



**City of St. Helena
Planning Commission
Regular Meeting
Tuesday, August 18, 2020 @ 6:00 PM**

In accordance with Executive Order N-29-20, and guidance from the California Department of Public Health on gatherings, remote public participation is allowed. We will address the Order in the following ways: Members of the public may not physically attend meetings. The Planning Commission meeting will be live-streamed on Comcast Channel 28 and on the City's website, barring technical difficulties. Those members of the public wishing to participate must do so remotely via Zoom electronic meetings in the following ways; by either logging onto the Zoom link located on the meeting agenda (please download the app to your computer or mobile device) and enter the meeting ID or by calling a listed number and enter the meeting ID. Public comment for Planning Commission meetings will be accepted via email to publiccomment@cityofstheleena.org. All public comments must be emailed by 4:00 PM prior to the meeting. Emailed public comments will not be read out loud but will be publicly available and attached to the on-line Planning Commission agenda.

Please see the end of the agenda for detailed PUBLIC PARTICIPATION instructions.

Please click the link below to join the meeting:

<https://us02web.zoom.us/j/89983243634>

Or iPhone one-tap :

US: +16699006833,,89983243634# or +12532158782,,89983243634#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799 or +1 312 626 6799 or +1 929 205 6099 or +1 301 715 8592

Meeting ID: 899 8324 3634

International numbers available: <https://us02web.zoom.us/j/89983243634>

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

Page

1. PLEDGE OF ALLEGIANCE
2. CALL TO ORDER AND ROLL CALL
Chairperson: Lester Hardy
Vice Chair: John Ponte
Commissioners: Autumn Anderson, Daniel Hale and Bobbi Monnette
City staff present at the meeting will be noted in the minutes.
3. PUBLIC FORUM:
This is an opportunity for the public to address the Commission on items of

interest to the public that are NOT listed on the agenda. Because of restrictions imposed by the Brown Act, the Commission may not engage in discussion nor take action on matters not described on the agenda. **Please observe the time limit of four minutes.**

4. CONSENT ITEMS

Members of the Commission 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)

4.1. Approval of Minutes: July 21, 2020

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[Commission Minutes 7.21.2020](#)

5. PUBLIC HEARINGS

5.1. A resolution of the Planning Commission of the City of St. Helena, California, recommending that the City Council adopt an Ordinance amending Chapter 17.48, Chapter 17.52, Appendix I, and Appendix II of the City of St. Helena Municipal Code relating to restaurant seat and hotel room limitations and determining the Ordinance to be exempt from CEQA.

13 - 55

CEQA Determination: Exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3).

Prepared By: Aaron Hecock, Senior Planner

Recommendation:

Staff recommends that the Planning Commission:

1. Adopt a resolution recommending that the City Council adopt an Ordinance amending Chapter 17.48, Chapter 17.52, Appendix I, and Appendix II of the City of St. Helena Municipal Code relating to restaurant seat and hotel room limitations and determining that the Ordinance is exempt from CEQA.

[Staff Report- Resolution recommending that the City Council adopt an Ordinance amending Chapter 17.48, Chapter 17.52, Appendix I and Appendix II of SHMC](#)

5.2. Request by Ted Hall on behalf of Long Meadow Ranch LLC for Use Permit Amendment and Design Review approval in order to make operational, including additional events, and minor physical changes to the existing Farmstead property at 738 Main Street in the Service Commercial (SC) zoning district. The applicant is also requesting Use Permit, Design Review, Lot Merger, Lot Line Adjustment, Variance, Water Agreement and Development Agreement approval in order to construct a new 65 room hotel with ancillary structures including a multi-purpose building, fitness center, utility building, and agricultural barns totaling approximately 53,200-sf of building area on the property located at 1000 Mills Lane in the Service Commercial (SC) and Twenty-acre Agriculture (A-20) districts. In accordance with Article 6 of the CEQA Guidelines, a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program has been prepared for the proposed project.

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CEQA Determination: A Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program has been prepared for the proposed

project.

Prepared By: Aaron Hecock, Senior Planner

Recommendation:

For the reasons described above, staff recommends that the Planning Commission:

1. Adopt a resolution recommending that the City Council approve the Mitigated Negative Declaration / Mitigation Monitoring and Reporting Program for the project, make the required findings and approve a Use Permit Amendment and Design Review for the Farmstead at Long Meadow Ranch project at 738 Main Street; and
2. Adopt a resolution recommending that the City Council approve the Mitigated Negative Declaration / Mitigation Monitoring and Reporting Program for the project, make the required findings and approve a Lot Merger, Lot Line Adjustment, Use Permit, Design Review, Variance, and Water Agreement; and
3. Adopt a resolution making specific findings and recommending that the City Council adopt an Ordinance approving a Development Agreement between the applicant and the City of St. Helena for the Long Meadow Ranch LLC lodging project at 1000 Mills Lane.

[Staff Report- 738 Main St. / 1000 Mills Ln. \(Farmstead\)](#)

[Resolution - 738 Main Street Final Version _amended](#)

[Resolution - 1000 Mills Lane Final Version _amended](#)

[1. Public Comment Kenealy](#)

[2. Public Comment Dyer](#)

[3. Public Comment Bressler](#)

[4. Public Comment Galbraith](#)

[5. Public Comment Brenkle](#)

[6. Public Comment Hart](#)

[7. Public Comment McMinn](#)

[8. Public Comment Lynch](#)

[9. Public Comment Johnson](#)

[10. Public Comment Kronmark](#)

[11. Public Comment Crus](#)

[12. Public Comment Stephenson](#)

[13. Public Comment Milliken](#)

[14. Public Comment Schlatter](#)

[15. Public Comment Hansen](#)

[16. Public Comment Kenward](#)

[17. Public Comment Gundling](#)

[18. Public Comment Mennella](#)

[19. Public Comment Smith](#)

[20. Public Comment Heit](#)

[21. Public Comment Jones](#)

[22. Public Comment Petroski](#)

[23. Public Comment MacNeil](#)

[24. Public Comment Dempsey](#)

[25. Public Comment Melvin](#)

[26. Public Comment Bailey](#)
[27. Public Comment Birdwell](#)
[28. Public Comment Black-Kellman-Minteer](#)
[29. Public Comment Green](#)
[30. Public Comment Cottrell](#)
[31. Public Comment Donati](#)
[32. Public Comment Serianni](#)
[33. Public Comment Offord](#)
[34. Public Comment Caldwell](#)
[35. Public Comment Sculatti](#)
[36. Public Comment Mitroff](#)
[37. Public Comment Marquez](#)
[38. Public Comment Miroglio](#)
[39. Public Comment Pawlcyn](#)
[40. Public Comment Benz](#)
[41. Public Comment Lamb](#)
[42. Public Comment Razo](#)
[43. Public Comment WaterAuditCalifornia](#)
[44. Public Comment Martin](#)
[45. Public Comment Stehling](#)
[46. Public Comment McBroom](#)
[47. Public Comment Davies](#)
[48. Public Comment White](#)
[49. Public Comment Heil](#)
[50. Public Comment Skupny](#)
[51. Public Comment Dell](#)
[52. Public Comment Faherty](#)
[53. Public Comment Laidley](#)
[54. Public Comment Morisoli](#)
[Response Letter Cole](#)
[Response Housing Slides 081820](#)
[Response Letter Stanton](#)
[Response Letter Kahn](#)
[Response Letter Hackett](#)

6. SCHEDULED MATTERS

7. DEPARTMENT REPORTS

This is an opportunity for staff to report on or update the Commission on any relevant matters.

8. AGENDA FORCAST

Below is a link to a list of pending and upcoming projects which may be of interest to the community.

This is also an opportunity for the Commission as a whole to request items be placed on future agendas for discussion. These items should be consistent with, and work to implement adopted Council Goals.

A list of all current planning projects is available on our city website in the link below:

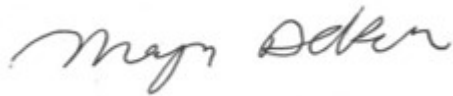
http://www.cityofsthelena.org/projects?term_node_tid_depth=21

Please contact the assigned project Planner for additional questions.

9. ADJOURNMENT

The next Regular Planning Commission meeting is scheduled for September 1, 2020 at 6:00 p.m.

I do hereby certify that a copy of the foregoing agenda was posted on the City website on August 11, 2020.



Maya DeRosa, Planning & Building Director

Appeal. A person who is dissatisfied with a decision of the Planning Commission may appeal that decision to the City Council pursuant to Municipal Code Section 17.08.180, Appeal procedure. Actions of the Planning Commission will be listed on the City Council agenda the following Tuesday to give the City Council opportunity to review the Planning Commission's decision. Absent of an appeal by the City Council or by a citizen, the appeal period will terminate two weeks after the Planning Commission hearing.

Special Assistance for the Disabled. 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 48 hours prior to the meeting will enable City to make reasonable arrangements to ensure accessibility to this meeting (28 CFR35.102-35.104 ADA Title II). However, City staff will attempt to assist at any time with accessibility. The City Clerk has equipment to assist those with a hearing impairment.

PUBLIC TESTIMONY PROCEDURES

Pursuant to the Government Code Section 54954.3, the public may address the Commission on each agenda item during the Commission's consideration of that item. Each speaker has the option to state his or her name for the record before testifying. Depending on the number of speakers or the interest of the item, the Planning Commission Chairman may also restrict, at his/her discretion, the speaker's time to three minutes. The Chairman may also restrict public comments if they become irrelevant to the agenda item or repetitious of prior comments. All persons interested may appear and be heard or submit written statements prior to the Planning Commission meeting. Please note that if you challenge the City's decision on any of these matters in court, you may be limited to raising only those issues you or someone else raised at the meeting or in written correspondence delivered to the City at, or prior to, the 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 Planning Commission regarding any item on this Agenda, after the posting of the Agenda, will be available for public review in the Planning Department's Office located at 1480 Main Street, St. Helena, California, during normal business hours. In addition, such writings or documents will be made available on the City's web site at <http://cityofstheleena.org> and will be available for public review at the respective meeting.

THE CITY OF ST. HELENA ENCOURAGES ONLINE PUBLIC PARTICIPATION IN VIRTUAL PLANNING COMMISSION MEETINGS

St. Helena, CA– The City of St. Helena is committed to public participation in City government in a manner that is consistent with guidance provided by the Napa County Public Health Official and Governor Newsom's Executive Order N-25-20. These guidelines relate to social distancing, and are intended to protect everyone by limiting the spread of COVID-19 in our community. In adherence to these guidelines, the St. Helena Planning Commission will host a Virtual Planning Commission Meeting on Zoom; a free teleconferencing tool that enables users to watch and/or call into the meeting from their computers or phones. This meeting will be open to public and allows for live public comment. The meeting will also be recorded, livestreamed, and posted on the City's website after the adjournment of the meeting if technical difficulties occur: <https://stheleena.civicweb.net/Portal/>

The ZOOM web link, meeting ID, and phone number will be listed at the top of the Planning Commission Meeting Agenda. You will be required to enter the meeting ID, but there will be no password or participant ID.

How to Watch or Listen to Planning Commission Meetings:

1. Watch on Comcast Channel 28

2. Watch the livestreaming video on the City's website
3. Watch and Listen on Zoom.us by clicking on the link in the Planning Commission Agenda
4. Listen only by calling the Zoom number listed on the Planning Commission Agenda

Watch Planning Commission Meetings by Joining the Zoom Meeting:

1. By Computer, Tablet, or Smart Phone:

- a. Before joining the virtual Planning Commission Meeting, it is highly encouraged that you download the Zoom App. To sign up for your own free account, visit zoom.us/signup and enter your email address. You will receive an email from Zoom (no-reply@zoom.us). In this email, click Activate Account.
- b. If you are logged into your account, Enter the **Meeting ID** listed on the Planning Commission Agenda. If you have not created an account go to: <https://zoom.us/join> and enter the **Meeting ID**
- c. Select if you would like to connect audio and/or video and tap **Join Meeting**.
- d. For specific instructions for your device, go to: <https://support.zoom.us/hc/en-us/articles/201362193-Joining-a-Meeting>

1. Listen Only by Telephone:

- a. **Dial** the number listed on the Planning Commission Agenda.
- b. At the prompt, enter the **Meeting ID** provided on the top of the Planning Commission Meeting Agenda and **Press #. A participate ID is not required.**
- c. To disconnect from the meeting, hang up the phone.

Ways to Provide Public Comment:

While attending the virtual Planning Commission Meeting, the public will have the opportunity to provide live public comment during Public Forum and after each agenda item. When it is the appropriate time for public comment the Chair will verbally open public comment. At this time each individual is permitted 4 minutes to speak.

1. Send a Public Comment in by 4:00 PM Prior to the Meeting to:
publiccomment@cityofsthelena.org

The easiest way to provide public comment is to email your public comment. Public comments may be emailed to publiccomment@cityofsthelena.org. Please include in the subject line "COMMENT TO PLANNING COMMISSION and the AGENDA ITEM". Any public comment is required to be submitted no later than 2 hours before the scheduled meeting and will be included as an attachment to the agenda. All public comments will be made publicly available and attached to the agenda item and will not be read out loud. All public comments that are received after 4:00 PM will be attached to the agenda the following day.

2. Provide Comment through Zoom meeting from a computer, tablet, or smart phone

This option allows the public to virtually attend the meeting as a muted 'attendee' with no video or screen sharing capabilities. You will be able to see

and hear those participating in the meeting, but they will not be able to hear you until the host unmutes you.

If you wish to provide public comment during a specific agenda item or during public forum, you can use the **“raise hand”** feature located in the control panel at the bottom of your screen. The icon is a small blue hand. In Windows you can also use the Alt+Y keyboard shortcut to raise or lower your hand. In Mac you can also use the Option+Y keyboard shortcut to raise or lower your hand.

The host will be notified that you've raised your hand and you will be placed in a queue with all incoming requests.

When it is your turn to speak, you will be notified that the host has unmuted you. To be removed from the queue, just click the **‘raise hand’** button again.

3. Call in to the ZOOM meeting from a cell phone or landline phone only

This option allows the member of the public with the opportunity to verbally participate in public comment.

If you wish to speak during public comment time dial ***9** on your telephone.

The host will be notified that you would like to speak and you will be placed in a queue with all incoming requests.

When it is your turn to speak, you will be notified that the host has unmuted you. You may press ***9** again if you wish to be removed from the queue.

You will be notified at the end of your statement that you have been muted.

MINUTES
City of St. Helena
Planning Commission Meeting
Tuesday, July 21, 2020 @ 6:00 PM
Virtual Meeting

In accordance with Executive Orders N-25-20, N-29-20, and guidance from the California Department of Public Health on gatherings, remote public participation is allowed. We will address the Order in the following ways: Members of the public may not physically attend meetings. The Planning Commission meeting will be live-streamed on Comcast Channel 28 and on the City's website, barring technical difficulties. Those members of the public wishing to participate must do so remotely via Zoom electronic meetings in the following ways; by either logging onto the Zoom link located on the meeting agenda (please download the app to your computer or mobile device) and enter the meeting ID or by calling a listed number and enter the meeting ID. Public comment for Planning Commission meetings will be accepted via email to publiccomment@cityofsthenena.org.

A complete video recording of this meeting, except for closed session, can be found at <https://sthenena.civicweb.net/Portal/> or by calling the City Clerk at (707) 967-2792. The City Council video is the official record of the Council meeting.

Present: Chair Lester Hardy, Commissioner Daniel Hale, Commissioner Bobbi Monnette, Vice Chair John Ponte, and Commissioner Autumn Anderson
Absent: None
Staff Present: Maya DeRosa, Planning & Building Director, Erica Ahmann Smithies, Public Works Director and City Engineer, Aaron Hecock, Senior Planner, and Xinia Gamero, Permit Technician II

1. **PLEDGE OF ALLEGIANCE**
2. **CALL TO ORDER AND ROLL CALL**
3. **PUBLIC FORUM:**

No public comment was received.

4. **CONSENT ITEMS**

Annette Smith addressed the Planning Commission.

- 4.1 Approval of Minutes: July 7, 2020

Vice-Chair John Ponte moved to approve the minutes on the Consent Calendar. The motion was seconded by Commissioner Daniel Hale and on roll call carried by the following vote:

AYES: Lester Hardy, Daniel Hale, Bobbi Monnette, John Ponte, and Autumn Anderson

NOES: None

ABSENT: None

ABSTAIN: None

RECUSE: None

5. PUBLIC HEARINGS

- 5.1 Request by Jenny Hoover on behalf of David and Elyse Walker for adoption of a resolution granting demolition permit, design review, use permit and variance approval to demolish an existing structure in order to construct a new 2,847 square foot commercial building on an existing non-conforming parcel located at 1229/1231 Adams Street (APN #009-240-023) in the Central Business District. The project is exempt from the requirements of CEQA pursuant to CEQA Guidelines Sections 15301, 15302, 15303, and 15332.

CEQA Determination: The project is exempt from the requirements of CEQA pursuant to CEQA Guidelines Sections 15301, 15302, 15303, and 15332.

Prepared By: Aaron Hecock, Senior Planner

Recommendation:

For the reasons described above, staff recommends that the Planning Commission adopt a resolution finding that:

1. The project is exempt from the requirements of CEQA pursuant to CEQA Sections 15301, 15302, 15303 and 15332; and
2. Accept the required findings and approve a Demolition Permit, Design Review, Use Permit and Variance for the proposed project at 1229/1231 Adams Street in the Central Business District.

Aaron Hecock, Senior Planner reported on the item.

David Walker, property owner, Luke Wade, Architect, Lilly Bianco, Architectural Historian, and Jenny Hoover, Project Manager addressed the Planning Commission.

Chair Hardy opened public comment.

Annette Smith, Tom Trainor and Joel Dickerson, Civil Engineer addressed the Planning Commission.

Chair Hardy closed the public comment.

Chair Hardy re-opened the public comment.

Luke Wade addressed the Planning Commission.

Chair Hardy closed the public comment.

Vice-Chair John Ponte moved to approve the item as amended. The motion was seconded by Commissioner Daniel Hale and on roll call carried by the following vote:

AYES: Lester Hardy, Daniel Hale, Bobbi Monnette, John Ponte, and Autumn Anderson

NOES: None

ABSENT: None

ABSTAIN: None

RECUSE: None

6. SCHEDULED MATTERS

None.

7. DEPARTMENT REPORTS

Planning and Building Director, Maya DeRosa reported on the following:

- The City of St. Helena applied for local HCD LEAP grant to assist with housing element update funding.
- Regular Planning Commission meeting of August 4th cancelled.
- Special Planning Commission Meeting for Zoning Code Update to be held August 13th at 6:00 pm. A virtual open house will be held prior to special meeting at 4:30 pm.

8. AGENDA FORCAST

Refer to the website link listed on the agenda.

9. ADJOURNMENT

Chair Hardy adjourned the meeting at **8:05 p.m.**

The July 21, 2020 minutes were approved at the _____ Planning Commission meeting.

APPROVED:

ATTEST:

Lester Hardy, Chair

Maya DeRosa, Planning and Building Director



PLANNING COMMISSION REPORT

Planning Commission Meeting of August 18, 2020

SUBJECT: A resolution of the Planning Commission of the City of St. Helena, California, recommending that the City Council adopt an Ordinance amending Chapter 17.48, Chapter 17.52, Appendix I, and Appendix II of the City of St. Helena Municipal Code relating to restaurant seat and hotel room limitations and determining the Ordinance to be exempt from CEQA.

PREPARED BY: Aaron Hecock, Senior Planner

REVIEWED BY: Maya DeRosa, Planning & Building Director

APPROVED BY: Maya DeRosa, Planning & Building Director

APPLICATION FILED:

LOCATION OF PROPERTY: Citywide

BACKGROUND

The City of St. Helena adopted the General Plan Update 2040 on May 14, 2019. The General Plan Update contains numerous objectives, policies, and implementation measures including Policies ES2.3 and ES2.7 which call for removing limitations on the number of hotel rooms and restaurant seats permitted within the City.

PROJECT DESCRIPTION

The proposed Ordinance amendment seeks to eliminate restaurant seat and hotel room limitations described in the Municipal Code as required by the General Plan Update.

ANALYSIS

After a General Plan is adopted, cities are required to make Municipal Code amendments so that the General Plan and Municipal Code are horizontally and vertically consistent.

CEQA

For purposes of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), a “project” is defined in State CEQA Guidelines Section 15378 (a) as “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment”. The Planning Commission hereby recommends that the City Council find that the action to adopt the proposed Ordinance will not result in any change in the environment and thus is not a project subject to the requirements of CEQA. Further, even if the action to adopt the proposed Ordinance was deemed to be a project subject to CEQA, the Planning Commission recommends that the City Council find the proposed Ordinance is exempt from CEQA under the common sense exemption set forth in Section 15061(b)(3), which provides that CEQA only applies to projects which have the potential for causing a significant effect on the environment, and thus where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

ISSUES

Staff has not identified additional items related to this code amendment that require further discussion.

CORRESPONDENCE

At the time of agenda publication, no comments related to this code amendment had been received.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission:

1. Adopt a resolution recommending that the City Council adopt an Ordinance amending Chapter 17.48, Chapter 17.52, Appendix I, and Appendix II of the City of St. Helena Municipal Code relating to restaurant seat and hotel room limitations and determining that the Ordinance is exempt from CEQA.

ATTACHMENTS

[Resolution CAP Ordinance Amendment - final](#)
[2020 CAP Ordinance Amendment](#)
[Exhibit A - redline](#)

CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION NO. PC2020-

**A RESOLUTION OF THE PLANNING COMMISSION OF
THE CITY OF ST. HELENA, CALIFORNIA,
RECOMMENDING THAT THE CITY COUNCIL ADOPT AN
ORDINANCE AMENDING CHAPTER 17.48, CHAPTER
17.52, APPENDIX I, AND APPENDIX II OF THE CITY OF
ST. HELENA MUNICIPAL CODE RELATING TO
RESTAURANT SEAT AND HOTEL ROOM LIMITATIONS
AND DETERMINING THE ORDINANCE TO BE EXEMPT
FROM CEQA**

Recitals

WHEREAS, the City of St. Helena, California ("City") is a municipal corporation, duly organized under the constitution and laws of the State of California; and

WHEREAS, the City adopted a General Plan 2040 Update on May 14, 2019; and

WHEREAS, the General Plan Update 2040 contains policies ES2.3 and ES2.7 which call for removing limitations on the number of hotel rooms and restaurant seats permitted within the City; and

WHEREAS, the City desires to amend its local regulatory scheme to eliminate limitations placed on the number of hotel rooms and restaurant seats permitted in the City consistent with the General Plan 2040 Update; and

WHEREAS, in accordance with the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) ("CEQA") and the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), the City has determined that the revisions to the St. Helena Municipal Code are exempt from environmental review.

WHEREAS, staff and the City Attorney prepared the proposed ordinance, including the proposed language and terminology, and any additional information and documents deemed necessary for the Planning Commission to take action; and

WHEREAS, the City gave public notice of the public hearing for the proposed ordinance by publishing in the Napa Valley Register; and

WHEREAS, on August 18, 2020, the Planning Commission held a duly-noticed public hearing and considered the staff report, recommendations by staff, and public testimony concerning the proposed ordinance.

Resolution

NOW THEREFORE, THE PLANNING COMMISSION OF THE CITY OF ST. HELENA DOES RESOLVE, DETERMINE, FIND AND ORDER AS FOLLOWS:

Section 1. For purposes of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), a “project” is defined in State CEQA Guidelines Section 15378 (a) as “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment”. The Planning Commission hereby recommends that the City Council find that the action to adopt the proposed Ordinance will not result in any change in the environment and thus is not a project subject to the requirements of CEQA. Further, even if the action to adopt the proposed Ordinance was deemed to be a project subject to CEQA, the Planning Commission recommends that the City Council find the proposed Ordinance is exempt from CEQA under the common sense exemption set forth in Section 15061(b)(3), which provides that CEQA only applies to projects which have the potential for causing a significant effect on the environment, and thus where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

Section 2. Based on the entire record before the Planning Commission, and all written and oral evidence presented, the Planning Commission hereby finds that the proposed ordinance is consistent with the City’s adopted General Plan. The proposed ordinance does not otherwise conflict with any of the General Plan’s goals or policies.

Section 3. The Planning Commission hereby recommends that the City Council adopt the attached proposed ordinance (Attachment A) entitled: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. HELENA AMENDING CHAPTER 17.48, CHAPTER 17.52, APPENDIX I, AND APPENDIX II OF THE CITY OF ST. HELENA MUNICIPAL CODE RELATING TO RESTAURANT SEAT AND HOTEL ROOM LIMITATIONS AND DETERMINING THE ORDINANCE TO BE EXEMPT FROM CEQA.

Section 6. The proposed ordinance entitled: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. HELENA AMENDING CHAPTER 17.48, CHAPTER 17.52, APPENDIX I, AND APPENDIX II OF THE CITY OF ST. HELENA MUNICIPAL CODE RELATING TO RESTAURANT SEAT AND HOTEL ROOM LIMITATIONS AND DETERMINING THE ORDINANCE TO BE EXEMPT FROM CEQA is on file and has been available for public review for at least ten days prior to the date of this Resolution, in the Planning Department, at St. Helena City Hall, 1572 Railroad Avenue.

I HEREBY CERTIFY that the foregoing recommendation to the City Council 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 August 18, 2020, by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

ATTEST:

Lester Hardy
Chair, Planning Commission

Maya DeRosa, AICP
Planning and Building Director

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. HELENA AMENDING CHAPTER 17.48, CHAPTER 17.52, APPENDIX I, AND APPENDIX II OF THE CITY OF ST. HELENA MUNICIPAL CODE RELATING TO RESTAURANT SEAT AND HOTEL ROOM LIMITATIONS AND DETERMINING THE ORDINANCE TO BE EXEMPT FROM CEQA

WHEREAS, the City of St. Helena, California ("City") is a municipal corporation, duly organized under the constitution and laws of the State of California; and

WHEREAS, the City adopted a General Plan 2040 Update on May 14, 2019; and

WHEREAS, the General Plan Update 2040 contains policies ES2.3 and ES2.7 which call for removing limitations on the number of hotel rooms and restaurant seats permitted within the City; and

WHEREAS, the City desires to amend its local regulatory scheme to eliminate limitations placed on the number of hotel rooms and restaurant seats permitted in the City consistent with the General Plan 2040 Update; and

WHEREAS, the City Council has reviewed and considered the public testimony and agenda reports prepared in connection with this ordinance, including the policy considerations discussed therein, and the consideration and recommendation by the City's Planning Commission; and

WHEREAS, in accordance with the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) ("CEQA") and the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), the City has determined that the revisions to the St. Helena Municipal Code are exempt from environmental review.

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

Section 1. The recitals above are each incorporated by reference and adopted as findings by the City Council.

Section 2. For purposes of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), a "project" is defined in State CEQA Guidelines Section 15378 (a) as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment". The City Council hereby finds that the action to adopt this Ordinance will not result in any change in the environment and thus is not a project subject to the requirements of CEQA. Further, even if the action to adopt this Ordinance was deemed to be a project subject to CEQA, the City Council finds the proposed Ordinance is exempt from CEQA under the common sense exemption set forth in Section 15061(b)(3), which provides that CEQA only applies to

projects which have the potential for causing a significant effect on the environment, and thus where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

Section 3. The City Council finds this Ordinance is consistent with the St. Helena General Plan Update 2040.

Section 4. Chapter 17.48, Chapter 17.52, Appendix I and Appendix II of the St. Helena Municipal Code is hereby amended and restated as provided in Exhibit "A", attached hereto and incorporated herein by reference.

Section 5. This ordinance shall take effect 30 days following its adoption.

Section 6. The City Clerk shall either: (a) have this ordinance published in a newspaper of general circulation within 15 days after its adoption or (b) have a summary of this ordinance published twice in a newspaper of general circulation, once five days before its adoption and again within 15 days after its adoption.

Section 7. The City Council hereby directs staff to prepare, execute and file with the Napa County Clerk a Notice of Exemption within five working days of first reading of this ordinance.

Section 8. If any provision of this ordinance or its application to any person or circumstance is held to be invalid, such invalidity has no effect on the other provisions or applications of the ordinance that can be given effect without the invalid provision or application, and to this extent, the provisions of this resolution are severable. The City Council declares that it would have adopted this resolution irrespective of the invalidity of any portion thereof.

Section 9. The documents and materials that constitute the record of proceedings on which this Ordinance and the above findings have been based are located at City Hall (1572 Railroad Avenue).

PASSED, APPROVED AND ADOPTED by the City Council of the City of St. Helena, California, at a regular meeting of the City Council held on the ____ th day of _____, 2020 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ST. HELENA

Mayor

ATTEST:

City Clerk

APPROVED AS TO FORM:

BEST BEST & KRIEGER LLP

City Attorney

EXHIBIT A

Amendments to Municipal Code

(follows this page)

Chapter 17.48

CENTRAL BUSINESS (CB) DISTRICT

Sections:

- 17.48.010 Purpose.
- 17.48.020 Permitted uses.
- 17.48.030 Conditional uses.
- 17.48.040 Design review required.
- 17.48.050 Accessory uses, buildings and structures.
- 17.48.060 Prohibited uses.
- 17.48.070 Development standards.
- 17.48.080 Outdoor storage, display or sale of merchandise.
- 17.48.090 Other standards and uses.
- 17.48.100 Reserved.

17.48.010 Purpose.

The central business district (CB) designation provides for retail, personal service uses, offices, restaurants, hotels/motels, service stations, public and quasi-public uses, and similar and compatible uses that serve local residents and the surrounding area. Emphasis is on pedestrian-oriented retail and service uses on the ground floor level, with office and residential uses on the upper levels. The intent is for the CB district to remain primarily local resident-serving in character. New uses which serve both local residents and tourists will be allowed. Uses which are primarily tourist-serving are not permitted.

Implementing Policy 2.6.42 of the 1993 General Plan states:

Allow only businesses which are primarily local-serving within all commercial areas. Exclude all fast food restaurants, outlet and discount type stores as well as large retail businesses whose consumer base requires a population larger than St. Helena and its vicinity. For purposes of the General Plan, vicinity shall be defined as the surrounding agricultural area for which St. Helena has historically provided goods and services.

Local-serving businesses are considered to be those that derive a significant portion of their revenues from St. Helena residents, and which provide services and products which satisfy local residents' day-to-day needs. They are those businesses for which a majority of the shoppers are regular repeat customers from the community. Nonlocal-serving or tourist-serving uses are those which would generally not be in St. Helena if it were not for the presence of visitors. Tourist-serving business use is generally characterized by a redundancy in merchandise from store to store with goods sold being substantially similar to such goods sold in other major destination points. (Ord. 10-8 § 2 (Exh. A (part)); prior code § 27.70)

17.48.020 Permitted uses.

The following uses are permitted in the CB district within usable floor areas of two hundred (200) square feet or greater:

Auto supply store;

Bakery, limited to products baked on the premises;

Bank and savings and loan institutions;

Bicycle and four-stroke moped (that meet standard manufacturer specifications) rental businesses, excluding motorcycles (as a primary or accessory use);

Bicycle store, retail sales, repairs, and rentals:

1. Storage or display of rental vehicles shall not be permitted within the public right-of-way, except where the city has jurisdiction over the sidewalk and as may be allowed by use permit with the following conditions in subsection (2) below.
2. For those vehicle rental businesses that wish to establish storage or display of rental bicycles on a sidewalk, the following will be required:
 - a. One-and-one-half-foot “recovery zone” from the edge of curb that must be kept free of obstructions (CalTrans requirement).
 - b. A four-foot clear path of travel along the sidewalk must be maintained to provide disabled access.
 - c. Bicycles must be brought indoors when the business is closed.
 - d. An encroachment permit must be obtained from the city of St. Helena. Application must include documentation of required liability insurance. The city of St. Helena maintains the preeminent right to use the sidewalk and suspend the right to encroach whenever the city needs use of the sidewalk for other public use or for repair.

Bookstore;

Chamber of Commerce office;

Clothing store, limited to the sale of new clothing and clothing accessories;

Computer and computer supply store;

Confectionery shop;

Consignment shop;

Dry cleaners, drop-off and pick-up only;

Florist;

Frame shop (gallery allowed only as accessory to the primary use);

Furniture store, new and unfinished;

General retail, the sale of goods in small quantities directly to the consumer except those uses prohibited in Section 17.48.060;

Hardware store;

Hobby, toy, and game store;

Home furnishings and interior decorating stores, limited to establishments engaged in the retail sale of such items as china, glassware, and metalware for kitchen and table use; bedding and linen; brooms and brushes; lamps and shades; mirrors and pictures; carpets and rugs; and window coverings;

Ice cream, frozen yogurt and shaved ice shops as regulated by Section 17.48.090(C) including sale of these items as accessory to an approved food establishment;

Music store;

Newsstand;

Office use, local-serving business and professional offices, upper floors only for properties with frontage on Main Street. Off-site winery offices are permitted with no wine tasting;

The St. Helena Municipal Code is current through Ordinance 20-2, passed March 10, 2020.

Opticians and optometrist shop;
Paint and wallpaper store;
Pharmacy and drugstore;
Photographic supply store;
Postal services;
Printing and copy services;
Real estate services located in spaces without frontage on Main Street;
Tailor and dressmaking;
Variety store except those uses prohibited in Section 17.48.060;
Watch and clock shop, provided the business includes on-premises repair;
Watch, clock, and/or jewelry repair shops;

Other similar uses found consistent with the general plan and the CB district pursuant to Chapter 17.08. (Ord. 18-7 § 4 (Exh. A (part)); Ord. 11-5 § 2 (Exh. B); Ord. 10-8 § 2 (Exh. A (part)); Ord. 09-6 § 2 (Exh. A (part)); Ord. 04-8 § 2: prior code § 27.71)

17.48.030 Conditional uses.

The following list of uses requires approval of a use permit as regulated by Chapter 17.168. ~~A use permit is also required for a business which consists of two or more of the permitted uses listed in Section 17.48.020.~~ Approval of a use permit is subject to finding the use consistent with the policies of the general plan and the purpose of the CB zoning district. When a use permit is considered for a use in the CBD, the standard use permit findings included in Section 17.168.050 shall be made to determine consistency of the use with the policies of the general plan and the purpose of the CB zoning district:

Antique store;
Art gallery;
Barber shop/beauty shop, including manicures, pedicures, make-up, facials, waxing, electrolysis, piercing, massage, and tanning when accessory to the primary use of hairstyling;
Catering establishments;
Cleaners and dry cleaners;
Delicatessen as regulated by Section 17.48.090(C);
Department store;
Drinking establishments serving alcoholic and/or nonalcoholic beverages as regulated by Section 17.48.090(C), provided the following are not allowed:

1. Establishments serving customers within their vehicles on the premises or preparing beverages or food intended for consumption within their vehicles on the premises,
2. Establishments primarily preparing beverages or food for consumption off the premises,
3. Music or entertainment which is not accessory to the approved use and/or audible beyond the confines of the building in which such music or entertainment is being performed,

4. Drive-in or walk-up window for take-out service;

Eating and drinking establishments as regulated by Section 17.48.090(C), provided the following are not allowed:

1. Establishments serving customers within their automobiles on the premises or preparing food intended for consumption within their automobiles on the premises,
2. Establishments primarily preparing food for consumption off the premises,
3. Music or entertainment which is not accessory to the approved use and/or audible beyond the confines of the building in which such music or entertainment is being performed,
4. The addition of on-site general liquor sales to any existing eating establishment when the operation of the eating place has been in violation of any city ordinance or any conditions of a use permit within the preceding two years and the premises do not conform in all respects with municipal code requirements,
5. Drive-in or walk-up window for take-out service,
6. Formula or take-out food establishments;*

Farmers' market;

Foodstore, no seating permitted;

Formula business. "Formula business" (not including formula restaurants, which are prohibited) means a business which is required by contractual or other arrangement to maintain any of the following: standardized services, decor, uniforms, architecture, signs or other similar features. This shall include, but not be limited to, retail sales and service, visitor accommodations, wholesale and industrial operations;

Health clubs;

Hotel, rental of rooms limited to upper floors;***

Household appliance and repair shop;

Jewelry store, provided the business includes on-premises repair;

Laundromat or laundry;

Liquor store;

Locksmith;

Market;

Massage salon;

Off-site winery offices with nonpublic wine tasting. Tasting of wine may be offered to wine distributors and wine merchants only;

Parking facilities (including parking for a fee) when not required to serve an approved use;

Pawnshops, subject to police chief review of information included in state or local statutes;

Photography studio;

Real estate services when located on the first floor with access and frontage on Main Street;

Residential units, limited to upper floors only for nontransient occupancy;

Service station, pursuant to Section 17.136.080;

Spa;

Supportive housing, limited to upper floors only;

Tanning salon;

Tattoo and/or piercing salon;

Theaters, movie and legitimate;

Tobacco/smoke shop, including the sale of tobacco, tobacco and/or nicotine products and equipment for smoking;

Transitional housing, limited to upper floors only;

Used merchandise store, including clothing, with no off-hours or exterior drop-off donation areas permitted;

Wine shops. "Wine shops" are establishments that purchase and sell wines from multiple wineries and distributors. Wines may be made in other counties in California, other states or other countries. Incidental wine tastings may occur in wine shops. Wine shops are not owned by wineries and must possess a Type 20, 21, or 42 license from ABC;

Winery tasting rooms. "Winery tasting rooms" are establishments that sell wines on behalf of one or more wineries and enable consumers to taste wine (with and without charge) as a regular part of the sales process. The wines for tasting and for sale must be made from a minimum of seventy-five percent (75%) Napa Valley grapes and must be labeled Napa Valley or be a subappellation of the Napa Valley. The permit requires a Type 02 ABC license. Food may be provided if it is at no cost to the consumer, is made off premises and the facilities are approved by Napa County environmental management;

Other similar uses found consistent with the general plan and the CB district pursuant to procedures in Chapter 17.08.

~~* — Note: The city has established a limit on the number of eating and drinking establishments within such establishments as listed in the regulated food and beverage establishments inventory. This inventory may be amended by action of the city council.~~

~~** — Note: The city has established a limit on the number of transient occupancy rooms permitted in the city to those existing or approved on September 28, 1993, as listed in the hotel, motel, and B&B inventory. This inventory may be amended by action of the city council.~~

(Ord. 18-7 § 4 (Exh. A (part)); Ord. 15-2 § 9: Ord. 10-8 § 2 (Exh. A (part)); Ord. 09-6 § 2 (Exh. A (part)); Ord. 04-8 § 3: Ord. 02-6 § 7: prior code § 27.72)

17.48.040 Design review required.

Pursuant to Chapter 17.164 all signs, new structures or buildings, or exterior revisions (including, but not limited to, change in exterior color) of any existing structures or buildings for both permitted and conditional uses shall require design review. (Ord. 10-8 § 2 (Exh. A (part)); prior code § 27.73)

17.48.050 Accessory uses, buildings and structures.

The following are the accessory uses, buildings and structures permitted in the CB district:

A. Signs subject to the provisions of Chapter 17.148;

B. Small recycling centers (not more than five hundred (500) square feet) including mobile recycling units, nonprofit drop-off facilities, and reverse vending machines, subject to design review approval by the planning director;

- C. On-site storage facilities accessory to the primary use subject to design review approval by the planning commission. On-site storage shall not be located within required parking areas. Design review will include, but not be limited to, location, length of time for the storage facility and size of the storage facility;
- D. Cottage food operations subject to the provisions of Section 17.116.045;
- E. Other uses and structures which are customarily incidental and clearly subordinate to permitted and conditional use pursuant to procedures in Chapter 17.08. (Ord. 16-3 § 10: Ord. 10-8 § 2 (Exh. A (part)): prior code § 27.75)

17.48.060 Prohibited uses.

The following uses are specifically prohibited in the CB district:

- A. Formula restaurant. "Formula restaurant" means a restaurant devoted to the preparation and offering of food and beverage for sale to the public for consumption either on or off the premises and which is required by contractual or other arrangement to offer any of the following: standardized menus, ingredients, food preparation, decor, uniforms, architecture, or similar standardized features;
- B. Outlet stores, discount stores, or stores devoting commercial area, gross sales or inventory to the sale of second quality, irregular or discontinued merchandise or to the liquidation of merchant's or manufacturer's stock;
- C. Souvenir shops;
- D. T-shirt shops;
- E. Time-share projects, programs or occupancies. (Ord. 10-8 § 2 (Exh. A (part)): prior code § 27.75)

17.48.070 Development standards.*

The following requirements shall be observed in the CB district, excluding the area within the specific plan area as defined in the general plan, and except as otherwise provided in this title:

A. Maximum Standards.	
1. Height of building/structures**	35 feet
2. Building floor area	***
3. Use floor area	****
4. Floor area ratio	2.0 (requires off-site parking)
B. Minimum Standards.	
1. Lot area	5,000 square feet
2. Front setback	0 feet
3. Side setback	0 feet
4. Side yard**	0 feet
5. Rear yard**	0 feet

* Development standards for the CB district area included in the specific plan area of the general plan shall be determined in conjunction with a site development plan for the parcel(s) at the time of project review. Variations from the adopted development standards may be allowed in the specific plan area if findings of consistency with general plan policies are made by the city during review of the development application.

** Yards abutting a property designated residential shall have a minimum of ten (10) foot setback and a maximum building height of thirty (30) feet.

*** Building floor area in the CB district shall be governed by the provisions of subsection C of this section.

**** Use floor area in the CB district shall be governed by the provisions of subsection D of this section.

C. Building Floor Area.

1. Buildings Existing Prior to 1993 Which Exceed Ten Thousand (10,000) Square Feet. Buildings which existed prior to 1993 and exceed ten thousand (10,000) square feet may increase the allowable floor area upon approval of a use permit by the planning commission. Approval of a use permit is subject to finding the expansion consistent with the policies of the general plan and the purpose of the CB district. When a use permit is considered for expansion of floor area the following criteria shall be considered in addition to the use permit findings included in Sections 17.168.050 and 17.48.100:

- a. Expanded floor area shall only be allowed for office, storage, or other nonretail uses determined by the planning commission.
- b. The proposed increase in floor area shall not result in an expansion of the footprint or building coverage of the existing building.
- c. The floor area ratio shall not be exceeded.

2. Buildings Constructed After 1993. Each building on a legal parcel of record is limited to a maximum of ten thousand (10,000) square feet of building floor area. Multiple buildings may be constructed on a legal parcel of record, provided the individual buildings do not exceed ten thousand (10,000) square feet of building floor area and the maximum floor area ratio on the parcel is not exceeded.

Floor area of a single building may exceed ten thousand (10,000) square feet upon approval of a use permit by the planning commission. Approval of a use permit is subject to finding the increased building floor area consistent with the policies of the general plan and the purpose of the CB district. When a use permit is considered for increased building floor area the following criteria shall be considered in addition to the findings included in Sections 17.168.050 and 17.48.100:

- a. Increased floor area shall only be allowed for office, storage, or other nonretail uses determined by the planning commission.
- b. The building footprint for each building shall not exceed ten thousand (10,000) square feet.
- c. The allowed floor area ratio shall not be exceeded.

D. Use Floor Area.

1. Minimum Floor Area. All uses in the CB district within existing and newly constructed buildings shall have a minimum floor area of two hundred (200) square feet unless a use permit is approved by the planning commission to allow a reduction in floor area below two hundred (200) square feet.

2. Maximum Floor Area. All uses in the CB district within existing and newly constructed buildings shall be limited to a maximum of ten thousand (10,000) square feet of floor area. Tenant spaces in existence on November 1, 1999, may increase the existing floor area by no more than ten percent (10%) of the existing floor area. Modification of tenant spaces existing on November 1, 1999, resulting in more than a ten percent (10%) increase in floor area may be allowed upon approval of a use permit by the planning commission. Increase of tenant space floor area shall not result in the tenant space exceeding ten thousand (10,000) square feet except as provided by subsection C of this section. (Ord. 10-8 § 2 (Exh. A (part)); prior code § 27.76)

17.48.080 Outdoor storage, display or sale of merchandise.

A. All uses shall be conducted entirely within a completely enclosed building except for:

1. Bus depots and transit stations;
2. Farmers' markets;

3. Outdoor dining, in conjunction with a use permit approved for restaurant use;
 4. Parking and loading areas;
 5. Portable shoeshine stands when the business is conducted in conjunction with an approved use, provided the shoeshine stand conducts business during the same business hours as the approved primary use;
 6. Seasonal sales (Christmas trees, pumpkins, etc.);
 7. Service stations;
 8. Taxi stands;
 9. Such other uses which, in the opinion of the planning director, require outside display or storage.
- B. Provided the use is allowed (either as a permitted or conditional use) by the zoning district regulations for the district in which the property is located, the following provisions shall apply to the incidental placement, storage, display, sale, or offer for sale of any merchandise out-of-doors or outside any completely enclosed building:
1. Screening. The merchandise shall be screened so as not to be visible from any public or private street, any off-street parking facility, or any common area in an integrated commercial center; or
 2. Use Permit. A use permit approved by the planning commission shall be required for the outdoor storage, display or sale of merchandise except for the following:
 - a. Fruits and vegetables,
 - b. Plants and other growing vegetation, with the limitation in subsection (B)(3)(f) of this section not applicable to nurseries,
 - c. Cut flowers (planter boxes subject to the standards specified in subsection (B)(3)(g) of this section),
 - d. Gasoline pumps, oil racks and accessory items when located on pump islands,
 - e. Vehicles, including, but not limited to, automobiles, trucks, motorcycles, trailers and recreational vehicles, with the limitation in subsection (B)(3)(f) of this section not applicable,
 - f. Areas within a completely roofed street alcove or entryway; provided, that the merchandise is inside the line of the building face,
 - g. Parking lot and sidewalk sales and other promotional events that involve retail sales, as long as they do not exceed twelve (12) days total during any twelve (12) month period with no more than three days being consecutive, regardless of the number of businesses located on the property, with the limitations in subsection (B)(3)(e) and (f) of this section not applicable,
 - h. Nonpromotional events conducted by or for recognized nonprofit or charitable community groups, with the limitations in subsection (B)(3)(a), (e) and (f) of this section not applicable,
 - i. Garage and yard sales, as long as they are conducted on property used for residential purposes by a resident and do not exceed three days during any six-month period, with the limitations in subsection (B)(3)(a), (e) and (g) of this section not applicable,
 - j. Merchandise associated with hardware stores and building supply stores,
 - k. Activities similar to the above, as determined by the planning commission.
 3. Standards. The placement or location of the merchandise must comply with the following:

- a. The merchandise or activity is incidental and adjacent to any lawfully established business that normally sells the merchandise inside the building.
 - b. The merchandise or activity does not present a hazard to pedestrians or vehicles.
 - c. The merchandise or activity does not occupy the space formed by extending the width of any required or existing building exit, whichever is wider, to the public right-of-way.
 - d. The display of merchandise shall not be located within the public right-of-way.
 - e. The merchandise or activity does not occupy any required parking spaces.
 - f. The storage, display or sales area is limited to two hundred (200) square feet or ten percent (10%) of the gross floor area of the business, whichever is less.
 - g. Along Main Street, between Mitchell Street and Pine Street on the west side, and Pope Street to Pine Street on the east side, planter boxes and plants shall encroach no more than twelve (12) inches into the public right-of-way, shall have a maximum height of four feet zero inches, and six feet of sidewalk shall be kept clear for pedestrian use. These standards shall apply elsewhere in the central business district outside of the area designated; however, the city council shall be empowered to waive the standards on a case-by-case basis.
4. Use of Street or Sidewalk. Nothing in this section shall authorize the placement, storage, display, sale or offer for sale of any merchandise on any street or on any sidewalk or any other portion of the public right-of-way, with the exception of sidewalk sales permitted by subsection (B)(2)(g) of this section. (Ord. 10-8 § 2 (Exh. A (part)); Ord. 06-9 § 2 (part); prior code § 27.77)

17.48.090 Other standards and uses.

- A. Catering. Food catering shall be permitted when accessory to an approved use.
- B. Music/Entertainment. Music/entertainment shall be allowed when accessory to an approved use and noise is not audible beyond the confines of the building.
- C. Food and Beverage Establishments. ~~Establishments serving food or beverage with seating are limited to thirty (30), as listed on the regulated food and beverage establishments inventory.~~ Such establishments shall be subject to the following regulations:
 - 1. The type of use shall be as listed on the ~~inventory and/or~~ conditions imposed during city review.
 - 2. All regulated uses shall be subject to use permit review by the planning commission prior to change in use or expansion of use. Change in use or expansion of use shall include increase in seating; increase in floor area; change to a restaurant with a complete kitchen capable of providing full menu service of food prepared on premises; or change in services which may result in an increase in water, sewer, traffic, noise, or parking/circulation impacts. Change in use shall not include minor changes to hours of operation or change in hours to the food service unless such hours are regulated by an existing use permit.
 - 3. If approvals expire for an establishment ~~listed in the inventory~~ or if an establishment ceases operation and may not be reestablished under Chapter 17.140 regulating nonconforming establishments, Section 17.08.120 regulating use permits, or other provisions of this title, another restaurant may be established at a new location as follows:
 - a. Use permit approval is required for a new establishment at any location within the city.
 - ~~b. The total number of establishments shall not be increased beyond thirty (30).~~
 - ~~c.~~ The total number of seats in the proposed restaurant shall not exceed two hundred (200).

~~dc.~~ Use permit applications for the establishment of new restaurants shall be considered in the order of applications received, except that priority will be given to an existing business which is being relocated if the following conditions are met:

- i. The existing business notifies the planning director in writing no later than ten (10) days after the business ceases operation of its intention to relocate and of the date it will or did cease operation; and
- ii. A completed use permit application is filed before the food or beverage use at the original location becomes null and void pursuant to Section 17.140.020, 17.08.120, or other provisions of this title.

~~ed.~~ No use permit application will be accepted for processing until an establishment ~~on the inventory~~ (or an approved replacement establishment) has ceased operation or the property owner has notified the planning director in writing that the use will not be reestablished at the previous location. The use permit application shall not be scheduled for hearing by the planning commission until the time period for reestablishing of the use at the location where the use has ceased, has expired or written notice has been given by the property owner that the use will not be reestablished at the previous location.

4. When an existing business is modifying its operation the use permit shall be reviewed for compliance with the following:

- a. That if the regulated use is considered a legal nonconforming business, the reasons for nonconformity shall be stated in the findings;
- b. That the plans submitted with the application indicate that any existing nonconformities will not be increased by the issuance of the permit;
- c. The total seating capacity authorized by the use permit and fire code occupancy shall be posted on the premises;
- d. That all trash and recycling areas are screened from view.

5. A use permit or use permit amendment is required to expand the number of seats at a restaurant ~~listed on the regulated food and beverage establishments inventory~~ or to enclose approved outdoor seating for use as indoor seating.

- a. The total number of restaurant seats, including indoor and outdoor seating, shall not exceed two hundred (200). Restaurants with more than two hundred (200) seats that were legally approved prior to the date of adoption of the ordinance codified in this chapter shall not be required to reduce their seating to comply with this regulation.
- b. Seating shall be in compliance with the maximum fire code occupancy as determined by the fire marshal.
- c. A building expansion to enclose outdoor seating to indoor seating shall be considered an expansion of seating for purposes of determining required parking.

6. Outdoor Seating. Administrative approval of a sidewalk dining permit is required to establish outdoor seating for dining at restaurants with an approved use permit. Use permit amendment is required for an increase in the number of seats. The sidewalk dining permit application shall include a plan showing the number of tables and chairs and the area where the dining will be allowed.

- a. Outdoor dining for seating that results in an increase in the number of seats shall be reviewed by the planning department for compliance with parking standards and by Napa County environmental management for compliance with regulations pertaining to food storage, health and safety.
- b. For those restaurants that wish to serve alcohol outside, the licensee must obtain approval for premises expansion from the California Department of Alcoholic Beverage Control.

- c. All entrances and emergency exits shall be kept free of obstructions to ingress and egress.
 - d. For those restaurants that wish to establish outdoor seating for dining on a sidewalk, the following will be required:
 - i. A one-and-one-half-foot “recovery zone” from the edge of curb that must be kept free of obstructions (CalTrans requirement).
 - ii. A four-foot clear path of travel, which clearly maintains ADA compliance along the sidewalk, must be maintained to provide disabled access.
 - iii. Tables and chairs must be brought indoors when the restaurant is closed.
 - iv. Entertainment shall not be allowed on the sidewalk as part of the restaurant service.
 - v. An encroachment permit must be obtained from the city of St. Helena. Application must include documentation of required liability insurance. The city of St. Helena maintains the preeminent right to use the sidewalk and suspend the right to encroach whenever the city needs use of the sidewalk for other public use or for repair.
 - vi. Sidewalk dining permits are revocable at the will of the city, and such revocations do not result in a taking of the owner’s property (i.e., a taking of the restaurant).
 - vii. No more than twenty percent (20%) of total restaurant seating may be located on the sidewalk or other public property.
 - e. For those restaurants wishing to allow patrons to bring dogs to the outdoor dining area, the following regulations shall be enforced:
 - i. Employees and patrons shall not allow dogs to come into contact with serving dishes, utensils, tableware, linens or any other items involved with food service operations.
 - ii. Patrons shall keep their dogs on a leash at all times and shall keep their dogs under control.
 - iii. Dogs shall not be allowed on chairs, tables, or other furnishings.
 - iv. All table and chair surfaces shall be cleaned and sanitized between seating of patrons.
 - v. Dog waste shall be removed immediately and the area immediately cleaned and sanitized with an appropriate product.
 - vi. Dogs shall not be permitted to travel through indoor portions of the public food service establishment.
- D. Landscaping Requirements.
- 1. Installation and Maintenance of Landscaping and Shade Trees. All required frontage yards, off-street parking areas, and all other open areas (other than screened storage areas) shall be permanently maintained by the property owner with the installation of shade trees, planters, and landscaped areas to cover a minimum of five percent of the total site in accordance with the following standards:
 - a. Parking Lot Trees. All trees in parking lots shall be fifteen (15) gallon can size and shall conform to the National Association of Nurserymen’s adopted standards for growth, condition and development of nursery-supplied materials. Modification of these standards for equivalent quality of tree or shade plant may be permitted depending on species and quality of stock. The following minimum number of trees shall be required in any parking lot:

Parking Lot Size	Number of Trees
------------------	-----------------

The St. Helena Municipal Code is current through Ordinance 20-2, passed March 10, 2020.

Parking Lot Size	Number of Trees
15 spaces or less	1 tree/4 spaces (minimum of 2 trees)
16 spaces or more	20 trees/acre if canopy is 40 feet or greater
	24 trees/acre if canopy is less than 40 feet

- b. Planters. Where a parking lot abuts a public right-of-way, there shall be provided a landscaped planter contiguous to and parallel to such right-of-way.
- c. Variety and Distribution. Shade trees shall be of a variety approved by the city that will, under ordinary circumstances and growing conditions, provide shade upon reaching maturity. Distribution of trees shall generally be in a grid or similar pattern within off-street parking lots, required yards, and other open spaces and landscaped areas so as to fulfill the intent of this title to shade expanses of pavement and other open space.
- d. Curbing. Landscaping and shade trees shall be contained in planters and tree wells bordered by a six-inch high concrete curb or equivalent barrier approved by the city.
- e. Width and Protection. Unless otherwise specified in this chapter or under the conditions of an approved permit, planters and tree wells shall have a width of not less than five feet and shall be protected from automobile overhang where necessary through the provision of barriers, tire stops or additional width.
- f. Maintenance. Landscaped areas and planters shall be served by an irrigation system approved by the city and shall be kept in a weed-free condition.

E. Wastewater Generation. Each and every use allowed in the CB district shall be restricted such that all such uses on any single "lot of record," as defined by Section 13.24.090(C) of this code do not in the aggregate generate wastewater in excess of the following standards:

- 1. Six hundred (600) gallons per day, without a use permit which regulates wastewater generation;
- 2. Two thousand five hundred (2,500) gallons per day, upon grant of a use permit regulating wastewater generation; provided the city council approves a use permit with conditions ensuring that all reasonable water conservation measures are implemented, and finds that approval is in the best interest of the city; or
- 3. For all uses lawfully in effect on any lot of record on December 8, 1981, which generated in aggregate more than six hundred (600) gallons of wastewater per day, such uses may be altered, reconstructed or changed; provided, that the resultant uses on any such lot of record do not in the aggregate generate wastewater exceeding the aggregate wastewater gallonage per day for all uses existing on such lot of record on December 8, 1981.

F. Demolition Permit Required. Except when required for the emergency protection of public health, safety or welfare as determined by the city manager, no permit authorizing the demolition of any structure within the commercial zoning districts shall be issued until reviewed by the planning commission in accordance with the procedures established in Chapter 17.92 and the following findings:

- 1. That, based on the public record and testimony presented at a public hearing, the structure is determined not to be a significant architectural or historical building. If a structure is determined to be significant by the planning commission, no demolition will be authorized unless the following findings are made by the commission:
 - a. That the structure poses a threat to health, safety and general welfare if it is not demolished;

- b. That restoration of the structure is not feasible or practicable using current building codes including, but not limited to, the Historic Building Code provisions of the Uniform Building Code of the state;
- c. That no public or other funding is available for financing renovation or purchase of the structure.

G. Right to Farm Provision. Property owners within the district shall recognize that there exists a right to farm properties within the district and in the vicinity of the district. There is a good faith expectation that no complaints will occur regarding legal normal agricultural activities on properties in the district or in the vicinity of the district. Such activities may include day or night disbursement of chemicals and creation of dust, noise or fumes. (Ord. 18-5¹ § 4 (Exh. B (part)); Ord. 10-8 § 2 (Exh. A (part)); Ord. 00-2 § 2; prior code § 27.78)

17.48.100 Reserved.
(Ord. 10-8 § 2 (Exh. A (part)))

¹ Code reviser's note: Section 5 of Ordinance 18-5 provides that its amendments "are enacted for a period of two years and shall terminate on November 8, 2020, unless extended or made permanent by action of the City Council."

Chapter 17.52

SERVICE COMMERCIAL (SC) DISTRICT

Sections:

- 17.52.010 Purpose.
- 17.52.020 Permitted uses.
- 17.52.030 Conditional uses.
- 17.52.040 Design review required.
- 17.52.050 Accessory uses, buildings and structures.
- 17.52.060 Prohibited uses.
- 17.52.070 Development standards.
- 17.52.080 Outdoor storage, display or sale of merchandise.
- 17.52.090 Other standards and uses.
- 17.52.100 Reserved.

17.52.010 Purpose.

The service commercial district (SC) designation provides for service and retail uses, restaurants, service stations, motels, public and quasi-public uses and similar and compatible uses. The designation is intended primarily for service and retail uses that are automobile-oriented or whose operational characteristics and space needs are not considered appropriate for the central business district. The intent is for the SC district to be primarily local resident-serving in character. Strictly tourist-serving retail uses are prohibited within this designation.

Implementing Policy 2.6.42 of the 1993 general plan states:

Allow only businesses which are primarily local-serving within all commercial areas. Exclude all fast food restaurants, outlet and discount type stores as well as large retail businesses whose consumer base requires a population larger than St. Helena and its vicinity. For purposes of the General Plan, vicinity shall be defined as the surrounding agricultural area for which St. Helena has historically provided goods and services.

Local-serving businesses are considered to be those that derive a significant portion of their revenues from St. Helena residents, and which provide services and products which satisfy local residents' day-to-day needs. They are those businesses for which a majority of the shoppers are regular repeat customers from the community. Nonlocal-serving or tourist-serving uses are those which would generally not be in St. Helena if it were not for the presence of visitors. Tourist-serving business use is generally characterized by a redundancy in merchandise from store to store with goods sold being substantially similar to such goods sold in other major destination points. (Ord. 10-8 § 2 (Exh. B (part)); prior code § 27.80)

17.52.020 Permitted uses.

The following uses are permitted in the SC district within usable floor areas of two hundred (200) square feet or greater:

- Accounting, auditing, and bookkeeping;
- Appliance store;
- Audio-visual store;
- Auto supply store;
- Automatic bank teller;
- Bakery;
- Bank, credit union or financial institution;

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Beauty shop/barber shop, including manicures, pedicures, make-up, facials, waxing, electrolysis, and piercing, when accessory to the primary use of hairstyling;

Boat sales and service;

Bookkeeping services;

Camera and photo supply store;

Catering establishments, no retail sales;

Child care facilities consistent with state law;

Cleaning and janitorial services;

Clothing store, limited to the sale of new clothing and clothing accessories;

Commercial art/photography service;

Computer supply store;

Dance studios and schools;

Emergency shelter;

Engraving services;

Farm supply and feed store;

Florist;

Frame shop;

Fruit and vegetable market;

Furniture stores, new and unfinished;

Glazing businesses;

Graphic design services;

Hardware store;

Health care equipment and services;

Hobby store;

Home furnishings and interior decorating stores, limited to establishments engaged in the retail sale of such items as china, glassware, and metalware for kitchen and table use; bedding and linen; brooms and brushes; lamps and shades; mirrors and pictures; carpets and rugs; and window coverings;

Locksmith;

Luggage store;

Music recording studio;

Nail salon;

Newspaper distribution facilities, no retail sales;

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Office use, local-serving business and professional offices; off-site winery offices are permitted with no wine tasting;

Opticians and optometrist shop, including repair;

Paint, glass and wallpaper store;

Painting contractor/services;

Party supplies and service;

Pet store, services, supplies;

Plumbing and contractor/services;

Postal and mail service;

Printing and copy service;

Residential units, upper floor only in conjunction with a mixed use project;

Reupholstery and furniture repair;

Saddle and equestrian store and repair;

Saw, knife and tool sharpening shops;

Security services;

Shoe repair;

Sign maker;

Sporting goods store;

Staffing services;

Supportive housing, upper floor only in conjunction with a mixed use project;

Telephone center, including sales and maintenance;

Transitional housing, upper floor only in conjunction with a mixed use project;

Trophy shop;

Used merchandise stores, including clothing, with no off-hours or exterior drop-off donation areas permitted;

Veterinary services without overnight boarding of animals;

Other similar uses found consistent with the general plan and the SC district pursuant to Chapter 17.08. (Ord. 18-7 § 4 (Exh. A (part)): Ord. 15-2 § 10: Ord. 10-8 § 2 (Exh. B (part)): Ord. 09-6 § 2 (Exh. A (part)): Ord. 04-8 § 5: prior code § 27.81)

17.52.030 Conditional uses.

The following list of uses requires approval of a use permit as regulated by Chapter 17.168. ~~A use permit is also required for a business which consists of two or more of the permitted uses listed in Section 17.52.020.~~ Approval of a use permit is subject to finding the use consistent with the policies of the general plan and the purpose of the SC zoning district. When a use permit is considered for a use in the SC district the standard use permit findings included

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in Section 17.168.050 shall be made to determine consistency of the use with the policies of the general plan and the purpose of the SC zoning district:

Ambulance services;

Animal boarding facility;

Automobile sales, service and repair;

Automobile, truck, and motorcycle rental;

Bicycle and scooter rental businesses, excluding motorcycles:

1. Storage or display of rental vehicles shall not be permitted within the public right-of-way, except where the city has jurisdiction over the sidewalks and as may be allowed by use permit with the following conditions in subsection 2 below.
2. For those vehicle rental businesses that wish to establish storage or display of rental bicycles/scooters on a sidewalk, the following will be required:
 - a. One-and-one-half-foot "recovery zone" from the edge of curb that must be kept free of obstructions (CalTrans requirement).
 - b. A four-foot clear path of travel along the sidewalk must be maintained to provide disabled access.
 - c. Bicycles/scooters must be brought indoors when the business is closed.
 - d. An encroachment permit must be obtained from the city of St. Helena. Application must include documentation of required liability insurance. The city of St. Helena maintains the preeminent right to use the sidewalk and suspend the right to encroach whenever the city needs use of the sidewalk for other public use or for repair;

Breweries, including tasting;

Cabinet making shop;

Car wash;

Catalogue office/retail center, including storage of merchandise;

Drinking establishments serving alcoholic and/or nonalcoholic beverages as regulated by Section 17.52.090(D), provided the following are not allowed:

1. Establishments serving customers within their vehicles on the premises or preparing beverages/food intended for consumption within their vehicles on the premises,
2. Establishments primarily preparing beverages/food for consumption off the premises,
3. Music/entertainment which is not accessory to the approved use and/or audible beyond the confines of the building in which such music/entertainment is being performed,
4. Drive-in or walk-up window for take-out service;

Eating and drinking establishments as regulated by Section 17.52.090(D), provided the following are not allowed:

1. Establishments serving customers within their automobiles on the premises or preparing food intended for consumption within their automobiles on the premises,
2. Establishments primarily preparing food for consumption off the premises,

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3. Music/entertainment which is not accessory to the approved use and/or audible beyond the confines of the building in which such music/entertainment is being performed,
4. The addition of on-site general liquor sales to an existing eating establishment when the operation of the eating place has been in violation of any city ordinance or any conditions of a use permit within the preceding two years and the premises do not conform in all respects with municipal code requirements,
5. Drive-in or walk-up window for take-out service,
6. Formula or take-out food establishments;*

Electric and gas utilities;

Equipment rental and leasing;

Farmers' market;

Food product development;

Formula business. "Formula business" (not including formula restaurants, which are prohibited) means a business which is required by contractual or other arrangement to maintain any of the following: standardized services, decor, uniforms, architecture, signs or other similar features. This shall include, but not be limited to, retail sales and service, visitor accommodations, wholesale and industrial operations;

Grocery stores; limited to ten thousand (10,000) square feet in size with retail sales of meat, produce, dairy, baked goods, and groceries with accessory sales of household goods and delicatessen items;

Gunsmith;

Health club and fitness centers;

Hotels and motels;**

Janitorial services;

Laundry, self-serve cleaning and garment services;

Light manufacturing uses;

Liquor stores, retail sales only;

Local passenger transportation and services, includes train depot;

Lumber and other building materials business;

Massage services;

Mortuary and funeral homes;

Motor vehicle sales, new and/or used vehicles;

Nursery, lawn and garden supply stores with retail sales;

Off-site winery offices with nonpublic wine tasting. Tasting of wine may be offered to wine distributors and wine merchants;

Parking facilities, commercial;

Performing arts facility;

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Pool and spa supply and sales;

Schools and educational services;

Service station, pursuant to Section 17.136.080;

Small engine and/or equipment repair shops, excluding the repair of heavy equipment;

Tanning salon;

Taxidermist;

Theater, movie and legitimate;

Tobacco/smoke shop, including the sale of tobacco, tobacco and/or nicotine products and equipment for smoking;

Towing services and yards;

Used merchandise stores, including clothing, with off-hours or exterior drop-off donation areas;

Utilities;

Warehouse and wholesale business, excluding retail sales;

Wine shops. "Wine shops" are establishments that sell wines from multiple wineries and distributors. Wines may be made in other counties in California, other states or other countries. Incidental wine tastings may occur in wine shops. Wine shops are not owned by wineries and must possess a Type 20, 21, or 42 license from ABC;

Wineries;

Winery tasting rooms. "Winery tasting rooms" are establishments that sell wines on behalf of one or more wineries and enable consumers to taste wine (with and without charge) as a regular part of the sales process. The wines for tasting and for sale must be made from a minimum of seventy-five percent (75%) Napa Valley grapes and must be labeled Napa Valley or be a subappellation of the Napa Valley. The permit requires a Type 02 ABC license. Food may be provided if it is at no cost to the consumer, is made off premises and the facilities are approved by Napa County environmental management;

Other similar uses found consistent with the general plan and the SC district pursuant to Chapter 17.08.

~~*— Note: The city has established a limit on the number of eating and drinking establishments. Such establishments are listed in the regulated food and beverage establishments inventory. This inventory may be amended by action of the city council.~~

~~**— Note: The city has established a limit on the number of transient occupancy rooms permitted in the city to those existing or approved on September 28, 1993, as listed in the hotel, motel, and B&B inventory. This inventory may be amended by action of the city council.~~

(Ord. 18-7 § 4 (Exh. A (part)): Ord. 11-5 § 2 (Exh. A); Ord. 10-8 § 2 (Exh. B (part)): Ord. 10-4 § 5; Ord. 09-6 § 2 (Exh. A (part)): Ord. 04-8 § 6; prior code § 27.82)

17.52.040 Design review required.

Pursuant to Chapter 17.164 all signs, new structures or buildings, or exterior revisions (including, but not limited to, change in exterior color) of any existing structures or buildings for both permitted and conditional uses shall require design review. (Ord. 10-8 § 2 (Exh. B (part)): prior code § 27.83)

17.52.050 Accessory uses, buildings and structures.

The following are the accessory uses, buildings and structures permitted in the SC district:

A. Signs subject to the provisions of Chapter 17.148;

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- B. Small recycling centers (not more than five hundred (500) square feet) including mobile recycling units, nonprofit drop-off facilities, and reverse vending machines, subject to design review approval by the planning director;
- C. On-site storage facilities accessory to the primary use are subject to design review approval by the planning commission. On-site storage shall not be located within required parking areas. Design review will include, but not be limited to, location, length of time for the storage facility, and size of the storage facility;
- D. Cottage food operations subject to the provisions of Section 17.116.045;
- E. Other uses and structures which are customarily incidental and clearly subordinate to permitted and conditional use pursuant to Chapter 17.08. (Ord. 16-3 § 11: Ord. 10-8 § 2 (Exh. B (part)): prior code § 27.84)

17.52.060 Prohibited uses.

The following uses are specifically prohibited in the SC district:

- A. Formula restaurant. "Formula restaurant" means a restaurant devoted to the preparation and offering of food and beverage for sale to the public for consumption either on or off the premises and which is required by contractual or other arrangement to offer any of the following: standardized menus, ingredients, food preparation, decor, uniforms, architecture, or similar standardized features;
- B. Outlet stores, discount stores, or stores devoting commercial area, gross sales or inventory, to the sale of second quality, irregular or discontinued merchandise or to the liquidation of merchant's or manufacturer's stock;
- C. Souvenir shops;
- D. T-shirt shops;
- E. Time-share projects, programs or occupancies. (Ord. 10-8 § 2 (Exh. B (part)): prior code § 27.85)

17.52.070 Development standards.*

The following requirements shall be observed in the SC district, excluding the area within the specific plan area as defined in the general plan, and except as otherwise provided in this title:

A. Maximum Standards.	
1. Height of building/structures	35 feet
2. Building floor area	**
3. Use floor area	***
B. Minimum Standards.	
1. Lot area	10,000 square feet
2. Front setback	****
3. Side setback	25 feet
4. Side yard	10 feet/floor
5. Rear yard****	15 feet*****

* Development standards for the SC district area included in the specific plan area of the general plan shall be determined in conjunction with a site development plan for the parcel(s) at the time of project review. Variations from the adopted development standards may be allowed in the specific plan area if findings of consistency with general plan policies are made by the city during review of the development application.

** Building floor area in the SC district shall be governed by the provisions of subsection C of this section.

*** Use floor area in the SC district shall be governed by the provisions of subsection D of this section.

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**** Fifteen percent (15%) of lot depth shall be the average front building setback along Main Street, but in no case shall the setback be less than thirty-five (35) feet. The first thirty-five (35) feet of the front setback shall be devoted to landscaping exclusive of driveway access with the balance, if any, of the required front setback devoted to parking or landscaping as determined by design review. Lot depth is the depth of the parcel or portion thereof which is zoned commercial.

***** Yards abutting a property designated residential shall have a minimum of twenty (20) feet.

C. Building Floor Area.

1. Buildings Existing Prior to 1993 Which Exceed Ten Thousand (10,000) Square Feet. Buildings which existed prior to 1993 and exceed ten thousand (10,000) square feet may increase the allowable floor area upon approval of a use permit by the planning commission. Approval of a use permit is subject to finding the expansion consistent with the policies of the general plan and the purpose of the SC district. When a use permit is considered for expansion of floor area the following criteria shall be considered in addition to the use permit findings included in Sections 17.168.050 and 17.52.100:

- a. Expanded floor area shall only be allowed for office, winery, storage, or other nonretail uses determined by the planning commission.
- b. The proposed increase in floor area shall not result in an expansion of the footprint or building coverage of the existing building.
- c. The floor area ratio shall not be exceeded.

2. Buildings Constructed After 1993. Each building on a legal parcel of record is limited to a maximum of ten thousand (10,000) square feet of building floor area. Multiple buildings may be constructed on a legal parcel of record provided the individual buildings do not exceed ten thousand (10,000) square feet of building floor area and the maximum floor area ratio on the parcel is not exceeded.

Floor area of a single building may exceed ten thousand (10,000) square feet upon approval of a use permit by the planning commission. Approval of a use permit is subject to finding the increased building floor area consistent with the policies of the general plan and the purpose of the SC district. When a use permit is considered for increased building floor area the following criteria shall be considered in addition to the findings included in Sections 17.168.050 and 17.52.100:

- a. Increased floor area shall only be allowed for office, winery, storage, or other nonretail uses determined by the planning commission.
- b. The building footprint for each building shall not exceed ten thousand (10,000) square feet.
- c. The allowed floor area ratio shall not be exceeded.

D. Use Floor Area.

1. Minimum Floor Area. All uses in the SC district within existing and newly constructed buildings shall have a minimum floor area of two hundred (200) square feet unless a use permit is approved by the planning commission to allow a reduction in floor area below two hundred (200) square feet.

2. Maximum Floor Area. All uses in the SC district within existing and newly constructed buildings shall be limited to a maximum of ten thousand (10,000) square feet of floor area. Tenant spaces in existence on November 1, 1999, may modify the existing floor area by no more than ten percent (10%) of the existing floor area. Modification of tenant spaces existing on November 1, 1999, resulting in more than a ten percent (10%) increase in floor area may be allowed upon approval of a use permit by the planning commission. Increase of tenant space floor area shall not result in the tenant space exceeding ten thousand (10,000) square feet except as provided by subsection C of this section. (Ord. 10-8 § 2 (Exh. B (part)); prior code § 27.86)

17.52.080 Outdoor storage, display or sale of merchandise.

A. All uses shall be conducted entirely within a completely enclosed building except for:

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1. Auto dealers;
 2. Bus depots and transit stations;
 3. Farmers' markets;
 4. Parking and loading areas;
 5. Plant nurseries;
 6. Restaurants, outdoor dining in conjunction with a use permit approved for restaurant use;
 7. Seasonal sales (Christmas trees, pumpkins, etc.);
 8. Service stations;
 9. Storage of building materials and supplies accessory to an approved use;
 10. Taxi stands;
 11. Such other uses which, in the opinion of the planning director, require outside display or storage.
- B. Provided the use is allowed (either as a permitted or conditional use) by the zoning district regulations for the district in which the property is located, the following provisions shall apply to the incidental placement, storage, display, sale, or offer for sale of any merchandise out-of-doors or outside any completely enclosed building:
1. Screening. The merchandise shall be screened so as not to be visible from any public or private street, any off-street parking facility, or any common area in an integrated commercial center; or
 2. Use Permit. A use permit approved by the planning commission shall be required for the outdoor storage display or sale of merchandise except for the following:
 - a. Fruits and vegetables,
 - b. Plants and other growing vegetation, with the limitation in subsection (B)(3)(f) of this section not applicable to nurseries,
 - c. Cut flowers,
 - d. Gasoline pumps, oil racks and accessory items when located on pump islands,
 - e. Vehicles, including, but not limited to, automobiles, trucks, motorcycles, trailers and recreational vehicles, with the limitation in subsection (B)(3)(f) of this section not applicable,
 - f. Areas within a completely roofed street alcove or entryway; provided, that the merchandise is inside the line of the building face,
 - g. Parking lot and sidewalk sales and other promotional events that involve retail sales, as long as they do not exceed twelve (12) days total during any twelve (12) month period with no more than three days being consecutive, regardless of the number of businesses located on the property, with the limitations in subsection (B)(3)(e) and (f) of this section not applicable,
 - h. Nonpromotional events conducted by or for recognized nonprofit or charitable community groups, with the limitations in subsection (B)(3)(a), (e), and (f) of this section not applicable,
 - i. Garage and yard sales, as long as they are conducted on property used for residential purposes by a resident and do not exceed three days during any six-month period, with the limitations in subsection (B)(3)(a), (e), and (f) of this section not applicable,

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- j. Merchandise associated with hardware stores and building supply stores,
 - k. Activities similar to the above, as determined by the planning director.
3. Standards. The placement or location of the merchandise must comply with the following:
- a. The merchandise or activity is incidental and adjacent to any lawfully established business that normally sells the merchandise inside the building.
 - b. The merchandise or activity does not present a hazard to pedestrians or vehicles.
 - c. The merchandise or activity does not occupy the space formed by extending the width of any required or existing building exit, whichever is wider, to the public right-of-way.
 - d. The display of merchandise shall not be located within the public right-of-way.
 - e. The merchandise or activity does not occupy any required parking spaces.
 - f. The storage, display or sales area is limited to two hundred (200) square feet or ten percent (10%) of the gross floor area of the business, whichever is less.
4. Public Right-of-Way. Nothing in this section shall authorize the placement, storage, display, sale or offer for sale of any merchandise on any street or on any sidewalk or any other portion of the public right-of-way, with the exception of sidewalk sales permitted by subsection (B)(2)(g) of this section. (Ord. 10-8 § 2 (Exh. B (part)); Ord. 06-9 § 2 (part); prior code § 27.87)

17.52.090 Other standards and uses.

- A. Catering. Food catering shall be permitted when accessory to an approved use.
- B. Music/Entertainment. Music/entertainment shall be allowed when accessory to an approved use and noise is not audible beyond the confines of the building.
- C. Hazardous/Toxic Substances. Uses reporting excessive amounts of hazardous/toxic substances shall require a use permit.
- D. Food and Beverage Establishments. ~~Establishments serving food or beverage with seating are limited to thirty (30), as listed on the regulated food and beverage establishment inventory.~~ Such establishments shall be subject to the following regulations:
 - 1. The type of use shall be as listed on the ~~inventory and/or~~ conditions imposed during city review.
 - 2. All regulated uses shall be subject to use permit review by the planning commission prior to change in use or expansion of use. Change in use or expansion of use shall include increase in seating; increase in floor area; change to a restaurant with a complete kitchen capable of providing full menu service of food prepared on premises; or change in services which may result in an increase in water, sewer, traffic, noise, or parking/circulation impacts. Change in use shall not include minor changes to hours of operation or change in hours to the food service unless such hours are regulated by an existing use permit.
 - 3. If approvals expire ~~for an establishment listed in the inventory~~ or if an establishment ceases operation and may not be reestablished under Chapter 17.140 regulating nonconforming establishments, Section 17.08.120 regulating use permits, or other provisions of this title, another restaurant may be established at a new location as follows:
 - a. Use permit approval is required for a new establishment at any location within the city.
 - ~~b. The total number of establishments shall not be increased beyond thirty (30).~~
 - ~~e~~b. The total number of seats at the proposed restaurant shall not exceed two hundred (200).

~~dc.~~ Use permit applications for the establishment of new restaurants shall be considered in the order of applications received, except that priority will be given to an existing business which is being relocated if the following conditions are met:

- i. The existing business notifies the planning director in writing no later than ten (10) days after the business ceases operation of its intention to relocate and of the date it will or did cease operation; and
- ii. A completed use permit application is filed before the food or beverage use at the original location becomes null and void pursuant to Sections 17.08.120, 17.140.020, or other provisions of this title.

~~ed.~~ No use permit application will be accepted for processing until an establishment ~~on the inventory~~ (or an approved replacement establishment) has ceased operation or the property owner has notified the planning director in writing that the use will not be reestablished at the previous location. The use permit application shall not be scheduled for hearing by the planning commission until the time period for reestablishing of the use at the location where the use has ceased has expired or written notice has been given by the property owner that the use will not be reestablished at the previous location.

4. When an existing business is modifying its operation the use permit shall be reviewed for compliance with the following:

- a. That if the regulated use is considered a legal nonconforming business, the reasons for nonconformity shall be stated in the findings;
- b. That the plans submitted with the application indicate that any existing nonconformities will not be increased by the issuance of the permit;
- c. The total seating capacity authorized by the use permit and fire code occupancy shall be posted on the premises;
- d. That all trash and recycling areas are screened from view.

5. A use permit or use permit amendment is required to expand the number of seats ~~at a restaurant listed on the regulated food and beverage establishments inventory~~ or to enclose approved outdoor seating for use as indoor seating.

- a. The total number of restaurant seats, including indoor and outdoor seating, shall not exceed two hundred (200). Restaurants with more than two hundred (200) seats that were legally approved prior to the date of adoption of the ordinance codified in this chapter shall not be required to reduce their seating to comply with this limitation.
- b. Seating shall be in compliance with the maximum fire code occupancy as determined by the fire marshal.
- c. A building expansion to enclose outdoor seating to indoor seating shall be considered an expansion of seating for purposes of determining required parking.

6. Outdoor Seating. Administrative approval of a sidewalk dining permit is required to establish outdoor seating for dining at restaurants with an approved use permit. Use permit amendment is required for an increase in the number of seats. The sidewalk dining permit application shall include a plan showing the number of tables and chairs and the area where the dining will be allowed.

- a. Outdoor dining for seating that results in an increase in the number of seats shall be reviewed by the planning department for compliance with parking standards and by Napa County environmental management for compliance with regulations pertaining to food storage, health and safety.
- b. For those restaurants that wish to serve alcohol outside, the licensee must obtain approval for premises expansion from the California Department of Alcoholic Beverage Control.

- c. All entrances and emergency exits shall be kept free of obstructions to ingress and egress.
 - d. For those restaurants that wish to establish outdoor seating for dining on a sidewalk, the following will be required:
 - i. A one-and-one-half-foot “recovery zone” from the edge of curb that must be kept free of obstructions (CalTrans requirement).
 - ii. A four-foot clear path of travel, which clearly maintains ADA compliance along the sidewalk, must be maintained to provide disabled access.
 - iii. Tables and chairs must be brought indoors when the restaurant is closed.
 - iv. Entertainment shall not be allowed on the sidewalk as part of the restaurant service.
 - v. An encroachment permit must be obtained from the city of St. Helena. Application must include documentation of required liability insurance. The city of St. Helena maintains the preeminent right to use the sidewalk and suspend the right to encroach whenever the city needs use of the sidewalk for other public use or for repair.
 - vi. Sidewalk dining permits are revocable at the will of the city, and such revocations do not result in a taking of the owner’s property (i.e., a taking of the restaurant).
 - vii. No more than twenty percent (20%) of total restaurant seating may be located on the sidewalk or other public property.
 - e. For those restaurants wishing to allow patrons to bring dogs to the outdoor dining area, the following regulations shall be enforced:
 - i. Employees and patrons shall not allow dogs to come into contact with serving dishes, utensils, tableware, linens or any other items involved with food service operations.
 - ii. Patrons shall keep their dogs on a leash at all times and shall keep their dogs under control.
 - iii. Dogs shall not be allowed on chairs, tables, or other furnishings.
 - iv. All table and chair surfaces shall be cleaned and sanitized between seating of patrons.
 - v. Dog waste shall be removed immediately and the area immediately cleaned and sanitized with an appropriate product.
 - vi. Dogs shall not be permitted to travel through indoor portions of the public food service establishment.
- E. Landscaping Requirements.
- 1. Twenty percent (20%) of the site shall be landscaped.
 - 2. Installation and Maintenance of Landscaping and Shade Trees. All required frontage yards, off-street parking areas, and all other open areas, other than screened storage areas, shall be improved and shall be permanently maintained by the property owner with the installation of shade trees and landscaped areas and planters in accordance with the following standards:
 - a. Parking Lot Trees. All trees in parking lots shall be fifteen (15) gallons in size and shall conform to the National Association of Nurserymen’s adopted standards for growth, condition and development of nursery-supplied materials. Modification of these standards for equivalent quality of tree or shade plant may be permitted depending on species and quality of stock. The following minimum number of trees shall be required in any parking lot:

Parking Lot Size	Number of Trees
15 spaces or less	1 tree/4 spaces (minimum of 2 trees)
16 spaces or more	20 trees/acre if canopy is 40 feet or greater
	24 trees/acre if canopy is less than 40 feet

b. Planters. Where a parking lot abuts a public right-of-way, there shall be provided a landscaped planter contiguous to and parallel to such right-of-way.

c. Variety and Distribution. Shade trees shall be of a variety approved by the city that will, under ordinary circumstances and growing conditions, provide shade upon reaching maturity. Distribution of trees shall generally be in a grid or similar pattern within off-street parking lots, required yards, and other open spaces and landscaped areas so as to fulfill the intent of this title to shade expanses of pavement and other open space.

d. Curbing. Landscaping and shade trees shall be contained in planters and tree wells bordered by a six-inch high concrete curb or equivalent barrier approved by the city.

e. Width and Protection of Planters. Unless otherwise specified in this chapter or under the conditions of an approved permit, planters and tree wells shall have a width of not less than five feet and shall be protected from automobile overhang where necessary through the provision of barriers, tire stops or additional width.

f. Maintenance. Landscaped areas and planters shall be served by an irrigation system approved by the city and shall be kept in a weed-free condition.

F. Wastewater Generation. Each and every use allowed in the SC district shall be restricted such that all such uses on any single "lot of record," as defined by Section 13.24.090(C) of this code, do not in the aggregate generate wastewater in excess of the following standards:

1. Six hundred (600) gallons per day, without a use permit which regulates wastewater generation;
2. Two thousand five hundred (2,500) gallons per day, upon grant of a use permit regulating wastewater generation; provided the city council approves a use permit with conditions ensuring that all reasonable water conservation measures are implemented, and finds that approval is in the best interest of the city; or
3. For all uses lawfully in effect on any lot of record on December 8, 1981, which generated in aggregate more than six hundred (600) gallons of wastewater per day, such uses may be altered, reconstructed or changed; provided, that the resultant uses on any such lot of record do not in the aggregate generate wastewater exceeding the aggregate wastewater gallonage per day for all uses existing on such lot of record on December 8, 1981.

G. Demolition Permit Required. Except when required for the emergency protection of public health, safety or welfare as determined by the city manager, no permit authorizing the demolition of any structure within the commercial zone districts shall be issued until reviewed by the planning commission in accordance with the procedures established in Chapter 17.92 and the following findings:

1. That, based on the public record and testimony presented at a public hearing, the structure is determined not to be a significant architectural or historical building;
2. If a structure is determined to be significant by the planning commission, no demolition will be authorized unless the following findings are made by the commission:
 - a. That the structure poses a threat to health, safety and general welfare if it is not demolished,

- b. That restoration of the structure is not feasible or practicable using current building codes including, but not limited to, the Historic Building Code provisions of the Uniform Building Code of the state,
- c. That no public or other funding is available for financing renovation or purchase of the structure.

H. Right to Farm Provision. Property owners within the district shall recognize that there exists a right to farm properties within the district and in the vicinity of the district. There is a good faith expectation that no complaints will occur regarding legal normal agricultural activities on properties in the district or in the vicinity of the district. Such activities may include day or night disbursement of chemicals, and creation of dust, noise or fumes.

I. Hotel and Motel Management. A manager or other responsible person shall reside upon the premises and shall have charge of every hotel or motel in which there are twelve (12) or more guest rooms, in the event that the owner of any such hotel or motel does not reside upon the premises. The requirements of this section are intended to be declarative of, and consistent with, state law. (Ord. 18-5¹ § 4 (Exh. B (part)); Ord. 10-8 § 2 (Exh. B (part)); Ord. 00-2 § 3; prior code § 27.88)

17.52.100 Reserved.
(Ord. 10-8 § 2 (Exh. B (part)))

¹ Code reviser's note: Section 5 of Ordinance 18-5 provides that its amendments "are enacted for a period of two years and shall terminate on November 8, 2020, unless extended or made permanent by action of the City Council."

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REGULATED FOOD AND BEVERAGE ESTABLISHMENTS INVENTORY JANUARY 2008

-	INSIDE SEATS	OUTSIDE SEATS	UNSPECIFIED	TOTAL SEATS
A. & W.**	107	28	0	135
501 Main Street	-	-	-	-
963-4333	-	-	-	-
(City Council Det. 1/10/95)	-	-	-	-
Ana's Cantina**	64	0	0	64
1205 Main Street	-	-	-	-
963-4921	-	-	-	-
(UP 5/3/89)	-	-	-	-
Armadillo's**	48	0	0	48
1304 Main Street	-	-	-	-
963-8082	-	-	-	-
(La Placita UP 6/7/89)	-	-	-	-
Azteca Market	12	0	0	12
789 Main Street	-	-	-	-
(UP Resolution 12/14/04)	-	-	-	-
Big Dipper	25	0	0	25
1336 Oak Avenue	-	-	-	-
963-2616	-	-	-	-
(file memo dated 2/9/90)	-	-	-	-
Cindy's Backstreet Kitchen**	0	0	125	125
1327 Railroad Ave.	-	-	-	-
963-1200	-	-	-	-
(UP 6/6/90)	-	-	-	-
Cook St. Helena**	36	0	0	36
1310 Main Street	-	-	-	-
963-7088	-	-	-	-
(UP 8/30/88)	-	-	-	-
Culinary Institute**	0	0	125	125
2555 Main Sreet	-	-	-	-
963-4503	-	-	-	-
(UP 10/15/93)	-	-	-	-
Gillwood's**	55	0	0	55

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1313 Main Street	-	-	-	-
963-1788	-	-	-	-
(City Council minutes 11/9/82)	-	-	-	-
Giugni's	25	0	0	25
1227 Main Street	-	-	-	-
963-3421	-	-	-	-
(see det.)	-	-	-	-
Go Fish**	0	0	169	169
641 Main Street	-	-	-	-
963-1401	-	-	-	-
(Southside Cafe UP 6/14/94)	-	-	-	-
Golden Harvest**	35	0	0	35
61 Main Street	-	-	-	-
963-3235	-	-	-	-
(UP 7/8/86)	-	-	-	-
La Prima**	68	24	0	92
1010 Adams Street	-	-	-	-
963-7909	-	-	-	-
(see det.)	-	-	-	-
Market Restaurant**	72	0	0	72
1347 Main Street	-	-	-	-
963-4646	-	-	-	-
(U.P. 10/16/01)	-	-	-	-
Martini House**	109	66	0	175
1245 Spring Street	-	-	-	-
963-5578	-	-	-	-
(UP 12/19/00)	-	-	-	-
Model Bakery	20	0	0	20
1357 Main Street	-	-	-	-
963-8192	-	-	-	-
(City Council Det. of Use 8/23/94)	-	-	-	-
N. V. Coffee Roasting Co.	40	10	0	50
1400 Oak Ave.	-	-	-	-
963-4491	-	-	-	-
(UP 7/24/90)	-	-	-	-
Pizzeria Tra Vigne**	0	0	120	120

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1000 Main Street	-	-	-	-
967-9999	-	-	-	-
(UP 8/27/91)	-	-	-	-
St. Helena Hotel	54	0	0	54
1309 Main Street	-	-	-	-
963-4388	-	-	-	-
(UP 11/17/87	-	-	-	-
Stomp/Keller's**	72	0	0	72
1320 Main Street	-	-	-	-
(UP 11/01/05)	-	-	-	-
CC Blue Sushi**	36	0	0	36
1148 Main Street	-	-	-	-
(UP 9/20/05)	-	-	-	-
Taylor's Refresher**	0	0	139	139
933 Main Street	-	-	-	-
(City Council Det. 1/10/95)	-	-	-	-
Terra**	105	0	0	105
1345 Railroad Ave.	-	-	-	-
963-8931	-	-	-	-
(Duckworth UP 6/7/88)	-	-	-	-
That Pizza Place**	12	0	0	12
1149 Main Street	-	-	-	-
(UP 11/06/07)	-	-	-	-
Tra Vigne Cantinetta	4	16	0	20
(UPA 5/2/90)	-	-	-	-
Tra Vigne Restaurant**	60 (Dining)	100	0	160
(UP 9/15/81)	80 (Banquet)	0	0	80
1050 Charter Oak	-	-	-	-
963-4444	-	-	-	-
Villa Corona**	35	8	0	43
(formerly Napa Valley Deli)	-	-	-	-
1138 Main Street	-	-	-	-
963-7710	-	-	-	-
(UP 5/17/94)	-	-	-	-
Vineland Station Tea House	0	0	20	20
1281 Vidovich Ave.	-	-	-	-

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UP 2007-63	-	-	-	-
Vineland Station Cafe	40	10	0	50
1281 Vidovich Ave.	-	-	-	-
UP 2007-65	-	-	-	-
Wine Valley Restaurant**	33	0	0	33
1146 Main Street	-	-	-	-
(UP 8/6/02)	-	-	-	-
SEATING TOTAL				2,177
RESTAURANT TOTAL				30
NUMBER OF RESTAURANTS PERMITTED IN ST. HELENA				30
1351 Lounge	Nonconforming use; business closed.			
1351 Main Street	-	-	-	-
963-4045	-	-	-	-
(ccc-det.)	-	-	-	-
Magnolia**	Permits for establishment of restaurant have expired.			
(formerly Teng's)	-	-	-	-
1113 Hunt Ave.	-	-	-	-
963-1161	-	-	-	-
(UP 12/17/96.)	-	-	-	-
Martin Design**	Permits for establishment of restaurant have expired.			
(formerly Magnolia Cafe)	-	-	-	-
1118 Hunt Ave.	-	-	-	-
963-0748	-	-	-	-
(UP 98-91)	-	-	-	-
Mixers	Permits for establishment of restaurant have expired.			
Juice bar as accessory use	-	-	-	-
1232 Spring Street	-	-	-	-
963-9592	-	-	-	-
Pairs Parkside Cafe**	Permits for establishment of restaurant have expired.			
1420 Main Street	-	-	-	-
263-7666	-	-	-	-
(Rissa's UP 4/18/90)	-	-	-	-
Roadhouse 29**	Permits for establishment of restaurant have expired.			
(Formerly Fidel's Tacos, Creekside Deli)	-	-	-	-
1065 Main Street	-	-	-	-
967-9997	-	-	-	-

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(UP 12/17/93)	-	-	-	-
Roux**		Nonconforming use expired after 60 days.		
1234 Main Street	-	-	-	-
963-5507	-	-	-	-
(occ. det.)	-	-	-	-
Vineland Station		Use Permit not vested.		
709 Main Street	-	-	-	-
(UP 11/04/03)	-	-	-	-
Tasting on Main		Use Permit not vested.		
1142 Main Street	-	-	-	-
(UP 2006-12)	-	-	-	-

*— The number of seats authorized in each establishment is either the number regulated by conditions imposed by the City or the number of occupants allowed based on the Uniform Fire Code regulating occupancy limits.

**— Restaurants with complete kitchens capable of providing full menu service of food prepared on premises.

Appendix II

~~HOTELS, MOTELS AND B&B INVENTORY~~

~~-(1/01/97)~~

Name of Business	Number of Rooms
Ambrose Bierce	
1515 Main St.	
Jane Gibson	
963-3003	2
Byland House	
2000 Howell Mountain Road	
Bill Byland	
963-9073	2
Chestelson House	
1417 Kearney	
Jackie Sweet	
963-2238	3
Cinnamon Bear	
1407 Kearney	
Jenny Jenkins	
963-4653	3
Creekside Inn	
945 Main Street	
Jean Nicholson	
963-7244	3
El Bonita Motel	
195 Main Street	
Mark Warren	
963-3216	41
Harvest Inn	
1 Main Street	
Robert Mannix	
963-9463	54
Hotel St. Helena	
1309 Main Street	18

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Elizabeth Martin	
510-268-0359	
963-4388	
Inn-at-Southbridge	
1020 Main Street	
Sulphur Creek Assoc.	
963-2225	21
Judy's	
2036 Madrona	
Judy Sculatti	
963-3081	4
Sunny Aeres	
397 Main Street	
Susanne Salvestrin	
963-2826	2
Vineyard Country Inn	
201 Main Street	
963-1000	21
-	-
Total	471



PLANNING COMMISSION REPORT

Planning Commission Meeting of August 18, 2020

FILE NUMBER: PL17-006, PL17-036 and PL20-002

SUBJECT: Request by Ted Hall on behalf of Long Meadow Ranch LLC for Use Permit Amendment and Design Review approval in order to make operational, including additional events, and minor physical changes to the existing Farmstead property at 738 Main Street in the Service Commercial (SC) zoning district. The applicant is also requesting Use Permit, Design Review, Lot Merger, Lot Line Adjustment, Variance, Water Agreement and Development Agreement approval in order to construct a new 65 room hotel with ancillary structures including a multi-purpose building, fitness center, utility building, and agricultural barns totaling approximately 53,200-sf of building area on the property located at 1000 Mills Lane in the Service Commercial (SC) and Twenty-acre Agriculture (A-20) districts. In accordance with Article 6 of the CEQA Guidelines, a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program has been prepared for the proposed project.

PREPARED BY: Aaron Hecock, Senior Planner

REVIEWED BY: Maya DeRosa, Planning & Building Director

APPROVED BY: Maya DeRosa, Planning & Building Director

APPLICATION FILED: 01/24/17

ACCEPTED AS COMPLETE: 06/10/20

LOCATION OF PROPERTY: 1000 Mills Lane and 738 Main Street

APN: 009-112-017, 009-070-049, 009-070-052, 009-070-053, and 009-070-054

GENERAL PLAN/ZONING: Service Commercial (SC) / Twenty-Acre Agriculture (A-20)

APPLICANT: Ted Hall, Long Meadow Ranch LLC

PHONE: (707) 963-4555

BACKGROUND

On March 24, 2009 the St. Helena City Council approved Resolution No. 2009-30 (attached for review) approving an increase in the eating and drinking establishments inventory, a use permit amendment, and design review for continuation of the nursery (has since ceased operation), a restaurant, an open air produce market, and a wine tasting room at the previously existing nursery site located at 738 Main Street at what is now known as Farmstead. Specifically, the entitlement permitted the following uses and changes on-site:

- A 160-seat restaurant;
- A wine tasting room and offices in the historic Logan-Ives house;
- A plant nursery and community garden;
- A covered open-air produce market; and
- The addition of on-site parking, construction of a covered produce market, and minor modifications to the exterior of the historic Logan-Ives house to accommodate accessible entrances and to add a trellis to the retail barn.

PROJECT DESCRIPTION

Farmstead at Long Meadow Ranch Restaurant Project – 738 Main Street

The applicant is requesting approval of a use permit amendment in order to memorialize all activities currently occurring on-site, including those not originally approved in the 2009 use permit amendment. These additional activities include the following:

- Retail sales, in addition to the approved tasting room and offices, inside the historic Logan-Ives house (open 10 a.m. to 6 p.m.);
- A café serving breakfast items and coffee (open from 7 a.m. to 12 p.m. with 40 outdoor seats);
- Various business and private social events occurring throughout the year. Events would occur between 9 am and 10 pm. Almost all events include at least one meal served by the restaurant. Events up to 75 persons would occur daily while events of 76 to 200 persons are limited to four (4) per week. Outdoor live and recorded amplified music is often included with these events;
- Local community events up to 6 times per year with up to 300 attendees;
- Fitness classes including yoga and Pilates beginning at 9 a.m. (offered 2-3 times per week with up to 12 attendees); and
- Film screenings. Films are screened four times per year, with four showings each day. Twenty to 40 attendees at each screening.

The applicant indicates that these additional uses account for less than 10 percent of total visitors each year. The applicant also states that business meetings (e.g., regular organizational meetings, speaker presentations, strategic planning sessions, workshops, etc.) and private parties (e.g. birthdays, wedding celebrations, anniversaries, etc.) are the largest segment of these additional activities. Currently three-quarters of events involve 75 or fewer persons and occur daily at different times and at different locations within the 2.47-acre site. The applicant also hosts larger events up to 200 persons, one or two times per week, but projects business growth that could result in 4 of these larger events per week in the busier months. These larger

events often also include amplified music. The applicant says site capacity limits the size and number of events per day, so few or no small events occur on days when 76-200 person events are scheduled. The applicant also hosts up to 6 annual local community events such as a 4th of July barbecue, gingerbread baking workshop, holiday seasons celebration in December and a benefit concert. These local events attract up to 300 attendees each.

For events with 40-200 persons, client hosts are required to use buses or vans for transporting their guests to and from the site. These buses, vans, and shuttles are required to park off-site. For smaller events during peak season (July through November), Farmstead will provide complimentary valet parking. A total of 73 additional parking spaces are available one-half of a mile away in a lot at the corner of McCormick and Dowdell Lane, which will be used for employee parking. This off-site lot is leased by the applicant in 5-year periods. Should the lease not be renewed, the applicant will be required to find parking at another similar location or a use permit amendment may be required.

Additionally, the applicant is requesting design review approval in order to add a 408 sf addition to the farmer's market building for the addition of a butcher shop; a 355 sf expansion of dry storage space off the restaurant kitchen; and a 510 sf expansion of storage space on the back side of the south wing events building on the southeast corner; a sound barrier approximately 4 ft. in height to an existing air-conditioning unit on the restaurant building; a sound attenuator to the exhaust outlet on the primary air conditioning unit on the restaurant building; and a sound barrier to the kitchen exhaust fan on the events building.

Proposed Floor Area Summary:

	<u>EXISTING (gsf)</u>	<u>PROPOSED (gsf)</u>
Restaurant Building	4,295	4,650 (+355 addition)
South Wing (Events)	3,161	3,671 (-183 demo / +693 addition)
Farmer's Market	242	650 (+408 addition)
Logan-Ives House	2,980	2,980
Café	144	144
TOTAL:	11,004 sf	12,095 sf

Parking: Parking for the restaurant, general store and tasting room, farmer's market, and garden nursery (which has since ceased operation) was originally approved at 48 spaces. Farmstead at Long Meadow Ranch has added 11 spaces including three electric car-charging stations for a total of 59 spaces. As previously noted, employees would be required to park in the 73 space lot at McCormick Street and Dowdell Lane. This lot is under lease to the applicant for 5 years, with extensions possible.

Employees: According to the applicant, on average, 58 employees currently work at the site daily including the restaurant, general store, farmers' market and administrative

offices, spread across shifts beginning at 3 AM and ending after midnight. The restaurant staff generally works in two shifts, afternoons and evenings. All employees park their vehicles in the supplemental parking lot. Employees are never allowed to park on-site or on any adjacent city streets. Proposed changes at the Farmstead Restaurant would not require the hiring of additional staff beyond those currently working on the restaurant site, however, staffing levels would be reduced should the additional uses not originally approved in Resolution 2009-30 cease to operate.

Proposed Site Improvements: There are minor modifications proposed to existing pathways including building and path/paving modifications, however the total proposed new/reconstructed impervious surface is below 5,000 sf. Based on this, existing drainage features are identified by the applicant as adequate and no alterations to existing drainage patterns or conveyances are proposed. Approximately 255 ft of 8 ft fence will be installed on the east side of the property to buffer the adjacent property from noise and light.

Long Meadow Ranch Lodging Project – 1000 Mills Lane

The applicant is requesting approval of a use permit, design review, lot line adjustment, lot merger, variance, water agreement, and development agreement in order to construct a 65 room hotel spread throughout 10 individual buildings that are configured with either 6 or 7 guest rooms per building. The lodging buildings will total approximately 32,100 square feet and will be single story with a maximum height of 29 feet. The lodging component of the Project would occur on approximately 6.1 acres of an overall 10 acre site; the remaining 3.9 acres would continue to be used for agricultural purposes.

Each guest room will have two bicycles assigned and stored at the room for guests' exclusive use. In addition, staffed courtesy electric-powered carts will also be available to ferry guests between properties. EVA charging stations will be provided for guests' vehicles and the Project's courtesy vehicles. Throughout the lodging portion of the property, farming will continue with an edible landscape of herbs, fruit and citrus trees, and vegetables planted along the pathways. The perimeter of the property will be lined two- and three-deep with fruit trees, creating a commercial fruit orchard, as well as providing a visual buffer to Main Street and Mills Lane. In addition to the lodging buildings described above, the Project includes the following components:

A 9,882 sf multi-purpose building with the following amenities:

- Guest reception and administration area;
- Office space;
- A bar and lounge area;
- A meeting/classroom with a demonstration kitchen primarily for lodging guests, however cooking and food preparation classes will also be open to the public on a scheduled and by appointment basis;
- A commercial kitchen which will prepare daily breakfast, assemble room service meals, provide prep for cooking demonstrations, and support the daily chef's

table featuring wine and food pairings for up to 20 people per sitting. The Chef's Table will service both lodging guests and also be open to the public by reservation only;

- Outdoors areas for lodging guest use only; and
- Staff facilities located in the multi-purpose building will include a break room, restrooms, lockers and showers, and covered bicycle parking.

Additional Facilities and Buildings:

- A 3,452 sf utility and service building which would include a bicycle center for guests, housekeeping, pool support and a green energy facility. This building would also accommodate a small laundry area serving incidental needs for the pool, gym, spa and lodging.
- A 3,114 sf spa building which would include four treatment rooms and two saunas;
- A 2,652 sf pool and fitness building which would include a gym, lockers, and showers;
- Two outdoor pools, including one children's pool, would be located in-between the three buildings; and
- Two (2) 1,000 sf agricultural barns in the northeast corner of the agriculturally zoned area will house tractors, farm equipment and will accommodate repair and maintenance activities.

Proposed Floor Area Summary:

	<u>PROPOSED (gsf)</u>
Guest Lodging	32,100
Multi-purpose Building	9,882
Pool & Fitness Building	2,652
Spa Building	3,114
Utility Building	3,452
Agricultural Barns	2,000
TOTAL:	53,200 sf

The spa, pool and fitness building and associated pools would be for use by lodging guests only. Construction of the buildings described above would result in approximately 53,200 sf of new commercial floor area on the currently vacant property.

Employment: On average up to 65 employees, split into 3 shifts will work daily at the property. If employees travel to work by automobile, they will park at the supplemental parking lot located at McCormick and Dowdell. Secure covered bicycle storage, showers and lockers will also be provided for employees. A transportation demand manager (TDM) will be appointed to facilitate employee car-pooling and other programs to reduce vehicle miles traveled (VMT). Ten employees already working at the current restaurant will support breakfast and room service at the lodging facility. An additional 11 employees will be added to the existing marketing, sales, reservations and support

services already operating for Farmstead at Long Meadow Ranch (these employees will work at the LMR offices at 801 Main Street, St. Helena).

Access and Parking: Automobile access to the lodging facilities will be from Mills Lane. Mills Lane will be realigned with Grayson Avenue at Highway 29 and widened to accommodate two lanes of traffic and parallel parking on both sides of the street. In addition, a 10' class 1 sidewalk and landscaping strip will be added on the north side of the street to accommodate pedestrian and bicycle traffic. Stop signs will be added at the north end of La Fata and at the exit from the Lodging driveway entrance. With the improvements of Mills Lane, a proper connection to La Fata will be completed at the same time. Also, a sidewalk will be added to the west side of La Fata. LMR will complete the construction of the Mills Lane and La Fata Street improvements prior to the opening of the lodging with costs allocated per the Highway 29 Specific plan, development agreement and conditions of approval.

The entrance to the registration parking court and parking lot will be aligned with La Fata Street. There will be 80 onsite parking spaces. All employee parking will be at the supplemental lot located at McCormick and Dowdell. Employees will not be allowed to park on site or on neighboring side streets. The applicant will provide an on-call shuttle for employees to both sites when needed at night. Secure bicycle parking will also be available for general public guests not staying at the lodging.

Water: The lodging and related facilities' needs for potable water (identified as approximately 5.8 acre-feet annual requirement) will be fulfilled through a connection to the City of St. Helena water system. Existing on-site non-potable wells will service all agricultural and landscaping activities. The pool will initially be filled by water from outside the City of St. Helena. To achieve the City's requirements for water neutrality the Developer and City have negotiated for Developer to provide an innovative program to achieve water neutrality through the Development Agreement. As set forth in the terms of the Development Agreement, the Developer has agreed to construct and install recycled water infrastructure (i.e., purple pipe) in Mills Lane extending from Highway 29 easterly to the eastern end of Mills Lan. As the City's wastewater treatment plant transitions to tertiary treatment, the City plans to implement a water recycling system that would allow for use of recycled water for irrigation and landscaping purposes. The piping that the Developer has agreed to install will, at a minimum, provide the ability to irrigate the landscaping at Crane Park and the fields at St. Helena Elementary School with recycled water, which would provide projected annual water savings of more than two times the annual water usage for the lodging project. Developer has agreed to fund these improvements at a cost of up to \$256,549, which is more than \$100,000 more than the in-lieu fees that Developer would pay under th3e City's water neutrality ordinance (the in-lieu fee would have been \$142,341.73). In addition to the Development Agreement, the applicant will enter into a water agreement that will set a cap on allowable water usage for the project and require that the applicant construct the recycled water improvements described in this section.

ANALYSIS

CEQA

In accordance with Article 6 and Appendix G of the California Environmental Quality Act (CEQA) Guidelines, an Initial Study and Mitigated Negative Declaration (IS/MND) has been prepared for the proposed project and included as an attachment to this report. The document contains a description of the proposed project, an analysis of potential environmental impacts resulting from the proposed project, as well as mitigation measures intended to reduce potentially significant impacts to less-than-significant levels.

The IS/MND found that although the proposed project would generate potentially significant impacts related to air quality, biological resources, cultural/tribal resources, hydrology, noise, public services, traffic/transportation, and utilities/service systems, through the introduction of mitigation measures, all potentially significant impacts would be reduced to less than significant levels.

The Draft IS/MND was circulated for a 30-day public review period from May 29, 2020 to June 29, 2020. Thirty-four (34) comment letters were received during the public comment period or shortly thereafter which communicated concerns related to water availability, traffic, parking, housing and climate change (these comments are attached). Additionally, a formal response to comments received was prepared and is included as an attachment to this report. The response to comments addresses concerns raised on environmental issues and provides clarification and revision to the IS/MND, as appropriate. Included in the response to comments are changes made to the IS/MND. Modifications are denoted using ~~striketrough~~ for deletions and underline for insertions. Modifications to the IS/MND are intended to provide clarification, expand discussion, and enhance understanding of the analysis, site conditions, and potential impacts of the project. No modifications to the IS/MND were so substantial as to warrant recirculation pursuant to CEQA Guidelines Section 15088.5.

GENERAL PLAN

As noted above, project related parcels are designated as Service Commercial (SC) and Agriculture (AG) in the City's General Plan Update 2040. The portion of the lodging site designated as SC is within the City's Urban Limit Line (ULL) while the portion of the site designated as AG is not. The ULL 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 ULL is to discourage urban sprawl by containing urban development within designated areas during the planning period.

The SC designation provides for 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. The AG designation provides for 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.

The St. Helena General Plan Update 2040 includes the following policies that are relevant to the proposed project:

- 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.
- 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.
- 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.
- LU3.5 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.
- LU3.7 Provide sufficient auto and bicycle parking in order to serve local businesses in the commercial districts. Ensure that all parking areas are well designed and that auto parking spaces are hidden from pedestrian view, whenever possible.
- LU3.11 Ensure that new commercial development does not obstruct view corridors to the mountains.

- LU5.1 Discourage conversion of existing farmland to non-agricultural uses.
- LU5.3 Strictly limit development on properties existing at the time of the adoption of this General Plan that are designated as agricultural land.
- LU5.5 Encourage the use of sustainable agricultural practices.
- LU5.6 Permit wineries and other agricultural-related industries to locate in the city if their location does not adversely impact surroundings, uses, or city services (water, traffic, etc.) or the quality and character of the community.
- ES1.1 Maintain central St. Helena as the social, cultural, and economic heart of the City by supporting infill and redevelopment of vacant and underutilized parcels in the central St. Helena area.
- ES1.2 Identify and expand economic sectors in which the City has competitive advantages, and capitalize on these strengths in order to diversify local economic activities and strengthen St. Helena's role as an agriculturally-based service center for the surrounding area.
- ES1.3 Ensure the long-term infrastructure needs and priorities of the community are met as part of an economic approach to economic vitality and sustainability.
- ES1.4 Encourage the creation of workforce housing to support the local employment base in keeping with small town smart growth.
- ES1.6 Support local arts, cultural activities, and entertainment that can contribute to the local economy.
- ES2.1 Support the development of responsible, visitor-serving components to the City's economy as a valuable source of jobs, tax revenues, and cultural amenities. Promote policies that facilitate and encourage this type of sustainable economic development.
- ES2.2 Encourage visitor-serving uses oriented toward an upscale market, consistent with the Valley's reputation as a producer of world-class wines. Discourage the introduction of uses that are dependent upon a mass tourist market.
- ES2.3 Ensure a diverse mix of uses that avoids an over-representation of any particular use. Remove the cap on the number of hotel and motel rooms and restaurant seats but continue to limit vacation rentals.
- ES2.5 Encourage socially and environmentally responsible businesses that make positive contributions to the community and operate in an environmentally-sound manner.
- ES2.6 Expand lodging in the downtown area to encourage walking, biking, and alternative transportation modes in order to reduce the need for automobile trips.
- ES2.7 Do not legislate or restrict the number of restaurant seats, but continue to prohibit formula restaurants.
- PF1.1 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.
- PF3.1 Ensure that new developments provide adequate drainage improvements and detention to mitigate flooding from increased stormwater runoff attributable to the development.

- PF5.4 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.
- CR1.1 Promote a connected street and bicycle and pedestrian network within the city to provide better internal automobile, bicycle, and pedestrian connections for residents.
- CR6.2 Require concurrent infrastructure development for any new development projects that have impacts on the circulation system, including streets, paths, trails, sidewalks, and public transit.
- CD1.2 Ensure the construction of sustainable buildings and landscaping in all public and private development projects.
- CD1.8 Require, to the extent feasible, that all new development include under-ground 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.
- CD2.2 Within industrial and commercial areas outside downtown, maintain transitional zones as needed to protect public health and safety but allow flexible front setbacks while encouraging transparent and accessible front façades and parking on the sides and backs of buildings.
- CD2.4 Ensure active and complete streets within commercial districts by providing sidewalk amenities, such as landscape buffers, berms, street trees, street furniture, outdoor dining, public art, signage, and wayfinding.
- CD4.3 Support agricultural and low-intensity uses beyond the Urban Limit Line.
- CD5.3 Ensure that key gateways into the City receive special, character-defining treatments and landscaping. Consider establishing landmark trees along the roads that serve as gateways to the City. New commercial development on Main Street south of the Sulphur Creek bridge should be carefully designed to provide an appropriate gateway into the downtown area.
- OS2.1 Maintain agriculture as the mainstay of the local economy by preserving agricultural lands as an invaluable and irreplaceable open space resource.
- PS2.5 An increase in average noise levels of 5 dBA or greater is considered to be significant and to constitute a noise impact by the noise source in question for the purpose of environmental analyses.
- PS4.6 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.

Staff Response: In accordance with the General Plan and, in particular, those policies listed above, the proposed project would support both a local and visitor serving component to the City's economy by providing jobs, tax revenue, and additional amenities. The project would also enhance the character of the SC district by redeveloping an under utilized site in the commercial district. The project would also be oriented toward an upscale market, consistent with the Valley's reputation as a producer of world-class wines. Additionally, the project would preserve agricultural activities on the existing designated agricultural land beyond the Urban Limit Line (ULL) thereby

preserving those lands for agricultural use consistent with the General Plan policies listed above. For these reasons, the proposed project exhibits overall consistency with the General Plan Update 2040.

HIGHWAY 29 SPECIFIC PLAN

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. A key component of the proposed circulation system is the signalization and realignment of the Highway 29/Grayson Avenue/Mills Lane intersection. As presently configured, the current roadway alignment provides for off-set intersections on both Grayson Avenue and Mills Lane at Highway 29. This intersection is proposed to be realigned as shown schematically on Exhibit 9 of the Specific Plan, whereby Mills Lane would be shifted south to connect with Highway 29 directly opposite the current easterly terminus of Grayson Avenue.

Staff Response: The proposed project is consistent with the land use, design, and policy objectives of the Highway 29 Specific Plan. Furthermore, the project would implement the direction provided in the Highway 29 Specific Plan by realigning Mills Lane with Grayson Avenue. Therefore, the proposed project is consistent with the Highway 29 Specific Plan.

ZONING

Consistent with the General Plan land use designations described above, project related parcels have zoning designations of Service Commercial (SC) and Twenty-Acre Agriculture (A-20).

The SC designation provides for service and retail uses, restaurants, service stations, motels, public and quasi-public uses, and similar and compatible uses. The designation is intended primarily for service and retail uses that are automobile-oriented or whose operational characteristics and space needs are not considered appropriate for the Central Business District. The A-20 designation provides for agricultural and residential uses. With the exception of those hillside areas designated woodlands and watershed, and wineries designated winery, all lands outside the urban limit line are designated A-20 regardless of their size or use. The purpose of the A-20 district is to promote and implement the policies of the general plan to preserve agricultural land uses and provide for future orderly development as the urban limit line is adjusted to accommodate urban growth. This district restricts the density of residential use and stipulates the location and area of residential development to promote preservation of agricultural land use and reduce impacts to the provision of infrastructure as the urban area of the city expands.

Farmstead at Long Meadow Ranch Restaurant Project – 738 Main Street

Per St. Helena Municipal Code (SHMC) Section 17.52.030, eating and drinking establishments require use permit approval in the SC district. As modifications to a previously approved use permit for the Farmstead at Long Meadow Ranch Restaurant

are being proposed, a use permit amendment is required. Additionally, SHMC Section 17.52.040 requires design review approval for new structures or buildings, or exterior revisions of any existing structures or buildings for both permitted and conditional uses. The maximum floor area ratio (F.A.R.) in the SC district is 0.50.

Development Standards

STANDARD		MIN/MAX	EXISTING	PROPOSED
Lot Area		10,000 sf min	107,593 sf	No Change
Building/Use	Floor Area	10,000 sf each max	11,004 sf total	12,095 sf total
Front	Setback (Charter Oak)	35 feet	±85 feet	No Change
Side	Setback (Main Street)	25 feet	±50 feet	±42 feet
Sidyard	Setback (Residential)	20 feet	32'6" feet	20 feet
Rear	Setback (Gold)	20 feet	20 feet	No Change
Height		35 feet max	33'2"	No Change
Floor Area Ratio (FAR)		0.5 max	0.10	0.11

Landscaping Requirements

SHMC Section 17.52.090(E) prescribes various landscaping requirements in the SC district including that 20% of any given site be landscaped. Additionally, it requires the installation of 20 to 24 shade trees (depending on canopy size) if there are more than 16 parking spaces on-site. Where a parking lot abuts a public right-of-way, there must be a landscaped planter contiguous to and parallel to such right-of-way. Planters and tree wells must be bordered by a six-inch high concrete curb or equivalent barrier approved by the city. Unless otherwise specified under the conditions of an approved permit, planters and tree wells shall have a width of not less than five feet and shall be protected from automobile overhang where necessary through the provision of barriers, tire stops or additional width. Landscaped areas and planters must be served by an irrigation system approved by the city and shall be kept in a weed-free condition.

***Staff Response:** The existing Farmstead property is heavily landscaped including more landscaping and shade trees than required by code (it is estimated that at least 26% of the site is landscaped and/or used for gardens). The project site has adequate planters and automobile barriers. Conditions of approval have been added to the attached resolution to ensure that landscaping is preserved and maintained in the future.*

Wastewater Generation

SHMC Section 17.52.090(F) restricts each and every use in the SC district such that any lot of record does not generate wastewater in excess of 600 gallons per day (gpd) without a use permit which regulates wastewater generation, and up to 2,500 gpd with a use permit.

Staff Response: The existing restaurant property has its own water system and supplies water to the project site through an existing well. As Municipal Water is not being supplied to the site, the City doesn't know how much water is being used or discharged into the wastewater system. A condition of approval has been added to the resolution requiring that the applicant install an effluent flow meter and limiting discharge to the 2,500 gpd maximum.

Overall Staff Response: The project as proposed meets all development standards as required by Section 17.52 of the Municipal Code including setbacks, height, floor area ratio, landscaping, etc. Note: the 10,000 sf building maximum is per building, you can have multiple buildings on-site but no individual building can be over 10,000 sf but the sum total of all the buildings can be over 10,000 sf.

Long Meadow Ranch Lodging Project – 1000 Mills Lane

Service Commercial Component

According to SHMC Section 17.52.030, the establishment of a new hotel requires use permit approval in the SC district. Additionally, SHMC Section 17.52.040 requires design review approval for new structures or buildings, or exterior revisions of any existing structures or buildings for both permitted and conditional uses. The maximum floor area ratio (F.A.R.) in the SC district is 0.50.

Development Standards

STANDARD	MIN/MAX	EXISTING	PROPOSED
Lot Area	10,000 sf min	±265,716 sf	No Change
Building/Use Floor Area	10,000 sf each max	-	51,200 sf total
Front Setback (Mills Lane)	35 feet	-	79'7"
Side Setback (Main Street)	25 feet	-	±130 feet
Sidyard Setback (Agriculture)	20 feet	-	25 feet
Rear Setback (Through AG lot)	20 feet	-	±300 feet
Height	35 feet max	-	29 feet
Floor Area Ratio (FAR)	0.5 max	-	0.19

Landscaping Requirements

As described above, SHMC Section 17.52.090(E) prescribes various landscaping requirements in the SC district including that 20% of any given site be landscaped. Additionally, it requires the installation of 20 to 24 shade trees (depending on canopy size) if there are more than 16 parking spaces on-site. Where a parking lot abuts a public right-of-way, there must be a landscaped planter contiguous to and parallel to such right-of-way. Planters and tree wells must be bordered by a six-inch high concrete curb or equivalent barrier approved by the city. Unless otherwise specified under the

conditions of an approved permit, planters and tree wells shall have a width of not less than five feet and shall be protected from automobile overhang where necessary through the provision of barriers, tire stops or additional width. Landscaped areas and planters must be served by an irrigation system approved by the city and shall be kept in a weed-free.

Staff Response: The proposed lodging portion of the project is heavily landscaped including more landscaping and shade trees than required by code; over 20% of the site is landscaped and/or used for orchards. The project site has adequate planters and automobile barriers. Conditions of approval have been added to the attached resolution to ensure that landscaping is preserved and maintained in the future.

Wastewater Generation

SHMC Section 17.52.090(F) restricts each and every use in the SC district such that any lot of record does not generate wastewater in excess of 600 gallons per day (gpd) without a use permit which regulates wastewater generation, and up to 2,500 gpd with a use permit provided the City Council approves a use permit with conditions ensuring that all reasonable water conservation measures are implemented, and finds that approval is in the best interest of the city.

Staff Response: According to the Sewer Capacity Analysis included as Attachment C to the MND, the estimated wastewater generation of the proposed project is approximately 5,148 gallons per day and the existing sewer main has capacity to accommodate this additional flow. The applicant will be required to enter into a Water Agreement with the City to account for all water and wastewater use related to the proposed project; a draft of the Water Agreement is included as an attachment to this report.

Hotel and Hotel Management

SHMC Section 17.52.090(I), states that a manager or other responsible person shall reside upon the premises and shall have charge of every hotel or motel in which there are twelve (12) or more guest rooms, in the event that the owner of any such hotel or motel does not reside upon the premises. The requirements of this section are intended to be declarative of, and consistent with, state law.

Staff Response: The applicant has applied for a variance in order to eliminate the requirement that a manager or other responsible person reside on the premises. This is discussed in more detail below under the Variance heading.

Twenty-acre Agriculture (A-20) Component

Approximately 3.9 acres of the overall 10 acre lodging project site is designated A-20. The applicant is proposing two 1,000 sf agricultural barns on this portion of the property which will house tractors, farm equipment and will accommodate repair and maintenance activities. The remainder of the A-20 site will be used for active agriculture to support restaurant and hotel operations. According to SHMC Section 17.20.030,

buildings for agricultural related activities require use permit approval in the A-20 district. Additionally, SHMC Section 17.20.040 requires design review approval for new structures or buildings (except for one accessory dwelling unit which complies with the provisions set forth in Section 17.116.030), or exterior revisions (not including change in exterior color) of any existing structures or buildings for both permitted and conditional uses.

Development Standards

STANDARD	MIN/MAX	EXISTING	PROPOSED
Lot Area	20 acres min	3.9 acres	No Change
Maximum Non-agricultural Coverage	1 acre	-	2,000 sf
Front Setback (Main Street)	50 feet	-	±300 feet
Sideyard (North - Residential)	20/50 feet*	-	50 feet
Sideyard Setback (South)	20 feet	-	±100 feet to SC line
Rear Setback (Agriculture)	20 feet	-	20 feet
Height	30 feet max	-	29 feet
Floor Area Ratio (FAR)	n/a	-	n/a

**Per SHMC Section 17.20.070 (Special Yards and Distances Between Buildings), Barns, stables, chicken houses and similar accessory buildings shall not be less than fifty (50) feet from a street, nor less than forty (40) feet from any dwelling on an adjacent parcel or R district boundary line.*

Overall Staff Response: *The project as proposed meets all development standards as required by Section 17.52 of the Municipal Code including setbacks, height, floor area ratio, landscaping, etc. Note: the 10,000 sf building maximum is per building, you can have multiple buildings on-site but no individual building can be over 10,000 sf but the sum total of all the buildings can be over 10,000 sf. Water and wastewater issues have been addressed through a Water Agreement and Development Agreement which are attached to this report.*

USE PERMIT / USE PERMIT AMENDMENT

As discussed above, SHMC Section 17.52.030 requires that eating and drinking establishments obtain use permit approval in the SC district. As modifications to a previously approved use permit for the Farmstead at Long Meadow Ranch Restaurant are being proposed, a use permit amendment is required. Additionally, SHMC Section 17.52.030 requires use permit approval for the establishment of a new hotel in the SC district. The purpose of a use permit is to allow the proper integration of essential or desirable uses which may be suitable only in certain locations or zoning districts in the City, or to ensure that such uses are designed or arranged on the site in a particular manner. In its review of applications for use permits, the Planning Commission shall

evaluate each proposed use in order to consider its impact on the City. Pursuant to Municipal Code Section 17.168.050, no use permit shall be granted unless the following findings can be made:

1. That the proposed use would not generate odors, fumes, dust, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community.
2. That the proposed use would not generate levels of noise that adversely affect the health, safety, or welfare of neighboring properties or uses.
3. That the proposed use would not generate traffic noise in excess of the "normally acceptable" range identified in the General Plan.
4. That the proposed use would not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection, and fire protection.
5. That the proposed use would provide adequate ingress and egress to and from the proposed location.
6. That allowing the proposed use would not conflict with the City's goal of maintaining the economic viability of a local serving economy.
7. That the proposed use would be compatible with surrounding land uses and would not conflict with the purpose established for the district within which it would be located.
8. That the proposed use would not be in conflict with the City's General Plan.
9. That the proposed use would not be injurious to public health, safety, or welfare.
10. That granting the use permit would not set a precedent for the approval of similar uses whose incremental effect would be detrimental to the City or would be in conflict with the General Plan.
11. That, as demonstrated on a detailed plan submitted by the applicant, adequate off-street parking to accommodate the long term parking needs of employees and business owners and customers is available.
12. That the capacity of surrounding streets is adequate to serve the automobile and delivery truck traffic generated by the proposed use.

Staff Response: *Farmstead Restaurant - Staff finds that the project meets and/or complies with the required findings to approve a use permit amendment for the restaurant project. The findings included in the attached resolution identify this compliance.*

Farmstead Lodging - Staff finds that the project meets and/or complies with the required findings to approve a use permit for the lodging project. The findings included in the attached resolution identify this compliance.

DESIGN REVIEW

SHMC Sections 17.20.040, 17.52.040, and 17.164.050 requires design review approval for new structures or buildings, or exterior revisions of any existing structures or buildings. The purpose of design review is to, among other things, promote the qualities that bring value to the community and foster attractiveness and functional utility of the community as a place to live and work. The Planning Commission must find that the

project takes reasonable account of the design criteria prescribed in SHMC Section 17.164.030 (listed below) in review of this application:

1. Consistency and compatibility with applicable elements of the general plan;
2. Compatibility of design with the immediate environment of the site;
3. Relationship of the design to the site;
4. Determination that the design is compatible in areas considered by the board as having a unified design or historical character;
5. Whether the design promotes harmonious transition in scale and character in areas between different designated land uses;
6. Compatibility with future construction both on and off the site;
7. Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;
8. Whether the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community;
9. Whether the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures;
10. Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;
11. Whether natural features and vegetation are appropriately preserved and integrated with the project;
12. Whether the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structures and functions;
13. Whether the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors, create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site;
14. Whether sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials.

Staff Response: *Farmstead Restaurant - South of the Sulphur Creek bridge, where commercial development embodies the characteristics more typical of auto oriented, strip commercial development, a principal concern is encouraging the renovation and redevelopment of commercial sites to create a more attractive southern entrance to the City and a more vital and inviting commercial environment.*

Proposed additions to the existing restaurant property are minor in nature and would not present any design problems or conflicts with the design review criteria listed above.

Farmstead Lodging - The proposed lodging project and associated structures present a unique opportunity to enhance and beautify the southern gateway into to the City. Staff believes the project has been thoughtfully designed in consideration of the site and it's surroundings. The proposed buildings are of a scale and massing that is consistent with the context of St. Helena's agricultural setting. The project will use modern materials to

mimic farm-style architecture in the surrounding area. For these reasons, staff believes that the proposed project is consistent with the design review criteria listed above. Per SHMC Section 17.164.040(C), only the proponent's failure to take reasonable account of the items discussed in Sections 17.164.010 through 17.164.030 shall justify the commission's disapproving a proposal solely on the basis of design.

VARIANCE (Lodging Project Only)

As noted above, the applicant has applied for a variance in order to eliminate the requirement that a manager or other responsible person reside on the lodging premises. Applications for variance consideration are governed by SHMC Section 17.172 which states:

"The purpose of a variance is to allow variation from the strict application of the terms of this title where, by reason of the exceptional narrowness or unusual shape of a specific piece of property, or by reason of exceptional size, shape, topographic conditions or other extraordinary situation or condition of such piece of property; or because of the use or development of lands immediately adjoining such property, the literal enforcement of the requirements of this title would involve practical difficulties or would cause undue hardship."

Section 17.172.050, Findings required, states:

"In approving a variance the planning commission must make the following findings:

- A. A hardship peculiar to the property, not created by any act of the owner, exists. In this context, personal, family or financial difficulties, loss of prospective profits and neighboring violations, are not hardships justifying a variance;
- B. The variance is necessary for the preservation and enjoyment of substantial property rights of the applicant which are possessed by other properties in the same district and in the same vicinity; and that a variance, if granted, would not constitute a special privilege of the recipient not enjoyed by his or her neighbors;
- C. The authorization of the variance will not be of substantial detriment to adjacent properties, and will not materially impair the purpose and intent of this title or the public interest, nor adversely affect the general plan;
- D. The condition or situation of the specific piece of property for which the variance is sought is not so general or recurrent in nature as to make reasonably practicable the formulation of a general regulation for such condition or situation; and
- E. The variance and any buildings or structures permitted by the variance will not be detrimental to the public health, safety and welfare of the community."

The applicant proposes that in place of a responsible person residing on premises, they will schedule a responsible manager to be on site 24 hours per day, 365 days per year. The applicant states that this change actually provides superior coverage to a single resident responsible person for the following reasons:

1. The responsible manager is always on site.

- a. They are never absent for vacations or holidays.
 - b. They are never absent for hotel or personal errands.
2. The responsible manager is always immediately available to perform their duties in the event of any emergency. In contrast, a resident manager will be sleeping at night, have sick days and/or otherwise be less able to take action in an emergency.
3. There will never be an unqualified responsible person on site as a temporary replacement for the resident manager when they would be on vacation, holiday, etc. Every manager assigned to this position will be fully trained in emergency protocols to assure the health and safety of all guests and employees, including health emergencies, fire, water issues or other emergencies which could occur.
4. This is the normal industry practice for hotels of this size and larger.

Staff's Response:

- A. *A hardship peculiar to the property, not created by the owner, exists as this requirement doesn't follow modern operational models and creates operational inefficiencies and therefore constitutes a peculiar hardship that is appropriately addressed and may be resolved through consideration of a Variance.*
- B. *Other hotels in the SC district are not burdened by this requirement, therefore, the variance is necessary for the preservation and enjoyment of substantial property rights available to other properties in the same district and vicinity; and that a variance, if granted, would not constitute a special privilege of the recipient not enjoyed by his or her neighbors.*
- C. *The authorization of the variance will not be a substantial detriment to adjacent properties, and will not materially impair the purpose and intent of this title or the public interest, or adversely affect the general plan.*
- D. *Inasmuch as there are not a significant number of similar properties in the vicinity or zoning district, it is not reasonably practicable to formulate a general regulation for such condition or situation. In other words, there are not enough hotels to make it necessary or practical to amend the zoning code to address this peculiar situation.*
- E. *An approval of this Variance to allow for a 24/7 365 day/year on-site manager opposed to requiring that a manager physically live on-site will enhance the public health, safety and welfare of the community.*

LOT MERGER

SHMC Section 16.08.110 (Voluntary merger) states that upon request of the legal owner of contiguous parcels, the Planning Director may approve the merger of the property without reverting to acreage. Any such request shall be in writing signed by all owners and accompanied by an executed assessor's combining agreement and such other data, documents or maps as may be required by the planning director to illustrate or legally describe the proposed configuration, dedications, etc. In approving the combination of parcels, the planning director may impose reasonable conditions. The

planning director's decision shall be final unless appealed to the planning commission. The procedure for approval, appeals, and notice of lot line adjustments, set forth in Section 16.08.070(D), (E) and (F), shall be followed for voluntary mergers. Upon approval, the planning director shall file a notice of merger with the county recorder.

Staff Response: The lodging portion of the project consists of four parcels totaling 10.03 acres (APNs 009-070-049, 009-070-052, 009-070-053, and 009-070-054). The applicant has submitted an application for a lot merger in order to combine these four parcels into one parcel in order to avoid project buildings adjacent to and/or crossing the current lot lines of the four parcels (an exhibit of the proposed merger has been attached to this report). Staff has no issues with the proposed merger and believes it makes sense having the entirety of the proposed lodging project on one site. Like the other entitlements, the Planning Commission will be making a recommendation to the City Council as whether to approve the lot merger or not.

LOT LINE ADJUSTMENT

Review procedures for Lot Line Adjustments (LLA) are regulated by the St. Helena Municipal Code Section 16.08.070. A LLA map may be submitted and approved for a boundary adjustment between (four or fewer) existing and adjoining parcels, which does not create a greater number of lots than originally existed, if each proposed lots meets all the requirements of the California Subdivision Map Act, St. Helena General Plan, the Zoning Ordinance and building regulations.

As required by St. Helena Municipal Code Section 16.08.070(B), each of the parcels involved in the proposed LLA are legally established parcels owned by the respective applicant(s). In addition to identifying the application requirements, Section 16.08.070 grants the Planning Director and the Public Works Director the discretion to jointly approve a LLA application which meet all development criteria. If jointly approved by the Planning Director and Public Works Director, Section 16.08.070(D) requires that the directors make a written report to the Planning Commission at its next regularly scheduled meeting, which this report is satisfying.

The Planning Commission may choose to formally review the LLA or simply provide concurrence on the Planning and Public Works Director's approval. If the Planning Commission decides by majority vote to formally "review" the LLA, then a Planning Commission hearing date is set, public notice is sent out and the proposal is considered by the Commission.

If the Planning Commission concurs with the staff approval, then the Planning Director must publish the action to approve the LLA in the newspaper and send out a notice to all property owners within 300 feet of the site notifying them of the decision. Upon receipt of such notice property owners may then choose to appeal the action of the Planning Director/ Public Works Director to the Planning Commission.

Staff Response: The LLA is proposed between Dr. Gold's property (APN 090-070-034) and the lodging parcels (APNs 009-070-049, 009-070-052, 009-070-053, and 009-070-

054) which are proposed to be merged into one parcel as shown in the exhibit attached to this report. The LLA provides LMR a path from the lodging property to the restaurant property. Dr. Gold would receive an equal amount of land in trade plus they receive the 75' wide driveway area leading to Mills Lane in place of the current easement. Like the other entitlements, the Planning Commission will be making a recommendation to the City Council as whether to approve the lot line adjustment or not.

DEVELOPMENT AGREEMENT

A development agreement is a land use tool that is authorized and governed by Government Code Section 65864 *et seq.* and SHMC Chapter 17.156. Development agreements are voluntary, negotiated agreements entered into between an applicant and the City, pursuant to which the Developer may secure vested rights to develop their property under the rules in place at the time of their approval. In exchange for granting these additional vested rights, the City can negotiate to require the Developer to provide additional community benefits to the City in excess of what the City could require through the normal entitlement process. SHMC Chapter 17.156 requires that the Planning Commission hold a public hearing to consider the Development Agreement and following the public hearing make a recommendation to the City Council on whether to approve the Development Agreement, including making a determination whether the development agreement proposed:

- A. Is consistent with the objectives, policies, general land uses and programs specified in the general plan and any applicable specific plan;
- B. Is compatible with the uses authorized in, and the regulations prescribed for, the land use district in which the real property is located;
- C. Is in conformity with public convenience, general welfare and good land use practice;
- D. Will be detrimental to the health, safety and general welfare;
- E. Will adversely affect the orderly development of property or the preservation of property values. The recommendation shall include the reasons for the recommendation; and
- F. Will have a sufficient water supply for subdivisions pursuant to the requirements of Government Code Section 66473.7 [*Note: This last finding applies to residential subdivisions of 500 or more lots and therefore is not applicable to this Project*].

Section 17.156.090 (Decision by City Council), sets the following requirements for the City Council's consideration of the development agreement:

1. After the City Council completes its public hearing, it may accept, modify or disapprove the recommendation of the planning commission. It may, but need not, refer matters not previously considered by the Planning Commission during its hearing back to the Planning Commission for report and recommendation. The Planning Commission may, but need not, hold a public hearing on matters referred back to it by the city council.

2. The City Council may not approve the development agreement unless it finds that the provisions of the agreement are consistent with the general plan and any applicable specific plan.
3. If the City Council approves the development agreement, it shall do so by the adoption of an ordinance. After the ordinance approving the development agreement takes effect, the City may enter into the agreement.

Staff Response: Earlier this year, the City Council formed an Ad Hoc Subcommittee of two council members to advise in the negotiations with the applicant. The Development Agreement provides the applicant with a vested right to develop the lodging project for a term of five years, with the ability to receive a five year extension. In exchange, the applicant has committed to providing certain community benefits related to affordable housing and infrastructure improvements.

A. Affordable Housing

In the absence of the Development Agreement, the applicant would be required to pay the City's non-residential inclusionary housing fee, which would total \$202,160. Instead, under the terms of the Development Agreement the applicant will pay a total contribution of \$3.2 million toward affordable housing. The applicant will make an initial payment of \$1 million prior to receipt of a building permit, which will be set aside to assist Our Town St. Helena (OTSH) to acquire the Phelps property across the street from St. Helena High School, subject to OTSH securing entitlements (including a general plan amendment and zone change) and financing for development of affordable housing on that site. The remaining \$2.2 million will be paid at the time the Project converts from construction to permanent financing, or upon sale of the Project.

By way of background, it is important to understand the decision making process that the City considered prior to determining that payment of a fee would be the most feasible option to pursue to mitigate the workforce housing impacts of the project. A summary of the options considered is provided below:

- *Make contribution to City for affordable housing:*
Staff determination: Feasible. The amount of the payment was determined based on research of other cities hotel studies and workforce housing generation. The methodology for calculating the \$3.2 million is based on Developer's internal analysis, to produce 51 net new jobs in the City (since the lodging project will be served in part by existing employees of the restaurant), of which approximately 75% (38 jobs) will be low or very low income jobs. These numbers will need to be substantiated by the City. The City currently requires at least 20% of the units in residential projects to be set aside for low and very low income households, and it is appropriate to expect nonresidential projects to provide funding that would be sufficient to provide housing for at least 20% of their low and very low income employees, or in this case, 8 employees. Based on the City's

current research, affordable units in Napa County and surrounding areas cost \$400,000 or more per unit. Therefore, the amount needed to develop affordable housing for 8 of Developer's future employees would be \$3,200,000.

- *Build Units onsite:*

Staff determination: Not feasible for following reasons: requires general plan and zoning amendment to allow residential uses, changes project description, required entitlements and CEQA process. Delays and costs render project infeasible.

- *Donate land to the City that is appropriately zoned for affordable housing:*

Staff determination: Likely infeasible, lack of adequate sites with general plan and zoning to allow high density housing. However, structure of development agreement allows for potential funding for acquisition of the Phelps site by OTSH, as noted above.

Note: In the Housing Element, the following two sites were identified as high density infill opportunities, however these sites are presently not on the market:

- *1447 Spring Street (APN# 009-590-003). It is 1.5 acres and designated High Density. There is currently a single-family home on-site.*
- *1515 Spring Street (APN# 009-590-010). It is .89 acres and designated High Density. There is also a single-family home on this site.*

B. Infrastructure Improvements

Under the Development Agreement the applicant has additionally committed to construct certain public improvements that are needed by the proposed Project but also benefit the City and surrounding property owners. These include the improvements to realign Mills Lane in accordance with the Highway 29 Specific Plan, improvements to the storm drain along Mills Lane consistent with the City's Storm Drain Master Plan, and improvements to the sidewalk on the west side of La Fata street to provide better pedestrian access from the employee parking lot on McCormick and Dowdell to the Project site. The applicant has also agreed to construct and install recycled water infrastructure (purple pipe) in Mills Lane in order to facilitate the development of a City recycled water system that could serve Crane Park, and St. Helena Elementary School (at a minimum), as an alternative means of satisfying the City's water neutrality ordinance, as discussed in the discussion of Water, below.

The Developer will construct all of these improvements at its own cost, with the City Engineer inspecting all the improvements prior to acceptance by the City. The City will reimburse the Developer for costs in excess of Developer's proportionate share of the Mills Land and Storm Drain Improvements, and any amount in excess of \$256,549

spent on the Recycled Water improvements. The City will reimburse the Developer out of future funds in an amount equal to 50% of the transient occupancy tax generated by the Project, until the reimbursement is paid in full.

WATER

Chapter 13.12.030 of the SHMC requires mandatory water efficiency measures and water demand offset requirements for new construction. Among these provisions is the requirement that any “new development” (i.e. construction that would introduce any freestanding building that contains water-using fixtures, any floor area additions to existing nonresidential structures, or any residential additions or remodeling that increases the number of independent living units) offset new water demand by an amount equal to the new demand placed on the city water system (i.e., it must be water neutral). The offset must be clearly demonstrated to the satisfaction of the Public Works Department.

The existing restaurant property has their own water system which supplies water to the property from an existing well; no municipal water is used. According to the Water Use Analysis included as Attachment i2 to the MND, the proposed lodging project would result in the use of approximately 5,148 gallons per day (gpd) and 1,879,028 gallons per year (gpy).

Staff Response: The lodging project is already planning to use water efficient fixtures and water conservation practices to the maximum extent possible, but given that the existing parcel is vacant and thus has no existing water use, no amount of on-site water conservation measures would be sufficient to comply with the City’s water neutrality ordinance.

According to Municipal Code Section 13.12.030, if the City Council determines that actual retrofitting of existing residential or nonresidential buildings is impractical or constitutes an unusual hardship on an applicant, it may authorize the payment to the city of an in-lieu retrofit fee equivalent to the cost of retrofitting a sufficient number of existing homes. According to the applicant, the cost of materials for a retrofit is equal to \$994.01 and the installation cost for a retrofit is equal to \$480.00, resulting in the total cost of \$1,474.01 to retrofit a residence with low flow fixtures. The total in-lieu retrofit fee would then be \$1,474.01 per residence multiplied by 97 residences, resulting in an in-lieu retrofit fee of \$142,341.73. However, Section 13.12.030(B) also provides that an applicant may petition the City Council to allow an alternative innovative method of mitigating water use for new development. Rather than requiring the applicant to pay the in-lieu fee, City and the applicant have negotiated for the applicant to construct and install piping to convey recycled water pipe in Mills Lane from Highway 29 to the end of Mills Lane. These improvements will position the City to provide recycled water for irrigation at, at a minimum, Crane Pake and the fields at St. Helena Elementary, and likely additional users as well. Even if only Crane Park and St. Helena Elementary were to access this recycled water, it would result in water savings of more than two times the expected water usage of the lodging project (Crane Park and the St. Helena Elementary School fields used 4,215,260 gallons of water in 2019, as compared to 1,879,029

gallons per year projected for the lodging project. This alternative solution will facilitate dramatically more significant water savings than would be available through payment of the in-lieu fee, and provides for a significantly larger financial investment. This proposal therefore satisfies the City's requirement of alternative, innovative methods for mitigating water use under the City's water neutrality ordinance.

PARKING

On-site parking requirements are described in SHMC Section 17.124.030. The requirement for establishments with seating for the service of food and/or drinks is one (1) space for each four (4) seats. The parking requirement for general commercial uses is one (1) space for each 300-sf of floor area. Hotels are required to provide one (1) space for each individual guest room, suite, or sleeping or living unit with additional parking being required for ancillary uses such as restaurants.

Farmstead at Long Meadow Ranch Restaurant Project – 738 Main Street

On-site parking required for the proposed uses on the existing restaurant property are as follows:

- 160 seat restaurant/café = 40 spaces (the café will close at 12pm when the restaurant opens);
- 2,980sf Logan-Ives Building = 10 spaces;
- 650sf Farmer's Market Building = 2 spaces; and
- The existing south wing building is largely utilized to support the restaurant, however 1,823 sf of the space is used for separate uses including a potting shed (563 sf) and a meeting/event room (1,260 sf) = 6 spaces.

Total on-site parking required: 58 spaces

Long Meadow Ranch Lodging Project – 1000 Mills Lane

On-site parking required for the proposed lodging project are as follows:

- 65 room hotel = 65 spaces; and
- 20 seat chef's table = 5 spaces.

Total on-site parking required: 70 spaces

Staff Response: *The existing restaurant property provides 59 on-site spaces and the proposed hotel property provides 80 spaces, therefore, required off-street parking has been provided. In addition to the on-site parking provided on both the restaurant and lodging properties, the applicant has secured a 5-year lease for an off-site parking lot at the southwest corner of the Dowdell Lane/McCormick Street intersection. This lot would provide up to 73 parking spaces and would be used for employee parking which would eliminate the need for employees to use on-site parking. A condition of approval has been added to the attached resolution requiring that if the lease option for this lot is lost, that the applicant provide evidence that a parking lot of a similar size has been secured (and is approximately the same distance from the project site) or apply for a use permit amendment and/or variance for parking.*

ISSUES

Concurrent with the processing of these applications, staff has prepared a zoning ordinance amendment in order to remove hotel and restaurant limitations consistent with implementation actions described in the General Plan Update 2040.

CORRESPONDENCE

As noted above, thirty-four (34) comments were received during or shortly after the public review period for the MND. These comments generally communicated concerns related to water availability, traffic, parking, housing and climate change. Formal responses to those comments have been prepared and attached to this report. Additionally, the applicant has provided project information and responded to several comments which are attached to the end of this report.

STAFF RECOMMENDATION

For the reasons described above, staff recommends that the Planning Commission:

1. Adopt a resolution recommending that the City Council approve the Mitigated Negative Declaration / Mitigation Monitoring and Reporting Program for the project, make the required findings and approve a Use Permit Amendment and Design Review for the Farmstead at Long Meadow Ranch project at 738 Main Street; and
2. Adopt a resolution recommending that the City Council approve the Mitigated Negative Declaration / Mitigation Monitoring and Reporting Program for the project, make the required findings and approve a Lot Merger, Lot Line Adjustment, Use Permit, Design Review, Variance, and Water Agreement; and
3. Adopt a resolution making specific findings and recommending that the City Council adopt an Ordinance approving a Development Agreement between the applicant and the City of St. Helena for the Long Meadow Ranch LLC lodging project at 1000 Mills Lane.

ATTACHMENTS

[Resolution - 738 Main Street Final Version 081020](#)

[Resolution - 1000 Mills Lane Final Version 081020](#)

[PC Resolution Rec Approval Farmstead DA - final](#)

[Ordinance Approving Farmstead DA - final](#)

[Development Agreement \(Farmstead\) \(revised\)-c1](#)

[Draft Water Agreement 081020](#)

[Resolution #2009-30](#)

[APN map](#)

[1000 Mills Lane Plan Set](#)

[738 Main Street Plan Set](#)

[Lot Line Adjustment Color Exhibit](#)

[Lot Line Adjustment Exhibit_june 2020](#)

[Lot Merger Exhibit](#)

[Variance Applicant Statement - 1000 Mills Lane](#)

[Farmstead IS-MND final](#)
[Final MND - Response to Comments 081020](#)
[attch a1. Restaurant MMRP](#)
[attch a2. Lodging MMRP](#)
[attch b. Traffic Study Revised 11-21-19](#)
[attch c. Sewer Capacity Analysis](#)
[attch d1. RGH Geotechnical Report](#)
[attch d2. Report Update Letter](#)
[attch e1. Noise Update 120319](#)
[attch e2. Sound Level Compliance](#)
[attch e3. Exterior Noise Analysis](#)
[attch f. TAC GHG 022720](#)
[attch g1\(a\). Environmental Assessment](#)
[attch g1\(b\). Natural Hazard Report 07.21.15](#)
[attch g2. Pesticide Reprot](#)
[attch h. Biological Evaluation](#)
[attch i1. Prelim Stormwater Control Plan](#)
[attch i2. Water Use Report](#)
[attch i3. Hydrology Analysis](#)
[attch i4\(a\). Caltest Well Water 2.25.13](#)
[attch i4. \(b\) Caltest Well Water 7.02.04](#)
[attch j. Civil Design Narrative](#)
[attch k. Cultural Report](#)
[Applicant Letter to Neighbors 061120](#)
[Applicant Letter to Neighbors 072220](#)
[Applicant Letter to Dianne Fraser v2 081020](#)
[Applicant Letter to Dodson 081020](#)
[Applicant Letter to Doug Stanton 081020](#)
[Applicant Letter to Leslie Stanton 081020](#)
[Applicant Response to Napa Housing Coalition Ltr 081020](#)

CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION NO.

**RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ST. HELENA
RECOMMENDING THAT THE CITY COUNCIL OF THE CITY OF ST. HELENA ADOPT
A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND
REPORTING PROGRAM, AND RECOMMENDING THAT THE CITY COUNCIL ADOPT
A RESOLUTION APPROVING DESIGN REVIEW AND A USE PERMIT AMENDMENT
FOR THE FARMSTEAD AT LONG MEADOW RANCH PROJECT AT 738 MAIN
STREET IN THE CITY OF ST. HELENA, CALIFORNIA**

PROPERTY OWNER: Dixie & Martin Vanderkamp

APN: 009-112-017

Recitals

1. On May 23, 2017, LMR Main Street Partners LLC submitted applications for a Use Permit Amendment and Design Review approval to memorialize all uses currently occurring on-site and to make several small additions to existing buildings at 738 Main Street in the Service Commercial district as described below:
 - A 160-seat restaurant; and
 - A wine tasting room, retail sales and offices in the historic Logan-Ives house; and
 - A covered open-air produce market; and
 - A café serving breakfast items and coffee (open from 7 a.m. to 12 p.m. with 40 outdoor seats); and
 - Various business and private social events occurring throughout the year. Events would occur between 9 am and 10 pm. Events up to 75 persons would occur daily while events of 76 to 200 persons are limited to four (4) per week. Outdoor live and recorded amplified music is included with these events; and
 - Local community events up to 6 times per year with up to 300 attendees;
 - Fitness classes including yoga and Pilates beginning at 9 a.m. (offered 2-3 times per week with up to 12 attendees); and
 - Film screenings. Films are screened four times per year, with four showings each day. Twenty to 40 attendees at each screening; and
 - A 408 sf addition to the farmer's market building for the addition of a butcher shop; and
 - A 355 sf expansion of dry storage space off the restaurant kitchen; and
 - A 510 sf expansion of storage space on the back side of the south wing events building on the southeast corner; and
 - A sound barrier approximately 4 ft. in height to an existing air-conditioning unit on the restaurant building; a sound attenuator to the exhaust outlet on the primary air conditioning unit on the restaurant building; and a sound barrier to the kitchen exhaust fan on the events building.
 - Approximately 255 ft of 8 ft fence will be installed on the east side of the property to buffer the adjacent property from noise and light.

2. Pursuant to CEQA Guidelines Sections 15072 and 15073, a Draft Mitigated Negative Declaration and included Initial Study was circulated for public review and comment from May 29, 2020 until June 29, 2020; and
3. The Initial Study/Mitigated Negative Declaration concluded that implementation of the Project could result in a number of potentially significant effects on the environment and identified mitigation measures that would reduce the significant effects to a less-than-significant level; and
4. Whenever a lead agency approves a project requiring the implementation of measures to mitigate or avoid significant effects on the environment, CEQA also requires a lead agency to adopt a Mitigation Monitoring and Reporting Program to ensure compliance with the mitigation measures during project implementation; and
5. 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
6. 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 August 18, 2020; and
7. Now, therefore let it be found that, the Planning Commission recommends that the City Council of the City of St. Helena adopt the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program and approve a Use Permit Amendment and Design Review thereby authorizing the modifications described in the staff report and the reviewed plans based on the findings below and subject to the conditions of approval enumerated herein.

Resolution

- A. In reviewing 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.
- B. CEQA Findings:
 1. The Planning Commission has independently reviewed and analyzed the Initial Study/Mitigated Negative Declaration and other information in the record and has considered the information contained therein, prior to acting upon or approving the Project; and
 2. The Initial Study/Mitigated Negative Declaration prepared for the Project has been completed in compliance with CEQA and consistent with state and local guidelines implementing CEQA; and
 3. On the basis of the whole record, there is no substantial evidence that the Project as designed, conditioned, and mitigated, will have a significant effect on the environment; and
 4. The Initial Study/Mitigated Negative Declaration represents the independent judgment and analysis of the City as lead agency for the Project; and

5. Based on the foregoing, the Planning Commission recommends that the City Council approve the Initial Study/Mitigated Negative Declaration and adopt the Mitigation Monitoring and Reporting Program for the Project.
- C. In accordance with the design review criteria identified in SHMC Section 17.164.030, in making their recommendation the Planning Commission finds that the project demonstrates the following:
1. *Consistency and compatibility with applicable elements of the general plan in that the proposed structures are consistent with the intent of applicable General Plan policies pertaining to development in the Service Commercial District.*
 2. *Compatibility of design with the immediate environment of the site in that the project has been designed to be compatible with the surrounding environment.*
 3. *Relationship of the design to the site is found to be consistent in that the project has been designed to be compatible with the site and the surrounding area.*
 4. *That the design is compatible in areas considered by the board as having a unified design or historical character in that the project has been designed to be compatible with the site and the surrounding area.*
 5. *That the design promotes harmonious transition in scale and character in areas between different designated land uses in that the project would not alter the scale or transition between different land uses inasmuch as it is surrounded by commercial and residential structures of a similar style.*
 6. *Compatibility with future construction both on and off the site in that the proposed minor additions will blend in with existing and future construction in the immediate vicinity.*
 7. *That the architectural design of structures and their materials and colors are appropriate to the function of the project in that the project has been professionally designed to suit the site and its surroundings.*
 8. *That the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community in that the improvements have been designed to be compatible with the site and its surroundings.*
 9. *That the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures in that landscaping and open space will enhance the overall appearance of the property and general vicinity.*
 10. *That access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles in that access to the site will remain via Charter Oak Avenue. No changes are proposed that would impact access to the site.*
 11. *That natural features are appropriately preserved and integrated with the project in that the project has been designed to be compatible with the site and its surroundings.*
 12. *That the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structure and functions in that the proposed*

siding, colors, and roofing materials are consistent with the site context and compatible with surrounding design.

- 13. That the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site in that project landscaping and open space will enhance the project site and its surroundings.*
 - 14. That sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials in that project related construction is required to meet all California Building Codes and City of St. Helena development standards.*
- D. In accordance with SHMC Section 17.168.050, the Planning Commission recommends the following use permit findings to support the motion to recommend approval of the use permit amendment:
- 1. That the proposed uses would not generate odors, fumes, dust, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community in that proposed uses are related to the existing restaurant, would largely occur indoors within existing buildings, and are subject to review and approval by the Napa County Environmental Health Department.*
 - 2. That the proposed uses would not generate levels of noise that adversely affect the health, safety, or welfare of neighboring properties in that the proposed project is subject to City noise regulations and is not anticipated to produce frequent noise audible beyond the property line.*
 - 3. That the proposed use would not generate traffic noise in excess of the "normally acceptable" range identified in the General Plan as traffic related impacts have been identified in the Mitigated Negative Declaration and been determined to be less than significant.*
 - 4. That the proposed use would not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection, and fire protection in that impacts to these services have been identified in the Mitigated Negative Declaration and been determined to be less than significant.*
 - 5. That the proposed uses would provide adequate ingress and egress to and from the proposed location in that ingress and egress to the project site would not change as a result of the proposed project.*
 - 6. That allowing the proposed uses would not conflict with the City's goal of maintaining the economic viability of a local serving economy in that the proposed project would be consistent with General Plan Update 2040 policies.*
 - 7. That the proposed uses would be compatible with surrounding land uses and would not conflict with the purpose established for the district within which it would be located as the proposed project is consistent with the intent of the Service Commercial zoning district.*

8. *That the proposed uses would not be in conflict with the City's General Plan in that the project would support both a local and visitor serving component to the City's economy by providing jobs, tax revenue, and additional amenities.*
9. *That the proposed uses would not be injurious to public health, safety, or welfare in that the proposed uses are related to the existing restaurant, would largely occur indoors within existing buildings, and are subject to review and approval by the Napa County Environmental Health Department.*
10. *That granting the use permit would not set a precedent for the approval of similar uses whose incremental effect would be detrimental to the City or would be in conflict with the General Plan in that this use permit amendment only applies to this property and to these specific uses.*
11. *That, as demonstrated on a detailed plan submitted by the applicant, adequate off-street parking to accommodate the long term parking needs of employees and business owners and customers is available in that the proposed project has provided required off-street parking.*
12. *That the capacity of surrounding streets is adequate to serve the automobile and delivery truck traffic generated by the proposed uses in that the project site can adequately be served by existing streets (Highway 29 and Charter Oak Avenue).*

Planning Department Conditions of Approval

- E. The Planning Commission recommends approval of design review and a use permit amendment 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.
 1. 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.
 2. This approval shall be vested within one (1) year from the date of final action. A building permit application for the use allowed under this approval shall have been submitted within one (1) year from the effective date of this action or the approval shall expire, provided however that the approval may be extended for up to two (2) one-year periods pursuant to the St. Helena Municipal Code, Section 17.08.130, Extension of Permits and Approvals.
 3. Any request for an extension of this approval shall be justified in writing and received by the Planning Department at least thirty (30) days prior to expiration.
 4. The approvals shall not become effective until fourteen (14) calendar days after approval, providing that the action is not appealed by the City Council or any other interested party within that 14-day period.
 5. All required fees, including planning fees, development impact fees, residential in-lieu housing fees, building fees, toilet retrofit fees, and St. Helena Unified School District fees shall be paid prior to issuance of a building permit. Fees shall be those in effect at the time of the issuance of the building permit.
 6. Pursuant to City Council Resolution 2003-65, the owner and applicant are informed of the following:

In recognition of the need for additional affordable housing, and to mitigate the effects of this development on the supply and demand of affordable housing, the permittee shall be subject to a Housing Impact Fee, an inclusionary requirement, an in-lieu fee, and/or similar fair and appropriate mechanisms, to provide funds for or to develop additional affordable housing. This fee must be paid prior to a certificate of occupancy being issued.

7. 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.
8. 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.
9. Provided they are in general compliance with this approval, minor modifications may be approved by the Planning Director.
10. Pursuant to St. Helena Municipal Code Section 17.08.110, this permit shall run with the land and 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. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The property owners or their designee shall be responsible for meeting with the Building Official, Fire Inspector and or Public Works Department to review compliance with Building Codes, Fire Codes and specific Public Works Standards including fire protection systems and any applicable accessibility standards of Title 24.
12. All conditions and requirements contained in Resolution #2009-30 remain in effect unless otherwise superseded by this approval.
13. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on August 18, 2020, except as modified herein.
14. Planters and tree wells must be bordered by a six-inch high concrete curb or equivalent barrier approved by the City.
15. A minimum of 20% of the subject property must remain maintained landscaping and shall be kept in a weed-free condition.
16. If the lease option for the off-site parking lot to be used for employee parking at Dowdell/McCormick is lost or the lease is otherwise terminated or expires, the applicant shall provide evidence that a parking lot with a similar number of parking spaces has been secured (and is approximately the same distance from the project site or applicant provides appropriate transportation from parking to project site).

17. During construction, the areas under construction on project site shall be adequately fenced and secured to prevent trespassing.
18. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
19. 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.
20. Any seating used for the café is considered part of the 160 seat maximum not in addition to it. Café hours of operation are limited to 7:00 am to 12 pm.
21. The Farmers Market hours of operation shall be limited to daily from 10 am to 6 pm.
22. The events on the site may not exceed:
 - a. Daily events up to 75 persons;
 - b. Four (4) events per week, up to 200 persons with amplified outdoor live and recorded music;
 - c. Six (6) community events per year with up to 300 guests; and
 - d. Four (4) film screenings per year with 4 showings per day with a maximum of 40 attendees at each screening.
23. All onsite events shall be limited to the hours of 9 am to 10 pm. Fitness classes shall end by 11 am.
24. There shall be no events scheduled concurrently on dates when film screenings occur.
25. All live and amplified music must comply with applicable City noise regulations.
26. The property shall maintain complimentary on or offsite valet parking service or a parking attendant when one or more private parties under 40 persons require parking above available onsite parking (consistent with past and existing parking operations).
27. For events with 40-200 persons, client hosts are required to use buses, vans or shuttles for transporting their guests to and from the site and the buses, vans and shuttles are required to park offsite after drop off.
28. An annual compliance review shall evaluate applicant's operations to determine compliance with all conditions of approval. City Planning and Building Director shall direct such review annually for five (5) years after approval. Any compliance issues shall be resolved either through applicant's voluntary action or, if necessary, City enforcement action consistent with St. Helena Municipal Code.

29. All noise attenuating features approved as part of the project must be installed within 120 days of building permit approval of such features.

Public Works Department Conditions of Approval

30. Approval of this project shall be subject to the requirements of, and all improvements shall be designed and constructed in accordance with, the most current version at the time of improvement plan submittal, Caltrans Standards and Specifications, the City of St. Helena Municipal Code, the St. Helena Water and Sewer Standards, the St. Helena Street, Storm Drain and Sidewalk Standards, and all current federal, state and county codes governing such improvements.
31. Prior to the issuance of a building permit, for any improvements outside the existing building envelope, a grading and drainage plan showing topographic data, all easements, infrastructure onsite and directly adjoining, and an erosion control plan shall be submitted for review and approval by the City Engineer.. If the project entails more than 50 cubic yards of soil disturbance, 10,000 square feet of disturbance area, a cut or fill of 3 feet or more, or alteration of any drainage pattern, a grading permit shall be required.
32. Improvement plans shall incorporate all grading, drainage, and utilities shown on the approved Use Permit package, those improvements agreed to in public hearings, the requirements of these conditions of approval, and those improvements required by any codes in effect at the time of plan submittal.
33. Drainage needs to be routed to prevent inundation of neighboring properties. Grading and/or site improvement plans shall show how 2-year and 10-year storm flows shall be infiltrated on site and/or diverted at the property lines to prevent inundation of neighboring properties.
34. Erosion and sediment control plans shall conform to the latest State and City codes at a minimum
35. Site plans submitted for the building permit review shall identify the location of any trees within the project area. Additionally, all existing vegetation including location, species, and sizes shall be identified and indicate what vegetation is to be protected or removed. If proposed/new landscaping involves an area greater than 500 square feet or rehabilitation of more than 2,500 square feet, the proposed landscaping shall comply with the State's Model Water Efficient Landscape Ordinance (MWELO). MWELO compliance shall be demonstrated as part of the building permit submittal.
36. Prior to issuance of a Certificate of Occupancy, any new and modified existing water laterals, meters and backflow prevention devices shall be required and constructed

in accordance with the current requirements of the City of St. Helena's Water Standards and the California Department of Health Standards. Existing meter boxes located within a driveway shall be retrofitted with a traffic-rated box. New laterals shall be located perpendicular to the water main and outside any driveway/drive aisle.

37. Prior to issuance of a Certificate of Occupancy, remodels or new construction which require fire sprinklers shall install an appropriately-sized water service with appropriate backflow and meter devices. Fire system calculations shall be submitted with the Building Permits to verify fire service lateral and meter sizing. Deferred submittals are not accepted.
38. Proposed separations between public water facilities and other utilities shall meet the minimum separations as specified by the Department of Health and the City of St. Helena Public Works Standards.
39. No construction may commence until adequate access to fire water supply is available to building sites as approved by the Fire Chief.
40. Wastewater discharged is subject to all of the requirements and limitations set forth in Chapter 13.24, Wastewater Discharge, of the St. Helena Municipal Code.
41. Prior to the issuance of the Certificate of Occupancy, the Developer shall replace the existing 4" sewer lateral serving the facility to a 6" sewer lateral to accommodate additional wastewater flows during larger events to the City's sewer main on Charter Oak Avenue.
42. Prior to the issuance of a Certificate of Occupancy, the Developer is required to install a wastewater flow meter measuring the total volume of wastewater leaving the project site, into the City's sewage collection infrastructure, and after installation, have the wastewater flow meter calibrated yearly. Annual wastewater flow meter calibration records are to be maintained by the project ownership and made available to City staff upon request. The style, design, manufacturer, and location of this meter must be of a form found to be acceptable by the City. The costs associated with the installation and calibration of this meter are required to be fully borne by the Developers, and the results of the flow measurement are to be utilized to determine the amount of the wastewater bills for the uses on site.
43. Prior to the issuance of a certificate of occupancy, trash areas, dumpsters and recycling containers shall be enclosed and roofed per State and County standards to prevent water run-on to the trash area and water runoff from the area, to contain litter and trash so that it is not dispersed by the wind or run-off during waste removal. In the event that wine or food is disposed in these areas, the enclosed trash area shall drain to the sanitary sewer system. An area drain connected to the sanitary sewer shall be installed in the enclosure area and a structural control such as an oil/water separator or sand filter shall be included. No other area shall drain

into the trash enclosure. A sign shall be posted prohibiting the dumping of hazardous materials into the sanitary sewer.

44. Where applicable, the applicant shall be required to submit to the requirements for annual inspections of food/beverage service establishments and businesses that handle hazardous wastes for illicit stormwater discharges as required by the State National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges. The annual stormwater illicit discharge inspections are performed and invoiced by Napa County Department of Environmental Management.
45. Provide details of all proposed fencing, walls, and gates on all plans submitted for building permit review.
46. Prior to issuance of a Certificate of Occupancy, the Developer shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards.
47. Existing streets being cut by new utility services will require edge grinding and an A.C. overlay per City standards, extent to be determined by the Public Works Department.
48. Prior to issuance of a grading or building permit, the Developer shall be required to obtain a City encroachment permit for improvements on public right-of-way authorizing site work or construction activities on the site.
49. The Developer shall be required to obtain a Caltrans encroachment permit for improvements on and immediately adjacent to Highway 29 as necessary to complete any required offsite improvements.
50. The Developer shall be required to obtain permits necessary to complete work on the railroad right-of-way as necessary in conjunction with any required offsite improvements.

Building Department Conditions of Approval

51. A building permit is required for all onsite demolition, construction and/or change of occupancy.
52. The applicant will be required to comply with the codes adopted at the time the applicant applies for a building permit. At this time the City of St. Helena utilizes the 2019 Title 24 codes.
53. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.
54. The applicant shall provide a construction waste management plan with the building permit application.
55. The plans for construction shall include a checklist for compliance with the California Green Buildings Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.

56. When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.
57. 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. Any deferral of the required submittal items shall have prior approval of the Building Official however deferral of fire sprinkler design is not allowed.
58. Properties which are on septic systems and proposing substantial renovations may require approval from the Napa County Environmental Health Department. Applicants are encouraged to engage with the County early in the building permit review process to reduce the potential for delay.

Fire Department Conditions of Approval

59. Plans submitted for building permit shall exhibit compliance with the current St. Helena Fire Code, as adopted and codified in St. Helena Municipal Code Chapter 15.36.
60. Fire sprinklers and fire hydrants shall be installed as required by Fire Code and the Fire Department.
61. 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.
62. 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.

I HEREBY CERTIFY that the City of St. Helena Planning Commission recommends that the City of St. Helena City Council approve the foregoing design review and use permit amendment applications at a regular meeting of said Planning Commission held on August 18, 2020 by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

ATTEST:

Lester Hardy
Chair, Planning Commission

Maya DeRosa, AICP
Planning and Building Director

CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION NO.

**RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ST. HELENA
RECOMMENDING THAT THE CITY COUNCIL OF THE CITY OF ST. HELENA ADOPT
A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND
REPORTING PROGRAM, AND RECOMMENDING THAT THE CITY COUNCIL ADOPT
A RESOLUTION APPROVING DESIGN REVIEW, A USE PERMIT, A LOT LINE
ADJUTMENT, A LOT MERGER, A VARIANCE, AND A WATER AGREEMENT FOR
THE FARMSTEAD AT LONG MEADOW RANCH PROJECT AT 1000 MILLS LANE IN
THE CITY OF ST.HELENA, CALIFORNIA**

PROPERTY OWNER: LMR Property Acquisition Partners LLC **APN:** 009-070-
49,52,53,54

Recitals

1. LMR Main Street Partners LLC has submitted applications to the City of St. Helena for a Use Permit, Design Review, Lot Line Adjustment, Lot Merger, Variance, Water Agreement and Development Agreement approval in order to construct an new 65 room hotel and associated facilities at 1000 Mills Lane in the Service Commercial and Twenty-acre Agriculture districts as described below:
 - A 9,882 sf multi-purpose building; and
 - A 3,452 sf utility and service building; and
 - A 3,114 sf spa building; and
 - A 2,652 sf pool and fitness building; and
 - Two outdoor pools, including one children's pool; and
 - Two (2) 1,000 sf agricultural barns.
2. Pursuant to CEQA Guidelines Sections 15072 and 15073, a Draft Mitigated Negative Declaration and included Initial Study was circulated for public review and comment from May 29, 2020 until June 29, 2020; and
3. The Initial Study/Mitigated Negative Declaration concluded that implementation of the Project could result in a number of potentially significant effects on the environment and identified mitigation measures that would reduce the significant effects to a less-than-significant level; and
4. Whenever a lead agency approves a project requiring the implementation of measures to mitigate or avoid significant effects on the environment, CEQA also requires a lead agency to adopt a Mitigation Monitoring and Reporting Program to ensure compliance with the mitigation measures during project implementation; and
5. 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

6. 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 August 18, 2020; and
7. Now, therefore let it be found that, the Planning Commission recommends that the City Council of the City of St. Helena adopt the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program and approve a Use Permit, Design Review, Lot Line Adjustment, Lot Merger, Variance, and Water Agreement approving a Development Agreement thereby authorizing the modifications described in the staff report and the reviewed plans based on the findings below and subject to the conditions of approval enumerated herein.

Resolution

- A. In reviewing 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.
- B. CEQA Findings:
 1. The Planning Commission has independently reviewed and analyzed the Initial Study/Mitigated Negative Declaration and other information in the record and has considered the information contained therein, prior to acting upon or approving the Project; and
 2. The Initial Study/Mitigated Negative Declaration prepared for the Project has been completed in compliance with CEQA and consistent with state and local guidelines implementing CEQA; and
 3. On the basis of the whole record, there is no substantial evidence that the Project as designed, conditioned, and mitigated, will have a significant effect on the environment; and
 4. The Initial Study/Mitigated Negative Declaration represents the independent judgment and analysis of the City as lead agency for the Project.
 5. Based on the foregoing, the Planning Commission recommends that the City Council approve the Initial Study/Mitigated Negative Declaration and adopt the Mitigation Monitoring and Reporting Program for the Project.
- C. In accordance with the design review criteria identified in SHMC Section 17.164.030, in making their recommendation the Planning Commission finds that the project demonstrates the following:
 1. *Consistency and compatibility with applicable elements of the general plan in that the proposed structures are consistent with the intent of applicable General Plan policies pertaining to development in the Service Commercial and Agricultural Districts.*
 2. *Compatibility of design with the immediate environment of the site in that the project has been designed to be compatible with the surrounding environment.*

3. *Relationship of the design to the site is found to be consistent in that the project has been designed to be compatible with the site and the surrounding area.*
4. *That the design is compatible in areas considered by the board as having a unified design or historical character in that the project has been designed to be compatible with the site and the surrounding area.*
5. *That the design promotes harmonious transition in scale and character in areas between different designated land uses in that the project is of a similar scale and character to other development in the immediate area.*
6. *Compatibility with future construction both on and off the site in that the proposed project will blend in with existing and future construction in the immediate vicinity.*
7. *That the architectural design of structures and their materials and colors are appropriate to the function of the project in that the project has been professionally designed to suit the site and its surroundings.*
8. *That the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community in that the improvements have been designed to be compatible with the site and its surroundings.*
9. *That the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures in that landscaping and open space will enhance the overall appearance of the property and the immediate vicinity.*
10. *That access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles in that access to the site will be provided via a realigned Mills Lane. Additional pedestrian connectivity will be provided by new sidewalks on LaFata Street and a pedestrian path connecting the property to 738 Main Street.*
11. *That natural features are appropriately preserved and integrated with the project in that the project has been designed to be compatible with the site and its surroundings.*
12. *That the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structure and functions in that the proposed siding, colors, and roofing materials are consistent with the site context and compatible with surrounding design.*
13. *That the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site in that project landscaping and open space will enhance the project site and its surroundings.*
14. *That sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape*

materials in that project related construction is required to meet all California Building Codes and City of St. Helena development standards.

D. In accordance with SHMC Section 17.168.050, the Planning Commission recommends the following use permit findings to support the motion to recommend approval of the use permit:

1. *That the proposed uses would not generate odors, fumes, dust, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community in that proposed uses are related to a new hotel and would largely occur indoors within new buildings.*
2. *That the proposed uses would not generate levels of noise that adversely affect the health, safety, or welfare of neighboring properties in that the proposed project is subject to City noise regulations and is not anticipated to produce frequent noise audible beyond the property line.*
3. *That the proposed use would not generate traffic noise in excess of the "normally acceptable" range identified in the General Plan as traffic related impacts have been identified in the Mitigated Negative Declaration and been determined to be less than significant.*
4. *That the proposed use would not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection, and fire protection in that impacts to these services have been identified in the Mitigated Negative Declaration and been determined to be less than significant.*
5. *That the proposed uses would provide adequate ingress and egress to and from the proposed location in that ingress and egress to the project site would be provided via a realigned Mills Lane.*
6. *That allowing the proposed uses would not conflict with the City's goal of maintaining the economic viability of a local serving economy in that the proposed project would be consistent with General Plan Update 2040 policies.*
7. *That the proposed uses would be compatible with surrounding land uses and would not conflict with the purpose established for the district within which it would be located as the proposed project is consistent with the intent of the Service Commercial and A-20 zoning districts.*
8. *That the proposed uses would not be in conflict with the City's General Plan in that the project would support both a local and visitor serving component to the City's economy by providing jobs, tax revenue, and additional amenities.*
9. *That the proposed uses would not be injurious to public health, safety, or welfare in that the proposed uses consist of a new hotel and ancillary facilities and would largely occur indoors within new buildings.*
10. *That granting the use permit would not set a precedent for the approval of similar uses whose incremental effect would be detrimental to the City or would be in conflict with the General Plan in that this use permit only applies to this property and to this specific use.*

11. *That, as demonstrated on a detailed plan submitted by the applicant, adequate off-street parking to accommodate the long term parking needs of employees and business owners and customers is available in that the proposed project has provided required off-street parking.*
 12. *That the capacity of surrounding streets is adequate to serve the automobile and delivery truck traffic generated by the proposed use in that the project site can adequately be served by existing streets and a realigned Mills Lane.*
- E. In accordance with SHMC Section 17.172.050, the Planning Commission recommends the following findings to support the motion to recommend approval of the variance:
1. *A hardship peculiar to the property, not created by the owner, exists as this requirement doesn't follow modern operational models and creates operational inefficiencies and therefore constitutes a peculiar hardship that is appropriately addressed and may be resolved through consideration of a Variance.*
 2. *Other hotels in the SC district are not burdened by this requirement, therefore, the variance is necessary for the preservation and enjoyment of substantial property rights available to other properties in the same district and vicinity; and that a variance, if granted, would not constitute a special privilege of the recipient not enjoyed by his or her neighbors.*
 3. *The authorization of the variance will not be a substantial detriment to adjacent properties and will not materially impair the purpose and intent of this title or the public interest, or adversely affect the general plan.*
 4. *Inasmuch as there are not a significant number of similar properties in the vicinity or zoning district, it is not reasonably practicable to formulate a general regulation for such condition or situation. In other words, there are not enough hotels to make it necessary or practical to amend the zoning code to address this peculiar situation.*
 5. *An approval of this Variance to allow for a 24/7 365 day/year on-site manager opposed to requiring that a manager physically live on-site will enhance the public health, safety and welfare of the community.*
- F. In accordance with the requirements of SHMC Chapter 16.08, the Planning Commission recommends that the City Council approve the lot line adjustment and lot merger as described in the staff report.

Planning Department Conditions of Approval

- G. The Planning Commission recommends that the City Council approve a design review, a use permit, a variance, a lot line adjustment, a lot merger, and a water agreement, for the above-described project located at 1000 Mills Lane 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.
1. 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.

2. This approval shall be vested pursuant to the development agreement, provided however that the approval may be extended under the terms of the development agreement or for up to two (2) one-year periods pursuant to the St. Helena Municipal Code, Section 17.08.130, Extension of Permits and Approvals.
3. Any request for an extension of this approval shall be justified in writing and received by the Planning Department at least thirty (30) days prior to expiration.
4. All required fees, unless otherwise specified in the development agreement, including planning fees, development impact fees, building fees, and St. Helena Unified School District fees shall be paid prior to issuance of a building permit except as expressly provided herein. Fees shall be those in effect at the time of the issuance of the building permit.
5. Developer shall make a payment for the purpose of furthering the City's affordable housing goals in accordance with the requirements of Section 5.1.6 entered into by and between Developer and the City for this project. The Development Agreement requires \$1,000,000 to be paid to the City prior to issuance of the building permit, and the remaining \$2,200,000 to be paid at the earlier of (i) Transfer of the Property by Developer, other than a Permitted Transfer ("Transfer" and "Permitted Transfer" are defined in the Development Agreement); (ii) conversion of Developer's construction financing for the Project to permanent financing, or (iii) sixty (60) months after issuance of a final certificate of occupancy for the Project.
6. 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.
7. 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.
8. Provided they are in general compliance with this approval and the development agreement, minor modifications may be approved by the Planning and Building Director.
9. Pursuant to St. Helena Municipal Code Section 17.08.110, this permit shall run with the land and 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.
10. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The property owners or their designee shall be responsible for meeting with the Building Official, Fire Inspector and or Public Works Department to review compliance with Building Codes, Fire Codes and specific Public Works Standards including fire protection systems and any applicable accessibility standards of Title 24.

11. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on August 18, 2020, except as modified herein.
12. All live and amplified music must comply with applicable City noise regulations.
13. All guests and visitors must park on-site or at applicant provided off-site parking.
14. Planters and tree wells must be bordered by a six-inch high concrete curb or equivalent barrier approved by the City.
15. A minimum of 20% of the subject property must remain maintained landscaping and shall be kept in a weed-free condition.
16. If the lease option for the off-site parking lot to be used for employee parking at Dowdell/McCormick is lost or the lease is otherwise terminated or expires, the applicant shall provide evidence that a parking lot with a similar number of parking spaces has been secured (and is approximately the same distance from the project site or applicant provides appropriate transportation from parking to project site).
17. Prior to issuance of a Certificate of Occupancy, the applicant shall designate a Transportation Demand Management (TDM) coordinator to establish programs to ensure VMT by guests and employees are reduced.
18. Prior to issuance of a Certificate of Occupancy, the developer shall provide verification that an on-call shuttle service is available during all hours as long as there is an off-site employee parking lot.
19. Prior to issuance of a Certificate of Occupancy, the developer shall install a shelter at the off-site Dowdell Lane parking lot.
20. Prior to issuance of a grading permit, the project site shall be adequately fenced and secured to prevent trespassing.
21. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
22. Prior to issuance of a Certificate of Occupancy, the applicant shall provide two (2) courtesy bicycles per guest room.
23. 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 Department Conditions of Approval

24. Approval of this project shall be subject to the requirements of, and all improvements shall be designed and constructed in accordance with, the most

current version at the time of improvement plan submittal, Caltrans Standards and Specifications, the City of St. Helena Municipal Code, the St. Helena Water and Sewer Standards, the St. Helena Street, Storm Drain and Sidewalk Standards, and all current federal, state and county codes governing such improvements.

25. For any improvements outside the existing building envelope, a grading and drainage plan showing topographic data, all easements, infrastructure onsite and directly adjoining, and an erosion control plan shall be submitted for review and approval by the City Engineer prior to the issuance of a building permit. If the project entails more than 50 cubic yards of soil disturbance, 10,000 square feet of disturbance area, a cut or fill of 3 feet or more, or alteration of any drainage pattern, a grading permit shall be required.
26. Improvement plans shall incorporate all grading, drainage, and utilities shown on the approved Use Permit package, those improvements agreed to in public hearings, the requirements of these conditions of approval, and those improvements required by any codes in effect at the time of plan submittal.
27. Drainage needs to be routed to prevent inundation of neighboring properties. Grading and/or site improvement plans shall show how 2-year and 10-year storm flows shall be infiltrated on site and/or diverted at the property lines to prevent inundation of neighboring properties. The Developer shall submit a storm drain system design calculations for the project in accordance with City of St. Helena, Napa County and State of California codes in effect at the time of improvement plan submittal. The calculations shall include a hydrology map, hydrology and hydraulic calculations, pipe size calculations, inlet capacity calculations, and other information necessary to support the proposed design.
28. Prior to the issuance of a Certificate of Occupancy, the Developer shall install storm drain Detention system improvements as required to maintain post development 10-year and 25-year runoff from the pre-development levels. The Developer shall submit storm drain detention system supporting calculations for review and approval prior to improvement plan approval.
29. Prior to the issuance of a Certificate of Occupancy, the Developer shall install detention system inlets sized to pass at minimum the 25-year flows.
30. A grading and drainage plan shall be prepared for the project that includes a design that allows for a 100-year overland release. All graded building pads shall be above the 100-year overland release elevation.
31. The grading plans provided by the Developer for review shall include the existing topography shown with contour lines labeled at one-foot intervals and extending a minimum of 100-feet beyond the limits of the site, or sufficient distance to indicate impacts on adjacent properties.
32. Erosion and sediment control plans shall conform to the latest State and City codes at a minimum
33. Prior to the issuance of a grading permit or building permit (whichever occurs first), the project property owner shall file a Notice of Intent (NOI) with the State Water Resources Control Board and prepare a Construction Storm Water Pollution Prevention Plan (SWPPP). This is required because the overall project grading involves an area of disturbed surface soil that is greater than or equal to one acre, .

34. The Developer shall execute a City of St. Helena Water Agreement with an annual water use cap of 1,879,029 gallons per year prior to issuance of a Building Permit.
35. Due to the new water demand on the City system in the amount of 1,879,029 gallons per year, the Developer shall implement an alternative innovative method of mitigating water use as allowed under Section 13.12.030(B) of the SHMC, and approved by City Council in the Development Agreement prior to certificate of occupancy. The required offsite improvements to offset water demand as required pursuant to the Development Agreement is for the Developer to construct water recycling infrastructure (i.e., 12" purple pipe) in Mills Lane extending from Highway 29 easterly to the end of Mills Lane in a portion of the trench constructed for the storm drain improvements referenced above. Such improvements shall be constructed and approved by the City Engineer in accordance with the terms of the Development Agreement prior to the issuance of a final certificate of occupancy for the Project. Developer may be eligible for partial reimbursement of the costs of construction of the improvements required under this condition in accordance with the terms of the Development Agreement.
36. The Developer shall adhere to the executed Water Agreement with the City and shall incorporate water conservation practices into the proposed project per the Water Availability Analysis prepared by Sherwood Design Engineers, dated May 2, 2017. The water conservation requirements shall be replicated in full on the architectural plans.
37. Prior to issuance of a Certificate of Occupancy, all parcels shall be connected to the City of St. Helena municipal water system and installed per City of St. Helena standards.
38. Prior to issuance of a grading or building permit (whichever occurs first) a detailed Post-Construction Stormwater Control Plan (SWCP) that identifies and sizes all permanent post-construction stormwater treatment BMPs shall be prepared by the applicant's engineer and submitted for review approval. The Plan shall be prepared in accordance with the latest edition of the *Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual* and the requirements of the State Water Resources Control Board Phase II Municipal Separate Storm Water System (MS4) General Permit (Order 2013-0001 DWQ).
39. Prior to the issuance of a Certificate of Occupancy, a Post Construction Stormwater Operations and Maintenance Plan that provides a color-coded plan sheet showing all storm drain and water quality infrastructure that is to be maintained, along with detailed instructions and schedules for the ongoing maintenance and operation of all post-construction stormwater BMPs shall be submitted by the applicant's engineer for review and approval by the City Engineer. Once approved, the property owner shall enter into an agreement with the City that provides the terms, conditions, and security associated with the ongoing requirements of the Post Construction Stormwater Best Management Practices.
40. If proposed/new landscaping involves an area greater than 500 square feet or rehabilitation of more than 2,500 square feet, the proposed landscaping shall comply with the State's Model Water Efficient Landscape Ordinance (MWELO). MWELO compliance shall be demonstrated as part of the building permit submittal.

41. Prior to issuance of a grading permit, a detailed Soils Investigation/Geotechnical Report shall be prepared by the developer and submitted for review. The report shall address, at a minimum, potential for liquefaction, R-values, expansive soils and seismic risk. The improvement plans shall incorporate all design and construction criteria recommended in the Geotechnical Report.
42. Prior to issuance of a grading permit, unless otherwise explicitly permitted, all existing wells, septic tanks/systems and/or underground fuel storage tanks shall be abandoned under permit and inspection of Napa County Department of Environmental Services or other designated agency. If there are none, the Developers project engineer shall provide a letter describing the scope of the search done to make this determination.
43. Prior to the issuance of a grading permit, the site plan shall show the location of any trees within the project area. Provide a tree protection plan for approval by the Public Works Director prior to approval of the building permit. The plan shall be coordinated with any civil grading/drainage/improvement plans.
44. 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.
45. Prior to the issuance of a Certificate of Occupancy, the Developer shall underground all on-site utility lines per St. Helena Municipal Code. The cost of undergrounding shall be the responsibility of the Developer.
46. Due to the economic and engineering infeasibility of undergrounding regional serving overhead power lines, such existing lines may remain on overhead power poles.
47. Any new and modified existing water laterals, meters and backflow prevention devices shall be required and constructed in accordance with the current requirements of the City of St. Helena's Water Standards and the California Department of Health Standards. Existing meter boxes located within a driveway shall be retrofitted with a traffic-rated box. New laterals shall be located perpendicular to the water main and outside any driveway/drive aisle.
48. Remodels or new construction which require fire sprinklers shall install an appropriately-sized water service with appropriate backflow and meter devices prior to Certificate of Occupancy. Fire system calculations shall be submitted with the Grading and Drainage Plan to verify fire service lateral and meter sizing. Deferred submittals are not accepted.
49. Proposed separations between public water facilities and other utilities shall meet the minimum separations as specified by the Department of Health and the City of St. Helena Public Works Standards.
50. No construction may commence until adequate access to fire water supply is available to building sites as approved by the Fire Chief.
51. Wastewater discharged is subject to all of the requirements and limitations set forth in Chapter 13.24, Wastewater Discharge, of the St. Helena Municipal Code.
52. Prior to the issuance of the first building permit for 1000 Mills Lane, the Developer shall apply for annexation to the St. Helena Municipal Sewer District No. 1. The

application shall be completed in accordance with the City of St. Helena's Sewer Annexation Procedures including all annexation, impact, connection, and sewer fees.

53. Prior to issuance of a building permit, in order to confirm the theoretical assumptions in the Theoretical Sewer Capacity provided by Sherwood Design Engineers dated May 2, 2017, the Developer is required to perform 7-day flow monitoring at the downstream sanitary sewer manholes (No. 1-89 and No. 1-94) to verify that the existing sewer pipe has adequate capacity to accommodate the proposed additional flows. Peak sewer flows will not be allowed to exceed 2/3 full pipe. If the proposed wastewater discharge regimen increases peak flows to greater than 2/3 full pipe at the monitored locations and with the current infrastructure, the owner must share the cost of sewer upgrades with a dollar amount proportional to the increase in wastewater flow as a result of the site development.
54. Prior to the issuance of a Certificate of Occupancy, the Developer is required to install a wastewater flow meter measuring the total volume of wastewater leaving the project site, into the City's sewage collection infrastructure, and after installation, have the wastewater flow meter calibrated yearly. Annual wastewater flow meter calibration records are to be maintained by the project ownership and made available to City staff upon request. The style, design, manufacturer, and location of this meter must be of a form found to be acceptable by the City. The costs associated with the installation and calibration of this meter are required to be fully borne by the Developers, and the results of the flow measurement are to be utilized to determine the amount of the wastewater bills for the uses on site. Said meter is required to be installed and functional prior to occupancy of the project.
55. Prior to issuance of a certificate of occupancy, trash areas, dumpsters and recycling containers shall be enclosed and roofed per State and County standards to prevent water run-on to the trash area and water runoff from the area, to contain litter and trash so that it is not dispersed by the wind or run-off during waste removal. In the event that wine or food is disposed in these areas, the enclosed trash area shall drain to the sanitary sewer system. An area drain connected to the sanitary sewer shall be installed in the enclosure area and a structural control such as an oil/water separator or sand filter shall be included. No other area shall drain into the trash enclosure. A sign shall be posted prohibiting the dumping of hazardous materials into the sanitary sewer.
56. Where applicable, the applicant shall be required to submit to the requirements for annual inspections of food/beverage service establishments and businesses that handle hazardous wastes for illicit stormwater discharges as required by the State National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges. The annual stormwater illicit discharge inspections are performed and invoiced by Napa County Department of Environmental Management.
57. Provide details of all proposed fencing, walls, and gates on all plans submitted for building permit review.
58. Prior to Certificate of Occupancy, the Developer shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards.

59. Existing streets being cut by new utility services will require edge grinding and an A.C. overlay per City standards, extent to be determined by the Public Works Department.
60. Prior to issuance of building permits, the Developer shall be required to pay a fair share fee contribution in the amount of 28.8% to a "HAWK" pedestrian hybrid flashing beacon for the Highway 29 at Charter Oak Avenue crosswalk identified in the Traffic Study by the Crane Transportation Group dated November 21, 2019 proposed for the SR 29/Charter Oak Avenue.
61. The Developer shall be required to pay a fair share fee contribution in the amount of 23.3% towards the Dowdell Lane and Highway 29 signalization at the time such improvement is constructed by the City.
62. The Developer shall construct those certain storm drain improvements necessary to extend and improve the storm drain along Mills Lane to serve properties on Mills Lane, La Fata Street, Fountain Street, Grayson Avenue, Main Street (to Charter Oak Avenue), and Vidovich Avenue and to construct an outfall for said storm drain into the Napa River. The Storm Drain Improvements shall be designed by City in accordance with the City's long-standing plan for this separate project is contained in City's Storm Drain Master Plan dated September 2000 (see Table 4-1) and the Highway 29 Specific Plan (see pages 37-39, Exhibit 11). City shall further be responsible for permitting required for the Storm Drain Project, which shall likely include permits from the California Department of Fish and Wildlife, San Francisco Regional Water Quality Control Board, and the United States Army Corp of Engineers. Developer shall commence construction of the Storm Drain Improvements after the City has secured the permits required for the Storm Drain Improvements, provided, however, that the Storm Drain Improvements shall be completed before the Developer receives final certificate of occupancy for the Project. Upon completion of the storm drain improvements described in this condition, Developer shall be eligible for reimbursement of costs in excess of its proportionate share of costs in accordance with the terms of the Development Agreement.
63. Developer shall construct improvements to Mills Lane, which are consistent with City's Highway 29 Specific Plan, prior to or concurrently with the development of the Project and shall complete the Mills Lane Improvements prior to the issuance of the first certificate of occupancy for the Project by the City. Construction shall be completed in accordance with improvements plans as approved by the City Engineer, and before Developer receives a final certificate of occupancy for the Project.
64. The Developer shall construct all on and offsite improvements in accordance with the improvement plans and supporting calculations that are prepared by a registered civil engineer and reviewed by the City of St. Helena Public Works Department. The improvement plans and supporting calculations shall include detailed designs for all utilities, water, grading, drainage, erosion control and paving.
65. Prior to issuance of a grading or building permit, the Developer shall be required to obtain a City encroachment permit for improvements on public right-of-way.

66. The following offsite improvements shall be installed by the Developer, completed prior to the issuance of a Certificate of Occupancy and will be provided on a separate offsite improvement plan set:
- In accordance with civil site plans prepared by Sherwood Design Engineers, dated May 6, 2019, all required public frontage and street improvements shall be designed and built in accordance with City of St. Helena ordinances, Public Works Department Standard Specifications, and Caltrans requirements.
 - Specific offsite improvements include, in general, pavement widening, realignment of Mills Lane in accordance with the Highway 29 Specific Plan, signal upgrade at Highway 29/Main Street/Grayson Avenue/Mills Lane, signage, striping, street lighting, required accessible pedestrian curb ramps, and a new railroad crossing.
 - The typical half cross section of Mills Lane shall consist of a landscape strip, 10' class I path, curb and gutter, 8' parking strip, and 12' travel lane.
 - In accordance with civil site plans prepared by Sherwood Design Engineers, dated May 6, 2019, the Developer shall extend the City water main from La Fata to the City's 12" water main on Highway 29 and install adequately spaced fire hydrants per the approval of the City's Fire Chief.
 - In accordance with civil site plans prepared by Sherwood Design Engineers, dated May 6, 2019, the Developer shall extend the sewer main on La Fata to the project site.
 - As identified in the 2019 Traffic Study by Crane Transportation Group, the Developer shall extend the sidewalk from La Fata Street to Mills Lane with a crosswalk to the project site. The La Fata Sidewalk improvements shall further be completed in accordance with the terms of the Development Agreement.
 - The improvement plans shall include a Construction Traffic Control Plan.
 - The improvement plans shall include an Erosion and Sediment Control Plan.
 - The improvement plans shall include a Joint Trench Plan (as necessary).
67. The Developer shall be required to obtain a Caltrans encroachment permit for improvements on and immediately adjacent to Highway 29 as necessary to complete the offsite improvements as outlined above.
68. The Developer shall be required to obtain permits necessary to complete work on the railroad right-of-way as necessary in conjunction with the offsite improvements as outlined above.
69. The Developer shall construct all on and offsite improvements which are consistent with City's Highway 29 Specific Plan, prior to or concurrently with the development of the Project and shall complete the Mills Lane Improvements prior to the issuance of the final certificate of occupancy for the Project by the City. Construction shall be completed in accordance with improvements plans as approved by the City Engineer and before the Developer receives a final certificate of occupancy for the Project.

70. Prior to issuance of a certificate of occupancy, the Developer shall pay traffic impact fees based on the Master Fee Schedule, and the fee will assume all square footage calculated at the lodging rate.

Building Department Conditions of Approval

71. A building permit is required for all onsite demolition, construction and/or change of occupancy.
72. The applicant will be required to comply with the codes adopted at the time the applicant applies for a building permit. At this time the City of St. Helena utilizes the 2019 Title 24 codes.
73. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.
74. The applicant shall provide a construction waste management plan with the building permit application.
75. The plans for construction shall include a checklist for compliance with the California Green Buildings Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.
76. When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.
77. 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. Any deferral of the required submittal items shall have prior approval of the Building Official however deferral of fire sprinkler design is not allowed.
78. Properties which are on septic systems and proposing substantial renovations may require approval from the Napa County Environmental Health Department. Applicants are encouraged to engage with the County early in the building permit review process to reduce the potential for delay.

Fire Department Conditions of Approval

79. Plans submitted for building permit shall exhibit compliance with the current St. Helena Fire Code, as adopted and codified in St. Helena Municipal Code Chapter 15.36.
80. Fire sprinklers and fire hydrants shall be installed as required by Fire Code and the Fire Department.
81. 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.
82. 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.

I HEREBY CERTIFY that the City of St. Helena Planning Commission recommends that the City of St. Helena City Council approve the foregoing design review, use permit, lot line adjustment, lot merger, variance, water agreement applications and development agreement ordinance at a regular meeting of said Planning Commission held on August 18, 2020 by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

ATTEST:

Lester Hardy
Chair, Planning Commission

Maya DeRosa, AICP
Planning and Building Director

CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION NO. _____

**A RESOLUTION OF THE PLANNING COMMISSION OF
THE CITY OF ST. HELENA RECOMMENDING THAT
THE CITY COUNCIL APPROVE A DEVELOPMENT
AGREEMENT WITH LMR PROPERTY ACQUISITION
PARTNERS, LLC RELATING TO THE FARMSTEAD
LODGING PROJECT AT 1000 MILLS LANE**

Recitals

WHEREAS, to strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, the Legislature of the State of California adopted Government Code Sections 65864 *et seq.* (the "Development Agreement Statute") which authorizes cities to enter into agreements for the development of real property with any person having a legal or equitable interest in such property in order to establish certain development rights in such property; and

WHEREAS, in accordance with the Development Agreement Statute, the City of St. Helena (the "City") has enacted regulations encompassed in St. Helena Municipal Code Chapter 17.156 (the "Development Agreement Regulations") to implement procedures for the processing and approval of development agreements in accordance with the Development Agreement Statute; and

WHEREAS, in accordance with the Development Agreement Statute and the Development Agreement Regulations, LMR Property Acquisition Partners, LLC, a California limited liability company (the "Developer") has applied to the City for certain land use entitlements and a development agreement for the development of the Farmstead Lodging Project, a 65 room single story hotel project, which in addition to the guest rooms includes a multi-purpose building for guest reception/administration, a bar and lounge area, meeting/classroom with demonstration kitchen, commercial kitchen and staff facilities; a utility and service building; a spa building; a pool and fitness building; two outdoor pools; two agricultural barns; and approximately 3.9 acres of land used for agricultural purposes (the "Project"); and

WHEREAS, the Development Agreement Regulations provide at St. Helena Municipal Code Section 17.156.080 that the Planning Commission shall hold a duly noticed public hearing on any proposed development agreement, and following such public hearing the Planning Commission shall make a recommendation to the City Council on whether or not to approve the development agreement, which recommendation shall include whether or not the development agreement proposed: (a) Is consistent with the objectives, policies, general land uses and programs specified in the general plan and any applicable specific plan; (b) is compatible with the uses authorized in, and the regulations prescribed for, the land use district in which the real property is located; (c) is in conformity with public convenience, general welfare and good land

use practice; (d) will be detrimental to the health, safety and general welfare; (e) will adversely affect the orderly development of property or the preservation of property values. The recommendation shall include the reasons for the recommendation;

WHEREAS, the Planning Commission of the City held a duly noticed public hearing on August 18, 2020 on the Mitigated Negative Declaration, Project Entitlements and the Development Agreement, during which public hearing the Planning Commission received comments from the Developer, City staff, and members of the general public and following the close of the public hearing, the Planning Commission made a recommendation to the City Council on the adoption of the Mitigated Negative Declaration and approval of the Project Entitlements; and

WHEREAS, Developer desires to carry out the development of the Project consistent with the General Plan, the Highway 29 Specific Plan and the Development Agreement and the vested entitlements referenced therein; and

WHEREAS, the Development Agreement will assure both the City and the Developer that the Project will proceed as proposed and that the public improvements and other amenities and funding obligations of the Developer will be accomplished as proposed; and that the Project can proceed without disruption caused by a change in City planning and development policies and requirements, which assurance will thereby reduce the actual or perceived risk of planning, financing and proceeding with construction of the Project and promote the achievement of the private and public objectives of the Project; and

WHEREAS, the Planning Commission desires to make its recommendation to the City Council in accordance with Section 17.156.080 of the St. Helena Municipal Code through this Resolution.

NOW THEREFORE, THE PLANNING COMMISSION OF THE CITY OF ST. HELENA, CALIFORNIA, DOES ORDAIN AS FOLLOWS:

SECTION 1. This Resolution incorporates, and by this reference makes a part hereof, the Development Agreement attached hereto as Exhibit A.

SECTION 2. In accordance with the Development Agreement Regulations and specifically St. Helena Municipal Code Section 17.156.080, the City Council hereby make the following determinations and findings with regard to the proposed Development Agreement:

A. The proposed Development Agreement is consistent with the objectives, policies and general land uses and programs specified in the General Plan and Highway 29 Specific Plan. Specifically, the Project to be developed pursuant to the Development Agreement is consistent with the land use designations for the parcel upon which the Project will be developed. The lodging component of the Project will be constructed on the portion of the parcel that is within the City's Urban Limit Line and is designated for as Service Commercial (SC), where lodging is an allowable use. The portions of the parcel that are outside the Urban Limit Line will remain in agricultural use, consistent

with the requirements of the General Plan. The Project will further numerous policies of the General Plan as more specifically enumerated in the City staff report to the Planning Commission prepared in conjunction with the Planning Commission's consideration of the Project, in that the Project would support both a local and visitor serving component to the City's economy by providing jobs, tax revenue, and additional amenities. The Project would enhance the character in the Service Commercial district by redeveloping an under-utilized site in the district. The Project would also be oriented toward an upscale market, consistent with the Napa Valley's reputation as a producer of world-class wines. Further, the Project is consistent with the Highway 29 Specific Plan and would implement its direction by providing for the realignment of Mills Lane with Grayson Avenue consistent with the goals of the Highway 29 Specific Plan.

B. The Development Agreement is compatible with the uses authorized in, and the regulations prescribed for, the land use district in which the real property upon which the proposed Project will be located. The Project as proposed meets all development standards as required by Section 17.52 of the Municipal Code including setbacks, height, floor area ratio, landscaping, and other requirements set forth therein, as more specifically described in the staff report prepared in conjunction with the Project. The Project Entitlements include a Use Permit with conditions to ensure compliance with the regulations prescribed for the land use district in which the Project shall be located.

C. The Development Agreement is in conformity with public convenience, general welfare and good land use practice. As outlined above, the proposed Project is consistent with the land use and zoning designations for the parcel upon which it will be located, and will further multiple policies contained in the City's General Plan. The terms of the Development Agreement will additionally ensure valuable infrastructure will be installed, including the realignment of Mills Lane, installation of storm drain improvements that would benefit the Project and other property owners, and installation of recycled water infrastructure that will significantly help to reduce burdens on the City's water system. Further, the Development Agreement will help to further the City's affordable housing goals and thereby benefit the general welfare of the City and its residents, by making a monetary contribution toward affordable housing that is over fifteen times the amount that Developer would be required to pay toward affordable housing in absence of the Development Agreement.

D. The Development Agreement will not be detrimental to the health, safety and general welfare of the City. As described herein, the proposed Project is consistent with the land use and zoning designations for the parcel upon which it will be located. The hotel portion of the development will be located within the City's Urban Limit Line, and the portions of the proposed Project that are outside of the Urban Limit Line will remain in agricultural use, consistent with the goals and policies of the City's General Plan. The proposed Project will enhance the character of the Service Commercial district by redeveloping an under-utilized site, will provide significant new tax revenue to the City to provide needed services and amenities to the community, and will make beneficial improvements to the City's infrastructure that will benefit both the Project and the community at large.

E. The Development Agreement will not adversely affect the orderly development of the property or the preservation of property values. The proposed Project will is not phased, is located on an underutilized site contemplated for service commercial development, is located within the City limits, and the lodging will be located within an area contemplated for urban development in both the General Plan and the City's zoning map. All public infrastructure improvements required to serve the Project are required to be constructed prior to the Project receiving a certificate of occupancy. The development of the Project contemplated in the Development Agreement will therefore not adversely affect the orderly development of the property. Further, the proposed Project will be oriented toward an upscale market, consistent with the Napa Valley's reputation as a producer of world-class wines, which will not only preserve but will likely enhance property values. Further, the requirement to realign Mills Lane will benefit neighboring property owners and help to preserve property values.

SECTION 4. The foregoing findings and determinations are based upon the following:

- (a) The Recitals set forth in this Ordinance, which are deemed true and correct;
- (b) The City's General Plan;
- (c) The City's Highway 29 Specific Plan;
- (d) All City staff reports (and all other public reports and documents) prepared for the Planning Commission, relating to the Development Agreement and other actions relating to the Property;
- (f) All documentary and oral evidence received at public hearings or submitted to the Planning Commission during the comment period relating to the Development Agreement, and other actions relating to the Property; and
- (g) All other matters of common knowledge to the Planning Commission, including, but not limited to the City's fiscal and financial status; City policies and regulations; reports, projections and correspondence related to development within and surrounding the City; State laws and regulations and publications.

SECTION 5. The Planning Commission hereby recommends, based on the findings and determinations contained herein, that the City Council approve the Development Agreement, attached hereto as Exhibit A, subject further to such minor, conforming and clarifying changes consistent with the terms thereof as may be approved by the City Manager, in consultation with the City Attorney to execution thereof, including completion of references and status of planning approvals, and completion and conformity of all exhibits thereto.

PASSED, APPROVED, AND ADOPTED this ____ day of _____, 2020.

Lester Hardy, Chair

ATTEST:

Maya DeRosa, Planning and Building Director

APPROVED AS TO FORM:

Kara K. Ueda, City Attorney

EXHIBIT A

Farmstead Development Agreement

[Inserted behind this cover page]

ORDINANCE NO. _____**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ST. HELENA APPROVING A DEVELOPMENT AGREEMENT WITH LMR PROPERTY ACQUISITION PARTNERS, LLC RELATING TO THE FARMSTEAD LODGING PROJECT AT 1000 MILLS LANE**

WHEREAS, to strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, the Legislature of the State of California adopted Government Code Sections 65864 *et seq.* (the "Development Agreement Statute") which authorizes cities to enter into agreements for the development of real property with any person having a legal or equitable interest in such property in order to establish certain development rights in such property; and

WHEREAS, in accordance with the Development Agreement Statute, the City of St. Helena (the "City") has enacted regulations encompassed in St. Helena Municipal Code Chapter 17.156 (the "Development Agreement Regulations") to implement procedures for the processing and approval of development agreements in accordance with the Development Agreement Statute; and

WHEREAS, in accordance with the Development Agreement Statute and the Development Agreement Regulations, LMR Property Acquisition Partners, LLC, a California limited liability company (the "Developer") has applied to the City for certain land use entitlements and a development agreement for the development of the Farmstead Lodging Project, a 65 room single story hotel project, which in addition to the guest rooms includes a multi-purpose building for guest reception/administration, a bar and lounge area, meeting/classroom with demonstration kitchen, commercial kitchen and staff facilities; a utility and service building; a spa building; a pool and fitness building; two outdoor pools; two agricultural barns; and approximately 3.9 acres of land used for agricultural purposes (the "Project"); and

WHEREAS, on _____, 2020, the City approved Resolution No. ____ adopting a Mitigated Negative Declaration for the Project (the "Mitigated Negative Declaration"), finding there is no substantial evidence in support of a fair argument that the proposed Project will have a significant, adverse impact on the environment with the mitigation measures proposed; and

WHEREAS, the City Council adopted Resolution No. ____, which approved a Lot Merger, Lot Line Adjustment, Use Permit, Design Review, Variance and Water Agreement for the Project (the "Project Entitlements"); and

WHEREAS, Developer desires to carry out the development of the Project consistent with the General Plan, the Highway 29 Specific Plan and the Development Agreement and the vested entitlements referenced therein; and

WHEREAS, the Development Agreement will assure both the City and the Developer that the Project will proceed as proposed and that the public improvements and other amenities and funding obligations of the Developer will be accomplished as proposed; and that the Project can proceed without disruption caused by a change in City planning and development policies and requirements, which assurance will thereby reduce the actual or perceived risk of planning, financing and proceeding with construction of the Project and promote the achievement of the private and public objectives of the Project; and

WHEREAS, the Planning Commission of the City held a duly noticed public hearing on August 18, 2020 on the Mitigated Negative Declaration, Project Entitlements and the Development Agreement, during which public hearing the Planning Commission received comments from the Developer, City staff, and members of the general public and made a recommendation to the City Council on the adoption of the Mitigated Negative Declaration and approval of the Project Entitlements and the Development Agreement; and

WHEREAS, pursuant to Section 65867 of the Government Code, the City Council held a duly noticed public hearing on _____, 2020 on the Mitigated Negative Declaration, Project Entitlements and the Development Agreement, during which public hearing the City Council received comments from the Developer, City staff, and members of the general public.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF ST. HELENA, CALIFORNIA, DOES ORDAIN AS FOLLOWS:

SECTION 1. This Ordinance incorporates, and by this reference makes a part hereof, the Development Agreement attached hereto as Exhibit A, subject to the provisions of Section 5 hereof.

SECTION 2. This Ordinance is adopted under the authority of Government Code Section 65864 et seq., and pursuant to the Development Agreement Regulations.

SECTION 3. In accordance with the Development Agreement Regulations, the City Council hereby finds and determines that the provisions of the Development Agreement are consistent with the General Plan and Highway 29 Specific Plan. Specifically, the Project to be developed pursuant to the Development Agreement is consistent with the land use designations for the parcel upon which the Project will be developed. The lodging component of the Project will be constructed on the portion of the parcel that is within the City's Urban Limit Line and is designated as Service Commercial (SC), where lodging is an allowable use. The portions of the parcel that are outside the Urban Limit Line will remain in agricultural use, consistent with the requirements of the General Plan. The Project will further numerous policies of the General Plan as more specifically enumerated in the City staff reports prepared for this Ordinance, in that the Project would support both a local and visitor serving component to the City's economy by providing jobs, tax revenue, and additional amenities. The Project would enhance the character in the SC district by redeveloping an under-utilized site in the commercial district. The Project would also be oriented toward an upscale market, consistent with the Napa Valley's reputation as a producer of world-class wines. Further, the Project is consistent with the Highway 29 Specific

Plan and would implement its direction by providing for the realignment of Mills Land with Grayson Avenue consistent with the goals of the Highway 29 Specific Plan.

SECTION 4. The foregoing findings and determinations are based upon the following:

- (a) The Recitals set forth in this Ordinance, which are deemed true and correct;
- (b) The City's General Plan;
- (c) The City's Highway 29 Specific Plan;
- (d) Resolution No. _____, adopted by the City Council on _____, 2020, making findings as to the Mitigated Negative Declaration for the Project, including the Statement of Findings and the Mitigation Monitoring and Reporting Program approved by and incorporated in said Resolution, which Resolution and exhibits are incorporated herein by reference as if set forth in full;
- (e) Resolution No. ____ of the Planning Commission of the City of St. Helena recommending that the City Council approve a Development Agreement with LMR Property Acquisition Partners, LLC relating to the Farmstead Lodging Project;
- (f) All City staff reports (and all other public reports and documents) prepared for the City Council, relating to the Development Agreement and other actions relating to the Property;
- (g) All documentary and oral evidence received at public hearings or submitted to the City during the comment period relating to the Development Agreement, and other actions relating to the Property; and
- (h) All other matters of common knowledge to the City Council, including, but not limited to the City's fiscal and financial status; City policies and regulations; reports, projections and correspondence related to development within and surrounding the City; State laws and regulations and publications.

SECTION 5. The City Council hereby approves the Development Agreement, attached hereto as Exhibit A, subject further to such minor, conforming and clarifying changes consistent with the terms thereof as may be approved by the City Manager, in consultation with the City Attorney to execution thereof, including completion of references and status of planning approvals, and completion and conformity of all exhibits thereto.

SECTION 6. The City Manager is hereby authorized and directed to perform all acts authorized to be performed by the City Manager in the administration of the Development Agreement pursuant to the terms of the Development Agreement.

SECTION 7. If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance.

SECTION 8. This ordinance shall become effective on and after the thirtieth (30th) day following its adoption.

SECTION 9. The Mayor shall sign, and the City Clerk shall certify to the passage and adoption of this Ordinance and shall cause the same, or the summary thereof, to be published and posted pursuant to the provisions of applicable law.

PASSED, APPROVED, AND ADOPTED this ____th day of _____, 2020.

Geoff Ellsworth, Mayor

ATTEST:

Cindy Tzafopoulos, City Clerk

APPROVED AS TO FORM:

Kara K. Ueda, City Attorney

EXHIBIT A

Farmstead Development Agreement

[Inserted behind this cover page]

RECORDING REQUESTED BY
AND WHEN RECORDED RETURN TO:

City of St. Helena
1480 Main Street
St. Helena, CA 94574
Attention: City Clerk

Record Without Fee
*Pursuant to Government Code
Section 27383*

Space Above Reserved for Recorder's Use Only

DEVELOPMENT AGREEMENT

BY AND BETWEEN

CITY OF ST. HELENA

AND

LMR PROPERTY ACQUISITION PARTNERS LLC

Effective Date: _____

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DEVELOPMENT AGREEMENT

This Development Agreement (“**Agreement**”), dated as of the Effective Date, is entered into by and between the City of St. Helena, a California municipal corporation (“**City**”) and LMR Property Acquisition Partners LLC, a California limited liability company (“**Developer**”). Developer and City may be referred to individually in this Agreement as a “**Party**” and collectively as the “**Parties**.”

R E C I T A L S

This Agreement is entered into on the basis of the following facts, understandings and intentions of the Parties. The following recitals are a substantive part of this Agreement; capitalized terms used herein and not otherwise defined are defined in Article 1 of this Agreement.

A. In order to strengthen the public planning process, encourage private participation in comprehensive planning, and reduce the economic costs and risks of development, the Legislature of the State of California enacted section 65864 *et seq.* of the Government Code (“**Development Agreement Statute**”) which authorizes a city and a developer having a legal or equitable interest in real property to enter into a binding, long-term development agreement establishing certain development rights in the property.

B. In accordance with the Development Agreement Statute, the City Council of the City of St. Helena enacted Municipal Code Chapter 17.156 (“**Development Agreement Regulations**”), which authorizes the execution of development agreements and set forth the required contents and form of those agreements. The provisions of the Development Agreement Statute and the City’s Development Agreement Regulations are collectively referred to herein as the “**Development Agreement Law**.”

C. Developer is the owner of that certain real property located at 1000 Mills Lane, St. Helena in the County of Napa, State of California and more particularly described and depicted in Exhibits A and B attached hereto and incorporated herein (the “**Property**”).

D. Developer has applied to the City to construct on the Property a maximum 65 room hotel with ancillary retail and related amenities (the “**Project**”). The Project is more fully described in Exhibit C, Project Description, and incorporated herein by reference.

E. The Project is the subject of a mitigated negative declaration (“MND”) prepared pursuant to the California Environmental Quality Act (“**CEQA**”) (Public Resources Code section 21000 *et seq.*) and approved by Resolution No. _____ adopted by the City Council on ____.

F. Prior to or concurrently with approval of this Agreement, the City will take several actions to review and plan for the future development and use of the Project (“**Existing Approvals**”). These include:

1. Ordinance No. _____ approving this Agreement;

2. Resolution No. _____ approving the Use Permit and Design Review for the Project;

3. Resolution No. _____ approving the Lot Line Adjustment, Lot Merger, and Variance required for the Project; and

4. Resolution No. _____ approving the MND.

A copy of the Existing Approvals are attached hereto as Exhibit D.

G. It is the intent of City and Developer to establish certain conditions and requirements related to review and development of the Project, which are or will be the subject of subsequent development applications and land use entitlements.

H. City finds that the Agreement will promote orderly growth and quality development in accordance with the goals and policies set forth in the General Plan; is compatible with the uses authorized in, and the regulations prescribed for, the district in which the Property is located; will promote the public convenience, general welfare, and good land use practice; will not be detrimental to the health, safety and general welfare; will not adversely affect the orderly development of property or the preservation of property value; and will promote and encourage the development of the Project by providing a greater degree of requisite certainty.

I. City and Developer have reached mutual agreement and desire to voluntarily enter into this Agreement to facilitate development of the Project subject to the conditions and requirements set forth herein.

J. City has given the required notice of its intention to adopt this Agreement and has conducted public hearings thereon pursuant to Government Code section 65867 and Municipal Code section 17.156.070. The City has reviewed and evaluated this Agreement in accordance with the Development Agreement Law and found that the provisions of this Agreement and its purposes are consistent with the Development Agreement Law and the goals, policies, standards and land use designations specified in the General Plan.

K. On _____ the City Council introduced Ordinance No. _____ approving this Agreement and authorizing its execution, and adopted that Ordinance on _____. The Ordinance became effective on _____.

A G R E E M E N T

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein and other valuable consideration, the Parties hereby agree as follows:

ARTICLE 1 DEFINITIONS

1.1 Definitions.

“Affiliate” means and refers to any person or entity, directly or indirectly, Controlling or Controlled by or under common Control with the applicable person or entity, whether by direct or indirect ownership of equity interests, by contract or otherwise.

“Agreement” shall mean this Development Agreement between City and Developer, including all Exhibits hereto.

“Applicable Law” is defined in Section 3.2.

“CalTrans” means the California Department of Transportation.

“CEQA” means the California Environmental Quality Act, California Public Resources Code section 21000, *et seq.*, as amended from time to time.

“CEQA Guidelines” means the State CEQA Guidelines (California Code of Regulations, Title 14, section 15000, *et seq.*), as amended from time to time.

“Changes in the Law” is defined in Section 3.7.

“City” means the City of St. Helena, a municipal corporation.

“City Council” means the City Council of the City of St. Helena.

“City Manager” means City’s City Manager or his or her designee.

“City Parties” means and includes City and its elected and appointed officials, officers, employees, attorneys, contractors and representatives.

“Claims” means liabilities, obligations, orders, claims, damages, fines, penalties, and expenses, including attorneys’ fees and costs.

“Connection Fees” means those fees charged by City on a citywide basis or by a utility provider to utility users as a cost for connecting water, sanitary sewer, and other applicable utilities, except for any such fee or portion thereof that constitutes an Impact Fee, as defined below.

“Control” means and refers to possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person or entity, whether by ownership of equity interests, by contract or otherwise.

“Controlling” and “Controlled” mean and refer to exercising or having Control.

“Default” is defined in Section 12.1.

“Developer” means LMR Property Acquisition Partners LLC and its permitted successor and assigns.

“Development Agreement Law” is defined in Recital B.

“Development Agreement Regulations” is defined in Recital B.

“Development Agreement Statute” is defined in Recital A.

“Discretionary Action” or **“Discretionary Approval”** means an action which requires the exercise of judgment, deliberation or a decision on the part of the City, including any board, commission or department or any officer or employee of the City, in the process of approving or disapproving a particular activity, as distinguished from an activity which merely requires the City, including any board, commission or department or any officer or employee of the City, to determine whether there has been compliance with statutes, ordinances or regulations.

“Effective Date” means the date that this Agreement becomes effective as determined under Section 2.1.

“Enacting Ordinance” refers to the Ordinance identified in Recital K.

“Exactions” means exactions that may be imposed by the City as a condition of developing the Project, including requirements for acquisition, dedication or reservation of land; and obligations to construct on-site or off-site public and private infrastructure improvements such as roadways, utilities or other improvements necessary to support the Project, whether such exactions constitute subdivision improvements, mitigation measures in connection with environmental review of the Project, or impositions made under Applicable Law, including, but not limited to, the Highway 29 Specific Plan. For purposes of this Agreement, Exactions do not include Impact Fees.

“Existing Approvals” means and includes those permits and approvals for the Project granted by City to Developer as of the Effective Date as set forth in Recital F.

“Extension Term” is defined in Section 2.2.1.

“General Plan” means the City of St. Helena’s General Plan, as amended from time to time.

“Highway 29 Specific Plan” means the Highway 29 Specific Plan approved by the City Council of the City of St. Helena on February 22, 2005.

“Housing Fees” means the nonresidential development project housing impact fees charged by the City to further affordable housing pursuant to Municipal Code section 17.146.040.

“Impact Fees” means the monetary amount charged by City in connection with a development project for the purpose of defraying all or a portion of the cost of mitigating the

impacts of the development project or development of the public facilities related to the development project, including, any “fee” as that term is defined by Government Code section 66000(b).

“Initial Term” is defined in Section 2.2.

“Litigation Challenge” is defined in Section 9.3.

“Major Amendment” is defined in Section 8.2.

“Minor Amendment” is defined in Section 8.2.

“MND” is defined in Recital F.

“Mortgage” means any mortgage, deed of trust, security agreement, and other like security instrument encumbering all or any portion of the Property or any of the Developer’s rights under this Agreement

“Mortgagee” means the holder of any Mortgage, and any successor, assignee or transferee of any such Mortgage holder.

“Municipal Code” means and refers to the City of St. Helena’s Municipal Code, as amended from time to time.

“New City Laws” means and includes any ordinances, resolutions, orders, rules, official policies, standards, specifications, guidelines or other regulations, which are promulgated or adopted by the City (including but not limited to any City agency, body, department, officer or employee) or its electorate (through their power of initiative or otherwise) after the Effective Date.

“Notice of Breach” is defined in Section 12.1.

“Other Agency Fees” is defined in Section 4.3.

“Permitted Delay” is defined in Section 13.3.

“Permitted Transfer” means any of the following types of Transfer by Developer, which unless otherwise provided do not require the City’s prior written approval:

1. Any Transfer to a lender pursuant to a Security Instrument as collateral for financing to pay all or any part of the cost of construction of the Project; or pursuant to a Security Instrument as collateral for a permanent financing for the Project.
2. Any Transfer directly resulting from the foreclosure or deed in lieu of foreclosure of a Security Instrument for a loan from a Lender for construction or permanent financing for the Project or as otherwise permitted under Article 11.
3. Any Transfer of stock or equity in the Developer that does not change management or operational Control of the Project, with no material change in beneficial

ownership (with the exception of any conveyance to member(s) of the immediate family(ies) of the transferor(s) or trusts for their benefit) and which constitutes a tax-free transaction under Federal income tax law and California real estate transfer tax.

4. A Property Transfer from Developer to an Affiliate, including LMR Destinations, LLC, a California limited liability company, provided that such Affiliate is Controlled by Long Meadow Ranch Partners, L.P., a California limited partnership.

“Planning Commission” means the City of St. Helena Planning Commission.

“Processing Fees” means all fees for processing development project applications, including any required supplemental or other further environmental review, plan checking and inspection and monitoring for land use approvals, design review, grading and building permits, General Plan maintenance fees, and other permits and entitlements required to implement the Project, which are in effect at the time those permits, approvals or entitlements are applied for, and which are intended to cover the actual costs of processing the foregoing.

“Project Approvals” means the Existing Approvals and all Subsequent Approvals.

“Project” is defined in Recital D.

“Property” is defined in Recital C.

“Property Transfer” means and refers to any “change in ownership,” as defined in Revenue and Taxation Code Sections 60, et seq., of all or any portion of the Property.

“Security Instrument” means any security instrument, deed of trust, security deed, contract for deed, deed to secure debt, or other voluntary real property (including leasehold) security instrument(s) or agreement(s) intended to grant real property (including leasehold) security for any obligation (including a purchase-money or other promissory note) encumbering the Property, as entered into, renewed, modified, consolidated, increased, decreased, amended, extended, restated, assigned (wholly or partially), collaterally assigned, or supplemented from time to time, unless and until paid, satisfied, and discharged of record. If two or more such security instruments are consolidated or restated as a single lien or held by the same Lender (as applicable), then all such security instruments so consolidated or restated shall constitute a single Security Instrument. A participation interest in a security instrument (or partial assignment of the secured loan) does not itself constitute a Security Instrument.

“Subdivision Map Act” means California Government Code sections 66410 through 66499.58, as it may be amended from time to time.

“Subsequent Approvals” is defined in Section 7.1.

“Term” means the Initial Term plus any Extension Term, if such Extension Term is granted under the terms of this Agreement.

“Total Cost” is defined in Section 7.3.1.

“Traffic Fees” means Impact Fees charged by the City to finance circulation improvements including those Impact Fees charged pursuant to Municipal Code section 3.32.100.

“Transfer” means any of the following:

1. Any assignment, conveyance, grant, hypothecation, mortgage, pledge, sale, or other transfer, whether direct or indirect, of all or any part of such property, right or obligation, or of any legal, beneficial, or equitable interest or estate in such property, right or obligation or any part of it (including the grant of any easement, lien, or other encumbrance); or
2. Any conversion, exchange, issuance, modification, reallocation, sale, or other transfer of any direct or indirect equity interest(s) in the owner of such property, right or obligation by the holders of such equity interest(s); or
3. Any merger, consolidation, sale, or lease of all or substantially all of the assets of the Developer or a series of such sales, assignments and the like that, in the aggregate, result in a disposition of more than a 49% interest of all or substantially all of the assets of the Developer; or
4. Any Property Transfer; or
5. The recordation of any deed of trust, mortgage, lien or similar encumbrance against all or any portion of the Property or the Project

“Transient Occupancy Tax” means those taxes levied by City pursuant to Municipal Code chapter 3.28, which are collected and remitted to City by hotel operators.

ARTICLE 2 EFFECTIVE DATE AND TERM

2.1 Effective Date. The Effective Date of this Agreement shall be the later of (a) the date that is thirty (30) days after the date that the Enacting Ordinance is adopted, or (b) the date this Agreement is fully executed by the Parties. The Effective Date is inserted at the beginning of this Agreement. The Parties acknowledge that section 65868.5 of the Development Agreement Statute requires that this Agreement be recorded in the official records of Napa County no later than ten (10) days after the City enters into this Agreement, and that the burdens of this Agreement shall be binding upon, and the benefits of this Agreement shall inure to, all successors in interest to the Parties to this Agreement.

2.2 Initial Term of Agreement. The **“Initial Term”** of this Agreement shall commence on the Effective Date and shall expire on the fifth (5th) anniversary of the Effective Date, unless earlier terminated.

2.2.1 Extension of Initial Term. The Initial Term of this Agreement may be extended from the date of expiration of the Initial Term until the date which is five (5) years following the expiration of the Initial Term (**“Extension Term”**), provided that at the end of the Initial Term: (a) Developer is not, at the time, in Default of any of its obligations hereunder

following notice and expiration of applicable cure periods; (b) the applicable Developer warranties and representations in Section 2.4 below continue to be true and correct; and (c) no event has occurred which with the passage of time or giving of notice or both would constitute a Default by Developer hereunder. Following the expiration of the Term, or the earlier completion of development of the Project and satisfaction of all of Developer's obligations in connection therewith, this Agreement shall be deemed terminated and of no further force and effect; provided, however, that this termination shall not affect reimbursements to Developer under Section 7.3, Developer's obligation to pay the Affordable Housing Payment pursuant to Section 5.1.6, or any right or duty arising from entitlements or approvals, including the Project Approvals concurrently with, or subsequent to, the Effective Date. The Initial Term or Extension Term, as applicable, shall automatically be extended for the period of time of any actual delay resulting from any enactments pursuant to New City Laws that are necessary to protect the physical health and safety of the public that are uniformly applied on a City-wide basis.

2.2.2 Memorandum of Extension. If the Extension Term is granted, City and Developer agree to execute, acknowledge and record in the official records of Napa County a memorandum evidencing approval of the Extension Term.

2.3 City Representations and Warranties. City represents and warrants to Developer that, as of the Effective Date:

2.3.1 City is a municipal corporation, and has all necessary powers under the laws of the State of California to enter into and perform the undertakings and obligations of City under this Agreement.

2.3.2 The execution and delivery of this Agreement and the performance of the obligations of the City hereunder have been duly authorized by all necessary City Council action and all necessary approvals have been obtained.

2.3.3 This Agreement is a valid obligation of City and is enforceable in accordance with its terms.

2.3.4 During the Term of this Agreement, City shall, upon learning of any fact or condition which would cause of any of the warranties and representations in this Section 2.3 not to be true, immediately give written notice of such fact or condition to Developer.

2.4 Developer Representations and Warranties. Developer represents and warrants to City that, as of the Effective Date:

2.4.1 Developer is duly organized and validly existing under the laws of the State of California, and is in good standing and has all necessary powers under the laws of the State of California to own property interests and in all other respects enter into and perform the undertakings and obligations of Developer under this Agreement.

2.4.2 The execution and delivery of this Agreement and the necessary performance of the obligations of Developer hereunder have been duly authorized by all necessary company action and all necessary member approvals have been obtained.

2.4.3 This Agreement is a valid obligation of Developer and is enforceable in accordance with its terms.

2.4.4 Developer has not (a) made a general assignment for the benefit of creditors; (b) filed any voluntary petition in bankruptcy or suffered the filing of any involuntary petition by Developer's creditors; (c) suffered the appointment of a receiver to take possession of all, or substantially all, of Developer's assets; (d) suffered the attachment or other judicial seizure of all, or substantially all, of Developer's assets; or (e) admitted in writing its inability to pay its debts as they come due.

2.4.5 During the Term of this Agreement, Developer shall, upon learning of any fact or condition which would cause any of the warranties and representations in this Section 2.4 not to be true, immediately give written notice of such fact or condition to City.

ARTICLE 3 DEVELOPMENT OF THE PROPERTY

3.1 Vested Rights. The Property is hereby made subject to the provisions of this Agreement. Developer shall have the vested right to develop the Property and the Project in accordance with and subject to the Existing Approvals, the Subsequent Approvals, Applicable Law and this Agreement, which shall, among other things, control the permitted uses, density and intensity of use of the Property, requirements for on- and off-site infrastructure and public improvements, the Exactions, and the maximum height and size of buildings on the Property.

3.2 Applicable Law. City and Developer acknowledge and agree that City is restricted in its authority to limit its police power by contract and that the limitations, reservations and exceptions contained in this Agreement are intended to reserve to City all of its police power that cannot be so limited. Notwithstanding the foregoing reservation of City, it is the intent of City and Developer that this Agreement be construed to provide Developer with rights afforded by law, including but not limited to, the Development Agreement Statute. Therefore, the laws, rules, regulations, official policies, standards and specifications of City applicable to the development of the Property and/or the Project shall be (collectively, "**Applicable Law**"):

3.2.1 Those rules, regulations, official policies, standards and specifications of the City set forth in the Project Approvals and this Agreement. For purposes of convenience and clarity and to provide a centralized set of reference documents, Exhibit E describes and attaches portions of the Project Approvals and the Applicable Law, which sets forth the applicable development standards, including permitted uses, density and intensity of uses, maximum size and height of buildings, and exactions that are vested through this Agreement. The parties do not intend for Exhibit E to limit any vested rights or other rights or obligations specifically contemplated or conferred by this Agreement;

3.2.2 With respect to matters not addressed by and not otherwise inconsistent with the Project Approvals and this Agreement, those laws, rules, regulations, official policies, standards and specifications (including City ordinances and resolutions) governing permitted uses, building locations, timing and manner of construction, densities, intensities of uses, heights

and sizes, requirements for on- and off-site infrastructure and public improvements, in force and effect on the Effective Date;

3.2.3 New City Laws that relate to hearing bodies, petitions, applications, notices, findings, records, hearings, reports, recommendations, appeals and any other matter of procedure imposed at any time, provided such New City Laws are uniformly applied on a City-wide basis to all substantially similar types of development projects and properties;

3.2.4 New City Laws that revise City's uniform construction codes, including City's building code, plumbing code, mechanical code, electrical code, fire code, grading code and other uniform construction codes, as of the date of permit issuance, provided, that such New City Laws are uniformly applied on a City-wide basis to all substantially similar types of development projects and properties;

3.2.5 New City Laws that are necessary to protect physical health and safety of the public; provided, that such New City Laws are uniformly applied on a City-wide basis to all substantially similar types of development projects and properties;

3.2.6 New City Laws that do not conflict with this Agreement or the Project Approvals, provided such new City Laws are uniformly applied on a City-wide basis to all substantially similar types of development projects and properties; and

3.2.7 New City Laws that do not apply to the Property and/or the Project due to the limitations set forth above, but only to the extent that such New City Laws are accepted in writing by Developer in its sole discretion.

3.3 Development Timing. City and Developer acknowledge that Developer cannot at this time predict what portions of the Project will be included within any phase of the Project, when or the rate at which the phases will be developed or the order in which each phase will be developed. Such decisions depend upon numerous factors that are not within the control of Developer, such as market orientation and demand, interest rates, absorption, completion, availability of financing and other similar factors. In particular, and not in any limitation of any of the foregoing, since the California Supreme Court held in *Pardee Construction Co. v. The City of Camarillo*, 37 Cal.3d 465 (1984), that the failure of the parties therein to consider and expressly provide for the timing of development resulted in a later-adopted initiative restricting the timing of development prevailing over such parties' agreement, it is the desire to avoid that result by acknowledging that, unless otherwise provided for in this Agreement or the Project Approvals, Developer's vested rights under this Agreement include the right to develop the Property and the Project in such order and at such rate and at such times as Developer deems appropriate in the exercise of its discretion, subject to the terms, requirements and conditions of the Project Approvals and this Agreement.

3.4 Regulation by Other Public Agencies. City and Developer acknowledge and agree that other governmental or quasi-governmental entities not within the control of City possess authority to regulate aspects of the development of the Property and the Project and that this Agreement does not limit the authority of such other public agencies. City shall reasonably cooperate with Developer in Developer's effort to obtain such permits and approvals as may be

required by other governmental or quasi-governmental entities in connection with the development of, or the provision of services to, the Property and/or the Project; provided, however, City shall have no obligation to incur any costs, without compensation or reimbursement, or to amend any City policy, regulation or ordinance in connection therewith.

3.5 Life of Project Approvals. The term of any and all Project Approvals shall automatically be the longer of the Term or the term otherwise applicable to such Project Approval.

3.6 Developer's Right to Rebuild. City agrees that Developer may renovate or rebuild portions of the Project at any time within the Term should it become necessary due to any casualty, including natural disaster or changes in seismic requirements. Such renovations or reconstruction shall be processed as a Subsequent Project Approval consistent with all prior Project Approvals and Applicable City Law. Any such renovation or rebuilding shall be subject to all design, density and other limitations and requirements imposed by this Agreement, and shall comply with the Project Approvals, Applicable City Law, and the requirements of CEQA.

3.7 State and Federal Law. As provided in Section 65869.5 of the Development Agreement Statute, this Agreement shall not preclude the applicability to the Project of changes in laws, regulations, plans or policies, to the extent that such changes are specifically mandated and required by changes in State or Federal laws or by changes in laws, regulations, plans or policies of special districts or other governmental entities, other than City, created or operating pursuant to the laws of the State of California ("**Changes in the Law**"). In the event Changes in the Law prevent or preclude, or render substantially more expensive or time consuming, compliance with one (1) or more provisions of this Agreement, the City and Developer shall meet and confer in good faith in order to determine whether such provisions of this Agreement shall be modified or suspended, or performance thereof delayed, as may be necessary to comply with Changes in the Law. Nothing in this Agreement shall preclude City or Developer from contesting by any available means (including administrative or judicial proceedings) the applicability to the Project any such Changes in the Law. If Changes in the Law preclude or substantially prevent or preclude, or render substantially more expensive or time consuming, performance of this Agreement in a manner that makes the Project economically infeasible, Developer, in its sole and absolute discretion, may terminate this Agreement by providing written notice thereof to City.

3.8 Subsequent Development Review. The City shall not require Developer to obtain any approvals or permits for the development of the Project in accordance with this Agreement other than those permits or approvals that are required by the Applicable Law. However, any subsequent Discretionary Action or Discretionary Approval initiated by Developer that is not otherwise permitted by or contemplated in the Project Approvals, which changes the uses, intensity, density, building height or timing of the Project, or decreases the lot area, setbacks, yards, parking or other entitlements permitted on the Property shall be subject to the rules, regulations, ordinances and official policies of the City then in effect.

3.9 Effective Development Standards. The City agrees that it is bound to permit the uses, intensity of use and density on the Property which are permitted by this Agreement, insofar as this Agreement and the Project Approvals so provide or as otherwise set forth in the

Applicable Law. The City hereby agrees that it will not unreasonably withhold or unreasonably condition any Discretionary Action or Discretionary Approval which must be issued by the City in order for the Project to proceed, provided that Developer reasonably and satisfactorily complies with all preliminary procedures, actions, payments of Processing Fees, and criteria generally required of developers by the City for processing applications for developments and consistent with this Agreement.

3.10 Moratoria. In the event an ordinance, resolution or other measure is enacted, whether by action of the City, by initiative, or otherwise after the Effective Date, which relates to the rate, timing, or sequencing of the development or construction on all or any part of the Property, including, without limitation, any ordinance, resolution or other measure restricting or precluding the issuance of building permits, the City agrees that the ordinance, resolution or other measure shall not apply to the Property or this Agreement, unless the changes are both (a) found by the City to be necessary to protect the health and safety of the residents of the City, and (b) generally applicable on a Citywide basis.

ARTICLE 4 FEES

4.1 Impact Fees and Exactions. City may charge and, subject to Developer's right to protest and/or pursue a challenge in law or equity to any new or increased Impact Fees, Developer shall pay any and all Impact Fees imposed by City, including new Impact Fees adopted after the Effective Date; provided, however, City shall only require Developer to pay new Impact Fees (including increases in Impact Fees) that are uniformly applied by City to all substantially similar types of Development Projects and properties. Pursuant to St. Helena Municipal Code Section 17.146.040, Developer shall pay Traffic Fees upon City's issuance of a certificate of occupancy, while all other Impact Fees shall be paid prior to issuance of a building permit. In addition, City may impose and Developer shall comply with those Exactions required by this Agreement and the Project Approvals. Notwithstanding anything to the contrary contained in this Section 4.1, except as otherwise specifically provided in Section 3.2 above, in no event shall the City impose any additional Exactions (beyond those set forth in the Existing Approvals and this Agreement) in connection with the development of the Project, as long as such development is substantially consistent with the Project Approvals.

4.2 Processing Fees. Subject to Developer's right to protest and/or pursue a challenge in law or equity to any new or increased Processing Fee, City may charge and Developer agrees to pay any and all Processing Fees which are in effect on a City-wide basis at the time those permits, approvals or entitlements are applied for, and which are intended to cover the actual costs of processing the foregoing.

4.3 Other Agency Fees. Nothing in this Agreement shall preclude City from collecting fees from Developer that are lawfully imposed on the Project by another agency having jurisdiction over the Project, which the City is required to collect pursuant to Applicable Law ("**Other Agency Fees**").

4.4 Connection Fees. Subject to Developer's right to protest and/or pursue a challenge in law or equity to any new or increased Connection Fee, City may charge and Developer shall pay any Connection Fee that is lawfully adopted.

ARTICLE 5 DEVELOPER OBLIGATIONS

5.1 Developer Obligations. In consideration of the rights and benefits conferred by City to Developer under this Agreement, Developer shall perform the public benefit obligations and pay to City the contributions set forth in this Article 5 all within the times set forth herein.

5.1.1 Mills Lane Improvements. Developer shall construct improvements to Mills Lane as depicted in Exhibit F ("**Mills Lane Improvements**"), which are consistent with City's Highway 29 Specific Plan, prior to or concurrently with the development of the Project and shall complete the Mills Lane Improvements prior to the issuance of the first certificate of occupancy for the Project by the City. Construction shall be completed in accordance with improvements plans as approved by the City Engineer, and before Developer receives a final certificate of occupancy for the Project.

5.1.2 Storm Drain Improvements. Developer shall construct those certain storm drain improvements necessary to extend and improve the storm drain along Mills Lane to serve properties on Mills Lane, La Fata Street, Fountain Street, Grayson Avenue, Main Street (to Charter Oak Avenue), and Vidovich Avenue and to construct an outfall for said storm drain into the Napa River (the "**Storm Drain Improvements**"). The Storm Drain Improvements shall be designed by City in accordance with the City's long-standing plan for this separate project as contained in City's Storm Drain Mater Plan dated September 2000 (*see* Table 4-1) and the Highway 29 Specific Plan (*see* pages 37-39, Exhibit 11), and are depicted in Exhibit G. City shall further be responsible for permitting required for the Storm Drain Project, which are anticipated to include permits from the California Department of Fish and Wildlife, San Francisco Regional Water Quality Control Board and Army Corps of Engineers. Developer shall commence construction of the Storm Drain Improvements after the City has secured the permits required for the Storm Drain Improvements, provided, however, that the Storm Drain Improvements shall be completed before the Developer receives a final certificate of occupancy for the Project.

5.1.3 La Fata Sidewalk Improvements. Developer shall design and construct those certain sidewalk improvements on the west side of La Fata Street as depicted in Exhibit H (the "**La Fata Sidewalk Improvements**"). Developer shall construct the La Fata Sidewalk in accordance with improvement plans as approved by the City Engineer. The La Fata Sidewalk Improvements shall be constructed concurrently with the Project and shall be completed prior to issuance of a final certificate of occupancy for the Project. In the event that the Developer secures access to an alternate employee parking lot prior to occupancy of the Project where Developer's employees will no longer utilize the La Fata Sidewalk Improvements to access the Project site, the Developer may request that the City consider such alternate parking lot as an acceptable location for employee parking. In the event City approves such alternative parking lot for employee parking, which approval City may grant or deny in its sole discretion,

Developer shall be relieved of the obligation to construct the La Fata Sidewalk Improvements pursuant to this Section 5.1.4.

5.1.4 Recycled Water Improvements. Developer shall construct and install additional piping to convey recycled water in the public right of way in Mills Lane extending from Highway 29 easterly to the eastern end of Mills Lane (the “**Recycled Water Pipe**”) in a manner as directed by the City Engineer and shall be completed prior to a final certificate of occupancy for the Project. For purposes of this agreement “recycled water” means wastewater treated by the City’s wastewater treatment facility that meets State requirements for reuse, including but not limited to California Department of Public Health regulations contained in Title 17 and Title 22 of the California Code of Regulations. The Recycled Water Pipe shall be designed and at a size as directed by the City Engineer, but is anticipated to be a twelve (12) inch pipe and will be installed in the trench constructed for the Storm Drain Improvements. Developer shall construct and install the Recycled Water Pipe as a means of offsetting its water requirement in accordance with Chapter 13.12 of the St. Helena Municipal Code. The construction of the Recycled Water Pipe is being conducted in lieu of paying the in-lieu retrofit fee that would otherwise be required of the Project pursuant to Section 13.12.030(B) of the St. Helena Municipal Code.

5.1.5 Affordable Housing. In lieu of paying the City’s nonresidential development project housing impact fee pursuant to City of St. Helena Municipal Code Section 17.146.040, Developer shall make a payment in the amount and manner set forth in this Section 5.1.6. Developer shall make a total payment to the City for affordable housing in the amount of Three Million Two Hundred Thousand Dollars (\$3,200,000) (the “Affordable Housing Payment”). The Affordable Housing Payment shall be made to the City in the manner and for the purposes set forth in this Section.

5.1.5.1 One Million Dollars (\$1,000,000) (the “Initial Housing Payment”) shall be paid to the City prior to and as a condition of issuance of the building permit for the Project. The Initial Housing Payment shall be set aside by the City to be used by Our Town St. Helena or its designee (which designee must be approved by the City) (“OTSH”) to acquire that certain parcel designated as APN 009-660-005 and commonly known at the “Phelps Property” or an equivalent parcel suitable for the purpose of developing affordable housing as approved by the City in its discretion (the “Affordable Housing Parcel”) subject to and conditioned upon satisfaction of the following conditions:

(i) Prior to the time that the Initial Housing Payment is due and payable by Developer to City, OTSH shall provide evidence satisfactory to the City that OTSH has entered into a binding purchase option or binding purchase agreement for the acquisition of the Affordable Housing Parcel. If OTSH has not provided such evidence prior to the time the Initial Housing Payment is due and payable to the City, the Initial Housing Payment may be used by the City for any affordable housing purpose at its discretion, and the City shall have no further obligation to set aside the Initial Housing Payment for the acquisition of the Affordable Housing Parcel.

(ii) Subject to paragraph (i) above, the City shall deposit the Initial Housing Payment into escrow for the acquisition of the Affordable Housing Parcel at such

time as requested by OTSH, provided that OTSH has satisfied the following conditions precedent:

(a) OTSH has provided evidence satisfactory to the City that OTSH has secured land use entitlements from the City and all other applicable governmental agencies for the development of not less than twenty (20) units of for-sale or rental housing on the Affordable Housing Parcel, including but not limited to a General Plan Amendment and Zone Change. Developer acknowledges that City's zoning, building and land use regulations shall be applicable to any development of the Affordable Housing Parcel, and nothing herein shall be construed as a waiver or limitation on the City's discretion in considering any application for land use entitlements on the Affordable Housing Parcel.

(b) OTSH has provided evidence satisfactory to the City that it has secured financing sufficient to construct and develop not less than 20 units of for-sale or rental housing with not less than 50% of the total units affordable to very low income households and not less than 50% of total units affordable lower income households, both as defined in St. Helena Municipal Code Section 17.144.020.

(c) OTSH has entered into an Affordable Housing Covenant or Regulatory Agreement with the City in a form satisfactory to the City Attorney, ensuring that the Affordable Housing Parcel shall be developed with affordable for-sale or rental housing consistent with the requirements of the project financing described in paragraph (b) above, which covenant or agreement shall be recorded against the Property at the time of acquisition of the Affordable Housing Parcel by OTSH.

(d) In the event that OTSH has not satisfied the conditions precedent described in paragraphs (a)-(c) above on or before three (3) years from the date of payment of the Initial Housing Payment to the City by Developer, the City shall have no further obligation to set aside the Initial Housing Payment for the acquisition of the Affordable Housing Site, and the City may use the Initial Housing Payment for any affordable housing purpose as City deems appropriate.

5.1.5.2 The remaining Two Million Two Hundred Thousand (\$2,200,000) of the Affordable Housing Payment (the "Second Housing Payment") shall be due and payable to the City at the earlier of (i) a Transfer of the Property by Developer, other than a Permitted Transfer, (ii) conversion of the Developer's construction financing for the Project to permanent financing, or (iii) sixty (60) months after issuance of a final certificate of occupancy for the Project. The Second Housing Payment shall be deposited into the City's affordable housing fund to be used for affordable housing purposes as City deems appropriate. This obligation shall survive the expiration of the Term or any Extended Term of this Agreement and the City shall have all rights and remedies available under this Agreement or in law or equity to compel Developer to make such Second Housing Payment at or before the time required under this Section, even if the Term or any Extended Term has expired.

5.2 City of St. Helena Business License. Developer, at its expense, shall obtain and maintain a City of St. Helena business license at all times during the Term, and shall include a provision in all general contractor agreements for the Project requiring each such general

contractor to obtain and maintain a City of St. Helena business license during performance of the work of construction.

5.3 Sales Tax Point of Sale Designation. Developer shall use good faith, diligent efforts to the extent allowed by law to require all persons and entities providing bulk lumber, concrete, structural steel and pre-fabricated building components, such as roof trusses, to be used in connection with the construction and development of, or incorporated into, the Project, to (a) obtain a use tax direct payment permit; (b) elect to obtain a subcontractor permit for the job site of a contract valued at Five Million Dollars (\$5,000,000) or more; or (c) otherwise designate the Property as the place of use of material used in the construction of the Project in order to have the local portion of the sales and use tax distributed directly to City instead of through the county-wide pool. Developer shall instruct its general contractor(s) for the Project to, and cause such general contractor(s) to instruct its/their subcontractors to, cooperate with City to ensure the local sales/use tax derived from construction of the Project is allocated to City to the fullest extent possible. To assist City in its efforts to ensure that such local sales/use tax is so allocated to City, Developer shall on an annual basis provide City with such information as shall be reasonably requested by City regarding subcontractors working on the Project with contracts in excess of the amount set forth above, including a description of all applicable work and the dollar value of such subcontracts. City may use such information to contact each subcontractor who may qualify for local allocation of use taxes to City.

ARTICLE 6 ANNUAL REVIEW

6.1 Annual Review.

6.1.1 Purpose. As required by California Government Code section 65865.1 and Municipal Code section 17.156.120, City and Developer shall review this Agreement and all actions taken pursuant to the terms of this Agreement with respect to the development of the Project every twelve (12) months solely to determine good faith compliance with this Agreement. Specifically, City's annual review shall be conducted for the purposes of determining compliance by Developer with its obligations under this Agreement. Each annual review shall also document: (a) the status of the Project development, and (b) any extension of the Initial Term of this Agreement pursuant to Section 2.2.

6.1.2 Conduct of Annual Review. The annual review shall be conducted as provided in this Section 6.1.2. By December 1st of each year, Developer shall provide documentation of its good faith compliance with this Agreement during the calendar year, and such other information as may reasonably be requested by the City Manager. Within ninety (90) days after receipt of Developer's documents of good faith compliance with this Agreement, the City Manager shall make a determination regarding whether or not Developer has complied in good faith with the provisions and conditions of this Agreement. This determination shall be made in writing with reasonable specificity, and a copy of the determination shall be provided to Developer in the manner prescribed in Section 13.2. If the City Manager finds good faith compliance by Developer with the terms of this Agreement, Developer shall be notified in writing and the review for that period shall be concluded. If the City Manager is not satisfied that Developer is performing in accordance with the terms and conditions of this Agreement, the

City Manager shall prepare a written report specifying why the Developer may not be in good faith compliance with this Agreement, refer the matter to the City Council, and notify Developer in writing at least fifteen (15) business days in advance of the time at which the matter will be considered by the City Council. This notice shall include the time and place of the City Council's public hearing to evaluate good faith compliance with this Agreement, a copy of the City Manager's report and recommendations, if any, and any other information reasonably necessary to inform Developer of the nature of the proceeding. The City Council shall conduct a public hearing at which Developer must submit evidence that it has complied in good faith with the terms and conditions of this Agreement. Developer shall be given an opportunity to be heard at the hearing. The findings of the City Council on whether Developer has complied with this Agreement for the period under review shall be based upon substantial evidence in the record. If the City Council determines, based upon substantial evidence, that Developer has complied in good faith with the terms and conditions of this Agreement, the review for that period shall be concluded. If the City Council determines, based upon substantial evidence in the record, that Developer has not complied in good faith with the terms and conditions of this Agreement, or there are significant questions as to whether Developer has complied with the terms and conditions of this Agreement, the City Council, at its option, may continue the hearing and may notify Developer of the City's intent to meet and confer with Developer within thirty (30) days of such determination, prior to taking further action. Following such meeting, the City Council shall resume the hearing in order to further consider the matter and to make a determination regarding Developer's good faith compliance with the terms and conditions of this Agreement. In the event City determines Developer is not in good faith compliance with the terms and conditions of this Agreement, City may give the Developer a written Notice of Breach, in which case the provisions of Section 12.1, below, shall apply.

6.1.3 Failure to Conduct Annual Review. Failure of City to conduct an annual review shall not constitute a waiver by the City of its rights to otherwise enforce the provisions of this Agreement nor shall Developer have or assert any defense to such enforcement by reason of any such failure to conduct an annual review.

ARTICLE 7 COOPERATION AND IMPLEMENTATION

7.1 Subsequent Approvals. Certain subsequent land use approvals, entitlements, and permits other than the Existing Approvals, will be necessary or desirable for implementation of the Project ("**Subsequent Approvals**"). The Subsequent Approvals may include, without limitation, the following: amendments of the Existing Approvals, grading permits, building permits, design review permits, sewer and water connection permits, certificates of occupancy, lot line adjustments, site plans, encroachment permits, development plans, land use plans, building plans and specifications, parcel maps and/or subdivision maps and any amendments to, or repealing of, any of the foregoing. Except as otherwise expressly provided herein, the City shall not impose requirements or conditions upon the development and construction of the Project that are inconsistent with the Project, Project Approvals, Existing Approvals, vested rights and the terms and conditions of this Agreement. The City acknowledges and agrees that except as otherwise specifically provided in Section 3.3 above, as long as development of the Project sought in the Subsequent Approvals is substantially consistent with the Project, in no event shall the City impose any additional Exactions (beyond those set forth in the Existing

Approvals) in connection with the development of the Project approved in the Subsequent Approvals.

7.2 Processing Applications for Subsequent Approvals.

7.2.1 Timely Submittals by Developer. Developer acknowledges that City cannot begin processing applications for Subsequent Approvals until Developer submits complete applications on a timely basis. Developer shall use diligent good faith efforts to (a) provide to City in a timely manner any and all documents, applications, plans, and other information necessary for City to carry out its obligations hereunder; and (b) cause Developer's planners, engineers, and all other consultants to provide to City in a timely manner all such documents, applications, plans and other materials required under Applicable Law. It is the express intent of Developer and City to cooperate and diligently work to obtain any and all Subsequent Approvals.

7.2.2 Timely Processing by City. Upon submission by Developer of all appropriate applications and Processing Fees for any pending Subsequent Approval, City shall, promptly and diligently, subject to City ordinances, policies and procedures, commence and complete all steps necessary to act on Developer's currently pending Subsequent Approval applications including: (a) providing at Developer's expense planning and processing of each pending Subsequent Approval application (provided that Developer shall pay such all costs at cost plus 10% for administrative costs incurred); (b) if legally required, providing notice and holding public hearings; and (c) acting on any such pending Subsequent Approval application.

7.3 Construction and Reimbursement for Public Improvements. Pursuant to Sections 5.1.1-5.1.5 of this Agreement, Developer is required to construct the Mills Lane Improvements, Storm Drain Improvements, Recycled Water Pipe, and La Fata Sidewalk Improvements, collectively referred to herein as the "**Public Improvements**". This section sets forth the manner in which the required Public Improvements will be planned, designed and constructed, and provides for reimbursement to Developer for costs incurred in conjunction with the construction of these Public Improvements in excess of Developer's share of the costs.

7.3.1 Planning and Design of Public Improvements. City will undertake and complete the planning and design of the Storm Drain Improvements, including preparation of final design plans, specifications, drawings and related materials as necessary for Developer to issue a request for bids for construction of the Storm Drain Improvements. Developer will undertake and complete the planning and design of the Mills Lane Improvements, La Fata Sidewalk Improvements and Recycled Water Pipe, including final design plans, specifications, drawings and related materials as necessary to solicit bids for these improvements, which materials shall be subject to the review and approval by the City Engineer.

7.3.2 Construction of Public Improvements. Following completion of the design work described above, Developer shall bid the Mills Lane Improvements, Storm Drain Improvements and Recycled Water Pipe in conformance with all local and state bidding requirements applicable to the City. The City Engineer shall assist Developer as necessary to ensure compliance with applicable bidding requirements. The improvements described above may be bid as a single project, provided that if it is bid as a single project it will be broken into

component parts in a manner as approved by the City Engineer, so that the costs of each component part is clearly indicated, to allow for calculation of Developer's share of the cost of each of the required Public Improvements in accordance with this section. The Developer shall bid the La Fata Sidewalk Improvements in a manner as Developer deems appropriate. Developer shall award and enter into the contracts for all the Public Improvements and shall be solely responsible for all project and construction management activities. The Public Improvements shall be inspected and accepted by the City at the appropriate times in accordance with the City's customary practice and processes.

7.3.3 Developer Share of Public Improvement Costs. Developer shall be solely responsible to pay the full cost of constructing the Public Improvements described herein, but shall be entitled to reimbursement from the City for a portion of the cost of constructing the Public Improvements in excess of the Developer's share of such costs. Developer's share of the cost of each of the required Public Improvements is as follows:

7.3.3.1 Developer's share of the cost of the Mills Lane Improvements shall be forty-one percent (41%) of the construction costs attributable to the Mills Lane Improvements as set forth in the bid documents for such improvements, including any change orders for such improvements that are reviewed and approved by the City Engineer.

7.3.3.2 Developer's share of the cost of the Storm Drain Improvements shall be eighteen percent (18%) of the construction costs attributable to the Storm Drain Improvements as set forth in the bid documents for such improvements, including any change orders for such improvements that are reviewed and approved by the City Engineer.

7.3.3.3 Developer shall pay the full construction cost attributable to the Recycled Water Pipe as set forth in the bid documents for such improvements, including any change orders for such improvements that are reviewed and approved by the City Engineer up to a maximum amount of Two Hundred Fifty-Six Thousand Five Hundred Forty-Nine Dollars (\$256,549). Any construction costs in excess of this maximum amount shall be subject to reimbursement by the City in accordance with Section 7.3.4.

7.3.3.4 Developer shall pay the full cost of construction of the La Fata Sidewalk Improvements with no reimbursement from the City.

7.3.3.5 The amounts for which Developer is solely responsible as set forth above are collectively referred to herein as the "Developer's Share of Public Improvements."

7.3.4 Reimbursement for Costs in Excess of Developer's Share of Public Improvements.

7.3.4.1 Following construction of the Public Improvements by Developer and acceptance of said Public Improvements by the City, the City shall reimburse Developer for the construction costs of the Public Improvements in excess of the Developer's Share of Public Improvements, as set forth in the bid documents for such Public Improvements, including any change orders reviewed and approved by the City Engineer, in the manner set forth below.

7.3.4.2 City shall reimburse Developer an amount equal to fifty percent (50%) of the Transient Occupancy Tax (“TOT”) received by the City from Developer pursuant to Chapter 3.28 of the St. Helena Municipal Code, until the construction costs in excess of Developer’s Share of Public Improvements have been reimbursed to Developer in full. Reimbursement shall be made on a quarterly basis within thirty (30) days after the City has confirmed the amount of TOT paid by Developer for the prior quarter, provided that the City may, at its discretion, make additional or larger payments to the Developer toward to the total reimbursement amount. City may use any source of funds it deems appropriate to make the reimbursement payment required hereunder, including general fund moneys, impact fees as appropriate for the constructed improvements or other funds available to pay for the construction of capital improvements. City’s obligation to reimburse Developer pursuant to this section shall survive the expiration of the Term and any Extended Term.

ARTICLE 8 AMENDMENT OF AGREEMENT AND PROJECT APPROVALS

8.1 Amendment by Written Consent. Except as otherwise expressly provided herein (including Section 6.1 relating to City’s annual review and Section 12.1 relating to termination in the event of a breach), this Agreement may be terminated, modified or amended only by mutual written consent of the Parties hereto or their successors in interest or assignees and in accordance with the provisions of Government Code sections 65867, 65867.5, and 65868.

8.2 Major Amendments to Agreement. Any amendment to this Agreement which affects or relates to (a) the Term; (b) permitted uses of the Property; (c) provisions for the reservation or dedication of land; (d) conditions, terms restrictions or requirements for subsequent discretionary actions; (e) the density or intensity of the use of the Property or the maximum height or size of proposed buildings; or (f) monetary contributions by Developer, shall be deemed a “**Major Amendment**” and shall require giving of notice and a public hearing before the Planning Commission and City Council. Any amendment which is not a Major Amendment shall be deemed a “**Minor Amendment**” and shall not, except to the extent otherwise required by Applicable Law, require notice of public hearing before the Parties may execute an amendment hereto. The City Manager or his or her designee shall have the authority to determine if an amendment is a Major Amendment or a Minor Amendment.

8.3 Minor Amendment. The City Manager or his or her designee shall have the authority to review and approve amendments to this Agreement provided that such amendments are not Major Amendments.

8.4 Requirement for Writing. No modification, amendment or other change to this Agreement or any provision hereof shall be effective for any purpose unless specifically set forth in a writing which refers expressly to this Agreement and is signed by duly authorized representatives of both Parties or their successors in interest.

8.5 Subsequent CEQA Review. No additional CEQA documentation shall be required unless Developer proposes substantial changes in the Project that result in unmitigated environmental impacts beyond those analyzed in the Prior CEQA documents or in the Prior CEQA Analysis. In the event that any additional CEQA documentation is legally required for

any discretionary Subsequent Approval, then the scope of such documentation shall be focused, to the extent possible consistent with CEQA, on the specific subject matter of the Subsequent Approval, and the City, at Developer's expense, shall conduct such additional CEQA review as expeditiously as possible.

ARTICLE 9 INSURANCE, INDEMNITY AND COOPERATION IN THE EVENT OF LEGAL CHALLENGE

9.1 Insurance Requirements. Developer shall procure and maintain, or cause its contractor(s) to procure and maintain, until the earlier of (a) the expiration of this Agreement; or (b) the completion of the Project, a commercial general liability policy in an amount not less than two million (\$2,000,000) combined single limit, including contractual liability together with a comprehensive automobile liability policy in the amount of one million (\$1,000,000), combined single limit. Such policy or policies shall be written on an occurrence form, so long as such form of policy is then commonly available in the commercial insurance marketplace. Developer's insurance shall be placed with insurers with a current A.M. Best's rating of no less than A-:VII or a rating otherwise approved by the City in its sole discretion. Developer shall furnish at City's request appropriate certificate(s) of insurance evidencing the insurance coverage required hereunder, and City Parties shall be named as additional insured parties in such policies. The certificate of insurance shall contain a statement of obligation on the part of the carrier to notify City of any material change, cancellation or termination of the coverage at least thirty (30) days in advance of the effective date of any such material change, cancellation or termination (ten (10) days advance notice in the case of cancellation for nonpayment of premiums) where the insurance carrier provides such notice to the Developer. Coverage provided hereunder by Developer shall be primary insurance and shall not be contributing with any insurance, self-insurance or joint self-insurance maintained by City, and the policy shall contain such an endorsement. The insurance policy or the endorsement shall contain a waiver of subrogation for the benefit of City.

9.2 Indemnity and Hold Harmless. Developer shall indemnify, defend (with counsel reasonably acceptable to City) and hold harmless City Parties from and against any and all Claims, including Claims for any bodily injury, death, or property damage, resulting directly or indirectly from the development or construction of the Project by or on behalf of Developer, and/or from any other acts or omissions of Developer under this Agreement, whether such acts or omissions are by Developer or any of Developer's contractors, subcontractors, agents or employees, except to the extent such Claims arise from the sole active negligence or willful misconduct of City or City Parties.

9.3 Defense and Cooperation in the Event of a Litigation Challenge. City and Developer shall cooperate in the defense of any court action or proceeding instituted by a third party or other governmental entity or official challenging the validity of any provision of this Agreement, or the Project Approvals ("**Litigation Challenge**"), and the Parties shall keep each other informed of all developments relating to such defense, subject only to confidentiality requirements that may prevent the communication of such information. To the extent Developer desires to contest or defend such Litigation Challenge, (a) Developer shall take the lead role defending such Litigation Challenge and may, in its sole discretion, elect to be represented by the

legal counsel of its choice; (b) City may, in its sole discretion, elect to be separately represented by the legal counsel of its choice in any such action or proceeding with the reasonable costs of such representation to be paid by Developer; (c) Developer shall reimburse City, within ten (10) business days following City's written demand therefor, which may be made from time to time during the course of such litigation, all reasonable costs incurred by City in connection with the Litigation Challenge, including City's administrative, legal, and court costs and City Attorney oversight expenses; and (d) Developer shall indemnify, defend, and hold harmless City Parties from and against any damages, attorneys' fees or cost awards, including attorneys' fees awarded under Code of Civil Procedure section 1021.5, assessed or awarded against City by way of judgment, settlement, or stipulation. Any proposed settlement of a Litigation Challenge shall be subject to City's approval not to be unreasonably withheld, conditioned or delayed. If the terms of the proposed settlement would constitute an amendment or modification of this Agreement or any Project Approvals, the settlement shall not become effective unless such amendment or modification is approved by City in accordance with Applicable Law, and City reserves its full legislative discretion with respect thereto. If Developer opts not to contest or defend such Litigation Challenge, City shall have no obligation to do so.

9.4 **Prevailing Wages.** Without limiting the foregoing, Developer acknowledges 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, as defined. If work on off-site improvements pursuant to this Agreement is being performed by Developer as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation under the contract in question is \$1,000 or more, Developer agrees to fully comply with such Prevailing Wage Laws. Developer understands and agrees that it is Developer's obligation to determine if Prevailing Wages apply to work done on the Project or any portion of the Project. Upon Developer's request, the City shall provide a copy of the then current prevailing rates of per diem wages. Developer shall make available to interested parties upon request, copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the work subject to Prevailing Wage Laws, and shall post copies at the Developer's principal place of business and at the Property. Developer shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless pursuant to the indemnification provisions of this Agreement from any claim or liability arising out of any failure or alleged failure by Developer to comply with the Prevailing Wage Laws associated with any "public works" or "maintenance" projects associated with Project development.

ARTICLE 10 TRANSFER AND NOTICE

10.1 **Transfer.** Because of the necessity to coordinate development of the entirety of the Property pursuant to plans for the Project, particularly with respect to the provision of on- and off-site public improvements and public services and benefits, certain restrictions on the right of Developer to Transfer its interest under this Agreement with respect to the Property, or any portion thereof, are necessary in order to assure the achievement of the goals, objectives and public benefits of the Project and this Agreement.

10.1.1 Developer agrees to and accepts the restrictions set forth in this Section 10.1 as reasonable and as a material inducement to City to enter into this Agreement. The Developer shall promptly notify the City in writing of any and all changes whatsoever in the identity of the business entities or individuals either comprising or in Control of the Developer, as well as any and all changes in the interest or the degree of Control of the Developer by any such person, of which information the Developer or any of its partners, members or officers are notified or may otherwise have knowledge or information.

10.1.2 Except as expressly permitted in this Agreement, the Developer represents to the City that it has not made and agrees that it will not make or create, or suffer to be made or created, any Transfer other than a Permitted Transfer, either voluntarily, involuntarily or by operation of law, until after the completion of the Project and all of Developer's obligations under this Agreement; provided, however, that the City may approve in its reasonable discretion, Transfers other than Permitted Transfers prior to the completion of the Project and such obligations under this Agreement. In deciding whether to approve or disapprove any proposed Transfer, the City may consider the proposed transferee's financial strength and the experience of the proposed transferee and its senior management in undertaking and successfully completing projects of a similar type and size as the Project or that portion of the Project proposed to be transferred. Any Transfer made in contravention of this Section 10.1 shall be voidable at the election of the City and this Agreement may be terminated by the City or the City may exercise any other remedy available to the City under the terms of this Agreement, provided, however, that (i) the City shall first notify the Developer in writing of its intention to terminate this Agreement or to exercise any other remedy, and (ii) the Developer shall have twenty (20) calendar days following its receipt of such written notice to commence and, thereafter, diligently and continuously proceed to cure the default of the Developer and submit evidence of the initiation and satisfactory completion of such cure to the City, in a form and substance reasonably satisfactory to the City.

10.1.3 The Developer shall provide the City no less than thirty (30) days prior written notice of any proposed Permitted Transfer which the Developer desires to enter into prior to the completion of the Project and Developer's obligations under this Agreement, other than a Permitted Transfer for which no notice shall be required. The Developer shall have the burden of demonstrating to the City's reasonable satisfaction that the proposed Permitted Transfer meets the conditions and requirements of this Agreement with respect to Permitted Transfers.

10.1.4 Once the Developer has completed all its obligations under Article 5 of this Agreement, including but not limited to payment of the full Affordable Housing Payment, and received a final certificate of occupancy for the Project, this Section 10.1 shall no longer apply to Transfers by Developer. City acknowledges that in the event Developer has completed all obligations under Article 5 except for making the Second Housing Payment, and Developer intends to make the Second Housing Payment concurrently with the Transfer of the Project, City shall not have discretion to approve or deny such transfer except to require the making of the Second Housing Payment concurrent with the Transfer, and Developer shall still be obligated to notify City of such Transfer in accordance with this Section 10.1.

10.2 Successive Transfer. In the event there is more than one Transfer under the provisions of this Article 10, the provisions of this Article 10 shall apply to each successive Transfer.

ARTICLE 11 MORTGAGEE PROTECTION

11.1 Mortgagee Protection. Neither entering into this Agreement nor a breach hereof shall defeat, render invalid, diminish or impair the lien of any Mortgage made in good faith and for value. Nothing in this Agreement shall prevent or limit Developer, at its sole discretion, from granting one or more Mortgages encumbering all or a portion of Developer's interest in the Property or portion thereof or improvement thereon as security for one or more loans or other financing, but all of the terms and conditions contained in this Agreement shall be binding upon and effective against and shall run to the benefit of Mortgagee who acquires title or possession to the Property, or any portion thereof, by foreclosure, trustee's sale, deed in lieu of foreclosure or otherwise. Developer shall provide the City with a copy of the deed of trust or mortgage within ten (10) days after its recording in the official records of Napa County; provided, however, that Developer's failure to provide such document shall not affect any Mortgage, including without limitation, the validity, priority or enforceability of such Mortgage.

11.2 Mortgagee Not Obligated. No Mortgagee (including one who acquires title or possession to the Property, or any portion thereof, by foreclosure, trustee's sale, deed in lieu of foreclosure or otherwise) shall have any obligation to construct or complete construction of improvements, or to guarantee such construction or completion; provided, however, that a Mortgagee shall not be entitled to devote the Property to any use except in full compliance with this Agreement and the other Project Approvals nor to construct any improvements thereon or institute any uses other than those uses or improvements provided for or authorized by this Agreement, or otherwise under the Project Approvals. Except as otherwise provided in this Section 11.2, all of the terms and conditions contained in this Agreement and the other Project Approvals shall be binding upon and effective against and shall run to the benefit of any person or entity, including any Mortgagee, who acquires title or possession to the Property, or any portion thereof.

11.3 Notice of Default to Mortgagee. If City receives a notice from a Mortgagee requesting a copy of any Notice of Default given Developer hereunder and specifying the address for service thereof, then City agrees to use its diligent, good faith efforts to deliver to such Mortgagee, concurrently with service thereon to Developer, any Notice of Default given to Developer. Each Mortgagee shall have the right, but not the obligation, during the same period available to Developer to cure or remedy, or to commence to cure or remedy, the event of Default claimed or the areas of noncompliance set forth in City's Notice of Default. If a Mortgagee is required to obtain possession in order to cure any Default, the time to cure shall be tolled so long as the Mortgagee is attempting to obtain possession, including by appointment of a receiver or foreclosure, but in no event may this period exceed 120 days from the date the City delivers the Notice of Default to Developer.

11.4 No Supersedure. Nothing in this Article 11 shall be deemed to supersede or release a Mortgagee or modify a Mortgagee's obligations under any subdivision or public

improvement agreement or other obligation incurred with respect to the Project outside this Agreement, nor shall any provision of this Article 11 constitute an obligation of City to such Mortgagee, except as to the notice requirements of Section 11.3.

ARTICLE 12

DEFAULT; REMEDIES; TERMINATION

12.1 Breach and Default. Subject to Permitted Delays or by mutual consent in writing, and except as otherwise provided by this Agreement, breach of, failure, or delay by either Party to perform any term or condition of this Agreement shall constitute a “**Default.**” In the event of any alleged Default of any term, condition, or obligation of this Agreement, the Party alleging such Default shall give the defaulting Party notice in writing specifying the nature of the alleged Default and the manner in which the Default may be satisfactorily cured (“**Notice of Breach**”). The defaulting Party shall cure the Default within thirty (30) days following receipt of the Notice of Breach, provided, however, if the nature of the alleged Default is non-monetary and such that it cannot reasonably be cured within such thirty (30) day period, then the commencement of the cure within such time period, and the diligent prosecution to completion of the cure thereafter, shall be deemed to be a cure, provided that if the cure is not diligently prosecuted to completion, then no additional cure period shall be provided. If the alleged failure is cured within the time provided above, then no Default shall exist and the noticing Party shall take no further action to exercise any remedies available hereunder. If the alleged failure is not cured, then a Default shall exist under this Agreement and the non-defaulting Party may exercise any of the remedies available under this Agreement.

12.2 Failure to Cure Default Procedure. If after Default or Notice of Breach, the Planning and Building Director finds and determines that Developer remains in default and that the City intends to terminate or modify this Agreement, or those transferred or assigned rights and obligations, as the case may be, the Planning and Building Director shall make a report to the Planning Commission and then set a public hearing before the Commission in accordance with the notice and hearing requirements of Government Code Sections 65867 and 65868. If after public hearing, the Planning Commission finds and determines, on the basis of substantial evidence, that Developer, or an Assignee, as the case may be, has not cured default pursuant to this Section, and that the City shall terminate or modify this Agreement, Developer shall be entitled to appeal that finding and determination to the City Council in accordance with Section 12.10 below. In the event of a finding and determination that all defaults are cured, there shall be no appeal by any person or entity.

12.3 Withholding of Permits. In the event of a Default by Developer, or following notice of breach to Developer pursuant to Section 12.1 above and during/following the cure period provided therein, upon a finding by the City Manager that Developer is in breach, City shall have the right to refuse to issue any permit or other Subsequent Approvals to which Developer would otherwise have been entitled pursuant to this Agreement until such Default or breach is cured. This provision is in addition to and shall not limit any actions that City may take to enforce the conditions of the Project Approvals.

12.4 Termination. In the event of an uncured Default by a Party, the non-defaulting Party shall have the right to terminate this Agreement upon giving notice of intent to terminate

pursuant to Government Code section 65868 and regulations of City implementing such section. Following notice of intent to terminate, the matter shall be scheduled for consideration and review in the manner set forth in Government Code section 65867 and City regulations implementing said section. Following consideration of the evidence presented in said review before the City Council, a Party alleging Default by the other Party may give written notice of termination of this Agreement to the other Party. Termination of this Agreement shall be subject to the provisions of Section 12.12.

12.5 Specific Performance for Violation of a Condition. If City issues a Project Approval pursuant to this Agreement in reliance upon a specified condition being satisfied by Developer in the future, and if Developer then fails to satisfy such condition, City shall be entitled to specific performance for the purpose of causing Developer to satisfy such condition. If City issues a Project Approval pursuant to this Agreement and Developer fulfills its obligations under this Agreement in reliance upon a specified condition being satisfied by the City in the future, and if the City then fails to satisfy such condition, Developer shall be entitled to specific performance for the purpose of causing City to satisfy such condition.

12.6 Legal Actions.

12.6.1 Institution of Legal Actions. In addition to any other rights or remedies and subject to the limitation of damages in Section 12.7, a Party may institute legal action to cure, correct or remedy any Default, to enforce any covenants or agreements herein, to enjoin any threatened or attempted violation thereof, or to obtain any other remedies consistent with the purpose of this Agreement. Any such legal action shall be brought in the Superior Court for Napa County, California, except for actions that include claims in which the Federal District Court for the Northern District of the State of California has original jurisdiction, in which case the Northern District of the State of California shall be the proper venue.

12.6.2 Acceptance of Service of Process. In the event that any legal action is commenced by Developer against City, service of process on City shall be made by personal service upon the City Clerk of City or in such other manner as may be provided by law. In the event that any legal action is commenced by City against Developer, service of process on Developer shall be made by personal service upon CS Lawyer's Incorporating Service, Developer's registered agent for service of process, or in such other manner as may be provided by law.

12.7 Rights and Remedies Are Cumulative. The rights and remedies of the Parties are cumulative, and the exercise by a Party of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same Default or any other Default by the other Party, except as otherwise expressly provided herein.

12.8 No Damages. In no event shall a Party, or its boards, commissions, officers, agents or employees, be liable in damages, including without limitation, actual, consequential or punitive damages, for any Default under this Agreement. It is expressly understood and agreed that the sole legal remedy available to a Party for a breach or violation of this Agreement by the other Party shall be an action in mandamus, specific performance or other injunctive or

declaratory relief to enforce the provisions of this Agreement by the other Party, or to terminate this Agreement. This limitation on damages shall not preclude actions by a Party to enforce payments of monies or the performance of obligations requiring an obligation of money from the other Party under the terms of this Agreement including, but not limited to, obligations to pay attorneys' fees and obligations to advance monies or reimburse monies. In connection with the foregoing provisions, each Party acknowledges, warrants and represents that it has been fully informed with respect to, and represented by counsel of such Party's choice in connection with, the rights and remedies of such Party hereunder and the waivers herein contained, and after such advice and consultation has presently and actually intended, with full knowledge of such Party's rights and remedies otherwise available at law or in equity, to waive and relinquish such rights and remedies to the extent specified herein, and to rely to the extent herein specified solely on the remedies provided for herein with respect to any breach of this Agreement by the other Party.

12.9 Resolution of Disputes. With regard to any dispute involving the Project, the resolution of which is not provided for by this Agreement or Applicable Law, a Party shall, at the request of another Party, meet with designated representatives of the requesting Party promptly following its request. The parties to any such meetings shall attempt in good faith to resolve any such disputes. Nothing in this Section 12.9 shall in any way be interpreted as requiring that Developer, City and/or City's designee reach agreement with regard to those matters being addressed, nor shall the outcome of these meetings be binding in any way on City or Developer unless expressly agreed to in writing by the parties to such meetings.

12.10 Remedies upon Transfer or Assignment. Notwithstanding anything to the contrary contained in this Article 12, if Developer has transferred all or a portion of its interest in the Property pursuant to Section 10.1 above, then the City may only exercise its remedies under this Article 12 against the defaulting Developer or Assignee and such party's portion of the Property.

12.11 Appeals to City Council. Where an appeal by Developer to the City Council from a finding and/or determination of the Planning Commission is created by this Agreement, that appeal shall be taken, if at all, within twenty (20) days after the mailing of the finding and/or determination to Developer. The City Council shall act upon the finding and/or determination of the Planning Commission within eighty (80) days after the mailing, or within any additional period as may be agreed upon by Developer and the Council.

12.12 Surviving Provisions. In the event this Agreement is terminated, neither Party shall have any further rights or obligations hereunder, except for those obligations of Developer set forth in Article 9.

ARTICLE 13 GENERAL PROVISIONS

13.1 Covenants Binding on Successors and Assigns and Run with Land. Except as otherwise more specifically provided in this Agreement, this Agreement and all of its provisions, rights, powers, standards, terms, covenants and obligations, shall be binding upon the Parties and their respective successors (by merger, consolidation, or otherwise) and assigns, and all other persons or entities acquiring the Property, or any interest therein, and shall inure to the benefit of

the Parties and their respective successors and assigns, as provided in Government Code section 65868.5.

13.2 Notice. Any notice, demand or request which may be permitted, required or desired to be given in connection herewith shall be given in writing and directed to the City and Developer as follows:

If to the City: City Clerk
City of St. Helena
1572 Railroad Avenue
St. Helena, CA 94574

with a copy to: City Attorney
City of St. Helena
1572 Railroad Avenue
St. Helena, CA 94574

If to Developer:

LMR Property Acquisition Partners LLC

Attn: Ted Hall

P.O. Box 477

Rutherford, CA 94573

with a copy to:

Rob Anglin

Holman Teague Roche Anglin, LLP

1455 First Street, Suite 217

Napa, CA 94559

Telephone: (707) 927-4280

Notices are deemed effective if delivered by certified mail, return receipt requested, or commercial courier, with delivery to be effective upon verification of receipt. Any Party may change its respective address for notices by providing written notice of such change to the other Parties.

13.3 Permitted Delays. Performance by either of the Parties of an obligation hereunder shall be excused during any period of “**Permitted Delay**.” Permitted Delay shall mean delay

beyond the reasonable control of a Party caused by (a) calamities, including without limitation earthquakes, floods, and fire; (b) civil commotion; (c) riots or terrorist acts; (d) strikes or other forms of material labor disputes; (e) shortages of materials or supplies; or (f) vandalism. A Party's financial inability to perform or obtain financing or adverse economic conditions generally shall not be grounds for claiming a Permitted Delay. The Party claiming a Permitted Delay shall notify the other Party of its intent to claim a Permitted Delay, the specific grounds of the same and the anticipated period of the Permitted Delay within thirty (30) business days after the occurrence of the conditions which establish the grounds for the claim. If notice by the Party claiming such extension is sent to the other Party more than thirty (30) days after the commencement of the cause, the period shall commence to run only thirty (30) days prior to the giving of such notice. The period of Permitted Delay shall last no longer than the conditions preventing performance. In no event shall any Permitted Delay extend the Term of this Agreement.

13.4 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

13.5 Waivers. Notwithstanding any other provision in this Agreement, any failures or delays by any Party in asserting any of its rights and remedies under this Agreement shall not operate as a waiver of any such rights or remedies, or deprive any such Party of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce any such rights or remedies. A Party may specifically and expressly waive in writing any condition or breach of this Agreement by the other Party, but no such waiver shall constitute a further or continuing waiver of any preceding or succeeding breach of the same or any other provision. Consent by one Party to any act by the other Party shall not be deemed to imply consent or waiver of the necessity of obtaining such consent for the same or similar acts in the future.

13.6 Construction of Agreement. All Parties have been represented by counsel in the preparation and negotiation of this Agreement, and this Agreement shall be construed according to the fair meaning of its language. The rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in interpreting this Agreement. Unless the context clearly requires otherwise, (a) the plural and singular numbers shall each be deemed to include the other; (b) the masculine, feminine, and neuter genders shall each be deemed to include the others; (c) "shall," "will," or "agrees" are mandatory, and "may" is permissive; (d) "or" is not exclusive; (e) "includes" and "including" are not limiting; and (f) "days" means calendar days unless specifically provided otherwise.

13.7 Headings. Section headings in this Agreement are for convenience only and are not intended to be used in interpreting or construing the terms, covenants, or conditions of this Agreement.

13.8 Severability. If any term or provision of this Agreement, or the application of any term or provision of this Agreement to a specific situation, is found to be invalid, or unenforceable, in whole or in part for any reason, the remaining terms and provisions of this Agreement shall continue in full force and effect unless an essential purpose of this Agreement

would be defeated by loss of the invalid or unenforceable provisions, in which case any Party may terminate this Agreement by providing written notice thereof to the other Party.

13.9 Time is of the Essence. Time is of the essence of this Agreement. All references to time in this Agreement shall refer to the time in effect in the State of California.

13.10 Extension of Time Limits. The time limits set forth in this Agreement may be extended by mutual consent in writing of the Parties in accordance with the provisions of this Agreement.

13.11 Signatures. The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Agreement on behalf of the respective legal entities of Developer and the City.

13.12 Entire Agreement. This Agreement (including all exhibits attached hereto, each of which is fully incorporated herein by reference), integrates all of the terms and conditions mentioned herein or incidental hereto, and constitutes the entire understanding of the Parties with respect to the subject matter hereof, and all prior or contemporaneous oral agreements, understandings, representations and statements, and all prior written agreements, understandings, representations, and statements are terminated and superseded by this Agreement.

13.13 Estoppel Certificate. Developer or its lender may, at any time, and from time to time, deliver written notice to the City requesting the City to certify in writing that: (a) this Agreement is in full force and effect; (b) this Agreement has not been amended or modified or, if so amended or modified, identifying the amendments or modifications; and (c) Developer is not in Default of the performance of its obligations, or if in Default, to describe therein the nature and extent of any such Defaults. Developer shall pay, within thirty (30) days following receipt of City's invoice, the actual costs borne by City in connection with its review of the proposed estoppel certificate, including the costs expended by the City Attorney's Office in connection therewith. The City Manager shall be authorized to execute any certificate requested by Developer hereunder. The form of estoppel certificate shall be in a form reasonably acceptable to the City Attorney. The City Manager shall execute and return such certificate within thirty (30) days following Developer's request therefor. Developer and City acknowledge that a certificate hereunder may be relied upon by tenants, transferees, investors, partners, bond counsel, underwriters, bond holders and Mortgagees. The request shall clearly indicate that failure of the City to respond within the thirty-day period will lead to a second and final request. Failure to respond to the second and final request within fifteen (15) days of receipt thereof shall be deemed approval of the estoppel certificate.

13.14 Recordation of Termination. Upon completion of performance of the Parties or termination of this Agreement, a written statement acknowledging such completion or termination shall be recorded by City in the Official Records of Napa County.

13.15 City Approvals and Actions. Whenever a reference is made herein to an action or approval to be undertaken by City, the City Manager or his or her designee is authorized to act on behalf of City, unless specifically provided otherwise or the context requires otherwise.

13.16 Negation of Partnership. The Parties specifically acknowledge that the Project is a private development, that no Party to this Agreement is acting as the agent of any other in any respect hereunder, and that each Party is an independent contracting entity with respect to the terms, covenants and conditions contained in this Agreement. None of the terms or provisions of this Agreement shall be deemed to create a partnership between or among the Parties in the businesses of Developer, the affairs of the City, or otherwise, or cause them to be considered joint venturers or members of any joint enterprise.

13.17 No Third Party Beneficiaries. This Agreement is made and entered into for the sole protection and benefit of the signatory Parties and their successors and assigns, including Mortgagees. No other person shall have any right of action based upon any provision in this Agreement.

13.18 Governing State Law. This Agreement shall be construed in accordance with the laws of the State of California, without reference to its choice of law provisions.

13.19 Recordation. As provided in Government Code Section 65868.5, the City Clerk of St. Helena shall record a copy of this Agreement with the Registrar-Recorder of the County of Napa within ten (10) days following its execution by both Parties. Developer shall provide the City Clerk with the fees for recording prior to or at the time of recording.

13.20 Exhibits. The following exhibits are attached to this Agreement and are hereby incorporated herein by this reference for all purposes as if set forth herein in full:

- Exhibit A: Property Description
- Exhibit B: Site Map
- Exhibit C: Project Description
- Exhibit D: Existing Approvals
- Exhibit E: Applicable Law & Project Approval Excerpts
- Exhibit F: Mills Lane Improvements
- Exhibit G: Storm Drain Improvements
- Exhibit H: La Fata Sidewalk Improvements

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the City and Developer have executed this Agreement as of the Effective Date.

CITY:

CITY OF ST. HELENA, a municipal corporation

By:

Mark Prestwich, City Manager
[Signature must be notarized]

ATTEST:

By:

Cindy Tzaopoulos, City Clerk

APPROVED AS TO FORM:

By:

Kara K. Ueda, City Attorney

DEVELOPER:

LMR PROPERTY ACQUISITION PARTNERS LLC,
a California limited liability company

By: Long Meadow Ranch Partners, L.P.
a California limited partnership
Its: Manager

By: LMR GP LLC,
a California limited liability company
Its: General Partner

By:

Ted W. Hall,
Its Manager
[Signature must be notarized]

NOTARY ACKNOWLEDGEMENT TO BE ATTACHED

83578.00008\32847380.8

EXHIBITS

[TO BE INSERTED]

EXEMPT FROM RECORDING FEES PURSUANT
TO GOVERNMENT CODE SECTION 6103

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

City Clerk
City of St. Helena
1572 Railroad Avenue
St. Helena, California 94574

Assessor's Parcel Nos. 009-070-049, 009-070-052, 009-070-053, 009-070-054

**WATER AGREEMENT FOR
FARMSTEAD AT LONG MEADOW RANCH**

THIS AGREEMENT ("Agreement"), entered into on _____, 2020, by and between the City of St. Helena, a municipal corporation of the State of California ("City"), and LMR Property Acquisition Partners LLC, a California limited liability company ("Customer"), each of whom shall be referred to as a "party" and together as the "parties," provides as follows:

RECITALS

A. Customer is the owner of certain real property located at 1000 Mills Lane, St. Helena, Napa County, with Napa County Assessor's Parcel Nos. 009-070-049, 009-070-052, 009-070-053, 009-070-054 (the "Property"), as more particularly described in **Exhibit A** attached hereto and incorporated herein.

B. As part of the proposed construction of a 65 room hotel project, which in addition to the guest rooms includes a multi-purpose building for guest reception/administration, a bar and lounge area, meeting/classroom with demonstration kitchen, commercial kitchen and staff facilities; a utility and service building; a spa building; a pool and fitness building; two outdoor pools; two agricultural barns; and approximately 3.9 acres of land used for agricultural purposes ("Project"), Customer is required to execute a water agreement with the City limiting City potable water use on the Property to 1,879,028 gallons of water per year.

C. The parties hereto wish to enter into this Agreement to fulfill the requirement for such a water use agreement.

NOW THEREFORE, in consideration of the mutual covenants contained herein, the parties agree as follows:

83578.00106\33023384.4

AGREEMENT

1. Incorporation of Recitals. The recitals set forth above and **Exhibit A** attached to this Agreement are incorporated herein and are part of this Agreement.

2. Annual Water Limitation. Customer agrees to use no more than 1,879,028 gallons of City-provided potable water per Water Year (“Annual Limitation”) at the Property, upon the terms and conditions set forth herein. As used herein, the term “Water Year” shall mean the City’s fiscal year, which begins annually on July 1 and ends on June 30.

3. Permissible Uses. City water shall be used only for those uses as defined by: (a) St. Helena Municipal Code section 13.12.020 as “domestic use,” which means any treated water used by a person for cooking, cleaning, bathing, washing clothes, drinking and sanitation; (b) any resolution adopted by the City Council; and/or (c) any permit issued by the City for the Project. City shall not be obligated to provide water service for any other use nor for any further expansion of the uses allowed.

4. Rates. Customer shall pay the same rate for water service as all other water customers within the City and shall be billed in the same manner as other similar City water customers. Customer shall pay City for such water service in accordance with the City’s regular billing cycle for water customers.

5. No Guarantee of Service. The parties acknowledge and agree that by entering into this Agreement, the City is not guaranteeing the continuous, uninterrupted provision of water. Customer agrees that City shall not be responsible or liable for any damage, harm, or economic loss suffered by Customer due to interruption, reduction, or cessation of service or in delivery of water under this Agreement due to force majeure events or that are necessary as determined in City’s sole discretion because of maintenance or operational needs. City shall not be responsible for the supply or provision of back-up or reserve potable water if there is an interruption to City water service. A “force majeure” event shall mean a cause beyond a party’s reasonable control despite the exercise of reasonable diligence, an act of God, an act (or failure to act) of a governmental authority (other than City), a fire, a severe weather condition that is not reasonably foreseeable, an earthquake, a strike or other labor disturbance, a flood, war (declared or undeclared), an epidemic, civil unrest, and riot.

6. Applicable Laws. While water is furnished to Customer pursuant to this Agreement, Customer shall be bound by and subject to all lawful resolutions, rules, regulations, directives, ordinances, and orders of the City pertaining to water services as may be enacted from time to time for all other applicable users of City water, including, without limitation, provisions relating to rate charges and changes and water shortage emergencies. Customer shall also be bound by and subject to all provisions within the St. Helena Municipal Code related to water conservation, including but not limited to, Article 2 (Water Shortage Emergencies, Drought and Water Conservation) of

Chapter 13.04, Chapter 13.12 (Water Use Efficiency and New Development), and section 17.112.140 (Water efficient landscaping).

7. Monitoring of Usage. Customer shall monitor its water usage on a monthly basis and employ all measures necessary to ensure that the Annual Limitation is not exceeded. In the event the City Director of Public Works reasonably determines that the Annual Limitation inevitably will be exceeded or that the Annual Limitation has been exceeded, City may require Customer to undertake reasonable additional conservation measures and may require Customer, upon ten (10) days' prior written notice, to terminate water service for nonessential uses. For purposes of this Agreement, the term "nonessential uses" shall mean uses for which non-potable water would suffice.

8. Installation of Water Efficient Fixtures. Customer shall install at its expense, on all new construction only high-efficiency flush toilets and urinals, showerheads, and faucets (collectively "retrofits") pursuant to St. Helena Municipal Code Section 13.12.030. Customer understands that pursuant to Municipal Code Section 13.12.030, City may withhold a certificate of occupancy pending compliance with this Section.

9. Alternative Method of Mitigating Water Use. Consistent with St. Helena Municipal Code Section 13.12.030 (New Development) and the City's Water Neutral Policy for Development, and as approved by the City Council as a part of the approval of the Project, Customer is required to implement an alternative innovative method of mitigating water use as allowed under Section 13.12.030(B) of the SHMC, and approved by City Council in the Development Agreement prior to certificate of occupancy. Specifically, Developer shall construct and install additional piping to convey recycled water in the public right of way in Mills Lane extending from Highway 29 easterly to the eastern end of Mills Lane (the "**Recycled Water Pipe**") in a manner as directed by the City Engineer and shall be completed prior to a final certificate of occupancy for the Project. For purposes of this agreement "recycled water" means wastewater treated by the City's wastewater treatment facility that meets State requirements for reuse, including but not limited to California Department of Public Health regulations contained in Title 17 and Title 22 of the California Code of Regulations. The Recycled Water Pipe shall be designed and at a size as directed by the City Engineer, but is anticipated to be a twelve (12) inch pipe and will be installed in the trench constructed for the Storm Drain Improvements.

10. Backflow Prevention Device. Customer shall also cause a backflow prevention device to be installed in its landscape irrigation system unless such requirement is waived by the City Director of Public Works.

11. Penalty. In the event Customer exceeds its Annual Limitation, it shall pay to City a penalty surcharge equal to sixty percent (60%) of the water rate charge for each hundred cubic feet, or portion thereof, used in excess of the Annual Limitation. Such penalty surcharge shall be due and payable within 30 days after calculation and demand by City. In addition to the 60% surcharge, City may avail itself of all rights and remedies set forth in Section 13 of this Agreement.

12. Term and Termination. This Agreement shall be effective as of the date of last execution by the parties ("Effective Date") and shall continue indefinitely, unless terminated pursuant to this Section. Either party may terminate this Agreement for cause upon a breach of any material term by the other party. Prior to delivering a notice of termination for cause, the non-defaulting party shall provide written notice of breach to the defaulting party and a reasonable opportunity to cure the default of not less than thirty (30) days, except in the event of nonpayment of charges due from Customer, in which event the breach shall be cured in not less than ten (10) days. If the cure of a breach reasonably requires more than thirty days and if the defaulting party has commenced to cure within thirty days and thereafter prosecutes the cure with reasonable diligence, then the time within which such failure may be cured shall be extended for such period as may be reasonably necessary to complete the cure with reasonable diligence.

13. Rights and Remedies. In addition to any other rights or remedies, either party may institute legal action to cure, correct, or remedy any default of this Agreement; to enforce any covenants or agreements herein or to enjoin any threatened or attempted violation thereof; to recover damages for any default; or to obtain any other remedy consistent with the purpose of this Agreement.

14. Notice. Except as otherwise expressly provided by law, any and all notices or other communications required or permitted by this Agreement shall be sent to the parties at the following addresses:

City: Director of Public Works
City of St. Helena
1572 Railroad Avenue
St. Helena, California 94574

Customer: LMR Property Acquisition Partners
P. O. Box 477
Rutherford, CA 94573
Attn: Ted Hall

15. Construction and Interpretation. This Agreement has been reviewed by legal counsel for both parties and shall be deemed for all purposes to have been jointly drafted by both Customer and City. No presumption or rule that ambiguities shall be construed against the drafting party shall apply to the interpretation or enforcement of this Agreement. The language in all parts of this Agreement, in all cases, shall be construed as a whole and in accordance with its fair meaning and not strictly for or against any party, and consistent with the provisions hereof, in order to achieve the parties' objectives. The captions of the sections of this Agreement are for convenience only and shall not be considered or referred to in resolving questions of construction. This and enforced in accordance with the laws of the State of California. Should any legal action be brought by either party because of breach of this Agreement or to enforce any provision of this Agreement, the prevailing party in such action shall be entitled to all reasonable attorneys' fees, court costs, and

necessary disbursements in connection with such action. Any action to interpret or enforce this Agreement shall be brought and maintained exclusively in the courts of and for Napa County, California.

16. Severability. The parties hereto agree that the provisions of this Agreement are severable. If any provision of this Agreement is held invalid, the remainder of this Agreement shall not be affected and shall remain in full force and effect unless amended or modified by mutual consent of the Parties in writing.

17. No Water Rights Conferred. Nothing in this Agreement shall be construed to confer any appropriative, public trust or other right to water on any person or entity. The only rights granted to Customer as a result of this Agreement are those expressly set forth herein.

18. Successors and Assigns. Neither party may assign this Agreement without the other party's express prior written consent. The provisions of this Agreement shall be binding on all tenants, heirs, assigns, and successors in interest to the parties hereto and shall be a covenant that runs with the land.

19. Execution in Counterparts. This Agreement may be executed in duplicate counterparts, each of which shall be deemed an original.

20. Amendment. The provisions of this Agreement may be amended only by mutual written consent of the parties. Any amendments to this Agreement must be in writing and executed by both parties.

21. Authorized Signatories. Both parties represent to the other that they have the requisite power and authority to conduct their business and to execute, deliver, and perform the requirements of, this Agreement. Each party warrants to the other that the individual who has signed this Agreement has the legal power, right, and authority to enter into this Agreement and to bind each respective party.

[Signatures on following page]

Executed the last date written below and effective the first date above written.

CUSTOMER:

LMR PROPERTY ACQUISITION PARTNERS LLC, a California limited liability company

By: Long Meadow Ranch Partners, L.P.
a California limited partnership
Its: Manager

By: LMR GP LLC,
a California limited liability company
Its: General Partner

By: _____
Ted W. Hall,
Its Manager
[Signature must be notarized]

CITY: CITY OF ST. HELENA,
a municipal corporation

Dated: _____

By: _____
Mark Prestwich
Its: City Manager

ATTEST:

Cindy Tzafofoulous, City Clerk

83578.00106\33023384.4

APPROVED AS TO FORM:

Kara K. Ueda, City Attorney

DRAFT

83578.00106\33023384.4

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)
) ss.
COUNTY OF _____)

On _____, before me, _____, a 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 _____ (Seal)

[illegible]

On _____, 20__, before me, the undersigned, City Clerk of the City of St. Helena, personally appeared Mark Prestwich, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature: _____
Cindy Tzafofopoulos, City Clerk

EXHIBIT A
LEGAL DESCRIPTION OF PROPERTY

The land is situated in the State of California, County of Napa, and is described as follows:

DRAFT

83578.00106\33023384.4

Exhibit A

CITY OF ST. HELENA

RESOLUTION NO. 2009-30

**APPROVING AN INCREASE IN THE EATING AND DRINKING ESTABLISHMENTS
INVENTORY, USE PERMIT AMENDMENT, AND DESIGN REVIEW FOR
WHITING NURSERY AND LONG MEADOW RANCH
LOCATED AT 738 MAIN STREET, APN 009-112-017**

APPLICANT: Kevin Twohey, Whiting Nursery
Ted, Ladislav and Chris Hall, Long Meadow Ranch

PROPERTY OWNER: Ver Der Camp Revocable Trust

Recitals

1. The applicants, Kevin Twohey of Whiting Nursery and Ted, Ladislav and Chris Hall of Long Meadow Ranch request a Use Permit Amendment for additional food, wine, farm and community garden uses at the existing Whiting Nursery site at 738 Main Street. Whiting Nursery was approved by Resolution 2003-127, Adopting a Negative Declaration and Approving Use Permit, Design Review and Demolition Permit for the Whiting Nursery. In addition to the continuation of the nursery, new uses to be added to the site include a restaurant, open air produce market, and wine tasting room. The new business would be named Long Meadow Ranch Winery and Farmstead.
2. The proposal requires the following actions or entitlements:
 - An increase in the Eating and Drinking Establishments Inventory to allow the establishment of a wine tasting room and a 160 seat restaurant at 738 Main Street.
 - A Use Permit Amendment to retain the existing plant nursery and add food, wine, farm and community garden uses. The proposed uses include the conversion of the retail barn to a restaurant and the construction of an open air produce market. The historic residence will be converted into a wine tasting room and office.
 - Design Review for the addition of on-site parking spaces, construction of a covered produce market, minor modifications to the exterior of the historic home to accommodate accessible entrances and to add a trellis to the retail barn.
3. The Planning Commission held a noticed public hearing to consider the project and make recommendations to the City Council on March 3, 2009. The Planning Commission recommended the following actions to the City Council:
 - To determine that the project is exempt from the requirements of CEQA pursuant to Section 15303, Class 3 which exempts the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure.

- To increase the Eating and Drinking Establishments Inventory to allow the establishment of a wine tasting room and a 160 seat restaurant at 738 Main Street.
- To accept the required findings and approve the attached Resolution titled Approving an Increase in the Eating and Drinking Establishments Inventory, Use Permit Amendment, and Design Review for Long Meadow Ranch and Whiting Nursery located at 738 Main Street, APN 009-112-017.

4. The City Council held a noticed public hearing to consider the project on March 24, 2009.

Resolution

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

A. The City Council determines that the project is exempt from the requirements of CEQA pursuant to Section 15303, Class 3 of the Guidelines which exempts the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. The exemption applies to up to four commercial buildings not exceeding 10,000 square feet in floor area on sites zoned for such use, if not involving the use of significant amounts of hazardous substances where all necessary public services and facilities are available and the surrounding area is not environmentally sensitive. The total floor area of buildings at 738 Main Street is 10,822 sq. ft., however only 8,022 will be converted to new uses. One building will remain in the existing plant nursery use.

B. The City Council makes the Use Permit findings, contained in Zoning Ordinance Section 17.168.050, to support the motion to approve a Use Permit Amendment to allow the proposed improvements on the subject parcel.

1. That the proposed use would not generate odors, fumes, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community;
The Council finds that the incorporation of green building practices into the renovation and conversion of the historic home into winetasting and offices will reduce odors and fumes that may be injurious to building occupants, including members of the community.
2. That the proposed use would not generate levels of noise that adversely affect the health, safety or welfare of neighboring properties or uses;
The project site has been used for commercial uses in the past. No new noises are being introduced to the site that could adversely affect the neighboring properties.
3. That the proposed use would not generate traffic noise in excess of the normally acceptable range identified in the General Plan;
The primary traffic noise in St. Helena is from Hwy. 29. The project will not noticeably increase traffic noise.
4. That the proposed use would not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection and fire protection;

The uses will be served by well water. Development impact fees will be charged to offset increased demands on sewer, police and fire protection. Green building practices will lessen demands on energy supply. Demands on communication facilities will not be increased by the project.

5. That the proposed use would provide adequate ingress and egress to and from the proposed location;
Entrances and drive widths meet city standards.
6. That allowing the proposed use would not conflict with the City's goal of maintaining the economic viability of a local-serving economy;
The business will benefit the local serving economy because it is in keeping with the agricultural emphasis of St. Helena; the historic home will be renovated and will therefore enhance the entrance to St. Helena.
7. That the proposed use would be compatible with surrounding land uses and would not conflict with the purpose established for the district within which it would be located;
The uses are consistent with the SC: Service Commercial zoning designation of the property.
8. That the proposed use would not be in conflict with the City's General Plan;
The uses are consistent with the General Plan land use designation of Service Commercial.
9. That the proposed use would not be injurious to public health, safety or welfare;
The emphasis of the business plan is on sustainable practices that are not injurious to the public.
10. That granting the Use Permit would not set a precedent for the approval of similar uses whose incremental effect would be detrimental to the city or would be in conflict with the General Plan;
There is no precedent that is set with this project that is detrimental to the city.
11. That, as demonstrated on a detailed plan submitted by the applicant, adequate off-street parking to accommodate the long-term parking needs of employees and business owners and customers is available;
The Council finds that there is adequate off-street parking to accommodate the long-term parking needs of employees and business owners and customers for the additional uses. The site plan shows that a total of 48 parking spaces will be provided on the site. Strict adherence to city parking standards establish a need for 63 parking spaces, however approval of a shared parking arrangement is warranted based on the following reasons:
 - *The nursery is a seasonal operation, with the peak months of business being March, April and May.*
 - *The outdoor market will primarily operate between May and October, during the growing season.*

- *The tasting room would be busiest at peak times for tourism, also May through October.*
- *Outdoor restaurant seating will only be utilized in the summer months (May – October). This is the time that the nursery is slow.*
- *The nursery is closed on Wednesday and the produce market will be closed on Sunday.*
- *The offices will be closed on the weekends and holidays, when tourism is greater.*
- *The nursery closes at 5:00.*
- *The tasting room and produce market will close at 6:00.*
- *The restaurant will serve lunch and dinner, 7 days per week. The restaurant use will primarily be in the evening, after the nursery and tasting room have closed.*
- *The peak hours for the nursery are between 8:30 am and noon. Customers (professional gardeners buying plants and supplies for the days work) arrive during the morning hours.*
- *The other uses will open at 10 am or 11 am, generally after the peak traffic for the nursery.*
- *The parking requirement for the covered produce area is unprecedented, and the need for five parking spaces may be unwarranted.*

12. That the capacity of surrounding streets is adequate to serve the automobile and delivery truck traffic generated by the proposed use.

The site is adjacent to State Hwy. 29 which is adequate to serve vehicular traffic to the site.

C. The City Council approves the Design Review application after consideration of the purposes of Design Review found in Municipal Code Section 17.164.020 and the criteria for Design Review found in Section 17.164.030. The Council has determined that the following purposes and criteria support conditions of approval that require the incorporation of green building practices into the project design. The Purposes of Design Review are:

- *To promote those qualities in the environment which bring value to the community.*
- *To foster the attractiveness & functional utility of the community as a place to live and work.*
- *To raise the level of community expectations for the quality of its environment.*

D. The City Council approves the project entitlements, as identified herein, subject to compliance with the following conditions. This project shall be in conformance with all City ordinances, rules, regulations and policies in effect at the time of issuance of the approval. The conditions noted below are particularly pertinent to this action and shall not be construed to permit violation of other laws and policies not so listed. Minor modifications may be approved by the Planning Director provided they are in general compliance with the intent of the aforementioned General Plan policies.

1. This approval shall be vested within one (1) year from the date of action. A building permit for the uses allowed shall have been obtained within one (1) year from the date of approval or the approvals shall expire; provided however that the approvals may be extended for up to two (2) one-year periods pursuant to the St. Helena Municipal Code, Section 17.08.130, Extension of Permits and Approvals.

U:\Admin\Approved Resolutions 2009\2009-30 Twohey Nursery_032609_tm.doc

2. This approval is valid for this use only. New permits must be applied for upon any change in use. These permits will expire if the use is discontinued pursuant to then existing ordinances and regulations.
3. 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.
4. The applicant will defend and indemnify and hold the City, its agents, officers, and employees harmless against any claim, action or proceedings to attack, set aside, void or annul an approval so long as the City promptly notifies the applicant of any such claim, action, or proceedings and the City cooperates fully in the defense of the action or proceedings.
5. This permit shall run with the land and 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 the benefit of the City of St. Helena.
6. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The owner/applicant is responsible for meeting with the Building Official/Fire Inspector to review compliance with Building and Fire Codes, including fire protection systems and the accessibility standards of Title 24.
7. The covered, open air market area will be constructed to display and sell organic, farm direct products including organic fruits and vegetables, eggs, grass-fed beef, and olive oil.
8. Construction shall be in compliance with plans reviewed and approved by the City on March 24, 2009. Prior to submittal of a building permit application, all plan sheets shall be revised to be consistent with the City's approval and coordinated with the civil and landscaping plans.
9. Plans and construction practices shall be in compliance with City of St. Helena Green Building Practices List 1. Alternative and equivalent green measures may be proposed by the applicant and may be approved by the Planning Director if they are more applicable to the design of the project.
10. A survey for hazardous materials should be conducted prior to demolition or construction activities on the historic house to determine the presence of, and abatement procedures for, asbestos containing materials as well as lead based paint.
11. All required fees, including planning fees, development impact fees, engineering or building fees, shall be paid prior to issuance of a building permit. With the exception of traffic mitigation impact fees, fees shall be those in effect at the time of the issuance of the building permit and shall be paid for the conversion of the house to a tasting room and

office use. The applicant shall pay a deposit of \$25,000 at the time of issuance of building permits for the tasting room to be used for the conversion of the existing crosswalk at Charter Oak and Main Street to a “smart crosswalk” or similar crosswalk that is lighted and signed for increased visibility. The applicant shall pay the full costs associated with the crosswalk improvements and permitting. The applicant shall be the lead in obtaining all permits from Cal Trans. The \$25,000 deposit shall be refunded once the improvements are complete and approved by the Public Works Director. In addition to the deposit for the crosswalk, the owner/applicant shall remain responsible for a fair share contribution to a future traffic signal as required by Resolution 2003-127, Adopting a Negative Declaration and Approving Use Permit, Design Review and Demolition Permit for the Whiting Nursery. The property owner signed a promissory note, secured by a deed of trust, for \$25,675 as that project’s fair share if and when a traffic signal is installed at the Charter Oak/Main Street intersection. The promissory note will remain in place as a contribution to a future traffic signal.

12. Prior to issuance of building permit, the applicant shall be required to obtain approval of the Napa County Department of Environmental Management. Complete plans and specifications containing equipment layout, finish schedule and plumbing plans for the food and/or beverage facilities (wine tasting room, restaurant, and produce market) and employee restrooms shall be submitted to the St. Helena Building Department, who shall stamp the plans prior to submittal to Napa County Department of Environmental Management. These plans must be reviewed and approved prior to issuance of any building clearance or building permit for said areas.
13. An annual food permit will be required upon completion of the work and prior to issuance of certificate of occupancy.
14. The municipal water use on the property is limited to 600 gallons per day, per Resolution 2004-14 approved February 24, 2004. Water use above this amount shall be provided by a private well located on the property at 738 Main Street. Prior to issuance of building permit for restaurant, the applicant shall comply with Napa County Department of Environmental Management regulations pertaining to the operation of a small water system. A water system feasibility report will be required to ensure that the proposed project can satisfy the technical, managerial and financial requirements of this department. Prior to issuance of a building permit the new water supply must be developed and full plans for the water system must be submitted to and approved by this department. If the small water system is not approved and operational, the applicants must request and be approved for an amended water use agreement prior to issuance of building permits for restaurant. The water use agreement may include compliance with St. Helena Municipal Code Title 13, Chapter 13.12 Water Use Efficiency and Use Guidelines.
15. Prior to issuance of building permit, the applicant shall have the plans for renovation of the house and conversion to tasting room/office use reviewed by either Sheila McElroy of Circa Historic Property Development or another qualified architectural historian. A letter of approval shall be submitted with the building plans.

16. This permit authorizes these specific businesses to share the 48 on-site parking spaces. The right to shared parking is not transferable to other businesses that may occupy the site in the future. The Planning Commission may review the parking impacts one year after occupancy of the business to determine if modifications to the business and/or site plans are necessary.
17. The tasting room shall close to the public no later than 6:00 p.m. Only Napa Valley wines comprised of at least 75% Napa County grown grapes may be poured, tasted, or sold at the tasting room.
18. Modifications to existing landscaping shall be reviewed and approved by staff. The Valley Oak tree and the California Bay Laurel tree shall be retained on the site as recommended by the St. Helena Tree Committee in 2003. New plant materials shall be obtained from a source that verifies they have been inspected for glassy winged sharpshooter to ensure that they will not contribute to the spread of Pierce's disease to adjacent vineyards.
19. The applicant shall provide for the enclosed storage of trash and separated recyclable materials. Should the area designated for trash storage prove insufficient to accommodate approved uses on the site, the applicant agrees to provide alternative means (e.g. expanded facilities, more frequent collection, etc.) to address this issue.
20. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
21. No signs shall be installed without approval of a Sign Permit, as required by the St. Helena Municipal Code.
22. Fire equipment shall be inspected annually by the Fire Department.
23. The builder shall submit manufacturer information pertaining to the noise generation of any mechanical equipment that is proposed to be located on the exterior of the structure. The information will help the building official determine whether the ambient noise level at any property line will be increased by more than 5 dba. If it is determined that the noise level will be increased by more than this amount, appropriate measures shall be imposed to reduce the increase in the ambient noise level to less than 5 dba. These measures could include replacement, relocation, removal or shielding of the equipment.
24. 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.

25. This property adjoins an agricultural district. There exists a right-to-farm the adjoining property. There is a good faith expectation that no complaints will occur regarding legal, normal agricultural activities on the adjacent land. Such activities may include day or night disbursement of chemicals, and creation of dust, noise, or fumes.

Approved at a Regular Meeting of the St. Helena City Council on March 24, 2009 by the following vote:

AYES: Councilmembers Schoch, Crull, Sanchez, Mayor Britton

NOES: None

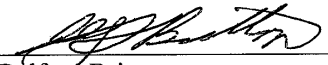
ABSENT: None

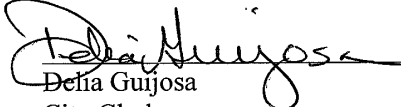
ABSTAIN: Councilmember Sklar

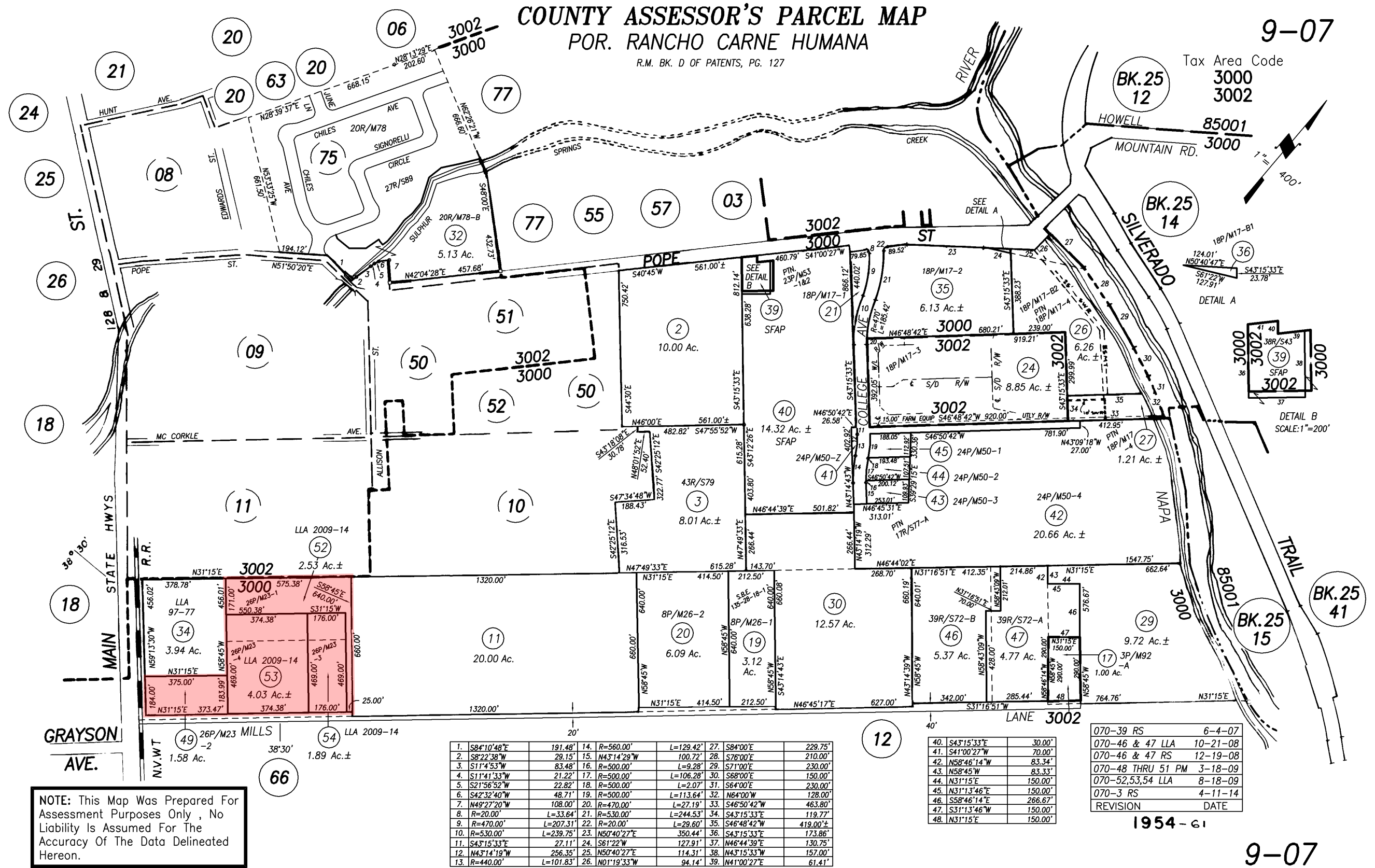


APPROVED:

ATTEST:


Delford Britton
Mayor


Delia Gujosa
City Clerk



TURNBULL
GRIFFIN &
HAESLOOP

1660 BUSH STREET, STE 200
SAN FRANCISCO, CA 94109
P. 415-441-2300
WWW.TGHARCHITECTS.COM

USE PERMIT APPLICATION 5-6-2019

[illegible]

5.6.2019 PLANNING SUBMITTAL

2016 CALIFORNIA BUILDING, PLUMBING, ELECTRICAL AND MECHANICAL CODES
2016 CALIFORNIA ENERGY CODE
2016 CALIFORNIA FIRE CODE
2016 CALIFORNIA GREEN BUILDING STANDARDS CODE
CITY OF ST. HELENA LOCAL ORDINANCES & REGULATIONS

A circular professional seal for a Licensed Architect in the State of California. The outer ring contains the text "LICENSED ARCHITECT" at the top and "STATE OF CALIFORNIA" at the bottom, separated by two stars. The center of the seal contains the name "ERIC HAESLOOP" and the license information "NO. C15347" and "REN. 3-31-21". A handwritten signature is written over the top of the seal.

COVER SHEET

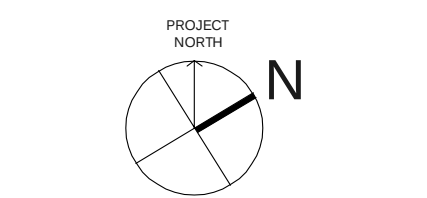
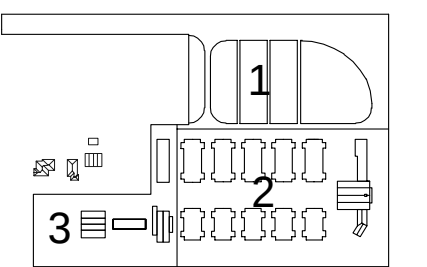
NTS

c)

GO.U

FARMSTEAD AT
LONG MEADOW
RANCH
LODGING
1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:
5.6.2019 PLANNING SUBMITTAL

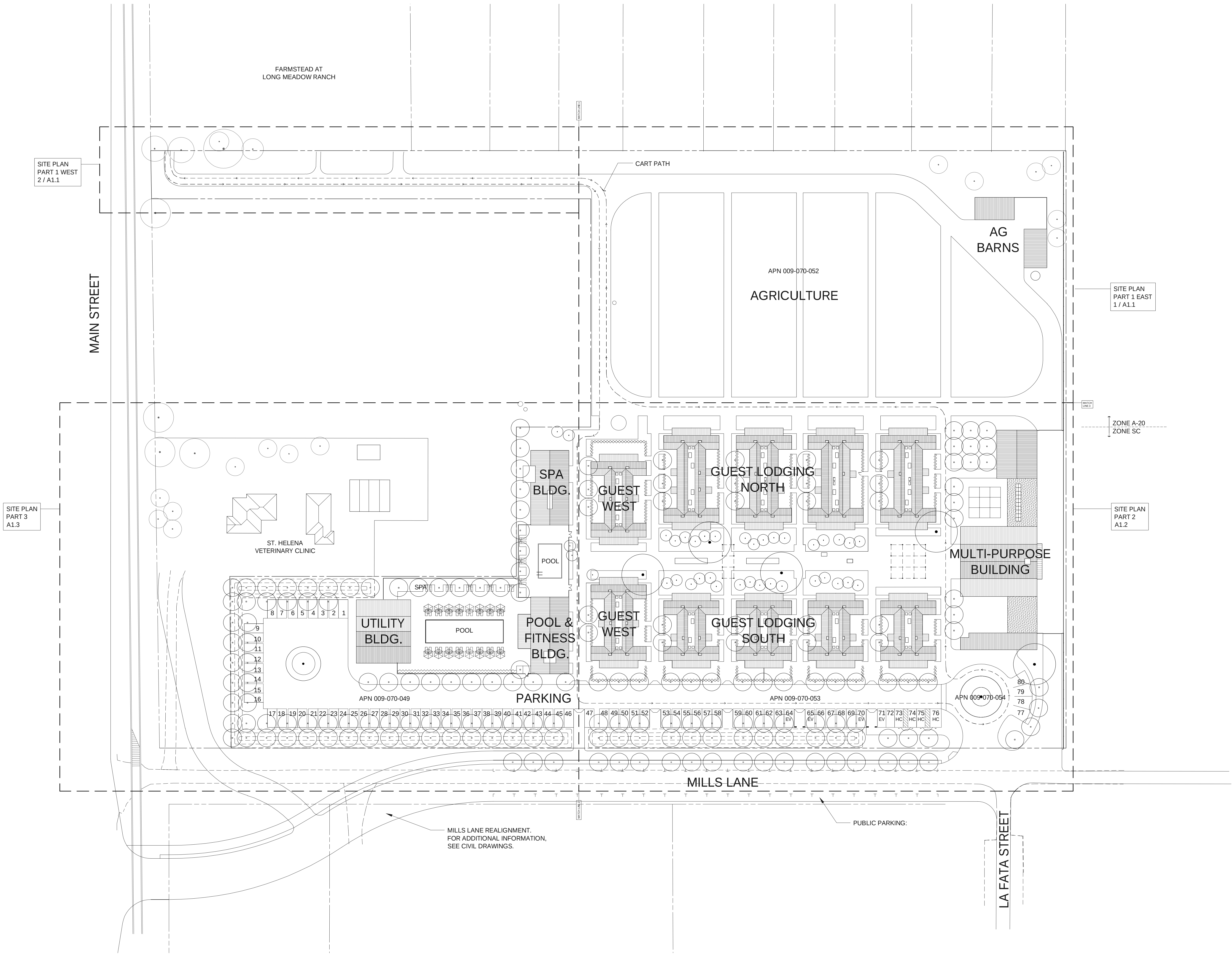


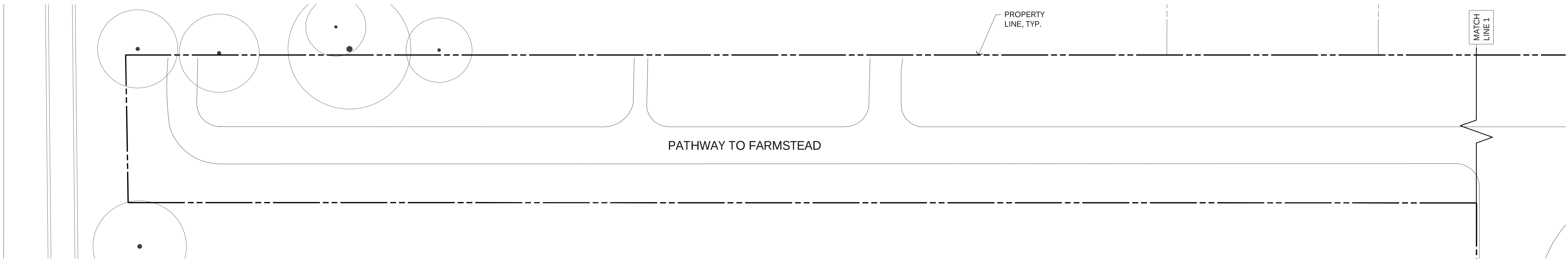
DRAWING TITLE:
MASTER
SITE PLAN

DATE:
5.6.2019
SCALE:
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SHEET NO:

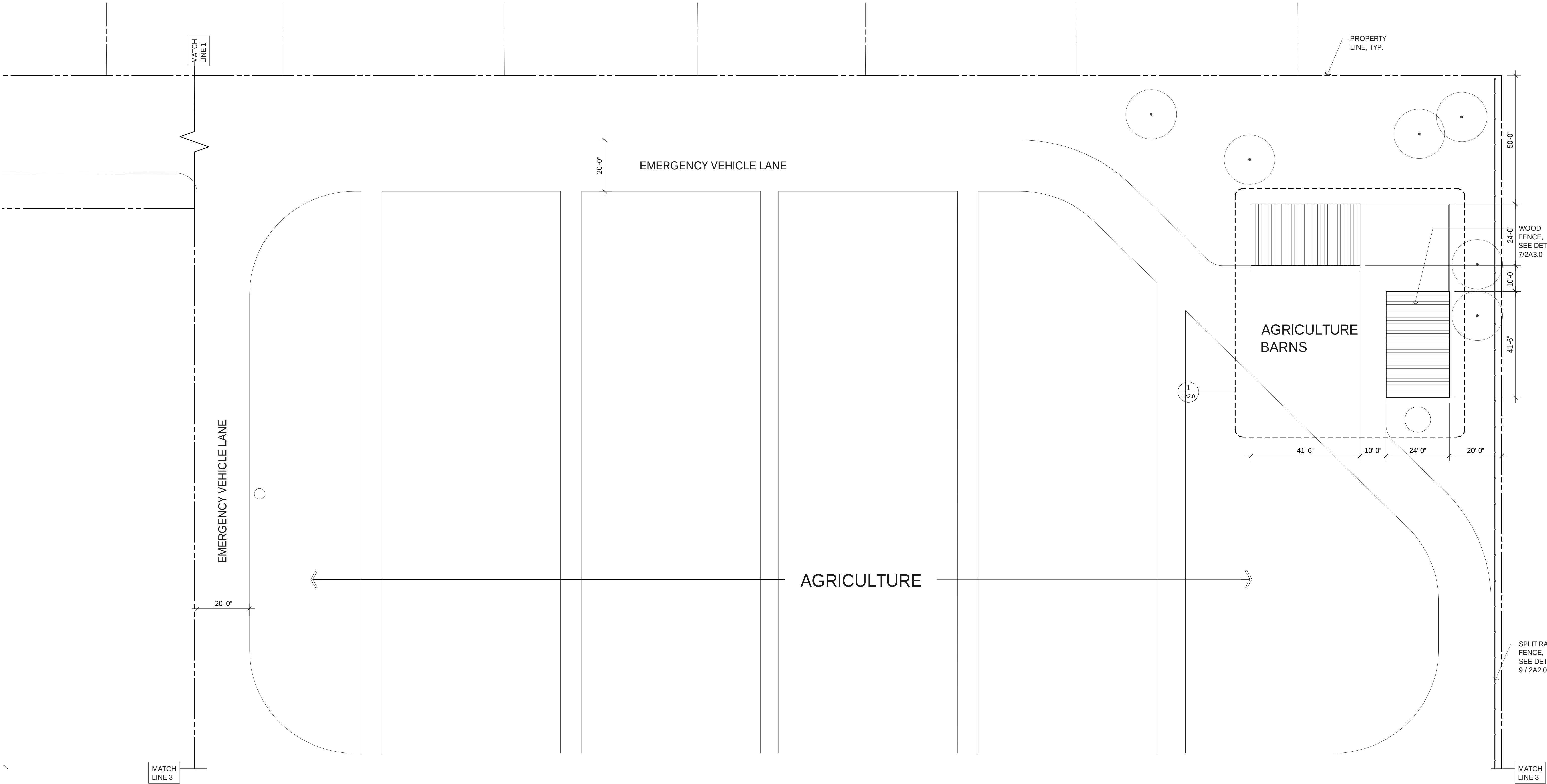
A1.0

- NOTES:
1. THE MASTER SITE PLAN HAS BEEN SPLIT INTO 3 PARTS TO ALLOW FOR LARGER SCALE DRAWINGS. SEE SHEETS A1.1, A1.2 & A1.3 FOR ENLARGED SITE PLANS PART 1, 2 AND 3.
 2. FOR MODIFICATIONS TO MILLS LANE SEE CIVIL DRAWINGS.





SITE / ROOF PLAN PART 1 WEST
SCALE: 1/16" = 1'-0" 2
A1.1



SITE / ROOF PLAN - PART 1 EAST
SCALE: 1/16" = 1'-0" 1
A1.1

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HAESLOOP

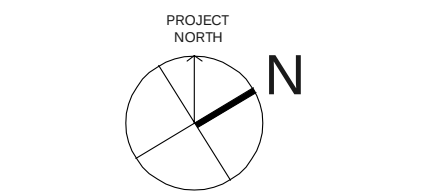
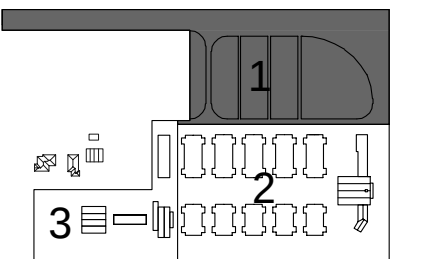
ARCHITECTS

1660 BUSH STREET, STE 200
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WWW.TGHARCHITECTS.COM

FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:
5.6.2019 PLANNING SUBMITTAL



DRAWING TITLE:
SITE / ROOF PLAN
PART 1

DATE:
5.6.2019
SCALE:
1/16" = 1'-0"

SHEET NO:
A1.1

TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

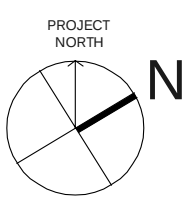
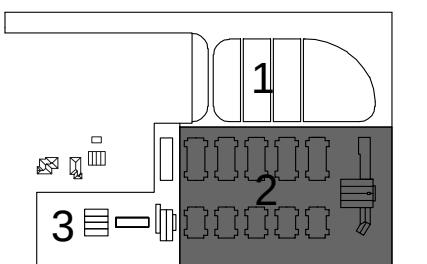
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FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:

5.6.2019 PLANNING SUBMITTAL



APPROVED BY:



DRAWING TITLE:
SITE / ROOF PLAN
PART 2

DATE:

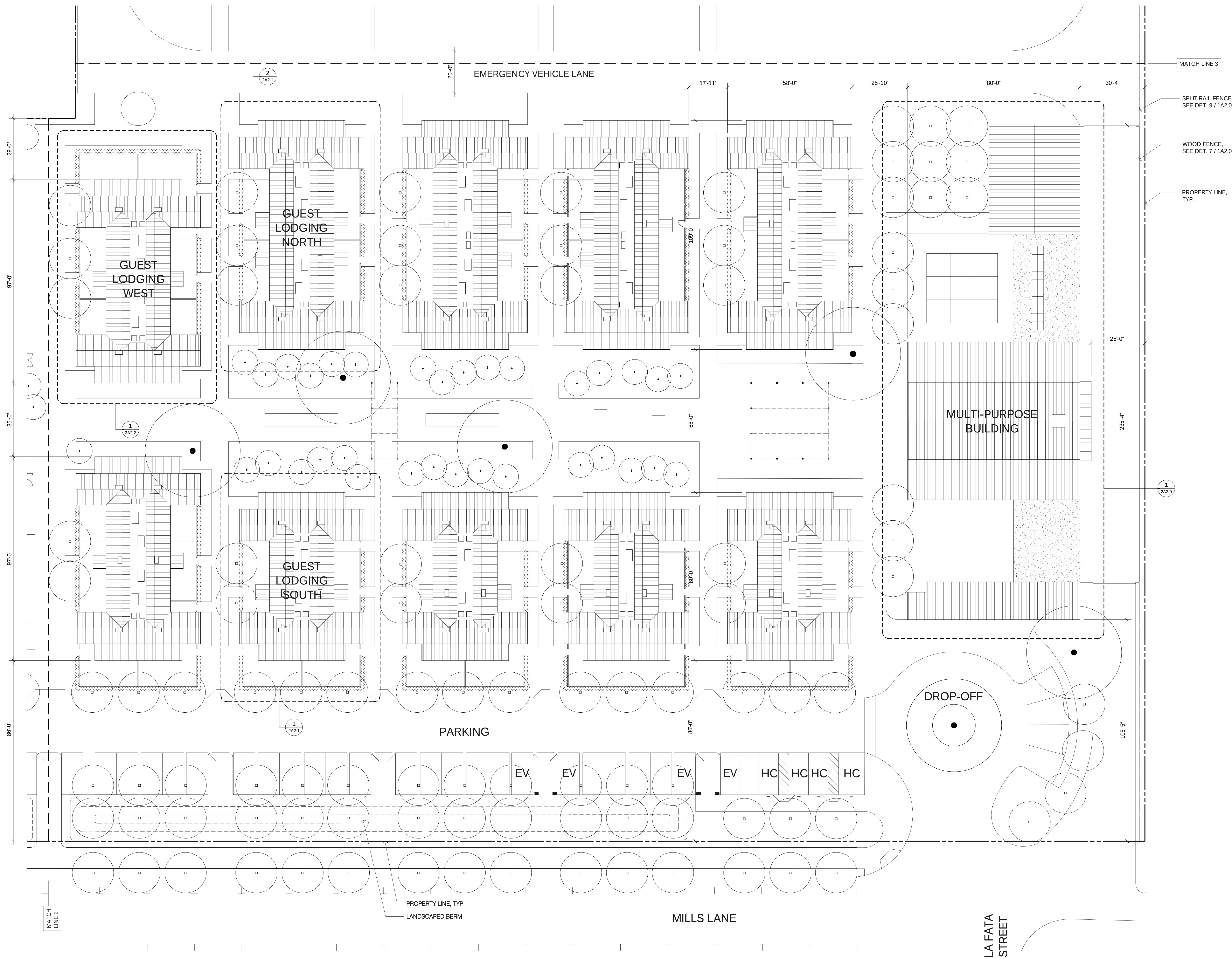
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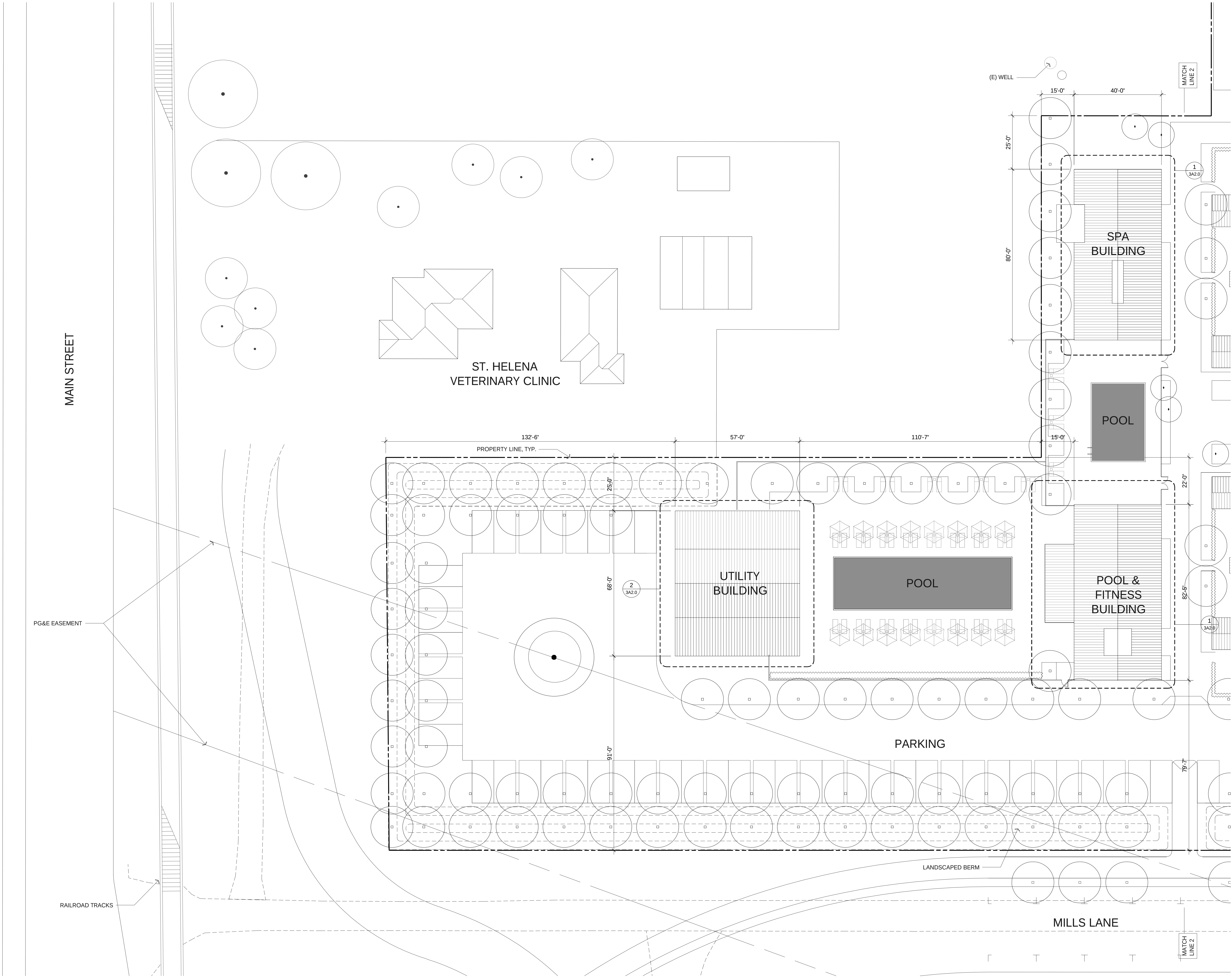
SCALE:

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SHEET NO:

A1.2





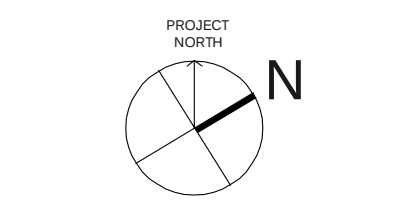
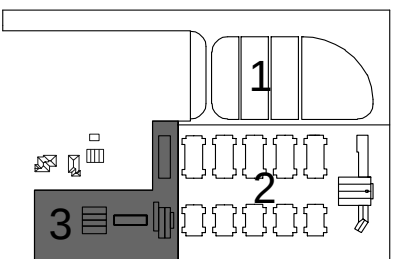
TURNBULL
GRIFFIN &
HAESLOOP

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REVISIONS:
5.6.2019 PLANNING SUBMITTAL



DRAWING TITLE:
SITE / ROOF PLAN
PART 3

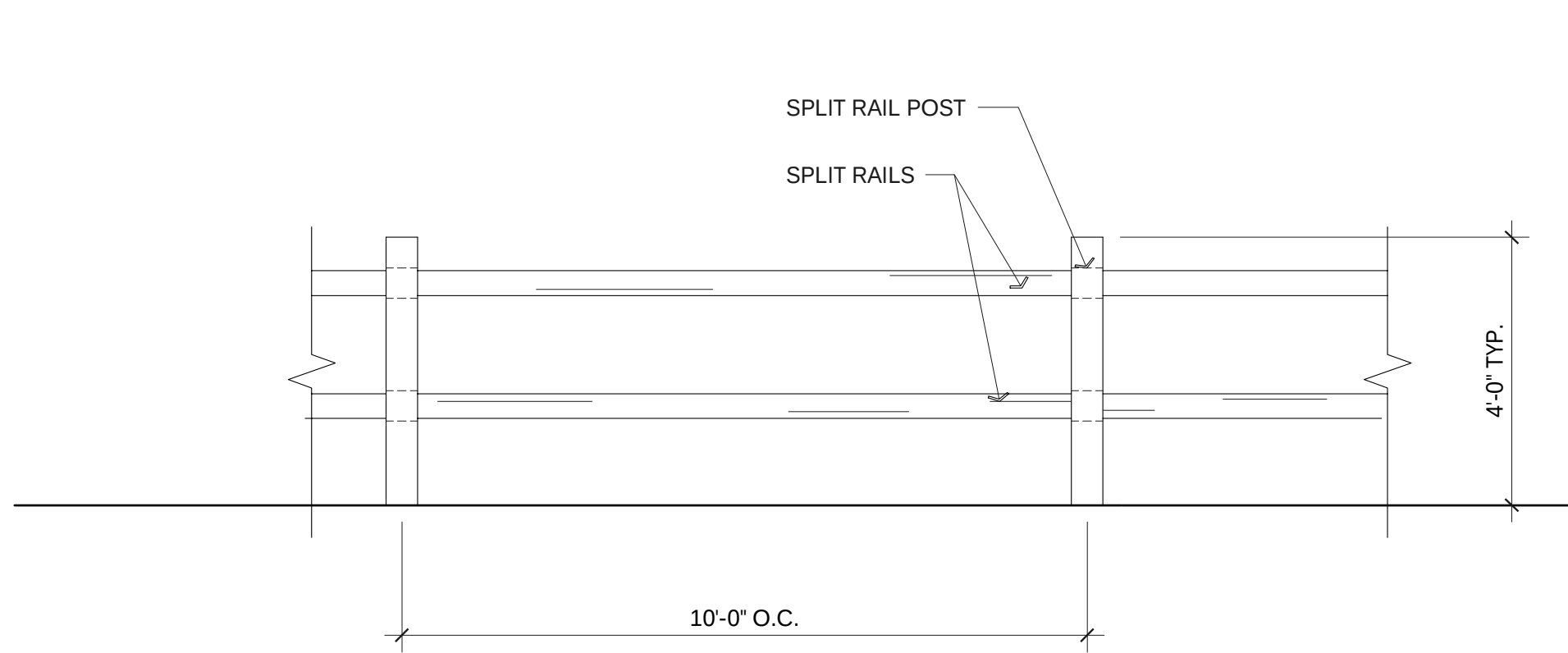
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5.6.2019
SCALE:
1/16" = 1'-0"
SHEET NO:

A1.3

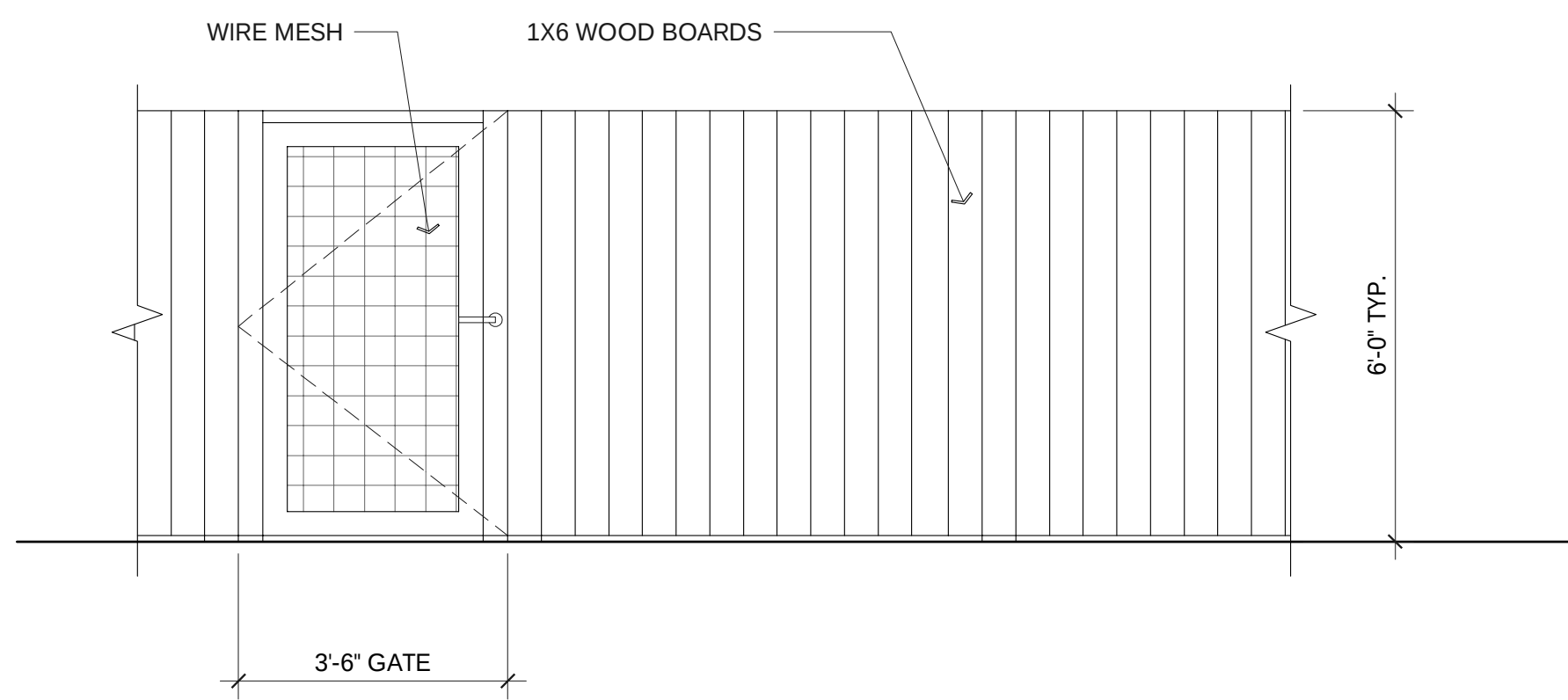
TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

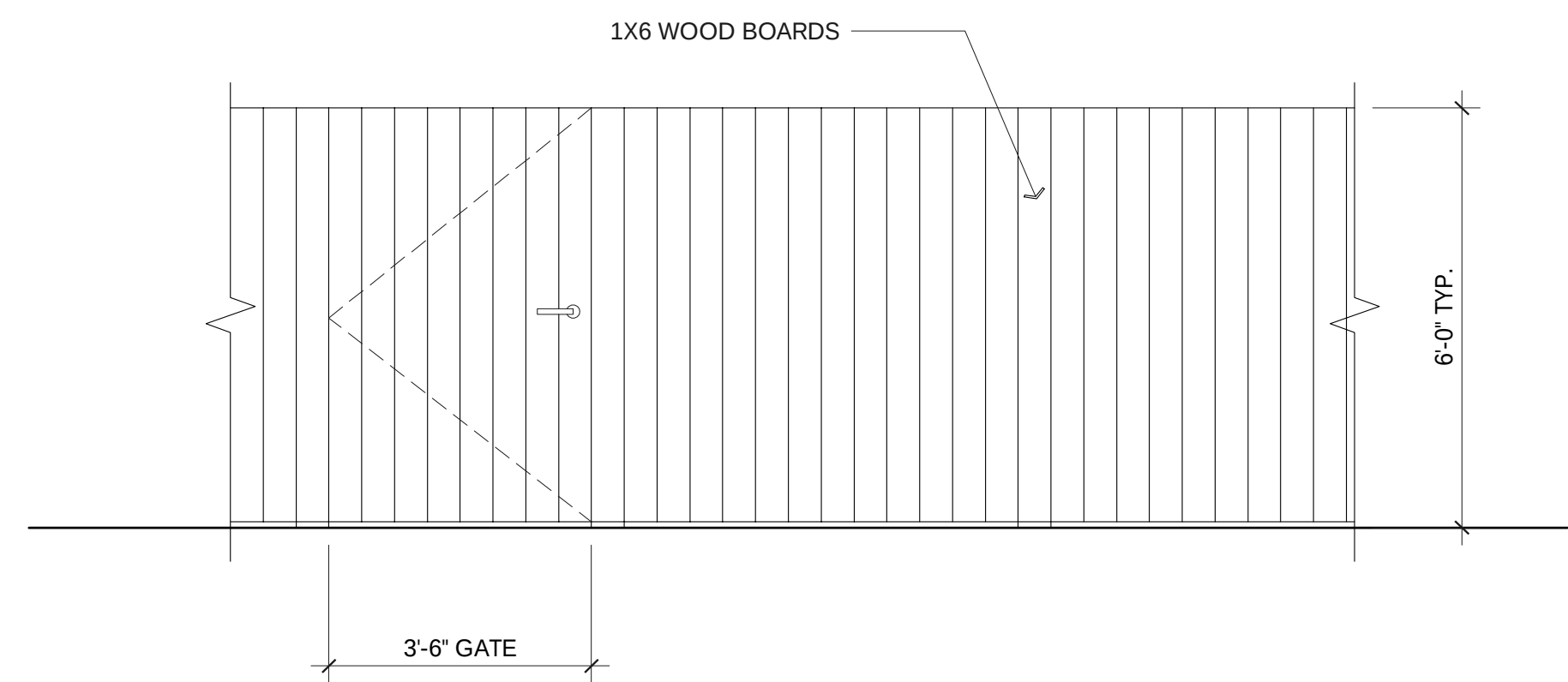
1660 BUSH STREET, STE 200
SAN FRANCISCO, CA 94109
P. 415-441-2300
WWW.TGHAARCHITECTS.COM



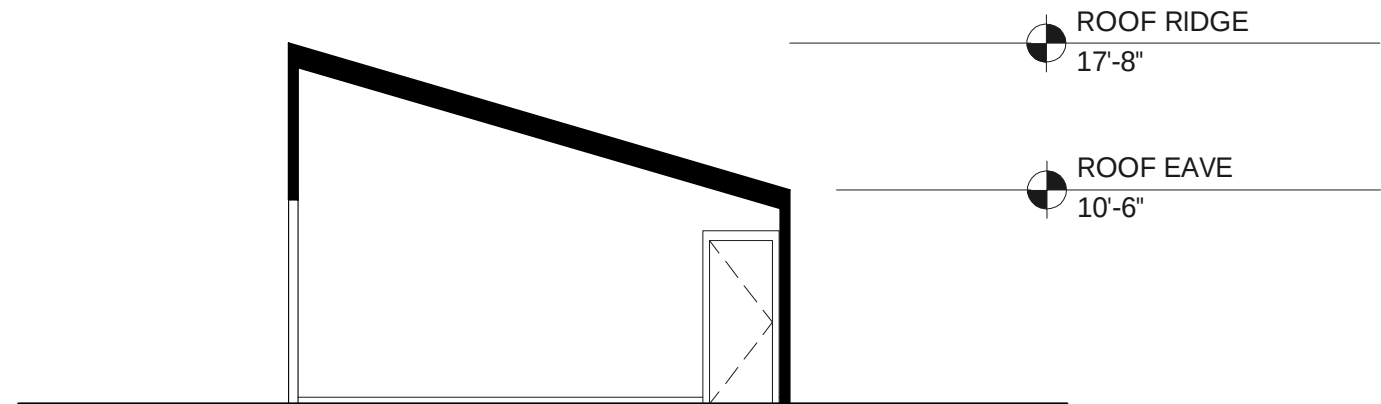
SPLIT RAIL FENCE - ELEVATION
1/2" = 1'-0" 9 1A2.0



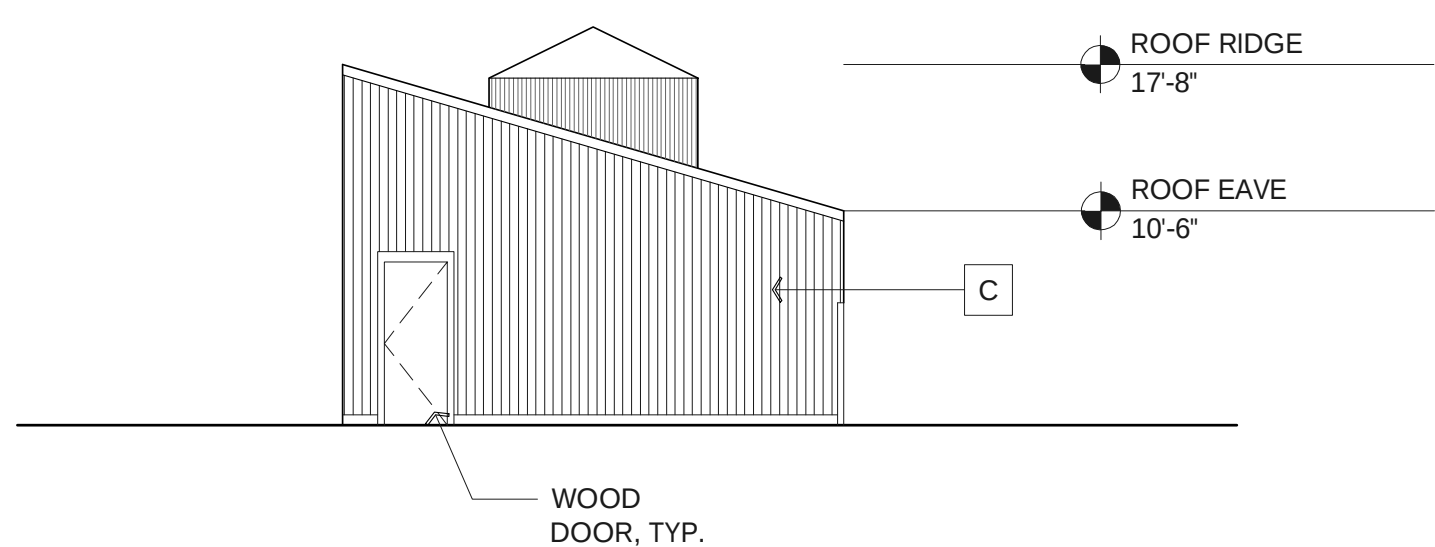
WOOD & WIRE FENCE AND GATE - ELEVATION
1/2" = 1'-0" 8 1A2.0



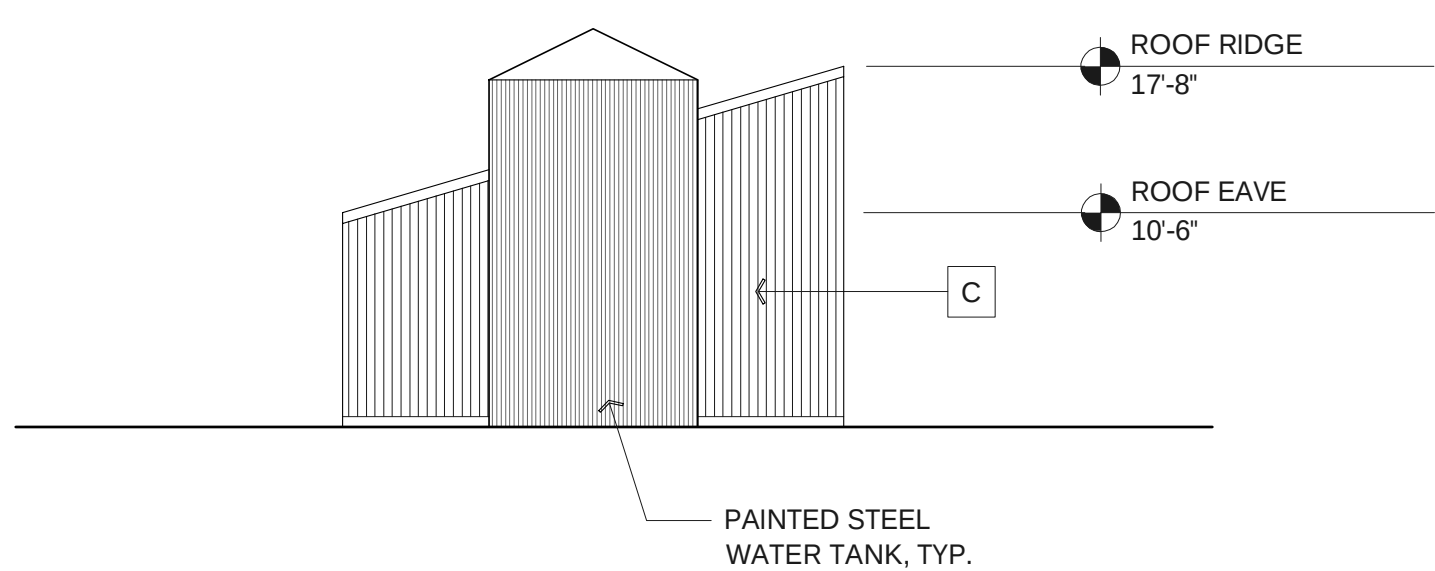
SOLID WOOD FENCE AND GATE - ELEVATION
1/2" = 1'-0" 7 1A2.0



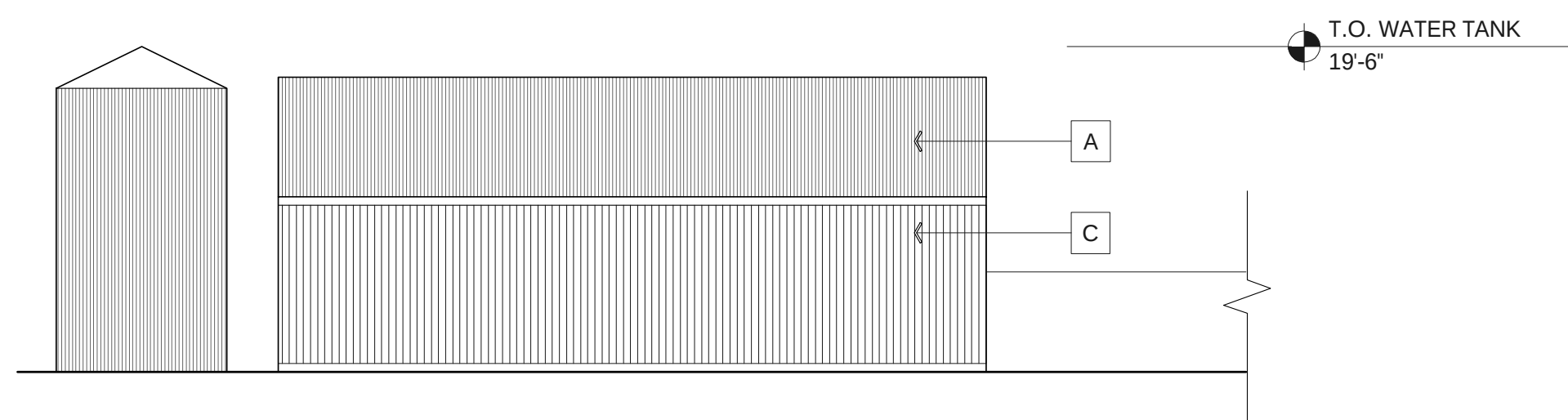
AGRICULTURE BARN - TRANSVERSE SECTION
1/8" = 1'-0" 6 1A2.0



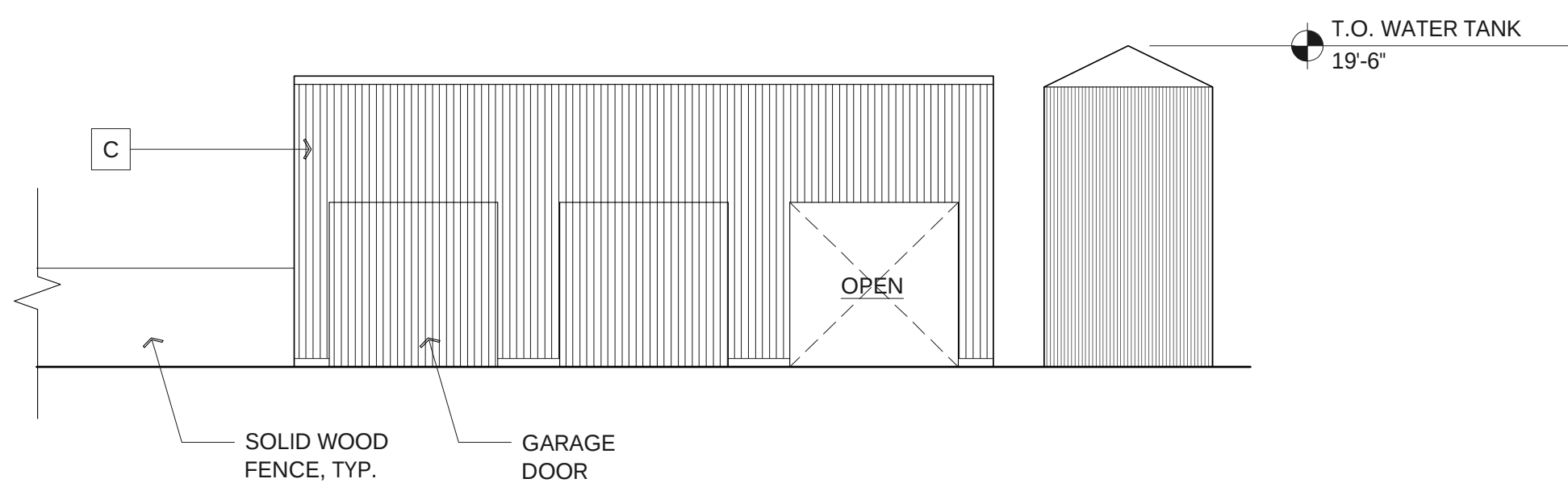
AGRICULTURE BARN - NORTH ELEVATION
1/8" = 1'-0" 5 1A2.0



AGRICULTURE BARN - SOUTH ELEVATION
1/8" = 1'-0" 3 1A2.0



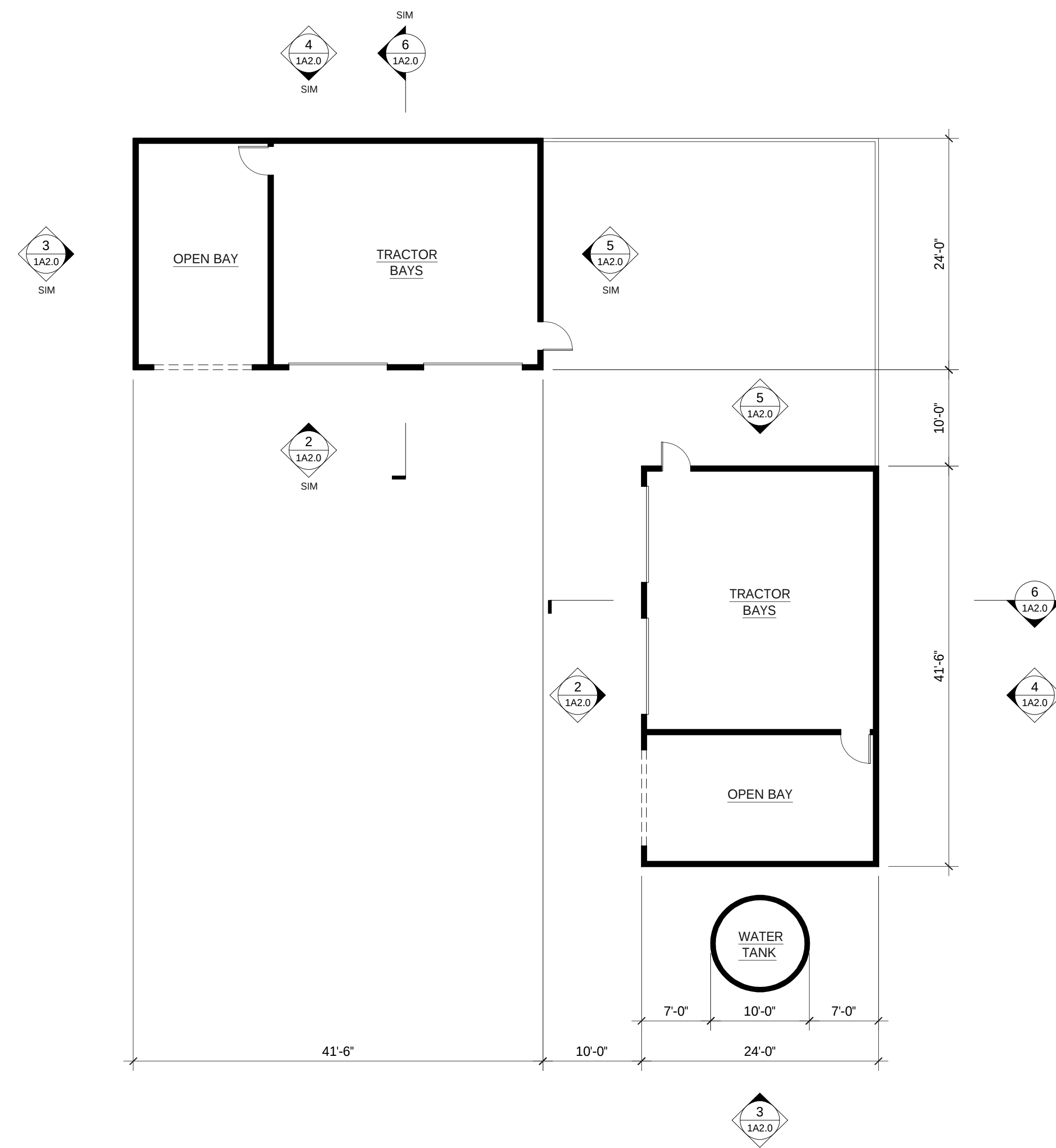
AGRICULTURE BARN - EAST ELEVATION
1/8" = 1'-0" 4 1A2.0



AGRICULTURE BARN - WEST ELEVATION
1/8" = 1'-0" 2 1A2.0

KEY NOTES

- A CORRUGATED METAL ROOF
- B VERTICAL T&G WOOD SIDING, PAINTED
- C CEDAR T&G SIDING, NATURAL
- D ULTREX CLAD WINDOW
- E CORRUGATED GLASS PANEL
- F POST & BEAM FRAMING
- G ALUMINUM CLAD DOOR
- H SKYLIGHT



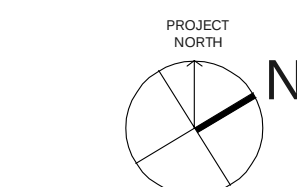
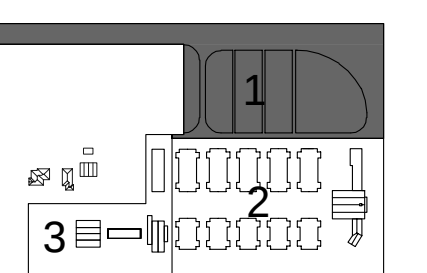
AGRICULTURE BARNS - FLOOR PLAN
1/8" = 1'-0" 1 1A2.0

FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:

5.6.2019 PLANNING SUBMITTAL



APPROVED BY:



DRAWING TITLE:

FLOOR PLANS,
ELEVATIONS & SECTION -
AGRICULTURE BARN & FENCES

DATE:

5.6.2019

SCALE:

1/8" = 1'-0"

SHEET NO:

1A2.0

TURNBULL
GRIFFIN &
HAESLOOP

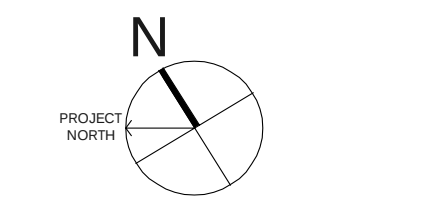
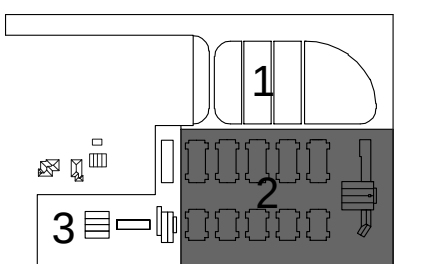
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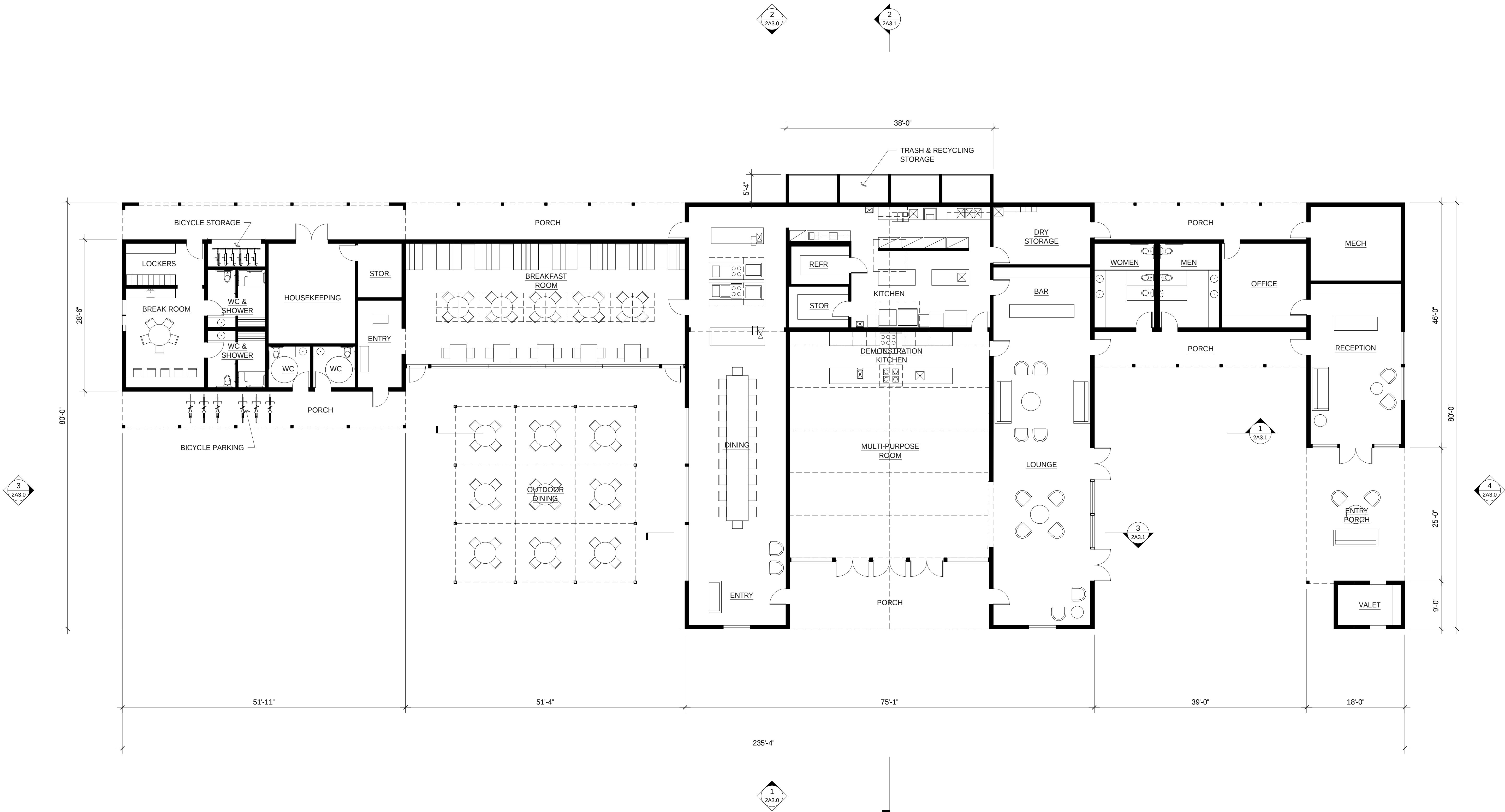
FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:
5.6.2019 PLANNING SUBMITTAL



DRAWING TITLE:
FLOOR PLAN -
MULTI-PURPOSE
BUILDING
DATE:
5.6.2019
SCALE:
1/8" = 1'-0"
SHEET NO:
2A2.0

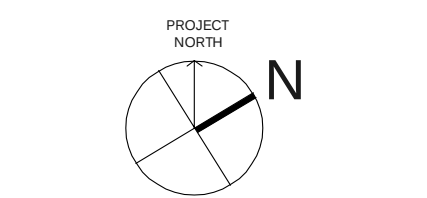
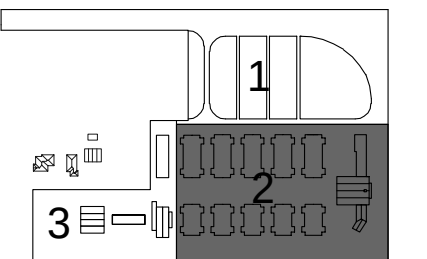


FARMSTEAD AT LONG MEADOW RANCH LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS

5.6.2019 PLANNING SUBMITTAL



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DRAWING TITLE:

FLOOR PLANS:
GUEST LODGING
NORTH & SOUTH

DATE:

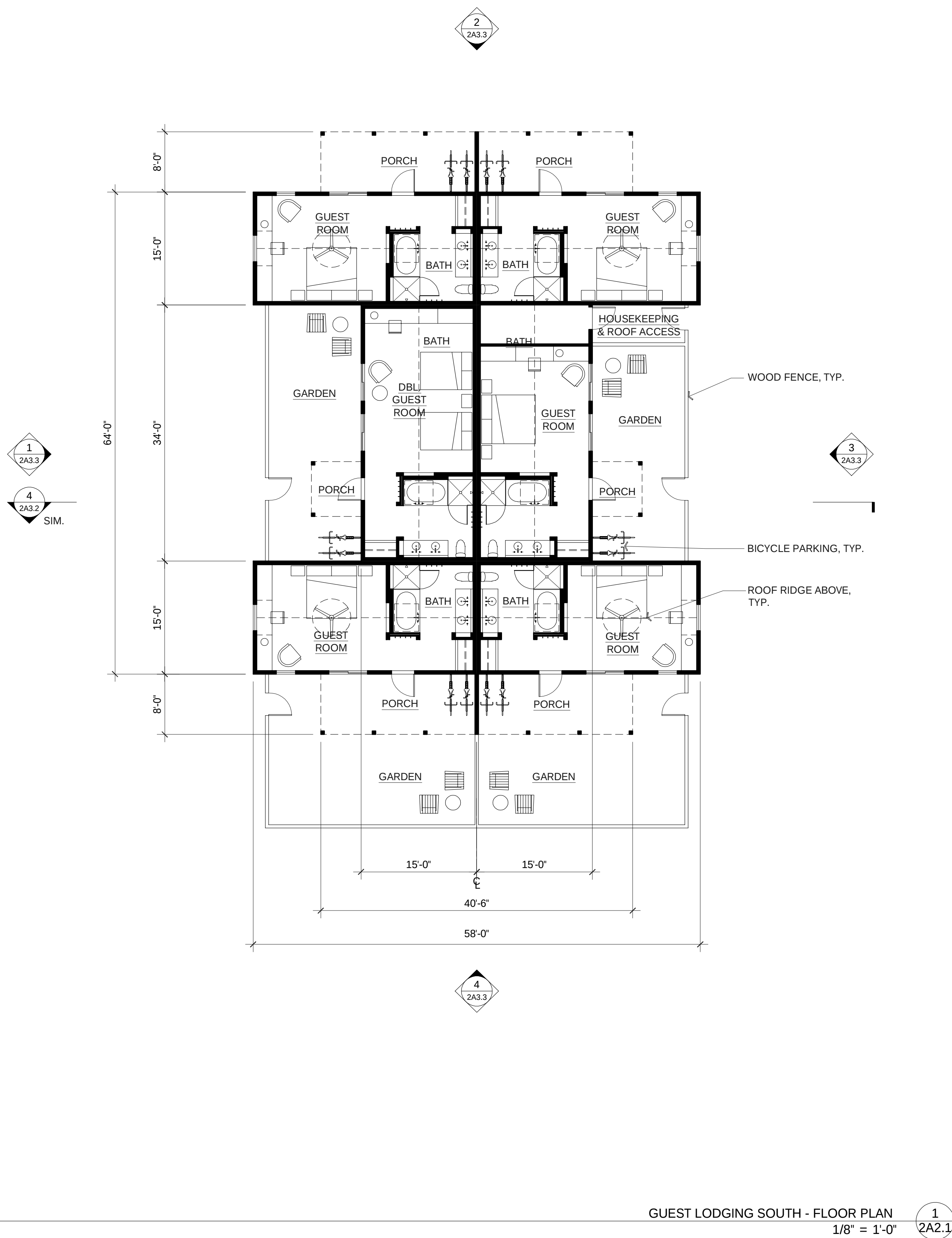
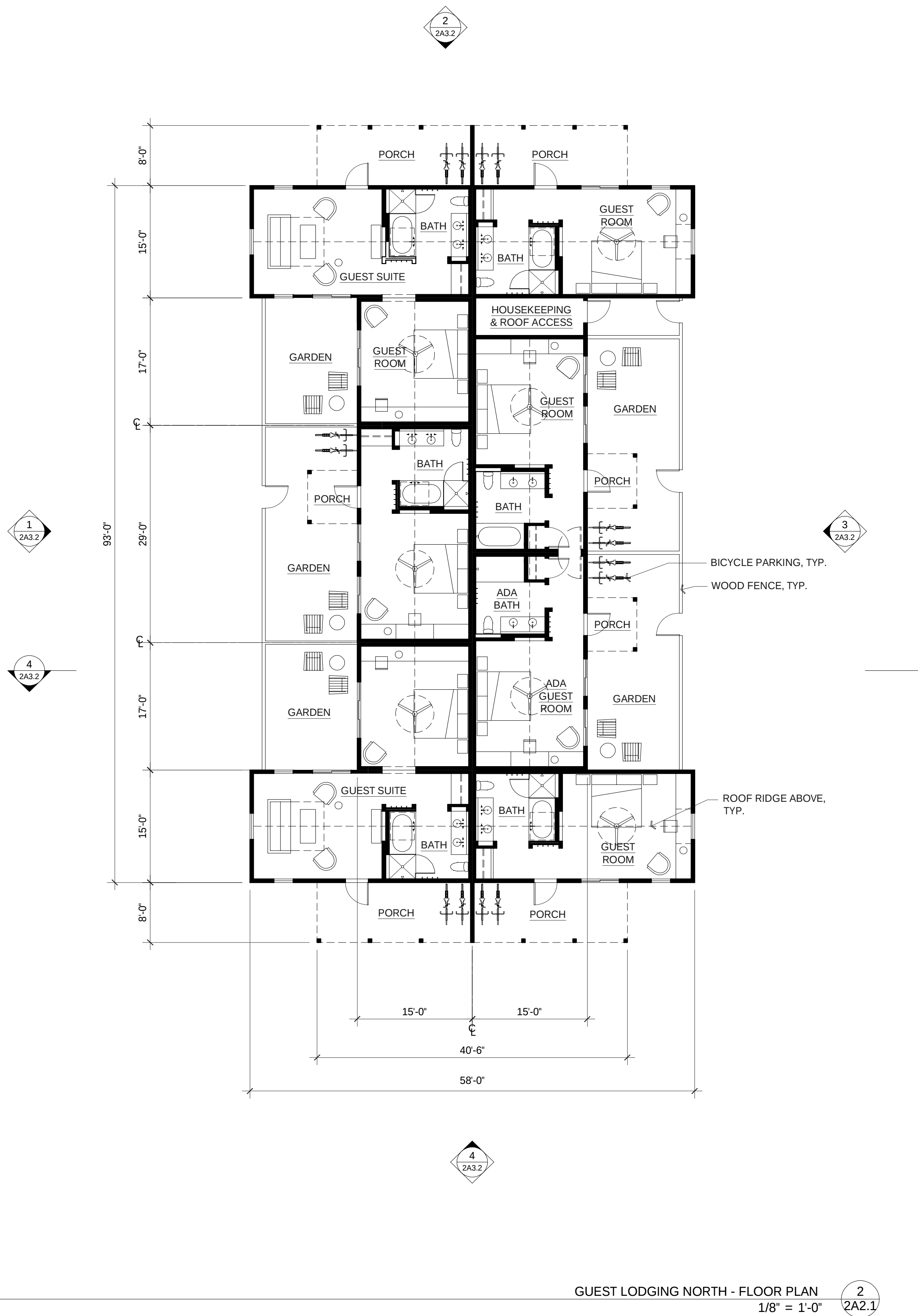
5.6.2019

SCALE

$$1/8'' = 1'-0''$$

SHEET NO:

2A2.1



TURNBULL
GRIFFIN &
HAESLOOP

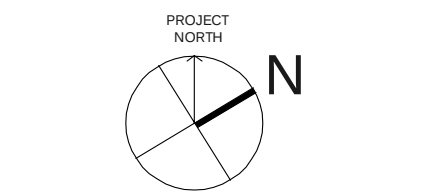
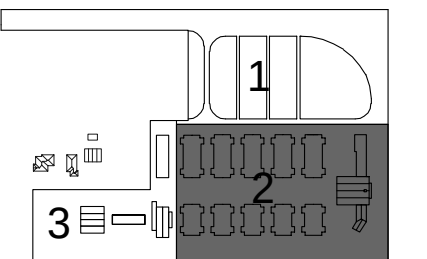
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FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

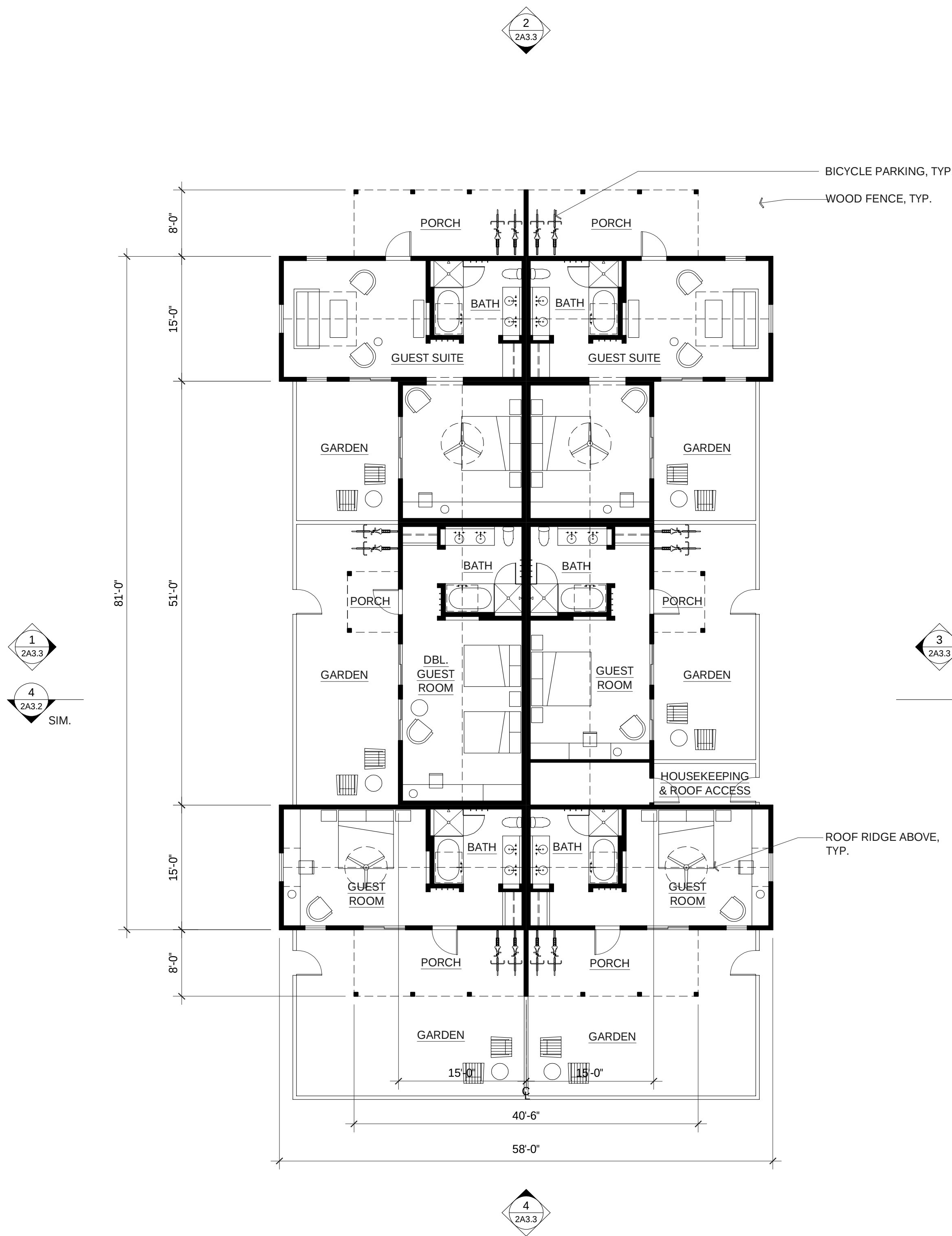
1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:
5.6.2019 PLANNING SUBMITTAL



DRAWING TITLE:
FLOOR PLAN:
GUEST LODGING
WEST
DATE:
5.6.2019
SCALE:
1/8" = 1'-0"

SHEET NO:
2A2.2



GUEST LODGING WEST - FLOOR PLAN
1/8" = 1'-0"

1
2A2.2

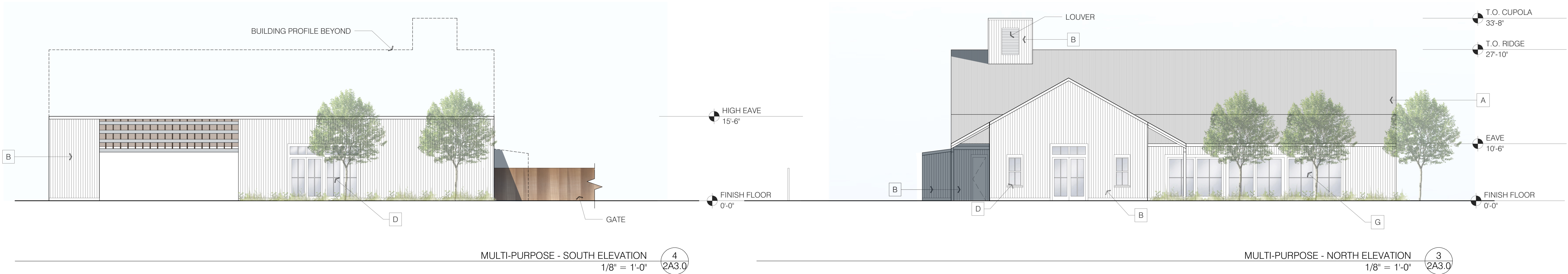
TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

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KEY NOTES

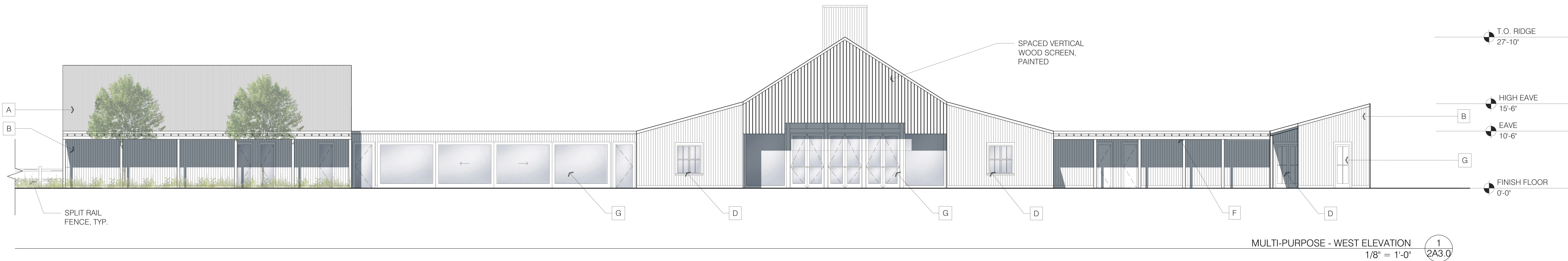
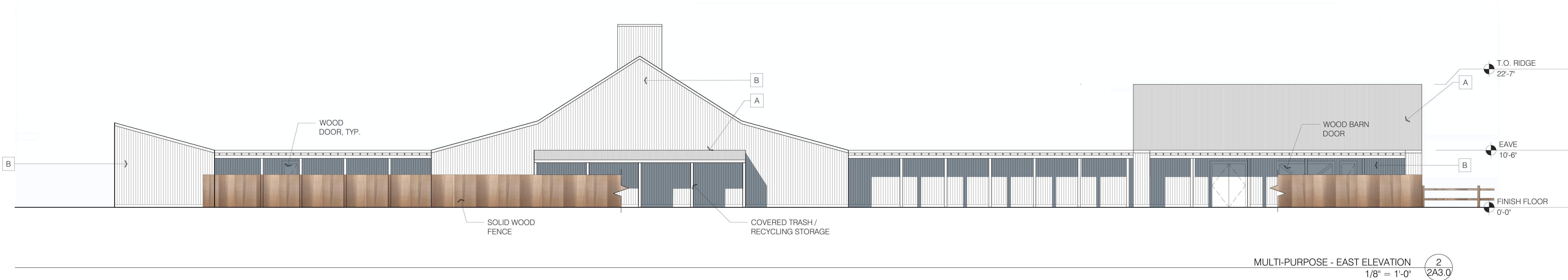
- A CORRUGATED METAL ROOF
- B VERTICAL T&G WOOD SIDING, PAINTED
- C CEDAR T&G SIDING, NATURAL
- D ULTREX CLAD WINDOW
- E CORRUGATED GLASS PANEL
- F POST & BEAM FRAMING
- G ALUMINUM CLAD DOOR
- H SKYLIGHT



FARMSTEAD AT
LONG MEADOW
RANCH
LODGING
1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:

5.6.2019 PLANNING SUBMITTAL



APPROVED BY:



DRAWING TITLE:
ELEVATIONS
MULTI-PURPOSE

DATE:

5.6.2019

SCALE:

1/8" = 1'-0"

SHEET NO.:

2A3.0

TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

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KEY NOTES

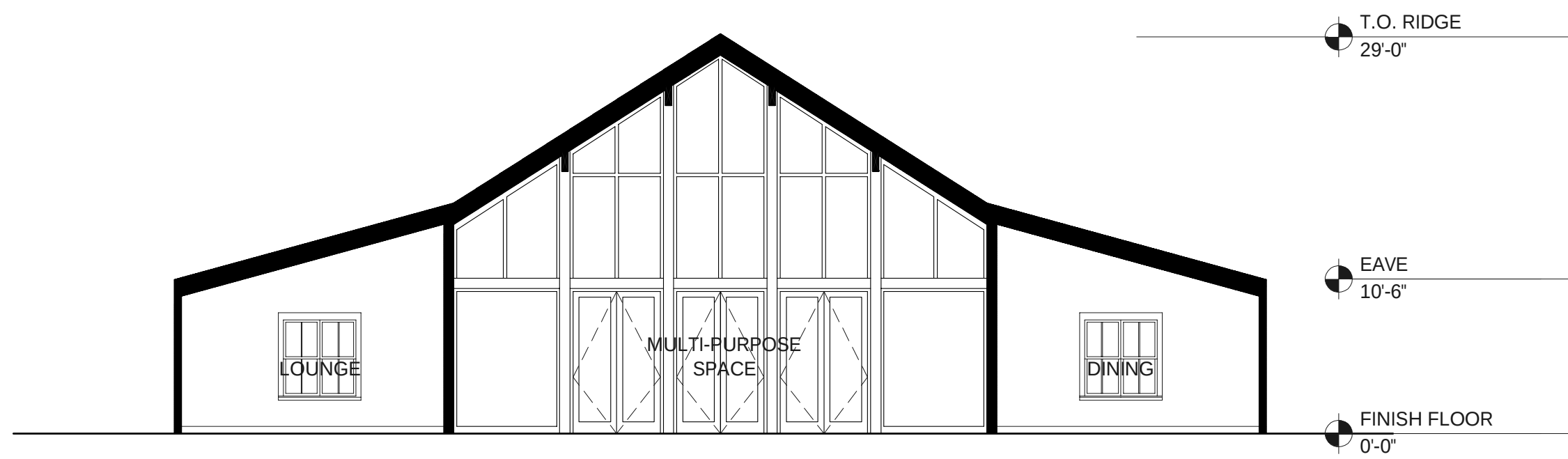
- A CORRUGATED METAL ROOF
- B VERTICAL T&G WOOD SIDING, PAINTED
- C CEDAR T&G SIDING, NATURAL
- D ULTREX CLAD WINDOW
- E CORRUGATED GLASS PANEL
- F POST & BEAM FRAMING
- G ALUMINUM CLAD DOOR
- H SKYLIGHT

FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

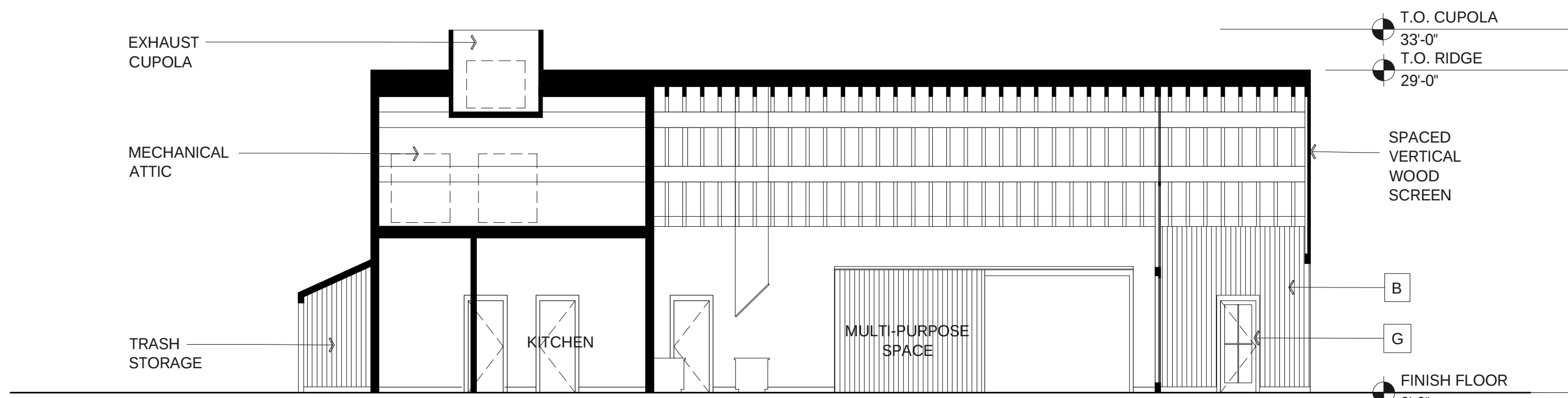
1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:

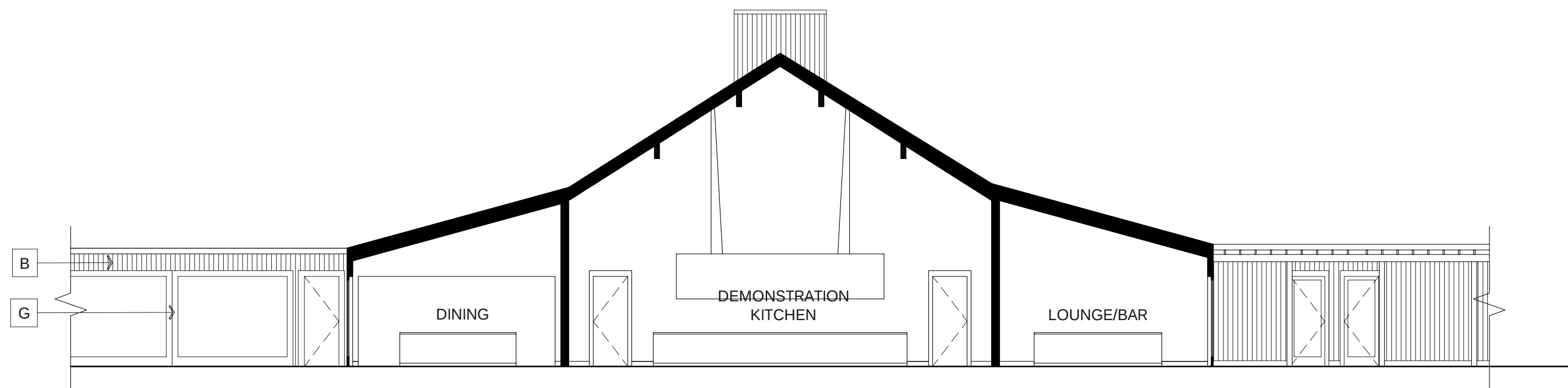
5.6.2019 PLANNING SUBMITTAL



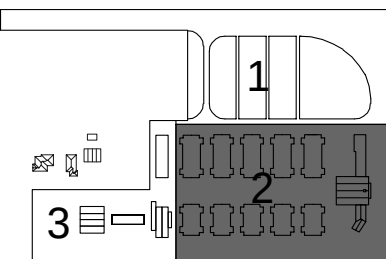
MULTI-PURPOSE - SECTION
1/8" = 1'-0" 3 2A3.1



MULTI-PURPOSE - LONGITUDINAL SECTION
1/8" = 1'-0" 2 2A3.1



MULTI-PURPOSE - SECTION
1/8" = 1'-0" 1 2A3.1



APPROVED BY:



DRAWING TITLE:

SECTIONS:
MULTI-PURPOSE
BUILDING

DATE:

5.6.2019

SCALE:

1/8" = 1'-0"

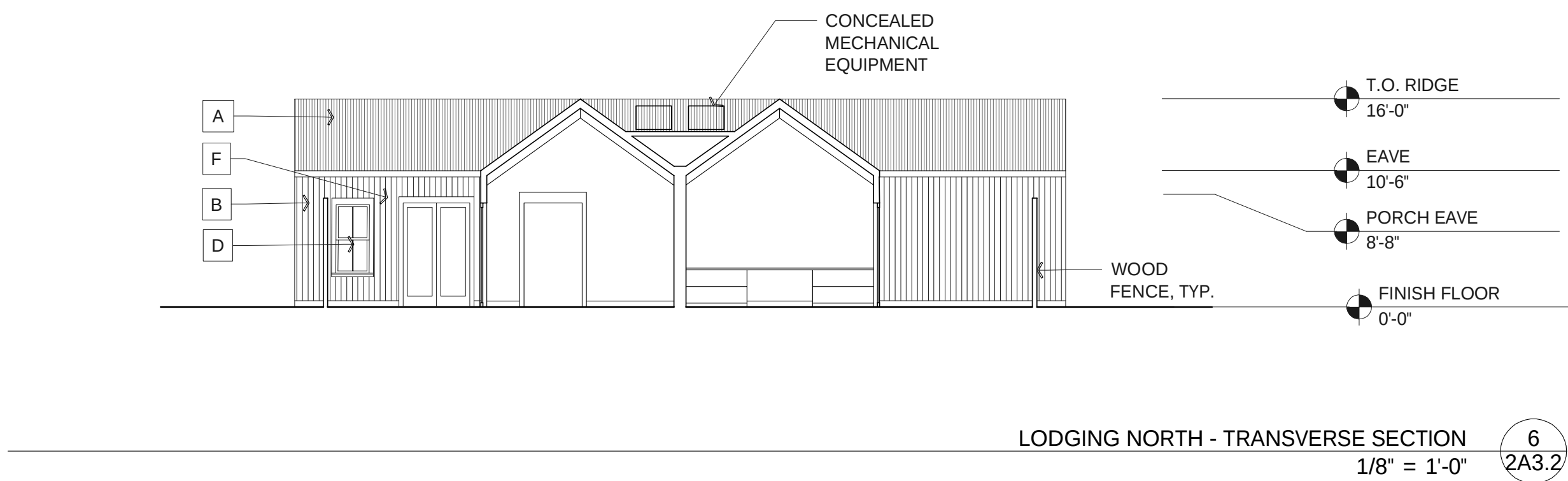
SHEET NO:

2A3.1

TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

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- KEY NOTES
- A CORRUGATED METAL ROOF
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 - D ULTREX CLAD WINDOW
 - E CORRUGATED GLASS PANEL
 - F POST & BEAM FRAMING
 - G ALUMINUM CLAD DOOR
 - H SKYLIGHT

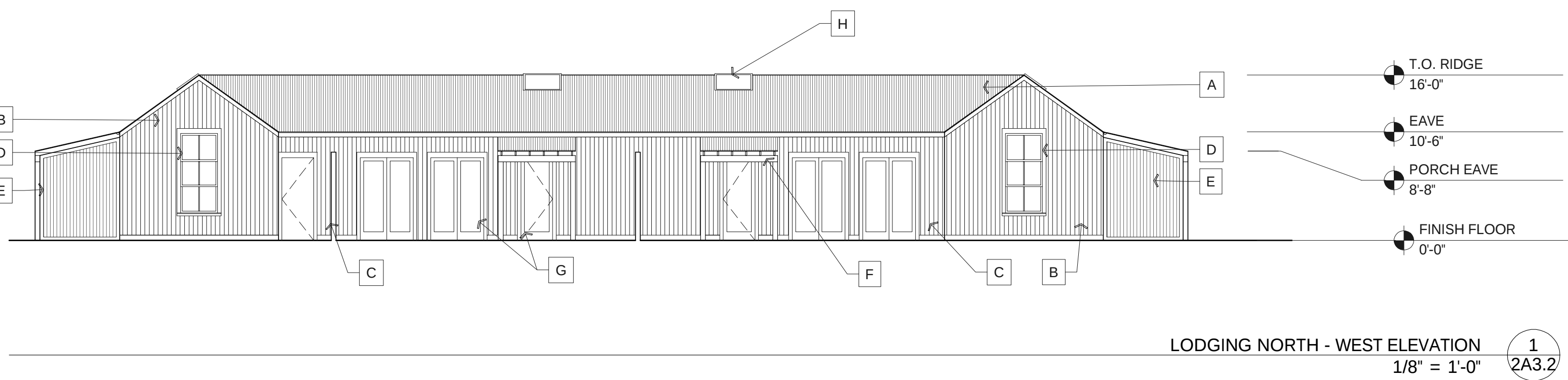
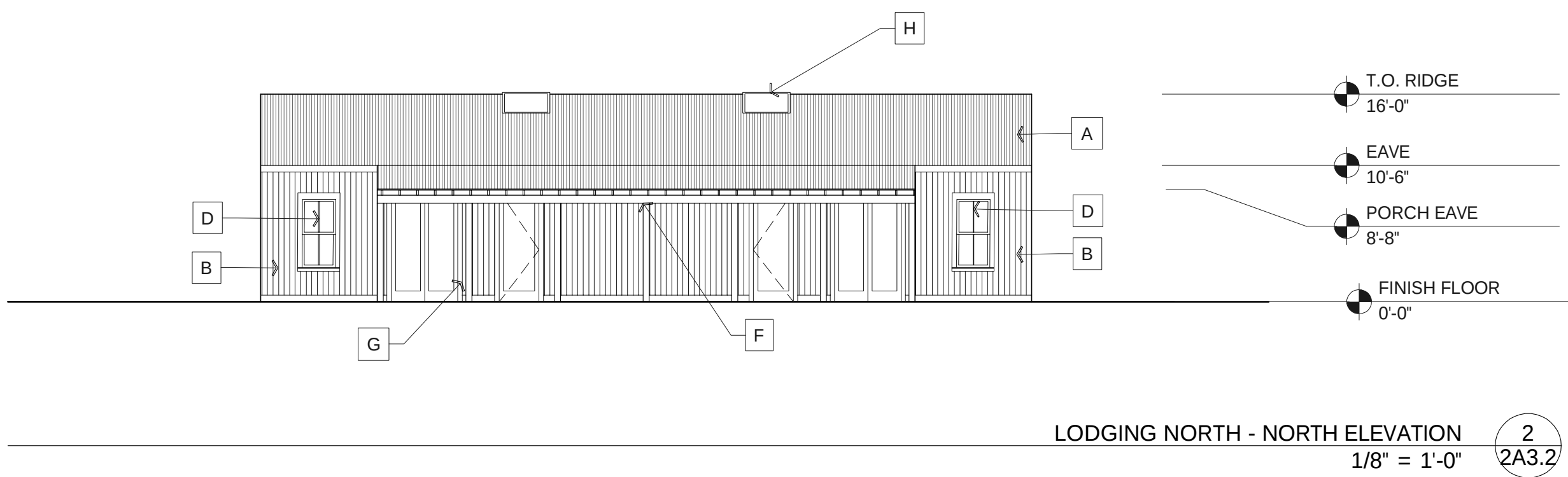
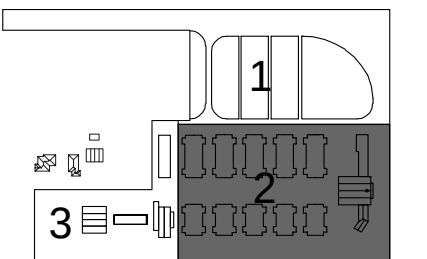
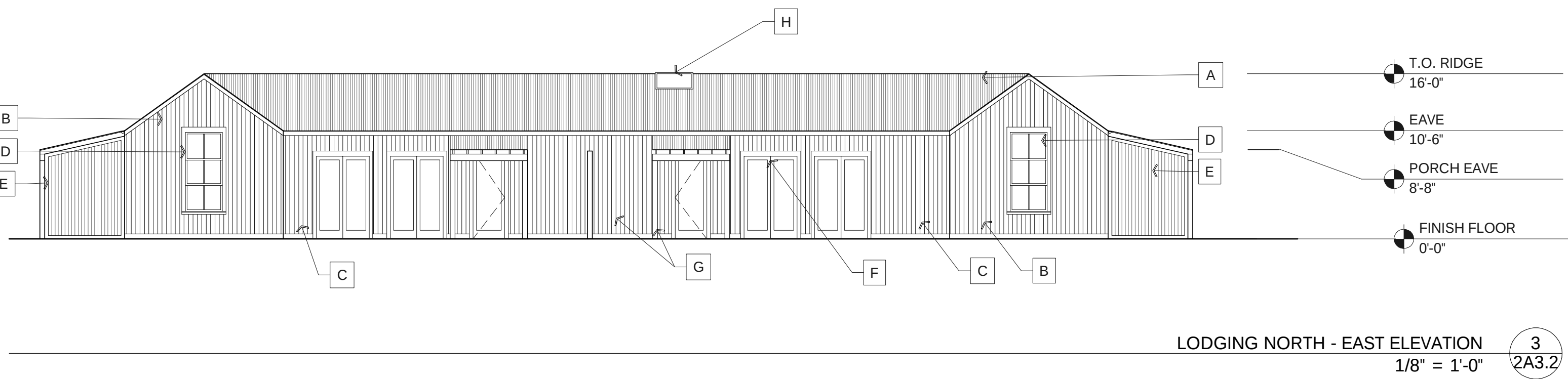
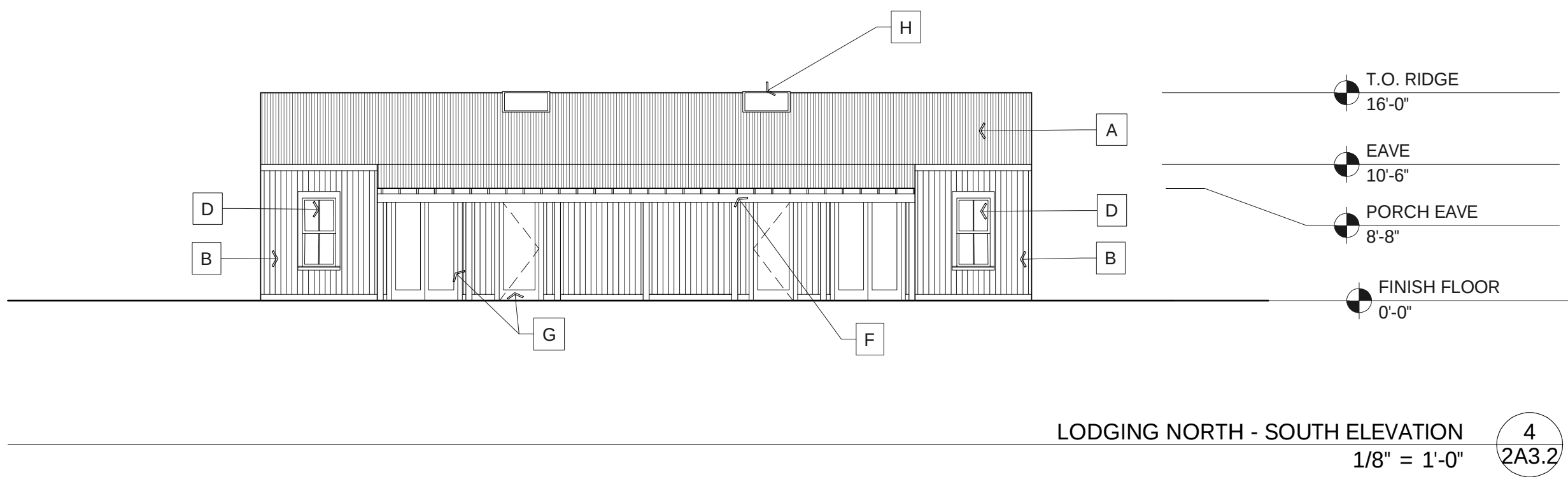
NOTE: GARDEN FENCES NOT SHOWN IN ELEVATIONS.

FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:

5.6.2019 PLANNING SUBMITTAL



DRAWING TITLE:
ELEVATIONS &
SECTION - GUEST
LODGING NORTH
DATE:
5.6.2019
SCALE:
1/8" = 1'-0"
SHEET NO:

2A3.2

TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

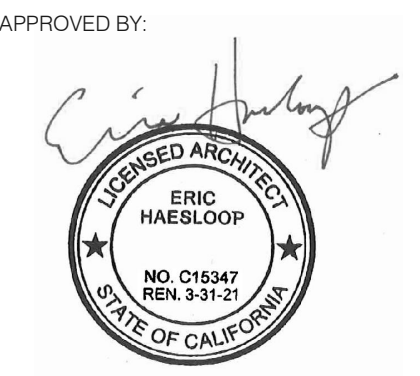
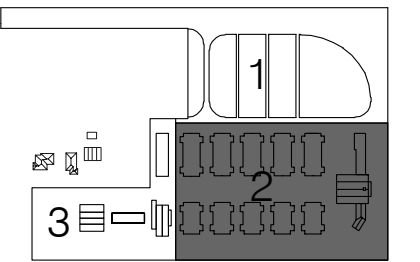
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FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:

5.6.2019 PLANNING SUBMITTAL



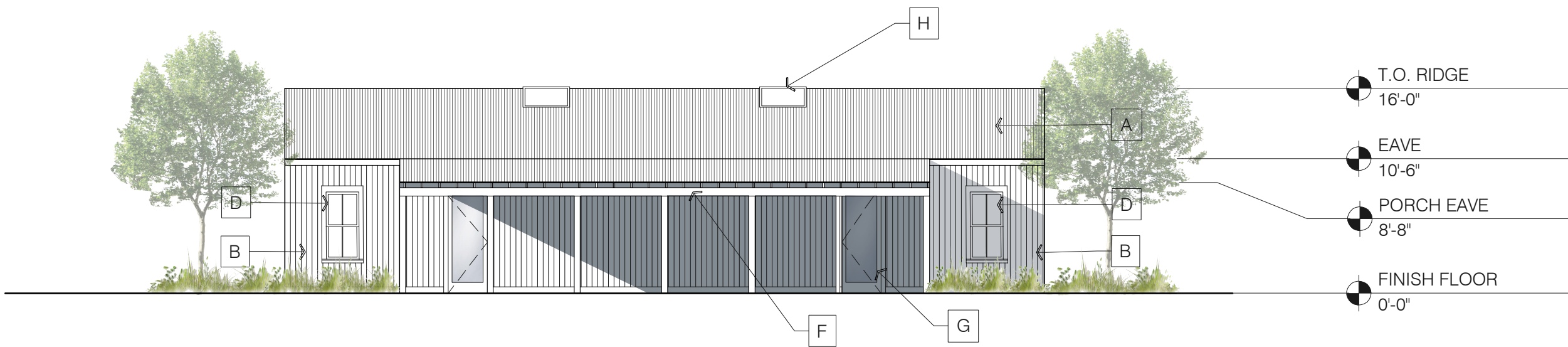
DRAWING TITLE:
ELEVATIONS -
GUEST LODGING
SOUTH & WEST

DATE:
5.6.2019

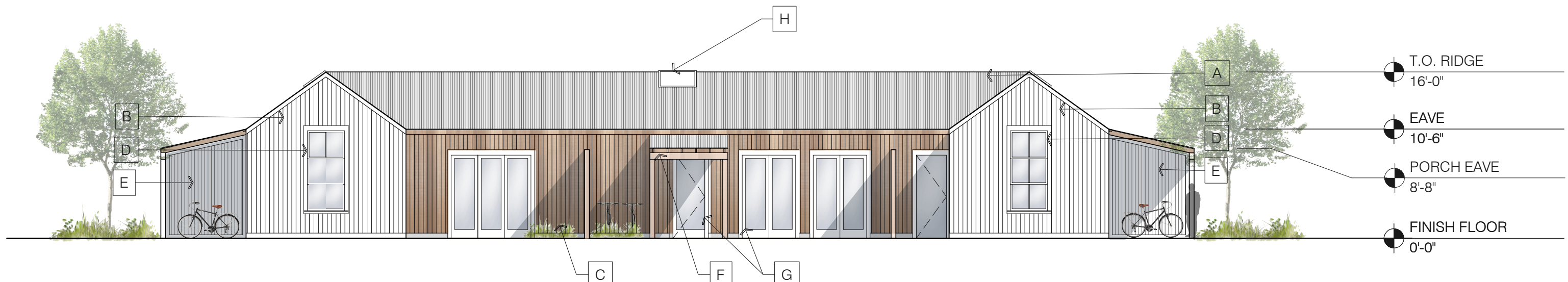
SCALE:
1/8" = 1'-0"

SHEET NO.:

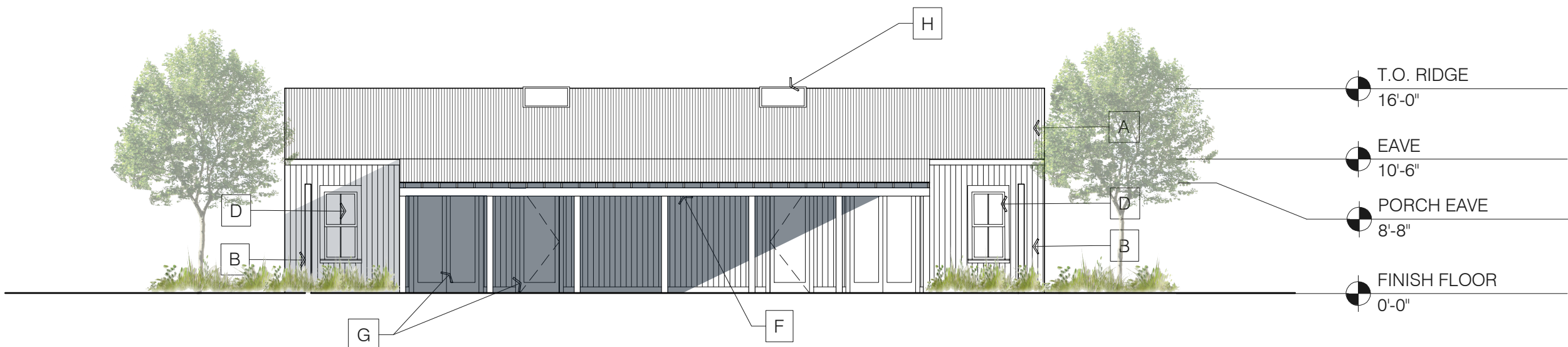
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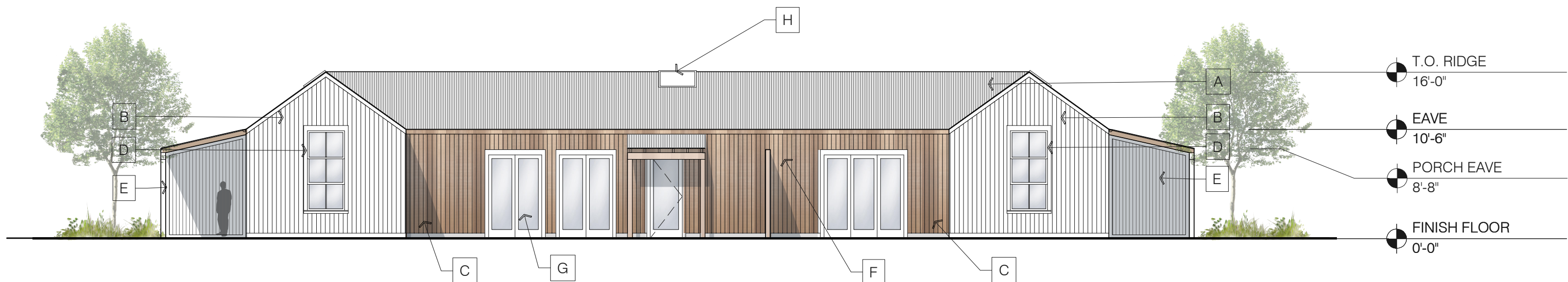
LODGING WEST - SOUTH ELEVATION
1/8" = 1'-0" 8 2A3.3



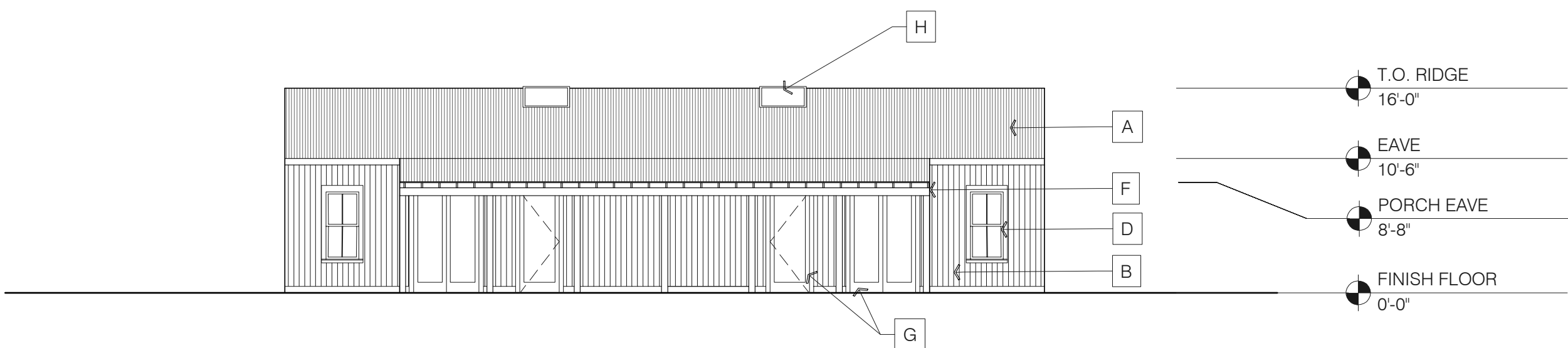
LODGING WEST - EAST ELEVATION
1/8" = 1'-0" 7 2A3.3



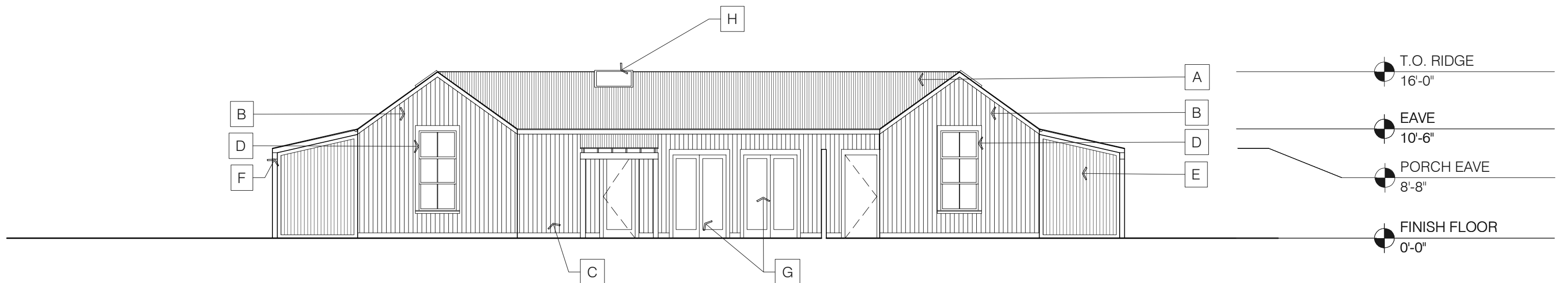
LODGING WEST - NORTH ELEVATION
1/8" = 1'-0" 6 2A3.3



LODGING WEST - WEST ELEVATION
1/8" = 1'-0" 5 2A3.3



LODGING SOUTH - SOUTH ELEVATION
1/8" = 1'-0" 4 2A3.3

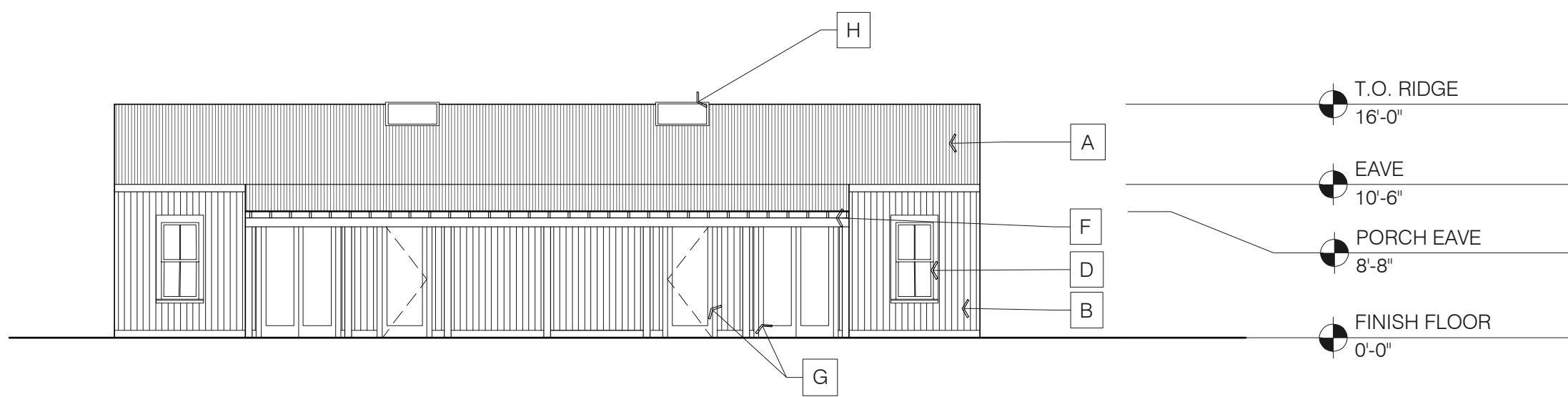


LODGING SOUTH - EAST ELEVATION
1/8" = 1'-0" 3 2A3.3

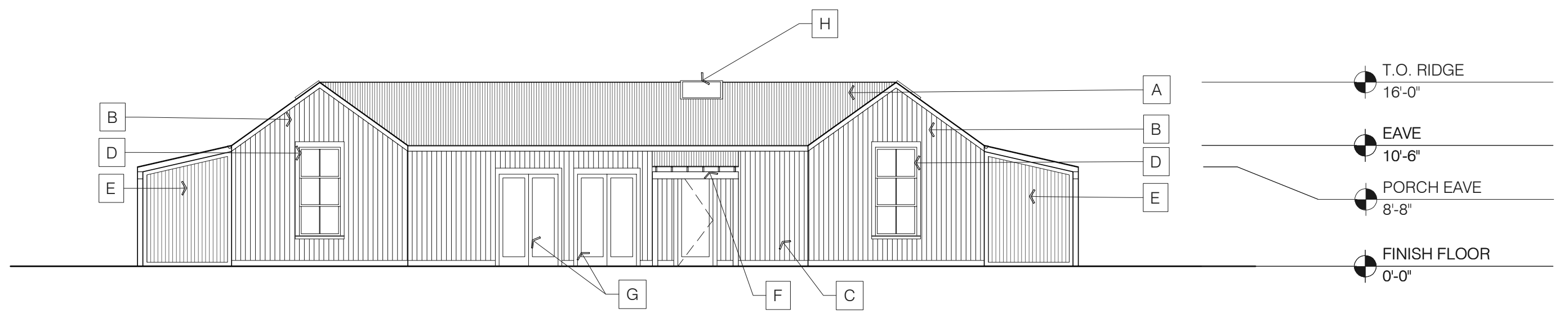
KEY NOTES

- A CORRUGATED METAL ROOF
- B VERTICAL T&G WOOD SIDING, PAINTED
- C CEDAR T&G SIDING, NATURAL
- D ULTREX CLAD WINDOW
- E CORRUGATED GLASS PANEL
- F POST & BEAM FRAMING
- G ALUMINUM CLAD DOOR
- H SKYLIGHT

NOTE: GARDEN FENCES
NOT SHOWN IN ELEVATIONS.



LODGING SOUTH - NORTH ELEVATION
1/8" = 1'-0" 2 2A3.3



LODGING SOUTH - WEST ELEVATION
1/8" = 1'-0" 1 2A3.3

TURNBULL
GRIFFIN &
HAESLOOP

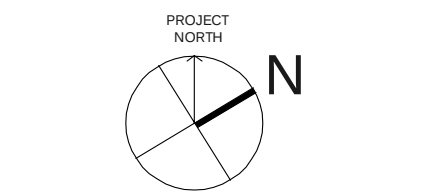
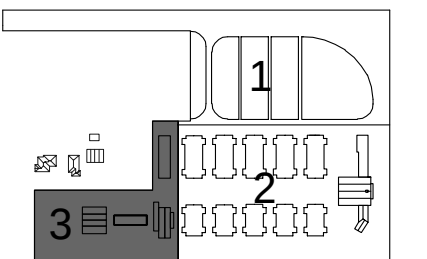
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FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:
5.6.2019 PLANNING SUBMITTAL



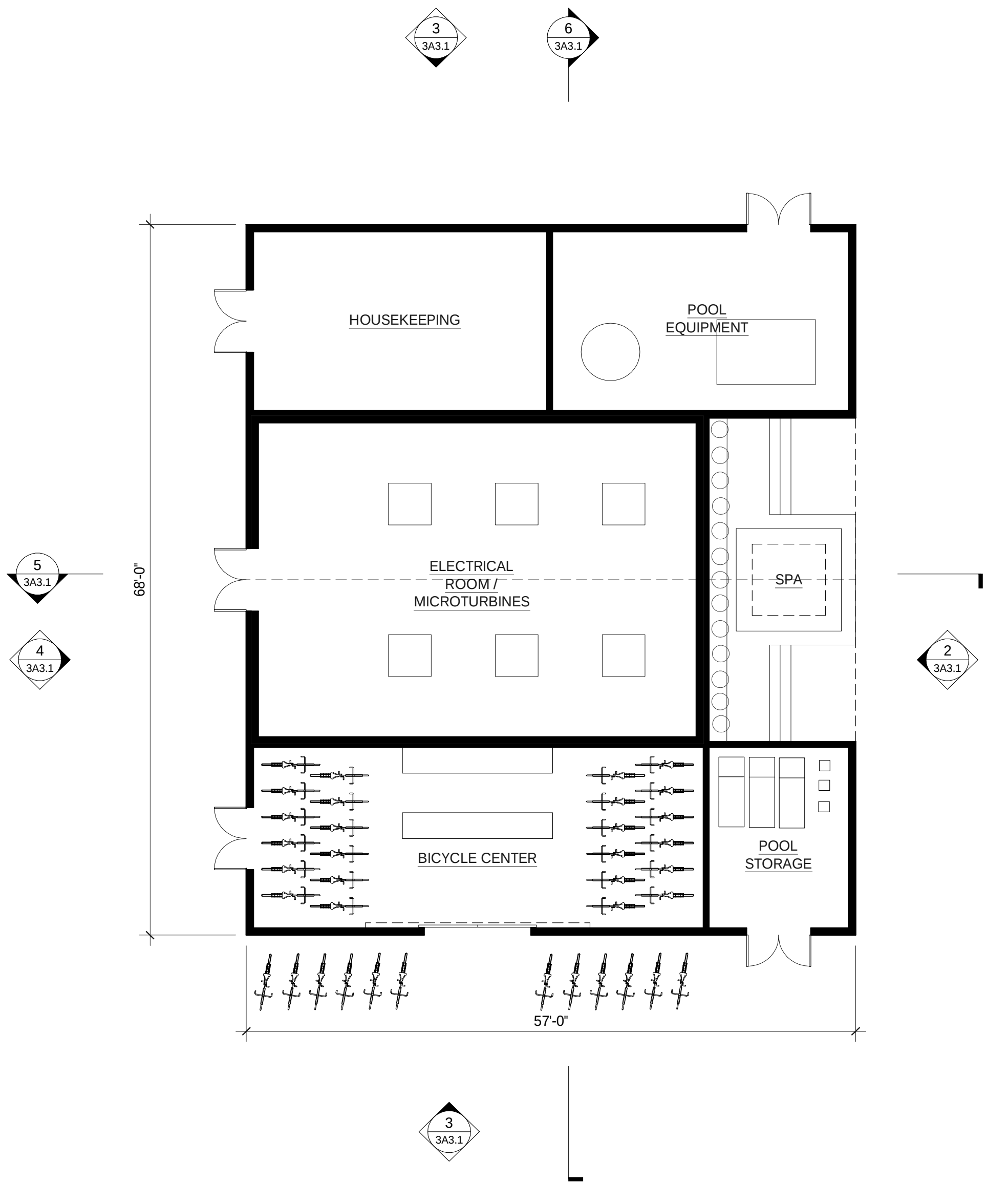
APPROVED BY:



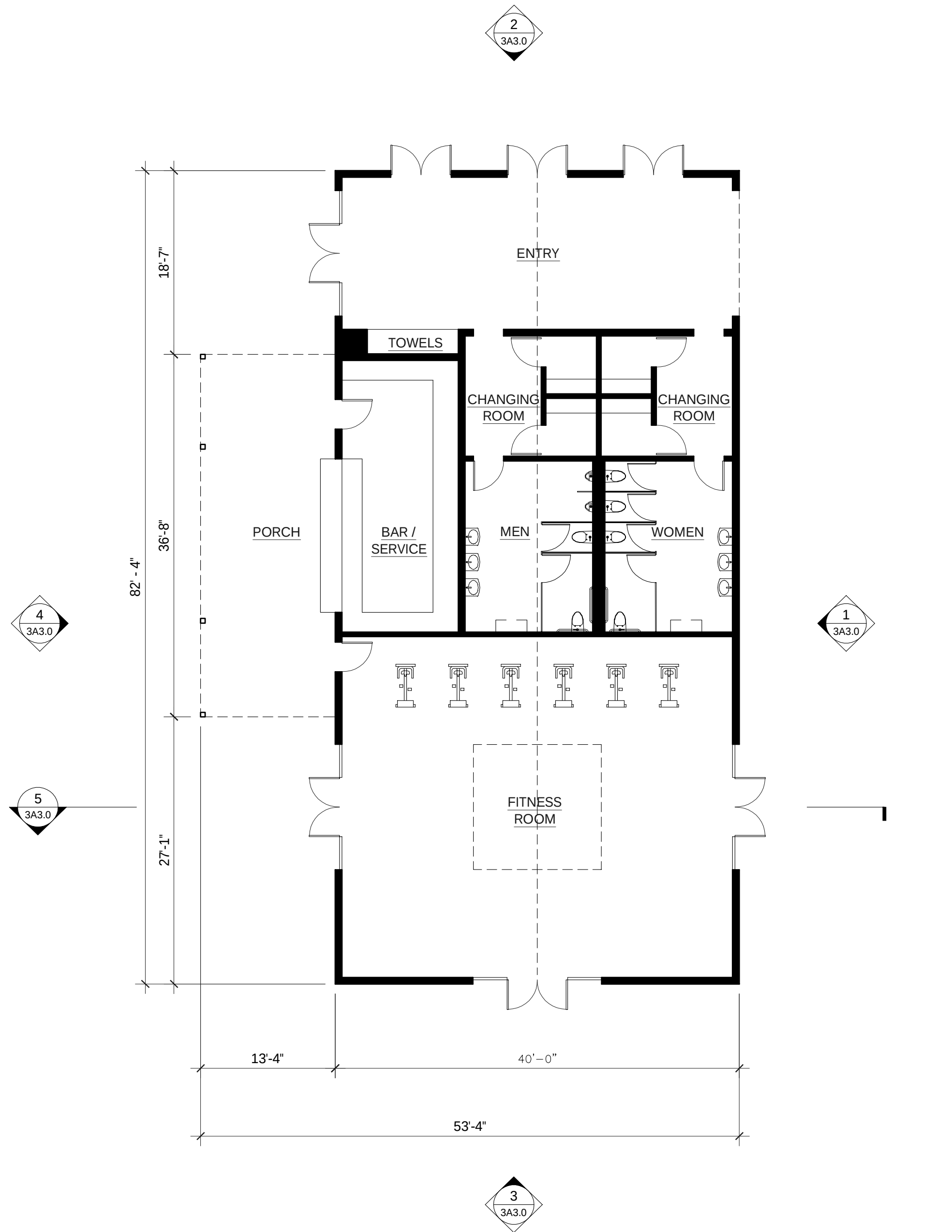
DRAWING TITLE:
FLOOR PLANS:
SPA, POOL & FITNESS,
UTILITY BLDG.

DATE:
5.6.2019
SCALE:
1/8" = 1'-0"
SHEET NO:

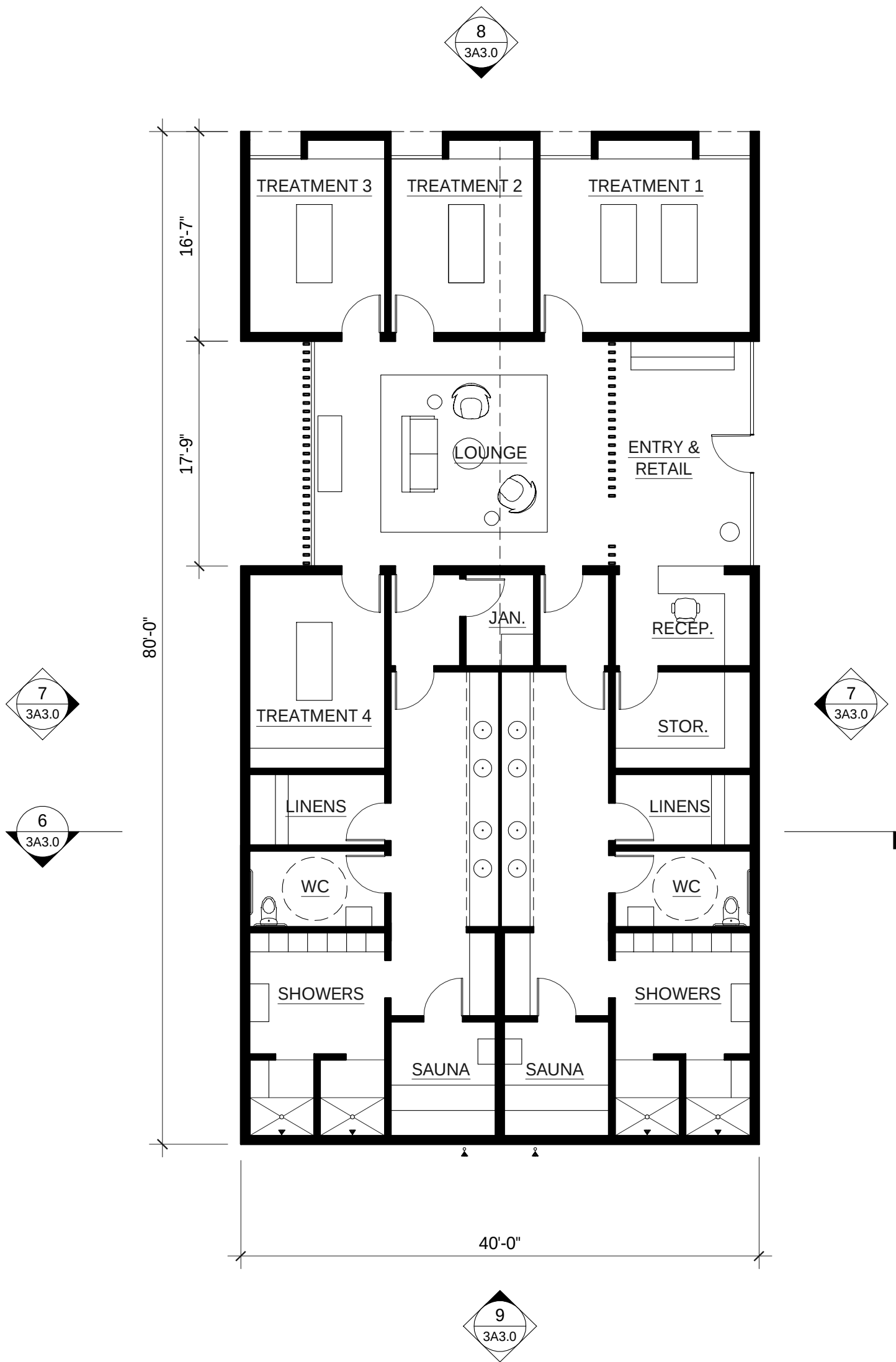
3A2.0



UTILITY BUILDING - FLOOR PLAN
1/8" = 1'-0" 3
3A2.0



POOL AND FITNESS BUILDING - FLOOR PLAN
1/8" = 1'-0" 2
3A2.0



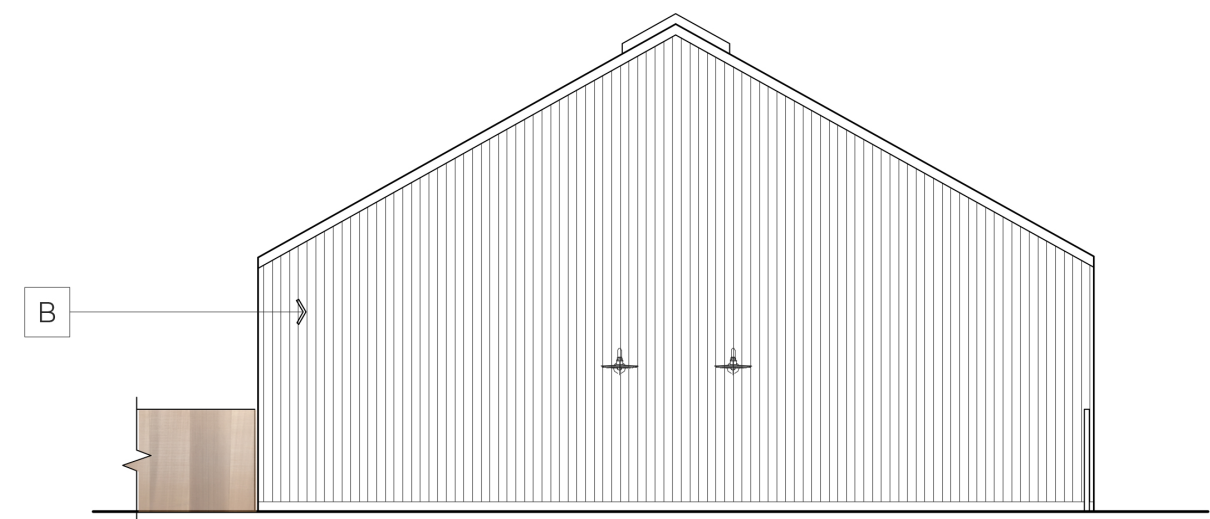
SPA BUILDING - FLOOR PLAN
1/8" = 1'-0" 1
3A2.0

- KEY NOTES
- A CORRUGATED METAL ROOF
 - B VERTICAL T&G WOOD SIDING, PAINTED
 - C CEDAR T&G SIDING, NATURAL
 - D ULTREX CLAD WINDOW
 - E CORRUGATED GLASS PANEL
 - F POST & BEAM FRAMING
 - G ALUMINUM CLAD DOOR
 - H SKYLIGHT

TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

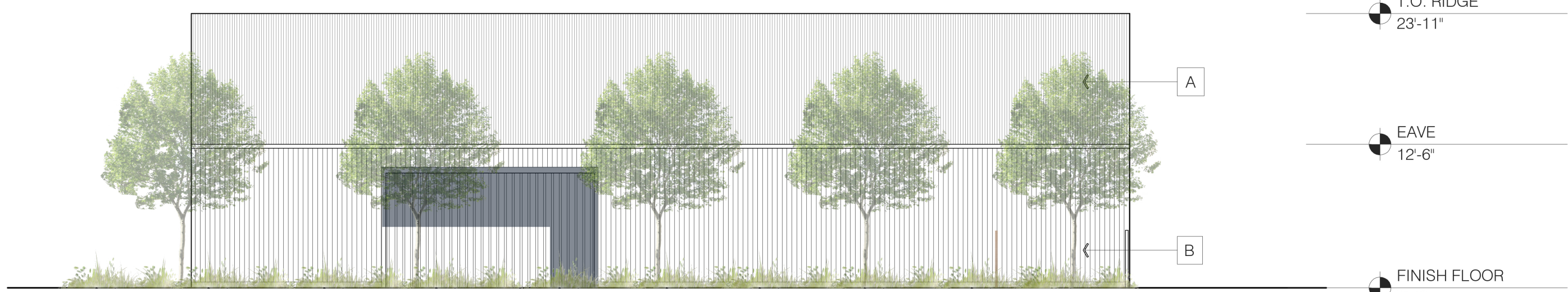
1660 BUSH STREET, STE 200
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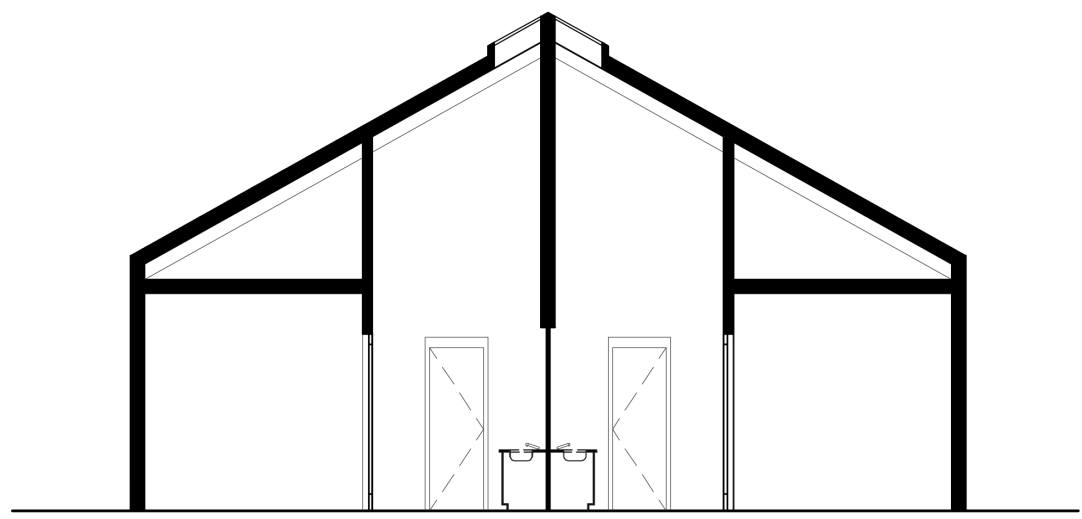
SPA BUILDING - SOUTH ELEVATION
1/8" = 1'-0" 9 3A3.0



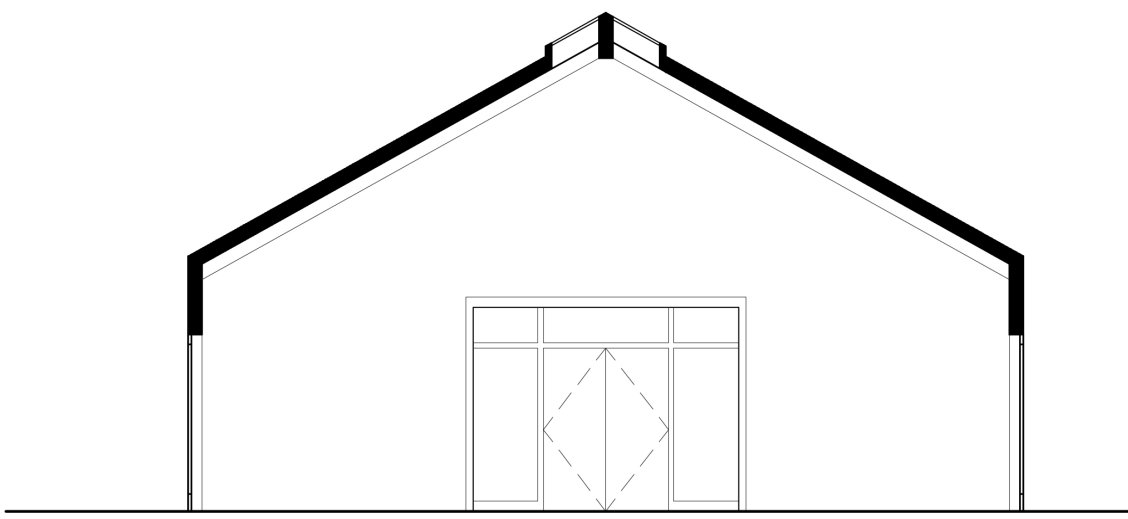
SPA BUILDING - NORTH ELEVATION
1/8" = 1'-0" 8 3A3.0



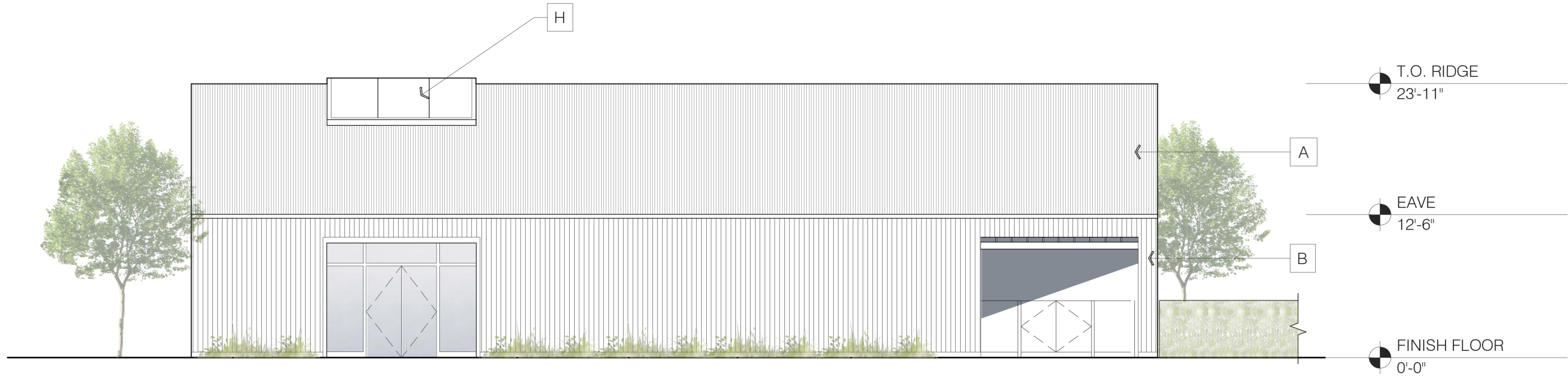
SPA BUILDING - EAST & WEST ELEVATION
1/8" = 1'-0" 7 3A3.0



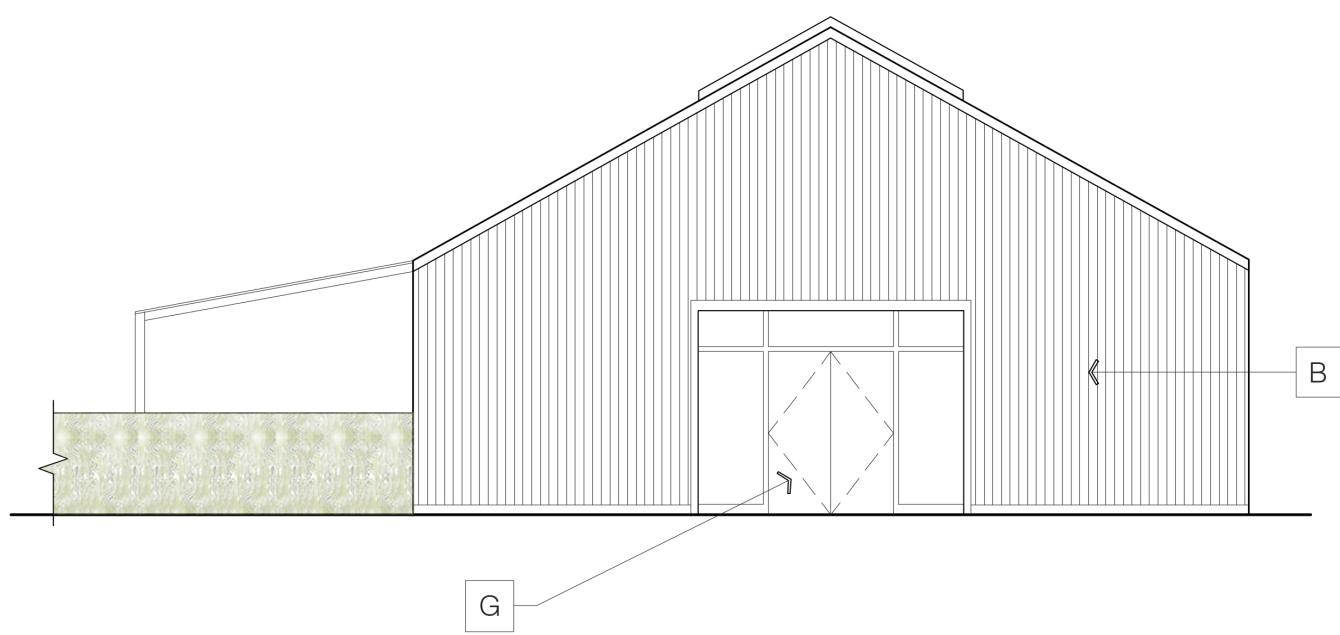
SPA BUILDING - CROSS SECTION
1/8" = 1'-0" 6 3A3.0



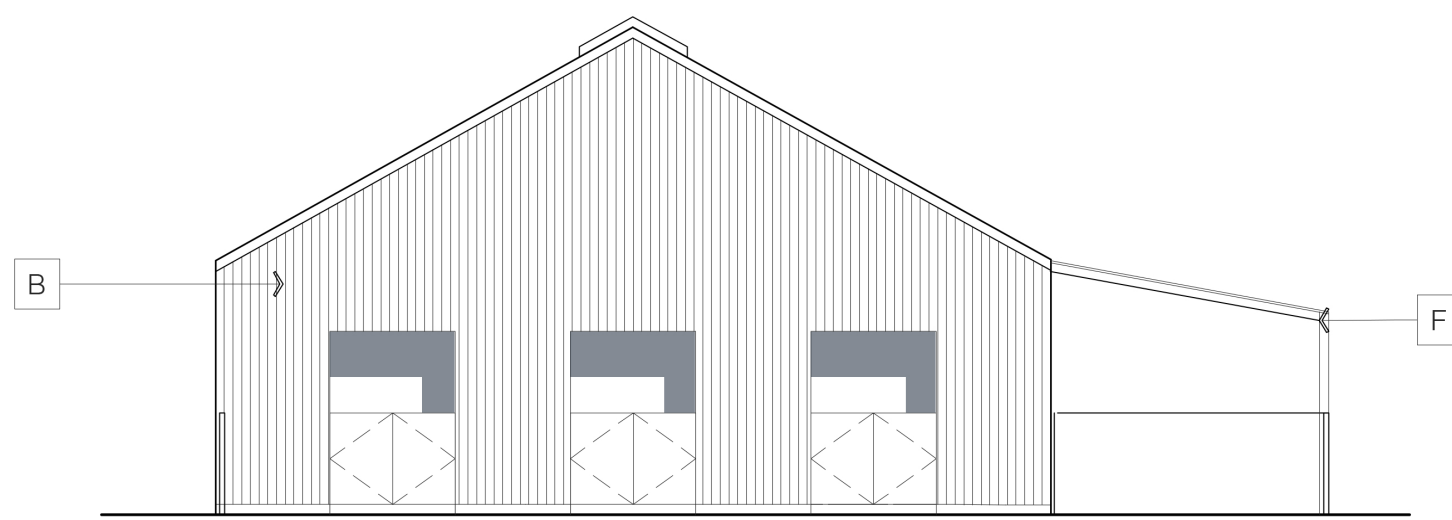
POOL AND FITNESS BUILDING - CROSS SECTION
1/8" = 1'-0" 5 3A3.0



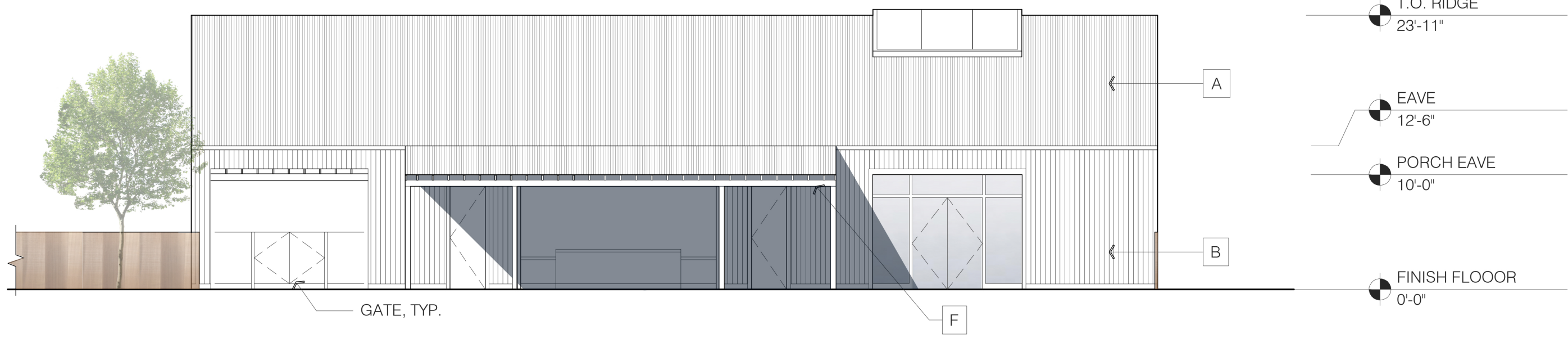
POOL AND FITNESS BUILDING - EAST ELEVATION
1/8" = 1'-0" 4 3A3.0



POOL AND FITNESS BUILDING - SOUTH ELEVATION
1/8" = 1'-0" 3 3A3.0



POOL AND FITNESS BUILDING - NORTH ELEVATION
1/8" = 1'-0" 2 3A3.0



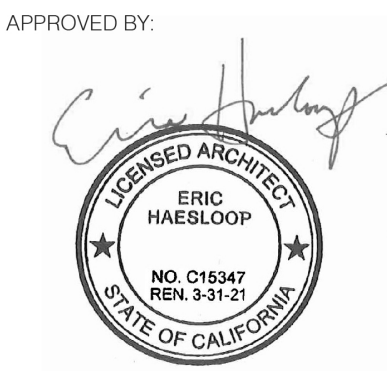
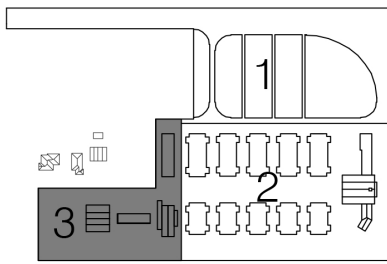
POOL AND FITNESS BUILDING - WEST ELEVATION
1/8" = 1'-0" 1 3A3.0

FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS:

5.6.2019 PLANNING SUBMITTAL



DRAWING TITLE:
ELEVATIONS &
SECTIONS: SPA,
POOL & FITNESS

DATE:
5.6.2019

SCALE:
1/8" = 1'-0"

SHEET NO:
3A3.0

TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

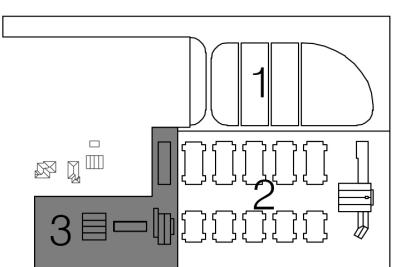
1660 BUSH STREET, STE 200
SAN FRANCISCO, CA 94109
P. 415-441-2300
WWW.TGHARCHITECTS.COM

FARMSTEAD AT
LONG MEADOW
RANCH
LODGING

1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS

5.6.2019 PLANNING SUBMITTAL



APPROVED BY:



DRAWING TITLE:

ELEVATIONS &
SECTIONS
UTILITY BUILDING

DATE:

5.6.2019

SCALE:

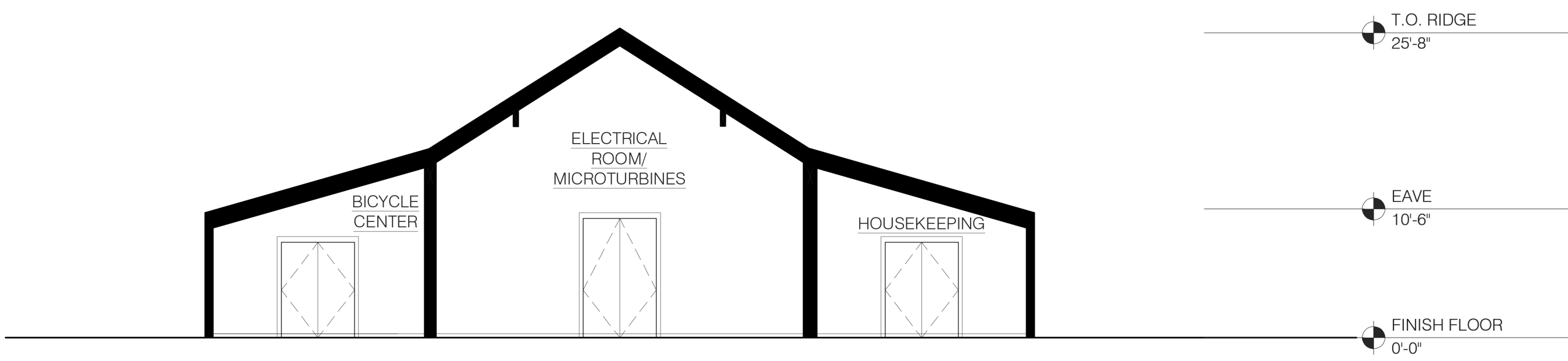
1/8" = 1'-0"

SHEET NO:

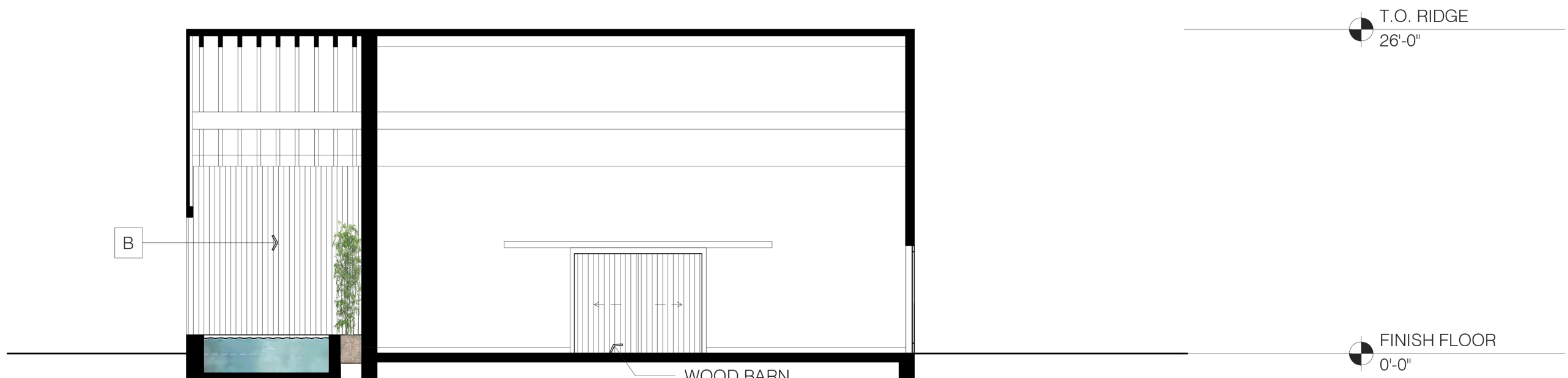
3A3.1

KEY NOTES

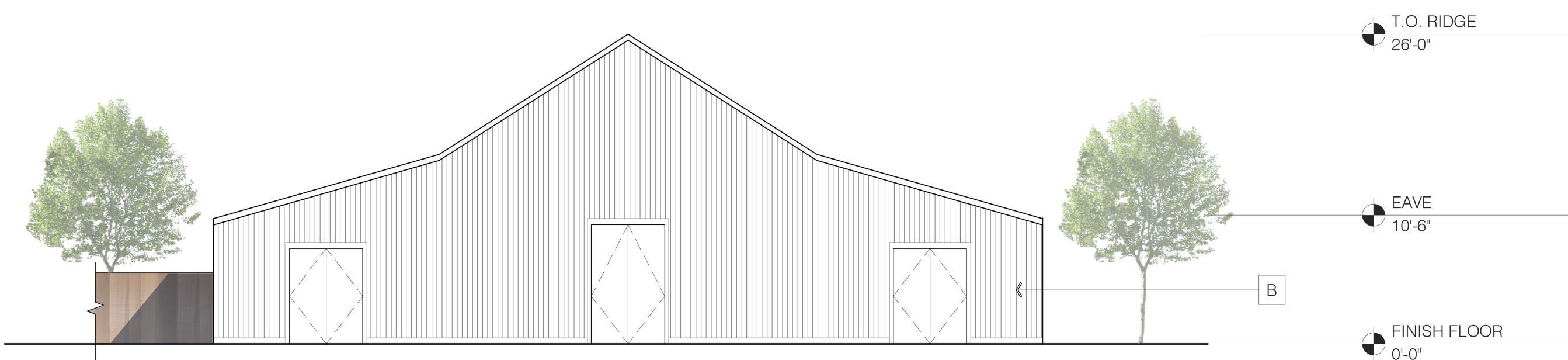
- A CORRUGATED METAL ROOF
- B VERTICAL T&G WOOD SIDING, PAINTED
- C CEDAR T&G SIDING, NATURAL
- D ULTREX CLAD WINDOW
- E CORRUGATED GLASS PANEL
- F POST & BEAM FRAMING
- G ALUMINUM CLAD DOOR
- H SKYLIGHT



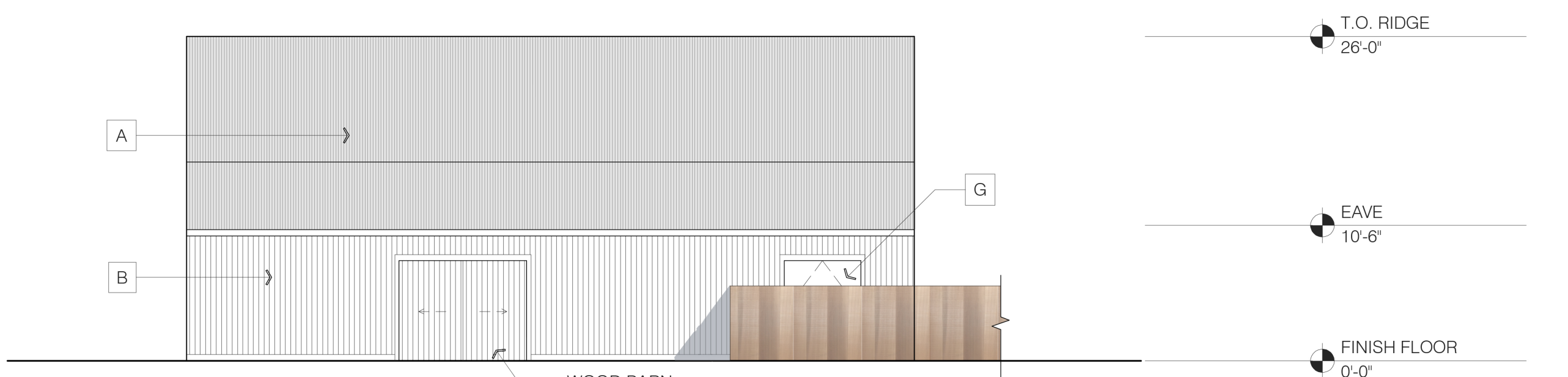
UTILITY BUILDING - TRANSVERSE SECTION
1/8" = 1'-0" 6 3A3.1



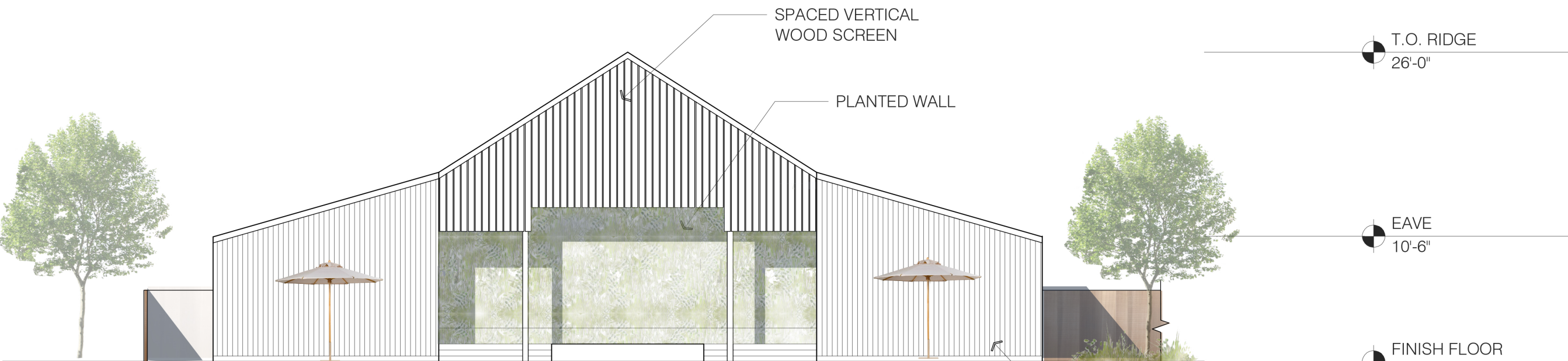
UTILITY BUILDING - LONGITUDINAL SECTION
1/8" = 1'-0" 5 3A3.1



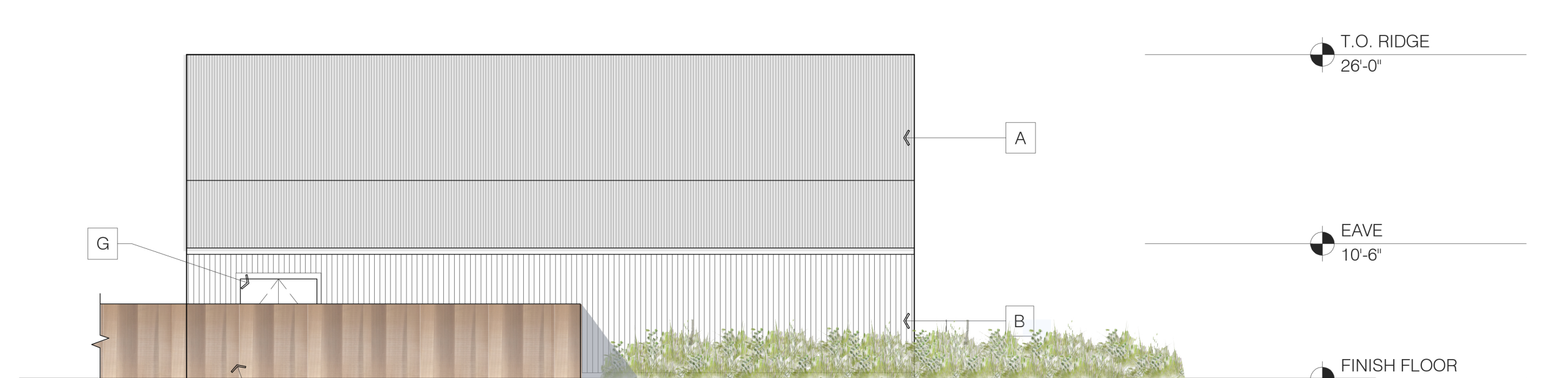
UTILITY BUILDING - WEST ELEVATION
1/8" = 1'-0" 4 3A3.1



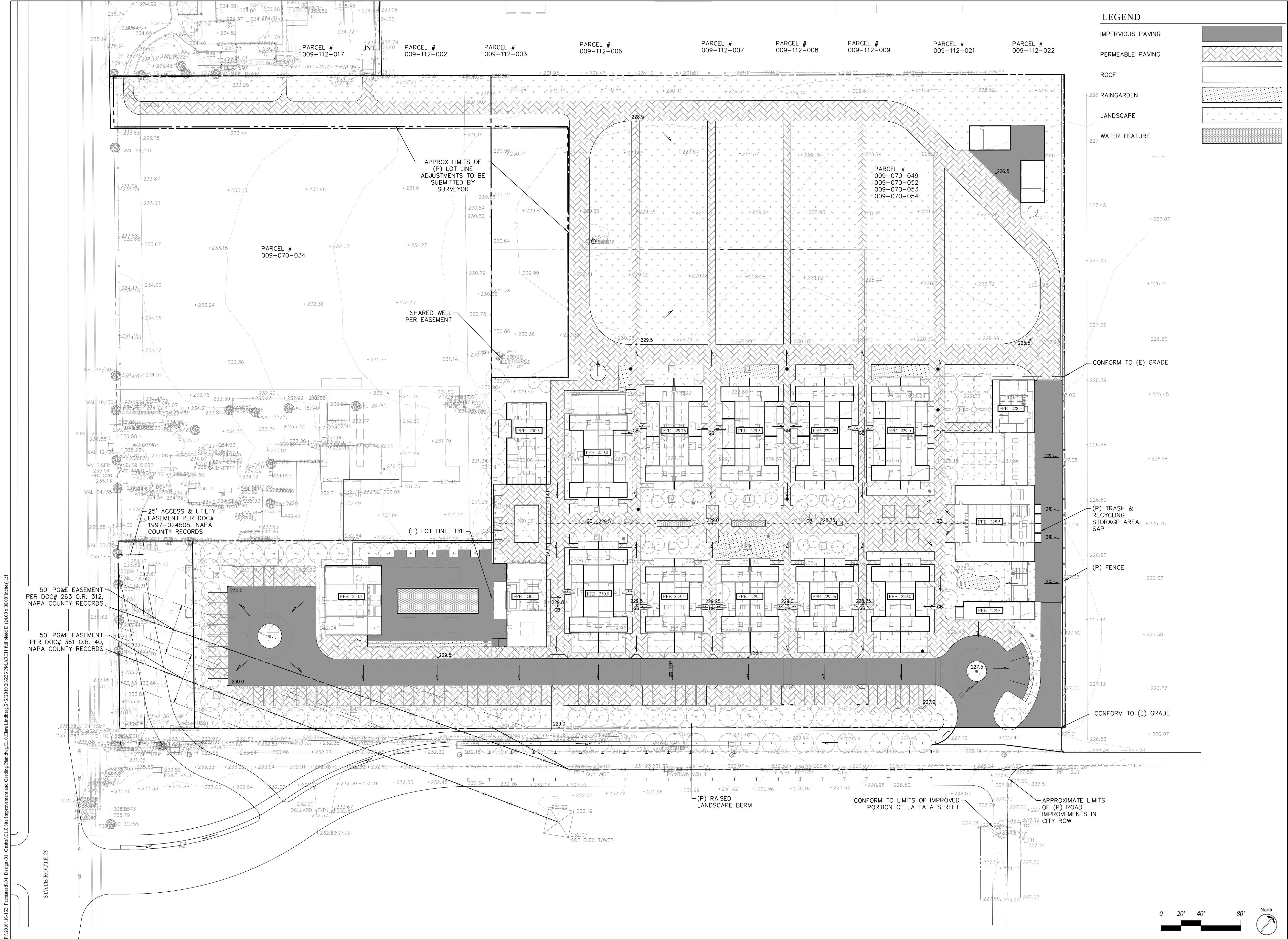
UTILITY BUILDING - SOUTH ELEVATION
1/8" = 1'-0" 3 3A3.1



UTILITY BUILDING - EAST ELEVATION
1/8" = 1'-0" 2 3A3.1



UTILITY BUILDING - NORTH ELEVATION
1/8" = 1'-0" 1 3A3.1





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FARMSTEAD
AT LONG MEADOW RANCH LODGING
1000 MILLS LANE
ST. HELENA, CA 94574

SCALE: 1" = 40'

REVISIONS		
NO	DATE	ISSUE
1	05-01-2017	USE PERMIT AMENDMENT APPLICATION
2	10-23-2017	RESUBMITTAL
3	05-06-2019	USE PERMIT APPLICATION

DRAWING TITLE:
GRADING & SITE IMPROVEMENT PLAN

PROJECT #: 16-163

DATE: 05/06/19

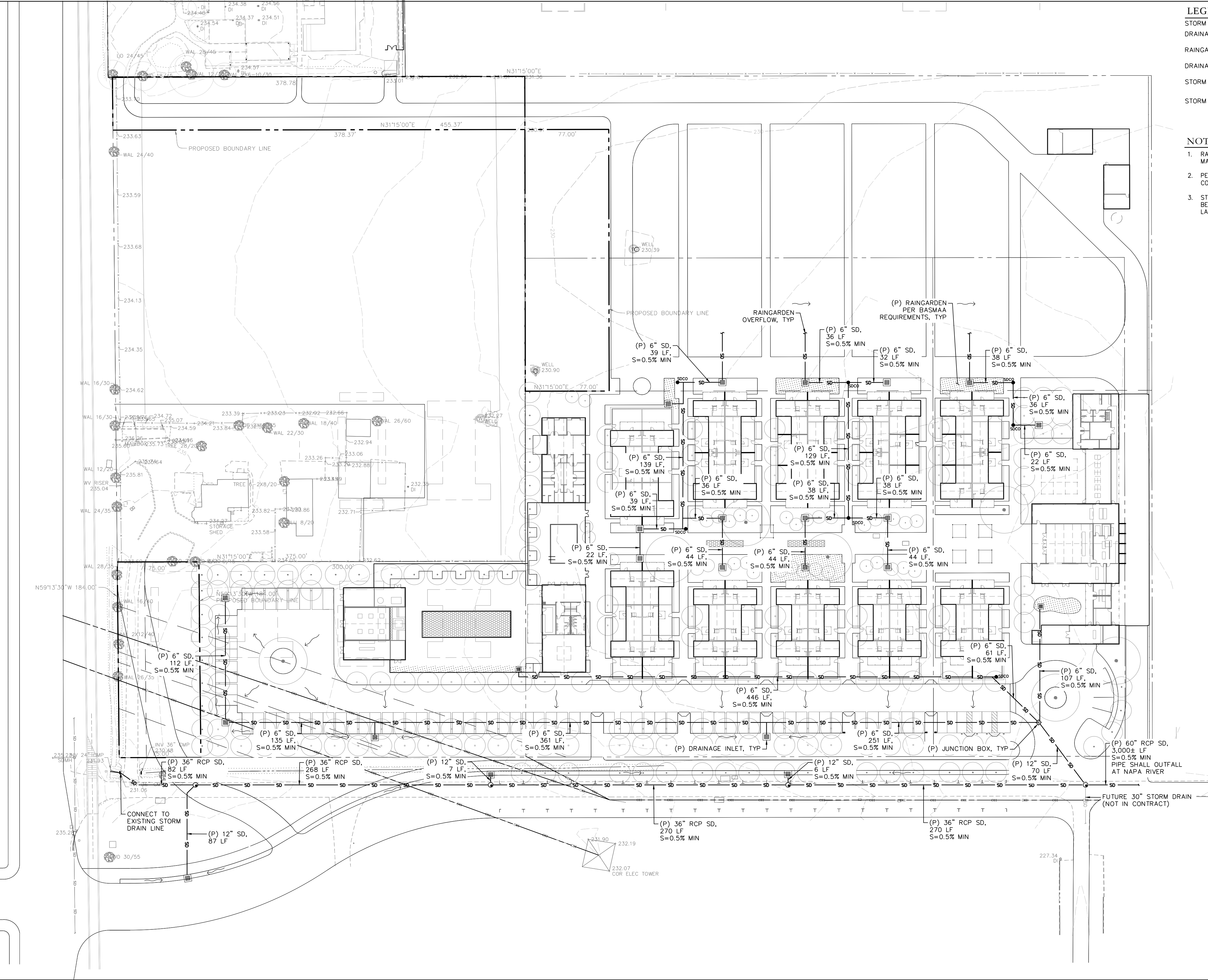
DWN BY: CL

DGN BY: EL

CHKD BY: CA

DRAWING NO:
C1.0

P:\2015\15-163_Farmstead\04_Design\02_C2.0_Drainage\Plan\dwg\02_C2.0_Drainage_Plan.dwg, 6/20/15 2:28:58 PM, AUCT full based D (2400 x 3600) inches, 1:1



LEGEND

STORM DRAIN LINE
DRAINAGE DIRECTION

RAIN GARDEN

DRAINAGE INLET

STORM DRAIN MANHOLE

STORM DRAIN CLEANOUT

- NOTES**
1. RAIN GARDEN AREA DETERMINED BY IMPERVIOUS AREA MANAGED X 0.04 PER BASMAA REQUIREMENTS.
 2. PERMEABLE PAVING TO HAVE UNDERDRAINS WHICH WILL CONNECT TO (P) STORM DRAIN LINE.
 3. STORM WATER NOT INFILTRATED IN PERMEABLE PAVING WILL BE COLLECTED IN STORM DRAIN INLETS AND DRAIN TOWARDS LASATA STREET CONNECTION.



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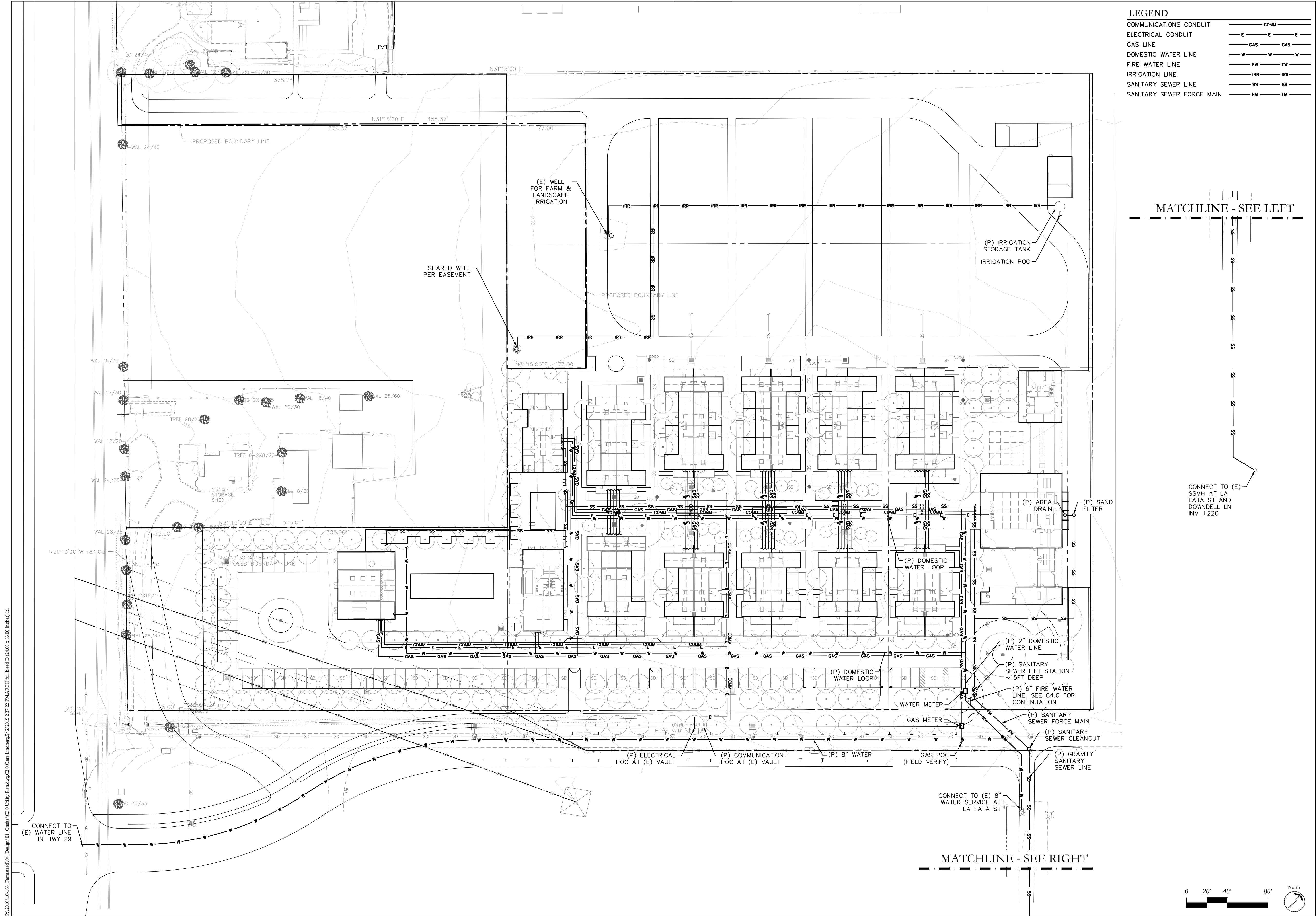
FARMSTEAD
AT LONG MEADOW RANCH LODGING
1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS		
NO	DATE	ISSUE
-	09-14-2016	USE PERMIT AMENDMENT APPLICATION
1	05-01-2017	RESUBMITTAL
2	10-23-2017	RESUBMITTAL
3	05-06-2019	USE PERMIT APPLICATION

DRAWING TITLE:
DRAINAGE PLAN

PROJECT #: 16-163
DATE: 05/06/19
DWN BY: CL
DGN BY: EL
CHKD BY: CA

DRAWING NO:
C2.0



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FARMSTEAD
AT LONG MEADOW RANCH LODGING
1000 MILLS LANE
ST. HELENA, CA 94574

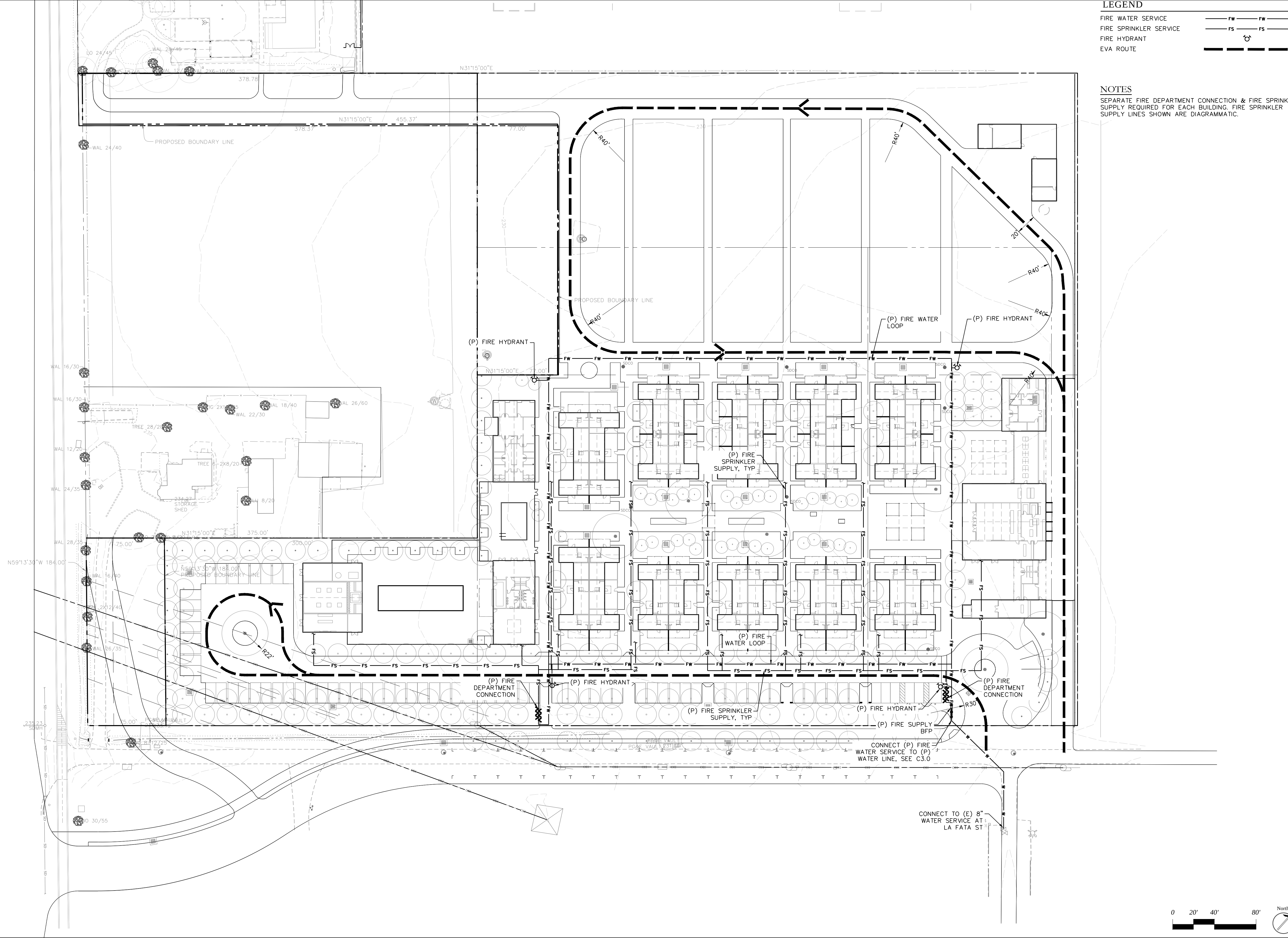
REVISIONS		
NO	DATE	ISSUE
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1	05-01-2017	RESUBMITTAL
2	10-23-2017	RESUBMITTAL
3	05-06-2019	USE PERMIT APPLICATION

UTILITY PLAN

PROJECT #: 16-163
DATE: 05/06/19
DWN BY: CL
DGN BY: EL
CHKD BY: CA

DRAWING NO:
C3.0

P:\2015\15-163_Farmstead.dwg, Design: C3.0 Utility Planning, 2/16/2016 2:57:52 PM, ANCH (all lines) (2,000 x 3600) inches, 1:1



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FARMSTEAD
AT LONG MEADOW RANCH LODGING
1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS		
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1	09-14-2016	USE PERMIT AMENDMENT APPLICATION
2	05-01-2017	RESUBMITTAL
3	10-23-2017	RESUBMITTAL
4	05-06-2019	USE PERMIT APPLICATION

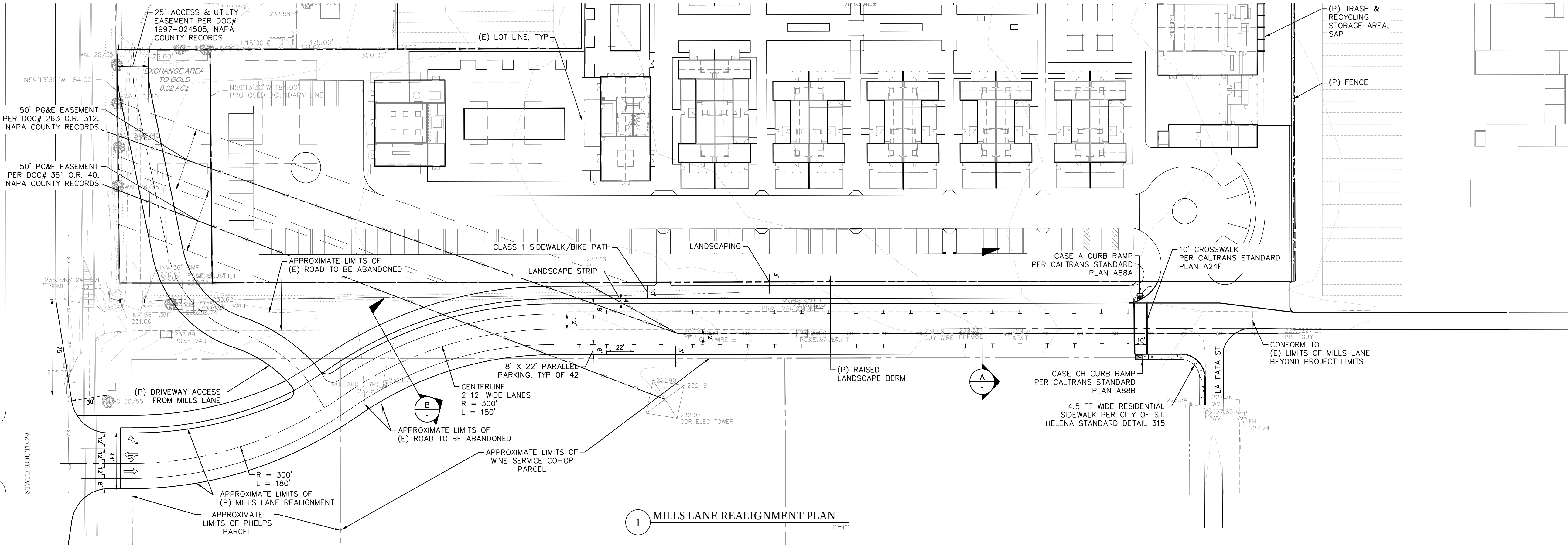
FIRE SERVICE PLAN

PROJECT #: 16-163
DATE: 05/06/19
DWN BY: CL
DGN BY: EL
CHKD BY: CA

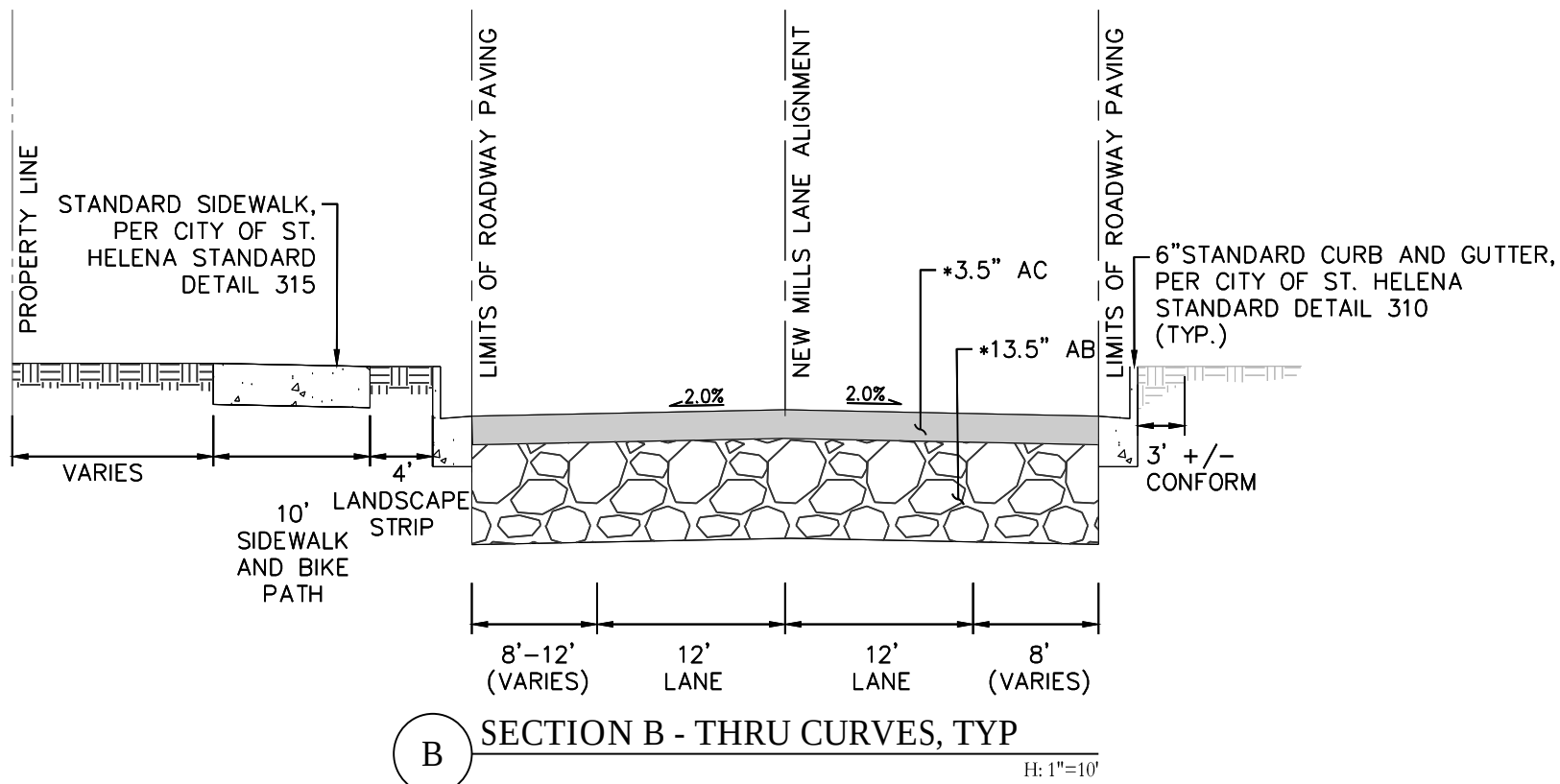
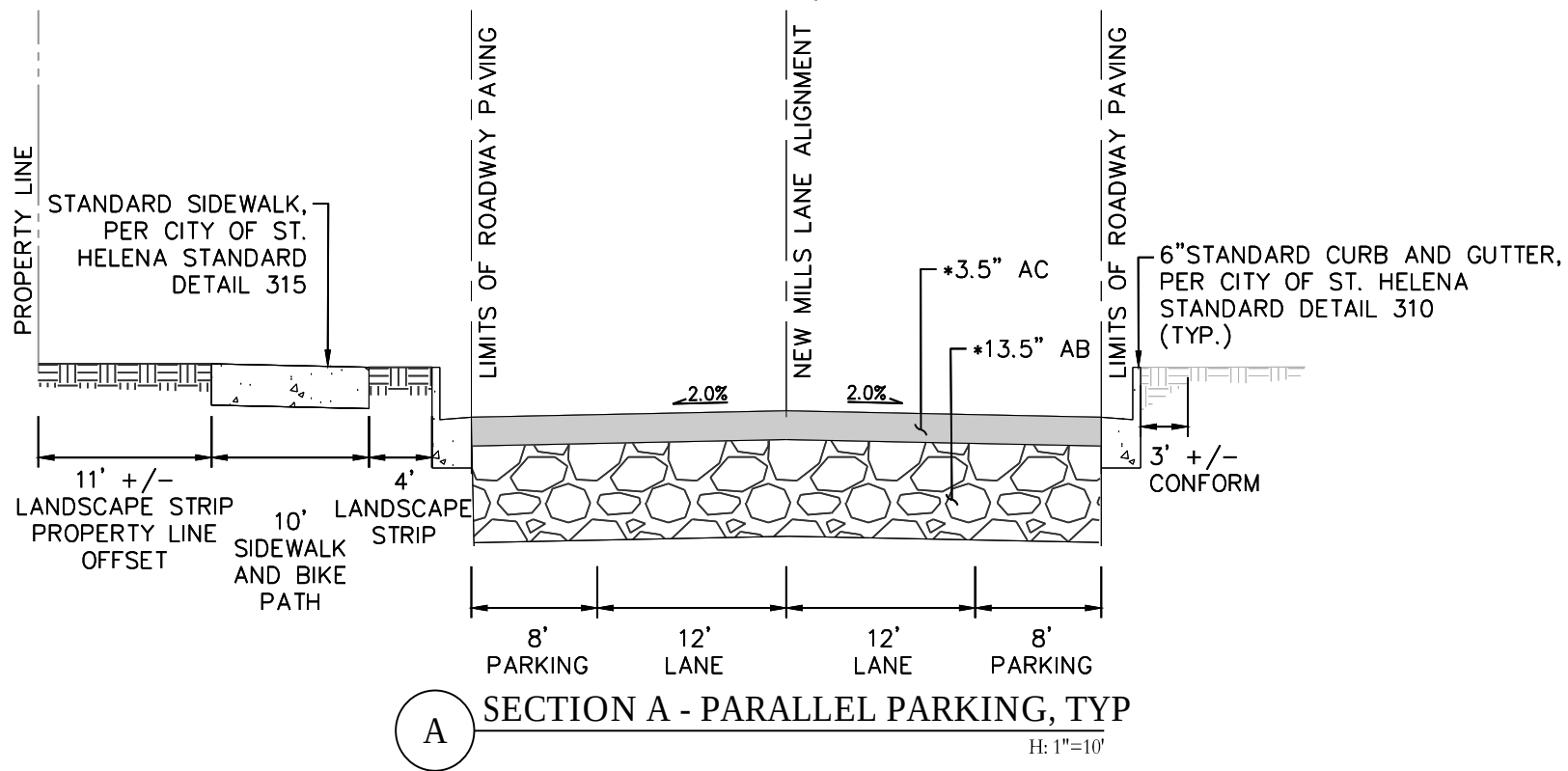
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NOTES

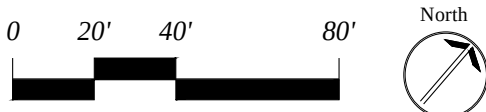
1. IMPROVEMENT WITHIN CITY ROW TO INCLUDE CLASS 1 SIDEWALK/BIKE PATH, PLANTER STRIP, PARALLEL PARKING, AND TWO-WAY ROAD IMPROVEMENTS AS INDICATED ON PLANS.
2. DRAINAGE AND UTILITY MODIFICATIONS AND IMPROVEMENTS WILL BE COORDINATED WITH THE CITY OF ST HELENA AND INCLUDED IN DETAILED CONSTRUCTION DOCUMENTS.



1 MILLS LANE REALIGNMENT PLAN
1"=40'



* FINAL STREET PAVEMENT SECTION TO BE COORDINATED WITH CITY OF ST. HELENA



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1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS		
NO	DATE	ISSUE
1	05-01-2017	USE PERMIT AMENDMENT APPLICATION
2	10-23-2017	RESUBMITTAL
3	05-06-2019	USE PERMIT APPLICATION

DRAWING TITLE:
**MILLS LANE
REALIGNMENT
PLAN**

PROJECT #: 16-163
DATE: 05/06/19
DWN BY: CL
DGN BY: EL
CHKD BY: CA

DRAWING NO:
C5.0

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LEGEND

PERVIOUS PAVING	
CONCRETE PAVING	
4 INCH WHITE STRIPE	
STREETLIGHT	
BUS STOP	

NOTES:

1. ASSUME ENTIRE PARKING LOT IS PERVIOUS MATERIAL. THEREFORE STORMWATER TREATMENT MEASURES WILL NOT BE IMPLEMENTED.
2. ALL STRIPING SHALL BE COORDINATED WITH THE REQUIREMENTS OF THE PROPOSED PERVIOUS MATERIAL.
3. FINAL LIGHTING LOCATIONS AND NUMBERS SHALL BE COORDINATED IN THE FINAL PARKING LOT DESIGN.

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FARMSTEAD
AT LONG MEADOW RANCH LODGING
1000 MILLS LANE
ST. HELENA, CA 94574

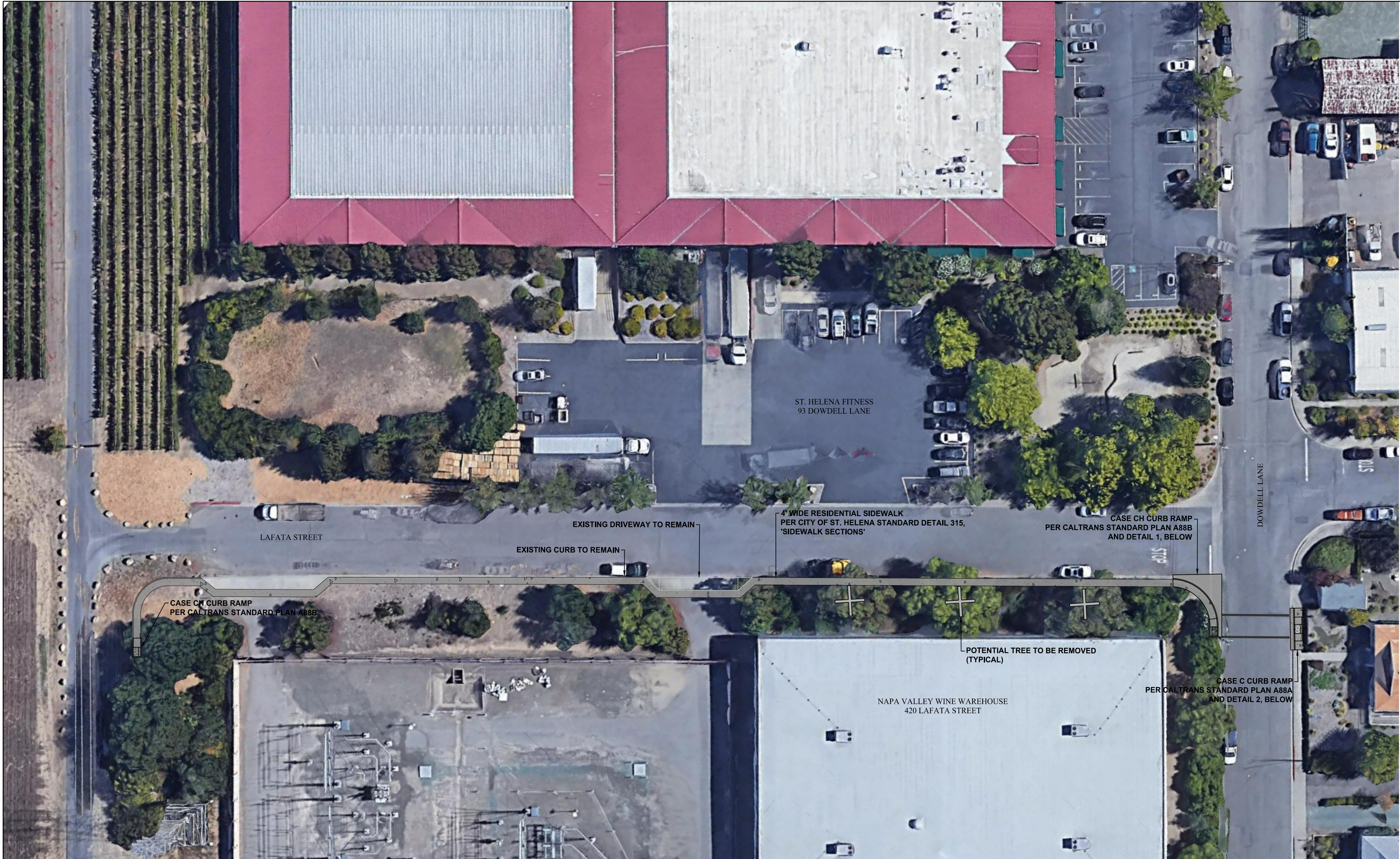
REVISIONS		
NO	DATE	ISSUE
-	05-14-2016	USE PERMIT AMENDMENT APPLICATION
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2	10-23-2017	RESUBMITTAL
3	05-06-2019	USE PERMIT APPLICATION

EMPLOYEE
PARKING LOT
SITE PLAN

PROJECT #: 16-163
DATE: 05/06/19
DWN BY: CL
DGN BY: EL
CHKD BY: CA

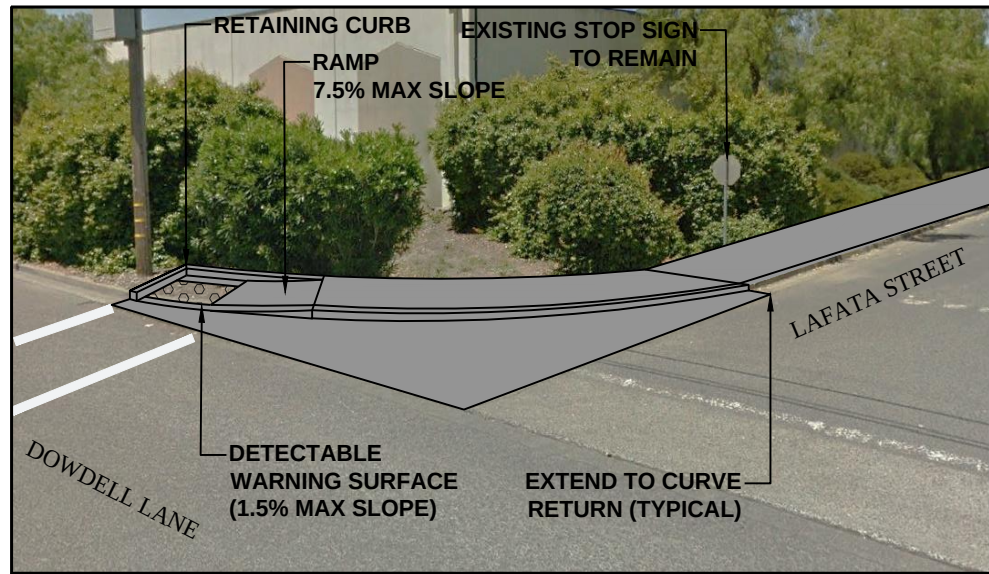
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C6.0

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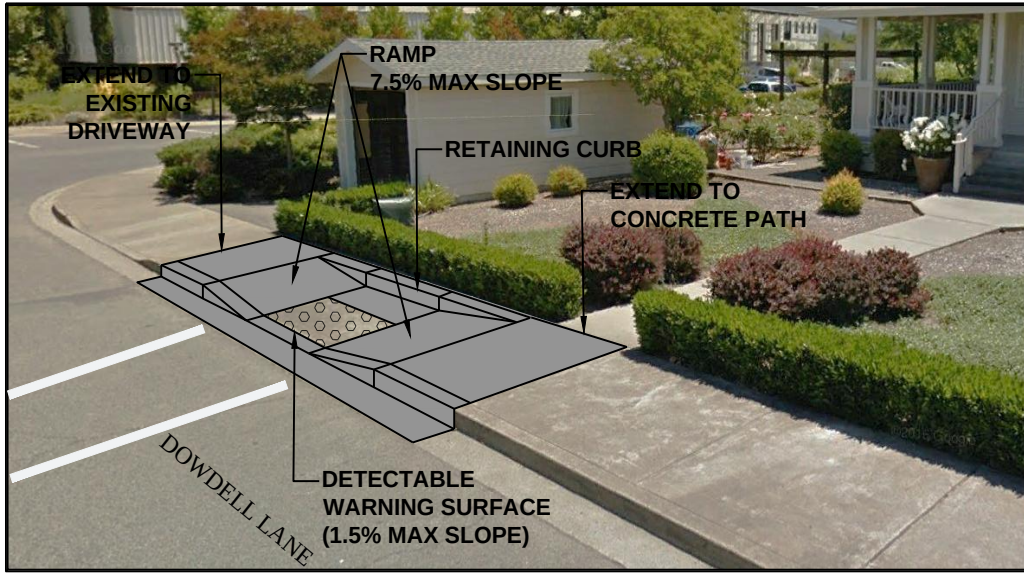


LEGEND

- CONCRETE SIDEWALK
- CONCRETE PAVING
- 12" CROSSWALK
- TREE REMOVAL



DETAIL 1 - SOUTHEAST CORNER
NO SCALE



DETAIL 2 - SOUTHEAST CORNER (DOWDELL LANE)
NO SCALE



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FARMSTEAD
AT LONG MEADOW RANCH LODGING
1000 MILLS LANE
ST. HELENA, CA 94574

REVISIONS		
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-	05-14-2016	USE PERMIT AMENDMENT APPLICATION
1	05-01-2017	RESUBMITTAL
2	10-23-2017	RESUBMITTAL
3	05-06-2019	USE PERMIT APPLICATION

DRAWING TITLE:
LAFATA SIDEWALK
SITE PLAN

PROJECT #: 16-163
DATE: 05/06/19
DWN BY: CL
DGN BY: EL
CHKD BY: CA
DRAWING NO:

C7.0

EXISTING VEGETATION

 Non-native grasses and forbs

 Non-native grasses and annual vegetables

FARMSTEAD AT
LONG MEADOW
RANCH
LODGING - USE
PERMIT

738 MAIN STREET
ST. HELENA, CA 94574



DRAWING TITLE:

Existing Vegetation

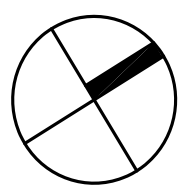
DATE:

05.06.2019

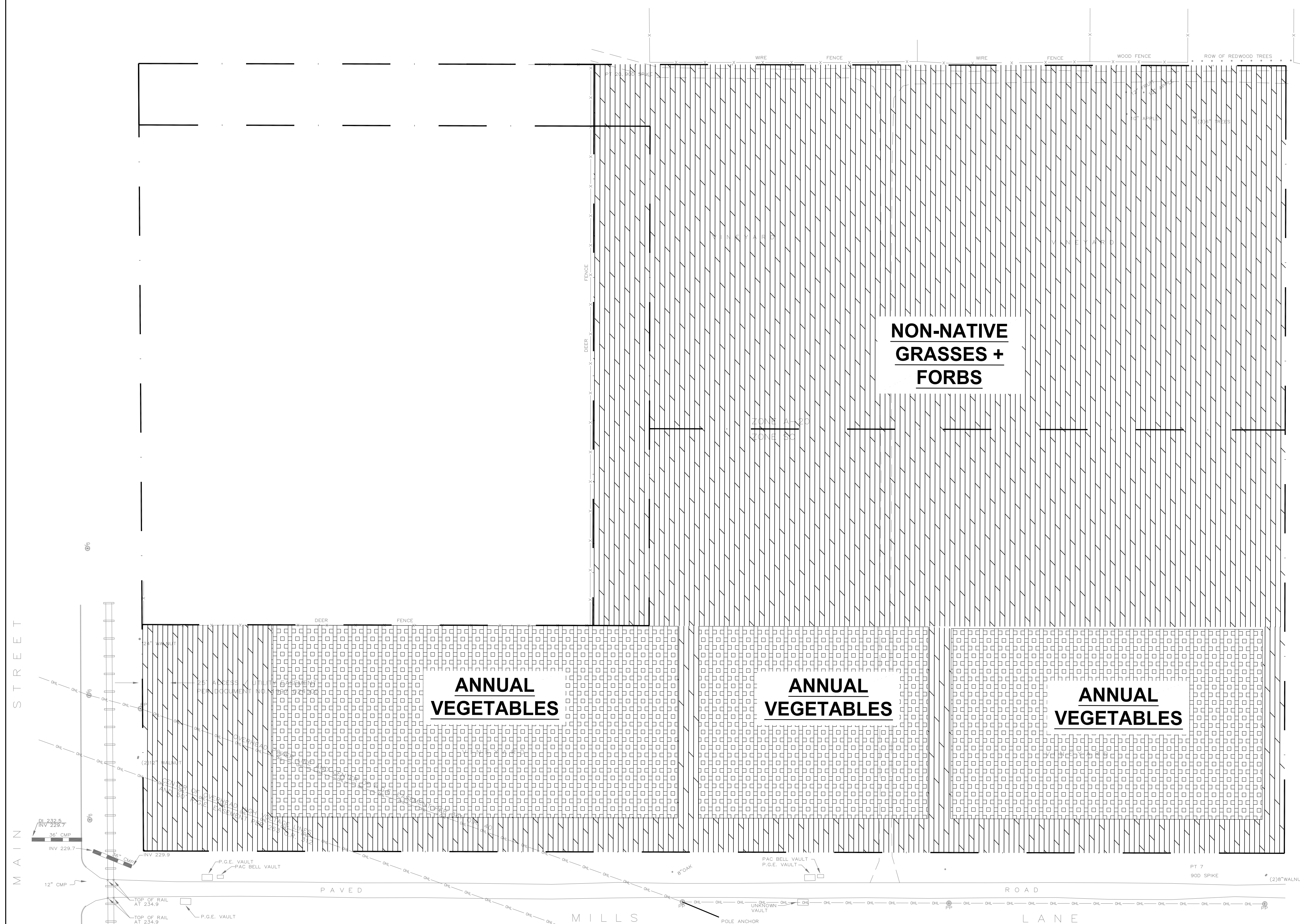
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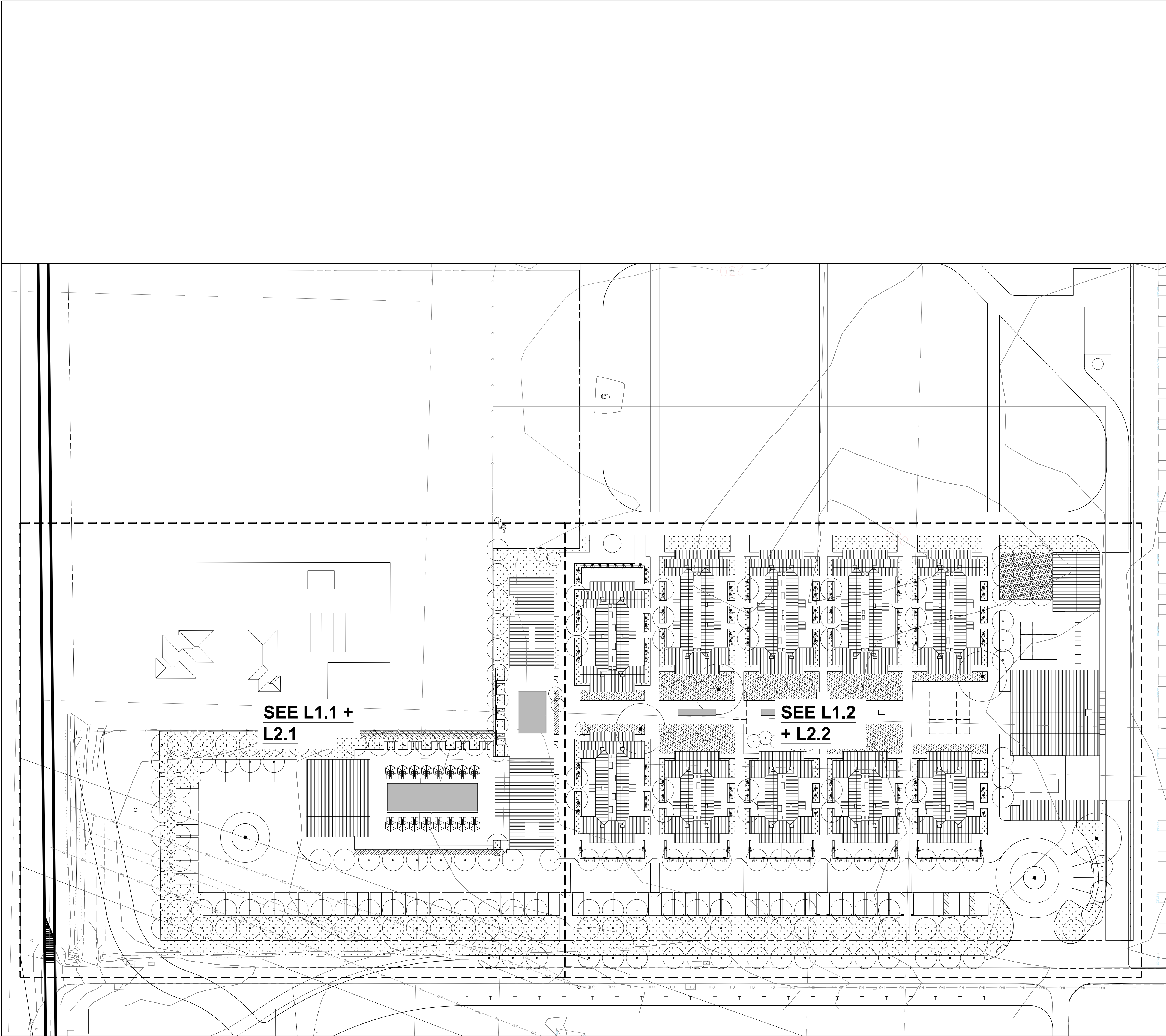
$$1'' = 40' - 0''$$

SHEET NO:
L0.0



NOT FOR CONSTRUCTION





MASTER PLANT LIST							
Symbol	Area	Plant Type and Botanical Name	Common Name	Qty	Size	Spacing	% Mix
OK		Orchard Trees <i>Diospyros kaki</i> 'Fuyu'	Fuyu Persimmon Tree	25	b + b	20' o.c.	
□		<i>Malus domestica</i>	Apple Tree	110	b + b	20' o.c.	
*		Evergreen Screening Trees <i>Schinus molle</i>	California Pepper Tree	56	36" box	20' o.c.	
●		Large Deciduous Tree <i>Quercus lobata</i>	Valley Oak Tree	7	48" box	see plan	
+		Evergreen Shrub <i>Osmantthus fragrans</i> 'Aureobaculus'	Sweet Olive	37	15 gal	96" o.c.	
OK		Vines <i>Clematis henryi</i>	Early Large-Flowered Clematis	15	5 gal	6' o.c.	
CC		<i>Clytostoma callistegiodes</i>	Lavendar Trumpet Vine	89	5 gal	20' o.c.	
PH		<i>Parthenocissus henryana</i>	Chinese Virginia Creeper	25	5 gal	20' o.c.	
788		Tall Narrow Screening Shrub <i>Teuocrium fruticosum</i>	Bush Germander	31	5 gal	60" o.c.	100
791		Medium Screening Shrub <i>Leucophyllum laurifolium</i> 'Lynno Legacy'	Lynno's Legacy Texas Sage	32	5 gal	60" o.c.	100
38150		Orchard Understory Mix <i>Achillea millefolium</i> <i>Carum spissum</i> <i>Oenothera biennis</i>	Yarrow San Diego Sedge Gaillardia	1998 5723 3391	1 gal 1 gal 1 gal	24" o.c. 24" o.c. 18" o.c.	20 60 20
13968		Low Ornamental Mix - Farm Character <i>Rosmarinus officinalis</i> <i>Stachys byzantina</i> 'Helen Von Stein' <i>Euphorbia characias</i> 'Wulfenii' <i>Lavandula sp.</i> <i>Salvia africana caerulea</i> <i>Salvia x jamensis</i> <i>Yucca filamentosa</i> 'Compacta' <i>Yucca filamentosa</i>	Rosemary Lamb's Ear Mediterranean Spurge Lavender Blue Sage Mexican Marigold Common Yucca	194 1746 194 194 437 437 194	1 gal 1 gal 1 gal 1 gal 1 gal 1 gal 1 gal	36" o.c. 12" o.c. 36" o.c. 36" o.c. 24" o.c. 24" o.c. 36" o.c.	12.5 12.5 12.5 12.5 12.5 12.5 12.5
10195		Low Ornamental Mix - Native Character <i>Arctostaphylos pacifica</i> 'Mist' <i>Ceanothus maritimus</i> 'Valley Violet' <i>Ribes viburnifolium</i> <i>Teuocrium charnoides</i> <i>Vigiera parvifolia</i>	Pacific Mist Manzanita Valley Violet Ceanothus Catalina Currant Germander Golden Eye	32 127 62 510 127	1 gal 1 gal 1 gal 1 gal 1 gal	96" o.c. 48" o.c. 60" o.c. 24" o.c. 48" o.c.	20 20 20 20 20
1982		Turf Type TBD					

General Notes:

1. I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan.
2. See Civil Design for Pervious Vs. Impervious materials.
3. See Civil Design for Stormwater management
4. See Planting Specs for mulch type and soil amendments
5. See Irrigation Design Plan (L2.1-L2.3) for Hydrozones
6. No areas are specifically dedicated to edible plants but fruit trees are used throughout the design.

NOT FOR CONSTRUCTION

TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

LUTSKO ASSOCIATES
landscape

3205 Mission Street
San Francisco, CA 94110
t: 415.302.2800

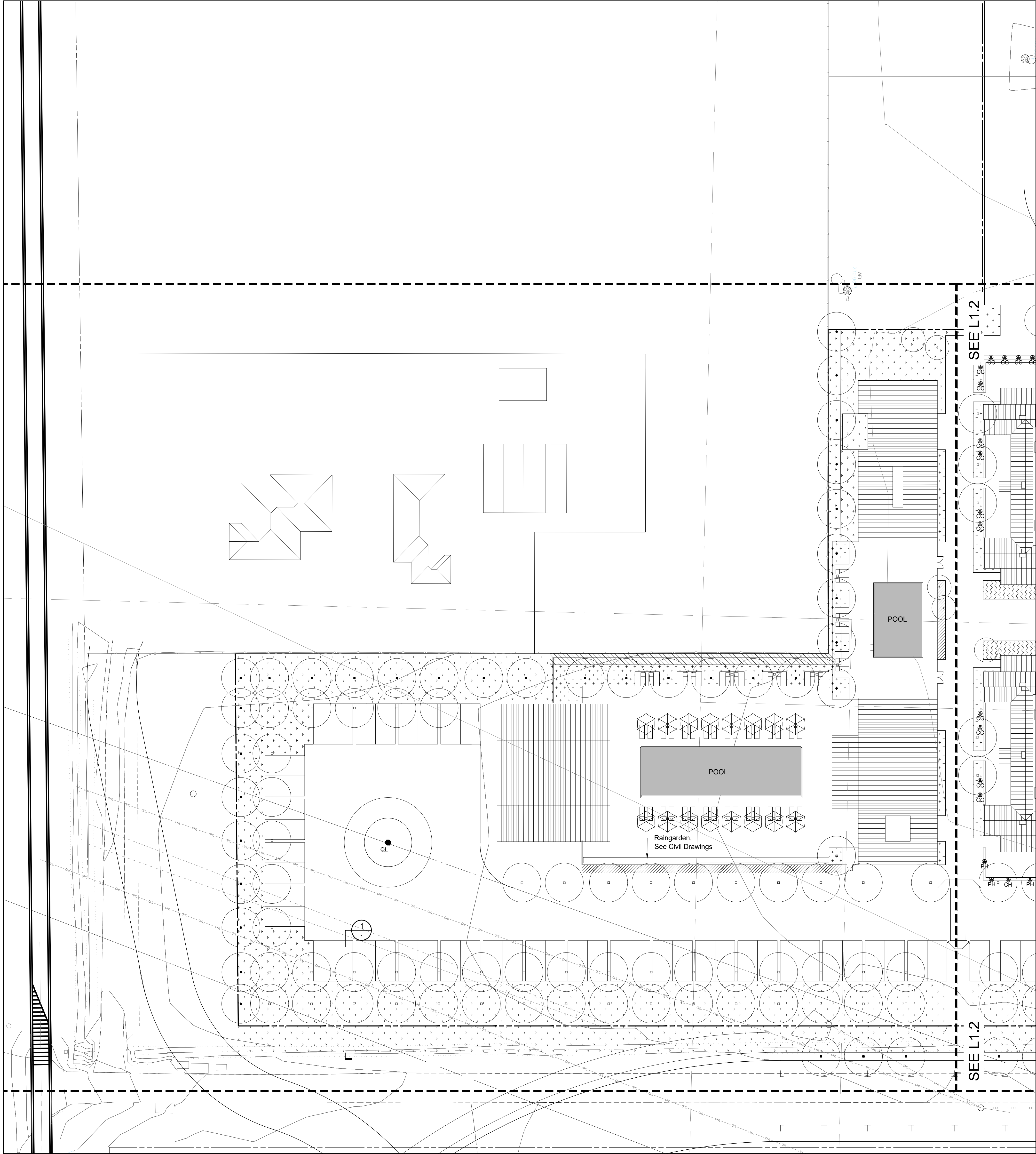
FARMSTEAD AT
LONG MEADOW
RANCH
LODGING - USE
PERMIT
1000 MILLS LANE
ST. HELENA, CA 94574

DRAWING TITLE:
Landscape Design Plan

DATE:
05.06.2019

SCALE:
1" = 40' - 0"

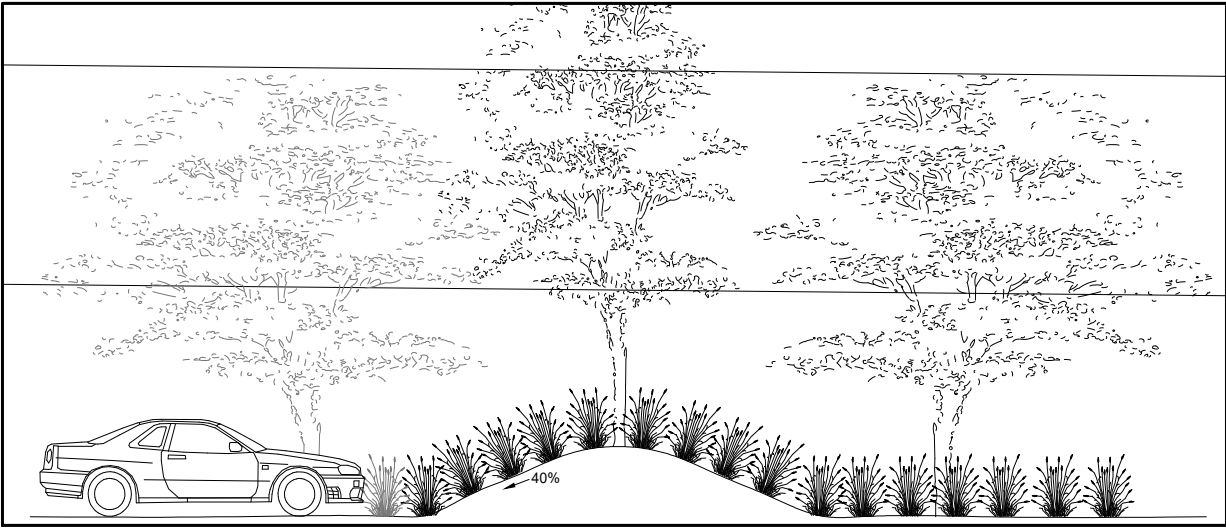
SHEET NO:
L1.0



PLANT LIST

Symbol	Area	Plant Type and Botanical Name	Common Name	Qty	Size	Spacing	% Mix
DK		Orchard Trees <i>Diospyros kaki</i> 'Fuyu'	Fuyu Persimmon Tree	b + b	20'	o.c.	
□		<i>Malus domestica</i>	Apple Tree	b + b	20'	o.c.	
•		Evergreen Screening Trees <i>Schinus molle</i>	California Pepper Tree	36" box	20'	o.c.	
●		Large Deciduous Tree <i>Quercus lobata</i>	Valley Oak Tree	48" box	see plan		
○		Evergreen Shrub <i>Osmundus fragrans</i> 'Aurantiacus'	Sweet Olive	15 gal	96" o.c.		
○		Vines <i>Clematis hentyi</i>	Early Large-Flowered Clematis	5 gal	6'	o.c.	
○		<i>Clytostoma callistegodes</i>	Lavender Trumpet Vine	5 gal	20'	o.c.	
○		<i>Parthenocissus hentyana</i>	Chinese Virginia Creeper	5 gal	20'	o.c.	
▨		Tall Narrow Screening Shrub <i>Teucrium radicans</i>	Bush Germander	5 gal	60" o.c.	100	
▨		Medium Screening Shrub <i>Leucophyllum tangierense</i> 'Lynne Legacy'	Lynne Legacy Texas Sage	5 gal	60" o.c.	100	
▨		Orchard Understory Mix <i>Achillea millefolium</i>	Yarrow	1 gal	24" o.c.	20	
▨		<i>Carex spicata</i>	San Diego Sedge	1 gal	24" o.c.	60	
▨		<i>Gaura lindheimeri</i>	Gaura	1 gal	18" o.c.	20	
▨		Low Ornamental Mix - Farm Character <i>Rosmarinus officinalis</i>	Rosemary	1 gal	36" o.c.	12.5	
▨		<i>Stachys byzantina</i> 'Helen Von Stein'	Lamb's Ear	1 gal	12" o.c.	12.5	
▨		<i>Euphorbia characias</i> 'volcani'	Mediterranean Spurge	1 gal	36" o.c.	12.5	
▨		<i>Levandula sp.</i>	Lavender	1 gal	36" o.c.	12.5	
▨		<i>Salvia africana</i> 'caerulea'	Blue Sage	1 gal	24" o.c.	12.5	
▨		<i>Salvia x jamensis</i>	Salvia	1 gal	36" o.c.	12.5	
▨		<i>Tagetes lemmonii</i> 'Compacta'	Mexican Marigold	1 gal	24" o.c.	12.5	
▨		<i>Yucca filamentosa</i>	Common Yucca	1 gal	36" o.c.	12.5	
▨		Low Ornamental Mix - Native Character <i>Arctostaphylos Pacifica</i> 'Red'	Pacific Mist Manzanita	1 gal	96" o.c.	20	
▨		<i>Ceanothus maritimus</i> 'Valley Violet'	Valley Violet Ceanothus	1 gal	48" o.c.	20	
▨		<i>Ribes viburnifolium</i>	Catalina Currant	1 gal	60" o.c.	20	
▨		<i>Teucrium chamaedrys</i>	Germander	1 gal	24" o.c.	20	
▨		<i>Viguiera parviflora</i>	Golden Eye	1 gal	48" o.c.	20	
▨		Turf Type TBD					

NOTE: See L1.0 for Plant Quantities



1 Berm Section SCALE: 1/8" = 1'-0"

TURNBULL
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HAESLOOP

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3205 Mission Street
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Stamp:

FARMSTEAD AT
LONG MEADOW
RANCH
LODGING - USE
PERMIT
1000 MILLS LANE
ST. HELENA, CA 94574



DRAWING TITLE:

Enlarged Landscape
Design Plan

DATE:

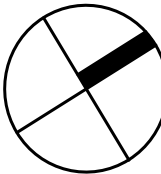
05.06.2019

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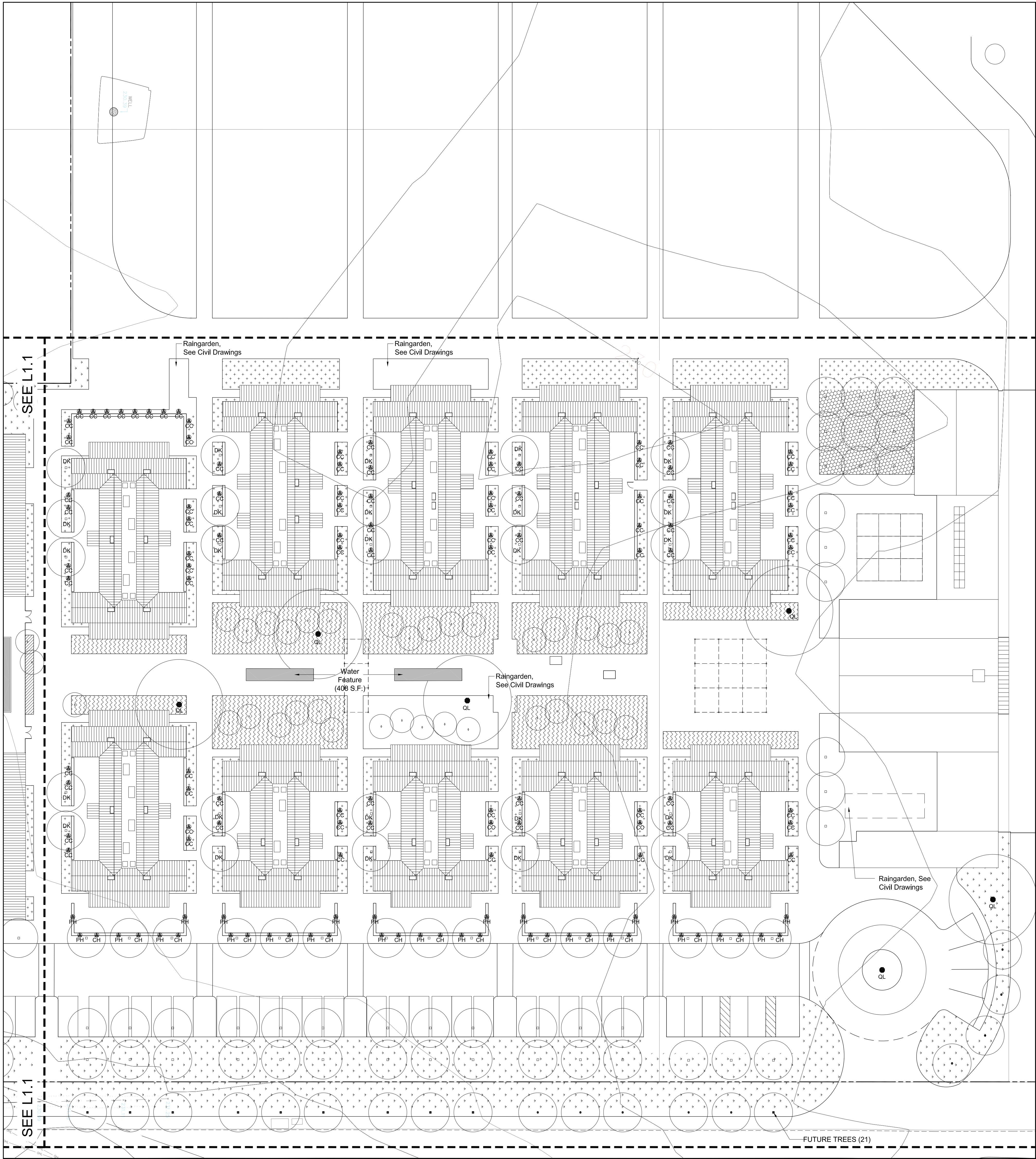
1" = 20' - 0"

SHEET NO:

L1.1



NOT FOR CONSTRUCTION



PLANT LIST

Symbol	Area	Plant Type and Botanical Name	Common Name	Qty	Size	Spacing	% Mix
DK		Orchard Trees <i>Diospyros kaki</i> 'Fuyu'	Fuyu Persimmon Tree	b = b	20'	o.c.	
		<i>Malus domestica</i>	Apple Tree	b = b	20'	o.c.	
*		Evergreen Screening Trees <i>Schinus molle</i>	California Pepper Tree	36" box	20'	o.c.	
QL		Large Deciduous Tree <i>Quercus lobata</i>	Valley Oak Tree	48" box	see plan		
*		Evergreen Shrub <i>Osmundus fragrans</i> 'Aurantiacus'	Sweet Olive	15 gal	96" o.c.		
CH		Vines <i>Clematis hennryi</i>	Early Large-Flowered Clematis	5 gal	6'	o.c.	
CC		<i>Clystoma callistegodes</i>	Lavendar Trumpet Vine	5 gal	20'	o.c.	
PH		<i>Parthenocissus hennryana</i>	Chinese Virginia Creeper	5 gal	20'	o.c.	
		Tall Narrow Screening Shrub <i>Tecumtum radicans</i>	Bush Germander	5 gal	60" o.c.	100	
		Medium Screening Shrub <i>Leucophyllum longimanus</i> 'Lynns Legacy'	Lynns Legacy Texas Sage	5 gal	60" o.c.	100	
		Orchard Understory Mix <i>Achillea millefolium</i> <i>Carex spicata</i> <i>Gaura lindheimeri</i>	Yarrow San Diego Sedge Gaura	1 gal 1 gal 1 gal	24" o.c. 24" o.c. 18" o.c.	20 60 20	
		Low Ornamental Mix - Farm Character <i>Rosmarinus officinalis</i> <i>Stachys byzantina</i> 'Helen Von Stein' <i>Euphorbia characias</i> 'Wulfenii' <i>Levandula sp.</i> <i>Salvia africana caerulea</i> <i>Salvia x jamensis</i> <i>Tagetes tenuifolia</i> 'Compacta' <i>Yucca filamentosa</i>	Rosemary Lamb's Ear Mediterranean Spurge Lavender Blue Sage Mexican Marigold Common Yucca	1 gal 1 gal 1 gal 1 gal 1 gal 1 gal 1 gal	36" o.c. 12" o.c. 36" o.c. 36" o.c. 24" o.c. 36" o.c. 36" o.c.	12.5 12.5 12.5 12.5 12.5 12.5 12.5	
		Low Ornamental Mix - Native Character <i>Arctostaphylos 'Pacific Mist'</i> <i>Ceanothus maritimus</i> 'Valley Violet' <i>Ribes viburnifolium</i> <i>Tecumtum chinensis</i> <i>Vigiera parviflora</i>	Pacific Mist Manzanilla Valley Violet Ceanothus Catalina Currant Germander Golden Eye	1 gal 1 gal 1 gal 1 gal 1 gal	96" o.c. 48" o.c. 60" o.c. 24" o.c. 48" o.c.	20 20 20 20 20	
		Turf Type TBD					

NOTE: See L1.0 for Plant Quantities

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Design Plan

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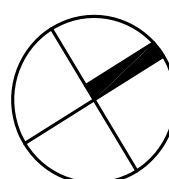
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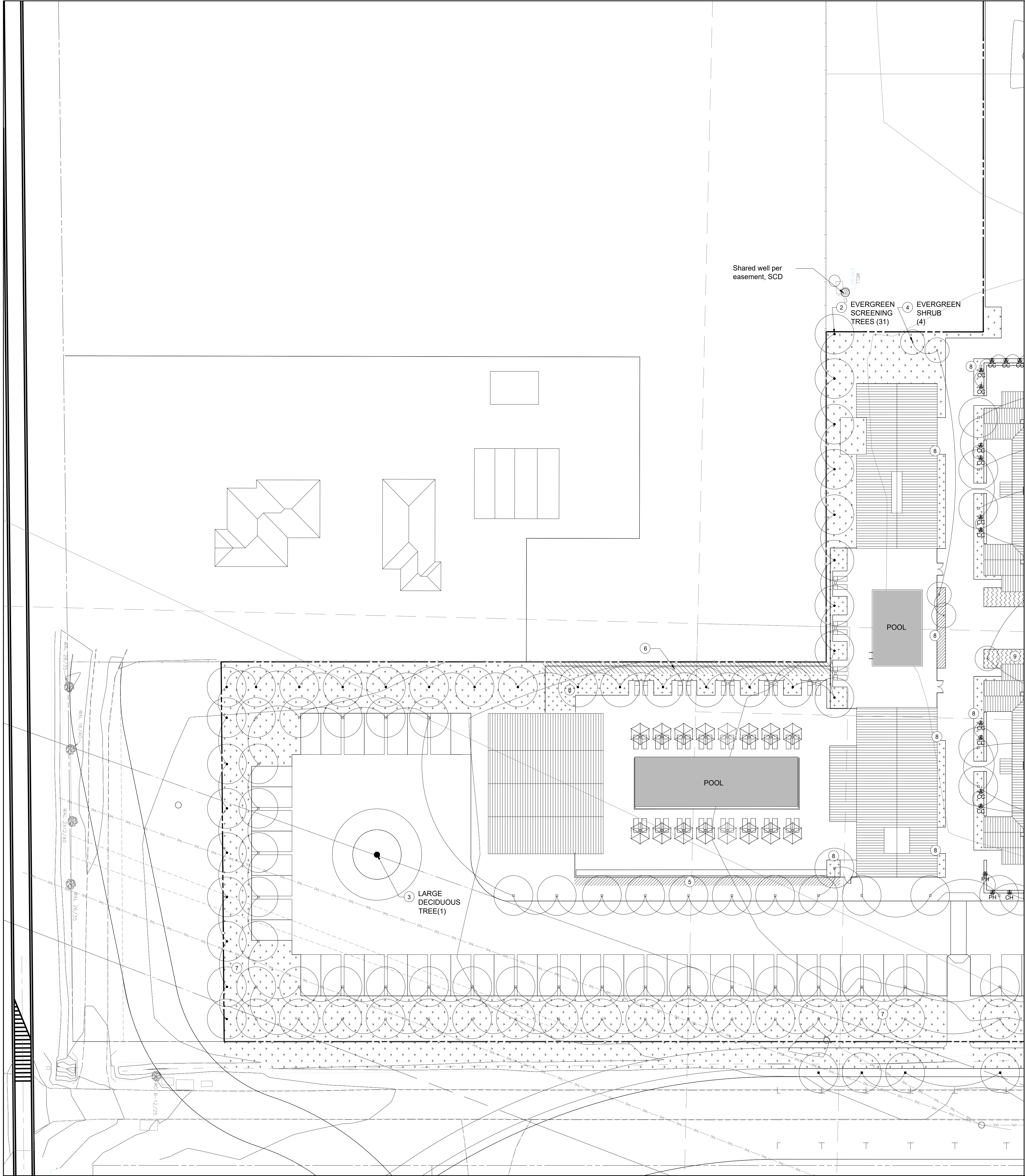
1" = 20' - 0"

SHEET NO.

L1.2



NOT FOR CONSTRUCTION



IRRIGATION HYDROZONES:

		Hydrozone Area (HA)	Plant Factor (PF)	PF x HA
1	Orchard Trees; MED WATER USE, BUBBLERS	1350 sf	0.50	675
2	Evergreen Screening Trees; LOW WATER USE, BUBBLERS	560 sf	0.30	168
3	Large Deciduous; LOW WATER USE, BUBBLERS	154 sf	0.30	46
4	Evergreen Shrub MED WATER USE, BUBBLERS	222 sf	0.50	111
5	Tall Narrow Screening Shrub MED WATER USE, BUBBLERS	768 sf	0.50	384
6	Medium Screening Shrub LOW WATER USE, BUBBLERS	791 sf	0.30	237
7	Orchard Understory Mix; MED WATER USE, SPRAY	38150 sf	0.50	19075
8	Low Ornamental Mix- Farm: MED WATER USE, DRIP	13968 sf	0.30	4190
9	Low Ornamental Mix- Native LOW WATER USE, DRIP	10195 sf	0.30	3059
10	Vines MED WATER USE, DRIP	387 sf	0.30	116
11	Turf HIGH WATER USE, SPRAY	1992 sf	0.70	1394
Sum:		68,537 sf		32,327

WATER CALCULATIONS:

Maximum Applied Water Allowance:
MAWA = (ETo) x (0.62) [(0.7 x LA) + (0.3 x SLA)]
= (44.1) x (0.62) [(0.7 x 68537) + (0.3 x 0)]
= 1,311,661 Gallons

Estimated Total Water Use:
ETWU = (ETo) x (0.62) [(PF x HA)/0.88 + SLA]
= (44.1) x (0.62) [32327/0.88) + (0)]
= 1,244,818 Gallons

IRRIGATION DIAGRAM NOTES:

1. This diagram is to show design intent only, it is not intended to replace an complete irrigation plan construction document and is therefore not for construction purposes. Zones of differing water needs are indicated, exact water requirements to be determined.
2. Contractor shall evaluate existing irrigation system prior to commencing construction. Existing components are to be maintained and reused unless they are in conflict with drawings and specifications. Contractor shall design design and install comprehensive irrigation system and prepare a full, detailed as-built plan of the system, incorporating information on both new and existing systems, for the Owner.
3. Contractor is responsible for coordination with other Contractors as required.
4. Contractor shall be responsible for ensuring that all work is in accordance with all applicable codes and that all necessary permits are obtained.
5. Contractor shall verify available pressure, and review the following with the Landscape Architect or Owner: point of connection, backflow preventer, master shut off valve, entire irrigation system pressure regulator, controller location, power source and other information pertinent to the installation of the irrigation system.
6. The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system. Static water pressure, dynamic or operating pressure, and flow reading of the water supply shall be measured at the point of connection.
7. The manual shut-off valve shall be installed as close as possible to the point of connection of the water supply.
8. The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 492.4 of the Updated Model Water Efficient Landscape Ordinance AB 1881 regarding the Maximum Applied Water Allowance.
9. Materials are to be Rainbird or products of an equivalent quality.
10. I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan.
11. High Flow sensors that detect and report high flow conditions will be part of the irrigation system
12. In mulched areas low volume irrigation is used

NOT FOR CONSTRUCTION

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GRIFFIN &
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ST. HELENA, CA 94574



DRAWING TITLE:

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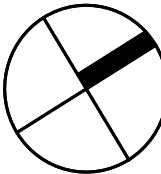
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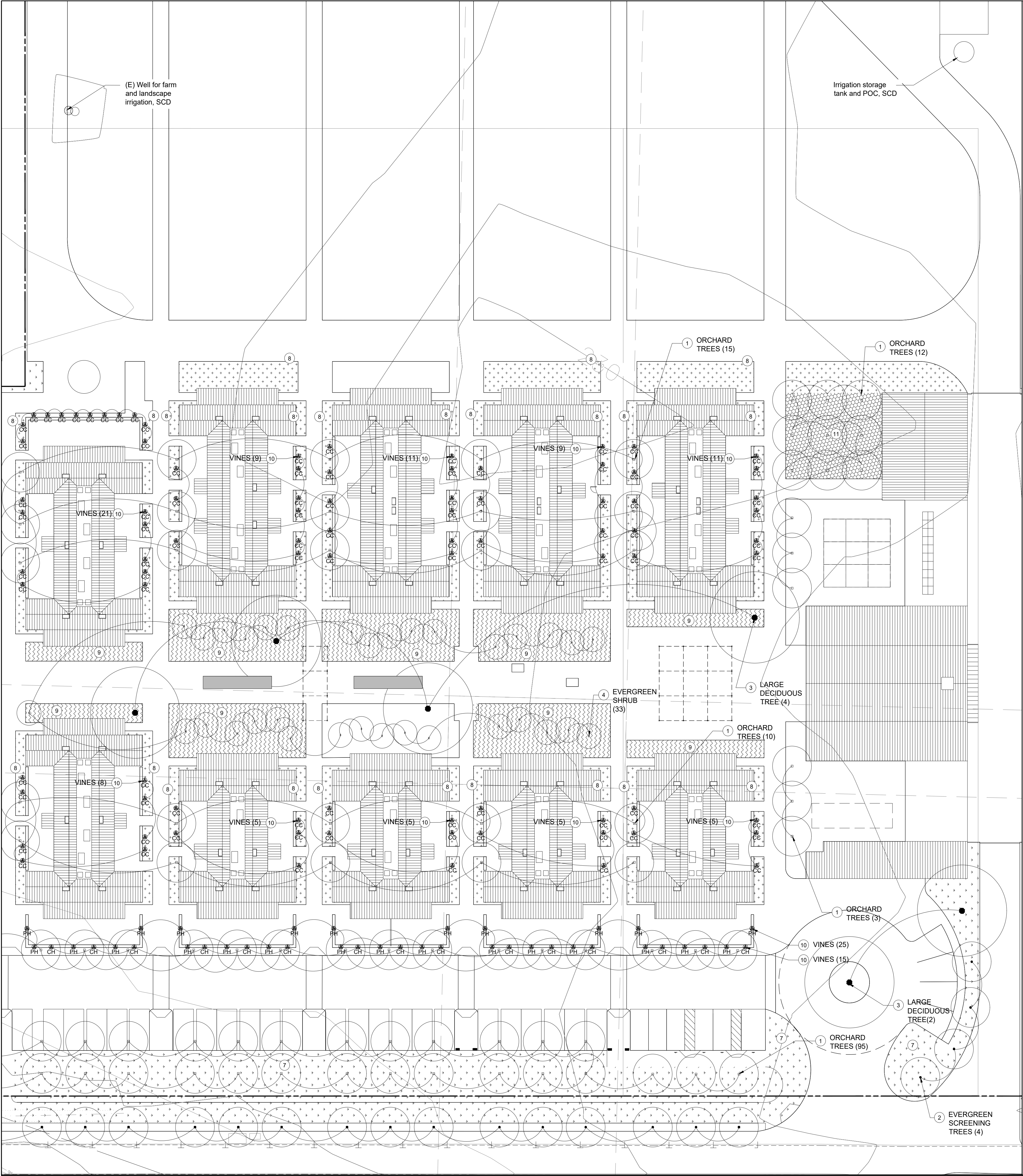
SCALE:

1" = 20' - 0"

SHEET NO:

L2.1





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ST. HELENA, CA 94574



DRAWING TITLE:

Enlarged Irrigation
Design Plan

DATE:

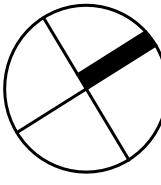
05.06.2019

SCALE:

1" = 20' - 0"

SHEET NO:

L2.2





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SITE INFORMATION

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009-070-049, 052, 053 & 054
ADDRESS: 738 MAIN STREET
SAINT HELENA, CA 94574

MAP OF TOPOGRAPHY
OF THE LANDS OF
LMR
COUNTY OF NAPA STATE OF CALIFORNIA

REVISIONS & ADDITIONS

DATE: 10/27/18	FB: 764, 756	PG: 1-37, 54-55
DRAWER: M. HICKS	FB:	PG:
DATE:	FB:	PG:
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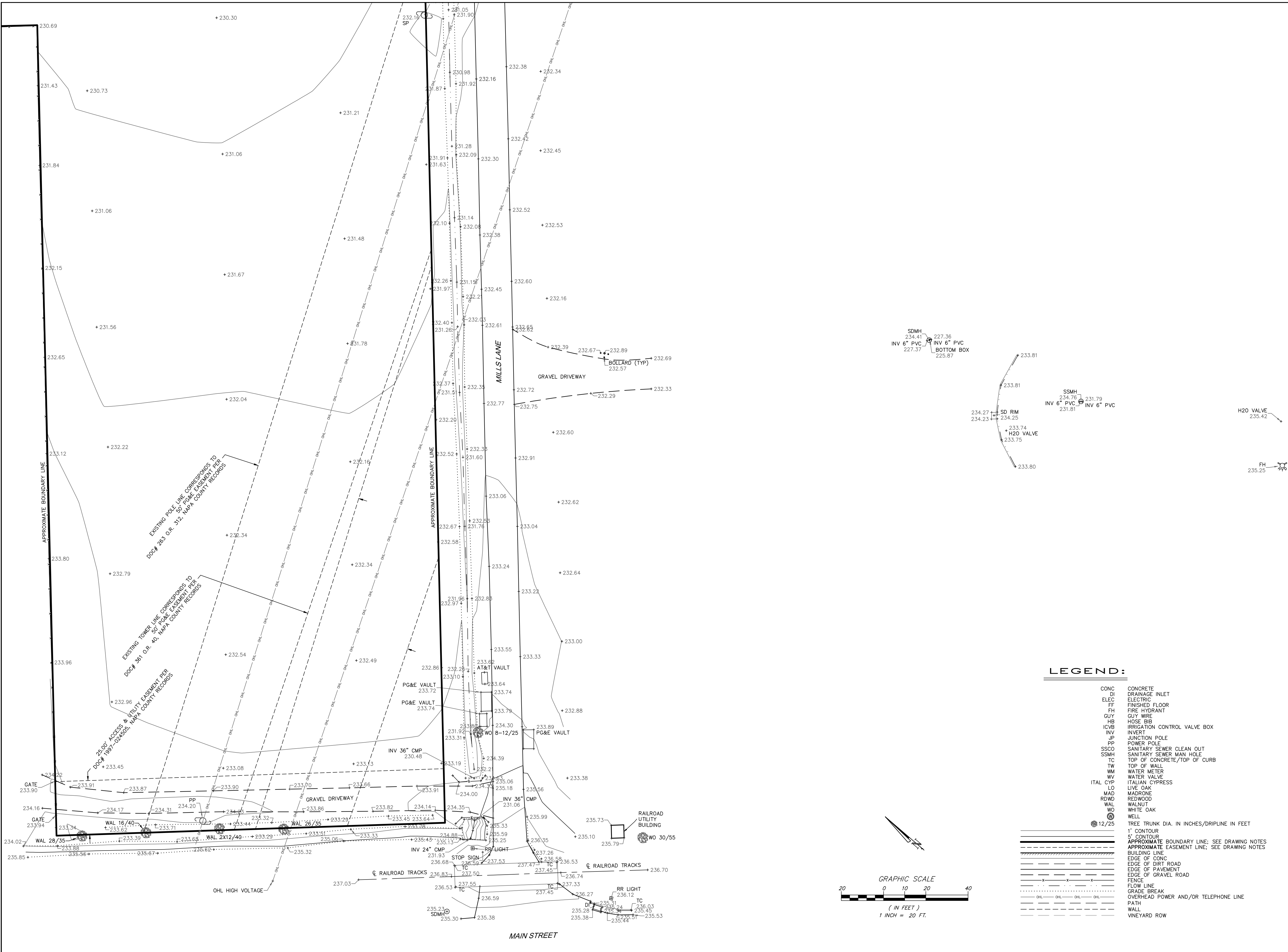
ALBION REFERENCES

PROJECT NO: 3775
PROJECT MANAGER: J. WEBB
DATE OF SURVEY: OCTOBER 2016

CONTOUR INTERVAL = 1'
VERTICAL DATUM BASED ON NAVD '88
HORIZONTAL DATUM BASED ON NAD '83
PER TRIMBLE GPS OBSERVATIONS
USING GPUS SOLUTION

APPROXIMATE BOUNDARIES SHOWN HEREON
BASED ON 26 PM 23, N.C.R

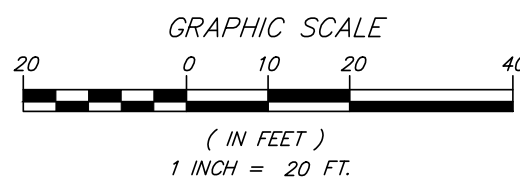
SHEET 3 OF 7
CSD PROJECT: 3775
3775--TOPO.dwg



LEGEND:

- CONC CONCRETE
- DI DRAINAGE INLET
- ELEC ELECTRIC
- FF FINISHED FLOOR
- FH FIRE HYDRANT
- GUY GUY WIRE
- HB HOSE BIB
- IOVB IRRIGATION CONTROL VALVE BOX
- INV INVERT
- JP JUNCTION POLE
- PP POWER POLE
- SSCO SANITARY SEWER CLEAN OUT
- SSMH SANITARY SEWER MAN HOLE
- TC TOP OF CONCRETE/TOP OF CURB
- TW TOP OF WALL
- WM WATER METER
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- ITAL CYP ITALIAN CYPRESS
- LO LIVE OAK
- MAD MADRONE
- RWD REDWOOD
- WAL WALNUT
- WO WHITE OAK
- WELL
- 12/25 TREE TRUNK DIA. IN INCHES/DRIPLINE IN FEET

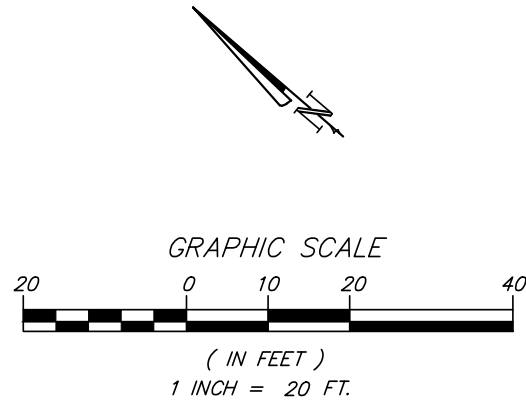
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- 5' CONTOUR
- APPROXIMATE BOUNDARY LINE; SEE DRAWING NOTES
- APPROXIMATE EASEMENT LINE; SEE DRAWING NOTES
- BUILDING LINE
- EDGE OF CONCRETE
- EDGE OF DIRT ROAD
- EDGE OF GRAVEL ROAD
- FENCE
- FLOW LINE
- GRADE BREAK
- OVERHEAD POWER AND/OR TELEPHONE LINE
- PATH
- WALL
- VINEYARD ROW





LEGEND:

CONC	CONCRETE
DI	DRAINAGE INLET
ELEC	ELECTRIC
FF	FINISHED FLOOR
FH	FIRE HYDRANT
GUY	GUY WIRE
HB	HOSE BIB
IOVB	IRRIGATION CONTROL VALVE BOX
INV	INVERT
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SSMH	SANITARY SEWER MAN HOLE
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TW	TOP OF WALL
WM	WATER METER
WV	WATER VALVE
ITAL CYP	ITALIAN CYPRESS
LO	LIVE OAK
MAD	MADROÑE
RWD	REDWOOD
WAL	WALNUT
WO	WHITE OAK
W	WELL
12/25	TREE TRUNK DIA. IN INCHES/DRIPLINE IN FEET
1"	1" CONTOUR
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APPROXIMATE BOUNDARY LINE; SEE DRAWING NOTES	
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BUILDING LINE	
EDGE OF CONC	
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**MAP OF TOPOGRAPHY
OF THE LANDS OF
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COUNTY OF NAPA STATE OF CALIFORNIA**

REVISIONS & ADDITIONS		
DATE: 10/27/18	FB: 764, 756	PG: 1-37, 54-55
DRAFTER: M. HICKS		
DATE:	FB:	PG:
DRAFTER:		
DATE:	FB:	PG:
DRAFTER:		
DATE:	FB:	PG:
DRAFTER:		
DATE:	FB:	PG:
DRAFTER:		

ALBION REFERENCES

PROJECT NO: 3775
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CONTOUR INTERVAL = 1'
VERTICAL DATUM BASED ON NAVD '88
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APPROXIMATE BOUNDARIES SHOWN HEREON
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SHEET 4 OF 7
C3D PROJECT: 3775
3775-TOPO.dwg



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DRAWER: M. HICKS		
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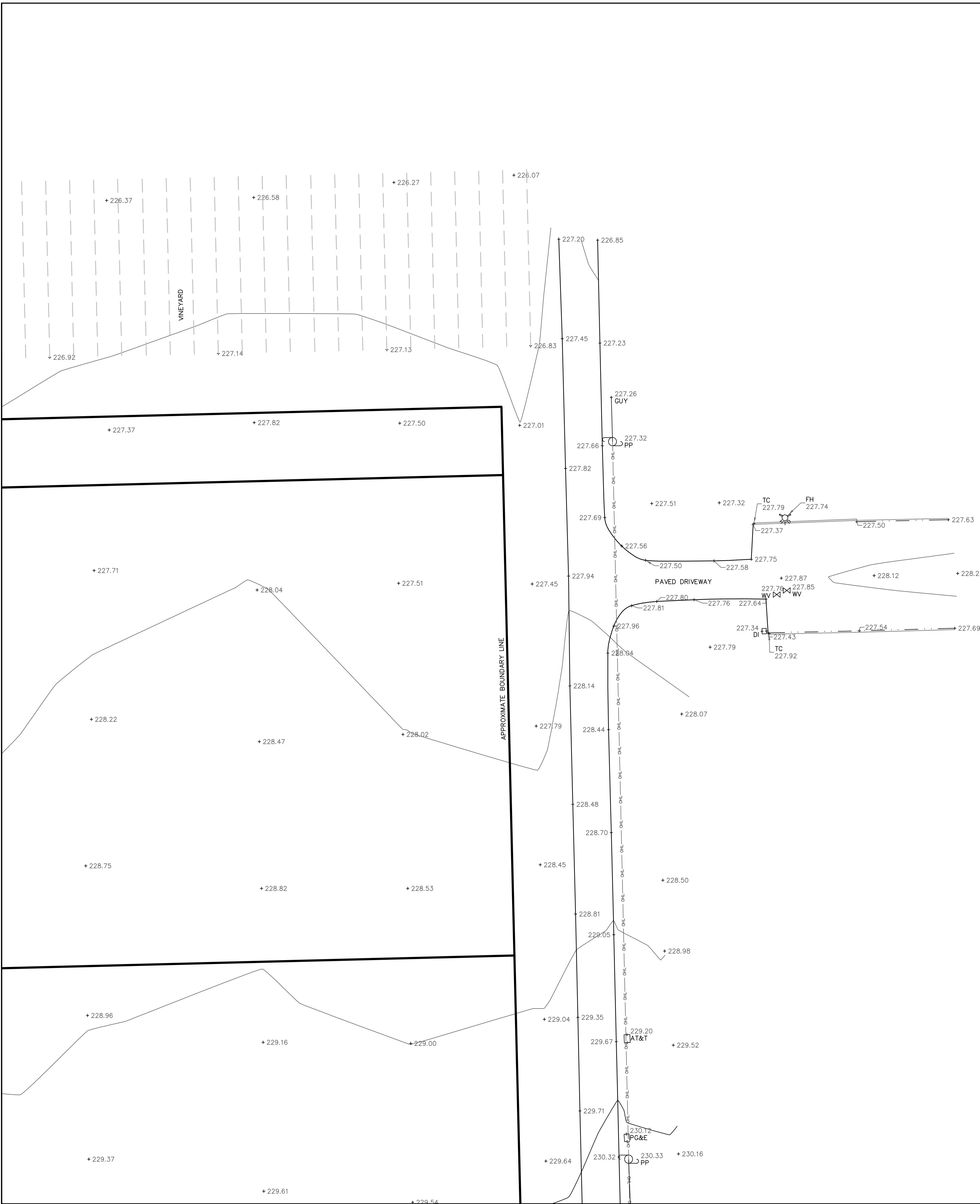
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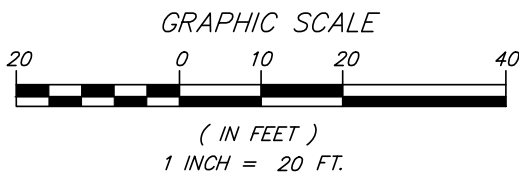
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SHEET 5 OF 7
C3D PROJECT: 3775
3775--TOPO.dwg



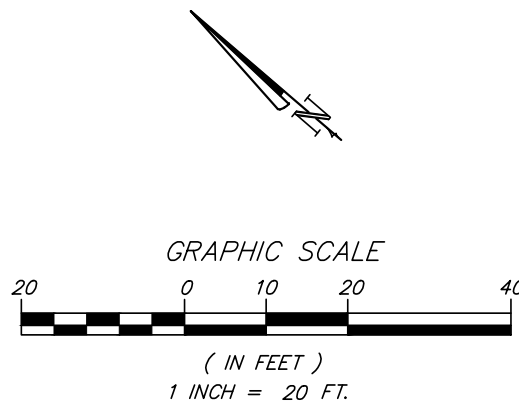
LEGEND:

CONC	CONCRETE
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VO WHITE OAK
WELL
12/25 TREE TRUNK DIA. IN INCHES/DRIPLINE IN FEET
1' CONTOUR
5' CONTOUR
APPROXIMATE BOUNDARY LINE; SEE DRAWING NOTES
APPROXIMATE EASEMENT LINE; SEE DRAWING NOTES
BUILDING LINE
EDGE OF CONC
EDGE OF DIRT ROAD
EDGE OF PAVEMENT
EDGE OF GRAVEL ROAD
FENCE
FLOW LINE
GRADE BREAK
OVERHEAD POWER AND/OR TELEPHONE LINE
PATH
WALL
VINEYARD ROW



ALBION SURVEYS
CONSULTING LAND SURVEYORS
1113 HUNT AVENUE,
ST. HELENA, CA 94574
(707) 963-1217
www.albionsurveys.com

DRAWING NOTES

THIS MAP IS NOT A BOUNDARY SURVEY.
IT IS PROVIDED TO LOCATE THE PROPOSED SUBJECT PROPERTY
IN RELATION TO ADJOINING LANDS, HIGHWAYS, ROADS,
STREETS AND NOT TO GUARANTEE ANY FIXED
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CRITICAL DESIGN WORK, CONSTRUCTION OR CONVEYANCE.
EASEMENTS MAY AFFECT THIS PROPERTY.
THIS SURVEYOR WAS NOT PROVIDED ANY INFORMATION
REGARDING EASEMENTS BY THE OWNER.

SITE INFORMATION

APN: 009-112-017
009-070-049, 052, 053 & 054
ADDRESS: 738 MAIN STREET
SAINT HELENA, CA 94574

MAP OF TOPOGRAPHY
OF THE LANDS OF
LMR
COUNTY OF NAPA STATE OF CALIFORNIA

REVISIONS & ADDITIONS

DATE: 10-27-16	FB: 764, 756	PG: 1-37, 54-55
DRAFTER: M. HICKS		
DATE:	FB:	PG:
DRAFTER:		
DATE:	FB:	PG:
DRAFTER:		
DATE:	FB:	PG:
DRAFTER:		
DATE:	FB:	PG:
DRAFTER:		

ALBION REFERENCES

PROJECT NO: 3775
PROJECT MANAGER: J. WEBB
DATE OF SURVEY: OCTOBER 2016

CONTOUR INTERVAL = 1'
VERTICAL DATUM BASED ON NAVD '88
HORIZONTAL DATUM BASED ON NAD '83
PER TRIMBLE GPS OBSERVATIONS
USING GPUS SOLUTION

APPROXIMATE BOUNDARIES SHOWN HEREON
BASED ON 26 PM 23, N.C.R

SHEET 6 OF 7
CSD PROJECT: 3775
3775--TOPO.dwg

FARMSTEAD AT
LONG MEADOW RANCH

738 MAIN STREET, ST. HELENA, CA 94574

USE PERMIT AMENDMENT APPLICATION 5.6.2019

ABBREVIATIONS

A	AND	LAV	LABATORY
@	AT	LOC	LOCATION
Ø	CENTERLINE	LT	LIGHT
φ	DIAMETER OF HOLE	LVL	LEVEL
J	JOINT	MAX	MAXIMUM
#	POUND OR NUMBER	MECH	MECHANICAL
P	PROPERTY LINE	MEMB	MEMBRANE
(E)	EXISTING	MFR	MANUFACTURER
(N)	NEW	MNL	MINIMUM
(R)	RENOVATED	MISC	MISCELLANEOUS
A.F.F	ABOVE FINISH FLOOR	MTD	MOUNTED
ACUS	ACUSTICAL	MTL	METAL
ADJ	ADJACENT/ADJACIBLE	N	NORTH
ALUM	ALUMINUM	NAT	NATURAL
APPROX	APPROXIMATE	NEC	NECESSARY
ARCH	ARCHITECTURAL	NED	NEED
ASPH	ASPHALT	N.I.C	NOT IN CONTRACT
BO	BOARD	NO	NUMBER
BLDG	BUILDING	NOM	NOMINAL
BLK	BLOCK	N.T.S	NOT TO SCALE
BNG	BLOCKING	O.A	OVERALL
BM	BEAM	O.C	ON CENTER
BOT	BOTTOM	O.D	OUTSIDE DIAMETER (DIM)
B.P	BUILDING PAPER	OPNG	OPENING
BW	BETWEEN	OPP	OPPOSITE
CAB	CABINET	P	PROPERTY LINE
CEM	CEMENT	P.LAM	PLASTIC LAMINATE
CER	CERAMIC	PLYWD	PLYWOOD
CLG	CEILING	PR	PLUMBING STACK
CLNG	CEILING	P.S	POINT
CLO	CLOSET	PT	PAINTED
CLF	CLEAR	PTD	PAINTED
COL	COLUMN	R	RISER
COMP	COMPOSITION	REF	REFERENCE
CONC	CONCRETE	RGTR	REGISTER
CONSTR	CONSTRUCTION	RGR	REQUIRED
CONT	CONTINUOUS	RET	REINFORCED
DET	DETAIL	RET	REINFORCED
DF	DOWEL AS FR	RFL	RETAINING
DAM	DAMETER	R.O	ROUGH OPENING
DIR	DIRECTION	R.W.L	RAIN WATER LEADER
DR	DOOR	S	SOUTH
DWR	DRAWER	S.C	SOLID CORE
DWG	DRAWING	SCHED	SCHEDULE
DWGS	DRAWINGS	SECT	SECTION
E	EAST	S.E.D	SEE ELECTRICAL DRAWINGS
EA	EACH	SM	SIMILAR
EL	ELEVATION	S.M.D	SEE MECHANICAL DWGS.
ELEC	ELECTRICAL	S.O	SASH OPENING
ENCL	ENCLOSURE	SPEC	SPECIFICATION
EQL	EQUAL	SQ	SQUARE
EQT	EQUIPMENT	S.S.D	SEE STRUCTURAL DRAWINGS
EXT	EXTERIOR	ST	STAINLESS STEEL
F	FROSTED	STD	STANDARD
F.D.C	FIRE DEPT CONNECTION	STL	STEEL
FDN	FOUNDATION	STOR	STORAGE
FIN	FINISH	STRUCT	STRUCTURAL
FL	FLOOR	SYM	SYMMETRICAL
FLASH	FLASHING	T	TREAD OR TEMPERED
FLOOR	FLUORESCENT	T.B	TOWEL BAR
F.O.C	FACE OF CONCRETE	T.B.R	TO BE REMOVED
F.O.F	FACE OF FINISH	TEL	TELEPHONE
F.O.S	FACE OF STUDS	T&G	TONGUE AND GROOVE
F.O.T	FACE OF TILES	THK	THICK
F.R.O	FOR REFERENCE ONLY	TOP	TOP OF
FT	FOOT OR FEET	T.V	TELEVISION
FTL	FOOTING	TW	TOP OF WALL
FURN	FURNACE	TYP	TYPICAL
G.A	GAUGE	UNF	UNFINISHED
GA	GALLON	U.O.N	UNLESS OTHERWISE NOTED
G.S.M	GALVANIZED SHEET METAL	VERT	VERTICAL
GL	GLASS	VS	VERTICAL GRAN
GND	GROUND	V.I.F	VERIFY IN FIELD
GR	GRADE	W.H	WATER HEATER
GYP	GYPHUM	W	WEST
G.W.B	GYPHUM WALL BOARD	W	WITH
H.B	HOSE BIB	WD	WOOD
HW	HARDWOOD	WO	WITHOUT
HW	HARDWARE	W.O	WHERE OCCURS
HW	HORIZONTAL	WP	WATERPROOF
HGT	HEIGHT	WT	WEIGHT
I.D	INSIDE DIAMETER (DIM)		
INSUL	INSULATION		
INT	INTERIOR		
JT	JOINT		

SYMBOLS & HATCHES

DETAIL NUMBER	
SHEET NUMBER	
SECTION NUMBER	
SHEET NUMBER	
ELEVATION NUMBER	
SHEET NUMBER	
INTERIOR ELEVATION NUMBER	
ELEVATION ORIENTATION	
SHEET NUMBER	
DOOR MARK	
WINDOW MARK	
FACE OF FRAMING	
FACE OF FINISH	
CENTERLINE	

SAND	
GRAVEL	
RIVER ROCK	
BATT INSULATION	
SPRAY INSULATION	
TILE OR STONE	
SOIL	
WOOD BLOCKING	
WOOD FRAMING	
FRASH WOOD	
PLYWOOD	
GYPHUM BOARD	
CONCRETE	
STEEL/ALUMINUM	

PROPERTY INFORMATION

Parcel Number:	009-112-017
Lot Area:	2.48 Acres (108,161 sq. ft.)
Zoning:	SC
Use Description:	Restaurant & Retail
Fire Jurisdiction:	Local Responsibility Area (Incorporated)
Fire Hazard Severity Zone:	NON-VHFHSZ
Flood Zone:	None at Building Location (See Flood Insurance Rate Map #06055C0385E)

AREA SUMMARY

Farmstead at LMR	Existing (g.s.f.)	Proposed (g.s.f.)
Restaurant Building	4,295	4,295
Dry Storage Addition		+ 355
		4,650
South Wing	3,161	3,161
Storage Demolition		- 183
Storage Addition		+ 693
		3,671
Farmer's Market Building	242	242
Porch Enclosure		+ 408
		650
Logan-Hves House		
First Floor	1,635	1,635
Second Floor	1,345	1,345
		2,980
Cafe	144	144
	10,822	12,095
Roofed Outdoor Porches	3,600	3,783
Parking Spaces	53	59
Area Totals	Land Parcel (s.f.)	Enclosed Building Area (g.s.f.)
	108,161	12,095

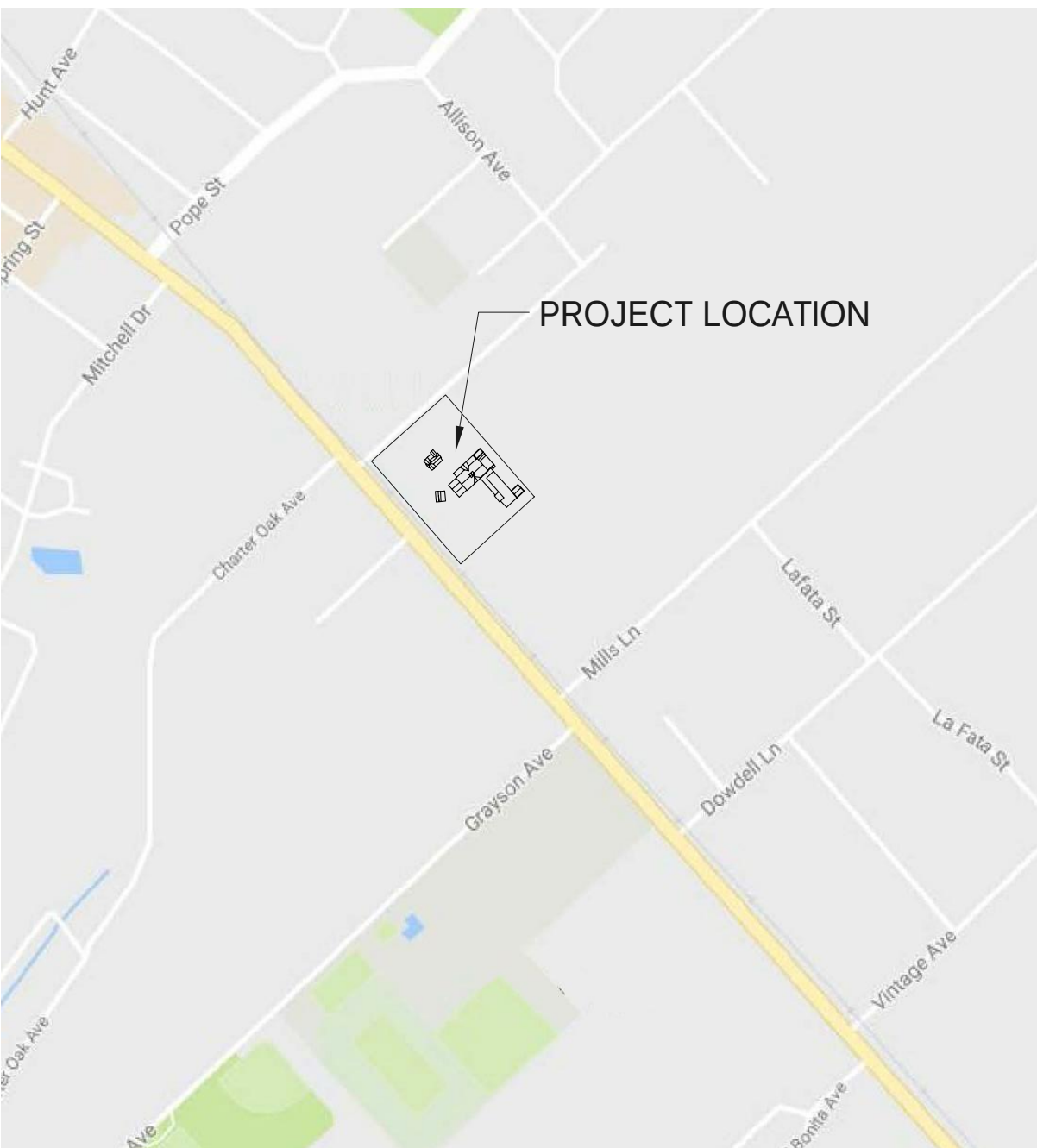
DRAWING INDEX

GENERAL	
G0.0	Cover Sheet
ARCHITECTURAL	
A1.0	Site / Roof Plan
A2.0	Floor Plans - Building Additions & Farmers Market
A3.0	Elevations & Sections - Building Additions & Farmers Market
CIVIL	
C1.0	Site Plan
LANDSCAPE	
L0.0	Tree Protection Plan
SURVEY	
For Reference Only	

PROJECT DIRECTORY

OWNER/APPLICANT	
LMR Destinations LLC	
PO Box 477	
Rutherford, CA 94573	
Tel. 707-963-4555	
ARCHITECT	
Turnbull Griffin Haesloop Architects	
1660 Bush St. Suite 200	
San Francisco, CA 94109	
Tel. 415-441-2300	
CIVIL ENGINEER	
Sherwood Design Engineers	
2548 Mission Street	
San Francisco, CA 94110	
Tel. 415-667-7300	
LANDSCAPE ARCHITECT	
Lutsko Associates	
3295 Mission Street	
San Francisco, CA 95110	
Tel. 415-920-2800	
LAND SURVEYOR	
Abbot Surveyors	
1113 Hunt Ave.	
St Helena, CA 94574	
Tel. 707-963-1217	

VICINITY MAP



TURNBULL
GRIFFIN &
HAESLOOP

ARCHITECTS

1660 BUSH STREET, STE 200
SAN FRANCISCO, CA 94109
P. 415-441-2300
WWW.TGHARCHITECTS.COM

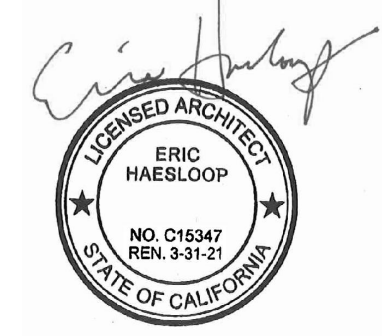
FARMSTEAD AT
LONG MEADOW
RANCH

738 MAIN STREET
ST. HELENA, CA 94574

REVISIONS:

5.6.2019 PLANNING SUBMITTAL

APPROVED BY:



DRAWING TITLE:

COVER SHEET

DATE:

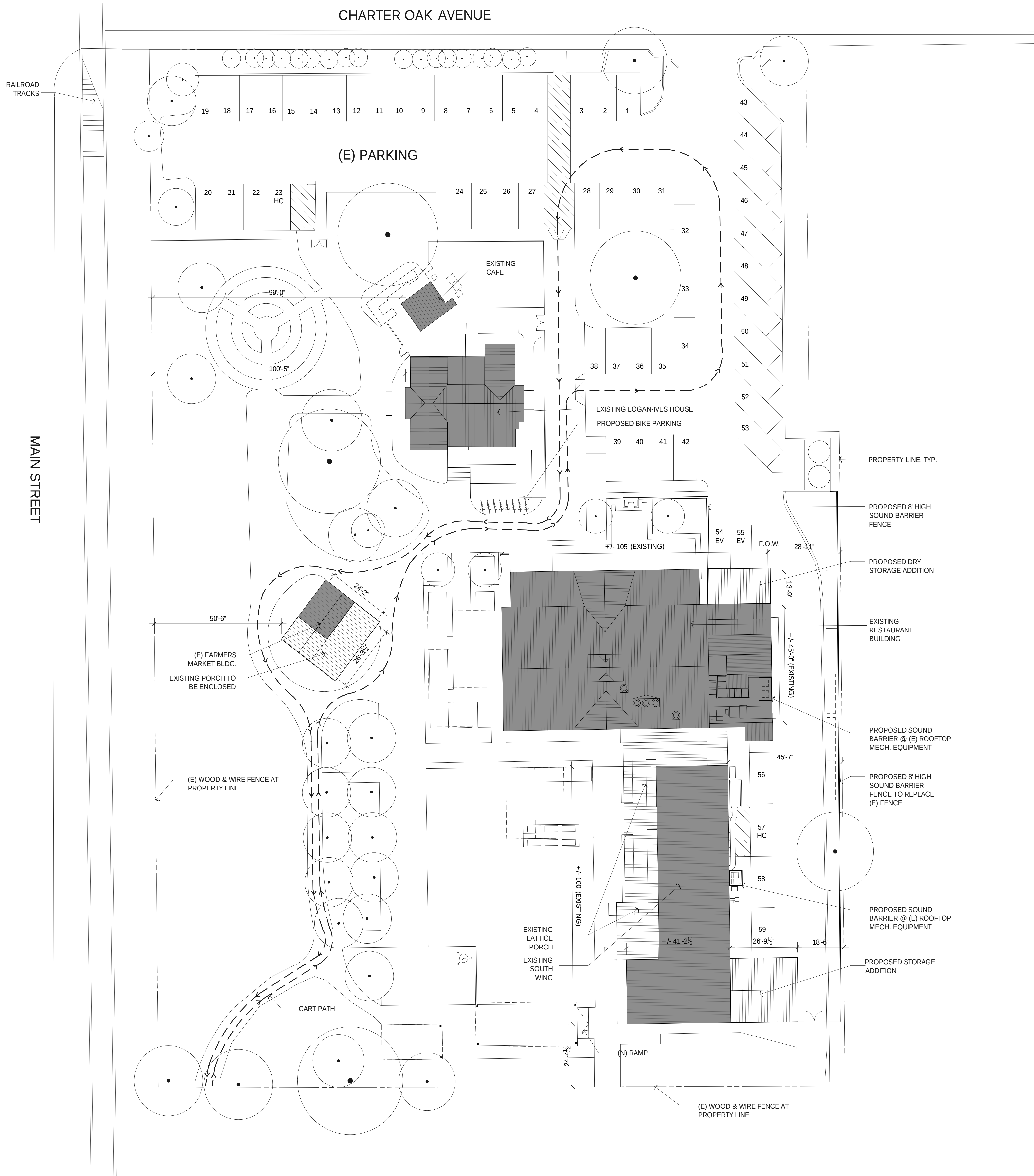
5.6.2019

SCALE:

AS NOTED

SHEET NO:

G0.0



TURNBULL
GRIFFIN &
HAESLOOP

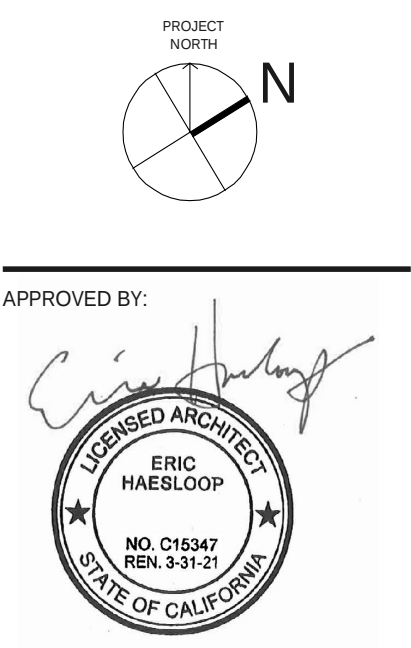
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FARMSTEAD AT
LONG MEADOW
RANCH

738 MAIN STREET
ST. HELENA, CA 94574

REVISIONS:

5.6.2019 PLANNING SUBMITTAL



DRAWING TITLE:
SITE / ROOF PLAN

DATE:
5.6.2019

SCALE:
1/16" = 1'-0"

SHEET NO:

A1.0

TURNBULL
GRIFFIN &
HAESLOOP

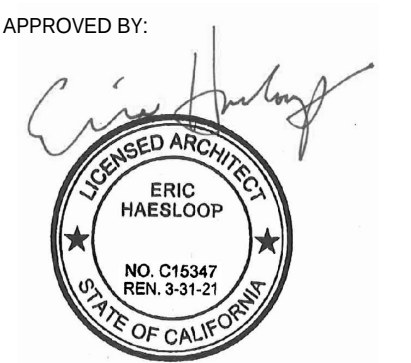
ARCHITECTS

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FARMSTEAD AT
LONG MEADOW
RANCH

738 MAIN STREET
ST. HELENA, CA 94574

REVISIONS:
5.6.2019 PLANNING SUBMITTAL



DRAWING TITLE:
FLOOR PLANS -
BLDG. ADDITIONS &
FARMERS MARKET

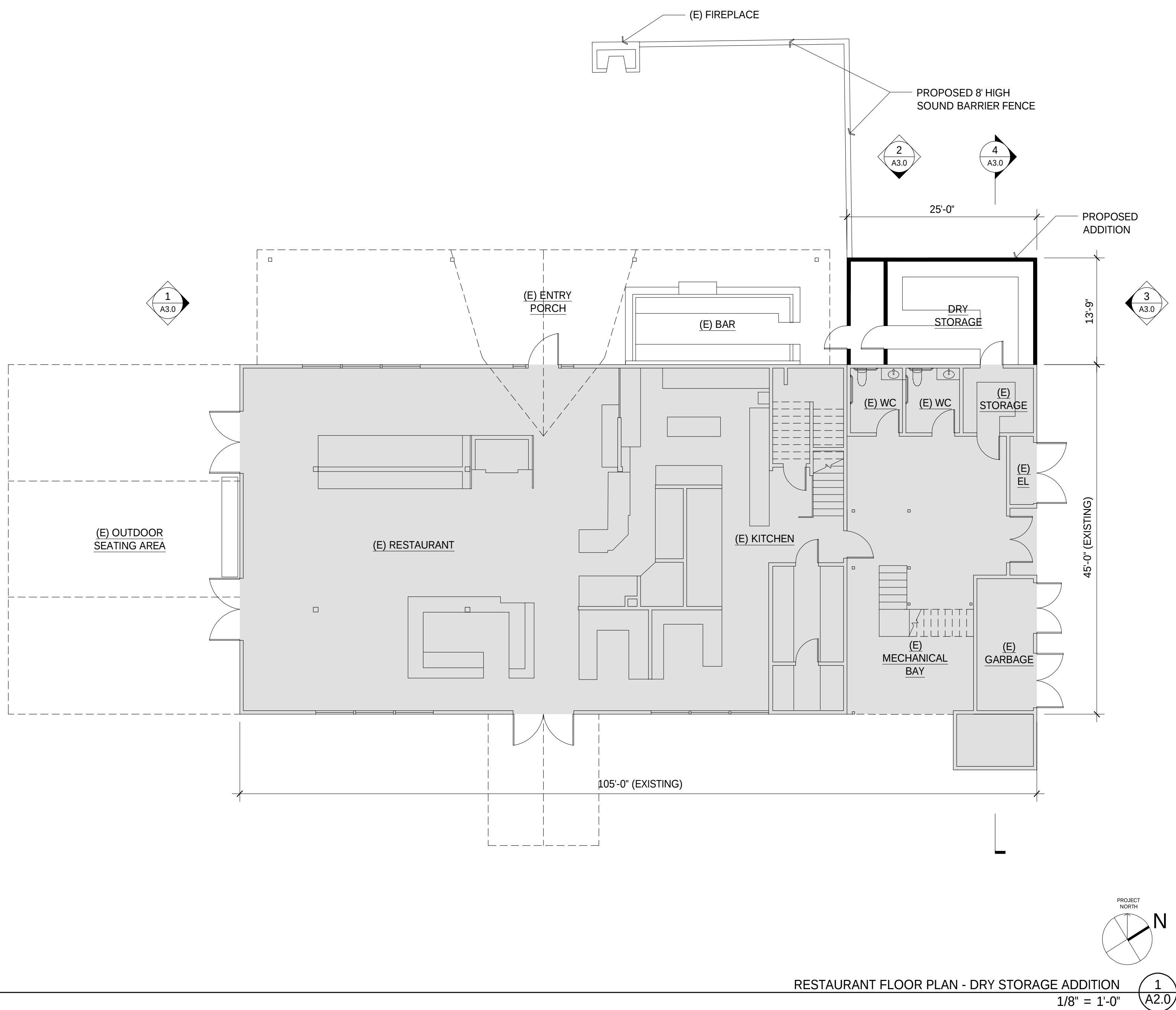
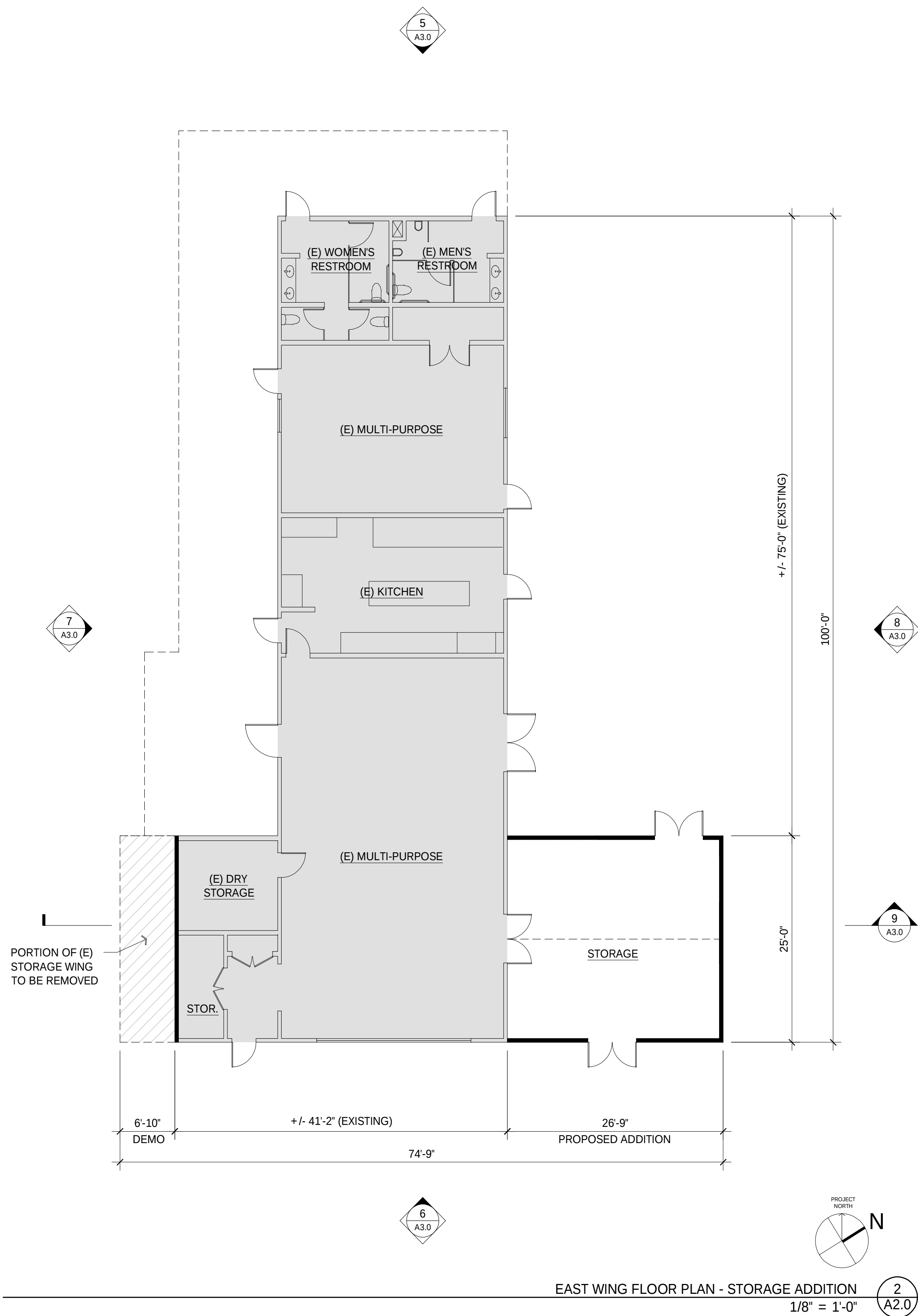
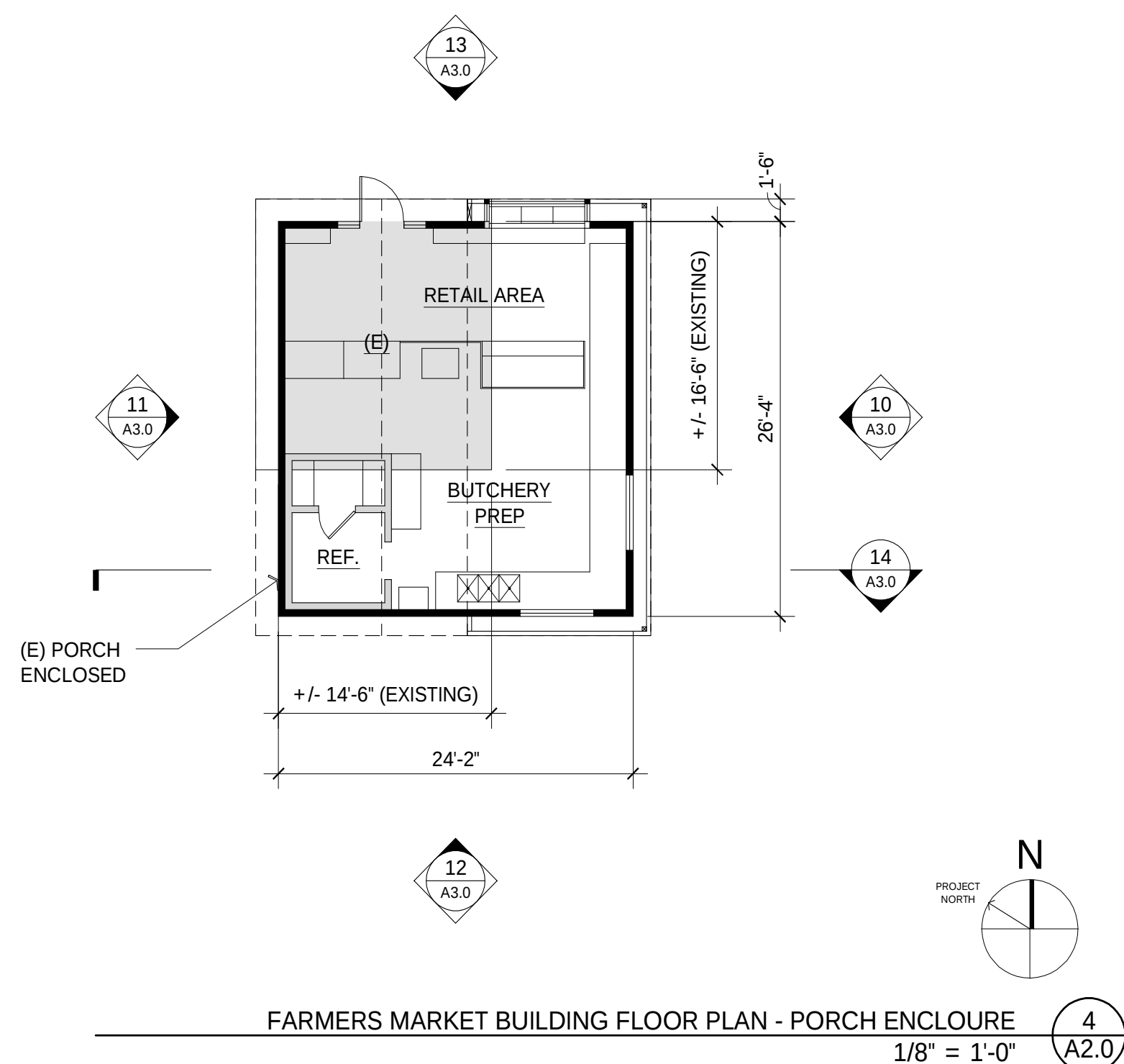
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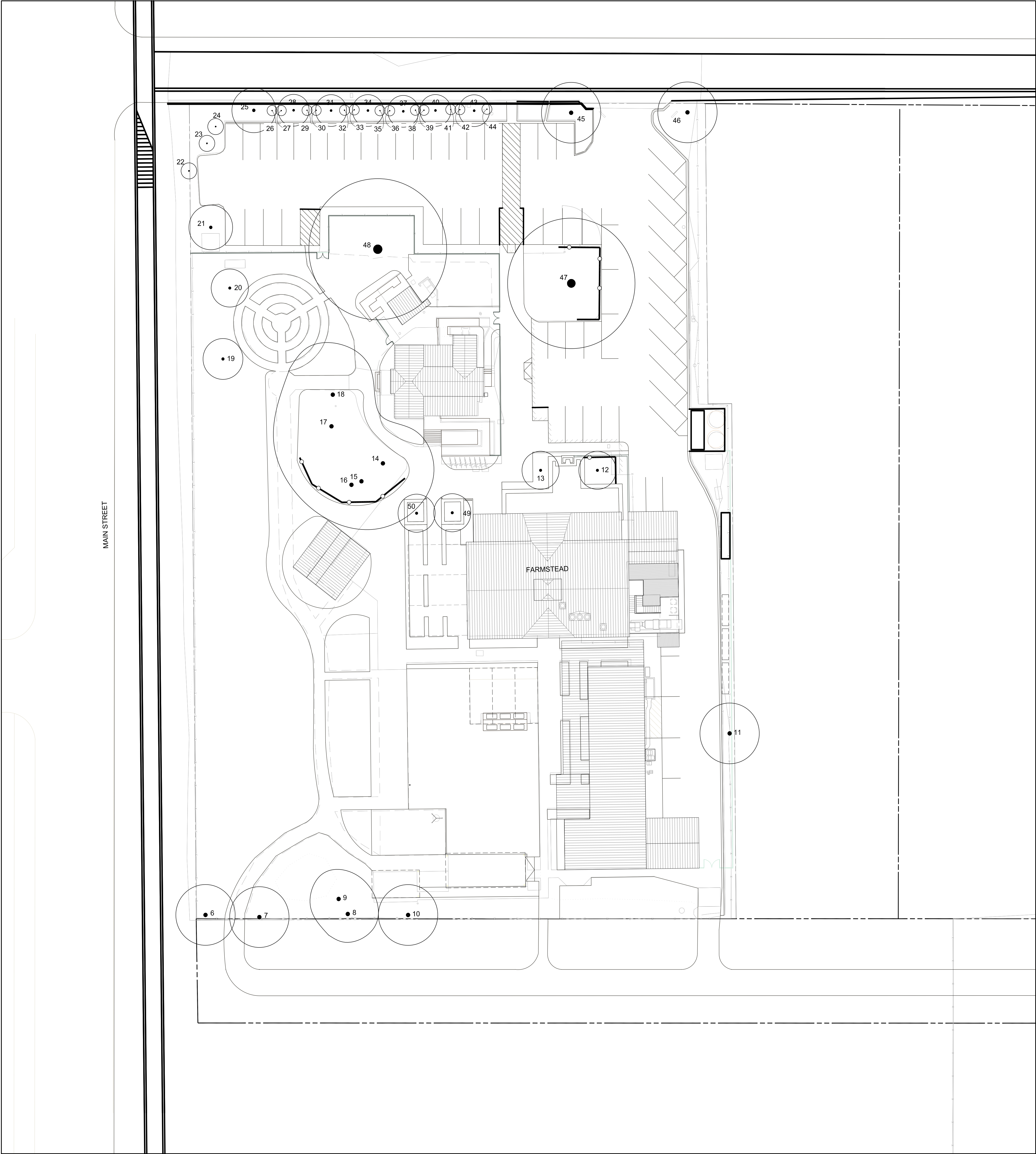
SCALE:
1/8" = 1'-0"

SHEET NO:

A2.0

- LEGEND
- EXISTING TO REMAIN
 - PROPOSED ADDITION
 - PROPOSED DEMOLITION





DEMOLITION & TREE PROTECTION LEGEND:

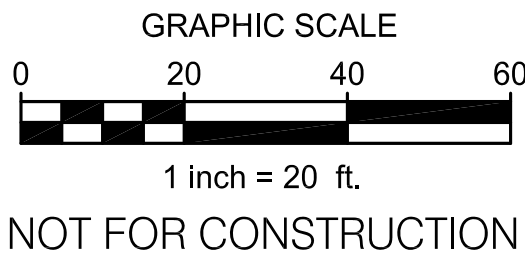
- Temporary Construction Access Road
- Temporary Construction Fencing
- Tree Protection Fencing
- Construction Limit
- Existing Fence to Be Removed
- Existing Tree to Be Removed

EXISTING TREE LIST

6	<i>Quercus agrifolia</i>	Coast Live Oak	28" / 35'
7	<i>Quercus lobata</i>	Valley Oak	18" / 45'
8	<i>Juglans regia</i>	Walnut	12" / 30'
9	<i>Juglans regia</i>	Walnut	28" / 45'
10	<i>Juglans regia</i>	Walnut	2x10" / 30'
11	<i>Quercus agrifolia</i>	Coast Live Oak	48"
12	<i>Olea europea</i>	Olive	10" / 25'
13	<i>Olea europea</i>	Olive	6" / 12'
14	<i>Umbellularia californica</i>	Bay Laurel	44" / 40'
15	<i>Sequoia sempervirens</i>	Redwood	30" / 35'
16	<i>Sequoia sempervirens</i>	Redwood	30" / 35'
17	<i>Quercus lobata</i>	Valley Oak	60" / 75'
18	<i>Pseudotsuga menziesii</i>	Douglas Fir	48" / 45'
19	<i>Olea europea</i>	Olive	clump/ 20'
20	<i>Olea europea</i>	Olive	clump/ 20'
21	<i>Pistachia sp.</i>	Pistachio	8" / 25'
22	<i>Washingtonia sp.</i>	Fan Palm	24" / -
23	<i>Washingtonia sp.</i>	Fan Palm	14" / -
24	<i>Washingtonia sp.</i>	Fan Palm	14" / -
25	<i>Chilopsis linearis</i>	Desert Willow	4", 8", 12' / 35'
26	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
27	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
28	<i>Arbutus 'Marina'</i>	Marina Madrone	8' / 20'
29	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
30	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
31	<i>Arbutus 'Marina'</i>	Marina Madrone	8' / 20'
32	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
33	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
34	<i>Arbutus 'Marina'</i>	Marina Madrone	8' / 20'
35	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
36	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
37	<i>Arbutus 'Marina'</i>	Marina Madrone	8' / 20'
38	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
39	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
40	<i>Arbutus 'Marina'</i>	Marina Madrone	8' / 20'
41	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
42	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
43	<i>Arbutus 'Marina'</i>	Marina Madrone	8' / 20'
44	<i>Cupressus sempervirens</i>	Italian Cypress	16" / -
45	<i>Quercus agrifolia</i>	Coast Live Oak	16" / 45'
46	<i>Arbutus 'Marina'</i>	Marina Madrone	16" / 45'
47	<i>Quercus agrifolia</i>	Coast Live Oak	28" / 65'
48	<i>Cedrus atlantica glauca</i>	Blue Atlas Cedar	36" / 75'
49	<i>Olea europea</i>	Olive	8" / 15'
50	<i>Olea europea</i>	Olive	8" / 15'

TREE PROTECTION NOTES:

- A. Protect existing trees scheduled to remain against injury, compaction of root zone, or injury due to cutting, breaking or skinning of roots, trunks, or branches, smothering by stockpiled or disposal of construction materials, excavated materials or vehicular traffic within drip line of trees.
- B. No pruning of existing trees shall be completed without prior approval by the Client. Great care is to be taken in excavation under tree canopies to avoid unnecessary damage to the root system or cutting of major structural roots. If major roots are encountered, the Contractor shall immediately consult with an arborist and notify the Landscape Architect as to the recommended solution.
- C. Protect trees to remain with a temporary, wire mesh (cyclone) construction fence, six (6) feet high, wired to nine (9) foot steel stakes, driven two (2) feet minimum into the ground at the location indicated on the plan or at the drip line, whichever is greater.
- D. If any portion of the protective fence is in conflict with construction, that portion must be relocated, not removed. The fence may not be closer than eight (8) feet to the trunk of the tree. Consult with Landscape Architect before any relocation occurs.
- E. No storage or disposal of materials to be allowed within the protective fence.
- F. All subcontractors should be warned in writing against disposing of any material other than clean water in any area beneath the canopy of the tree or within the protective fencing.
- G. Trees severely damaged by construction operations, as determined by the Landscape Architect, must be replaced with tree species selected by the Landscape Architect. Replacement trees must be of comparable size to damaged trees being replaced, and shall be no less than 36" box trees (regardless of size of damaged tree).
- H. Replacement of trees scheduled to remain and damaged by construction operations shall be at Contractor's expense.



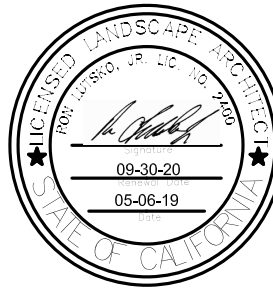
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LUTSKO ASSOCIATES
landscape

3295 Mission Street
San Francisco, CA 94110
t: 415.502.2800

FARMSTEAD AT
LONG MEADOW
RANCH - USE
PERMIT
AMENDMENT

738 MAIN STREET
ST. HELENA, CA 94574



DRAWING TITLE:
Tree Protection Plan

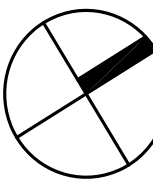
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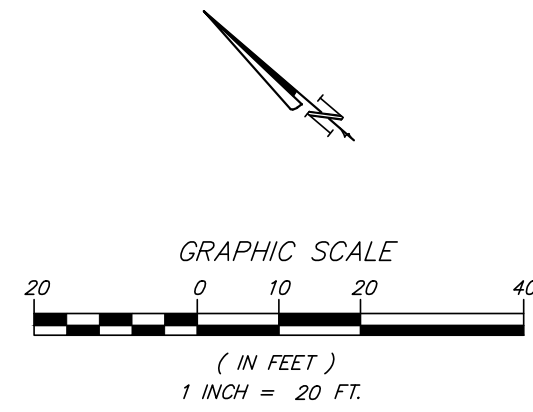
SCALE:

1" = 40' - 0"

SHEET NO:

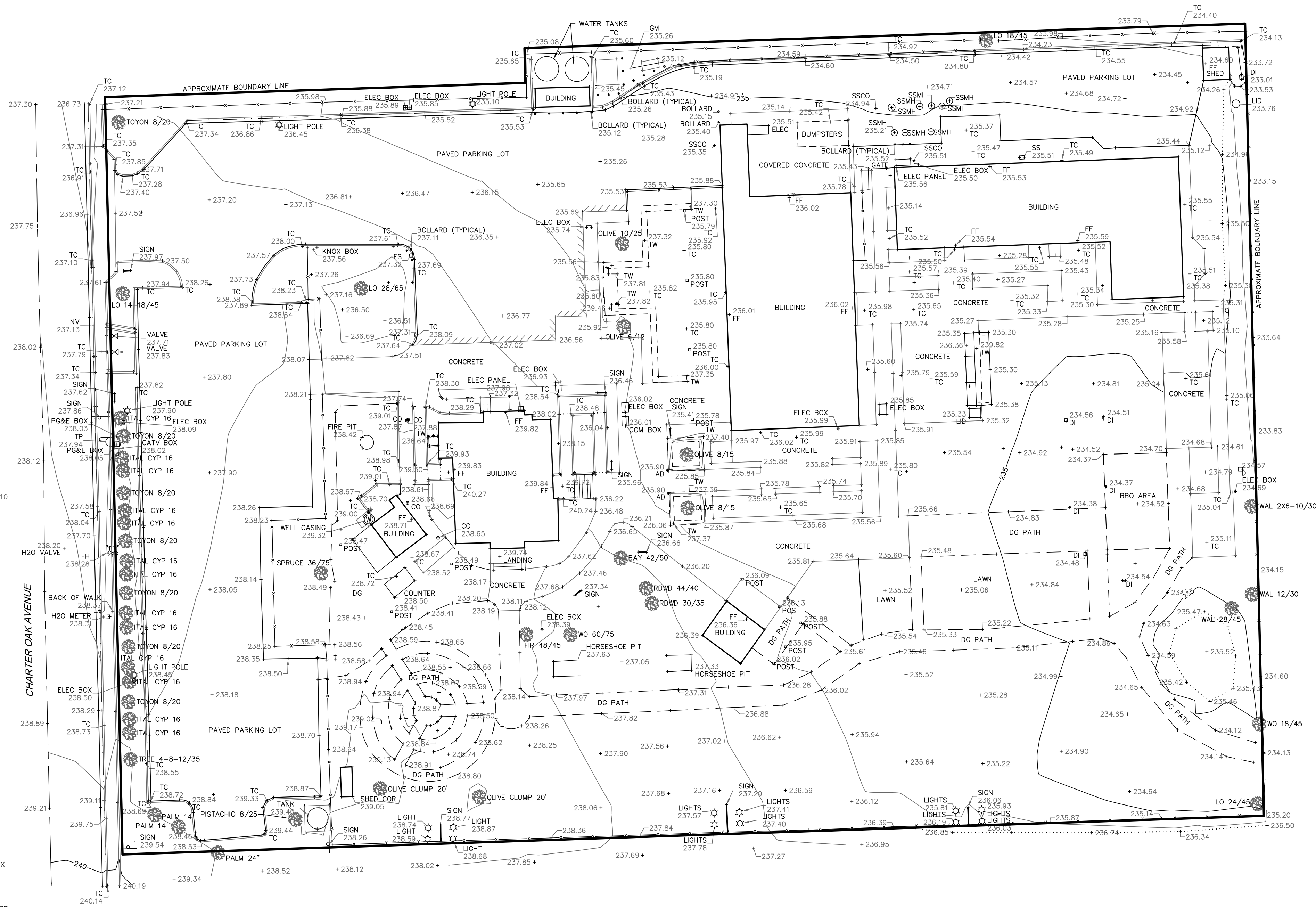
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LEGEND:

CONC	CONCRETE
DI	DRAINAGE INLET
ELEC	ELECTRIC
FF	FINISHED FLOOR
FH	FIRE HYDRANT
GUY	GUY WIRE
HB	HOSE BIB
ICVB	IRRIGATION CONTROL VALVE BOX
INV	INVERT
JP	JUNCTION POLE
PP	POWER POLE
SSCO	SANITARY SEWER CLEAN OUT
SSMH	SANITARY SEWER MAN HOLE
TC	TOP OF CONCRETE/TOP OF CURB
TW	TOP OF WALL
WM	WATER METER
WV	WATER VALVE
ITAL CYP	ITALIAN CYPRESS
LO	LIVE OAK
MAD	MADRODNE
RDWD	REDWOOD
WAL	WALNUT
WO	WHITE OAK
W	WELL
12/25	TREE TRUNK DIA. IN INCHES/DRIPLINE IN FEET
1'	CONTOUR
5'	CONTOUR
---	APPROXIMATE BOUNDARY LINE; SEE DRAWING NOTES
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---	EDGE OF CONC
---	EDGE OF DIRT ROAD
---	EDGE OF PAVEMENT
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---	PATH
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---	VINEYARD ROW



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DRAWING NOTES

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SITE INFORMATION

APN: 009-112-017
009-070-049, 052, 053 & 054
ADDRESS: 738 MAIN STREET
SAINT HELENA, CA 94574

MAP OF TOPOGRAPHY
OF THE LANDS OF
LMR
COUNTY OF NAPA STATE OF CALIFORNIA

REVISIONS & ADDITIONS

DATE: 10/27/16	FB: 764, 756	PG: 1-37, 54-55
DRAWN: M. HICKS	FB:	PG:
DATE:	FB:	PG:
DRAWN:	FB:	PG:
DATE:	FB:	PG:
DRAWN:	FB:	PG:
DATE:	FB:	PG:
DRAWN:	FB:	PG:

ALBION REFERENCES

PROJECT NO: 3775
PROJECT MANAGER: J. WEBB
DATE OF SURVEY: OCTOBER 2016

CONTOUR INTERVAL = 1'
VERTICAL DATUM BASED ON NAVD '88
HORIZONTAL DATUM BASED ON NAD '83
PER TRIMBLE GPS OBSERVATIONS
USING GRIS SOLUTION

APPROXIMATE BOUNDARIES SHOWN HEREON
BASED ON 26 PM 23, N.C.R.

SHEET 2 OF 7
CSD PROJECT: 3775
3775-TOPO.dwg



Existing Gold Parcel Area : 172,770 s.f.
Gold to LMR : -19,115 s.f.
LMR to Gold : 32,915 s.f.
New Gold Parcel Area : 186,570 s.f.

NOTE: FINAL PROPERTY BOUNDARY LINES AND PARCEL DIMENSIONS TO BE CONFIRMED BY LAND SURVEYOR

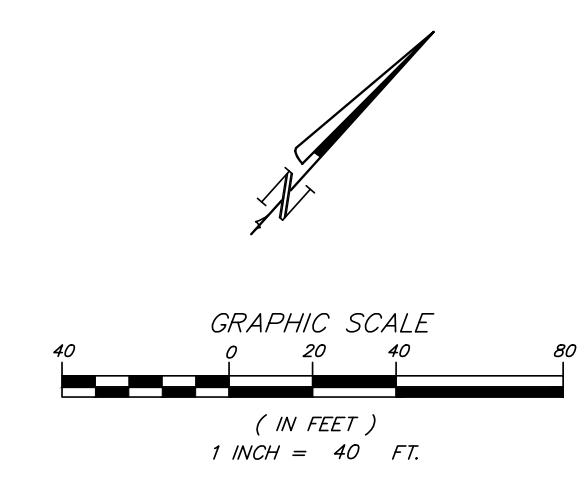
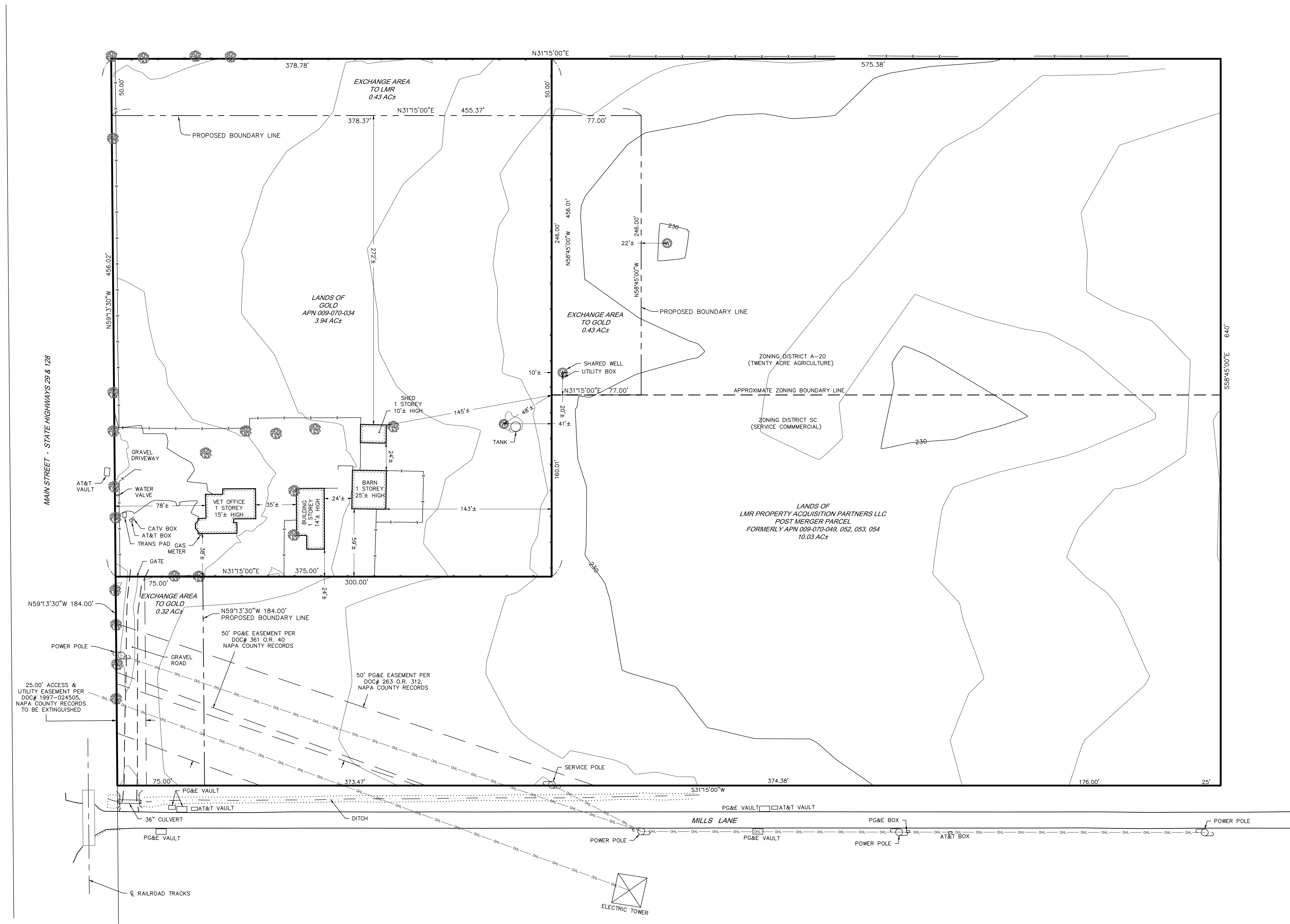
DIAGRAM 2: PROPERTY TRANSFER

Proposed Property Line Adjustment



12-6-2017

TURNBULL
GRIFFIN &
HAESLOOP
ARCHITECTS



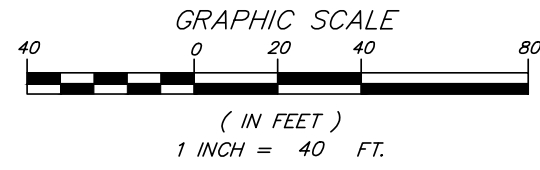
- LEGEND**
- TREE
 - UTILITY POLE, AS NOTED
 - WELL
 - 1' CONTOUR
 - 5' CONTOUR
 - APPROXIMATE EASEMENT LINE
 - EXISTING BOUNDARY LINE
 - PROPOSED BOUNDARY LINE
 - EDGE OF GRAVEL ROAD
 - EDGE OF PAVEMENT
 - FENCE
 - FLOW LINE
 - GRADE BREAK
 - OVERHEAD LINE

PRIOR PARCEL MAPS AND LOT LINE ADJUSTMENTS:
 - LLA 97-77
 - 26 PM 23, JANUARY, 2009
 - LLA 2009-14

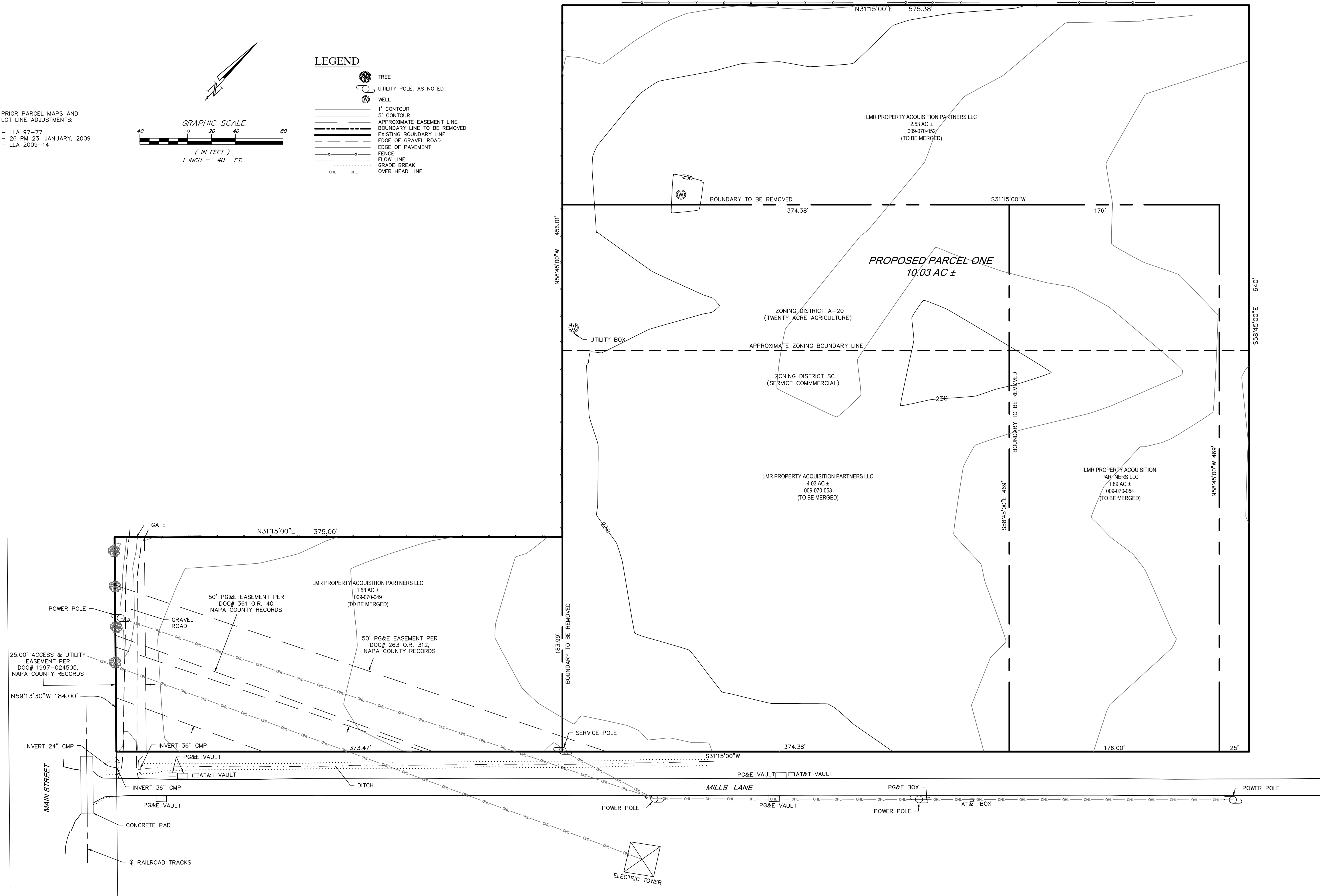
**LOT LINE
ADJUSTMENT MAP**
 OF THE LANDS OF
**LMR PROPERTY ACQUISITION
PARTNERS LLC**
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GOLD
 SITUATED IN THE CITY OF ST. HELENA
 COUNTY OF NAPA, STATE OF CALIFORNIA
 BY
 ALBION SURVEYS
 ST. HELENA, CALIFORNIA
 JUNE 10, 2018

SHEET 1 OF 1
 C30 PRJ. 3775
 3775-01 LLA.dwg

PRIOR PARCEL MAPS AND
LOT LINE ADJUSTMENTS:
- LLA 97-77
- 26 PM 23, JANUARY, 2009
- LLA 2009-14



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	EXISTING BOUNDARY LINE
	EDGE OF GRAVEL ROAD
	EDGE OF PAVEMENT
	FENCE
	FLOW LINE
	GRADE BREAK
	OVER HEAD LINE



LOT MERGER MAP
OF THE LANDS OF
LMR PROPERTY ACQUISITION
PARTNERS LLC

CITY OF ST. HELENA
COUNTY OF NAPA, STATE OF CALIFORNIA

BY
ALBION SURVEYS
ST. HELENA, CALIFORNIA



FEBRUARY 14, 2017

SHEET 1 OF 1
C30 PRJ. 3775
3775-01 MERGER.dwg

Written Statement
Variance Application
Zoning Code Section 17.52.090(I)

This Variance Application is submitted as part of applicant's Use Permit application File #PL17-006.

Zoning code section 17.52.090(I) requires an onsite responsible person to reside on the premises, specifically:

17.52.090 Other uses, standards and requirements.

1. Hotel and Motel Management. A manager or other responsible person shall reside upon the premises and shall have charge of every hotel or motel in which there are twelve (12) or more guest rooms, in the event that the owner of any such hotel or motel does not reside upon the premises. The requirements of this section are intended to be declarative of, and consistent with, state law.

Applicant proposes that in place of a responsible person residing on premises, they will schedule a responsible manager to be on site 24 hours per day, 365 days per year. This change actually provides superior coverage to a single resident responsible person for the following reasons:

1. The responsible manager is always on site.
 - a. They are never absent for vacations or holidays.
 - b. They are never absent for hotel or personal errands.
2. The responsible manager is always immediately available to perform their duties in the event of any emergency. In contrast, a resident manager will be sleeping at night, have sick days and/or otherwise be less able to take action in an emergency.
3. There will never be an unqualified responsible person on site as a temporary replacement for the resident manager when they would be on vacation, holiday, etc. Every manager assigned to this position will be fully trained in emergency protocols to assure the health and safety of all guests and employees, including health emergencies, fire, water issues or other emergencies which could occur.
4. This is the normal industry practice for hotels of this size and larger.

Applicant:

LMR Property Acquisition Partners LLC by Ted W. Hall 5/30/17
Date

LMR Property Acquisition LLC, a California limited liability company
By: Long Meadow Ranch Partners, L.P., a California limited partnership
Its: Manager

By: LMR GP LLC, a California limited liability company
Its: General Partner

By: Ted W. Hall, Its Manager

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
St. Helena, California



FARMSTEAD AT LONG MEADOW RANCH PROJECTS

*738 Main Street, St. Helena, CA (Napa County)
Assessor's Parcel No. 009-112-017*

*1000 Mills Lane, St. Helena, CA (Napa County)
Assessor's Parcel Nos. 009-070-049, 009-070-052, 009-070-053, and 009-070-054*

Initial Study/Mitigated Negative Declaration

CITY OF ST. HELENA

May 29, 2020

Lead Agency:

*City of St. Helena
Planning & Building Department
1572 Railroad Avenue
St. Helena, CA 94574*

*Contact: Aaron Hecock, AICP
Senior Planner*

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
St. Helena, California

INITIAL STUDY OF ENVIRONMENTAL SIGNIFICANCE

PROJECT NAME:	Farmstead at Long Meadow Ranch, 738 Main Street (Farmstead Restaurant Project) Farmstead at Long Meadow Ranch Lodging, 1000 Mills Lane (Lodging Project)
FILE NUMBER:	PL17-036 738 Main Street “Farmstead Project” PL17-006 1000 Mills Lane “Lodging Project”
SITE ADDRESS:	738 Main Street, St. Helena, California (Farmstead Restaurant) 1000 Mills Lane, St. Helena, California (Lodging)
APN:	738 Main Street 009-112-017 (Farmstead Restaurant) 1000 Mills Lane 009-070-049; 009-070-052; 009-070-053; 009-070-054 (Lodging)
GENERAL PLAN:	738 Main Street – Service Commercial 1000 Mills Lane – Service Commercial & Agriculture
ZONING:	738 Main Street - Service Commercial (SC) 1000 Mills Lane - Service Commercial (SC) and Agricultural (A-20)
APPLICANT:	LMR Property Acquisition Partners LLC PO Box 477, Rutherford, CA 94573
CONTACT:	Elliott Faxstein, Director of Special Projects Long Meadow Ranch PO Box 477, Rutherford, CA 94573 elliott@longmeadowranch.com
PROJECT SUMMARY:	Farmstead at Long Meadow Ranch (Farmstead Restaurant) at 738 Main Street: is seeking a use permit amendment and design review approval to expand and modify restaurant activities, to both permit some activities which are currently occurring on-site as well as to allow additional proposed activities as detailed below. As proposed, the existing farmer’s market building would be reconfigured to include a butchery and retail meat sales. Existing butchery operations would be moved from the restaurant to the reconfigured space and the farmer’s market would offer for sale, in addition to its current products, fresh meat and charcuterie. The existing baking operation would be moved from the restaurant to the existing commercial kitchen in the Logan-Ives House. Expansion of storage space for the current restaurant in two existing buildings is also proposed. A full project description is found below along with a summary all discretionary actions being requested. Farmstead at Long Meadow Ranch Lodging (Lodging Project) at 1000 Mills Lane: A 65 room, single-story hotel project is proposed in 14 new buildings on approximately 6.1 acres of the 10-acre site. The 10 guest lodging buildings are configured with either 6 or 7 guest rooms per building. The remaining approximately 3.9 acres of the property is zoned for agricultural use and is proposed to be operated as an organically-certified fruit and vegetable farm supplying restaurants and the farmer’s markets. Throughout the lodging portion of the property, farming would continue with an edible landscape of herbs, fruit and citrus trees, and vegetables planted along the pathways. A full project description is found below along with all discretionary actions being requested.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

St. Helena, California

INTRODUCTION

Purpose and Intent

This Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed Farmstead at Long Meadow Ranch Restaurant and Lodging Project(s) (hereinafter referred to as the “project” or “projects”) has been prepared by the City of St. Helena as lead agency in full accordance with the procedural and substantive requirements of the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

This IS/MND is intended to inform City decision-makers, responsible agencies, interested parties and the general public of the proposed project and its potential environmental effects. This IS/MND is also intended to provide the CEQA-required environmental documents for all city, local and state approvals or permits that might be required to implement the proposed project.

CEQA Guidelines Section 15063(c) lists the following purposes of an Initial Study:

1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration.
2. Enable an Applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby possibly enabling the project to qualify for a Negative Declaration.
3. Assist in the preparation of an EIR, if one is required.
4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs.
7. Determine whether a previously prepared EIR could be used with the project.

The City of St. Helena, as the lead agency, has determined that a Mitigated Negative Declaration is the appropriate level of environmental review for the proposed project.

Public Review

In accordance with CEQA and the state CEQA Guidelines, a 30-day public review period for the Project will begin on May 29, 2020 and will conclude on June 29, 2020. This IS/MND has been distributed to interested or involved public agencies, organizations, and private individuals for review. In addition, the IS/MND has been made available for general public review at the following location:

City of St. Helena
 Planning & Community Improvement Department
 1572 Railroad Avenue
 St. Helena, CA 94574
 Hours: 9:00 a.m. to 5 p.m., Monday – Friday

During the public review period, the public will have an opportunity to provide written comments on the information contained within this IS/MND. The City will use the final IS/MND and all comments and correspondence received within the public comment period for all environmental decisions related to the proposed projects.

In reviewing the IS/MND and as articulated in Section 15204(a) of the CEQA Guidelines, affected public agencies and interested members of the public should focus on the sufficiency of the document in identifying and analyzing potential impacts on the environment from the proposed project, and ways in which the significant effects of the project are proposed to be avoided or mitigated.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

St. Helena, California

Comments on the IS/MND should be submitted in writing and received by the City of St. Helena prior to the end of the 30-day public review period on June 29, 2020. Written comments should be submitted to:

Aaron Hecock, Senior Planner
City of St. Helena
Planning & Building Department
1572 Railroad Avenue
St. Helena, CA 94574

Phone: (707) 968-2659
Email: ahecock@cityofsthenela.org

SETTING

Project Location

The City of St. Helena is located in the northern end of the Napa Valley, approximately 18 miles northwest of the City of Napa and 65 miles north of San Francisco (see Figure 1). Napa Valley is a long narrow northwest trending alluvial plane flanked by the mountain ridges of the Mayacamas and Vaca Mountain range to the west and east, respectively. The Napa River extends along the eastern portion of St. Helena and is fed by several tributaries within St. Helena, including Sulphur Springs Creek and York Creek which serve as year-round tributaries to the river.

The City's incorporated boundaries comprise 3,285 acres or 5.1 square miles. The City of St. Helena is divided into two distinct areas: a developed "urban service area" and a more, rural, agricultural area located around the periphery such that the City exhibits a rather traditional landscape whereby commercial land uses are concentrated in the city center and along SR 29, with residential development radiating outwards to the northeast and southwest. The outer edge of the urban service area is demarcated by the urban limit line (ULL) which is a parcel specific boundary that marks the limit of allowed urban development. The intent of the ULL is to discourage urban sprawl and promote sensitive development which preserves the rural and agricultural lands around the City.

The Project involves two contiguous sites: Farmstead at Long Meadow Ranch at 738 Main Street (APN. 009-112-017) and the Long Meadow Ranch Lodging Project at 1000 Mills Lane (APN 009-070-049; 009-070-052; 009-070-053; 009-070-054). Both sites are located on the east side of Main Street (SR 29) in northern St. Helena (see Figure 2).

General Plan and Zoning

The City of St. Helena General Plan Update 2040 provides the vision for the community's natural and built environment through a series of goals and policies. The existing Farmstead at Long Meadow Ranch Restaurant property is designated service commercial, and the Farmstead at Long Meadow Ranch Lodging Project site is split designated both service commercial and agriculture. The Highway 29 Specific Plan includes both sites and identifies policies to guide development, as discussed further in Section XI, Land Use, of this Initial Study.

The City of St. Helena Zoning Ordinance implements the goals and policies of the General Plan. Several different districts are identified in the Zoning Ordinance that are intended to, among other things, provide for a wide range of uses and enhance the community's vision to preserve, protect and enhance its unique character and quality of life. The existing Farmstead Restaurant property is zoned as Service Commercial and the proposed Farmstead Lodging site is zoned both Service Commercial and Agricultural.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
St. Helena, California

PROJECT DESCRIPTION

Farmstead at Long Meadow Ranch Restaurant Project – 738 Main Street

In March 2009, Resolution No. 2009-30 was adopted granting design review and use permit amendment approval for food, wine, farm and community garden uses at an existing nursery site located at 738 Main Street. Specifically, the entitlement allows for the following uses on-site:

- A 160-seat restaurant;
- A wine tasting room and offices in the historic Logan-Ives house;
- A plant nursery and community garden; and
- A covered open-air produce market.

In May 2009 a building permit was issued to allow a New Commercial Kitchen at 738 Main Street. Additional activities and uses have been established at this location outside of those explicitly approved by Resolution No. 2009-30, including the following (also refer to Table 1):

- Retail sales, in addition to the approved tasting room and offices, inside the historic Logan-Ives house (open 10 a.m. to 6 p.m.);
- A café serving breakfast items and coffee (open from 7 a.m. to 4 p.m. with 40 outdoor seats);
- Various business and private social events occurring throughout the year. Events occur between 9 am and 10 pm. Almost all events include at least one meal served by the restaurant. These events occur daily with 15-200 persons in attendance. Outdoor live and recorded amplified music is often included with these events;
- Local community events up to 6 times per year with up to 300 attendees;
- Fitness classes including yoga and Pilates beginning at 9 a.m. (offered 2-3 times per week with up to 12 attendees); and
- Film screenings. Films are screened four times per year, with four showings each day. Twenty to 40 attendees at each screening.

The applicant indicates that these additional uses account for less than 10 percent of total visitors each year. The applicant also states that business meetings (e.g., regular organizational meetings, speaker presentations, strategic planning sessions, workshops, etc.) and private parties (e.g. birthdays, wedding celebrations, anniversaries, etc.) are the largest segment of these additional activities. Currently three-quarters of events involve 75 or fewer persons and occur daily in different dayparts and at different locations within the 2.47-acre site. The applicant also hosts larger events up to 200 persons, one or two times per week, but projects business growth that could result in 4 of these larger events per week in the busier months. These larger events often also include amplified music. The applicant says site capacity limits the size and number of events per day, so few or no small events occur on days when 76-200 person events are scheduled. Applicant also hosts up to 6 annual local community events such as a 4th of July barbecue, gingerbread baking workshop, holiday seasons celebration in December and a benefit concert. These local events attract up to 300 attendees each.

For events with 40-200 persons, client hosts are required to use buses or vans for transporting their guests or to and from the site. For smaller events during peak season (July through November), Farmstead will provide complimentary valet parking. A minimum of 73 additional parking spaces are available one-half of a mile away in a lot at the corner of McCormick and Dowdell Lane, which will be used for employee parking. This off-site lot is leased by the applicant in 5-year periods. Should the lease not be renewed, the applicant will be required to find parking at another similar location or a use permit amendment may be required.

The applicant is seeking approval of a use permit amendment and design review in order to memorialize all activities currently occurring on-site, not originally approved in the 2009 Use Permit amendment and also permit proposed future activities (i.e., addition of a butcher shop and baking operation) detailed in the project description. The existing farmer's market building will be reconfigured by remodeling and expanding the existing structure by 408 sf to accommodate a butchery and retail meat sales. Existing butchery operations will be moved from the restaurant

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

St. Helena, California

to the reconfigured space and the farmer's market will then offer fresh meat and charcuterie for sale, in addition to existing farmer's market products. The farmer's market would continue to operate from 10 a.m. to 6 p.m. daily. The existing baking operation will be moved from the restaurant to the existing commercial kitchen in the Logan-Ives House. In addition to the 408 sf addition to the farmer's market building, 510 sf of storage space would be added to the existing south wing building and a 355 sf dry storage addition would be added to the existing restaurant building (see Figure 4).

Parking: Parking for the restaurant, general store and tasting room, farmer's market, and garden nursery (which has since ceased operation) was originally approved at 48 spaces. Farmstead at Long Meadow Ranch has added 11 spaces including three electric car-charging stations for a total of 59 spaces (as required per SHMC). On high activity days and evenings, Farmstead at Long Meadow Ranch provides free valet parking, using the onsite lot. For 40+ person events client hosts are required to use buses or vans for transporting their guests. Employees are required to park in the 73 space lot at McCormick and Dowdell. This lot is under lease to the applicant for 5 years, with extensions possible.

Employees: On average, 58 employees currently work at the site daily including the restaurant, general store, farmers' market and administrative offices, spread across shifts beginning at 3 AM and ending after midnight. The restaurant staff works generally in two shifts, afternoons and evenings. All employees park their vehicles in the supplemental parking lot. Employees are never allowed to park on-site or on any adjacent city streets. Proposed changes at the Farmstead Restaurant would not require the hiring of additional staff beyond those currently working on the restaurant site, however, staffing levels would be reduced should the additional uses not originally approved in Resolution 2009-30 cease to operate.

Proposed Changes to Structures: As noted above, minor changes to existing buildings requiring design review approval include: a 408 sf addition to the farmer's market building for the addition of a butcher shop; a 355 sf expansion of dry storage space off the restaurant kitchen; and a 510 sf expansion of storage space on the back side of the south wing events building on the southeast corner; a sound barrier approximately 4 ft. in height to an existing air-conditioning unit on the restaurant building; a sound attenuator to the exhaust outlet on the primary air conditioning unit on the restaurant building; and a sound barrier to the kitchen exhaust fan on the events building.

Proposed Site Improvements: There are minor modifications proposed to existing pathways including building and path/paving modifications, however the total proposed new/reconstructed impervious surface is below 5,000 sf. Based on this, existing drainage features are identified by the applicant as adequate and no alterations to existing drainage patterns or conveyances are proposed. Approximately 255 ft of 8 ft fence will be installed on the east side of the property to buffer the adjacent property from noise and light.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
St. Helena, California

TABLE 1: Farmstead at Long Meadow Ranch Project Uses

Activity	Original Use Permit (No. 2009-30)	Proposed Use Permit Amendment
Restaurant/Bar	• 160 Seats • Supplemental kitchen approved and constructed (2013).	• Additional 355 sf dry storage space to be added. • Noise attenuation enclosures added to existing equipment and outdoor space. • No change in use.
Wine Tasting Room & Office	• Approved in historic Logan-Ives House.	• Miscellaneous retail sales. • Commercial kitchen for wine and food pairings (chef's table). • Wine and liquor tasting now under restaurant ABC License.
Café	• Not included in Use Permit no. 2009-30	• 40 outdoor seats. • 7:00 am to 4:00 pm.
Fitness Classes	• Not included in Use Permit no. 2009-30	• 2-3 classes per week. • Classes start at 7:00 am. • Up to 12 attendees per class.
Farmer's Market	• Open air produce market was approved.	• Daily: 10 am to 6 pm. • Retail butcher shop to be added in remodeled building expanded by 408 sf. • No Change in hours.
Nursery (now Outdoor Live Music and events space)	• Nursery ceased operations in 2011.	• Nursery indoor and outdoor space now used for private parties, meetings, fitness classes and other functions. • 510 sf storage space would be added to this building. • Daily events up to 75 persons. • Up to 4 events per week with up to 200 persons with amplified outdoor live and recorded music. • Up to 6 community events per year with up to 300 persons attending. • Operating from 9 am until 10 pm. • Film screenings up to 4 times per year with 4 showings per day and up to 40 attendees at each screening.
Total Building Space	• 10,822 sf	• 12,095 sf
Parking	48 parking spaces approved	59 spaces on-site plus 73 off-site supplemental spaces

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
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Long Meadow Ranch Lodging Project – 1000 Mills Lane

The lodging component of the Project would occur on approximately 6.1 acres of an overall 10 acre site; the remaining 3.9 acres would continue to be used for agricultural purposes. The Project proposes 65 guest rooms spread throughout 10 individual buildings that are configured with either 6 or 7 guest rooms per building. The lodging buildings will total approximately 32,100 square feet and will be single story with a maximum height of 29 feet.

Each guest room will have two bicycles assigned and stored at the room for guests' exclusive use. In addition, staffed courtesy electric-powered carts will also be available to ferry guests between properties. EVA charging stations will be provided for guests' vehicles and the Project's courtesy vehicles. Throughout the lodging portion of the property, farming will continue with an edible landscape of herbs, fruit and citrus trees, and vegetables planted along the pathways. The perimeter of the property will be lined two- and three-deep with fruit trees, creating a commercial fruit orchard, as well as providing a visual buffer to Main Street and Mills Lane.

In addition to the lodging buildings described above, the Project includes the following components:

A 9,882 sf multi-purpose building with the following amenities:

- Guest reception and administration area;
- Office space;
- A bar and lounge area;
- A meeting/classroom with a demonstration kitchen primarily for lodging guests, however cooking and food preparation classes will also be open to the public on a scheduled and by appointment basis;
- A commercial kitchen which will prepare daily breakfast, assemble room service meals, provide prep for cooking demonstrations, and support the daily chef's table featuring wine and food pairings for up to 20 people per sitting. The Chef's Table will service both lodging guests and also be open to the public by reservation only;
- Outdoors areas for lodging guest use only; and
- Staff facilities located in the multi-purpose building will include a break room, restrooms, lockers and showers, and covered bicycle parking.

Additional Facilities and Buildings:

- A 3,452 sf utility and service building which would include a bicycle center for guests, housekeeping, pool support and a green energy facility. This building would also accommodate a small laundry area serving incidental needs for the pool, gym, spa and lodging.
- A 3,114 sf spa building which would include four treatment rooms and two saunas;
- A 2,652 sf pool and fitness building which would include a gym, lockers, and showers;
- Two outdoor pools, including one children's pool, would be located in-between the three buildings; and
- Two (2) 1,000 sf agricultural barns in the northeast corner of the agriculturally zoned area will house tractors, farm equipment and will accommodate repair and maintenance activities.

The spa, pool and fitness building and associated pools would be for use by lodging guests only. Construction of the buildings described above would result in approximately 53,200 sf of new commercial floor area on the currently vacant property.

Employment

On average up to 65 employees, split into 3 shifts will work daily at the property. If employees travel to work by automobile, they will park at the supplemental parking lot located at McCormick and Dowdell. The applicant has a 5-year lease for the property with the potential for extensions. Secure covered bicycle storage, showers and lockers will also be provided for employees. A transportation demand manager (TDM) will be appointed to facilitate employee car-pooling and other programs to reduce vehicle miles traveled (VMT).

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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Ten employees already working at the current restaurant will support breakfast and room service at the lodging facility. An additional 11 employees will be added to the existing marketing, sales, reservations and support services already operating for Farmstead at Long Meadow Ranch (these employees will work at the LMR offices at 801 Main Street, St. Helena).

Access and Parking

Automobile access to the lodging facilities will be from Mills Lane.

Mills Lane will be realigned with Grayson Avenue at Highway 29 and widened to accommodate two lanes of traffic and parallel parking on both sides of the street. In addition, a 10' class 1 sidewalk and landscaping strip will be added on the north side of the street to accommodate pedestrian and bicycle traffic. Stop signs will be added at the north end of La Fata and at the exit from the Lodging driveway entrance. With the improvements of Mills Lane, a proper connection to La Fata will be completed at the same time. Also, a sidewalk will be added to the west side of La Fata. LMR will complete the construction of the Mills Lane and La Fata Street improvements prior to the opening of the lodging with costs allocated per the Highway 29 Specific plan.

The entrance to the registration parking court and parking lot will be aligned with La Fata Street. There will be 80 onsite parking spaces, 15 more than is required by city code. All employee parking will be at the supplemental lot located at McCormick and Dowdell. Employees will not be allowed to park on site or on neighboring side streets. The applicant will provide an on-call shuttle for employees to both sites when needed at night.

Secure bicycle parking will also be available for general public guests not staying at the lodging.

Water

The lodging and related facilities' needs for potable water (identified as approximately 5.8 acre-feet annual requirement) will be fulfilled through a connection to the City of St. Helena water system. Existing on-site non-potable wells will service all agricultural and landscaping activities. The pool will initially be filled by water from outside the City of St. Helena. To achieve the City's requirements for water neutrality the Project proposes to pay in lieu fees to fund an offset program as further described in the section on utilities.

CONSTRUCTION

Construction work will be limited to the days and hours set by the City's Municipal Code Section 17.16.030.

With the approval of the Development Agreement and various project entitlements, construction could begin in 2020 with completion targeted for late-2021.

REQUIRED DISCRETIONARY AND OTHER CITY APPROVALS

Farmstead Restaurant site (738 Main Street)

- Use permit amendment to memorialize all current and proposed uses on-site; and
- Design review for exterior modifications to existing buildings.

Lodging site (1000 Mills Lane)

- Use permit to authorize a lodging project;
- Design Review for all structures;
- Variance to allow for a non-resident manager;
- Adoption of new joint water use agreement;
- Lot line adjustment and lot merger;
- City Council approval of water offsets;
- Vacation of right of way; and
- A Development Agreement covering improvements to Mills Lane and Affordable Housing.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

St. Helena, California

OTHER PUBLIC AGENCY REVIEW REQUIRED

- Cal Trans District 4
- Regional Water Quality Control Board
- California Public Utilities Commission
- California Air Resources Board

CONSULTATION UNDER AB 52

In accordance with AB 52 (PRC Section 21084.2), lead agencies are required to consider Tribal Cultural Resources (TCR) including a site feature, place, cultural landscape, sacred place or object, of cultural value to the tribe and is listed on the California Register of Historic Resources (CRHR) or a local register, or the Lead agency, at its discretion, chooses to treat resources as such. AB 52 mandates that a lead agency initiate consultation with a tribe with traditional and/or cultural affiliations in the geographic area where a subject project is located if a project may cause a substantial adverse change in the significance of a tribal cultural resource. Should the tribe respond requesting formal consultation in accordance with the procedural requirements of AB 52, the lead agency must work with the tribe or representative thereof to determine the level of environmental review warranted, identify impacts, and recommend avoidance or mitigation measures to reduce any potential impacts.

In accordance with AB 52, a summary of the proposed project was mailed to the following local tribes on September 29, 2016:

- Yocha Dehe Wintun Nation Tribe
- Mishewal Wappo Tribe of Alexander Valley

A response requesting a site visit was received from the Yocha Dehe Wintun Nation Tribe on November 4, 2016. Subsequently, staff, the project proponent and a representative of the Tribe met at the project location for a site inspection on November 30, 2016. No changes to the proposed project were needed following consultation.

No other Tribes requested consultation under AB 52.

DOCUMENTS INCORPORATED BY REFERENCE

CEQA Guidelines Section 15150 recognizes the desirability of reducing the volume of documentation necessary for environmental review and authorizes incorporation by reference any portion of relevant documents that provide general background to the environmental document. As such, this Initial Study incorporates the following documents, which were reviewed as part of the analysis of certain topical sections provided herein:

- City of St. Helena, General Plan Update 2040;
- City of St. Helena, Zoning Ordinance, as amended;
- City of St. Helena, Highway 29 Specific Plan.

Additional documents not reflected in this section are identified and analyzed within the Initial Study. These documents are available for review at the City of St. Helena Planning Department, 1572 Railroad Avenue, St. Helena, CA 94574.

ENVIRONMENTAL PROCEDURES AND CHECKLIST

This Initial Study presents a preliminary evaluation of the potential environmental impacts resulting from the Project. The Initial Study was prepared in accordance with the California Environmental Quality Act (Public Resources Code Section 21000-21178.1) and the Guidelines for Implementation of the California Environmental Quality Act (Chapter 3, Title 14, California Code of Regulations of the CEQA Guidelines). This Initial Study considers all aspects of the Proposed Project, as required by Section 15063(a) (1) of the CEQA Guidelines Section 15063(a) (1) of the CEQA Guidelines requires that all phases of project planning, implementation, and operation must be considered in the Initial Study of the project.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
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The Environmental Checklist provided below, as contained in Appendix G of the CEQA Guidelines, was utilized to focus this Initial Study on the environmental factors that may be impacted or further impacted by implementation of the Proposed Project. Following each of the topical areas presented in the Environmental Checklist, a brief discussion is presented regarding the topical environment setting, the relevance of the Proposed Project to the topical environment setting, any and all potential impacts within the topical area and, as appropriate, any mitigation measures necessary to reduce potentially significant impacts to a less-than-significant level.

SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below identify “Potentially Significant Impacts” affected by this Project, as indicated by the checklist on the following pages. However, as demonstrated in this Initial Study in the applicable topical sections, mitigations are proposed for incorporation into the Project that will reduce or eliminate these impacts to “Less Than Significant” or “No Impact.”

- | | | |
|--|---|--|
| ☐ Aesthetics | ☐ Agriculture and Forestry | ☒ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources/Tribal Resources | ☐ Geology/Soils |
| ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials | ☒ Hydrology/Water Quality |
| ☐ Land Use/Planning | ☐ Mineral Resources | ☒ Noise |
| ☐ Population/Housing | ☒ Public Services | ☐ Recreation |
| ☒ Transportation/Traffic | ☒ Utilities/Service Systems | ☒ Mandatory Findings of Significance |
| ☐ Energy | ☐ Wildfire | |

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
St. Helena, California

DETERMINATION:

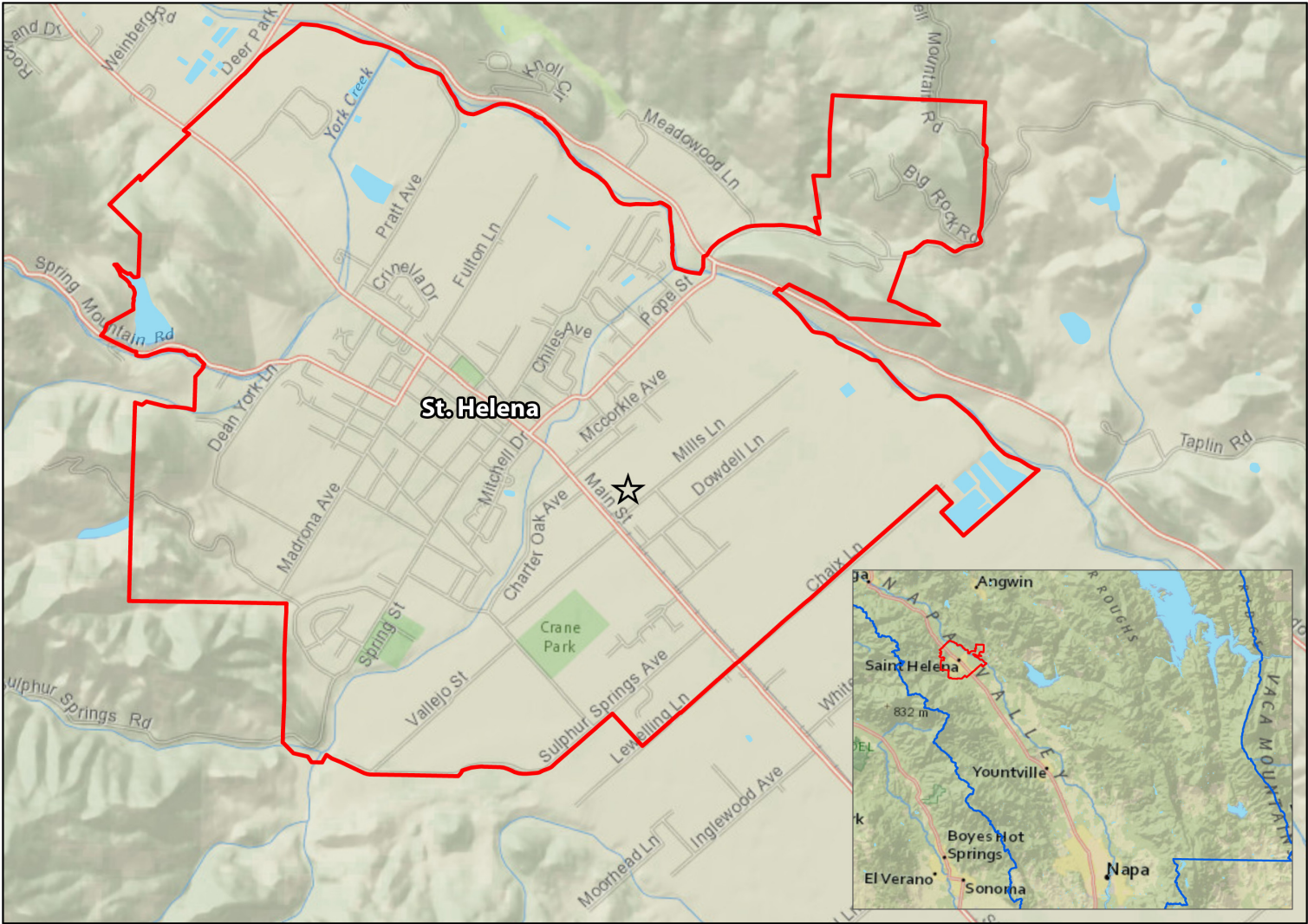
On the basis of this initial evaluation:

- ☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the Proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.



Maya DeRosa, AICP
Planning and Building Director
City of St. Helena

Date: May 29, 2020

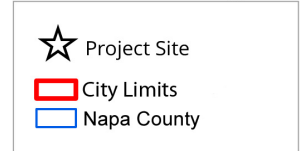


0 0.25 0.5 1 Miles



Service Layer Credits: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Regional Location
Farmstead at Long Meadow Ranch
St. Helena, California



Data source: Napa County GIS

Figure 1



Figure 2

Project Location
Farmstead at Long Meadow Ranch
St. Helena, California



Data source: Google Earth

Figure 3

Lodging Site Plan Farmstead at Long Meadow Ranch St. Helena, California



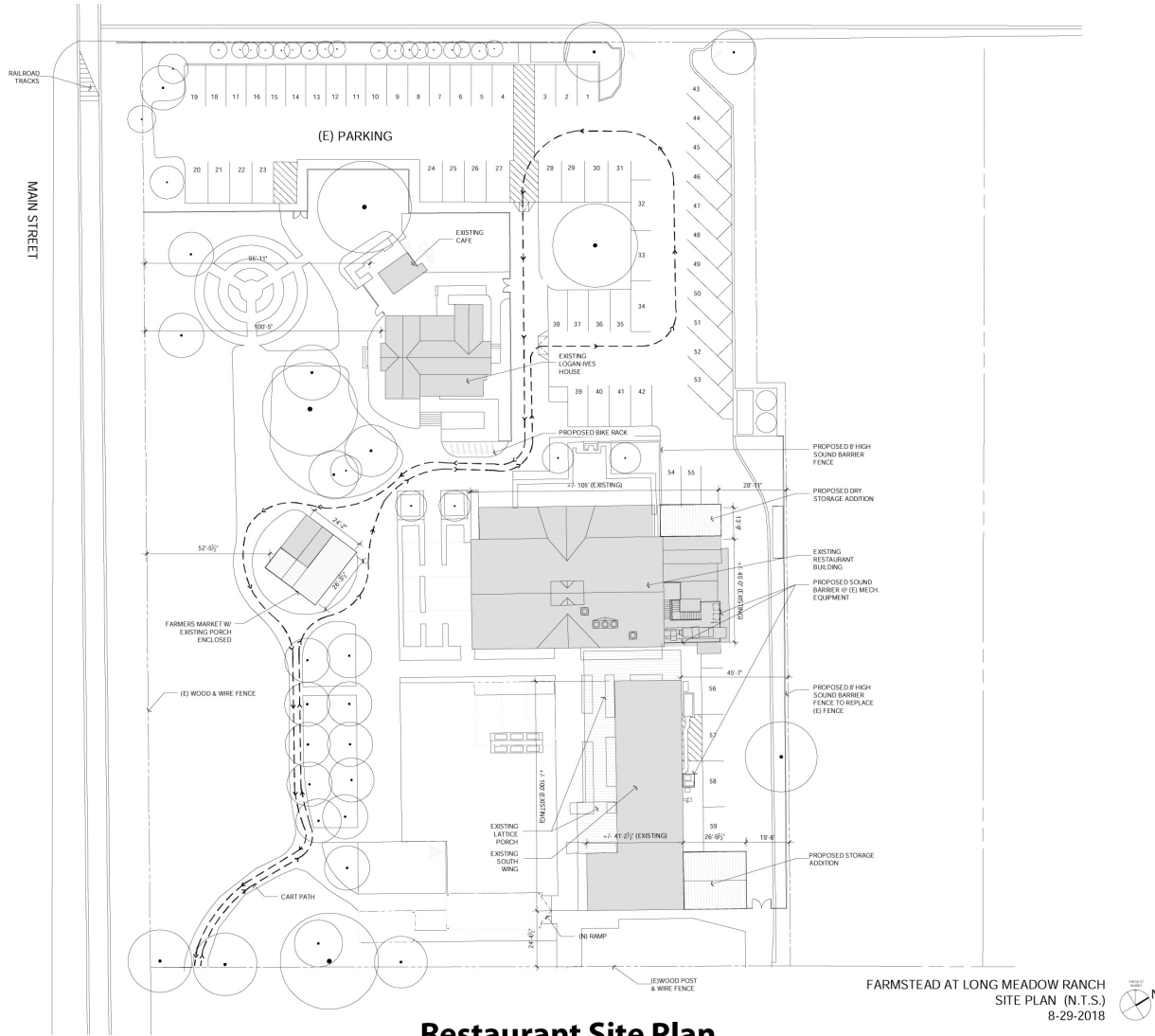


Figure 4

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
St. Helena, California

	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
I. AESTHETICS				
Would the project:				
a. Have a substantial adverse effect on a scenic vista?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
c. Substantially degrade the existing visual character or quality of the site and its surroundings?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐

DISCUSSION

The City of St. Helena is situated in the relatively narrow valley floor and framed by wooded foothills of the Mayacama and Vaca Mountain ranges located to the west and east, respectively. The valley floor undulates to the north and exhibits a gradual rise in elevation in a northerly direction of approximately 362 Feet above sea level which provides for the occasional interruptions in the vistas as viewed from the City. Foothills are readily visible from most locations in the flatland areas of the City, particularly from east/west oriented streets.

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Natural features that contribute to the distinct character of St. Helena include Sulphur Creek, York Creek, the Napa River, and oak and bay wooded hillsides located at the north end of St. Helena and at the base of Howell Mountain Road, east of the Napa River. Agricultural land uses, primarily viticulture, account for approximately 48 percent of the city's land use. As such, the vineyards serve as dynamic visual features and are central in defining the visual character of the City. The long-established urban form within the City limits contrasts with the surrounding natural and agricultural features and provides for a distinct visual character. Notable visual features include distinctive architecture, tree lined streets, and the interspersed vineyards.

The two Projects' design call for minor improvements to the existing Farmstead facilities as well as construction of a lodging and agricultural learning center as part of the Farmstead at Long Meadow Lodging Project on an adjacent site. Integrated into the Lodging's agricultural setting will be 65 new guest rooms/suites. The buildings are configured with courtyards or porches. Throughout the lodging portion of the property, farming will continue with an edible landscape of herbs, fruit, citrus trees, and vegetables planted along the pathways.

REGULATORY SETTING

General Plan Update 2040

General Plan Policies related to the proposed project include the following:

- LU3.5 Ensure that new retail and commercial development is compatible with and complementary to St. Helena's small-town image.
- LU3.11 Ensure that new commercial development does not obstruct view corridors to the mountains.
- CD1.8 Require, to the extent feasible, that all new development include underground utilities to minimize their negative visual impact.
- CD1.1 Ensure high-quality design and construction through a robust design review process.
- CD2.3 Encourage distinction within and between buildings by varying roof lines and articulating building facades.
- CD5.1 Preserve the visual and physical connection to agriculture by protecting views from streets, parks, and open spaces to vineyards, agriculture, and hillsides. Where new streets are extended adjacent to agriculture, encourage hillside, and vineyard views by maintaining agricultural activities at the road edge. Existing east and west entries should be maintained in their current appearance, protecting and improving views of vineyards and the surrounding hillsides wherever possible.
- CD5.2 Use public streets or pathways to form the edge of developed areas, allowing views of open space from streets.
- CD5.3 Ensure that key gateways into the City receive special, character-defining treatments and landscaping. Consider establishing landmark trees along the roads that serve as gateways to the City. New commercial development on Main Street south of the Sulphur Creek bridge should be carefully designed to provide an appropriate gateway into the downtown area.
- CD5.4 Preserve and enhance the City's nighttime environment and quiet rural sounds of the night for residents and wildlife by limiting the negative effects of artificial lighting.

Highway 29 Specific Plan

The design objectives of the Highway 29 Plan include:

- Promote a high quality of development in the Specific Plan area that is consistent with the design standards required of other recent developments in the city.
- Upgrade community image by improving the southerly approach into St. Helena south of the Highway 29 bridge.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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- Promote tasteful, high quality landscaping along Highway 29 and other streets within the Specific Plan area.
- Require preparation of master sign plans for all new development to ensure compliance with the City's sign ordinance.

The Specific Plan provides numerous guidelines. The following guidelines are intended to apply to development applications within the Specific Plan area in addition to the regulations and purposes in the St. Helena Zoning Ordinance, the remainder of this Specific Plan and the General Plan:

- Grading and fill in the Specific Plan area shall be designed to control stormwater runoff and blend with the natural environment through careful rounding of the toes and tops of fill. Grading permits that include conditions to this effect shall be required prior to the commencement of any grading operations.
- Site design for new projects shall include generous landscaped areas along the west side of Highway 29 and buffer plantings east of the Wine Train tracks for properties lying on the east side of the Highway.
- To the extent possible, buildings and building entrances should be sited near Highway 29 with parking areas to the rear. On the west side of Highway 29, access to parking areas can be via the extension of Oak Avenue. Generous landscaped setbacks shall be provided adjacent to Highway 29.

Municipal Code Guidelines: 17.164.030 Design criteria.

- Consistency and compatibility with applicable elements of the general plan;
- Compatibility of design with the immediate environment of the site;
- Relationship of the design to the site;
- Determination that the design is compatible in areas considered by the board as having a unified design or historical character;
- Whether the design promotes harmonious transition in scale and character in areas between different designated land uses;
- Compatibility with future construction both on and off the site;
- Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;
- Whether the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community;
- Whether the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures;
- Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;
- Whether natural features and vegetation are appropriately preserved and integrated with the project;
- Whether the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structures and functions;
- Whether the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors, create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site;

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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- Whether sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials.

ENVIRONMENTAL SETTING

Existing Farmstead at Long Meadow Ranch (Farmstead)

Farmstead at Long Meadow Ranch is seeking an amended use permit and design review approval to reflect current and planned uses, primarily related to a change from the former nursery use. The 2009 Use Permit allowed for:

- An increase in the Eating and Drinking Establishments Inventory to allow the establishment of a wine tasting room and a 160-seat restaurant at 738 Main Street.
- A Use Permit Amendment to retain the existing plant nursery and add food, wine, farm and community garden uses. The proposed uses include the conversion of the retail barn to a restaurant and the construction of an open-air produce market. The historic residence will be converted into a wine tasting room and offices.
- The 2009 Design Review for the addition of on-site parking spaces, construction of a covered product market, minor modifications to the exterior of the historic home to accommodate accessible entrances and to add a trellis to the retail barn.

The existing farmer's market building will be reconfigured to include butchery and retail meat sales. Existing butchery operations will be moved from the restaurant to the reconfigured space and the farmer's market will offer for sale, in addition to existing farmer's market products, fresh meat and charcuterie. The existing baking operation will be moved from the restaurant to the existing commercial kitchen in the Logan-Ives House. Expansion of storage space in two current buildings is also planned. Minor modifications are proposed to existing pathways.

The visual change for the farmer's market is wrapping the existing porch in horizontal spaced boards enclosing it to create a larger indoor space (+408 SF) for the butchery and retail meat sales. At the restaurant the storage space is a small addition that nests below the porch roof. A second storage space is set behind the existing south wing. Both of these additions will conform to the style and aesthetics of these existing two buildings.

Treatments designed to minimize noise include increasing the height and noise attenuating features of the of the existing fence along the property line with an eight-foot tall noise barrier and adding barriers to shield the AC exhausts on the top of the barn/catering building and restaurant. While these structures would increase the height over existing, their primary visibility is limited to the property to the east. Existing dense vegetation provides a visual screen to the farm buildings on the eastern property. An extension of the walls of the restaurant/bar building is proposed to provide additional noise attenuation of the bar area. This wall, approximately 8 feet high, will be visually "softened" with a continuation of the chimney vine along the northern side. This structure will be primarily visible from the on-site parking area.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

The Lodging Project is set back from Highway 29 (Main Street). The closest proposed building to Highway 29 is the Fitness Center which is almost 250 feet from Highway 29. The visibility of the Proposed Project is softened by several rows of trees along its Highway 29 viewshed as well as along the Mills Street frontage. The surrounding uses include a veterinary clinic along Highway 29, the existing Farmstead operation adjacent and to the northwest, residential uses to the north, agricultural uses to the east along with warehousing and a large PG&E sub-station across Mills Lane.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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The Lodging Project is designed to highlight the agricultural setting of St. Helena and the Napa Valley. The farmland in the agricultural view shed between Farmstead and the proposed lodging is the central feature of the overall site. The open farmland provides long views across the valley and a transition between the service commercial zone to the south and downtown to the north. Paths from the farmland extend across the site to the service commercial zone creating a direct experiential and visual link of the lodging with the farming. A multipurpose barn building anchors the eastern property edge and a fitness center is set at the western edge of the site. The barn roof silhouettes of these two buildings set the project in the larger valley floor and provide continuity with Dr. Gold's barn (the veterinary clinic) to the west and the barn roof of Farmstead to the north.

One story cottage buildings with porches and smaller garden spaces are set in between these barns. The cottage forms draw on earlier Napa Valley buildings with porches, gable roofs and small fenced gardens. Materials are simple with corrugated roofing, vertical board siding and double hung windows. A quiet vernacular architecture with shade covered indoor to outdoor spaces and orchards throughout will create the Lodging Project experience. The primary materials are white painted vertical boards, board and batten, natural cedar vertical boards and light gray corrugated metal roofs, consistent with Napa Valley's architecture setting. Setting farming at the center, the Proposed Lodging Project draws on the agricultural setting to provide a transition from the service commercial along Highway 29 to the vineyards to the east.

The Lodging Project maintains the same farm architectural style as the existing adjacent Farmstead and Veterinarian clinic structures, consisting only of single-story buildings (16' for the guest room buildings; 29' for the multi-purpose building; and 26' for the wellness building) throughout, creating a rural setting with farm lands, fruit and vegetable landscaping among the buildings and shielding the parking with multiple rows of fruit trees. In addition, the Project will provide bicycle and walking paths into downtown while maintaining off-street parking for cars away from the downtown area.

Green design measures will be incorporated throughout the Project. The Project will consist of edible vegetables and fruit plants and trees and limited decorative planting consisting of native and/or drought tolerant plant species. Hydro-zones will be utilized to make efficient use of water in compliance with City ordinances. The property will have two to three rows of orchard trees along Hwy 29 and Mills Lane to soften its appearance from Highway 29.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-d) **Less Than Significant Impact.** Changes to the existing Farmstead facilities will primarily involve interior construction. New construction will not be visible from off-site as the new structures are separated by existing buildings or existing landscaping. The visual change for the farmer's market is wrapping the existing porch in horizontal spaced boards enclosing it to create a larger indoor space for the butchery and retail meat sales. At the restaurant the storage space is a small addition that nests below the porch roof. A second storage space is set behind the existing south wing. Both of these additions will conform to the style and aesthetics of these existing two buildings. The noise attenuation features are only visible from on-site or from the farm buildings at the rear of the adjacent parcel to the east.

No impacts to a scenic vista or scenic resources near a scenic highway will occur with the Project as it is an existing commercial operation and will continue to be so. The development will retain the historic Logan-Ives House on-site (no exterior alterations are proposed) and maintain visual characteristics of the area. Any new lighting would be focused on path lighting, not resulting in any new substantial sources of light and glare. Therefore, impacts to visual resources, related to the existing Farmstead facilities, are determined to be less than significant.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
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Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a,b) **Less Than Significant Impact.** While the Project is located in a visually prominent scenic corridor, it does not contain scenic resources (trees, rock outcroppings or historic buildings) related to a State designated scenic highway as there are no officially designated scenic highways in St. Helena per the Department of Transportation. Therefore, the Project site will not impact any State designated scenic highways. City of St. Helena planning documents depict Highway 29 as an arterial roadway and the 2040 General Plan set a goal of investigating the possibility of obtaining a scenic highway designation for Highway 29 through St. Helena (Policy CD5.E), however this has not yet happened. The Project proposes to provide improvements onsite (including street trees, an orchard, setbacks, landscaping, and paths) in anticipation of meeting a future scenic corridor designation.

The Lodging Project is designed to be consistent with the agricultural setting of St. Helena and the Napa Valley. The farmland in the agricultural view shed between Farmstead and the proposed lodging is the central feature of the overall site. The open farmland provides long views across the valley and a transition between the service commercial zone to the south and downtown to the north. Paths from the farmland extend across the site to the service commercial zone creating a direct experiential and visual link of the lodging with the farming. A multipurpose barn building anchors the eastern property edge and a fitness center is set at the western edge of the site. The barn roof silhouettes of these two buildings set the project in the larger valley floor and provide continuity with Dr. Gold's barn to the west and the barn roof of Farmstead to the north.

The Project will not conflict with any current local policies or ordinances protecting scenic resources, policies or ordinances, and will not result in any significant impacts, therefore the impacts have been determined to be less than significant.

- (c) **Less Than Significant Impact.** While the Project will convert a parcel that is currently undeveloped to one that is developed, a portion of the site will remain in agriculture. The portion of the site most visible to the majority of the viewers (the view from Highway 29) will be altered from an open field to a lodging structure. This change in visual character will be minimized by screening trees along Highway 29 and Mills Lane. Evergreen screening trees will wrap the property along Mills Lane and the western border parallel with Highway 29. These California pepper trees, selected for the graceful form of their dense, low canopies, will reach up to 40' in height at maturity, effectively screening the lodging buildings from the two roads. Adjacent rows of fruit trees will create a secondary layer of screening, providing glimpses of the seasonal farming cycle and historic Napa Valley landscape.

The portion of the property zoned agricultural will be maintained as a working farm raising fruits and vegetables to be used in the Farmstead Restaurant. The Service Commercial portion is designed to be consistent with the City's design criteria 1) providing a harmonious transition between the different designated land uses, 2) using architectural designs and materials consistent with neighboring structures and 3) providing an appropriate balance of buildings, landscape and open space, and, therefore, will not result in any significant impacts. The Project shall be consistent with the Highway 29 Specific Plan Design Guidelines.

Therefore, the project will have a less than significant impact on the existing visual character.

- (d) **Less Than Significant Impact.** The City of St. Helena requires that lighting fixtures be shielded or recessed to reduce light bleed to adjoining properties, and that each light fixture be directed downward and away from adjoining properties and public rights-of-way, so that no on-site light fixture directly illuminates an area off the site. The Project will be conditioned to ensure compliance with these City objectives. The Project shall demonstrate at the time of building permit application that lighting has

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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been designed to be adequate without spilling off the property to ensure compliance with City requirements. Compliance with these requirements will ensure that the Project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area and, therefore, would result in a less than significant impact.

MITIGATION MEASURES

None required.

STANDARD MEASURES

A standard condition of approval regarding exterior lighting requirements will be placed on the Project as part of design review. Conformance review shall occur at the building permit stage.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- City of St. Helena Municipal Zoning Code.
- California Department of Transportation, Scenic Highway Program.
- City of St. Helena Highway 29 Specific Plan, February 22, 2005.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
II. AGRICULTURE AND FOREST RESOURCES				
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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DISCUSSION

The Farmstead Restaurant property is designated as Service Commercial and the Farmstead at Long Meadow Ranch Lodging property as Service Commercial and Agricultural in the current General Plan 2040 Update. The City of St. Helena planning documents focus on the need to provide for agricultural uses, wineries, single family residences and public and quasi-public uses, and the Farmstead and the Long Meadow Lodging Projects are both consistent with proposed service-oriented development only in the areas designated for service commercial use. The areas designated for agriculture are preserved for agriculture or agricultural support uses (e.g. orchards, gardens).

REGULATORY SETTING

California Department of Conservation

The existing Farmstead property is designated as “Urban Land and Built-up Land” by California Department of Conservation (DOC) Division of Land Resources Protection, Farmland Mapping and Monitoring Program (2016). The Farmstead at Long Meadow Ranch Lodging component has a split designation of “Urban Land and Built-up Land” and “Farmlands of Local Importance”.

The DOC’s Farmlands Mapping Program defines the two categories as follows:

“Land Urban and Built-up Land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.”

Urban and Built-up Land is used for residential, industrial, commercial, construction, institutional, public administrative purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as a part of Urban and Built-up Land if they are a part of the surrounding urban areas.

Units of land smaller than 10 acres will be incorporated into the surrounding map classifications. The building density for residential use must be at least 1 structure per 1.5 acres (or approximately 6 structures per 10 acres). Urban and Built-up Land must contain man-made structures or buildings under construction, and the infrastructure required for development (e.g., paved roads, sewers, water, electricity, drainage, or flood control facilities) that are specifically designed to serve that land. Parking lots, storage and distribution facilities, and industrial uses such as large packing operations for agricultural produce will generally be mapped as Urban and Built-up Land even though they may be associated with agriculture.

Urban and Built-up Land does not include strip mines, borrow pits, gravel pits, farmsteads, ranch headquarters, commercial feedlots, greenhouses, poultry facilities, or road systems for freeway interchanges outside of areas classified as Urban and Built-up Land areas.

Within areas classified as Urban and Built-up Land, vacant and nonagricultural land which is surrounded on all sides by urban development and is less than 40 acres in size will be mapped as Urban and Built-up. Vacant and nonagricultural land larger than 40 acres in size will be mapped as Other Land.

“These farmlands include areas of soils that meet all the characteristics of Prime Farmland or of additional Farmland of Statewide Importance with the exception of irrigation. These farmlands include dryland grains, haylands, and dryland pasture.” Farmland of Local Importance is land of importance to the local economy, as defined by each county’s local advisory committee and adopted by its Board of Supervisors. Farmland of Local Importance is either currently producing or has the capability of production; but does not meet the criteria of

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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Prime, Statewide or Unique Farmland. Authority to adopt or to recommend changes to the category of Farmland of Local Importance rests with the Board of Supervisors in each county.

Farmland of Local Importance is either currently producing crops, has the capability of production, or is used for the production of confined livestock. Farmland of Local Importance is land other than Prime Farmland, Farmland of Statewide Importance or Unique Farmland. This land may be important to the local economy due to its productivity or value. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use. In a few counties the local advisory committee has elected to additionally define areas of Local Potential (LP) farmland. This land includes soils which qualify for Prime Farmland or Farmland of Statewide Importance, but generally are not cultivated or irrigated. For reporting purposes, Local Potential and Farmland of Local Importance are combined in the acreage tables but are shown separately on the Important Farmland Map.

Farmland of Local Importance is initially identified by a local advisory committee (LAC) convened in each county by FMMP in cooperation with the USDA-SCS and the county board of supervisors. LAC membership is very similar to the map reviewers list on page 6 of this document. Authority to recommend changes to the category of Farmland of Local Importance rests with the board of supervisors in each county. The FMMP presents each draft map to the board of supervisors for their review. After the presentation of this map, the board of supervisors has a 90-day review period in which to request any needed modifications. An extension may be granted upon request. The board of supervisors may then approve or disapprove the Farmland of Local Importance category. The FMMP will accept the recommendation of the board of supervisors if it is consistent with the general program guidelines.

If no action is initiated by the county to identify or adopt a Farmland of Local Importance definition within a year of contact by FMMP, the county will be deemed to have no adopted definition for Farmland of Local Importance.

Any revision to the initial board of supervisors' action on Farmland of Local Importance will require 30-day written notice to FMMP and members of the LAC. This process may require reconvening of the LAC.

County definitions of Farmland of Local Importance are contained in Appendix C.

General Plan Update 2040

The City's current General Plan provides the following policy guidelines for agricultural land:

- LU5.1 Discourage conversion of existing farmland to non-agricultural uses.
- LU5.3 Strictly limit development on properties existing at the time of the adoption of this General Plan that are designated as agricultural land.
- LU5.5 Encourage the use of sustainable agricultural practices.
- LU5.6 Permit wineries and other agricultural-related industries to locate in the city if their location does not adversely impact surroundings, uses, or city services (water, traffic, etc.) or the quality and character of the community.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-e) **No Impact.** The Farmstead property is fully developed and the proposed changes will neither effect designated farmlands nor conflict with Williamson-contracted lands/agriculturally zoned lands. The site is urban and contains no timberland or forest resources. The site is in an urban area that is

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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projected for development with limited trees on-site and no forest resources on or near the site. The current uses and the proposed expansion of additional storage areas and the reconfiguration of existing uses is consistent with all of the City's General Plan policies and other regulatory criteria noted above. The Project would have no impact to agriculturally designated lands or forest resources. The current and proposed uses support, either directly or indirectly, agricultural lands.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a,e) **Less Than Significant Impact.** A portion of the Project site (approximately 3.9 acres) is designated Farmlands of Local Importance of the California Resources. Historical photos indicate that a portion of the site has been used for agricultural uses in the past. The Project site designated for development is located within St. Helena's Urban Growth Boundary, and has long been zoned for development. The portions of the site designated as Agricultural in the General Plan are currently supporting some agricultural activity and will be preserved as a working farm and an integral part of the Proposed Lodging's farm-oriented focus. The agricultural theme will be maintained on the acreage designated as service-commercial in the form of an edible landscape. Adjacent properties to the northwest and northeast are similarly zoned for development. As the proposed project will not result in the conversion of prime, unique, or farmland of statewide importance and as agricultural uses will continue on-site, this impact is considered less than significant.
- (b) **No Impact.** Neither the Project site nor the adjacent properties are under a Williamson Act contract. Therefore, the Project would not impact existing agricultural zoning or Williamson Act contract for the property.
- (c,d) **No Impact.** The site is in an urbanizing area that is projected for development with no trees on-site and no forest resources on or near the site. Therefore, the Project would have no impact to forest resources.

MITIGATION MEASURES

None required.

SOURCES

- California Department of Conservation (CDC), Division of Land Resources Protection, Farmland Mapping and Monitoring Program (2016).
- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- Marcus H. Bole & Associates, Biological Evaluation, Long Meadow Ranch Project – St. Helena, CA, September 6, 2016.
- RGH Geotechnical and Environmental Consultants, Geotechnical Engineering Report Update, Mills Lane Lodging Project, St. Helena, California, February 23, 2017.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
III. AIR QUALITY				
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
d. Expose sensitive receptors to substantial pollutant concentrations?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
e. Create objectionable odors affecting a substantial number of people?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐

DISCUSSION

The Project is located in Napa County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

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Air Pollutants of Concern

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

The predominant TAC from construction activity is diesel particulate matter (DPM). VOCs can contain trace levels of TACs but they do not contribute to overall health risks associated with construction activities when accounting for DPM. For these reasons, construction health risk assessments are based on emissions of DPM.

Toxic Air Contaminants

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), a part of the California Environmental Protection Agency (EPA), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways.

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. The closest sensitive receptors include residences to the north of the Project site on Charter Oak Avenue and the St. Helena High School to the southwest of the Project site.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
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REGULATORY SETTING

General Plan Update 2040

The following policies relate to the proposed project:

- PS1.1 Achieve and maintain clean, healthy air for the residents of St. Helena to preserve environmental quality and community health.
- PS1.2 Support regional efforts to achieve and maintain state ambient concentration standards to protect public health, reduce adverse industrial plant effects, and enhance the visual environment. In particular, provide local support for implementation of policies and measures set forth in the Napa County Congestion Management Program.
- PS1.3 Encourage effective regulation of those sources of air pollution, both inside and outside of St. Helena, which affect air quality, by implementing as many of the recommendations of the Napa County Congestion Management Plan as is feasible.
- PS1.4 Promote an optimized land use development pattern that minimizes cumulative air quality impacts from proposed developments.

Implementing Actions

- PS1.A Minimize local adverse air quality impacts related to construction by requiring dust abatement procedures for local projects.
- PS1.C Review project proposals for their potential to generate hazardous air pollutants.
- PS1.D Develop guidelines for locating new sensitive uses, including residences, schools, and childcare facilities, away from air pollutant sources. The guidelines can include measures to mitigate air emissions from existing sources, as well as to design buildings to prevent exposure.
- PS1.E Encourage and support regional efforts to use alternative modes of transportation.
- PS1.F Consider a citywide network to help commuters arrange carpools, including online coordination capabilities and designated areas for parking and pick-up.
- PS1.G Adopt the thresholds of significance contained in the Bay Area Air Quality Management District's (BAAQMD) Guidelines for Assessing the Impacts of Projects and Plans for determining the significance of project impacts under the California Environmental Quality Act.
- PS1.H Continue to implement an ordinance to restrict exposure to environmental tobacco smoke in new and existing multi-unit dwellings, public events, and outdoor areas, such as parks and playgrounds.
- PS1.I Adopt a voluntary, employer-based transportation demand management (TDM) program for St. Helena businesses in compliance with the BAAQMD's 2017 Clean Air Plan (CAP). Components of a TDM program should include measures to reduce the use of single-occupancy vehicles for work-related commuting, such as carpool/vanpool matching services and employer-sponsored transit passes.

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- PS1.J The potential for sources of odors that includes restaurants, auto body shops, or waste treatment facilities shall be considered when evaluating proposed residential projects and projects with sensitive recipients.

Highway 29 Specific Plan

The actions below are intended to reduce the effects of Specific Plan development on air which is essential to maintaining St. Helena's high quality of life for both residents and workers. Because of the importance of these issues, individual projects are strongly encouraged to incorporate additional safeguards into their development proposals wherever feasible.

Actions to Protect Air Quality

1. All projects involving grading and/or construction shall adopt recognized dust control measures sufficient to reduce emissions of Particulate Matter-10 microns (PM₁₀) to less-than-significant levels. Such measures may include the following, as well as additional measures as deemed appropriate by the City Engineer:
 - Watering construction sites as necessary using recycled water treated with a dust palliative or suppressant;
 - Enclosing, covering, watering, or applying non-toxic soil binders to stockpiles of soil, sand and other materials that can be blown by the wind when not in use;
 - Covering all trucks hauling soil, sand and other loose materials, or requiring all trucks to maintain at least two feet of freeboard;
 - Paving, applying water as necessary, or applying non-toxic soils stabilizers to all unpaved access roads, parking areas and staging areas at construction sites'
 - Sweeping all paved access roads, parking areas and staging areas at construction sites daily, preferably with water sweepers;
 - Sweeping streets daily if visible soil material is carried onto adjacent public streets, preferably with water sweepers;
 - Hydroseeding or applying non-toxic soil stabilizers to inactive construction areas;
 - Enforcing a speed limit of 15 mph on unpaved roads;
 - Installing silt fences or other erosion control measures to prevent silt runoff to public roadways; and
 - Replanting vegetation in disturbed areas as quickly as possible.

The Project will be subject to each of these actions to protect air quality as discussed below.

BAAQMD

The BAAQMD is the regional agency tasked with managing air quality in the region. At the State level, the CARB (a part of the California Environmental Protection Agency [EPA]) oversees regional air district activities and regulates air quality at the State level. BAAQMD's updated its CEQA Guidelines (updated May 2017). The significance thresholds identified by BAAQMD and used in this analysis are summarized in Table III-1.

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Table III-1. Air Quality Significance Thresholds

	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
Criteria Air Pollutants			
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (Exhaust)	82	15
PM _{2.5}	54 (Exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards	Single Sources Within 1,000-foot Zone of Influence		Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)
Excess Cancer Risk	>10 per one million		>100 per one million
Chronic Hazard Index	>1.0		>10.0
Annual Average PM _{2.5}	>0.3 µg/m ³		>0.8 µg/m ³
Odors	Complaints		Complaints
	No Threshold		5 confirmed complaints per year averaged over three years
Note: ROG = reactive organic gases, NO _x = nitrogen oxides, PM ₁₀ = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM _{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less; and GHG = greenhouse gas.			

Existing Farmstead at Long Meadow Ranch (Farmstead)

The existing Farmstead Project was constructed in 2006 and proposes only minor increases in square footage, mostly storage. No new employees would be needed. The attached Traffic Impact Report studied the impact of a 200 - person event at the project site. For the air quality analysis it was assumed that these events would occur, on average, twice per week.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

The Lodging Project proposes a 65-unit full-service lodging facility with design features to reduce vehicle trips.

The Lodging Project was evaluated by Illingworth & Rodkin in August 2016 and updated in December 2019 (Attachment F) for potential air quality impacts and toxic air contaminants. That report serves as the basis for this analysis.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

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- (a-e) **Less Than Significant Impact.** In the 2011 update to the CEQA Air Quality Guidelines, BAAQMD identifies screening criteria for the sizes of land use projects that could result in significant air pollutant emissions. For the purposes of this evaluation the Project is using the warehousing category as it most closely resembles the Project's proposed new construction of 865 square feet of storage and 408 square feet of retail butcher shop. For operational impacts, the screening project size is identified at 121,000 square feet. For construction impacts, the screening size is identified as 259,000 square feet. Also for operational purposes, two 200-person events per week were assumed.

Projects of smaller size would be expected to have less-than-significant impacts. Since the Project proposes to develop 865 square feet of storage and 408 square feet of retail space, it is concluded that emissions would be well below the BAAQMD significance thresholds. New stationary sources of air pollution (e.g. back-up generators) have not been identified with this Project.

The Farmstead Project is a local and visitor serving mixed use commercial facility. The proposed improvements include expansion of storage facilities and an increase in the retail component by 408 square feet. The Project is too small to result in exceedances of any of the Air Quality significant thresholds. Due to the Project size, construction- and operational-period emissions would also be minor.

The analysis also included the impact of two 200-person events per week. No other significant expansion of uses, over existing, is proposed and only limited construction is proposed. Measuring the impact of a minor increase in space and the impact of two 200-person events per week resulted in no new significant air quality impacts and this impact is considered less than significant.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a-b) **Less Than Significant Impact.** The Project is a local and visitor serving project with mixed uses. Its focus is on a balance of uses and the promotion of non-vehicular transportation once guests arrive (bicycles at every room, pedestrian pathways, etc.). The Bay Area 2010 Clean Air Plan that was adopted by BAAQMD in September 2010. The Proposed Project would not conflict with the latest Clean Air planning efforts since the Project would have emissions well below the BAAQMD thresholds (see Table III-1). The Project is too small to exceed any of the significance thresholds and, thus, it is not required to incorporate project-specific transportation control measures listed in the latest Clean Air Plan.

BAAQMD identifies screening criteria for the sizes of land use projects that could result in significant air pollutant emissions (As noted on Table III-1). Construction- and operational-period emissions would be less than significant as the 65-unit lodging project is considerably smaller than screening size identified in the 2011 update to the CEQA Air Quality Guidelines. For operational impacts, the screening project size is identified at 489 rooms. For construction impacts, the screening size is identified as 554 rooms. Lodging projects of smaller size would be expected to have less-than-significant impacts. Stationary sources of air pollution (e.g., back-up generators) have not been identified with this Project. Since the Project proposes to develop up to 65 rooms, it is concluded that emissions would be below the BAAQMD significance thresholds.

As discussed under Impact III(c), the Project would have emissions less than the BAAQMD screening size for evaluating impacts related to ozone and particulate matter. Therefore, the Project would not contribute substantially to existing or projected violations of those standards. Carbon monoxide emissions from traffic generated by the Project would be the pollutant of greatest concern at the local level, resulting in a less than significant impact.

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- (c) **Less Than Significant With Mitigation Incorporated.** The Bay Area is considered a non-attainment area for ground-level ozone and PM_{2.5} under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM₁₀ under the California Clean Air Act, but not the federal act. The area has attained both State and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM₁₀, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NOx), PM₁₀, and PM_{2.5} and apply to both construction period and operational period impacts.

Due to the Project size, construction- and operational-period emissions would be less than significant. In the 2011 update to the CEQA Air Quality Guidelines, BAAQMD identifies screening criteria for the sizes of land use projects that could result in significant air pollutant emissions. For operational impacts, the screening project size is identified at 489 rooms. For construction impacts, the screening size is identified as 554 rooms. Lodging projects of smaller size would be expected to have less-than-significant impacts. Since the Project proposes to develop up to 65 rooms, it is concluded that emissions would be below the BAAQMD significance thresholds. Stationary sources of air pollution (e.g., back-up generators) have not been identified with this Project.

Construction activities, particularly during site preparation and grading of the 6+/- acres of the lodging component would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. Fugitive dust emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. Fugitive dust emissions would also depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices are employed to reduce these emissions. Mitigation Measure AQ-1 would implement BAAQMD-required best management practices and reduce impacts to levels of less than significant.

- (d) **Less Than Significant With Mitigation Incorporated.** Project impacts related to increased community risk can occur either by introducing a new sensitive receptor, such as a residential use, in proximity to an existing source of TACs or by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the Project vicinity. Construction activity would generate dust and equipment exhaust on a temporary basis that could affect nearby sensitive receptors: the closest sensitive receptors include single-family residences adjacent to the property to the north of the Project site (and set back from the actual lodging project by 300 feet) and the St. Helena High School, less than 200 feet to the southwest of the Project site. Emissions and dispersion modeling was conducted to predict the off-site DPM concentrations resulting from Project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated. Attachment F includes the detailed health risk calculation methodology.

The Project could have a significant adverse impact with respect to community risk caused by construction activities. Implementation of Mitigation Measures AQ-1 and AQ-2 would reduce this impact to a level of less than significant.

- (e) **Less Than Significant Impact.** The Project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These odor emissions may be noticeable from time to time by adjacent receptors. However, they would be localized and are not likely to adversely affect people off site by resulting in confirmed odor complaints. The Project would not include any

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sources of significant odors that would cause complaints from surrounding uses. This would be a less-than-significant impact.

MITIGATION MEASURES

Existing Farmstead at Long Meadow Ranch (Farmstead)

None required.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

AQ-1. Construction Dust and Exhaust Control: During any construction period ground disturbance, the applicant shall ensure that the Project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less than significant level. The contractor shall implement the following best management practices that are required of all projects:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Implementation of the above Mitigation Measures would reduce dust and exhaust impacts to a level of less than significant.

AQ-2. Community Risk: The project evaluated is at a preliminary design phase and the actual measures to reduce diesel particulate matter emissions may change. A performance standard and feasible measure to achieve that standard are presented in below construction parameters. It is possible that a different set of measures could be developed or the project could be reduced in scope following entitlement that would change the requirements to reduce DPM emissions.

1. Select equipment during construction to minimize emissions.

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2. The Project shall develop a plan demonstrating that the off-road equipment used on-site to construct the Project would achieve a fleet-wide 72 percent reduction in PM_{2.5} exhaust emissions or more by requiring that all mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet, at a minimum, U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent.
3. The construction contractor shall use all measures to minimize construction period DPM emissions to reduce the calculated cancer risk and annual PM_{2.5} concentrations below the thresholds. The use of equipment shall include CARB-certified Level 3 Diesel Particulate Filters or alternatively-fueled equipment (i.e., non-diesel) to meet this requirement. Other measures shall include the use of added exhaust devices, or a combination of measures, provided that these measures are approved by the City and demonstrated to reduce community risk impacts

IMPACT SIGNIFICANCE AFTER MITIGATION

Implementation of the Mitigation Measures listed above would reduce construction related impacts to a less than significant level.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- City of St. Helena, Highway 29 Specific Plan, February 22, 2005.
- Illingworth & Rodkin, Inc., Draft Air Quality & Greenhouse Gas Emissions Assessment, Farmstead at Long Meadow Ranch Expansion Project, August 23, 2016; updated December 2019 and February 2020.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES				
Would the Project:				
a. 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
d. 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?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	X	☐	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐

REGULATORY SETTING

General Plan Update 2040

The following General Plan policies relate to the proposed project:

- 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.

Highway 29 Specific Plan

- Protect identified endangered and special-status plants and animals and their respective habitats through individual resource management plans prepared for properties containing or adjacent to such resources.
- Protected trees should not be removed or disturbed during project construction, although, due to the location of trees, some loss of trees is anticipated.
- All protected trees shall be identified on preliminary site development plans submitted to the City of St. Helena for approval.

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ENVIRONMENTAL SETTING

Existing Farmstead at Long Meadow Ranch (Farmstead)

The existing Farmstead property is a developed site and its biological resources consist of urban landscaping and a few native trees.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

A complete biological resources evaluation has been prepared for the Long Meadow Lodging Project site by Marcus H. Bole & Associates in June 2016. This report and inventory includes results of recent site plant and wetland surveys at the Project site and is found in Attachment H and is summarized below.

Habitat Description

The subject property is located in the City of St. Helena, California. The site is uniformly level with an elevation of 230 feet above sea level. The site is currently vacant land being used to grow vegetables. Interspersed between the rows of vegetables are non-native grasses and forbs. There are no wetlands or riparian habitats on or near the subject property. These features are addressed below.

Undeveloped (Vacant) Land

Interspersed between the rows of vegetables are non-native introduced, annual, grasses and forbs. Due to the phenology of these grasses they tend to dominate the uncultivated landscape. Besides the brome, barley and ryegrass, other grasses found were barbed goatgrass (*Aegilops triuncialis*), and saltgrass (*Distichis spicata*). Non-native forbs found at the site were yellow starthistle (*Centaurea solstitialis*), filaree (*Erodium* spp.), and vetch (*Vicia* spp.).

Wildlife Communities

Undeveloped lands generally provide marginal breeding, cover, and foraging habitat for wildlife species. A limited variety of bird, reptile and mammal species were observed during the recent surveys. Species observed in these habitats include American crow (*Corvus brachyrhynchos*), American robin (*Turdus migratorius*), western scrub jay (*Aphelocoma coerulescens*), western meadowlark (*Sturnella neglecta*), Botta's pocket gopher (*Thomomys bottae*) and the western fence lizard (*Sceloporus occidentalis*). No raptors were observed during over thirty hours of onsite observations.

Special Status Species

The following discussion describes the plant and animal species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special status species are of relatively limited distribution and may require specialized habitat conditions. Listed and special-status species are defined as one of the following:

- Listed or proposed for listing under the state or federal Endangered Species Acts.
- Protected under other regulations (e.g., Migratory Bird Treaty Act).
- California Department of Fish and Game (CDFG) Species of Special Concern.
- Receive consideration during environmental review under NEPA & CEQA.

Special-status species were considered for this analysis based on field survey results, a review of the *Federal Endangered and Threatened Species list for Napa County* (NEPA, 2016), *California Natural Diversity Database* (CNDDB, 2016), CNPS literature, and database information provided by the U. S. Fish and Wildlife Service (St. Helena & Rutherford 7 ½ Minute Quads). (See Table 1 of Attachment H.)

Sensitive Habitats

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Sensitive habitats include those that are of special concern to resource agencies and those that are protected under NEPA, CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. The Project area was systematically surveyed to ensure total search coverage, with special attention given to identifying those portions of the study area with the potential for supporting special-status species and sensitive habitats. No sensitive habitat was found on or near the Project site.

Determination of Waters of the United States

The intent of this determination is to identify wetlands and “other waters of the United States” that are present within the Study Area that could fall under the regulatory jurisdiction of the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. The *1987 Corps of Engineers Wetlands Delineation Manual* identifies several methodologies and combinations of methodologies that can be utilized in making jurisdictional determinations. Marcus H. Bole & Associates has employed the Routine On-Site Determination methodology for this study (as supplemented by the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*, dated December 2006). The Routine On-Site Determination method uses a three-parameter approach (vegetation, soils and hydrology) to identify and delineate the boundaries of jurisdictional wetlands. To be considered a wetland, all three positive wetland parameters must be present. These parameters include (1) a dominance of wetland vegetation, (2) a presence of hydric soils, and (3) hydrologic conditions that result in periods of inundation or saturation on the surface from flooding or ponding. Further description of these parameters is provided in Attachment H. Using the methodologies described in the *1987 Wetland Delineation Manual* (as supplemented by the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*, dated December 2006), Marcus H. Bole & Associates found no federal jurisdictional wetland habitats within the boundaries of the subject property.

Porter-Cologne Water Quality Control Act

The RWQCB requires complete pre- and post-development Best Management Practices Plan (BMPs) of any portion of the Project site that is developed. This means that a water quality treatment plan for the pre- and post-developed Project site must be prepared and implemented. Preconstruction requirements must be consistent with the requirements of the National Pollutant Discharge Elimination System (NPDES). That is, a Stormwater Pollution Prevention Plan (SWPPP) must be developed prior to the time that a site is graded (see NPDES section below). In addition, a post construction BMPs plan, or a Stormwater Management Plan (SWMP) must be developed and incorporated into any site development plan.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

(a-c,e-f) **Less Than Significant Impact.** As the site is currently developed with commercial structures and only minor new construction (<1,300 square feet) is proposed in an already disturbed area, no impacts to biological resources; removal of heritage trees; impacts to wetlands or habitats; interfere with fish or wildlife species; or habitat or conservation area would occur or would be less than significant.

(d) **Less Than Significant With Mitigation Incorporated.**

Nesting Raptors, Passerine Birds and Bats: 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 pines, redwoods, and oaks present on the Project site provide suitable nesting habitat for raptors and passerines. Impacts to such species are a potentially significant impact, unless mitigated to a level of less than significant by the measures identified below.

Special-Status Bats: In accordance with the CEQA Guidelines (Section 15380) which protects “rare” and “endangered” species as defined by CEQA (species of special concern meet this CEQA definition), impacts to these bats resulting from the Project would be regarded as potentially significant. The

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Project proponent shall void potential impacts to special-status bats by conducting preconstruction surveys and implementing avoidance measures, reducing the impacts to a level of less than significant.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a-c) **Less Than Significant Impact.** Site development will not result in impacts to listed federal or state plant or wildlife species. Impacts to common vegetation and wildlife habitats are as follows:

Common Vegetation and Wildlife Habitats: Project implementation will not result in alterations (removal) of natural plant or wildlife communities. The proposed development of this site will not interfere with the movement of any native resident or migratory fish or wildlife species or result in impacts to established native resident or migratory wildlife corridors. The Project will not affect the use of native wildlife nursery sites.

Special-Status Species: Special-status plant species were considered for this analysis based on field survey results, a review of the California Natural Diversity Database (CNDDDB), and CNPS literature. Based on the specific habitat characteristics of subject property, no sensitive plant or wildlife species will be impacted by this Project. The structures and trees near the Project site provide suitable roosting habitat for the pallid bat and Townsend's big-eared bat, State "species of special concern" and are discussed in IV(d) below.

Therefore, the Project has been determined not to have a significant effect on any candidate, sensitive or special status plant species, riparian habitats, or sensitive natural communities. Therefore, less than significant impacts are associated with these biological habitats. All potential water quality impacts are addressed by implementation of Mitigation Measures HYDRO-1 through HYDRO-3 in Section IX, Hydrology.

- (d) **Less Than Significant With Mitigation Incorporated.**

Nesting Raptors, Passerine Birds and Bats: 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 pines, redwoods, and oaks present on the Project site provide suitable nesting habitat for raptors and passerines. In addition, the grassland on the Project site provides suitable nesting habitat for ground nesting birds such as killdeer (*Charadrius vociferus*), western meadowlark (*Sturnella neglecta*), and mourning dove.

Special-Status Bats: In accordance with the CEQA Guidelines (Section 15380) which protects "rare" and "endangered" species as defined by CEQA (species of special concern meet this CEQA definition), impacts to these bats resulting from the Project would be regarded as potentially significant. The Project proponent can avoid potential impacts to special-status bats by conducting preconstruction surveys and implementing avoidance measures, reducing the impacts to a level of less than significant.

- (e-f) **Less Than Significant Impact.** The undeveloped portion of the Project has no trees.

The Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, less than significant impacts are associated with these biological habitats. All potential water quality impacts will be addressed by implementation of Mitigation Measures in Section IX, Hydrology.

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MITIGATION MEASURES

Existing Farmstead at Long Meadow Ranch (Farmstead); and the

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

BIO-1. Nesting Raptors, Passerines: A pre-construction survey for ground-nesting birds shall be performed within thirty (30) days prior to the start of construction. A qualified avian biologist will conduct passerine nest surveys prior to ground disturbing activities, or construction activities at the Project site to locate any active nests on or adjacent to the Project site. If land-clearing activities can be performed outside of the nesting season, that is, between August 16 and January 31, no preconstruction surveys for nesting birds are warranted.

If an active raptor nest is identified during the surveys of the project site and within 300 feet of the project site, a 300-foot buffer around the nest site shall be established. It can be established via installation of orange construction fencing or placement of bright orange lath on 10-foot centers along the arc of the protection buffer. If nesting passerines are identified nesting then a 75-foot protection buffer shall be established using the same buffer demarcation fence or lath as prescribed above.

If nests are located off the project site, then the buffer shall be demarcated as per above but only where the buffer intersects the project site. The size of the nest protection buffer may be altered if a qualified ornithologist with extensive construction-related nest protection experience conducts behavioral observations and determines the nesting raptors or passerines are well acclimated to disturbance. If this occurs, the qualified ornithologist may prescribe a modified buffer that provides sufficient buffer to prevent undue disturbance/harassment that would otherwise result in construction related nest failure. Physical harm to the nest or sufficient disturbance that results in adult inattentiveness to eggs or young will cause nest failure.

No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. In the area of the project site, this typically occurs by July 15th. However, this date may be earlier or later, and would have to be determined by the qualified ornithologist. If a qualified ornithologist is not hired to watch the nesting raptors/passersines then the buffers shall be maintained in place through the month of August and work within the buffer can commence September 1st.

Ground Nesting Raptors and Passerines

In order to determine if ground-nesting raptors or passerines are nesting onsite, a qualified ornithologist would have to conduct walking transects through the project site's grassland habitat searching for nests. If ground-nesting raptors (e.g. northern harrier) or passerines are identified during the surveys within 300 feet of the project site (or 75-feet in the case of passerines), a 300-foot buffer (or 75-feet in the case of passerines) around the nest site shall be fenced with orange construction fencing or brightly painted orange lath. If the nest is located off the project site, then the buffer shall be demarcated as per above where the buffer intersects the project site. The size of the buffer may be altered if a qualified ornithologist conducts behavioral observations and determines the nesting raptors or passerines are well acclimated to disturbance. If this occurs, the ornithologist should prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors/passersines.

No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by July 15th. This date may be earlier or later, and would have to be determined by a qualified ornithologist. If a qualified ornithologist is not hired to watch the

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nesting raptors/passerines then the buffers shall be maintained in place through the month of August and work within the buffer can commence September 1st.

Special Status Bats

In order to avoid impacts to special-status bats, a biologist shall conduct a preconstruction survey of structures and trees that would be impacted by the project 15 days prior to removal or commencement of groundwork. All bat surveys shall be conducted by a biologist with experience surveying for bats. If no special-status bats are found during the surveys, then there would be no further regard for special-status bat species.

If special-status bat species are found roosting on the project site, the biologist shall determine if there are young present (i.e., the biologist should determine if there are maternal roosts). If young are found roosting in any tree or structure that will be impacted by the project, such impacts shall be avoided until the young are flying and feeding on their own. A non-disturbance buffer installed with orange construction fencing shall also be established around the maternity site. The size of the buffer zone should be determined by a qualified bat biologist at the time of the surveys. If adults are found roosting in a tree or structure on the project site but no maternal sites are found, then the adult bats can be flushed or a one-way eviction door can be placed over the tree cavity (or structure access opening) for a 48-hour period prior to the time the tree or structure in question would be removed or disturbed. At that point, no other mitigation compensation would be required.

IMPACT SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measure listed above will ensure all impacts to biological resources are reduced to a less than significant level.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- Marcus H. Bole & Associates, DRAFT Biological Evaluation, Long Meadow Ranch Project – St. Helena, CA, September 8, 2016.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
V. CULTURAL RESOURCES				
Would the project?				
a. Cause a substantial adverse change in the significance of a historic resource as defined in 15064.5?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐

DISCUSSION

A Cultural Resources Report evaluating the 10 acre Project site was prepared by Flaherty Cultural Resources Services (FCRS) in June of 2016. Their report serves as the basis of this analysis and conclusions. The full report is continued in Attachment K. Contacts with the local tribes as well as the Office of Historic reservation were initiated as part of the Cultural Resources review. No tribes responded with any concerns. The sites are not identified in any state archival documentation. The Cultural Resources Manager for the Tewe Kewe Cultural Center, Bill Laverne, met with representatives of the City and the applicant's representative on the site in November of 2016.

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While the Farmstead at Long Meadow Ranch is a fully developed and disturbed site, the Lodging component is undeveloped. The Lodging site has been used for agriculture over the past 30± years (See also Section VII Hazards and Hazardous Waste).

REGULATORY SETTING

General Plan Update 2040

The General Plan Update 2040 contains the following policies related to cultural resources:

- HR1.5 For development and redevelopment proposals in archaeologically and paleontologically sensitive areas of St. Helena or where tribal cultural resources are known to exist, require an assessment of the potential presence of archaeological, paleontological and tribal cultural resources, including a site survey and a records search of the California Historical Resources Information System at the Northwest Information Center (NWIC). As warranted by the results of the assessment, require additional studies to identify and address project-specific impacts on archaeological and paleontological resources. The City shall incorporate the study recommendations as project conditions of approval to ensure that impacts on archaeological and/or paleontological resources are mitigated to the extent possible. Studies shall be prepared according to National Register Bulletin 24: Guidelines for Local Surveys: A Basis for Preservation Planning and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.
- HR2.1 Strengthen public awareness of and support for the preservation and protection of the City's historic resources, while improving community access to information about local Native American history.
- HR2.2 In cooperation with Native American Research and Historical Preservation Society, improve community access to information about Native American life.

ENVIRONMENTAL SETTING

Existing Farmstead at Long Meadow Ranch (Farmstead)

The 2.47± acre Farmstead property is a completely developed site. All alterations to the Project will occur on previously disturbed soils. The potential for impacts is minimal, however, the City's Standard Measures will ensure that should any previously undiscovered cultural resources be found during construction, appropriate measures are taken and potential impacts will remain less than significant.

The existing developed portion has a building with historical attributes that has been preserved and is being used. No changes to the building are proposed which would affect its historical characteristics

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

The proposed Lodging portion of the Project site is located on a vacant site within the City of St. Helena in an area planned for development. The study area comprises approximately 10 acres of relatively level land located approximately 0.5 miles south of downtown St. Helena, as shown on the St. Helena, California 7.5' USGS topographic maps. There are no known unique geological or paleontological features on the Project site that would indicate the presence of cultural resources.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

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- (a-d) **Less Than Significant Impact.** The Logan-Ives House is a local historical resource and was rebuilt as part of the 2009 LMR Project Approval. Proposed modifications to the Logan-Ives House will not require any exterior changes. Therefore, no impact to historical resources is anticipated, and impacts are deemed less than significant.

Neither the modifications to the other building nor construction of the storage areas will occur on previously undisturbed soils.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a) **Less Than Significant Impact.** The Directory of Properties in the Historic Property File for Napa County (maintained by the Office of Historic Preservation (OHP)) and the OHP Historic Maps including General Land Office maps, United States Geological Survey maps, and United States Army Corps of Engineers maps were all reviewed as part of the record search for the 10-acre parcel and no historical resources were identified. Therefore, it has been determined that no historical resources will be impacted by the Lodging Project.

- (b-d) **Less Than Significant With Mitigation Incorporation.** The Native American Heritage Commission has been contacted and no responses have been received

The investigation consisted of a complete on-foot survey of the Project area. Greater attention was paid to areas within the Project area where the ground could be observed. North south transects were used to cover the Project area. Transect width varied from a few meters to 30 meters, depending on ground cover. Ground visibility was fair in most areas. No cultural resources were discovered as a result of the survey; however, the possibility of buried or obscured cultural resources does exist.

Potential impacts to cultural, paleontological and historical resources are considered less than significant as no resources were identified in archival research, during contacts or during the on-site field reconnaissance. Existing measures, promulgated in Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5 pertaining to the discovery of human remains, will protect any subsurface features that might be discovered during construction, reducing impacts to a level of less than significant as identified in Mitigation Measure CUL-2, below.

MITIGATION MEASURES

CUL-1. If any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during any construction activities, the Contractor shall implement measures deemed necessary and feasible to avoid or minimize significant effects to the cultural resources including the following:

- Suspend work within 100 feet of the find; and,
- Immediately notify the City's Community Development Director and coordinate any necessary investigation of the site with a qualified archaeologist as needed to assess the resources (i.e., whether it is a "historical resource" or a "unique archaeological resource"); and,
- Provide management recommendations should potential impacts to the resources be found to be significant;
 - Possible management recommendations for historical or unique archaeological resources could include resource avoidance or data recovery excavations, where avoidance is infeasible in light of project design or layout, or is unnecessary to avoid significant effects

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- In addition, the Contractor in consultation with the Preservation Director, State Historic Preservation Officer, and if applicable, Tribal representatives, may include preparation of reports for resources identified as potentially eligible for listing in the California Register of Historical Resources.

None of the responses received from the tribes indicated that they wanted an archaeologist present during initial grading.

CUL-2. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

SOURCES

- Flaherty Cultural Resources Services, Cultural Resource Reconnaissance of 10.21± Acres City of St. Helena (Long Meadow Ranch), June 15, 2016.
- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- Bill Laverne, Tewe Kewe Cultural Center, on-site meeting, November 30, 2016.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
VI. ENERGY				
Would the project?				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X

DISCUSSION

This section addresses effects of the Projects on energy consumption during construction and operation. Existing energy consumption on the existing Farmstead site includes consumption of fossil fuels in operation of the restaurant and associated ancillary activities. Farmstead has implemented numerous energy-saving programs including on-demand water heaters, waterless urinals and installation of a 65 kW solar system on the roof of the restaurant.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- a) **Less Than Significant Impact.** The site is currently developed with commercial structures and only minor new construction (<1,300 square feet) is proposed in an already disturbed area. Operation of the Project would involve consumption of electricity and natural gas and an incremental increase in the consumption of these resources associated with Project operation would not represent unnecessary, inefficient, or wasteful use of resources. As described above, Farmstead has implemented several energy saving features including installation of a 65 kW solar system on the restaurant roof. Therefore, impacts related to energy consumption are considered less than significant as it would not represent unnecessary, inefficient, or wasteful use of energy resources.
- b) **No Impact.** Again, the proposed physical changes to the existing Farmstead operation are very minor in nature. All new construction will comply with the California Energy Code and the California Building Code and the project will not conflict with or obstruct a state or local plan for energy efficiency; therefore, no impact would occur.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- a) **Less Than Significant Impact.** Construction of the Lodging Project would require consumption of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil, natural gas, and

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gasoline) for automobiles and construction equipment, and other resources including, but not limited to, lumber, sand, gravel, asphalt, metals, and water. Construction would include energy used by construction equipment and other activities at the Project site (e.g., building construction, excavation, paving), in addition to the energy used to manufacture the equipment, materials, and supplies and transport them to the Project site. Energy for maintenance activities would include that for day-to-day upkeep of equipment and systems, as well as energy embedded in any replacement equipment, materials, and supplies. It is expected that nonrenewable energy resources would be used efficiently during construction and maintenance activities given the financial implications of inefficient use of such resources. Therefore, the amount and rate of consumption of such resources during construction and maintenance activities would not result in the unnecessary, inefficient, or wasteful use of energy resources.

Operation of the Project would involve consumption of electricity and natural gas and an incremental increase in the consumption of these resources associated with Project operation would not represent unnecessary, inefficient, or wasteful use of resources. As described in more detail below, the Project would include numerous energy-efficiency features. The Project would comply with Title 24 Building, Energy and Green Buildings Standards (California Building Code, Title 24, Parts 4, 6, and 11). Project lighting, in particular, would be a minimum of 20 percent more efficient than California Energy Code requirements. The new lodging facility would include the following additional energy efficiency features:

1. Micro-turbines to generate electricity for the lodging. Depending on load sizes, 3- 6 units are planned to go in the large equipment barn behind the pool area.
2. Heat exchangers. Waste heat from the micro-turbines will be used to heat the pool and produce or pre-heat the domestic hot water.
3. Space conditioning for both heating and cooling is planned to be VRF, variable refrigerant flow along with HRV, heat recovery ventilators to precondition outside air used for ventilation requirements.
4. Solar Photovoltaic panels will be set in the roof wells of the guestroom buildings.
5. Envelope design. The buildings are light colored with light roofs to reduce heat gain and porches are used to shade areas of glass.

Given the foregoing, the Project's consumption of energy resources would be less than significant, as it would not represent unnecessary, inefficient, or wasteful use of energy resources.

- b) **No Impact.** The new lodging facility's energy efficient features would, at a minimum, comply with the California Energy Code and the California Building Code. While not specifically applicable to the Project, Senate Bill 350 sets ambitious 2030 targets for energy efficiency and renewable electricity, increasing California's renewable electricity procurement goal from 33% by 2020 to 50% by 2030. In addition, the new lodging facility would include the additional energy efficiency features described above. As such, the Project would not conflict with or obstruct state or local plans for renewable energy or energy efficiency, and no related impact would occur.

MITIGATION MEASURES

None required.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
VII. GEOLOGY AND SOILS				
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
ii) Strong seismic ground shaking?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
iii) Seismic related ground failure, including liquefaction?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
iv) Landslides?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X
b. Result in substantial soil erosion or the loss of topsoil?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on, or off, site landslide, lateral spreading, subsidence, liquefaction or collapse?				

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X

DISCUSSION

RGH Geotechnical and Environmental Consultants have prepared several reports for the Lodging project and these are contained in Attachment D: Geotechnical Investigation, Mills Lane Commercial Project, St. Helena, California, May 8, 2001 (Attachment D-1); Report Update, Mills Lane Lodging Project, St. Helena, California, February 23, 2017 (Attachment D-2); and Geotechnical Engineering Report Update, Mills Lane Lodging Project, St. Helena, California, February 23, 2017 (D-3). These reports support the following discussion.

REGULATORY SETTING

General Plan Update 2040

The General Plan Update 2040 includes the following policies related to geologic and seismic safety:

- PS3.1 Minimize risk of injury, loss of life and property damage from seismically-induced and other known geologic hazards.
- PS3.2 Restrict the intensity of development and the level of landform alteration in the hillside areas in order to minimize the potential for slope failure.
- PS3.3 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.
- PS3.4 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.

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Highway 29 Specific Plan

The utilities, infrastructure and grading section explains the utilities, other infrastructure, and grading needed to serve development proposed in the Specific Plan area. Providing adequate and timely utility service is essential in ensuring orderly and safe development.

Policies specific to the projects include:

- Grading should be limited to the minimum necessary to improve site drainage. Grading operations undertaken to raise building pads or sites out of a 100-year flood plain shall conform to the City's Flood Protection Ordinance (Chapter 5B of the Municipal Code).
- Grading of individual sites within the Specific Plan area will likely be needed to improve site drainage and, in some instances, to raise building pads out of flood hazard areas.

ENVIRONMENTAL SETTING

Existing Farmstead at Long Meadow Ranch (Farmstead)

The Project site is fully developed with urban land uses including structures, a parking lot and landscaping. The site's geology is similar to the neighboring Lodging Project, discussed below.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

The Lodging Project has been the subject of a geotechnical investigation prepared in May 2001 by RGH Geotechnical and Environmental Consultants. A Geotechnical Engineering Report update was prepared on February 23, 2017. These reports are the basis for this analysis and the conclusions. Both reports are found in Attachment D-1 and Attachment D-2.

As described by RGH Geotechnical and Environmental Consultants the Project site is relatively flat and does not contain evidence of any geologic activities such as faulting and landsliding, but is located in an area considered to be susceptible to ground motions. St. Helena is located within a seismically active area in California. The area is subject to geological hazards related primarily to seismic events (earthshaking) due to presence of active faults. However, the Project site is of relatively flat terrain and is not located within the Alquist-Priolo Special Study Zone. The site is in an area of subject ground shaking in the event of an earthquake on the nearest faults. The development will require the application of the City of St. Helena and California Building Code (CBC) construction standards to address all potential impacts related to possible area seismic activity, thereby reducing impacts from geologic hazards less than significant. The CBC requires earthquake resistant design and construction which helps reduce earthquake damages and losses.

The primary geologic hazard identified at the site is the potential for strong to very strong earthquake-induced ground shaking. Other hazards, as discussed below, are not considered significant at the site. A brief description of each geologic hazard and mitigation measures are listed in the following sections.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-d) **Less Than Significant Impact.** The proposed alterations to the buildings consist of storage space and the remodeling of one building including a small expansion. Compliance with the CBC and the Standard Measures, identified below, will ensure that impacts are less than significant.

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- (e) **No Impact.** All wastewater discharges are to the public wastewater system and no increases in wastewater projected. Therefore, no impacts related to wastewater capabilities of soils will occur.

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(a)(i)-(iii))

Less Than Significant Impact. Fault Surface Rupture, Seismic Shaking and Liquefaction: The Project site is not located within an Alquist-Priolo Earthquake Fault Zone. The closest active faults are the Hayward Rodgers Creek Fault located 6 km to the northeast, the San Andreas Fault 26.5 km southwest of the site and the West Napa is located 12 km to the southwest. Peak ground acceleration (PGA) was determined using the methods in the 2016 California Building Code (CBC) and ASCE Standard 7-10, 7.5 earthquake at the site ranges from 0.32 to 0.48. The West Napa fault is most likely controlling the ground motions at the site. According to Petersen (1996), the West Napa fault is capable of a M_M 6.5 earthquake. Therefore, RGH judged that there is potential for liquefaction at the site.

There are three potential consequences of liquefaction: bearing capacity failure, lateral spreading toward a free face (e.g. riverbank) and settlement. Bearing capacity failure is sudden and extreme settlement of foundations that typically occurs when the liquefied layer is relatively close (typically within two times the footing width, depending on the loads) to the bottom of the foundation. Because the liquefiable layer is 6 feet below the ground surface, it is possible that foundations could be susceptible to bearing capacity failure. However, the groundwater in our borings ranged from 5 ½ to 7 feet after an extensive period of rain. It is likely that the groundwater is at a lower level for most of the year. Furthermore, the upper 5 feet of soil will need to be removed. Therefore, RGH judges the potential for bearing capacity failure as low.

Lateral spreading can occur where continuous layers of liquefiable soil extend to a free face, such as a creek bank. There are no significant free faces in the vicinity of the site. Therefore, RGH judges the potential for liquefaction-induced lateral spreading at the site as low.

The third potential consequence of liquefaction is settlement due to the densification of the liquefied soils. Potential settlements based on the blow count data and cyclic stress ratio RGH calculated using the methods of Ishihara and Yoshimine (1992). For the layer encountered in RGH's boring, they calculated total settlement ranging from up to ½ inch. Differential settlement could also range up to ½ inch.

Compliance with the CBC and the Standard Measures, identified below, will ensure that impacts are less than significant.

- (a)(iv) **No Impact.** The site is relatively flat and is, therefore, not susceptible to landsliding.
- (b) **Less Than Significant Impact.** Erosion: Sandy soils on moderate slopes or clayey soils on steep slopes are susceptible to erosion when exposed to concentrated surface water flow. The Project site is relatively flat; therefore the risk of significant erosion is low. However, the potential for erosion is increased when established vegetation is disturbed or removed. No significant fill placement or excavation is anticipated as part of the Project. Compliance with the CBC and the Standard Measures, identified below, will ensure that impacts are less than significant.
- (c) **Less Than Significant Impact.** Seismic Induced Ground Settlement: Densification is the settlement of loose, granular soils above the groundwater level due to earthquake shaking. Typically, granular soils that would be susceptible to liquefaction, if saturated, are susceptible to densification of not saturated.

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Provided remedial grading is performed as recommended, RGH judges there is a low potential for densification to impact structures at the site.

Lateral Spreading, Lurching and Ground Cracking: Lurching and associated ground cracking can occur during strong ground shaking. The ground cracking generally occurs along the tops of slopes where stiff soils are underlain by soft deposits or along steep slopes or channel banks. Due to the relatively flat site, absence of nearby creek banks, and non-continuous liquefiable layers, lateral spreading/lurching and ground cracking are not considered significant hazards at the Project site.

Slope Instability: Weak soils and bedrock on moderate to steep slopes can move downslope due to gravity. Slope instability is often initiated or accelerated from soil saturation and groundwater pressure. Slope movement can vary from slow, shallow soil creep to large, sudden debris flows. Landslides can cause significant damage to structures and improvements, and sudden landslides can result in loss of life. The topography of the site is relatively flat. Therefore, the potential for landsliding at the Project site is very low.

Settlement/Subsidence: Significant settlement can occur when new loads are placed at sites due to consolidation of soft compressible clays (i.e. bay mud) or compression of loose soils. Soft compressible materials were not observed during the subsurface exploration that would have a significant potential for compression settlement and consolidation with an applied surface load. Therefore, the risk of settlement to the proposed structures at the Project site is low.

- (d) **Less Than Significant Impact.** Expansive Soil: Expansive soil occurs when clay particles interact with water causing volume changes in the clay soil. The clay soil may swell when saturated and shrink when dried. This phenomenon generally decreases in magnitude with increasing confinement pressure at depth. These volume changes may damage lightly loaded foundations, flatwork, and pavement. Expansive soil also causes soil creep on sloping ground. Variable surface soils with a low to high expansion potential were observed during exploration. Therefore the potential for expansive soil damage is moderate. Compliance with the CBC and the Standard Measures, identified below, will ensure that impacts are less than significant.
- (e) **No Impact.** The Project proposes to connect to the public sewer system. Therefore, no impacts related soil capability for wastewater disposal is anticipated.

MITIGATION MEASURES

None Required.

Standard Measures

Compliance with the latest version of the California Building Code and conditioning the Lodging Project with the following geotechnical recommendations shall ensure application of the latest in design standards for geotechnical health and safety:

Seismic Design

Seismic design parameters presented below are based on Section 1613 titled "Earthquake Loads" of the most recent California Building Code (CBC). Based on Table 20.3-1 of American Society of Civil Engineers (ASCE) Standard 7-10, titled "Minimum Design Loads for Buildings and Other Structures" (2010), RGH has determined a Site Class of D should be used for the site. Using a site latitude and longitude of 38.5016°N and 122.4597°W, respectively, and the U.S. Seismic Design Maps from the United States Geological Survey (USGS) website: (<http://earthquake.usgs.gov/designmaps/us/application.php>), RGH recommends that the following seismic design

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criteria be used for structures at the site.

2016 CBC Seismic Criteria	
Spectral Response Parameter	Acceleration (g)
S_s (0.2 second period)	1.500
S_1 (1 second period)	0.600
S_{MS} (0.2 second period)	1.500
S_{M1} (1 second period)	0.900
S_{DS} (0.2 second period)	1.000

Grading

Site Preparation

Areas to be developed should be cleared of vegetation and debris. Trees and shrubs that will not be part of the proposed development should be removed and their primary root systems grubbed. Cleared and grubbed material should be removed from the site and disposed of in accordance with County Health Department guidelines. We did not observe septic tanks, leach lines or underground fuel tanks during our investigation. Any such appurtenances found during grading should be capped and sealed and/or excavated and removed from the site, respectively, in accordance with established guidelines and requirements of the County Health Department. Voids created during clearing should be backfilled with engineered fill as recommended herein.

Stripping

Areas to be graded should be stripped of the upper few inches of soil containing organic matter. Soil containing more than two percent by weight of organic matter should be considered organic. Actual stripping depth should be determined by a representative of the geotechnical engineer in the field at the time of stripping. The strippings should be removed from the site, or if suitable, stockpiled for re-use as topsoil in landscaping.

Excavations

Following initial site preparation, excavation should be performed as planned or recommended herein. Excavations extending below the proposed finished grade should be backfilled with suitable materials compacted to the requirements given below.

Within building areas, the weak, porous, and compressible surface soils shall be excavated to within 6 inches of their entire depth, which should be assumed to be about 5 feet based on our recent borings. All other geotechnical grading recommendations shall follow the original report.

The excavation of weak, porous, compressible surface soil should extend at least 5 feet beyond the limits of the proposed buildings and 3 feet beyond the edge of exterior slabs and/or pavements. The excavated materials should be stockpiled for later use as compacted fill, or removed from the site, as applicable.

Where evidence of seepage is observed, a subsurface drain should be installed as recommended by the geotechnical engineer, subdrains should also be installed. The subdrain should consist of a 4-inch diameter perforated plastic pipe with SDR 35 or better embedded in Class 2 permeable material. The drain should be at least 12 inches thick and extend at least 4 feet below the ground surface. The depth and extent of subdrains should be determined and approved by the geotechnical engineer in the field during construction.

At all times, temporary construction excavations should conform to the regulations of the State of California,

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Department of Industrial Relations, Division of Industrial Safety or other stricter governing regulations. The stability of temporary cut slopes, such as those constructed during the installation of underground utilities, should be the responsibility of the contractor. Depending on the time of year when grading is performed, and the surface conditions exposed, temporary cut slopes may need to be excavated to 1½:1, or flatter. The tops of the temporary cut slopes should be rounded back to 2:1 in weak soil zones.

Fill Quality

All fill materials should be free of perishable matter and rocks or lumps over 6 inches in diameter and must be approved by the geotechnical engineer prior to use. The upper 30 inches of fill beneath and within 5 feet of building areas and the upper 12 inches of fill beneath and within 3 feet of exterior slabs and/or pavement edges should be select fill. We judge the on-site soils are generally suitable for use as general fill and select fill.

Select Fill

Select fill should be free of organic matter, have a low expansion potential, and conform in general to the following requirements:

Sieve Size	Percent Passing (by Dry Weight)
6 inch	100
4 inch	90 - 100
No. 200	10 - 60
Liquid Limit – 40 Percent Maximum	
Plasticity Index – 15 Percent Maximum	

In general, imported fill, if needed, should be select. Material not conforming to these requirements may be suitable for use as import fill; however, it shall be the contractor's responsibility to demonstrate that the proposed material will perform in an equivalent manner. The geotechnical engineer should approve imported materials prior to use as compacted fill.

Fill Placement

The surface exposed by stripping and removal of weak, compressible surface soils should be scarified to a depth of at least 6 inches, uniformly moisture-conditioned to near optimum, and compacted to at least 90 percent of the maximum dry density of the materials as determined by the ASTM D-1557 laboratory compaction test procedure. Approved on-site soils or select fill material should then be spread in thin lifts, uniformly moisture-conditioned to near optimum and compacted to at least 90 percent relative compaction. Only approved select materials should be used for fill within the upper 30 inches of building pad subgrades and within the upper 12 inches of exterior slabs and/or pavement subgrades.

Permanent Cut and Fill Slopes

In general, cut and fill slopes should be no steeper than 2:1. Where steeper slopes are required, retaining walls should be used.

Wet Weather Grading

Generally, grading is performed more economically during the summer months when on-site soils are usually dry of optimum moisture content. Delays should be anticipated in site grading performed during the rainy season or early spring due to excessive moisture in on-site soils. Special and relatively expensive construction procedures, including dewatering of excavations and importing granular soils, should be anticipated if grading must be completed during

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the winter and early spring or if localized areas of soft saturated soils are found during grading in the summer and fall.

Foundation Support

Provided the weak surface soils are removed or strengthened by grading as recommended herein, the proposed structure can be supported on conventional continuous and isolated spread footings that bottom on select engineered fill.

Spread Footings

Spread footings should be at least 12 inches wide and should bottom on select compacted fill, at least 12 inches below pad subgrade. The continuous footings should have sufficient reinforcement to span, as a simple beam, an unsupported distance of approximately 10 feet. At corners, the continuous footings should be designed to cantilever at least 5 feet. In the absence of structural calculations that validate this requirement, perimeter footings, except retaining walls, should be reinforced with two No. 4 bars (top and bottom).

The bottoms of all footing excavations should be thoroughly cleaned out or wetted and compacted using hand-operated tamping equipment prior to placing steel and concrete. This will remove the supporting soils disturbed during footing excavations, or restore their adequate bearing capacity, and reduce post-construction settlements.

Bearing Pressures - Footings installed in accordance with these recommendations may be designed using allowable bearing pressures of 2000, 2500, and 3000 pounds per square foot (psf), for dead loads, dead plus code live loads, and total loads (including wind and seismic), respectively.

Lateral Pressures - The portion of spread footing foundations extending into select engineered fill may impose a passive equivalent fluid pressure and a friction factor of 350 pcf and 0.35, respectively, to resist sliding. Passive pressure should be neglected within the upper 6 inches, unless the soils are confined by concrete slabs or pavements.

Slab-On-Grade

Provided grading is performed in accordance with the recommendations presented herein, slabs should be underlain by firm, select engineered fill.

Slab-on-grade subgrade should be rolled to produce a dense, uniform surface. The future expansion potential of the subgrade soils should be reduced by thoroughly presoaking the slab subgrade prior to concrete placement. The slabs should be underlain with a capillary moisture break consisting of at least 4 inches of clean, free-draining crushed rock or gravel at least ¾-inch and no larger than ¾-inch in size. Interior slabs subject to vehicular traffic should be underlain by crushed rock. Class 2 aggregate base can be used for slab rock under exterior slabs subjected to vehicular traffic. Where migration of moisture vapor through slabs would be detrimental, an impermeable membrane moisture vapor barrier should be provided between the drain rock and the slabs.

Slabs-on-grade should be designed by the project civil or structural engineer to support the anticipated loads. Slabs should be at least 4 inches thick, and should be reinforced to reduce cracking. Slabs subjected to heavy concentrated wheel loads, such as forklift or trailer-trucks, should be designed to carry the anticipated wheel loads. Slabs should be grooved at regular intervals to induce and control cracking.

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Utility Trenches

Trench excavations shoring and safety is the sole responsibility of the contractor. Attention is drawn to the State of California Safety Orders dealing with "Excavations and Trenches".

Unless otherwise specified by the City of St. Helena, on-site, inorganic soil may be used as general utility trench backfill. Where utility trenches support pavements, slabs and foundations, trench backfill should consist of aggregate baserock. The baserock should comply with the minimum requirements in Caltrans Standard Specifications, Section 26 for Class 2 Aggregate Base. Trench backfill should be moisture-conditioned as necessary, and placed in horizontal layers not exceeding 8 inches in thickness, before compaction. Each layer should be compacted to at least 90 percent relative compaction as determined by ASTM Test D-1557. The top lift of trench backfill under vehicle pavements should be moisture conditioned as necessary and compacted to at least 95 percent relative compaction. Jetting or ponding of trench backfill to aid in achieving the recommended degree of compaction should not be attempted.

Pavements

Based on our investigation, we believe the near-surface soils will have a low supporting capacity, after proper compaction, when used as a pavement subgrade. An R-value of 12 was measured on a bulk sample of near-surface soil obtained near boring B-11. Because of potential variation in the on-site soils, we selected an R-value of 10 for use in pavement design calculations. The assumed Traffic Indices (TI) are judged to be representative of the anticipated traffic but are not based on actual truck traffic counts or predictions of counts. Actual truck traffic counts may require revision of these traffic indices.

Based on the selected R-Value and our experience with similar projects and soils, we recommend that the pavement section listed on Table 2, below be used.

TABLE 2: PAVEMENT SECTIONS

TRAFFIC TYPE	TI	THICKNESS (inches)		
		ASPHALT CONCRETE	CLASS 2 AGGREGATE BASE	AGGREGATE SUBBASE
Heavy Truck Lanes	6.5	3.5	13.5	---
		3.5	6.5	8.0
Parking Lots	4.5	2.5	8.5	---

Pavement thicknesses were computed using Method 301 F of the Caltrans Highway Design Manual and are based on a pavement life of 20 years.

As previously discussed, pavement performance should be enhanced and the incidence of edge cracking and repairs reduced by installation of a supporting layer of select fill at least 12 inches thick under pavement subgrades.

Prior to placement of aggregate base and subbase materials, the upper 6 inches of the pavement subgrade soils should be scarified, uniformly moisture conditioned to near optimum, and compacted to at least 95 percent relative compaction to form a firm, non-yielding surface. Aggregate subbase and aggregate base materials should be spread in thin layers, uniformly moisture conditioned, and compacted to at least 95 percent relative compaction to form a firm non-yielding surface.

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The materials and methods used should conform to the requirements of the City of St. Helena and the current edition of the Caltrans Standard Specifications, except that compaction requirements should be based on ASTM Test Method D-1557. Aggregate used for the base course should comply with the minimum requirements specified in Caltrans Standard Specifications, Section 26 for Class 2 Aggregate Base. Aggregate used for the subbase course should be non-expansive and should comply with the minimum requirements specified in Section 25 for Class 2 Aggregate Subbase.

These recommendations are intended to provide support for the auto and truck traffic represented by the indicated Traffic Indexes. They are not intended to provide pavement sections for heavy concentrated construction storage or wheel loads such as forklifts, parked truck-trailers and concrete trucks or for post-construction concentrated wheel loads such as self-loading dumpster trucks.

In areas where heavy construction storage and wheel loads are anticipated, the pavements should be designed to support these loads. Support could be provided by increasing pavement sections or by providing reinforced concrete slabs. Alternatively, paving can be deferred until heavy construction storage and wheel loads are no longer present. Loading areas for self-loading dumpster trucks should be provided with reinforced concrete slabs at least 6 inches thick, and reinforced with No. 4 bars at 12-inch centers each way. Alternatively, the asphalt concrete section should be increased to at least 8 inches in these areas.

Parking Lot Drainage

Water tends to migrate under pavements and collect in the aggregate courses at low areas on parking lot subgrade soils such as around storm drain inlets and the thread of paved swales leading to inlets. The ponded water will soften subgrade soils and, under repetitive heavy-wheel loads, will induce inordinately high stresses on the subgrade and pavement components that could result in untimely maintenance. Under-pavement drainage can be improved and maintenance reduced by replacing a 12-inch wide strip (extending at least 15 feet on either side of the inlet) of the select subbase layer or subgrade soils with $\frac{3}{4}$ -inch or 1 $\frac{1}{2}$ -inch free-draining Class 2 permeable material. The drain rock should be outletted into the storm drain inlet.

Where pavements will abut landscaped areas, the pavement baserock layer and subgrade soils should be protected against saturation from irrigation and rain water with a subdrain, similar to that previously discussed. The subdrain should extend to a depth of at least 6 inches below the bottom of the baserock layer.

Wet Weather Paving

In general, the pavements should be constructed during the dry season to avoid the saturation of the subgrade and base materials which often occurs during the wet winter months. If pavements are constructed during the winter, a cost increase relative to drier weather construction should be anticipated. Unstable areas may have to be over-excavated to remove soft soils. The excavations will probably require backfilling with imported crushed (ballast) rock. The geotechnical engineer should be consulted for recommendations at the time of construction.

Geotechnical Drainage

Surface water should be diverted away from foundations and edges of pavements. Surface drainage gradients within 10 feet of building foundations should be constructed with a minimum slope of 2 percent for paved areas and 4 percent for unpaved areas. Roofs should be provided with gutters, and the downspouts should empty onto splash blocks that discharge directly onto paved areas or be connected to closed (glued Schedule 40 PVC or better) conduits discharging well away from foundations, preferably onto paved areas or into the storm drainage system.

Where interior slab subgrades are lower than adjacent exterior grade a subdrain should be installed adjacent to

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perimeter foundations to prevent surface runoff from entering the slab rock. Foundation drains should be installed adjacent to perimeter foundations, except the downhill side. Foundation drains should consist of trenches at least 18 inches deep and sloped to drain by gravity. Three-inch diameter perforated pipe sloped to drain to outlets by gravity should be placed in the bottom of the trenches. The top of subdrain pipes should be at least 6 inches lower than the adjacent slab subgrade. The perimeter subdrain trenches should be backfilled to within 6 inches of the surface with clean, free-draining Class 2 permeable material. The upper 6 inches should be backfilled with compacted soil to exclude surface water. An illustration of this system is shown on Plate 18.

Piped outlets should be provided to allow drainage of water collected in the slab rock through foundations and discharge into the storm drain system. Additional protection against water seepage into slab rock can be obtained by compacting fill placed adjacent to exterior walls to at least 90 percent relative compaction. Roof downspouts and surface drains must be maintained entirely separate from foundation drains.

Water seepage or the spread of extensive root systems into the soil subgrade of footings, slabs or pavements could cause differential movements and consequent distress in these structural elements. Landscaping should be planned with consideration for these potential problems.

Maintenance

Periodic land maintenance will be required. Surface and subsurface drainage facilities should be checked frequently, and cleaned and maintained as necessary. A dense growth of deep-rooted ground cover must be maintained on all slopes to reduce sloughing and erosion. Sloughing and erosion that occurs must be repaired promptly before it can enlarge.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- RGH Geotechnical and Environmental Consultants, Geotechnical Investigation, Mills Lane Commercial Project, St. Helena, California, May 8, 2001.
- RGH Geotechnical and Environmental Consultants, Geotechnical Engineering Report Update, Mills Lane Lodging Project, St. Helena, California, February 23, 2017.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS				
Would the project:				
a. Generate Greenhouse Gas Emissions, either directly or indirectly, that may have a significant impact on the environment?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐

DISCUSSION

Greenhouse Gases (GHGs) are gases that trap heat in the atmosphere and regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of local GHGs are generally as follows:

- Fossil fuel combustion
- Agricultural operations
- Chlorofluorocarbons
- HFCs

In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO₂ equivalents (CO₂e).

An evaluation of Greenhouse Gases (GHGs) for the Farmstead at Long Meadow Ranch Lodging Project has been prepared by Illingworth & Rodkin and is found in Appendix F.

REGULATORY SETTING

State of California/Bay Area Air Quality Management District (BAAQMD)

The Bay Area is considered a non-attainment area for ground-level ozone and PM_{2.5} under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM₁₀ under the California Clean Air Act, but not the federal act. The area has attained both State and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM₁₀, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NOx), PM₁₀, and PM_{2.5} and apply to both construction period and operational period impacts:

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Table VIII-1. Air Quality Significance Thresholds

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (Exhaust)	82	15
PM _{2.5}	54 (Exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards	Single Sources Within 1,000-foot Zone of Influence		Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)
Excess Cancer Risk	>10 per one million		>100 per one million
Chronic Hazard Index	>1.0		>10.0
Annual Average PM _{2.5}	>0.3 µg/m ³		>0.8 µg/m ³
Note: ROG = reactive organic gases, NO _x = nitrogen oxides, PM ₁₀ = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM _{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less; and GHG = greenhouse gas.			

City of St. Helena

The following policies in the City's General Plan Update 2040 relate to GHG:

- CC1.2 Support transportation planning efforts to optimize fuel efficiency and reduce vehicle miles traveled on local roads.
- C 2.1 Encourage measures to reduce energy demand through conservation and efficiency.
- CC2.2 Support local efforts to improve the energy supply by switching from fossil fuels to renewables

ENVIRONMENTAL SETTING

Existing Farmstead at Long Meadow Ranch (Farmstead)

The Farmstead Project is a service-oriented facility. It offers guests a variety of activities (a full restaurant and bar, wine tasting, local food country store, a farmers' market, etc.) that serve multiple needs and thereby encourages fewer vehicle trips. Located a walkable distance to downtown, patrons arrive on foot, by bicycle and by car.

The Farmstead project is seeking approval of an amendment to the use permit to reflect current and planned uses, primarily related to a change from the former nursery use. In addition, the existing farmer's market building will be reconfigured to include a butchery and retail meat sales. Existing butchery operations will be moved from the restaurant to the reconfigured space and the farmer's market will offer for sale, in addition to existing farmer's market products, fresh meat and charcuterie. The existing baking operation will be moved from the restaurant to the existing commercial kitchen in the Logan-Ives House. Expansion of storage space in

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two current buildings is also planned along with modifying air-handling equipment and adding outdoor space enclosures to reduce noise from existing equipment. Overall new construction will be less than 1,300 square feet. No increases in traffic associated with the proposed reconfigurations or additional storage is anticipated however, two 200-person events per week have been proposed and analyzed in the attached traffic study.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

The Project has included as part of its Project description compliance with the GHG reducing components including solar on the lodging, as well as to incorporate CalGreen and other energy efficient features beyond Title 24 requirements. Implementation of these features will ensure that the Project meets local policies.

The Project has a “Buy Local Program” incorporating a farmer’s market selling local and on-site grown food products, a GHG reducing concept as products travel fewer miles thereby reducing GHG emissions.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-b) **Less than Significant Impact.** The Proposed Project would not conflict or otherwise interfere with the statewide GHG reduction measures identified in CARB’s Scoping Plan. The Project would comply with requirements of the Green Building Code. All of the new 1,300 square feet of proposed remodeled and storage areas would be constructed in conformance with CALGreen and the Title 24 Building Code, which require high-efficiency water fixtures and water-efficient irrigation systems. Therefore, no wasteful use of energy will occur.

The onsite restaurant offers and promotes locally sourced products. The production of locally sourced foods used in the restaurant is supported with the sustainable farming of vegetables and fruits plus edible landscaping plants used throughout the proposed adjacent lodging project. The Farmstead project currently recycles and will enhance its recycling components to include composting. The onsite restaurant, farming and wine tasting all support local agriculture and thereby reduce GHGs.

Minimal GHG emissions, primarily associated with construction (roughly equivalent to the construction of a small house), would occur over the short-term. The analysis also included the impact of two 200-person events per week. Measuring the impact of a minor increase in space and the impact of two 200-person events per week resulted in no new significant air quality impacts. No new GHG generating uses are proposed that would exceed BAAQMD thresholds, a less than significant impact.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a) **Less than Significant Impact.** GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy and water usage, and solid waste disposal. Emissions for the proposed project are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

GHG emissions for the construction period and the full-build out scenario of the Proposed Project were computed using CalEEMod. Construction emissions were based on the size and type of the project and phasing, duration and equipment usage information provided by the applicant. The model calculates emissions of GHG in the form of equivalent carbon dioxide emissions or CO₂e. CalEEMod also computes emissions from traffic generated by the project as well as emissions associated with energy usage, water

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usage and solid waste generation. CalEEMod is the model recommended by BAAQMD for predicting emissions from land use development projects, such as this one.

Land Use Types

The following land use types were input to the model:

- Hotel = 65 rooms
- High Turnover (Sit Down Restaurant) for the Farmer's Market expansion = 908 square feet
- Parking Lot = 80 spaces

Construction Emissions

The CalEEMod model was used to predict construction GHG emissions. An applicant-provided construction schedule was used in modeling. The full results of the modeling are contained in the appendices to Attachment F. Construction phases included site preparation, site grading, paving, building construction and application of architectural coatings. CO₂e emissions associated with construction were assumed to occur in 2017 and 2018. Under this scenario, construction of the project would emit 366 MT of CO₂e. Neither the City nor BAAQMD have quantified thresholds for construction activities. However, the annual emissions would be below the lowest project emission threshold considered significant by BAAQMD. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable. Best management practices assumed to be incorporated into construction of the proposed project include, but are not limited to: using local building materials of at least 10 percent and recycling or reusing at least 50 percent of construction waste or demolition materials.

Operational Emissions

The CalEEMod model along with the project vehicle trip generation rates were used to calculate operational period GHG emissions associated with operation of a fully developed site under the proposed project. The model uses mobile emission factors from the California Air Resources Board's EMFAC2011 model and adjusts these based on the effect of new regulations to reduce GHG emissions. These regulations include the Pavley Rule that increases fleet efficiency (reducing fuel consumption) and the low carbon fuel standard. This model is sensitive to the year selected, since vehicle emissions have and continue to be reduced due to fuel efficiency standards and low carbon fuels. Adjustments to the modeling are described below.

Year of Analysis

Emissions associated with vehicle travel depend on the year of analysis. The earlier the year, the higher the emission rates as CalEEMod uses the California Air Resources Board's EMFAC2011 motor vehicle emissions model. This model assumes reduced emission rates as newer vehicles with lower emission rates replace older, more polluting vehicles through attrition of the overall vehicle fleet. The earliest full year the project could be possibly constructed and operational would be 2019.

CalEEMod Traffic Inputs

Traffic trip generation rates provided by the project traffic consultant (Crane Transportation Group) were used and input to CalEEMod. The traffic study assessed daily trip generation assuming 100 percent occupancy of the proposed 65-unit lodging facility. Trip rates for the High Turnover Restaurant (Farmer's Market expansion) were assumed to be zero, as no increase in visitor trips to the Farmer's

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Market were reported in the traffic report. The weekend trip rates were estimated by applying the ratio between CalEEMod default weekday trip rate and the weekday rate from the traffic report.

Energy Consumption

CalEEMod has a default rate of 641.3 pounds of CO₂ per megawatt of electricity produced, which is based on PG&E's 2008 emissions rate. The PG&E rate was updated to be the most recent rate reported in the California Climate Registry that was for 2013, which is 429.6 pounds of CO₂ per megawatt of electricity produced, as described in Attachment F.

The 2013 Title 24 Building Standards became effective July 1, 2014 and are predicted to use 30 percent less energy for lighting, heating, cooling, ventilation, and water heating for non-residential uses than the 2008 standards that CalEEMod incorporates. Therefore, the CalEEMod project run was adjusted to account for the greater energy efficiency.

Solid Waste Generation

Emissions from solid waste generation are based on CalEEMod model defaults that are based on the project type and size. These are emissions associated with transporting and landfilling of solid waste generated by the project.

Water Usage

Emissions from water usage are based on CalEEMod model defaults that are based on the project type and size. These are emissions associated with electricity usage associated with conveyance and treatment of water and wastewater associated with the project.

Occupancy

GHG emissions are based on annual operations. The hotel is anticipated to have an occupancy rate of 100 percent. Therefore, emissions were modeled for full occupancy.

Table VIII-2. Annual GHG emissions of CO₂e (MT/year)

Source Category	2019 Proposed Project
Area	<0.1
Energy Consumption	188
Mobile	434
Waste	23
Water Usage	3
Total	649
BAAQMD Threshold	1,100 MT of CO₂e/year

The Proposed Project project's contributions of 649 MT of CO₂e/year to GHG's will be well below the threshold of 1,100 metric tons of CO₂e year; a less than significant impact as defined by BAAQMD.

- (b) **Less than Significant Impact.** AB 32, the Global Warming Solutions Act of 2006, codifies the State of California's GHG emissions target by directing CARB to reduce the state's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, CARB, CEC, the California Public Utilities Commission (CPUC), and the Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

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A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State of California's main strategies to reduce GHGs from Business as Usual (BAU) emissions projected in 2020 back down to 1990 levels. BAU is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It required CARB and other state agencies to develop and adopt regulations and other initiatives reducing GHGs by 2012.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 MMT of CO₂e as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector- or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMT of CO₂e. Two GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMT of CO₂e. Thus, an estimated reduction of 80 MMT of CO₂e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

The Proposed Project would not conflict or otherwise interfere with the statewide GHG reduction measures identified in CARB's Scoping Plan. The project would comply with requirements of the Green Building Code. For example, proposed buildings would be constructed in conformance with CALGreen and the Title 24 Building Code, which require high-efficiency water fixtures and water-efficient irrigation systems. The Project, as one that encourages alternatives to vehicular transportation promotes the Policy 8.2.4 which promotes balanced land use development, and therefore does not conflict with any statewide, regional or local GHG reducing goals. As the Project will meet all current codes for energy efficiency and focuses on alternative transportation, it will preserve resources and use energy efficiently. The potential impact of the project is therefore considered less than significant.

MITIGATION MEASURES

None required.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- BAAQMD CEQA Guidelines, May 2010 (updated 2011).
- Illingworth & Rodkin, Draft Air Quality & Greenhouse Gas Emissions Assessment; August 23, 2016; updated December 2019 and February 2020.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐

DISCUSSION

Several reports were consulted during the preparation of this section of the Initial Study. Those specific to the property are included in Attachment G: Andrew S. Rogers, ECON, No Soils Testing Required Memo including Natural Hazard Disclosure Reports, May 13, 2014 (Attachment G-1) and APEX Envirotech, Inc., Historical Pesticide Assessment, August 24, 2018 (Attachment G-2).

Regulations governing the use, management, handling, transportation and disposal of hazardous waste and materials are administered by Federal, State and local governmental agencies. The California Department of Toxic Substances Control (DTSC) defines a hazardous material as: "a substance or combination of substances that, because of its quantity, concentration or physical, chemical, or infectious characteristics, may either: (1) cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, disposed of, or otherwise managed."

REGULATORY SETTING

Pursuant to the Planning and Zoning Law, DTSC maintains a hazardous waste and substances site list, also known as the "Cortese List". Hazardous waste management in the City of St. Helena is administered through the County-wide integrated Waste Management Plan. The St. Helena Fire Department oversees the acquisition, maintenance and control of hazardous waste for all activities within the City.

In 2005 the Association of Bay Area Governments (ABAG) released "Taming Natural Disasters", which acts as a multi-jurisdictional local hazard mitigation plan for the San Francisco Bay Area. The intent of the plan is to enhance disaster resilience throughout the region, pursuant to the Disaster Mitigation Act of 2000. The Plan was subsequently updated in 2010 and has since been approved by the Federal Emergency Management Agency (FEMA) and formally adopted by ABAG.

General Plan Update 2040

The following General Plan policies relate to the use and storage of hazardous materials:

- PS4.3 Protect St. Helena residents from health and safety impacts related to the use, storage, manufacture, and transport of hazardous materials.
- PS4.4 Discourage new uses that rely extensively on the use of hazardous materials.

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- PS4.5 Facilitate communication and education about fire safety, non-point source pollution, household hazardous waste disposal, and recycling opportunities.
- PS4.6 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.

Implementing Actions

- PS4.D Require all new development to meet the minimum fire flow rates specified by the City's Fire Code.
- PS4.E Require all new development plans to be approved by the Fire Department prior to the issuance of building permits, grading permits, or final map approval.
- PS4.G Review all new development proposals for their potential to introduce the production, use, storage and/or transport of hazardous materials, and require reasonable controls on such materials.
- PS5.H Implement low impact development practices for new development and redevelopment projects to reduce stormwater peak flow rates and volumes from smaller, more frequently occurring storm events.
- PS4.K Require environmental assessments during the planning for development in areas previously used for agricultural, commercial, or industrial uses. Remediation of identified contamination that may result in health risks to construction workers and future owners and users shall be required prior to approval of construction, demolition, and grading permits for development.

Highway 29 Specific Plan

One of the objectives of the Specific Plan is the identification of existing potentially hazardous material in the local soil and groundwater. Two major hazardous material issues identified in the Specific Plan EIR include contamination of the former PG&E site on the south side of Mitchell Lane and the potential for release of asbestos and lead paint during the anticipated demolition of existing buildings within the project area. Neither the existing Farmstead at Long Meadow Ranch nor the Farmstead at Long Meadow Ranch Lodging component are associated with or located in areas of high risk.

ENVIRONMENTAL SETTING

Existing Farmstead at Long Meadow Ranch (Farmstead)

The private residence and former City Corporation yard on the existing Farmstead of Long Meadow Ranch were former LUST (Leaking Underground Storage Tank) sites that have been cleaned up. The current LUST list does not identify any LUST's in the immediate area. No sites are shown on the Cortese list of Hazardous Waste and Substances site are shown for St. Helena (Cal EPA, March 2018).

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

While the site has not been the subject of a Phase I Environmental Assessment, the site's history has been reviewed by ECON (Attachment G-1). The file ECON reviewed at the County showed there was an above ground storage tank (AST) recorded at the property address, but it was associated with a frost protection wind machine that was somewhere near the center of the property. These ASTs store 750 gallons of gasoline. The wind machine, AST, and vines are no longer there. A recent inspection report from the Napa County Inspector confirmed that "no releases from the AST were documented, and no violations were noted" and the case is listed as "closed". (Attachment G). Based on a site visit, County file review, discussion with the current and previous owners, and APEX determined that no evidence of the use of permitted pesticides at the site. (APEX, 2018).

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IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-c) **Less Than Significant Impact.** The site is fully developed and not a use associated with hazardous materials. Therefore, impacts, significant uses, transport or storage associated with hazardous materials will be less than significant.

Because contractors would be required to comply with existing and future hazardous materials laws and licensing requirements covering the transport, use and disposal of hazardous materials, the impacts associated with the potential to create a significant hazard to schools would be less than significant. There would be no new stationary source of hazardous emissions or handling of acutely hazardous materials or waste associated with the Project, therefore, potential impacts would be less than significant. Given the recent age of the existing structures on site (constructed circa mid 2000's), and that no developments are proposed for demolition, the presence of lead-based paint (LBP) and asbestos-containing materials (ACM) is remote.

- (d) **Less than Significant Impact.** The Project is not located on a site listed on the Cortese lists or LUST pursuant to Section 65962.5. Therefore, this impact is identified as less than significant. (Cal EPA, March 2018)

- (e-f) **No Impact.** The Project site is located over 2 miles from an airport or airstrip, therefore, no impacts associated with airports are anticipated.

The Project has provided emergency access onto and around the site. The site development will not interfere with any adopted emergency response or evacuation plan and will have no impacts related to emergency response impairment.

- (g) **Less than Significant Impact.** See Section XIX (Wildfire) below for a discussion of this topic area.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a-c) **Less Than Significant Impact.** Given that the site was an agricultural use that has no hazardous materials, the potential for any impacts are less than significant. Additionally, the Project is not a use known associated with hazardous materials.

Project construction activities would include the use minor of amounts of hazardous materials such as fuels, lubricants, paints and solvents. Routine transport of hazardous materials to and from the Project site could result in an incremental increase in the potential for accidents. However, Caltrans and the California Highway Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. Because contractors would be required to comply with existing and future hazardous materials laws and licensing requirements covering the transport, use and disposal of hazardous materials, the impacts associated with the potential to create a significant hazard to schools would be less than significant. There would be no new stationary source of hazardous emissions or handling of acutely hazardous materials or waste associated with the Project, therefore, potential impacts would be less than significant. For these reasons the potential for this impact has been identified as less than significant.

- (d) **Less than Significant Impact.** Econ's search of the data resources that provide information did not identify any known active hazardous waste facilities exist on or adjacent to the Project site. The Project

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is not located on a site listed on the Cortese list pursuant to Section 65962.5. Therefore, this impact is identified as less than significant.

- (e-f) **No Impact.** The Project site is located over 2 miles from an airport or airstrip, therefore, no impacts associated with airports are anticipated.

The Project has provided emergency access onto and around the site. The site development will not interfere with any adopted emergency response or evacuation plan and will have no impacts related to emergency response impairment.

- (g) **Less than Significant Impact.** See Section XX (Wildfire) below for a discussion of this topic area.

MITIGATION MEASURES

None required.

STANDARD MEASURES

- Construction chemicals shall be handled in compliance with state/federal law and stored in enclosed and secure buildings.

SOURCES

- Andrew S. Rogers, ECON, No Soils Testing Required Memo including Natural Hazards Disclosure Report; May 13, 2014.
- APEX Envirotech, Inc., Historical Pesticide Assessment, August 24, 2018.
- CalEPA, List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database (website accessed March, 2018).
- CalEPA, List of Leaking Underground Storage Tank Sites by County and Fiscal Year from Water Board and GeoTracker database (website accessed March 2018).
- Cal Fire, Napa County FHSZ (Fire Hazard Safety Zone) Map (website accessed March 2018) http://frap.fire.ca.gov/webdata/maps/napa/fhszs_map.28.pdf.
- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- City of St. Helena, Highway 29 Specific Plan, February 22, 2005.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY				
Would the project:				
a. Violate any water quality standards or waste discharge requirements?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	X	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	X	☐	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off- site?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	X	☐	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	X	☐	☐
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
f. Otherwise substantially degrade water quality?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X
j. Inundation by seiche, tsunami, or mudflow?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X

DISCUSSION

The Project's civil design team has prepared the following reports to address the Farmstead and Lodging Projects, these reports are contained in Attachment I-1 through I-4 and Attachment J:

- Preliminary Stormwater Control Plan
- Water Use Analysis Report
- Hydrology Analysis
- Memo Re: Schematic Design Civil Design Narrative

Additional discussion related to water is found in Section, XIX, Utilities.

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ENVIRONMENTAL SETTING

The existing 2.47+/- acre Farmstead development is served by both a private water system and City water supply as well as serviced by the City storm drains, all discussed below. No increases in impervious area are proposed and no alterations to the existing drainage are proposed or required.

The amount of additional development for the Farmstead project improvements involves a small expansion of the storage area (510± sf) of already sewer-impervious soils. No significant changes to hydrology, water quality, or other of the above CEQA factors are anticipated.

The 10.03+/- acres of the Lodging site has little storm drain infrastructure. Site drainage is characterized by slow surface flow towards the southern corner of the site. Some of the surface runoff is collected in an existing swale that runs above the southeast property line and discharges into an existing 36" culvert. Limited infiltration occurs due to the site soils, which are mainly sandy clay over clayey gravel.

REGULATORY SETTING

Water Quality

The Federal Clean Water Act prohibits discharges of storm water containing pollutants except in compliance with a National Pollutant Discharge Elimination System (NPDES) Permit. The NPDES program regulates stormwater discharges from municipal separate storm sewer systems (MS4s), construction activities, and industrial activities.

Acting per the mandate of the Clean Water Act, the California State Water Resources Control Board has issued a NPDES Construction General Permit to regulate construction activities and a NPDES General Permit for the Discharge of Storm Water for MS4s, Phase I and Phase II (Stormwater General Permit). The Construction General Permit requires construction projects that disturb one acre or more of soil to develop a Stormwater Water Pollution Prevention Plan (SWPPP). Phase II of the Stormwater General Permit requires small MS4s, including the City of St. Helena, to regulate storm water discharges. Per Provision E.12, "Post-Construction Stormwater Management Program," of the Phase II Stormwater General Permit, municipalities must require that development plans include specified features and facilities that will control pollutant sources; control runoff volumes, rates, and durations; and will treat runoff before leaving the site.

The City of St. Helena enforces Provision E.12 by requiring developers to comply with the guidelines in the BASMAA Post-Construction Manual (Manual). The Manual stipulates minimum requirements for different types of development projects. Per the Manual, a Regulated Project is a project that creates or replaces 5,000 square feet or more of impervious surface. Regulated Projects must route all runoff from impervious surfaces to bioretention facilities or landscaped retaining areas. Compliance with the Manual must be documented in a Stormwater Control Plan.

Groundwater Supply

The City of St. Helena follows the State of California's Model Water Efficient Landscape Ordinance, which requires water efficient landscapes in new landscape projects over 500 square feet and retrofitted landscapes over 2,500 square feet.

Drainage

Per Section 16.32.070 of the City of St. Helena Municipal Code, stormwater runoff from development projects must be collected and conveyed in a storm drainage system capable of collecting and conveying runoff generated by a 10-

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year flood. The system must also provide for the protection of abutting and off-site properties that may be adversely affected by any increase in runoff attributed to the development.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a, c-f) **Less Than Significant Impact. Stormwater and Water Quality:** The Farmstead Project will create a small amount of new impervious surface, resulting in a small increase in stormwater runoff that could potentially contain pollutants. However, the new impervious area is a small enough area (less than 1,300 square feet) that the reduced infiltration of stormwater is not anticipated to substantially affect groundwater recharge, and thus will have Less Than Significant impact on groundwater recharge. Specifically, the Farmstead Project will fall below 5,000 square feet of impervious surface, and thus is below the impact threshold in the BASMAA Post-Construction Manual that triggers requirements for improving water quality of stormwater runoff, and therefore can be evaluated to have less than significant impact.
- (b) **Less Than Significant Impact. Water Supply:** The existing Farmstead facility currently operates and maintains its own Public Water System, which is fed from an existing on-site well. The annual total water use from the well is shown in the following table for the years 2012 through 2017:

Year	2012	2013	2014	2015	2016	2017
Water Use (gallons)	1,365,100	1,304,000	1,571,300	2,447,418	2,607,673	2,287,779

For the years 2012 through 2017, the average annual water use was 1,930,545 gallons.

The proposed uses for the Farmstead Project will not increase water demand, and no modifications to the Public Water System are proposed. As the existing well will not be used to supply more water, the project will have less than significant impact to groundwater supply.

- (g-h) **No Impact. Flooding:** The Farmstead Project is not proposing any housing or structures within the 100-year flood plain (per the FEMA FIRM Map). Therefore, the project will have no impact related to exposure of homes or structures to flooding.
- (i) **No Impact. Dam Failure:** The Farmstead Project is not located near a levee or dam, and thus will have no impact with exposure of people or structures to risks by the failure of a dam or levee.
- (j) **No Impact. Seiche and Tsunami:** Seiche and tsunami are short duration, earthquake-generated water waves in large enclosed bodies of water and the open ocean, respectively. Mudflows typically occur on steep slopes where vegetation is not sufficient to prevent rapid erosion. The Farmstead Project site is not located near the Pacific Ocean, near any large enclosed bodies of water, or near any sparsely vegetated steep slopes. Therefore, the risk of seiche, tsunami, or mudflow inundation at the site is low to non-existent and the project will have no impact.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a,f) **Less Than Significant With Mitigation Incorporated. Water Quality:** The Lodging Project's potential impacts to water quality result from stormwater runoff from the project site during construction and post-construction.

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As the project will disturb more than one acre of soil during construction, the project will be required to prepare a SWPPP per the NPDES Construction General Permit prior to beginning construction. The SWPPP will describe the Best Management Practices (BMPs) for erosion and sediment control during construction. The BMPs will ensure that stormwater runoff from the project site during construction will adhere to water quality standards, so the project will have less than significant impact with mitigation incorporated.

As the project creates more than 5,000 square feet of impervious surface, the project will be required to follow the requirements of the BASMAA Post-Construction Manual (Manual) and demonstrate compliance by preparing a Stormwater Control Plan. The project's civil design team has prepared a Preliminary Stormwater Control Plan that demonstrates that proposed project is able to detain and treat stormwater runoff per the requirements of the Manual by utilizing strategies such as bioretention facilities and landscaped self-retaining areas. Refer to the Preliminary Stormwater Control Plan, included as an attachment, for a detailed description of project's post-construction stormwater management. The proposed project is able to meet the requirements of the Manual, so stormwater runoff from the project site post-construction will adhere to water quality standards. Therefore, the project will have less than significant impact with mitigation incorporated.

- (b) **Less Than Significant With Mitigation Incorporated. Groundwater:** The Lodging Project's potential impacts to groundwater supply are from increased demand at the two existing on-site wells. The existing wells have adequately served agricultural activities. Under the proposed Lot Line Adjustment, one of the existing wells will no longer be located on the Lodging Project parcel and will instead be located on the adjacent parcel belonging to David and Katherine Gold. A private water well easement agreement will be recorded to allow the Lodging Project access and to utilize the water from the well. Therefore, both existing wells will continue to be used and will supply water to the Lodging Project's farm and landscape irrigation.

Well reports submitted with this application indicate that well production rates far exceed estimated irrigation demands. Well reports indicate production rates of 75 gpm (west well) and 15 gpm (east well), requiring approximately 220 hours run time annually at peak rates to meet estimated irrigation demand of 3.6 acre-feet. Assuming the wells will not always produce at peak rates, a conservative assumption of 50% production results in 440 hours of run time annually. Therefore, no new wells will be required to meet the irrigation demands of the Lodging Project.

The Lodging Project landscaping and irrigation system will be designed to meet the requirements of the State of California Model Water Efficient Landscape Ordinance, ensuring that the irrigation demands from the project are as low as possible.

As the Lodging Project does not require any new wells and will minimize use of existing wells by following the guidelines in MWELD, the project will have less than significant impact with mitigation incorporated.

- (c) **Less Than Significant With Mitigation Incorporations. Stormwater:** The existing site of the Lodging Project has limited storm drain infrastructure. The site drains primarily through slow surface flow towards the southern corner of the site. Some of the surface runoff is collected in an existing ditch which runs along the southeast property line and Mills Lane. The existing ditch also receives runoff from a 36" CMP that runs below the driveway to the adjacent Gold parcel.

The Lodging Project will construct a new storm drain system. Stormwater runoff will be conveyed to facilities like raingardens, landscaped self-retaining areas, and permeable pavement to encourage infiltration. Stormwater runoff that does not infiltrate on site will primarily be collected in storm drain

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
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pipes that will connect to a new storm drain line in Mills Lane per the Highway 29 Specific Plan and City of St. Helena Storm Drain Master Plan that will discharge into the Napa River.

The project's civil design team prepared a Hydrology Analysis, included as Attachment I, which demonstrates that the proposed project improvements will not increase the 10-year runoff volume above the pre-development 10-year runoff volume by utilizing the storage volume provided in the on-site raingardens.

As the proposed project will not increase the 10-year runoff volume the alteration of the existing drainage pattern of the site will have less than significant impact on erosion or siltation.

- (d) **Less Than Significant With Mitigation Incorporated. Drainage Patterns:** Per the discussion in X(c), the Lodging Project will substantially alter the existing drainage pattern of the site. However, per the Hydrology Analysis, the proposed project improvements will not increase the 10-year runoff volume above the pre-development 10-year runoff volume. In addition, the proposed project will reduce the amount of surface conveyance of stormwater runoff, as most of the runoff will be conveyed in storm drain pipes rather than sheet flowing on the surface. All storm drain conveyances will be designed to be capable of collecting and conveying runoff generated by a 10-year flood.

By ensuring that the proposed project does not increase the 10-year runoff volume above the pre-development 10-year runoff volume and sizing all storm drain conveyances to be capable of collecting and conveying runoff generated by a 10-year flood, the project will have less than significant impact with mitigation incorporated on flooding.

- (e) **Less Than Significant Impact With Mitigation Incorporated. Runoff:** Per the discussion in X(c-d), the Lodging Project will not increase the 10-year runoff volume above the pre-development runoff volume and proposed stormwater drainage conveyances will be designed to have sufficient capacity to convey the runoff generated by a 10-year flood. Per the Highway 29 Specific Plan and the Storm Drain Master Plan, the new storm drain in Mills Lane is a planned storm drainage system and will be designed to have capacity for the runoff from the Lodging Project.

As described in the discussion in X(a) above, the Lodging Project will comply with the requirements of the BASMAA Post-Construction Manual to ensure that stormwater runoff from impervious surfaces will be treated to improve water quality. Therefore, the project will not contribute runoff water which will exceed the capacity of the planned storm drainage system and will not provide additional sources of polluted runoff. Thus, the project will have less than significant impact with mitigation incorporated.

- (g-h) **No Impact. Flooding:** The Farmstead Project is not proposing any housing or structures within the 100-year flood plain (per the FEMA FIRM Map). Therefore, the project will have no impact related to exposure of homes or structures to flooding.
- (i) **No Impact. Dam Failure:** The Farmstead Project is not located near a levee or dam, and thus will have no impact with exposure of people or structures to risks by the failure of a dam or levee.
- (j) **No Impact. Seiche and Tsunami:** Seiche and tsunami are short duration, earthquake-generated water waves in large enclosed bodies of water and the open ocean, respectively. Mudflows typically occur on steep slopes where vegetation is not sufficient to prevent rapid erosion. The Farmstead Project site is not located near the Pacific Ocean, near any large enclosed bodies of water, or near any sparsely vegetated steep slopes. Therefore, the risk of seiche, tsunami, or mudflow inundation at the site is low to non-existent and the project will have no impact.

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MITIGATION MEASURES

Existing Farmstead at Long Meadow Ranch (Farmstead)

None required.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

HYDRO-1. Water Quality: The applicant shall comply with the requirements in the BASMAA Post-Construction Manual. Compliance will be demonstrated by completion of a Stormwater Control Plan to be approved by the City of St. Helena prior to construction.

HYDRO-2. Groundwater: Prior to construction, the applicant shall submit landscape and irrigation plans to be approved by the City of St. Helena demonstrating compliance with the State of California's Model Water Efficient Landscape Ordinance.

HYDRO-3. Drainage, Stormwater, Runoff: Prior to construction, the applicant shall submit a hydrology analysis, to be approved by the City of St. Helena, demonstrating that the proposed project will not increase the 10-year runoff volume above the pre-development 10-year runoff volume.

IMPACT SIGNIFICANCE AFTER MITIGATION

Implementation of the above mitigation measures will ensure that the potential impacts related to hydrology and water quality are reduced to less than significant levels.

SOURCES

- FEMA, Firm Panel 377 of 3650, September 26, 2008.
- Sherwood Design Engineers. Preliminary Stormwater Control Plan for a Regulated Project Farmstead at Long Meadow Ranch Lodging. April 18, 2017.
- Sherwood Design Engineers. Hydrology Analysis for Farmstead at Long Meadow Ranch Lodging. April 18, 2017.
- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XI. LAND USE & PLANNING				
Would the project?				
a. Physically divide an established community?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect??				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X

DISCUSSION

The City of St. Helena is divided into two distinct areas: a developed “urban service area” and a more, rural, agricultural, industrial area located around the periphery. The City exhibits a traditional landscape with the urbanized commercial land uses concentrated in the city center and along SR 29, with residential development radiating outwards to the northeast and southwest.

The two Project sites are located on the northeast side of Main Street, generally bounded by Charter Oak Avenue to the north and Mills Lane to the south. The Farmstead operations occupy a fully developed site of 2.47 acres at the corner of Charter Oak Avenue and Main Street (738 Main Street). The proposed Lodging project is located on an undeveloped site of approximately 10.03± acres at the corner of Main and Mills Lane (1000 Mills Lane). The lodging property’s eastern boundary is separated from the railroad tracks along Main Street by the St. Helena Veterinary clinic. The northeastern arm extends from the railroad tracks east of Mills Lane to just north of the La Fata Street. The bulk of the property extends northwestward and backs up to adjacent residential development. A narrow sliver of land that will be subject to a lot line adjustment with the intervening veterinary facility will form the eastern property boundary. The southern half of this finger lies adjacent to the parcel containing the existing Farmstead restaurant. Surrounding land uses include single family residences to the northwest, agricultural land to the northeast and commercial properties to west, southwest and south.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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ENVIRONMENTAL SETTING

Existing Farmstead at Long Meadow Ranch (Farmstead)

The Applicant is requesting amendments to the use permit to allow for a re-configuration of interior facilities. The Project does not propose any substantial changes to the existing use of the site and as such, it will remain in conformance with the applicable land use designations with only minor changes to the use permit.

The minor changes to the existing Project are primarily operational: the remodeling and 408 sq. ft. expansion of the existing building between the restaurant and the Logan-Ives House, now used for the farmer's market, to house the butcher shop; a small expansion of dry storage space (355 sq. ft.) off of the restaurant kitchen near the electric charging parking spaces and a small expansion of storage space (510 sq. ft.) on the back side of the events building on the southeast corner; relocation of the chef's table to another location off-site to allow existing restaurant bakery operations to move to the commercial kitchen in Logan-Ives House.

The request for an amended use permit for the Farmstead property will clarify the current uses approved by Resolution #2009-30 and the building permits issued for the property in July 2009 through January 2010. The current amendments will allow for additional storage, reconfiguration of current uses, and to allow for the range of additional uses described in Table 1.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

For the lodging component on the undeveloped portion, 65 guest rooms and suites will be spread among 10 buildings integrated into the agricultural setting. The buildings are configured with 6 or 7 guest rooms per building. Individual rooms will have courtyards or porches. Throughout the lodging portion of the property, farming will continue with an edible landscape of herbs, fruit and citrus trees, and vegetables planted along the pathways. The Project details are included in Section 1.0 of this Initial Study.

The Lodging component has a General Plan land use designation of Service Commercial and Agriculture. The Project is zoned Service Commercial (SC). As part of the Project, the applicant is requesting a variance to allow on-site managers employed 24 hours per day, 7 days per week in place of the requirement for a manager living on-site as required by Zoning Code Section 17.52.090(I).

In addition to Use Permit and Design Review approvals required to establish the use and construct the proposed buildings, the Applicant is requesting approval of a Lot Line Adjustment (LLA) with the neighboring veterinarian property (Gold) to provide a direct land connection between the Farmstead and Lodging Projects. A merger of the four Lodging Project parcels will be required to enable the project buildings positioning to conform to zoning set-backs requirements. The city of St. Helena will require a vacation of ROW along Mills Lane after the realignment of Mills Lane. The realignment takes property from two parcels (that have dedicated land for the realignment) and returns the remainders to the owners (Gold and LMR).

REGULATORY SETTING

General Plan Update 2040

The Farmstead parcel is designated Service Commercial in the City's General Plan and the proposed Lodging parcels have a split designation of Service Commercial and Agriculture.

The outer edge of the City is demarcated by the Urban Limit Line (ULL) which is a parcel specific boundary that marks the limit of allowed urban development. The intent of the ULL is to discourage urban development and preserve lands outside of the ULL for agricultural lands. The project sites are mostly located within the ULL. The Farmstead

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site is completely within the ULL, and the area proposed for urban development on the Lodging site is also within the ULL. The portion of the Lodging site that is to remain in agriculture is outside of the ULL. By preserving the area outside of the ULL in agriculture, the project proposal is consistent with the goals of preserving agriculture and discouraging urban development.

The following General Plan policies relate to the proposed project:

- 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.
- 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.
- 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.
- LU3.5 Ensure that new retail and commercial development is compatible with and complementary to St. Helena's small-town image.
- LU3.7 Provide sufficient auto and bicycle parking in order to serve local businesses in the commercial districts. Ensure that all parking areas are well-designed and that auto parking spaces are hidden from pedestrian view, when-ever possible.
- LU3.11 Ensure that new commercial development does not obstruct view corridors to the mountains.
- LU5.1 Discourage conversion of existing farmland to non-agricultural uses.

Housing

The 2015 City of St Helena's Housing element provides the following applicable overall goal:

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Make efficient use of land within the Urban Limit Line to protect agricultural lands, promoting compact, well-designed developments that 'fit in' with existing neighborhoods and contribute to the overall livability of our community. Encourage a balance of housing types throughout the entire community.

While neither the Farmstead nor the Lodging project propose any housing, both projects' developed areas are within the ULL, and the Lodging project protects agricultural lands, as described above. Both projects will be subject to payment of an affordable housing fee (See also Section XIII, Population and Housing).

Highway 29 Specific Plan

The Highway 29 Specific Plan policies that discuss service commercial and agriculture include:

- 2.6.39 All retail businesses shall conform to a scale commensurate and compatible with the small-town character of St. Helena.
- 2.6.42 Allow only businesses which are primarily local-serving within all commercial areas. Exclude all fast food restaurants, outlet and discount type stores as well as large retail businesses whose consumer base requires a population larger than St. Helena and its vicinity.
- 2.6.58 Promote the continuation of agricultural activities within and adjacent to the City.
- 3.4.2 Support the development of a responsible visitor-serving component to the City's economy as a valuable source of jobs, tax revenues, and cultural amenities.
- 3.4.6 Allow the development of visitor-serving uses only within the capability of existing road capacities to accommodate increased traffic.
- 4.3.2 Ensure that local serving uses are located within a comfortable walk of the center of town and public parking.

The Farmstead project is proposing minor additions (less than 1,300 square feet) to its already established restaurant operations. No new uses will be added, although current uses will be reconfigured and relocated on site as described in Section 1.0, Project Description. Over half of this additional square footage is storage. The changes within the Logan Ives building will be internal, thereby preserving and adapting the historical structure, consistent with the above General Plan goals.

The Lodging project proposes development only on the areas designated and zoned service commercial. The area designated agriculture will be preserved and enhanced with agricultural operations. That agricultural theme is proposed to extend into the lodging component. The proposal is a logical extension of development, surrounded by other service commercial operations and thereby supporting the above policies.

Both of the Farmstead and Lodging projects are both visitor-serving and local-serving projects as they are within a comfortable walking distance to the center of town. Both are designed to integrate into the existing fabric of the town, thereby supporting both the General Plan's and Highway 29 Specific Plan's land use policies.

Zoning

The Farmstead site is zoned service commercial (SC). The Lodging component has a split zoning of SC and Agriculture (A-20), consistent with its land use designations.

The Service Commercial designation provides for service and retail uses, restaurants, service stations, motels, public and quasi-public uses, and similar and compatible uses. The designation is intended primarily for service and retail uses that are automobile-oriented or whose operational characteristics and space needs are not considered appropriate for the Central Business District. The intent is for the SC district to be primarily local resident serving in

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character. Strictly tourist-serving retail uses are prohibited within this designation. Maximum FAR in the SC district is 0.50.

Both Projects are consistent with the scale of St. Helena. Both Projects will serve the local population and visitors (Farmstead has a large locally sourced component and a local clientele). The Lodging component will complement the objectives of a continuation of the small town feel and serve locally sourced products. The incorporation of agricultural and returning a portion of the property to viable agriculture, while adding a lodging project with a sustainable visitor-serving use, will add to the City's economy. Both projects focus on alternative modes of transportation (pedestrians and bicycles), as discussed in the Section XVII, Traffic and Circulation.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a) **No Impact.** The Project is not expected to result in any division of an established community as it will not include (or remove) any physical features (such as a road or barrier) that divide, or reduce, access between the existing community and outlying areas. Therefore, there are no impacts to the division of community.
- (b) **No Impact.** The Farmstead Project is consistent with the underlying zoning district, Hwy. 29 Specific Plan and the General Plan Update. To modernize operations, the Project will be subject to a use permit amendment which would ensure that changes to structures and their uses are of an intensity that is consistent with the intent of the General Plan, Specific Plan or Zoning Ordinance. No changes are proposed to the site that would otherwise be in conflict with any applicable plan or regulation. Therefore, there are no land use impacts.
- (c) **No Impact.** As an existing commercial operation on a site designated for service commercial uses within a fully developed neighborhood area, the Farmstead Project will not impact any habitat conservation plans or natural community plans. Therefore, there are no impacts to any habitat conservation or natural community plans.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a) **No Impact.** The site is located at the southern portion of the City limits and is surrounded by commercial and residential uses. It will not physically divide an established community as it has been planned for Service Commercial use in General Plans dating back several decades. The Project is in an area that is transitioning to more intensive commercial/ agricultural uses as called for in both the City's current General Plan and the Highway 29 Specific Plan. This Project will contribute to that transition; it will not result in any obstructions to access. The Project would not physically divide an established community. Therefore, no significant impact is anticipated.
- (b) **Less Than Significant Impact.** The Lodging component is consistent with the General Plan designation and zoning as it preserves the agriculturally zoned component and provides for service commercial uses. The new Lodging will complement the existing St. Helena commercial center as no space currently exists in the center of the CBD to provide for additional lodging facilities. Given the large local serving activities associated with the adjacent Farmstead development, the Lodging Project will extend these services and provide for an additional employment base. The Project is a walkable project, encouraging alternative transportation to downtown. Existing commercial facilities will buffer the proposed uses to the south. Mitigation Measures have been identified for all biological, geological, construction noise and air quality, and transportation impacts. These mitigations will reduce all impacts to a less than significant level. Therefore, no significant land use impacts are identified.

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- (c) **No Impact.** The site is not within any conservation strategy or environmentally sensitive area. No conservation plans or natural habitat plans are located adjacent to the property (See Section IV(e-f)). The agricultural component will provide a buffer between the proposed Lodging facility and lands to the north. The Project will conform to the General Plan, have no impacts on habitat conservation plans or natural community conservation plans, and therefore, no significant impact is anticipated.

MITIGATION MEASURES

None required.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- City of St. Helena Zoning Map, May 24, 2018.
- City of St. Helena Housing Element, May 26, 2015.
- City of St. Helena Highway 29 Specific Plan, February 22, 2005.

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St. Helena, California

	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XII. MINERAL RESOURCES				
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X

DISCUSSION/IMPACT ANALYSIS

Neither the City of St. Helena's General Plan, nor the Surface Mining and Reclamation Act (SMARA) of 1975, identifies specific areas of mineral resources in this area of St. Helena.

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-b) **No Impact.** The Project does not lie within one of the listed aggregate deposits in the SMARA report as shown on the Napa Quadrangle. The Project will have no impact on mineral resources

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a-b) **No Impact.** The Project does not lie within one of the listed aggregate deposits in the SMARA report as shown on the Napa Quadrangle. Therefore, the Project will have no impact on mineral resources.

MITIGATION MEASURES

None required.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- State of California, Surface Mining and Reclamation Act (SMARA) of 1975, updated in 1977.

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St. Helena, California

	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XIII. NOISE				
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
b. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport				

FARMSTEAD AT LONG MEADOW RANCH PROJECTS
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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels??				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X

DISCUSSION

Several noise studies were prepared for the Project by Illingworth & Rodkin, Inc. in September of 2016; updated August 2019 (Attachment E-1); Papadimos Group for the Farmstead at Long Meadow Ranch in August of 2018 (Attachment E-2), and Walsh Norris Associates for the Farmstead Outdoor Bar Area in August of 2018 (Attachment E-3). All three reports are found in Attachment E.

REGULATORY SETTING

The State of California and the City of St. Helena have established regulatory criteria that are applicable in this assessment. The State CEQA Guidelines, Appendix G, are used to assess the potential significance of impacts pursuant to local General Plan policies, Municipal Code standards, or the applicable standards of other agencies. A summary of the applicable regulatory criteria is provided below.

2016 California Building Code, Title 24, Part 2. The current (2016) California Building Code (CBC) places limits on interior noise levels attributable to exterior environmental noise sources. This report considers interior noise levels attributable to exterior environmental noise sources to be limited to a level not exceeding 45 dBA L_{dn} in any habitable room for new dwellings other than detached single-family dwellings.

St. Helena General Plan and Municipal Code. The Municipal Code does not quantitatively regulate noise levels, but authorized the chief of police to review complaints of “unnecessary noise” as defined in Chapter 8.24. Similarly, noise that can be heard at the property line of any parcel that is generated by commercial activities, between the hours of 10:00 pm and 7:00 am is prohibited, unless permitted by the chief of police.

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City Ordinance No. 305 prohibits any noise which disturbs the public peace. This ordinance is intended to discourage unusually noisy activities in residential areas. It also specifically limits noise emissions by machinery between hours of 9:00 pm and 7:00 am.

General Plan Update 2040

The St Helena General Plan (Table 9.2) address the compatibility standards that apply to development projects:

Table XIII-1 Land Use Compatibility Guidelines

<u>Land Use Category</u>	<u>Community Noise Exposure (dBA, Ldn or CNEL)</u>			
	<u>/1/</u> <u>Completely</u> <u>Compatible</u>	<u>/2/</u> <u>Tentatively</u> <u>Compatible</u>	<u>/3/</u> <u>Normally</u> <u>Incompatible</u>	<u>/4/</u> <u>Completely</u> <u>Incompatible</u>
<i>Residential</i>	< 55 dBA	55-60 dBA	60-75 dBA	> 75 dBA
<i>Commercial/ Office</i>	< 65 dBA	65-75 dBA	75-80 dBA	> 80 dBA
<i>Industrial/</i>	< 70 dBA	70-80 dBA	80-85 dBA	> 85 dBA
<i>Agricultural</i>				
<i>School, libraries,</i>	< 65 dBA	65-70 dBA	70-80 dBA	> 80 dBA
<i>churches, hospitals</i>				
<i>Playground,</i>	< 67 dBA	67-70 dBA	70-75 dBA	> 75 dBA
<i>neighborhood park</i>				

/1/ Completely Compatible – Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction.

/2/ Tentatively Compatible – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems of air conditioning will normally suffice.

/3/ Normally Incompatible – New construction and development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

/4/ Clearly Incompatible – New construction or development should generally not be undertaken.

The following General Plan policies are related to noise:

- PS2.1** Preserve the current low levels of noise in St. Helena to maintain the City’s rural atmosphere.
- PS2.2** Maintain a citywide environment that balances various City objectives while minimizing the impact of highway, railroad, and industrial noise. The City should manage both indoor and outdoor noise levels to protect health and safety. A combination of noise standards and existing noise levels should be used to determine impacts and mitigation measures.
- PS2.3** Minimize potential noise impact conflicts between land uses by regulating incompatible land uses. Encourage noise-generating uses to reduce their impacts while promoting land use patterns that avoid conflicts. Employ compatibility guidelines, interior noise level criteria, the City’s noise standards, and noise contour maps to determine the compatibility of land uses.
- PS2.4** Require a reduction and/or control of the use of machinery, mechanical systems and other noise-making equipment and sources in and near residential areas where the noise impacts would be considered intrusive to adjacent residential property, unless consistent with the right-to-farm.

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PS2.5 An increase in average noise levels of 5 dBA or greater is considered to be significant and to constitute a noise impact by the noise source in question for the purpose of environmental analyses.

Existing Noise Environment

The Illingworth and Rodkin team undertook the long-term noise measurement (LT-1) along the northwest property line of the Project site, approximately 600 feet from the center of Main Street and adjacent to Charter Oak Avenue residential properties that border the site. Figures 2 - 7 of Attachment E-1 display the measured noise data over a daily basis. Hourly average noise levels typically ranged from 44 to 53 dBA Leq during the daytime period (7:00 a.m. to 10:00 p.m.) and from 38 to 48 dBA Leq at night (10:00 p.m. to 7:00 a.m.). Hourly average noise levels during the 9:00 p.m. hour on Monday, July 4, 2016 reached 68 dBA Leq because of fireworks. The day-night average noise level at LT-1 typically ranged from 50 to 52 dBA Ldn with the exception of Monday, July 4, 2016 when the Ldn reached 56 dBA Ldn because of the sounds attributable to fireworks during the 9:00 p.m. hour.

Four short-term noise measurements were also made on Friday, July 1, 2016 and Tuesday July 6, 2016 to complete the noise monitoring survey. A 20-minute short-term noise measurement was made at site ST-1 between 6:50 p.m. and 7:10 p.m. on Friday, July 1, 2016 to quantify noise levels produced by a wedding reception held on the event lawn east of the Farmstead restaurant. The wedding reception had live, amplified music provided by a bluegrass band known as the "Town Howlers". The sounds of distant traffic, mechanical equipment, and the amplified music ranged from 46 to 49 dBA, and the sound of the music was barely audible above the sounds produced by the distant traffic and mechanical equipment. Voices on the public address system were measured to range from 48 to 50 dBA, and the cheering of the crowd reached 53 to 54 dBA as the wedding party was introduced. The average noise level during the 20-minute measurement was 48 dBA Leq. Ambient traffic noise levels were monitored at sites ST-2, ST-3, and ST-4 on Tuesday July 6, 2016. Average traffic noise levels were 45 to 48 dBA Leq depending on the distance between the measurement site and Main Street. Table XII-2 summarizes the results of the short-term noise measurements.

TABLE XIII-2: Summary of Short-Term Noise Measurements (dBA)

Noise Measurement Location (Date, Time)	L _{max}	L ₍₁₎	L ₍₁₀₎	L ₍₅₀₎	L ₍₉₀₎	L _{eq}
ST-1: 300 feet from the center of the stage at the event lawn. (7/1/2016, 18:50-19:10)	60 ¹	53	49	48	47	48
ST-2: 820 feet from the center of Main Street. (7/6/2016, 13:40-13:50)	52	49	47	45 ²	43	45
ST-3: 600 feet from the center of Main Street. (7/6/2016, 14:00-14:10)	54	51	47	45	43	46
ST-4: 350 feet from the center of Main Street. (7/6/2016, 14:20-14:30)	58 ³	55	49	47	45	48

Notes: 1. A motorcycle along Main Street produced the maximum noise level of 60 dBA.

2. PG&E Substation produced noise levels ranging from 44 to 45 dBA.

3. Barking dogs at the nearby vet generated maximum noise levels reaching 58 dBA. After the measurement was complete, the Napa Valley Wine Train warning whistle generated maximum noise levels ranging from 80 to 82 dBA.

To document exterior equipment existing conditions, the Papadimos Group undertook noise surveys at Farmstead on 6/7/18 and 6/28/18. Noise output from exterior equipment was measured close to the equipment and at the east property line. The highest measured level at the east property line was 63 dBA and the loudest equipment was exhaust fan EXF-1 serving the barn/catering kitchen and Trane® packaged air-conditioning unit AC-1 serving the main restaurant building. Figure 1 of Attachment E-2 identifies the equipment observed at Farmstead.

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A 3-dimensional computer model of the site and equipment was constructed using SoundPLAN®. This model then was calibrated to match the measurements made during our noise surveys and subsequently used to predict noise levels from individual equipment and cumulative noise levels, both at the east property line and at neighboring residential facades. Table XII-3 on the next page shows these predictions ordered from highest to lowest noise level at the east property line. Additionally, a color contour map of the existing noise levels is attached in Appendix A of Attachment E-2.

TABLE XIII-3: Existing Noise Levels

Equipment	Highest noise level at property line (dBA)	Noise level at residential facades (dBA)
Barn Exhaust Fan (EXF-1)	60	45
Trane Packaged Unit (AC-1)	58	33
Restaurant MAU	47	31
Barn Exhaust Fan (EXF-2)	46	32
Small AC unit above AC-1	46	35
Solar Panel Electrical Box	45	23
Mushroom Exhaust Fans (EF-1 thru 5)	44	31
Barn MAU	41	24
Carrier Condensing Units	40	27
Electrical Transformer	37	14
All Equipment (Total)	62	46

Existing Farmstead at Long Meadow Ranch (Farmstead)

There are a number of acoustical variables that control the sound level at the property line, such as distance to the property line, height of sound barrier, distance between the patrons and the sound barrier inside the bar area, and sound level of the patrons. The Farmstead use permit amendment includes improvements to attenuate noise, and additional information on these planned improvements is contained in Attachments E-3 of this IS/MND.

Given that average noise levels east of Farmstead are typically no less than 45 dBA during Farmstead's hours of operation, the regulatory limit defined by the 1993 St. Helena General Plan would be 50 dBA at Farmstead's eastern property line. On this basis, noise control treatments are proposed as improvements to limit Farmstead's equipment noise to below 50 dBA at the eastern property line. These proposed noise attenuating improvements include:

- A 3ft long sound attenuator in the exhaust outlet duct of AC-1.
- A 4-sided barrier around EXF-1, 3ft taller than the top of the unit's discharge duct.
- A 3-sided barrier around the Small AC unit above AC-1, 1ft taller than the unit.
- Replacing the existing property line fence with an 8ft tall solid sound barrier.

With the noise attenuation proposed, noise levels would be reduced to the following levels:

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TABLE XIII-4: Noise Levels with Treatments for HVAC

Condition	Conditions				Noise Levels	
	EXF-1	AC-1	Small AC unit above AC-1	Property Line Barrier	Neighbor's Side of the eastern property line (dBA)	Level at residential facades (dBA)
Existing	None	None	None	None	60*	46
Treated	Barrier 3 ft. taller than unit	3 ft. Sound Attenuator	Barrier 1 ft. taller than unit	8 ft. tall	44	38

*Note the highest levels on the neighbor's side of the property line are 2 dB less than predicted levels at the property line. This is due to minor shielding from the existing property line fence.

Currently, the east side of the restaurant's outside bar area is mostly open to the closest property line. An existing board fence, approximately 6 feet high, extends in the north direction from the restaurant building approximately 43 feet and turns to the west at the end for approximately five feet. Additions are being proposed to the existing LMR Farmstead facility, including construction of a new dry storage area. This addition will extend out approximately 14' from the existing restaurant building and close off that area on the east side of the outdoor bar area. An 8 feet high solid fence will extend from the new dry storage building addition out to the north and turn west to the existing fireplace for a full enclosure of the bar area. Two hundred, fifty-five feet of the existing board fence on the property line will be replaced with an 8 feet high solid fence. The noise levels will be reduced at the property line to 37 dBA.

TABLE XIII – 5 Calculated Sound Levels at Property Line (PL)

	<u>Closest Distance to the East PL</u>	<u>Location on PL at Northeast with No Barrier Shielding</u>
Existing Condition 6' High Board Fence on East Side of Bar Area with a Small Return Portion on the North Side	54 dBA	42 dBA
With Changes - New Dry Storage Building 8' High Solid Fence on East and North Sides of Bar Area - Tectum ceiling panels installed above bar area 8' noise attenuating fence at the property line	39 dBA	37 dBA

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Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

Based on the results of the ambient noise monitoring survey, existing noise levels at the portions of the site proposed for lodging are approximately 50 to 52 dBA Ldn. Traffic noise levels along Main Street, between Pope Street and Mills Lane, are not anticipated to measurably increase by 2030; therefore, the future noise environment is expected to remain at or below 52 dBA Ldn, less than the requirements of the City of St. Helena. The exterior noise environment would be considered to be completely compatible for the proposed land use. Interior noise levels, assuming that buildings are of normal conventional construction with no special noise insulation, would be less than 45 dBA Ldn, meeting the interior noise limits established in the General Plan and by the State Building Code. Additional noise controls or noise insulation are not required to conform to the applicable exterior or interior noise limits established in the General Plan and State Building Code.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-c) **Less Than Significant Impact.** The Proposed Farmstead alterations would not result in a permanent noise level increase at existing noise sensitive land uses due to Project-generated traffic, and none of the construction is expected to require pile driving, which can cause excessive vibration. No new mechanical equipment is associated with the Project that would generate noise in excess of the City of St. Helena's noise standards. Noise attenuation measures for existing use are described above ensuring compliance with City standards and existing noise is reduced to a level of less than significant.
- (d) **Less Than Significant.** Noise generated by Project construction activities could temporarily elevate ambient noise levels at sensitive land uses in the vicinity. Due to the proximity of existing residential land uses, there is a potential that construction noise levels would exceed 60 dBA Leq, and the ambient by at least 5 dBA Leq, for short periods of time. Because construction activities near the residences are small (355 square feet), and of such a short duration, this impact is considered less than significant.
- (e,f) **No Impact.** The Project site is not located within an airport land use plan, or within two miles of a public airport, public use airport or private air strip. Occasional aircraft overflights are intermittently audible at the site, but these infrequent events do not substantially contribute to hourly average or daily average noise levels at the site. The Project would not expose persons in the area to excessive aircraft noise, therefore no impact will occur.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a) **Less Than Significant Impact.** The Proposed Project would not result in a permanent noise level increase at existing noise sensitive land uses due to Project-generated traffic, a less than significant impact.
- (b) **Less Than Significant Impact.** Construction-related vibration levels resulting from activities at the Project site would not exceed 0.3 in/sec PPV at the nearest residential and commercial land uses. The construction of the Project may generate vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used. Construction activities would include site preparation work, foundation work, paving, and new building framing and finishing. The Proposed Project is not expected

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to require pile driving, which can cause excessive vibration. Therefore, this impact is considered less than significant.

- (c) **Less Than Significant With Mitigation Incorporated.** Mechanical equipment associated with the Project could generate noise in excess of the City of St. Helena's noise standards, a potentially significant impact unless mitigation by Mitigation Measure NOI-1 below is implemented.

The Proposed Project would likely include rooftop mechanical equipment, such as heating, ventilation, and air conditioning systems (HVAC) that would produce noise during operation. At the time of this analysis, specific mechanical equipment details were not available. However, since completion of the acoustical analysis, the designers have made the following provisions in the design:

- Lodging rooms: The equipment is set in a roof well at the center of each 'H' shaped building. The ridge lines of the roofs are higher on all four sides, visually and acoustically shielding potential mechanical noise to all sides
- Micro-turbine barn: At this point we are showing a small barn enclosure. While the specifics of the structure are not yet completed, the building will be constructed with acoustical walls that shield the rooms and site from noise generated by the micro-turbine.
- Multi-purpose building: The equipment is proposed to be located in a semi-enclosed mechanical loft above the kitchen with the main kitchen exhaust directed up through a mechanical chimney. The louvered openings would be on the gable end facing east towards a vineyard, away from the rooms and adjacent neighboring structures.

Noise associated with the operation of mechanical equipment is not expected to exceed the evening and nighttime noise limits established by the City of St. Helena at the nearest residences to the west, assuming a worst-case scenario with regard to the location of the equipment. However, as final designs are not completed or approved, Mitigation Measure NOI-1 has been provided to offset any potential impacts to a level of less than significant.

- (d) **Less Than Significant With Mitigation Incorporated.** Noise generated by Project construction activities would temporarily elevate ambient noise levels at sensitive land uses in the vicinity. Due to the proximity of existing residential land uses, there is a potential that construction noise levels would exceed 60 dBA Leq, and the ambient by at least 5 dBA Leq, for a period greater than one year.

Hourly average noise levels are calculated to range from about 65 to 72 dBA Leq at the nearest residential receptors located approximately 300 feet from the westernmost edge of the proposed lodging area of the site and from about 61 to 68 dBA Leq when located approximately 500 feet from the center of the construction site. During Project construction activities, ambient noise levels at Charter Oak Avenue residential land uses could be elevated by 15 to 20 dBA, depending on the proximity of the portion of the site under construction to the sensitive receptor. Noise from temporary construction activities would exceed 60 dBA Leq and the ambient noise environment by at least 5 dBA Leq at noise-sensitive uses in the Project vicinity for a period greater than one year, and the impact would be considered significant unless mitigated by Measure NOI-2.

- (e,f) **No Impact.** The Project site is not located within an airport land use plan, or within two miles of a public airport, public use airport or private air strip. Occasional aircraft overflights are intermittently audible at the site, but these infrequent events do not substantially contribute to hourly average or daily average noise levels at the site. The Project would not expose persons in the area to excessive aircraft noise, therefore no impact will occur.

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MITIGATION MEASURES

Existing Farmstead at Long Meadow Ranch (Farmstead)

None required.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

NOI-1. The following mitigation measures shall be included in the Project to reduce the impact to a less-than-significant level:

- Mechanical equipment shall be selected and designed to reduce impacts on surrounding uses to meet the City's noise level requirements. A qualified acoustical consultant shall be retained to review mechanical noise as these systems are selected to determine specific noise reduction measures necessary to reduce noise to comply with the City's noise level requirements. Noise reduction measures could include, but are not limited to, selection of equipment that emits low noise levels and/installation of noise barriers such as enclosures and parapet walls to block the line-of-sight between the noise source and the nearest receptors. Alternate measures may include locating equipment in less noise-sensitive areas, such as the rooftop of the hotel buildings away from the building's edge nearest the residences, where feasible.

NOI-2. The St. Helena Municipal Code limits construction activities to the hours between 8:00 AM and 5:00 PM, Monday through Saturday. Construction is not allowed on Sundays and holidays (federal and local) if noise can be heard at the property line of any parcel of real property within the city limits. In accordance with Implementing Action PS2.F, noise suppression devices and techniques developed as part of a typical construction noise control plan would include, but not be limited to, the following measures:

- Use "quiet" models of air compressors and other stationary noise sources where technology exists;
- Equip all internal combustion engine-driven equipment with mufflers that are in good condition and appropriate for the equipment;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses;
- Locate staging areas and construction material areas as far away as possible from adjacent land uses;
- Prohibit all unnecessary idling of internal combustion engines;
- Notify all adjacent land uses of the construction schedule in writing;
- Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

The implementation of reasonable noise reduction measures during all phases of construction activity, in combination with the limitations on hours set forth in the St. Helena Municipal Code, would reduce the impact of temporary construction noise as well as reduce noise exposure, to levels of less than significant.

SOURCES

- Illingworth & Rodkin, Inc., Noise and Vibration Assessment Study for the Farmstead at Long Meadow Ranch Lodging Project, September 8, 2016; updated December 2019.

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- Walsh-Norris & Associates, Property Line Sound Levels for Outdoor Bar at Long Meadow Ranch, August 2018.
- Papadimos Group, Farmstead at Long Meadow Ranch Exterior Noise Analysis, August 15, 2018.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XIV. POPULATION AND HOUSING				
Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐

DISCUSSION

Existing Farmstead at Long Meadow Ranch (Farmstead)

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

A project would be considered growth-inducing if it were to provide new housing, new employment, or expand existing infrastructure not planned for by a local plan. Both the Existing Farmstead at Long Meadow Ranch (Farmstead) and the Farmstead at Long Meadow Ranch Lodging Project (Lodging Project) are commercial projects. There is no population that will be displaced and, while new employment will be provided, a population exists within St. Helena and Napa County that can meet projected needs, as discussed below. The Projects are located in areas designated for service commercial uses.

REGULATORY SETTING

General Plan Update 2040

- 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

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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.
- 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.

2015-2023 Housing Element

The 2015 City of St Helena's Housing element provides the following applicable overall goal:

Make efficient use of land within the Urban Limit Line to protect agricultural lands, promoting compact, well-designed developments that 'fit in' with existing neighborhoods and contribute to the overall livability of our community. Encourage a balance of housing types throughout the entire community.

Highway 29 Specific Plan

The Highway 29 Specific Plan provides for the "orderly build out of land uses as envisioned in the St. Helena General Plan and allowed by the St. Helena Zoning Ordinance". Land use objectives which apply to the site include:

- Provide for the logical extension of service commercial and light industrial uses and other land uses permitted and conditionally permitted in the St. Helena Zoning Ordinance.
- Provide for growth that is local-serving and pedestrian-scaled service commercial and light industrial opportunities on vacant land within the Specific Plan area. Where feasible, promote development of housing in the Specific Plan area.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-c) **No Impact.** Changes to existing Farmstead operations are for repurposing existing facilities and providing additional storage space. The remodeling will relieve existing overcrowding and modernize existing operations. No new employees would be added; however, several employees will be relocated from the restaurant kitchen to the butchery and bakery.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a) **Less Than Significant Impact.** The lodging component would generate approximately 65 new employees on site and expand infrastructure to the 10-acre site proposed for development. Eleven additional employees for marketing, sales and accounting would be added off-site to support the lodging operation. Food service workers currently employed at the Farmstead restaurant will also

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provide food services for the lodging component. All increases in employees, along with the accompanying infrastructure to serve this Lodging Project, were anticipated in the Highway 29 Specific Plan as noted in Figures 10 and 11 and discussed in pages 34-42 of the Highway 29 Specific Plan which anticipated service commercial uses on a portion of the site. The Proposed Project is consistent with these anticipated uses and will extend service onto the site, for project use only and not including any future growth. The project will also be required to comply with the City's inclusionary housing requirements which will require the project proponent to offset new housing demands created by the proposed project.

The Project Applicant is required to satisfy the City's housing requirements as fully described in the Development Agreement between Applicant and the City of St. Helena. For these reasons this impact is considered less than significant.

- (b,c) **Less Than Significant Impact.** The site currently has no dwelling units and is not zoned for housing. Therefore, the Project will not have an impact on housing.

MITIGATION MEASURES

None required.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- City of St. Helena, Highway 29 Specific Plan, February 22, 2005.
- City of St. Helena Fee schedule.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XV. PUBLIC SERVICES				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?				
a. Fire protection?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	X	☐	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
b. Police protection?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	X	☐	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
c. Schools?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	X	☐	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
d. Parks?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	X	☐	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
e. Other public facilities?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	X	☐	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐

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DISCUSSION

Public Services and schools are provided by either the City of St. Helena or the St. Helena Unified School District.

General Plan Update 2040

The following General Plan policies are related to the provision of public services:

- PF1.1 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.
- PF5.4 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.
- PF5.7 Set a goal of a maximum fire department response time of 8 minutes within the St. Helena city limits.
- PF5.8 Set a staffing ratio of 2 police officers per 1,000 population and for priority one calls, an average police department response time of 3 minutes or less.
- PR1.2 Enhance the community's quality of life and ensure a widely accessible environment through the provision of a citywide system of parks and open spaces. Identify and develop linkages, corridors, and other connections to provide an aesthetically pleasing and functional network of parks, open space areas, and bike paths throughout the city.
- PR1.3 Identify park land opportunity sites to ensure that the City can meet and possibly exceed its parkland standard of 5.0 acres per 1,000 residents. Locate new parks to ensure that City park facilities are equitably distributed throughout all areas of the city and residents of all ages can access them safely and conveniently.
- PR1.4 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.

Highway 29 Specific Plan

The Specific Plan addresses continuation of public services and facilities to serve anticipated development within the Specific Plan area.

Action

School fees shall be paid to the St. Helena Unified School District prior to issuance of building permits by the City of St. Helena. Payment of school fees represents mitigation for any impacts to the District.

New development is required to pay civic improvement impact fees to the City to support purchase of new parkland and development of park facilities.

Library service will continue to be supported by on-going revenues from development projects to the City's General Fund.

Fire and police protection services would be provided by the City of St. Helena.

Fire: A second station (#2) is proposed for Dowdell Lane.

Police: The St. Helena Police Department provides police services within the city limits with 24-hour patrol at an average response time of less than 3 minutes. The Police Department is based at 1480 Main Street in St. Helena. The Police Department consists of 18 full-time employees (including the Chief of Police and sworn

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officers) and one part-time employee. The Police Department maintains a staffing ratio of approximately 2 police officers for every 1,000 residents and is not understaffed.

The St. Helena Unified School District provides public school service in St. Helena. Students from two nearby elementary districts also attend the district's schools. The district maintains 5 schools: a primary school, an elementary school, a middle school, a high school, and an alternative high school.

The City of St. Helena provides administrative, civic, and library services. In order to offset the cost of improving or expanding City services to accommodate the demand generated by new development the City charges one-time impact fees on new private development. Development impact fees are necessary in order to finance required public service improvements and to pay for new development's fair share of the costs necessary to maintain acceptable levels of service related to fire and police protection services, open space, parkland and other such public services.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a,b) **Less than Significant Impact with Mitigation Incorporation – Police and Fire:** The Project will result in a demand for additional City's public services. However, no new facilities will be required to maintain public service performance standards. Additional fire or police personnel or equipment will not be necessary to adequately serve the Project. Payment of the City of St. Helena Public Safety impact fees will ensure adequate public services.
- (c) **Less than Significant Impact with Mitigation Incorporation - Schools:** The Project is a commercial project and therefore will not create a substantial increase in new students at local schools as described in Section XIII Population and Housing. California Government Code identifies the payment of school fees as mitigation for all development projects.
- (d,e) **Less than Significant Impact with Mitigation Incorporation – Parks and Other Facilities:** The Project is a commercial project and would not result in the direct incremental need for additional park services or administrative services. (See also Section XVI, Recreation). Payment of impact fees will offset any potential impacts to City-provided services.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a,b) **Less than Significant Impact with Mitigation Incorporation – Police and Fire:** The Project will result in a demand for additional City public services. A draft of the site plan has been reviewed by the City's Fire Marshall and comments have been addressed in the current plan. No new facilities will be required to maintain public service performance standards. Additional fire or police personnel, or equipment will not be necessary to adequately serve the Project. Payment of the City of St. Helena Public Safety impact fees will ensure adequate public services.
- (c) **Less than Significant Impact with Mitigation Incorporation - Schools:** The Project is a commercial project and therefore will not create a substantial increase in new students at local schools as described in Section XIII Population and Housing. California Government Code identifies the payment of school fees as mitigation for all development projects.
- d,e) **Less than Significant Impact with Mitigation Incorporation – Parks and Other Facilities:** The Project is a commercial project and would not result in the direct incremental need for additional park services

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or administrative services. (See also Section XVI, Recreation). Payment of impact fees will offset any potential impacts to City-provided services.

MITIGATION MEASURES

Existing Farmstead at Long Meadow Ranch (Farmstead); and the

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

PS-1. The Projects shall be required to pay project impacts fees:

- Evidence showing payment of school impact fees, in accordance with Government Code Section 65996, from the applicable school district, will be provided prior to City issuance of any building permits.
 - Evidence showing payment of park fees, Civic Improvement Fees and Public Safety Fees will be provided to the City prior to issuance of any building permits.
- Payment of the above fees will ensure that the project's potential impacts on schools, public facilities and parks are mitigated to a level of less than significant.
- Other standard conditions of approval will apply, including provision of a fire flow analysis to ensure adequate water pressure and flow rates and that the project has a less than significant impact on fire flows.

IMPACT SIGNIFICANCE AFTER MITIGATION

With implementation of the mitigation measure described above, impacts related to the provision of public services would be reduced to a less than significant level.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- City of St. Helena website: <http://www.cityofsthenana.org/>.
- City of St. Helena Fee Schedule.
- City of St. Helena School District Fee Schedule.
- City of St. Helena, Highway 29 Specific Plan, February 22, 2005.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XVI. RECREATION				
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
b. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐

DISCUSSION

The Farmstead Restaurant project site comprises 2.5± fully developed acres (restaurant, agricultural retail facilities) and is zoned for service commercial use.

The 10± acre Farmstead at Long Meadow Ranch Lodging Project has a split zoning of service commercial (6± acres) and agricultural development (4± acres). Of the 10 acres parcel, approximately 4+ acres are to be left in agriculture.

Each of the proposed projects (Farmstead and the Lodging Project) are commercial or agricultural in nature and are not expected to contribute significantly to the demand for recreational facilities.

REGULATORY SETTING

General Plan Update 2040

- PR1.1 Retain the park standard from the 1993 General Plan of 5.0 acres of parkland per 1,000 residents, while striving for the nationally recommended standard of 10.5 acres per 1,000 residents.
- PR1.5 Ensure adequate funding to acquire new park lands as they become available.
- PR1.E Develop a comprehensive network of bicycle and pedestrian trails that links the City's parks and enhances bicycle and pedestrian connectivity throughout the city and the region.

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IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-b) **Less Than Significant Impact.** The Farmstead, as a service commercial operation, will entail no construction or operational changes that would result in impacts to recreational facilities or increase the need for additional services of facilities. The Farmstead project would continue to contribute tax revenues that will add to the City's general fund and can be utilized for park and recreational development. There would no new employees added as the butchers and bakers that would transition to the new spaces are already employed by Farmstead, currently working in the restaurant kitchen. There are already farmers market employees who would continue to handle the retail sales. Therefore, potential impacts to recreational resources have been determined to be less than significant.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a) **Less Than Significant Impact.** While the Lodging Project proposes inclusion of on-site recreational facilities for its lodging guests, the Project will be required to participate in the payment of park in-lieu fees consistent with City policies. There will be 65 new employees as described in Section XIV, Population and Housing. A small portion of these employees may relocate to St. Helena and, therefore, add to the demand for recreational facilities. While this number is expected to be small, it represents a cumulative contribution. The Project proposes to reduce any potential impacts on recreational facilities and potential impacts to recreational resources through the payment of the standard park in-lieu fees, resulting in a less than significant project impact.
- (b) **Less Than Significant Impact.** The Farmstead Lodging component would provide both active and passive recreation for its guests in the form of exercise rooms, yoga programs, swimming facilities, bicycles, and walking paths throughout the property. These facilities are primarily intended for lodging guests, although, some may be available to the public. All potential project impacts on the recreational environment are therefore deemed to be less than significant.

MITIGATION MEASURES

REC-1. The project shall be required to pay project impact fees:

- Evidence showing payment of park impact fees shall be provided prior to the issuance of building permit.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- City of St. Helena Fee Schedule.
- City of St. Helena, Highway 29 Specific Plan, February 22, 2005.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XVII. TRANSPORTATION				
Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
Total Project (Farmstead + Farmstead Lodging)	☐	X	☐	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	X	☐	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
Total Project (Farmstead + Farmstead Lodging)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
Total Project (Farmstead + Farmstead Lodging)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
Total Project (Farmstead + Farmstead Lodging)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	☐	X
e. Result in inadequate emergency access?				
Total Project (Farmstead + Farmstead Lodging)	☐	☐	☐	X
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian				

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facilities, or otherwise decrease the performance or safety of such facilities?				
Total Project (Farmstead + Farmstead Lodging)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐

DISCUSSION

The following summarizes the Projects’ impacts and is based on a Traffic Impact Study completed by Crane Transportation Group (CTG) in August 2018 and updated in November 2019. The updated study is included with this Initial Study as Attachment B and is consistent with the traffic assumptions contained in the 2040 Update to the St. Helena General Plan. The Traffic Study discusses in detail: the methodology utilized, existing signal conditions and signal warrant criteria, intersections and local operational characteristics of the supporting pedestrian, bicycle and public transit facilities. These are summarized below following the project summaries.

Farmstead at Long Meadow Ranch (Farmstead)

In addition to a 40 seat café, a 408-square-foot butcher shop will be added to the farmers market and be open to the public. Hours will be 10:00 AM to 6:00 PM. Existing farmers market butchers and staff will work in the new retail facility. Local customers will either walk or drive to/from the site. Based upon the applicant’s request for four 200-person events per week with no restrictions on beginning or end times, for analysis purposes the City has requested that traffic from this size event be assumed on the local roadway network during the Friday and Saturday PM peak traffic hours. Access would be via 14 shuttle buses, although a few attendees would also be likely to drive. All shuttle buses will access the restaurant/farmers market parking lot along Charter Oak Avenue. They are assumed to park off site during the event.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

The proposed 65-unit Farmstead at Long Meadow Ranch lodging facility would be located east of SR 29 and north of Mills Lane in the southern section of the City of St. Helena (see Figures 1 & 2 – Regional and Local Area Maps, Figure 3 – Existing Intersection Geometrics & Control, and Figure 4 – Site Plan, all in attachment B of the Traffic Impact Report). Currently, the vast majority of the site is vacant with a small vegetable garden by the Farmstead restaurant. The only street bordering the site is Mills Lane, on the south. The site extends along Mills Lane from the adjacent Gold parcel on the northwest side to just east of the La Fata Street intersection. Lodge guest parking would be on-site and accessed via a driveway which would be the north leg of the Mills Lane/La Fata Street intersection, while lodge employee parking would be in a new improved lot on the southwest corner of the Dowdell Lane/McCormick Street intersection (see Figure 5 in attachment B). This lot is currently undeveloped and will also be used by employees of the existing Farmstead restaurant and farmer’s market. Overall the lodge will employ 65 staff, with a maximum of 47 on site during any given day. An on-call shuttle bus will be provided for all staff unable to walk between the new lot and either the lodge or restaurant/farmer’s market. A shelter will also be provided adjacent to the lot.

Mills Lane is planned to be widened between La Fata Street and SR 29 as well as realigned to intersect SR 29 as the fourth leg of the signalized Grayson Avenue intersection in conjunction with development of the Farmstead Lodge. The existing Mills Lane crossing of the Wine Train track would be eliminated, and a new at-grade crossing provided. The new Mills Lane at-grade crossing of the Napa Valley Wine Train track would be protected by gates and flashing lights. Mills Lane will have two travel lanes, on-street parking on both sides of the street adjacent to the lodge and a Class I bicycle path and pedestrian walkway on the north side of the street from SR 29 to La Fata Street. The Mills Lane approach to the SR 29/Grayson Avenue signal will have two lanes, one exclusively for right turns and one for combined through/left turns.

The northwest end of the project site would extend to the adjacent Gold property which borders the Napa Valley Wine Train right-of-way and be adjacent to the existing Farmstead at Long Meadow Ranch restaurant and farmers

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market. Access between the two parcels would be possible for electric carts, pedestrians and bicycles, but not autos. Guests walking to/from downtown St. Helena would use this route through the restaurant property to access SR 29 at the Charter Oak intersection.

The proposed lodging facility will contain 65 rooms as well as spa facilities for guests only. The existing Farmstead restaurant will be available for meals. There will be an expansion of existing cooking classes as well as gardening and crafts demonstrations (now taking place at the Farmstead restaurant to the north) in conjunction with the new lodging units. However, classes will be during non-peak restaurant and farmers market traffic hours (9:00 a.m. to 2 pm during the week and 1 pm on Saturdays).

As part of project development, a Class I paved path/pedestrian walkway will be provided on the north side of Mills Lane between La Fata Street and SR 29. In addition, a paved pathway will be provided along the west side of La Fata Street between Mills Lane and Dowdell Lane that will complete a paved walkway system between the employee improved parking lot and the lodge entrance.

La Fata Street will be widened to 40 feet (curb to curb) just south of Mills Lane in conjunction with removal of the boulders that now line both sides of the street in this area. Finally, stop signs will be provided on the La Fata Street-Lodge driveway approaches to Mills Lane.

A Transportation Demand Management (TDM) coordinator will be provided in order to establish and maintain ongoing programs to reduce vehicle trips by guests and employees. Such measures will include car and vanpooling programs for employees, winery tours for guests with pickup/drop off at the lodge, etc.

LOCAL CONDITIONS

Main Street (State Routes 29 & 128) is the primary north-south travel route through the Napa Valley and the major north-south route through the City of St. Helena. In this study it is referred to as SR 29. North of St. Helena SR 29 extends to Calistoga and Lake County, while to the south it extends to the cities of Napa and American Canyon. Main Street is classified as a Regional Connector Street in the St. Helena General Plan Update 2030 Circulation Element. In the project vicinity SR 29 has recently been reconstructed and has single travel lanes in each direction and a median continuous two-way left turn lane extending south for about three miles to the Mee Lane intersection. The posted speed limit is 35 miles per hour and no on-street parking is allowed while just south of Charter Oak Avenue the speed limit is reduced to 25 miles per hour. Curb and gutter along with two- to four-foot-wide paved shoulder are in place along both sides of the street. The SR 29/Grayson Avenue intersection was signalized about two years ago. There is a crosswalk on the west leg of the intersection (across Grayson Avenue), but none across SR 29. The signal is vehicle activated on the Grayson Avenue approach with SR 29 traffic receiving a continuous green light unless traffic approaches on Grayson Avenue, or a left turn is made from northbound SR 29 to Grayson Avenue. The SR 29 Specific Plan indicates that the SR 29/Dowdell Lane intersection will ultimately be signalized, while the SR 29/Pope Street-Mitchell Street intersection has been signalized for more than 50 years.

Mills Lane is a 14- to 15-foot-wide street extending easterly from SR 29 for about 0.85 miles before ending. It provides access to vineyards and intermittent residences. There are no curbs, gutters, sidewalks or paved shoulders, but grass and gravel shoulders are in place. Two-way traffic flow is possible by slow-moving vehicles, but it requires one or both drivers to partially pull off to the gravel and grass shoulders. Mills Lane is stop sign controlled on its approach to SR 29 and the posted speed limit is 25 miles per hour. Mills Lane also has about a 20-foot-wide at-grade crossing of the Napa Valley Wine Train single track about 20 feet from the east edge of SR 29. The crossing is protected by stop signs and "Railroad Crossing" crossbucks.

La Fata Street is primarily a 40-foot-wide curb-to-curb street extending southerly from Mills Lane to Dowdell Lane and then further south to Vintage Avenue. The La Fata Street centerlines are offset by about 40 feet at Dowdell Lane. Along the 40-foot section curb and gutter are in place along both sides of the street and on-street parking is allowed.

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La Fata Street primarily serves wine-related warehousing and production facilities. It is stop sign controlled on both approaches to Dowdell Lane, but not on its approach to Mills Lane. La Fata Street has been narrowed to about 14 to 15 feet for the first 60 feet south of Mills Lane by dirt being placed in the street. Large rocks also line the narrowed roadway and the north side of Mills Lane, potentially to preclude truck turns. There are no sidewalks or pathways along La Fata Street between Mills Lane and Dowdell Lane.

Dowdell Lane is a 40-foot-wide curb-to-curb street extending easterly from SR 29 to the east of La Fata Street, where it continues through a light industrial area and then narrows to serve vineyards and residences. Dowdell Lane between SR 29 and La Fata Street has curb, gutter and sidewalk along the south side of the street and on-street parking is allowed, while curb, gutter, minimal sidewalk and on-street parking is provided on the north side of the street. The posted speed limit is 25 miles per hour. Dowdell Lane is wide enough to allow right and left turning vehicles to separate on its stop sign controlled approach to SR 29. Dowdell Lane also has an at-grade crossing of the Napa Valley Wine Train single track about 20 feet from the east edge of SR 29. The crossing is protected by gates and flashing lights.

Charter Oak Avenue is a two-lane, 38-foot-wide street east and west of SR 29. Their "Tee" intersections with SR 29 are offset by about 90 feet, the west leg being to the north. Both Charter Oak Avenue approaches to SR 29 are stop sign controlled. There is a crosswalk across SR 29 between the offset intersections. The east leg of Charter Oak Avenue also has an at-grade crossing of the Napa Valley Wine Train about 20 feet from the east edge of SR 29. It is protected by gates and flashing lights.

The Napa Valley Wine Train has a single-track line extending between St. Helena and the City of Napa. In the project area it runs parallel to and about 20 feet to the east of the east curb of SR 29. Gates and flashing red lights are in place at the railroad's at-grade crossings of Pope Street, Dowdell Lane and Charter Oak Avenue, but not at Mills Lane. The Mills Lane crossing has top signs and "Railroad Crossing" crossbucks on both approaches. Currently, there are, at most, three round trips per day during the summer and fall. The train speed limit is 15 miles per hour.

Intersection Operation

Project traffic impacts have been evaluated during September harvest conditions at the request of St. Helena City staff. Based upon more than four years of historical information from Caltrans PeMS (Performance Measurement System) count surveys along SR 29 in the Napa Valley, September has the highest daily volumes of the year (during harvest).

Traffic counts for SR 29 at Pope Street-Mitchell signal, SR 29 at Grayson signal and Mills Lane are from 2018 and were utilized in the St. Helena general plan update circulation analysis. In addition, February 2017 peak hour traffic counts in the Komes traffic study and May 2019 traffic counts by Crane Transportation Group were seasonally adjusted to reflect September 2018 harvest conditions based upon historical traffic count data from Caltrans. Resultant harvest 2018 Friday AM and PM peak hour and Saturday afternoon peak hour volumes are presented in Figures 6, 7 and 8 in Attachment B.

The following chart presents a comparison of projected Harvest 2018 two-way peak hour traffic flows on the roads in close proximity to the project site.

Table XVII-1 2-WAY PEAK HOUR VOLUMES – HARVEST 2018

LOCATION	FRIDAY		SATURDAY AFTERNOON
	AM PEAK HOUR	PM PEAK HOUR	PEAK HOUR
Mills Lane (just east of SR 29)	25	20	11
La Fata Street (just north of Dowdell Lane)	31	36	13

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Dowdell Lane (just east of SR 29)	172	172	66
SR 29 (just north of Mills Lane)	1,643	1,560	1,511

Source: Crane Transportation Group, 2019.

As shown, two-way volumes along SR 29 are projected to be similar during the Friday AM and PM and Saturday afternoon peak traffic hours (between about 1,511 to 1,643 VPH). Volumes on Mills Lane are minimal during all peak hours (11-25 VPH), while those on La Fata Street are higher on weekdays (31-36 VPH) compared to Saturday (13 VPH). Peak hour volumes on Dowdell Lane are also higher during the week (172 VPH) compared to Saturday (66 VPH).

Pedestrian Activity

Sidewalks are provided along the following streets in the project area:

- SR 29 along both sides of street north of Charter Oak Avenue.
- SR 29 along the west side of the street, Charter Oak Avenue to Grayson Avenue.
- SR 29 gravel pathway along west side of street from Grayson Avenue to Dowdell Lane.
- Grayson Avenue along both sides of the street.
- Charter Oak Avenue east of SR 29, both sides of the street.
- Charter Oak Avenue west side of SR 29, south side of the street (sidewalk or paved path).
- Dowdell Lane, south side of the street from La Fata Street to McCormick Street.

There are no sidewalks along Mills Lane or along La Fata Street between Mills Lane and Dowdell Lane. There are crosswalks of SR 29 at the following locations:

- Charter Oak Avenue between the two offset Charter Oak Tee intersections. This crossing also includes pedestrian activated "in pavement" flashing lights on each side of the crosswalk.

The highest volume location for pedestrian crossings of SR 29 was at the Charter Oak Avenue crosswalk. Table 5 provides the total pedestrian crossings by hour at this location. Friday and Saturday pedestrian crossings of SR 29 at Charter Oak Avenue were conducted in both 2016 (May and June) and 2019 (September). As shown, the 2016 crossings were typically higher each hour than those in 2019.

Table XVII-2 SR 29 PEDESTRIAN CROSSINGS AT CHARTER OAK AVENUE

DAY & TIME	HIGHEST HOURLY VOLUME	
	2016	2019
Friday AM Peak Period (7:00-9:00 AM)	31	20
Friday PM Peak Period (3:00-6:00 PM)	58	45
Saturday PM Peak Period (1:00-6:00 PM)	73	41

Source: Crane Transportation Group, 2019.

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The California Manual of Uniform Traffic Control Devices 2014 (California MUTCD, Revision 4, March 29, 2019) has guidelines for the installation of pedestrian hybrid beacons on high and low speed roadways. These devices are also referred to as High Intensity Activated Crosswalk or “HAWK” pedestrian signals. Low speed roadways are those where vehicle speeds are 35 mile per hour or less, which would be appropriate for SR 29 at Charter Oak Avenue. The chart for installation with vehicular and pedestrian input values is presented in Appendix C-Figure A-3 in Attachment B. With two-way hourly volumes on SR 29 of more than 1,350 vehicles per hour and a crosswalk length of about 46 feet at Charter Oak Avenue, the chart indicates that a pedestrian hybrid beacon would be appropriate with more than 20 pedestrian crossings an hour. The number of pedestrian crossings during 9 of the 10 survey hours exceeded this number of pedestrians. It should be noted that activation of the HAWK beacon will provide a red light to north and southbound traffic flow on SR 29. This will allow left turn movements to proceed from both Charter Oak Avenue approaches.

Pedestrian crossings of SR 29 in 2016 at Grayson Avenue-Mills Lane intersections ranged from 5 to 14 people per hour during the three peak traffic hours evaluated, while crossings at Dowdell Lane ranged from 7 to 10 people per hour during the same hours.

Bicycle Activity

There are no Class I bicycle paths, signed and striped Class II bicycle lanes, or signed Class III bike routes in the project vicinity. There were more bicycle riders along SR 29 at Charter Oak Avenue than at Dowdell Lane (2-10/peak hour). Bike ridership along Mills Lane, La Fata Street and Dowdell Lane was minimal during all peak hours; one or zero bike riders on any of these three streets.

Public Transit

The St. Helena Shuttle is an on-demand shuttle service available for a nominal fee. Service is generally available Monday through Friday 7:00 am to 9:00 pm, Friday and Saturday 7:00 am to 11:00 pm, and Sunday (May through November) 11:00 am to 9:00 pm. *VINE Go* is an “origin to destination”, shared ride service which provides demand response for persons with disabilities in the cities of Calistoga, St. Helena, Napa, American Canyon, the Town of Yountville and the unincorporated areas of Napa County. *VINE Go* is the ADA paratransit service complementary to the fixed route operators and runs at times corresponding to the fixed routes.

Vehicle Miles Traveled (VMT)

An analysis of VMT as an alternative to, or in addition to, level of service (LOS) analysis has been mandated by SB743. SB743 changes the manner in which transportation impacts are measured in the review of plans and projects under the CEQA. OPR has recommended that VMT replace LOS as the primary measure of transportation impacts to facilitate the implementation of multimodal transportation plans (including road widening), in order to provide:

- Flexibility for impact fees to advance a variety of policy goals
- Greater certainty in the development process, ultimately allowing for more efficient development and economic growth.

Designed primarily to address traffic impacts in more populated areas, compliance with VMT goals is problematic in semi-rural areas such as Napa County and St. Helena, where public transit is not as varied and available as in the metropolitan areas. Additionally, in those cases where projects are more dynamic (such as hotels and wineries) rather than more standard residential or office developments that have the benefit of significantly more historical trip generation and vehicle trip length information is available, thresholds for VMT analysis have not yet been developed.

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Neither the County nor the City of St. Helena has yet developed any guidelines or significance criteria for this type of evaluation. The State Office of Planning & Research has not finalized the guidelines (the necessary first step that was directed by the legislation that initiated this approach). Currently, evaluation of VMT within Transit Priority Areas/TODs has been developed; however, criteria to allow for successful VMT modeling and determination of significant impacts in semi-rural areas are unavailable.

The Project includes (by design) many of the mitigation features and programs recommended by the Office of Planning and Research to reduce VMT. Among these are features which reduce the use of petroleum fuel powered vehicles (which reduce CO2 emissions, a related objective of VMT). These compact growth measures capture the travelling population and/or provide convenient access to alternative modes of travel while supporting the City of St. Helena's downtown. Those Project features include:

- Incorporating a neighborhood electric vehicle network through the use of electric cars.
- Provision of 4 EV charging stations.
- Dedicated EV/clean fuel spaces.
- Orienting the Project toward current and future transit, bicycle, and pedestrian facilities.
- Improving access to pedestrian or bicycle networks, and transit service, by providing transit passes to employees, showers, lockers, and secure, covered bicycle storage for employees and managed by the Transportation Coordinator (as will be detailed in the TDM).
- Providing bicycle parking.
- Limiting parking supply to basic needs.
- Encouraging car sharing, bicycle sharing, and ride sharing programs through its reservation program per the TDM.
- Applicant is leading Napa Valley Forward, an industry task force sponsoring a two-year pilot program to reduce commuter traffic in Napa Valley.
- A network of pathways connecting the restaurant and lodging activities to ensure the Projects operate as a campus, allowing guests and staff to move back and forth by foot, bicycle or electric cart on the multi-use internal paths.
- A multi-purpose barn-like building on the northeast side of the property that will serve as the agricultural learning center. This multi-purpose building will provide lodging guests with indoor and outdoor areas for:
 - Breakfast (for lodging guests only)
 - A service kitchen which will prepare daily breakfast, assemble room service meals, provide prep for cooking demonstrations, and support the daily chef's table featuring wine and food pairings at lunch and dinner for up to 20 people per sitting (relocated from the general store); primary food service will be provided by Farmstead restaurant
 - A service bar for beverage service for lodging guests
 - Meeting room(s) and classroom(s) on site to reduce offsite trips.
 - Adjacent event lawn area.
 - Farm-to-table food and agriculture education programs for guests and limited numbers of non-guests.
 - Culinary skills, animal husbandry, farmhouse craft classes

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- Growing-for-the-table gardening and farming lessons.

Lodging guests can utilize Farmstead restaurant for lunch and dinner and its general store and farmer's market for abundant grocery goods.

A fitness center is located near the pools and will include an indoor/outdoor workout area. Spa facilities (including 3 treatment rooms, sauna and whirlpool), and an adult and children outdoor pools will also be provided, all for exclusive use by lodging guests.

Each guest room will have two bicycles assigned and stored at the room for guests' exclusive use. Guests will be encouraged to use bicycles to visit downtown and local wineries. To service guests' bicycle needs, a bicycle barn will be located on the property. The bicycle barn building will also accommodate a housekeeping area serving the fitness center and incidental lodging needs.

The Project will facilitate guest pickup/drop off at Bay Area airports allowing for multiple travelers per trip; supports affordable housing by donation of excess in-lieu housing fees thereby supporting housing opportunities for employees and improving the jobs/housing fit of a community.

The above measures or design features will ensure that the Project has lower VMT than a lodging project located further from downtown or away from St. Helena, a major destination.

Given the pass-by traffic capture estimate of 10% the ability of guests to walk or bicycle to nearby downtown St. Helena and several wineries plus the focus on the alternative transportation/healthy living focus of the design, the Project could lower vehicles miles travelled by over 15% as compared to a project located in the outlying areas of St. Helena or Napa County where visitors must drive for all services.

FUTURE HORIZON (WITHOUT PROJECT) ANALYSIS CONDITIONS

Traffic analysis has been conducted in this study for two future horizon years without project:

- The year after estimated project completion – year 2022
- Cumulative Conditions – year 2040

Year 2022 peak hour traffic volumes have been developed using both a specific list of known projects supplied by the City of St. Helena Planning Department and a 1 percent per year growth rate along SR 29 to reflect regional growth. Resultant cumulative (year 2022) harvest Friday AM and PM peak hour and Saturday afternoon peak hour Without Project volumes are presented in Figures 11, 12 and 13, respectively, in Attachment B.

Table 7 of Attachment B in the Traffic Impact Report shows that two of the intersections are currently experiencing unacceptable operation.

HARVEST 2022 UNACCEPTABLE OPERATION

SR 29/Pope Street-Mitchell Street
SR 29/Charter Oak Avenue

LOS F during all peak hour
LOS E during the Friday AM peak hour

The SR 29/Charter Oak Avenue intersection would experience acceptable levels of service (LOS C or D) on both Charter Oak Avenue stop sign controlled intersection approaches during the Friday and Saturday PM peak traffic hours. However, during the Friday AM peak hour, while the eastbound approach would be operating at an acceptable LOS C, the westbound approach would be operating at an unacceptable LOS E.

Table 7 also shows that for harvest 2022 conditions three of the five analyzed intersections would be experiencing acceptable operation during the harvest Friday and Saturday peak traffic hours.

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HARVEST 2022 ACCEPTABLE OPERATION
(FRIDAY & SATURDAY PEAK TRAFFIC HOURS)

SR 29/Mills Lane (Mills Lane stop sign controlled)	LOS B or C
SR 29/Grayson Avenue (signal)	LOS C or D
SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C

Table 4 of Attachment B of the Traffic Impact Report shows that both the SR 29/Charter Oak Avenue and SR 29/Dowdell Lane intersections would have harvest 2022 Friday AM & PM peak hour and Saturday PM peak hour volumes meeting rural signal Warrant #3 volume criteria levels.

Cumulative (year 2040) weekday AM and PM peak hour and Saturday PM peak hour volumes for the SR 29/Pope Street-Mitchell Street, SR 29/Grayson Avenue and SR 29/Mills Lane intersections were obtained from the City's General Plan Update Circulation Element traffic analysis. In addition, cumulative projections were developed for the SR 29/Charter Oak Avenue and SR 29/Dowdell Lane intersections as well as for Dowdell Lane, Mills Lane and La Fata Street based upon traffic from the list of cumulative projects considered in the General Plan Update Circulation Element for the project area (see Table 6 in Attachment B).

Resultant cumulative (year 2040) harvest Friday AM and PM peak hour and Saturday afternoon peak hour Without Project volumes are presented in Figures 14, 15 and 16, respectively, in Attachment B. It should be noted that cumulative traffic projections from the 2040 General Plan Update analysis included a 75-unit hotel on the Farmstead project site. Trip generation from this lodging facility (using standard Institute of Transportation Engineers Trip Generation Manual, 10th Edition trip rates) was removed from the Cumulative projections to reflect a true "Without Project" condition for the analysis roadways.

INTERSECTION LEVEL OF SERVICE

Table 8 in Attachment B shows that for cumulative (year 2040) conditions three of the five analyzed intersections would be experiencing acceptable operation during both the Friday and Saturday peak traffic hours.

CUMULATIVE (YEAR 2040) ACCEPTABLE OPERATION
(FRIDAY & SATURDAY PEAK TRAFFIC HOURS)

SR 29/Mills Lane (Mills Lane stop sign controlled)	LOS B or C
SR 29/Grayson Avenue (signal)	LOS C or D
SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C

Table 8 also shows that there would be unacceptable operation at two intersections.

CUMULATIVE (YEAR 2040) UNACCEPTABLE OPERATION

SR 29/Pope Street-Mitchell Street (signal): LOS F during all Friday & Saturday peak hours
SR 29/Charter Oak Avenue (Charter Oak stop sign controlled approach): LOS F westbound approach Friday AM peak hour, LOS E westbound approach Friday PM peak hour.

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INTERSECTION SIGNAL WARRANT

Table 4 of Attachment B in the Traffic Impact Report shows that both the SR 29/Charter Oak Avenue and SR 29/Dowdell Lane intersections would have 2040 harvest Friday AM and PM peak hour and Saturday PM peak hour volumes meeting rural signal warrant #3 volume criteria levels.

IMPACT ANALYSIS

Significance Criteria

The significance criteria utilized in this study are based on the City of St. Helena's General Plan Circulation Element documentation for roadway and intersection operations.

Caltrans "rural" peak hour volume signal warrant has been used for all unsignalized intersection analysis along SR 29 in this study. Rural warrant criteria are used where speeds on the uncontrolled approaches are 40 mph or greater, or where the local population is less than 10,000 people. Although the speeds on SR 29 at the analysis intersections in this study are less than 40 mph, the St. Helena population is less than 10,000 people. Therefore, based upon direction from the City, rural warrants were used for evaluation purposes.

The City's current LOS standard is LOS D for signalized intersections on Main Street (SR 29/128) and LOS C elsewhere. At unsignalized intersections along Main street, the LOS standard for the side street stop sign controlled approach is LOS D. Based on City of St. Helena and CEQA standards, a project's impact would be considered significant if any of the following conditions occur.

- If operating conditions at a signalized intersection on Main Street (SR 29/128) deteriorate from LOS D without the project to LOS E or F with the project and an increase in delay of five seconds or greater.
- If operating conditions at a signalized intersection on Main Street (SR 29/128) operating at LOS E without the project deteriorate to LOS F with the project.
- If the average intersection delays at a signalized intersection on Main Street (SR 29/128) operating at LOS E or F without the project increases by more than five seconds with the project.
- If operating conditions at an unsignalized intersection on Main Street (SR 29/128) operating at LOS D or better without the project degrade to LOS E or F with the project and the volumes would qualify for signalization under the Caltrans peak hour volume warrants for signalization. If operating conditions at an unsignalized intersection not on Main Street operating at LOS C or better without the project degrade to LOS D, E or F with the project and the volumes would qualify for signalization under the Caltrans peak hour volume warrants for signalization.
- If average delay at an unsignalized intersection on Main Street (SR 29/128) operating at LOS E or F without the project increases by five or more seconds with the project and the volumes qualify for signalization under the Caltrans peak hour volume warrants for signalization. If average delay at an unsignalized intersection not on Main Street operating at LOS D, E or F without the project increases by five or more seconds with the project and the volumes qualify for signalization under the Caltrans peak hour volume warrants for signalization.
- If traffic volumes at an unsignalized intersection meet the peak hour signal warrant thresholds, then a significant impact is considered if total volumes passing through the intersection increase by 1 percent or greater with the project.

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- For vehicle queuing, if the lane storage length sufficiently accommodates the 95th percentile vehicle queue length without the project and the vehicle queue length would increase to exceed the available storage with the project. If the 95th percentile queue length exceeds the available storage length without the project and the turning movement volume would increase by 3 percent or more with the project and increase the total intersection volume by 1 percent.
- If, in the opinion of the registered traffic engineer conducting this study, the addition of project traffic, pedestrians or bicycle riders would result in a significant safety impact.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

The proposed 65-unit Farmstead at Long Meadow Ranch lodging facility would be located east of SR 29 and north of Mills Lane in the southern section of the City of St. Helena. Currently, the vast majority of the site is vacant with a small vegetable garden by the Farmstead restaurant. The only street bordering the site is Mills Lane to the south. The site extends along Mills Lane from the adjacent Gold property to just east of the La Fata Street intersection. Guest parking would be on-site and accessed via a driveway which would be the north leg of the Mills Lane/La Fata Street intersection, while employee parking would be in a new improved parking lot on the southwest corner of the Dowdell Lane/McCormick Street intersection (see Figure 4 of Attachment B). This lot is currently undeveloped and will also be used by employees of the existing Farmstead restaurant and general store.

(a) Less Than Significant Impact with Mitigation.

Lodging Project Trip Generation

Project lodging trip generation has been developed assuming 100 percent occupancy using the traffic engineering profession's standard source of trip rate data: Trip Generation Manual, 10th Edition, by the Institute of Transportation Engineers, 2017.

Table 9 of Attachment B shows that on a harvest Friday the proposed 65-unit lodging facility at 100 percent occupancy would be expected to generate 544 daily two-way trips (272 in and 272 out), with 19 inbound and 13 outbound trips during the AM commute peak traffic hour and 20 inbound and 20 outbound trips during the PM commute peak traffic hour. For a harvest Saturday, lodging peak hour trip rates are only available for the facility's peak traffic generation hour, and not during the local roadway system peak traffic hour. On a Saturday midafternoon the peak traffic hour on SR 29 is 2:00-3:00 when less traffic activity would be expected at the lodging facility, whereas the lodging facility's peak traffic hour would likely be in the early evening as some guests are leaving for dinner while others are arriving from a day's tourist activities. It was projected that the lodging facility trip generation on a Saturday afternoon during the time of peak traffic volumes on SR 29 (2:00-3:00) would be about 65 percent of the trip generation during the lodging facility's busiest traffic hour during the day, resulting in 17 inbound and 14 outbound trips during the SR 29 peak traffic hour on Saturday afternoon. This projection is supported by hourly hotel parking demand data from both the Institute of Transportation Engineers and the Urban Land Institute, which show low parking accumulation at hotels during the middle of the afternoon. In addition, hourly hotel trip generation data from the 10th Edition Trip Generation Manual also support the 65 percent of maximum trip generation occurring during the middle of a Saturday afternoon.

Lodge employee trip generation by shift was developed by the project applicant for each hour of the day and is presented in Appendix D of Attachment B, while a summary presentation is contained in Table 10 of Attachment B. Based upon this data, projected lodge employee versus guest trip generation was determined for each of the three peak analysis hours on Friday and Saturday and is presented in Table 11.

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It is likely that a small proportion of traffic during the Friday and Saturday PM peak traffic hours would be traveling along SR 29 with or without the project being in operation. After consultation with City staff, 90 percent of project traffic was projected to be newly added to SR 29, with 10 percent captured from the ambient traffic flow on the state highway. This passby capture would result in 100 percent of guest traffic being newly added to Mills Lane, La Fata Street and Dowdell Lane, while only 90 percent would be newly added to SR 29.

Lodging Project Trip Distribution

Based upon discussion with City of St. Helena staff, project guest traffic was distributed to SR 29 as shown in Table 12 in Attachment B for the Friday and Saturday peak traffic hours. Overall, a 50-50 north-south distribution pattern on SR 29 was projected for all in and outbound guest traffic, with an exception during the Friday PM peak hour when 60 percent of the inbound traffic was projected to come from the south. The same 50-50 distribution was also considered acceptable for employee traffic during all peak time periods. Appendix E Figures A-4 to A-7 in Attachment B present lodge guest and employee trip distribution during the Friday AM and PM and Saturday PM peak traffic hours, respectively.

Reassignment of Farmstead Restaurant/General Store Employee Traffic to the New Dowdell Parking Lot. In addition to the 65-unit lodging facility, the proposed project would also result in the transfer of Farmstead restaurant/farmer’s market employee traffic from a lot on Charter Oak Avenue west of SR 29 to the new improved parking lot at the Dowdell/McCormick intersection. Table 13 in Attachment B presents the amount of restaurant/farmers market employee traffic that would be transferred to the new parking lot.

Mills Lane Widening & Realignment to the SR 29/Grayson Avenue Signalized Intersection. The widening and realignment of Mills Lane to connect to SR 29 at the signalized Grayson Avenue intersection by itself will produce a change in traffic patterns east of SR 29. Some traffic now using Dowdell Lane to access SR 29 will shift to Mills Lane due to the easier signalized access provided to the state highway and Grayson Avenue. Figure 5 in Attachment B presents the intersection approach lanes and control after proposed improvements.

La Fata Street Improvements. Large boulders along both sides of La Fata Street near Mills Lane will be removed and the street section widened to 40 feet, curb to curb. A paved walkway will be provided on the west side La Fata between Dowdell Lane and Mills Lane, completing the paved walkway system between the lodge and the improved parking lot at the Dowdell Lane/McCormick Street intersection.

Existing + Lodging Intersection level of Service Impacts

Table 3 in Attachment B shows that acceptable operation would result at the following two intersections along SR 29 with the addition of lodge traffic during Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C
SR 29/Grayson Avenue-Mills Lane (signal)	LOS C or D

Table 3 also shows that the SR 29/Charter Oak Avenue intersection would maintain acceptable operation during the Friday and Saturday PM peak hour analysis time periods with the addition of lodge traffic (LOS C or D), while during the Friday AM peak hour operation of the westbound approach would remain an unacceptable LOS E. However, there would only be a 2.8-second increase in delay on the

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westbound approach during this time period, which would be less than the 5-second minimum change significance criteria limit. In addition, Table 3 shows that the SR 29/Pope Street-Mitchell Street intersection, which would already be experiencing unacceptable LOS F operation during the Friday and Saturday peak hours would have the delay increased by lodge traffic. However, the increases during each peak hour would be less than 3 seconds, which would also be less than the 5-second minimum change significance criteria limits. Therefore, the impact is considered less than significant.

Signal Warrant Impacts. Table 4 in Attachment B shows that while the SR 29/Charter Oak Avenue intersection volumes would already be exceeding rural signal warrant #3 volume criteria levels during the Friday AM peak hour and Saturday PM peak hour, the addition of project traffic would not increase volumes passing through the intersection by 1 percent or greater during either time period, which is the City's significance criteria limit. Also, the addition of project traffic to Friday PM peak hour volumes would not increase traffic to meet rural warrant #3 volume criteria during this time period.

At the SR 29/Dowdell Lane intersection volumes would already be exceeding rural signal warrant #3 volume criteria levels during the Friday AM and PM peak hours. However, project traffic would not increase volumes passing through the intersection by 1 percent or greater during either time period. Also, the addition of project traffic to Saturday PM peak hour volumes would not increase traffic to meet rural warrant #3 volume criteria during this time period. Therefore, the impact is considered less than significant.

Impacts to Mills Lane, La Fata Street and Dowdell Lane. The net change in traffic due to the 65-unit lodging facility, relocation of Farmstead restaurant/farmers market employee parking and change in traffic patterns east of SR 29 due to the realignment of an improved Mills Lane to the SR 29/Grayson Avenue signal would increase existing volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts.

Table XVII-3 YEAR 2018 HARVEST VOLUMES WITH & W/O THE LODGING PROJECT

TIME PERIOD	MILLS LANE 2-WAY VOLUMES		LA FATA STREET 2-WAY VOLUMES		DOWDELL LANE 2-WAY VOLUMES	
	W/O PROJECT	WITH PROJECT	W/O PROJECT	WITH PROJECT	W/O PROJECT	WITH PROJECT
Friday AM Peak Hour	25	71	31	46	172	163
Friday PM Peak Hour	20	77	36	63	172	161
Saturday Afternoon Peak Hour	11	33	13	26	66	68

Source: Crane Transportation Group, 2019

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the lodging project and improvement/realignment of Mills Lane to the SR 29/Grayson Avenue signal.

Year 2022 + Lodging Project Vehicle Impacts

Volumes. Year 2022 + Lodging Project Friday AM and PM and Saturday afternoon peak hour harvest volumes are presented in Figures 23, 24 and 25, respectively, in Attachment B.

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Intersection Level of Service Impacts. Table 7 of Attachment B shows that acceptable operation would remain at the following two intersections along SR 29 with the addition of lodging project traffic during the Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C
SR 29/Grayson Avenue-Mills Lane (signal)	LOS D

Table 7 also shows that the SR 29/Charter Oak Avenue intersection would maintain acceptable operation during the Friday and Saturday PM peak hours with the addition of lodge traffic (LOS D), while during the Friday AM peak hour operation of the westbound approach would remain an unacceptable LOS E. However, there would only be a 2.6-second increase in delay on the westbound approach during this time period, which would be less than the City's 5-second minimum change significance criteria limit. In addition, Table 3 shows that the SR 29/Pope Street-Mitchell Street intersection, which would already be experiencing unacceptable LOS F operation during the Friday and Saturday peak hours would have delay increased by lodge traffic. However, the increases during each peak hour would be 3 seconds or less, which would also be less than the 5-second minimum change significance criteria limits. Therefore, the impact is considered less than significant.

Signal Warrant Impacts. Table 4 in Attachment B shows that at the SR 29/Charter Oak Avenue intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without lodge traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, volume increases due to the lodge would be less than the City's minimum significance criteria limit of 1 percent during all peak hours.

At the SR 29/Dowdell Lane intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without lodge traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, volume increases due to the lodge would be less than the City's minimum significance criteria limit of 1 percent during all peak hours. Therefore, the impact is considered less than significant.

Impacts to Mills Lane, La Fata Street and Dowdell Lane. The net change in traffic due to the 65-unit lodging facility, relocation of Farmstead restaurant/farmers market employee parking and change in traffic patterns east of SR 29 due to the realignment of an improved Mills Lane to the SR 29/Grayson Avenue signal would increase 2022 Without Project volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts.

Table XVII-4 YEAR 2022 HARVEST VOLUMES WITH & W/O THE LODGING PROJECT

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ DOWDELL LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH LODGING PROJECT	W/O PROJECT	WITH LODGING PROJECT	W/O PROJECT	WITH LODGING PROJECT
Friday AM Peak Hour	26	77	43	62	235	223
Friday PM Peak Hour	29	91	53	84	227	208
Saturday Afternoon Peak Hour	11	41	30	53	137	131

Source: Crane Transportation Group, 2019

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The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the lodge and improvement/realignment of Mills Lane to the SR 29/Grayson Avenue signal.

Year 2040 + Lodging Project Vehicle Impacts

Volumes. Cumulative (year 2040) + Lodge Friday AM and PM and Saturday afternoon peak hour volumes are presented in Figures 29, 30 and 31, respectively in Attachment B.

Intersection Level of Service Impacts. Table 8 in Attachment B shows that acceptable operation would remain at the following intersection along SR 29 with the addition of lodge traffic during the Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C
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Table 8 also shows that at the SR 29/Pope Street-Mitchell Street intersection signalized operation would remain an unacceptable LOS F with or without lodge traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, the increases in delay due to lodge traffic would be less than 5 seconds during each peak hour (3.2 seconds Friday AM, 2.9 seconds Friday PM and 3.0 seconds Saturday PM).

At the SR 29/Charter Oak Avenue intersection operation of the stop sign controlled westbound Charter Oak Avenue approach would remain an unacceptable LOS F with or without lodge traffic during the Friday AM peak hour and an unacceptable LOS E during the Friday PM peak hour. However, the increases in delay due to lodge traffic would be less than 5 seconds during either peak hour (3.7 seconds Friday AM & 0.3 seconds Friday PM). Operation would remain acceptable during the Saturday PM peak hour with the addition of lodge traffic.

At the SR 29/Grayson Avenue-Mills Lane signalized intersection operation would be an unacceptable LOS E during the Friday AM peak hour with a fourth intersection leg. Friday AM peak hour operation would change from an acceptable LOS D to an unacceptable LOS E (with a 23.7 second increase in delay). With the implementation of the recommended mitigation(s) the impact would be reduced to less than significant.

Signal Warrant Impacts. Table 4 shows that at the SR 29/Charter Oak Avenue intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, volume increases would be less than 1 percent during all three peak hours.

At the SR 29/Dowdell Lane intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, volume increases would be less than 1 percent during all three peak hours. Therefore, the impact is considered less than significant.

Impacts to Mills Lane, La Fata Street and Dowdell Lane. The net change in traffic due to the 65-unit lodging facility, relocation of Farmstead restaurant/farmers market employee parking and change in traffic patterns east of SR 29 due to the realignment of an improved Mills Lane to the SR 29/Grayson Avenue signal would increase year 2040 Without Project volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts.

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Table XVII-5 YEAR 2040 (CUMULATIVE) HARVEST VOLUMES WITH & W/O THE LODGING PROJECT

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ DOWDELL LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH LODGING	W/O PROJECT	WITH LODGING	W/O PROJECT	WITH LODGING
Friday AM Peak Hour	26	80	43	69	235	216
Friday PM Peak Hour	29	100	53	96	227	202
Saturday Afternoon Peak Hour	12	47	30	58	137	126

Source: Crane Transportation Group, 2019

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the lodge, and improvement/ realignment of Mills Lane to the SR 29/Grayson Avenue signal. Therefore, this impact is considered less than significant.

- (b) **Less Than Significant Impact.** Napa County has not adopted a Congestion Management plan. As such, the Proposed Project would not exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways. Therefore, the Project will have a less than significant impact on local applicable congestion management plans.
- (c,d) **No Impact.** The Project has no components that would result in a change in air traffic patterns as it is located more than 2 miles from an airport, therefore the Project will have no impact.
- (e) **Less Than Significant Impact.** The Traffic Impact Study included in Attachment B indicates that the Project would not result in increases in average delay at intersections surrounding the site and would facilitate access to streets on the east side of SR 29 due to the connection of Mills Lane to the SR 29/Grayson Avenue signal, so emergency response times would generally not be increased. There are no other changes contemplated as part of the Project that would affect emergency access. The Fire Marshall has reviewed the preliminary site plan and shall review and approve the final site plan (See Section XV). Therefore, the Project would have a less than significant impact on emergency access.
- (f) **Less-Than-Significant with Mitigation Incorporated.** Existing and planned transit, bicycle and pedestrian facilities in the study area are expected to provide appropriate access to the Project site. This impact is considered less than significant with incorporated mitigation measures.

Total Project w/ Existing Farmstead at Long Meadow Ranch (Farmstead)

The farmer's market building will be expanded by 408-square-foot, converted into a butcher shop and be open to the public. Hours will be 10:00 AM to 6:00 PM. Existing farmer's market butchers and staff will work in the new retail

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facility. Local customers will either walk or drive to/from the site. Farmstead is also adding storage space to two buildings. Three retail customers are projected to be driving daily during peak weekday and weekend hours.

Based upon the applicant’s request for up to four 200-person events per week with no restrictions on beginning or end times, for analysis purposes the City has requested that traffic from this size event be assumed on the local roadway network during the Friday and Saturday PM peak traffic hours. The applicant requires guests attending these events to rent vans or buses to reach the site. For the analysis, it was assumed that 14 vans or buses are used along with five private automobiles. All shuttle buses will access the restaurant/farmers market parking lot along Charter Oak Avenue. They are assumed to park off site during the event.

City Parking Code requires the facility to have 59 spaces. Currently, there are 59 spaces. Primary guest/visitor automobile access to the campus, including Farmstead restaurant, general store, and farmer’s market, will continue to be from Charter Oak Avenue. Pedestrian entry will be from the Lodging as well as public sidewalks, including designated crosswalks at Charter Oak Avenue and Main Street. Multiple points of bicycle access will be from Charter Oak Avenue, Main Street, and Mills Lane (via the Lodging).

(a) **Less-Than-Significant Impact with Mitigation.**

Existing + Total Project Vehicle Impacts

Volumes. Resultant Existing + Total Project Friday AM and PM and Saturday afternoon peak hour harvest volumes are presented in Figures 20, 21 and 22, respectively, in Attachment B.

Intersection Level of Service Impacts. Table 3 in Attachment B shows that acceptable operation would remain at the following two intersections along SR 29 with the addition of total project traffic during Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C
SR 29/Grayson Avenue-Mills Lane (signal)	LOS C or D

Table 3 also shows that the SR 29/Charter Oak Avenue intersection would maintain acceptable operation during the Friday and Saturday PM peak hour analysis time periods with the addition of total project traffic (LOS C or D), while during the Friday AM peak hour operation of the westbound approach would remain an unacceptable LOS E. However, there would only be a 2.8-second increase in delay on the westbound approach during this time period, which would be less than the 5-second minimum change significance criteria limit. In addition, Table 3 shows that the SR 29/Pope Street-Mitchell Street intersection, which would already be experiencing unacceptable LOS F operation during the Friday and Saturday peak hours would have delay increased by total project traffic. However, the increases during each peak hour would be less than 4.3 seconds, which would also be less than the 5-second minimum change significance criteria limits. For these reasons, the impact is considered less than significant.

Signal Warrant Impacts. Table 4 in Attachment B shows that at the SR 29/Charter Oak Avenue intersection the addition of project traffic would increase Friday PM peak hour volumes to exceed rural signal warrant #3 volume criteria levels, while during the Saturday PM peak hour project traffic would increase total volumes entering the intersection by 2.3 percent during a period when “Without Project” volumes would already be exceeding warrant criteria. This would be a significant impact. During the AM peak hour, a time period when “Without Project” traffic would already be exceeding rural warrant #3 volume criteria the addition of project traffic would increase volumes by less than 1 percent, and not produce a significant impact.

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At the SR 29/Dowdell Lane intersection the addition of project traffic would only produce a significant impact during the Friday PM peak hour, when volumes passing through the intersection would increase by 1.6 percent during a period when "Without Project" volumes would already be exceeding rural warrant volume criteria. During the AM peak hour, a time period when "Without Project" traffic would already be exceeding rural warrant #3 volume criteria the addition of project traffic would increase volumes by less than 1 percent, and not produce a significant impact. Finally, during the Saturday PM peak hour project traffic would not increase volumes to meet rural warrant #3 volume criteria levels. It should be noted that levels of service at the Dowdell Lane intersection will remain acceptable even though rural signal warrant criteria are met during the Friday peak hours.

Impacts to Mills Lane, La Fata Street and Dowdell Lane. The net change in traffic due to the total project would increase existing volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts:

Table XVII-6 YEAR 2018 HARVEST VOLUMES WITH & W/O THE TOTAL PROJECT

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ DOWDELL LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT
Friday AM Peak Hour	25	71	31	46	172	163
Friday PM Peak Hour	20	77	36	63	172	161
Saturday Afternoon Peak Hour	11	33	13	26	66	68

Source: Crane Transportation Group, 2019

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the total project.

Year 2022 + Total Project Vehicle Impacts

Volumes. Year 2022 + Total Project Friday AM and PM and Saturday afternoon peak hour volumes are presented in Figures 26, 27 and 28, respectively in Attachment B.

Intersection Level of Service Impacts. Table 7 in Attachment B shows that acceptable operation would remain at the following two intersections along SR 29 with the addition of lodge traffic during the Friday AM and PM and Saturday afternoon peak hour conditions with the addition of project traffic.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach) LOS C

SR 29/Grayson Avenue-Mills Lane (signal) LOS D

Table 7 also shows that the SR 29/Charter Oak Avenue intersection would maintain acceptable operation during the Saturday PM peak hour with the addition of total project traffic (LOS D), while during the Friday AM peak hour operation of the westbound approach would remain an unacceptable LOS E. However, there would only be a 2.6-second increase in delay on the westbound approach during this time period, which would be less than the 5-second minimum change significance criteria limit. During the Friday PM peak hour operations of the

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westbound approach would change from an acceptable LOS D to an unacceptable LOS E. However, the delay increase would only be 3.3 seconds. For these reasons, this impact is considered less than significant.

Signal Warrant Impacts. Table 4 in Attachment B shows that at the SR 29/Charter Oak Avenue intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. While the volume increase would be less than 1 percent during the AM peak hour, the increases during the Friday PM peak hour and Saturday PM peak hour would be greater than 1 percent and would therefore be a significant impact (2.3% during the Friday PM peak hour and 2.2% during the Saturday PM peak hour). With the implementation of the recommended mitigation(s) the impact would be reduced to less than significant.

At the SR 29/Dowdell Lane intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. While the volume increase would be less than 1 percent during the AM peak hour, the increases during the Friday PM peak hour and Saturday PM peak hour would be greater than 1 percent and would therefore be a significant impact (1.1% both hours). With the implementation of the recommended mitigation(s) the impact would be reduced to less than significant.

Impacts to Mills Lane, La Fata Street and Dowdell Lane. The net change in traffic due to the total project would increase 2022 with or without total project volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts:

Table XVIII-7 YEAR 2022 HARVEST VOLUMES WITH & W/O THE TOTAL PROJECT

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ MILLS LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH PROJECT	W/O PROJECT	WITH PROJECT	W/O PROJECT	WITH PROJECT
Friday AM Peak Hour	26	77	43	62	235	223
Friday PM Peak Hour	29	91	53	84	227	208
Saturday Afternoon Peak Hour	11	41	30	53	137	131

Source: Crane Transportation Group, 2019

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the project. Therefore, this impact is considered less than significant.

Year 2040 + Total Project Vehicle Impacts

Volumes. Cumulative (year 2040) + Total Project Friday AM and PM and Saturday afternoon peak hour volumes are presented in **Figures 32, 33 and 34**, respectively, in Attachment B.

Intersection Level of Service Impacts. Table 8 in Attachment B shows that acceptable operation would remain at the following intersection along SR 29 with the addition of total project traffic during the Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)

LOS C

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Table 8 also shows that at the SR 29/Pope Street-Mitchell Street intersection signalized operation would remain an unacceptable LOS F with or without lodge traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, the increases in delay due to lodge traffic would be less than 5 seconds during each peak hour (3.2 seconds Friday AM, 4.4 seconds Friday PM and 4.8 seconds Saturday PM).

At SR 29/Charter Oak Avenue operation of the stop sign controlled westbound Charter Oak Avenue approach would remain an unacceptable LOS F with or without lodge traffic during the Friday AM peak hour and an unacceptable LOS E during the Friday PM peak hour. However, the increases in delay due to lodge traffic would be less than 5 seconds during either peak hour (3.7 seconds Friday AM & 4.6 seconds Friday PM). Operation would remain acceptable during the Saturday PM peak hour with the addition of lodge traffic.

At the SR 29/Grayson Avenue-Mills Lane signalized intersection operation would be an unacceptable LOS E during the Friday AM peak hour. Friday AM peak hour operation with a fourth intersection leg would change from an acceptable LOS D to an unacceptable LOS E (with a 23.7 second increase in delay). This change would all be due to lodge traffic. With implementation of the recommended mitigation(s), this impact would be reduced to less than significant.

Signal Warrant Impacts. Table 4 in Attachment B shows that at the SR 29/Charter Oak Avenue intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. While the volume increase would be less than 1 percent during the AM peak hour, the increases during the Friday PM peak hour and Saturday PM peak hour would be greater than 1 percent and would therefore be a significant impact (2.2% during the Friday PM peak hour and 2.1% during the Saturday PM peak hour). With implementation of the recommended mitigation(s), this impact would be reduced to less than significant.

At the SR 29/Dowdell Lane intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. The volume increase would be less than 1 percent during the all three peak hours.

Impacts to Mills Lane, La Fata Street and Dowdell Lane. The net change in traffic due to the total project would increase 2040 with and without Total Project volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts:

**Table XVII-8 YEAR 2040 (CUMULATIVE) HARVEST VOLUMES
WITH & W/O THE TOTAL PROJECT**

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ DOWDELL LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT
Friday AM Peak Hour	26	80	43	69	235	216
Friday PM Peak Hour	29	100	53	96	227	202
Saturday Afternoon Peak Hour	12	47	30	58	137	126

Source: Crane Transportation Group, 2019

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the total project, which includes realignment of Mills Lane to the SR 29/Grayson Avenue signal.

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Pedestrian Impacts

Mills Lane and La Fata Street. Figure 35 in Attachment B shows the project employee walking route between the proposed Dowdell Lane/McCormick Street parking lot and the lodge/restaurant/farmers market facilities, while Table 14 shows the maximum number of total project employees (lodge/restaurant & farmers market) that would be expected to walk between the Dowdell Lane employee parking lot and the uses on the project site. The lodge will be providing a pedestrian walkway system throughout their site connecting to the Farmstead restaurant and farmers market. There would be at most a total of about 100 walking trips in each direction over a 24-hour period if all employees drove alone. However, this number would potentially be reduced a little due to a few employees being dropped off/picked up, taking transit or walking and biking if they lived nearby. Paved pathways will be provided along the west side of La Fata Street (Mills Lane to Dowdell Lane) and along the north side of Mills Lane (from La Fata Street to SR 29). Due to the distance between the employee improved parking lot at the Dowdell Lane/McCormick Street intersection and the lodging facility (a quarter mile to the north) and the restaurant-farmers market facilities (about half a mile to the north), there may be some employees unable to walk this distance – or – bad weather may make this walk difficult. In addition, there would be safety concerns regarding employees walking at night to/from the Dowdell Lane parking lot through a deserted industrial area. As shown in Table 14, about a third of all employees would be walking at night.

In order to reduce concerns about employees walking between the Dowdell Lane parking lot and the lodge/restaurant-farmers market, the project will be providing on-call shuttle service during all hours. A shelter will also be provided at the Dowdell Lane parking lot. This impact is considered less than significant.

SR 29 Crossing at Charter Oak Avenue. The project would result in minor changes in pedestrian crossings of SR 29 at Charter Oak Avenue, and potentially there may even be a reduction during some hours due to the removal of restaurant-farmers market employee traffic formerly crossing at this location being greater than the increase from lodge guests. The vast majority of lodge guest pedestrian activity would be to/from downtown St. Helena, with a much smaller amount to/from the Grayson Avenue signal. (See Figure 36) Those pedestrians traveling between the project and downtown would walk through the Farmstead restaurant property and travel along SR 29 north of Charter Oak Avenue. Some would cross SR 29 at Charter Oak Avenue on their way to or from downtown.

The City of St. Helena does not have a significance criterion for pedestrian crossing impacts. However, the SR 29 crosswalk at Charter Oak Avenue already has existing traffic and pedestrian crossing volumes exceeding minimum guidelines for provision of a pedestrian hybrid flashing beacon during 9 of the 10 surveyed hours in 2016 and eight of the nine surveyed hours in 2019. Therefore, it is projected that the additional lodge traffic and pedestrians would continue to result in a significant safety impact for pedestrian crossings at the SR 29 Charter Oak crosswalk. With implementation of the recommended mitigation(s), this impact would be reduced to less than significant.

Bicycle Impacts

The project is proposing a Class I bicycle path along the north side of Mills Lane between SR 29 and La Fata Street. Bicycles will be provided for each guest room and bicycle lockers will be provided for employees. Therefore, the Project would have a less than significant impact with respect to bicycle facilities.

Dowdell Lane Employee Parking Lot

The proposed Farmstead employee paved parking lot at the southwest corner of the Dowdell Lane/McCormick Street intersection would provide 73 parking spaces. Three driveway connections would be provided to Dowdell Lane. See Figure 37. The most westerly would be for inbound vehicles only and would serve a “U” shaped parking lot with one-way flow parking aisles that would have an exit just west of McCormick Street. A third driveway for two-way flow would be provided between the one-way inbound and outbound driveways and would serve a dead-end parking aisle with 90-degree parking. All parking spaces would be striped, so it would be possible to drive across empty parking stalls between the two distinct parking areas.

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Based upon applicant provided lodge and restaurant/farmers market employee numbers and shift change times, there would be one time during the day (between 2:30 and 3:00 PM) when there would be an overlap of 73 employees on the project site at the same time (see Appendix D). However, the employee parking demand would potentially be at least 15 to 20 percent less than 73 spaces due to TDM program car and vanpooling, employee drop off and pickup by a friend or family member and walking or biking by employees living nearby. Therefore, the proposed employee parking lot should have an adequate parking supply for the currently proposed total project employee levels. Surveys by the project applicant of employee travel modes at the existing restaurant-farmers market facilities show about a 30 percent elimination of drive alone auto travel.

- (b) **Less Than Significant Impact.** Napa County has not adopted a Congestion Management plan. As such, the Proposed Project would not exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways. Therefore, the Project will have a less than significant impact on local applicable congestion management plans.
- (c,d) **No Impact.** The Project has no components that would result in a change in air traffic patterns as it is located more than 2 miles from an airport, therefore the Project will have no impact.
- (e) **Less Than Significant Impact.** The Traffic Impact Study included in Attachment B indicates that the Project would not result in increases in average delay at intersections surrounding the site and would facilitate access to streets on the east side of SR 29 due to the connection of Mills Lane to the SR 29/Grayson Avenue signal, so emergency response times would generally not be increased. There are no other changes contemplated as part of the Project that would affect emergency access. The Fire Marshall has reviewed the preliminary site plan and shall review and approve the final site plan (See Section XV). Therefore, the Project would have a less than significant impact on emergency access.
- (f) **Less-Than-Significant with Mitigation Incorporated.** Existing and planned transit, bicycle and pedestrian facilities in the study area are expected to provide appropriate access to the Project site.

MITIGATION MEASURES

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

TRAF-1. SR 29/Grayson Avenue – Mills Lane Intersection. Minor additional improvements are needed when Mills Lane is realigned and widened to connect to SR 29 at Grayson Lane. The Mills Lane approach should be striped to provide an exclusive left turn lane and a combined through/right turn lane. In addition, the Grayson Avenue approach should be re-striped or widened to provide two lanes, one exclusively for left turns and one for combined through/right turns. Protected left turn phasing should be provided on the Mills-Grayson approaches. Resultant AM peak hour operation: LOS D - 52.7 seconds delay (acceptable operation).

TRAF-2. SR 29/Charter Oak Avenue Intersection – SR 29 Pedestrian Crossing. Provide a fair share contribution to the "HAWK" pedestrian hybrid flashing beacon proposed for the SR 29/Charter Oak Avenue intersection.

Existing Farmstead at Long Meadow Ranch (Farmstead) + Lodging Project (Total Project)

TRAF-3. SR 29/Dowdell Lane Intersection – Signal Warrant Impact. Provide a fair share contribution towards the signal planned at the SR 29/Dowdell Lane intersection (as detailed in the Highway 29 Specific Plan).

TRAF-4. SR 29/Charter Oak Avenue Intersection – Signal Warrant Impact. Since City Public Works has indicated they are not in favor of signaling this intersection, provide one of the following two measures:

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- a. Start and end all special events with more than 75 people at times that will not add traffic to SR 29 during the weekday and Saturday PM peak traffic periods (3:30-6:00 PM on weekdays and 1:30-4:00 PM on weekend days).

– or –

- b. Provide additional funding for the “HAWK” pedestrian hybrid flashing beacon. The beacon shall be in operation before major events are permitted to add traffic to the existing weekday and weekend peak traffic hours along SR 29. Please note that Caltrans approval will be required for provision of the HAWK hybrid flashing beacon. If they do not approve of its installation, then the only measure to reduce the project impact to a level of insignificance is to eliminate traffic from the 200-person events during the Friday and Saturday PM peak hours.

STANDARD MEASURES

The Farmstead and Lodging Projects shall be conditioned to be consistent with all ADA requirements for accessibility to ensure that employees are able to access the parking lot on Dowdell Lane/McCormick, or other offsite employee parking area.

IMPACT SIGNIFICANCE AFTER MITIGATION

With implementation of the mitigation measures listed above, impacts related to traffic and transportation would be reduced to a less than significant level.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- City of St. Helena Highway 29 Specific Plan, Adopted February 22, 2005.
- Crane Transportation Group, Traffic Impact Report for the Proposed Farmstead at Long Meadow Ranch Lodging Facility; November, 2019¹.
- WRCOG, The Guide to Creating Walkable Communities, 2012.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	☐	X	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	☐	X	☐

DISCUSSION

A Cultural Resources Report evaluating the 10-acre Project site was prepared by Flaherty Cultural Resources Services (FCRS) in June of 2016. Their report serves as the basis of this analysis and conclusions. The full report is continued in Attachment K. Contacts with the local tribes as well as the Office of Historic reservation were initiated as part of the Cultural Resources review. No tribes responded with any concerns. The sites are not identified in any state archival documentation. The Cultural Resources Manager for the Tewe Kewe Cultural Center, Bill Laverne, met with representatives of the City and the applicant's representative on the site in November of 2016.

Based on the distribution of known cultural resources and their environmental settings, it is not anticipated that prehistoric and/or historical archaeological sites could be found within either of the Project sites.

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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REGULATORY SETTING

General Plan Update 2040

The following General Plan policies are related to Tribal Cultural Resources:

- HR1.5 For development and redevelopment proposals in archaeologically and paleontologically sensitive areas of St. Helena or where tribal cultural resources are known to exist, require an assessment of the potential presence of archaeological, paleontological and tribal cultural resources, including a site survey and a records search of the California Historical Resources Information System at the Northwest Information Center (NWIC). As warranted by the results of the assessment, require additional studies to identify and address project-specific impacts on archaeological and paleontological resources. The City shall incorporate the study recommendations as project conditions of approval to ensure that impacts on archaeological and/or paleontological resources are mitigated to the extent possible. Studies shall be prepared according to National Register Bulletin 24: Guidelines for Local Surveys: A Basis for Preservation Planning and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.
- HR2.1 Strengthen public awareness of and support for the preservation and protection of the City's historic resources, while improving community access to information about local Native American history.
- HR2.2 In cooperation with Native American Research and Historical Preservation Society, improve community access to information about Native American life.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a-b) **Less Than Significant Impact.** The project site is a fully developed and disturbed site. No excavation is proposed as part of the minor use modifications to the existing restaurant. The Logan-Ives House is included in the local register of historical resources; however, no exterior alterations are proposed to the structure. As no alterations to the historical resource are proposed, and the General Plan does not identify any archaeological resources on the project site, potential impacts to Tribal Cultural Resources is considered a less than significant impact.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a-b) **Less Than Significant Impact.** The Cultural Resource Reconnaissance included numerous contacts to the local tribes and the Native American Heritage Commission requiring they provide any comments on the Proposed Project. No responses were received to indicate that the Project site is a culturally significant resource. The site is not listed on the California Register of Historical Places. No Native American groups responded with concerns as to the site's cultural significance. Additionally, no archived research or field surveys identified any pre-historic or historic-era cultural resources. Absent any substantial evidence to support such a finding, the potential impacts to Tribal Cultural Resources is considered a less than significant impact.¹

MITIGATION MEASURES

- CUL-1.** If any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during any construction activities, the Contractor shall

¹However, the City's obligation to consult under AB52 is independent of this consultation by the archaeologists.

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implement measures deemed necessary and feasible to avoid or minimize significant effects to the cultural resources including the following:

- Suspend work within 100 feet of the find; and
- Immediately notify the City's Community Development Director and coordinate any necessary investigation of the site with a qualified archaeologist as needed to assess the resources (i.e., whether it is a "historical resource" or a "unique archaeological resource"); and
- Provide management recommendations should potential impacts to the resources be found to be significant:
 - Possible management recommendations for historical or unique archaeological resources could include resource avoidance or data recovery excavations, where avoidance is infeasible in light of project design or layout, or is unnecessary to avoid significant effects.
- In addition, the Contractor, in consultation with the Preservation Director, State Historic Preservation Officer, and if applicable, Tribal representatives, may include preparation of reports for resources identified as potentially eligible for listing in the California Register of Historical Resources.

None of the responses received from the tribes indicated that they wanted an archaeologist present during initial grading.

CUL-2. There is the possibility that buried archaeological deposits could be present, and accidental discovery could occur. In keeping with the CEQA guidelines, if archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

Sources:

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- Flaherty Cultural Resource Services, Cultural Resource Reconnaissance, Long Meadow Ranch, June 15, 2016.
- Bill Laverne, Tewe Kewe Cultural Center, on-site meeting; November 30, 2016.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS				
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	X	☐	☐
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐

DISCUSSION

Overview

The Project's civil design team has prepared the following reports to address the Farmstead and Lodging Projects, these reports are contained in Attachment I-1 through I-4 and Attachment J:

- Preliminary Stormwater Control Plan
- Water Use Analysis Report
- Hydrology Analysis
- Memo Re: Schematic Design Civil Design Narrative

Additional discussion related to water is found in Section X, Hydrology.

Both Projects are located within the City of St. Helena's city limits within an area that is either developed or within the City limits. Utilities are available from local City services and other non-governmental providers. Some utilities (sewer and storm drains) will need to be extended into the site from surrounding public streets. Solid waste (including recyclable material) generated during Project construction and operation would be collected by Upper Valley Disposal and Recycling and delivered to the Clover Flat Landfill outside of Calistoga. The landfill is permitted to receive 600 tons per day and as of September 2012 had 2,870,000 cubic yards of capacity remaining. More specific information follows, below:

The existing 2.47+/- acre Farmstead development is served by both a private water system and City water supply as well as serviced by the City storm drains, all discussed below. No increases in impervious area are proposed and no alterations to the existing drainage are proposed or required. The amount of additional development for the Farmstead project improvements involves a small expansion of the storage area (510± sf) of already sewer-impervious soils. No significant changes to hydrology, water quality, or other of the above CEQA factors are anticipated.

The 10.03+/- acres of the Lodging site has little storm drain infrastructure. Site drainage is characterized by slow surface flow towards the southern corner of the site. Some of the surface runoff is collected in an existing swale that runs above the southeast property line and discharges into an existing 36" culvert. Limited infiltration occurs due to the site soils, which are mainly sandy clay over clayey gravel.

General Plan Update 2040

The following General Plan policies relate to Utilities and Service

- 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.
- PF1.1 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.

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- PF1.5 Continue to implement and update as necessary the City's Water Management Plan Ordinance and the City's Ordinance containing the Water Use Efficiency Guidelines, along with other existing water conservation ordinances and measures.
- PF1.6 Aggressively promote adoption of "best practices" for reducing water usage in the existing housing stock through the City existing Ordinances and Water Conservation Plans.
- PF1.E Permit no new development relying on groundwater unless and until it is determined that the incremental production of ground water to support the development will not adversely impact the water production capability of the aquifer supporting the City wells.
- PF1.M Limit any future non-residential development to projects that incorporate "best practices" for water conservation.
- PF2.1 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.
- PF3.1 Ensure that new developments provide adequate drainage improvements and detention to mitigate flooding from increased stormwater runoff attributable to the development.
- PF3.A Require developers to provide adequate drainage improvements and detention to mitigate storm runoff from the site to the nearest major waterway. Drainage improvements can include measures such as creating settling basins, bio-swales, and the use of pervious materials for driveways and parking areas. Key waterways include York Creek, Sulphur Creek and the Napa River.
- PF3.B Continue to require that new developments contribute on a fair share basis to the extension or upsizing of storm drainage to accommodate it through the construction of infrastructure and/or the payment of Impact Fees.
- PF3.E At the time of development review, require that post-project runoff be limited to pre-project peak flow rates for the five-year and ten-year storms as a condition of approval.
- PF3.G Continue to require that new development and redevelopment projects implement Post Construction Runoff Management measures, including low impact development practices, to reduce stormwater peak flow rates and volumes from smaller, more frequently occurring storm events.
- PF4.1 Increase recycling and composting as part of a coordinated waste reduction and management program.

Water Supply

Per the City of St. Helena Water Neutral Policy for Development, the City requires new development to be water-neutral (from the City-delivered water system) through any combination of on-site water conservation measures and/or off-site retrofitting and/or well water. The required retrofits shall be calculated as specified in the city's water neutrality policy as adopted by council resolution and approved by the director of public works/city engineer. If the city council determines that retrofitting of existing residential or nonresidential buildings is impractical or constitutes an unusual hardship on an applicant, it may authorize the payment to the city of an in-lieu retrofit fee in lieu of complying with these requirements. The in-lieu fee shall be the equivalent of the cost of retrofitting a sufficient number of existing homes with the ULF toilets and other required water-saving devices.

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The City of St. Helena follows the State of California's Model Water Efficient Landscape Ordinance, requires water efficient landscapes in new landscape projects over 500 square feet and retrofitted landscapes over 2,500 square feet.

Wastewater

The City of St. Helena provides wastewater collection and treatment service in St. Helena. The City's wastewater infrastructure includes a wastewater treatment plant, a wastewater collection system that uses 8- and 24-inch pipe and trunk lines, and one wastewater lift station. Average annual dry weather flow was 0.43 million gallons per day (mgd) over the 2000-2014 period and the maximum average dry weather flow was 0.51 mgd.

The City's wastewater treatment plant is currently operating near its maximum permitted capacity. Inflow and infiltration of stormwater appear to be a large portion of the wet season sewage flow. The City is currently working with the San Francisco Bay Regional Water Quality Control Board (RWQCB) to extend the wastewater treatment permit.

Any new larger development projects allowed by the General Plan may require additional sewer lines and allow for other wastewater facilities (on-site wastewater treatment, etc.).

Stormwater Drainage Facilities

Development of storm drainage infrastructure for the Farmstead projects is governed by the guidelines within the City of St. Helena Highway 29 Specific Plan. Per the Specific Plan, new drainage facilities will be required to accommodate increased runoff due to development. The City of St. Helena Storm Drain Master Plan lays out the future expansion of the city's storm drain infrastructure to serve new development.

The Specific Plan requires developers of major projects to perform a drainage and hydrology analysis, including a discussion of existing stormwater runoff quantities and the capacity of downstream drainage facilities to accommodate project flows. If inadequate downstream drainage facilities are found to exist, a program to either upgrade existing facilities or construct new drainage facilities consistent with the Specific Plan and the Storm Drain Master Plan shall be identified.

The Specific Plan includes a Master Utility Plan that identifies the proposed storm drain infrastructure in the Specific Plan area, including adjacent to the Farmstead projects. The Master Utility Plan identifies a storm drain in Mills Lane with an eventual connection and outfall in the Napa River.

Solid Waste

The City of St. Helena contracts with Upper Valley Disposal Service to provide solid waste collection and recycling. The Upper Valley Disposal Service collects, sorts, recycles and transports commercial and solid waste to the Clover Flat Landfill. Clover Flat has the capacity to accommodate St. Helena's projected demand until 2035.

Highway 29 Specific Plan

The Highway 29 Specific Plan (2005) discusses water, sewer, recycled water, storm drainage and other utility requirements in Chapter 6. Generally the Specific Plan requires that development of new land uses and intensification of existing uses will require improvements related to:

- New underground water lines.
- To provide sufficient water volume and/or pressure to meet building and fire code requirements.

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- Recycled water lines shall be installed by project developers simultaneously with the installation of domestic water lines.
- New wastewater collection lines are required to connect with an existing sewer facility, project developers may be required to extend new sewer lines beyond their respective property frontage.
- New drainage facilities shall be located within a public right-of-way or public or private easements. Cross-lot drainage is discouraged.
- The St. Helena Municipal Code requires the undergrounding of existing local-serving overhead utility lines as a condition of subdivision and/or site development, undergrounding would be required as a condition of subdivision, Design Review or other land use entitlement.
- New natural gas service shall be provided.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

The current Farmstead operations are sewered by public service and storm drainage facilities under control of the City of St. Helena. No increase in the intensity of uses is proposed over existing and therefore no new modifications to the wastewater connections are proposed. The Farmstead operations are serviced by their own Public Water System (via an on-site well) and a City water connection which is used during periods of maintenance of its water system.

- (a,b,e) **Less than Significant Impact: Wastewater.** The Farmstead property will not add to the wastewater treatment as no new or increased water demand is expected and no additional wastewater generating uses are proposed as facilities are being relocated on the site and the new construction is primarily storage space. Therefore, the existing Farmstead operation will have minimal operational changes, relocating the existing baking and butchery operations from the existing restaurant kitchen to existing Logan-Ives building (baking) and the existing but to be updated farmer's market building (butchery) resulting in minimal additional, if any, incremental wastewater, and requiring no increase in the capacity of existing St. Helena wastewater treatment facilities and no increase in water usage since the operation is supplied by a private water system. A possible small water savings will occur as new facilities will use more water efficient fixtures. Therefore, the Project will have a less than significant impact.
- (c) **Less-Than-Significant Impact: Stormwater.** Site improvements for the Farmstead Project are limited to minor building changes and minor modifications to existing pathways. No construction of storm water drainage facilities or expansion of existing facilities is proposed, so the project will have less-than-significant impact.
- (d) **Less-Than-Significant Impact: Water.** The existing Farmstead facility currently operates and maintains its own Public Water System, which is fed from an existing on-site well. The proposed uses for the Farmstead Project will not increase water demand, and no modifications to the Public Water System are proposed. No new or expanded entitlements are needed. Therefore, the project will have less-than-significant impact to water supply.
- (f,g) **Less-Than-Significant Impact: Solid Waste** The site is currently served by the local solid waste disposal and recycling service. Site improvements for the Farmstead Project are limited to minor building changes and minor modifications to existing pathways. During construction, there would a temporary but minimal increase in solid waste disposal needs associated with construction wastes from the minor building renovation and minor, if any, and excess soil associated with site excavation and grading. All

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construction wastes will be recycled per CalGreen Tier 1 Mandatory Measures and the project shall prepare a construction waste management plan that documents the diversion. Therefore, no significant impacts are associated with construction waste and all potential impacts to solid waste will be less than significant.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a,b,e) **Less than Significant Impact with Mitigation Incorporation: Wastewater.** A new gravity collection system will be installed to serve the proposed site improvements. Given the flatness of the site and distance to the nearest adjacent manhole (420' +/- south in La Fata), it is anticipated that one or more pump sumps will be required within the Project boundary. The design intent is to return pumped effluent to gravity flow at the property line where it will then flow through a new sewer line installed down La Fata Street. The existing 10" sewer main in La Fata Street has the capacity of 707 gallons per minute when flowing 2/3-full. The proposed project peak flow combined with the existing and approved area users, is 60.6 gallons per minute. This represents 9% of existing sewer main capacity and leaves 91% capacity remaining after the completion of the project. The report included in this submittal provides additional detail and calculations of the capacity utilization.
- (c) **Less than Significant With Mitigation Incorporated: Stormwater.** There are no downstream drainage facilities to serve the Lodging Project. Therefore, as described in the City of St. Helena Highway 29 Specific Plan, the Lodging Project will need to construct new drainage facilities to connect with a new storm drain in Mills Lane. As described in the City's Storm Drain Master Plan, a proposed outfall in the Napa River is planned to serve the project area. Construction of the new storm drain in Mills Lane and outfall in the Napa River will be undertaken by the City, consistent with the Highway 29 Specific Plan and the St. Helena Storm Drain Master Plan.
- (d) **Less than Significant With Mitigation Incorporated: Water.** The existing parcel to be developed is vacant and does not have a water connection to the City of St. Helena municipal system. Therefore, the baseline water use from the City-delivered system is zero gallons per day as summarized in Table XIX-1.

Table XIX-1: Water Use

Summary			
Category	Water Use (gal/day)	Water Use (gal/year)	Water Use (acre-ft/year)
Guest Rooms	2,330	850,304	2.609
Employees	192	69,905	0.215
Multi-Purpose Bldg	1,770	646,050	1.983
Laundry	52	18,980	0.058
Cooling	545	198,890	0.610
Fitness Center	260	94,900	0.291
TOTAL	5,148	1,879,028	5.767

The existing Lodging Project site is currently serviced by site wells and has no connection to the City of St. Helena water system, so the baseline water use for the project is zero gallons annually. The Lodging Project will serve its irrigation water needs using an existing on-site well. However, to serve the project's potable water needs, the project will require a new connection and new entitlements to the existing City of St. Helena water supply in La Fata Street.

The potable water demand associated with the propose site improvements will connect to the existing City water service in La Fata Street, south of the project entrance. Potable water will be distributed throughout the site to supply the multi-purpose building, guest rooms and fitness center. The 8" water line extended from La Fata Street will branch at the property line into the metered domestic supply

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system for the property and a separate fire protection loop that will feed hydrants and building sprinkler systems. Additionally, a new 8" line will be extended down Mills Lane to connect to the existing water line in Highway 29, creating a looped system.

The project's civil design team prepared a Water Use Analysis, included as Attachment I-2, which demonstrates that the proposed Lodging Project will use approximately 5.8 acre-feet of water per year. The project will use water efficient fixtures and water conservation practices to the maximum extent possible. The project will require a will-serve water agreement with the City.

To satisfy the City of St. Helena Water Neutral Policy for Development, the City requires new development to be water-neutral (from the City-delivered water system) through any combination of on-site water conservation measures and/or off-site retrofitting and/or well water. The required retrofits shall be calculated as specified in the city's water neutrality policy as adopted by council resolution and approved by the director of public works/city engineer. The in-lieu fee shall be the equivalent of the cost of retrofitting a sufficient number of existing homes with the ULF toilets and other required water-saving devices and to be \$142,351.73.

While this is considered a potentially significant impact, off-site retrofitting and/or payment of an in-lieu fee will allow the Lodging Project to be water neutral, resulting in a less-than-significant impact after mitigation incorporated.

- (f,g) **Less than Significant Impact: Solid Waste.** During construction, there would be a temporary increase in solid waste disposal needs associated with construction wastes. Construction wastes for the Project would include minor amounts of solid waste from building renovation, as well as excess soil associated with excavation and site grading. Both construction waste and operational solid waste could be accommodated by landfills located in the region. The impact from construction waste and commercial solid waste would be less than significant.

MITIGATION MEASURES

Existing Farmstead at Long Meadow Ranch (Farmstead)

None required.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- UTL-1. Storm Drain.** The applicant shall connect to a storm drain capable of conveying the City's Master Planned 100-year storm water run-off in Mills Lane and outfall in the Napa River per the City of St. Helena Highway 29 Specific Plan and the City of St. Helena Storm Drain Master Plan.
- UTL-2. Water.** The Project shall connect to City water service and the Project shall pay an in-lieu retrofit fee to be negotiated and approved by the City of St. Helena equal to the cost of retrofitting existing buildings with low flow fixtures to result in a water savings equal to the proposed Lodging Project water use.
- UTL-3. Water.** The Project shall demonstrate that the irrigation demands for the Project do not exceed well water in excess of well capacity. Annual reports shall be provided for 5 years after occupancy.
- UTL-4. Water.** The Project shall include all water saving devices and methodology as required by CalGreen and City code.

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UTL-5. Wastewater. Prior to issuance of Project approvals, the Project shall provide an analysis of wastewater capacity and availability in a formal study that:

1. Shall confirm availability of sewer lines and establish connections; and
2. Shall confirm plant capacity.

IMPACT SIGNIFICANCE AFTER MITIGATION

With implementation of the mitigation measure listed above, impact related to utilities and service systems would be reduced to a less than significant level.

SOURCES

- City of St. Helena General Plan Update 2040; Adopted May 14, 2019.
- City of St. Helena Highway 29 Specific Plan, February 2005.
- City of St. Helena Storm Drain Master Plan.
- Sherwood Design Engineers, Theoretical Sewer Capacity Analysis for Farmstead at Long Meadow Ranch Lodging, May 2, 2017.
- Sherwood Design Engineers, Water Use Analysis Report for Farmstead at Long Meadow Ranch Lodging, May 2, 2017.
- Sherwood Design Engineers, Preliminary Stormwater Control Plan for a Regulated Project Farmstead at Long Meadow Ranch Lodging, January 22, 2017.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XX. WILDFIRE				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	X	☐
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	X	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				
<i>Existing Farmstead at Long Meadow Ranch (Farmstead)</i>	☐	☐	☐	X
<i>Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)</i>	☐	☐	☐	X

DISCUSSION

The California Department of Forestry and Fire Protection (CAL FIRE) maps areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors, pursuant to Public Resources Code 4201-4204 and Government Code 51175-51189. These areas are referred to as Fire Hazard Severity Zones (FHSZs) and are identified for areas where the state has financial responsibility for wildland fire protection (i.e., state responsibility areas, or SRAs), and areas where local governments have financial responsibility for wildland fire protection (i.e., local responsibility areas, or LRAs). There are three FHSZ mapped for SRAs (moderate, high, and very high), while only lands zoned as very high are identified in LRAs.

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead) and (Lodging Project)

FARMSTEAD AT LONG MEADOW RANCH PROJECTS

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- (a – d) **Less than Significant Impact.** According to CAL FIRE's Fire Hazard Severity Zone map for Napa County, all land within the City of St. Helena, and all land immediately surrounding the city limits, is in a non-VHFHSZ (Very High Fire Hazard Severity Zone). However, the mountain ranges immediately east and west of the city limits are within an SRA and are considered a moderate to high FHSZ (CAL FIRE, 2007). While land within the city limits may be outside an SRA, as evidenced by the 2017 wildfires that destroyed large areas of Napa and Sonoma counties, the threat from wildfires extends to areas within LRAs. Neither of the project sites are near an SRA nor other land classified as a Very High Fire Hazard Severity Zone (VHFHSZ), and each are in close proximity to St. Helena Fire Station #2 (less than ¼ mile away at 1025 Dowdell Lane).

Each of the project sites are located near the center of the incorporated City of St. Helena in a very flat, largely urban and agricultural area. Therefore, neither of the proposed projects will have any effect on an adopted emergency plan; nor will they exacerbate wildfire risks, require the installation of infrastructure that may exacerbate fire risk, or expose people or structures to risks associated with flooding or landslides resulting from post fire slope instability. For these reasons, this impact is considered less than significant.

MITIGATION MEASURES

None required.

SOURCES

- CAL FIRE, 2007. Fire Hazard Severity Zones in SRA; Adopted by CAL FIRE: November 7, 2007.
- CAL FIRE, 2008. Very High Fire Hazard Severity Zones in LRA as Recommended by CAL FIRE: September 24, 2008.

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	Potentially Significant Impact	Less-Than- Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
Would the project?				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	X	☐	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	X	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	X	☐	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	X	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				
Existing Farmstead at Long Meadow Ranch (Farmstead)	☐	X	☐	☐
Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)	☐	X	☐	☐

IMPACT ANALYSIS

Existing Farmstead at Long Meadow Ranch (Farmstead)

- (a) **Less Than Significant With Mitigation Incorporated.** The Farmstead project is located within the City's Urban limit line and potential impacts associated with its development have been anticipated by the City's General Plan and analyzed in the General Plan EIR. The project is consistent with the General Plan Land Use designation, goals, policies and zoning. All potential impacts to biological resources have been mitigated to levels less than significant, as identified in Section IV Biological Resources which calls for mitigation for the protection of nesting birds and bats.

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Section V Cultural Resources assessed the potential for cultural resources at the site. While there is a historically significant building onsite, all proposed changes to the structure are proposed for the interior only, thereby not affecting the integrity of its historical nature. The Project site is located in close proximity to existing sensitive receptors including adjacent residential uses to the northeast and St. Helena High School to the south of the project site. Construction activities associated with the development are very limited and could result in interim short-term air quality emissions and noise levels, all of which are below the thresholds of significance and would cease once construction is finished.

With implementation of mitigation measures set forth in the sections on public services, the Project's adherence to the City's development standards, including Design Review, and Conditions of Approval, will ensure the project's potential impacts on the quality of the environment would be reduced to a less than significant level. As such, the project will not degrade the quality of the environment, reduce habitat, or affect cultural resources. Therefore, the project will have a less than significant impact on the environment.

- (b) **Less Than Significant With Mitigation Incorporated.** CEQA Guidelines (Section 15355(a)(b)) defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or increase in environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the proposed project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time".

The Project does not have the potential to create impacts which are individually limited but cumulatively considerable. The environmental effects of the Project are typical of service commercial development and will all be reduced to less than significant levels through the implementation of standard conditions of approval, or through mitigation measures contained in this Initial Study/Mitigated Negative Declaration.

Traffic impacts will not result in adverse cumulative conditions as no additional traffic is anticipated due as a result of the Project's proposed construction of storage facilities and renovations. The City of St. Helena has adopted circulation policies as part of its General Plan that regulate traffic movement and ensure traffic safety. All other potentially cumulative impacts are either less than significant or are mitigated such to levels of less than significant or reduced through application of the City's Conditions of Approval or development standards. They will not, therefore, add to a cumulatively considerable impact.

- (c) **Less Than Significant With Mitigation Incorporated.** The Project does not present adverse impacts upon human beings, either directly or indirectly. Geotechnical concerns will be lessened through the conditions identified in Section VI, Geology and Soils. While the Project site is located in close proximity to existing sensitive receptors including existing surrounding residential uses to the east and St. Helena High School to the south of the project site, construction is minor and is buffered by existing buildings. Construction activities associated with the development would result in short-term air quality emissions and noise levels that fall below levels of significance and would cease once construction is finished. The Project will be conditioned to achieve City standards with respect to noise, safety, and drainage. Building and improvement plans will be reviewed to ensure compliance with applicable building codes and standards. With implementation of mitigation measures, conditions of approval, and the City's development standards, or payment of development fees, the project does not present potentially significant impacts that may have an adverse effect upon human beings, either directly or

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indirectly. Therefore, the project will have less than significant impacts due to substantial adverse environmental effects.

Farmstead at Long Meadow Ranch Lodging Project (Lodging Project)

- (a) **Less Than Significant With Mitigation Incorporated.** The proposed Farmstead at Long Meadow Ranch Lodging Project is located within the City's Urban limit line and potential impacts associated with its development have been anticipated by the City's General Plan and Highway 29 Specific Plan and analyzed in the General Plan EIR/Highway 29 Specific Plan EIR. The project is consistent with the General Plan Land Use designation, goals, policies and zoning. All potential impacts to biological resources have been mitigated to levels less than significant, as identified in Section IV Biological Resources which calls for mitigation for the protection of nesting birds and bats. Furthermore, mitigation measures prescribed in Sections III, IV, V, X, XIII, XV, XVII, and XIX will ensure that any potential impacts to the environment are fully mitigated.
- (b) **Less Than Significant With Mitigation Incorporated.** CEQA Guidelines (Section 15355(a)(b)) defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or increase in environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the proposed project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time".

The Project does not have the potential to create impacts which are individually limited but cumulatively considerable. All potential impacts to biological resources, cultural resources and tribal resources, traffic, hydrologic and water quality resources have been mitigated such that the project will not contribute to the cumulative degradation of these resources. Similarly, mitigations ensure the Project has no impacts associated with construction related noise or air quality impacts. Potential impacts to public services and utilities are also mitigated to ensure no significant long-term contributions. With implementation of mitigation measures set forth in the Initial Study, and the Project's adherence to the City's development standards (including Design Review) and Conditions of Approval, will ensure the project's potential impacts on the quality of the environment would be reduced to levels of less than significant and not contribute to any cumulative impact. Therefore, the project will not have a cumulatively significant impact.

- (c) **Less Than Significant With Mitigation Incorporated.** The Project does not present adverse impacts upon human beings, either directly or indirectly. The project has the potential to result in adverse impacts to humans due to air quality, biological resources, cultural resources, hazards/ hazardous materials, noise, and tribal cultural resources. With implementation of mitigation measures set forth in this Initial Study, the project will have less than significant environmental effect that would directly or indirectly impact human beings onsite or in the project vicinity. The Project does not present potentially significant impacts which may cause adverse impacts upon human beings, either directly or indirectly. Geotechnical concerns will be lessened through the conditions identified in Section VII, Geology and Soils. While the Project site is located in proximity to existing sensitive receptors including existing residential uses to the northeast and St. Helena High School to the south of the project site, some buffering through setbacks exists to the residential areas. Construction activities associated with the development would result in air quality emissions and noise, for which mitigation has been identified and would cease once construction is finished. The Project will be conditioned to achieve City standards with respect to other safety issues and drainage. Building and improvement plans will be reviewed to ensure compliance with applicable building codes and standards. With implementation

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of mitigation measures, conditions of approval, and the City's development standards, the Project does not present potentially significant impacts that may have an adverse effect upon human beings, either directly or indirectly. Therefore, the project will have less than significant impacts due to substantial adverse environmental effects.

* The Guide to Creating Walkable Communities (WRCOG, 2012) references a nationwide survey that says two things: that people prefer to walk to work for trips 2 miles or less and that nationally the average walk to work is 0.74 miles.



FINAL MITIGATED NEGATIVE DECLARATION FOR
THE FARMSTEAD AT LONG MEADOW MARCH RESTAURANT AND
LODGING PROJECTS
(File No. PL17-006, PL17-036 and PL20-002)
SCH #2020050553

LEAD AGENCY:
CITY OF ST. HELENA
1572 Railroad Avenue
St. Helena, CA 94574

August 10, 2020

1.0 INTRODUCTION

1.1 Background of Environmental Review Process for the Project1.0-1

1.2 Intended Uses of the MND1.0-1

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2.0 COMMENTS AND RESPONSES TO COMMENTS

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3.0 ERRATA TO THE MITIGATED NEGATIVE DECLARATION

3.1 Revisions to the Mitigated Negative Declaration.....3.0-1

This document, in conjunction with the draft Mitigated Negative Declaration (MND), responds to comments made on the proposed Farmstead at Long Meadow Ranch Restaurant and Lodging Projects. While the State's California Environmental Quality Act (CEQA) Guidelines do not require a final initial study or the preparation of formal responses to comments on draft initial studies/mitigated negative declarations, in order to provide further disclosure of the project's impacts, the City has determined that it will provide responses to the comments it has received.

1.1 BACKGROUND OF ENVIRONMENTAL REVIEW PROCESS FOR THE PROJECT

MITIGATED NEGATIVE DECLARATION

The draft MND was available for public and agency review beginning May 29, 2020, with the 30-day review period ending on June 29, 2020. The City received 34 comments letters/emails during this review period.

RESPONSE TO COMMENTS

This document provides a response to comments received on the MND. The comment letters are included in Section 2.0, Comments and Responses to Comments.

1.2 INTENDED USES OF THE MND

The City of St. Helena will use the MND in its final form in considering approval of the proposed project. In accordance with CEQA Guidelines Section 15074, the MND will be used as the primary environmental document in consideration of all subsequent planning and permitting actions associated with the project, to the extent such actions require CEQA compliance and as otherwise permitted under applicable law.

CONSIDERATION OF COMMENTS

Prior to taking action on the proposed project, the City will consider the MND, this response to comments document, and any additional comments or testimony. Negative declarations and mitigated negative declarations are considered and adopted per CEQA Guidelines Section 15074, which reads as follows:

15074. CONSIDERATION AND ADOPTION OF A NEGATIVE DECLARATION OR MITIGATED NEGATIVE DECLARATION.

- (a) Any advisory body of a public agency making a recommendation to the decision-making body shall consider the proposed negative declaration or mitigated negative declaration before making its recommendation.
- (b) Prior to approving a project, the decision-making body of the lead agency shall consider the proposed negative declaration or mitigated negative declaration together with any comments received during the public review process. The decision-making body shall adopt the proposed negative declaration or mitigated negative declaration only if it finds on the basis of the whole record before it (including the initial study and any comments received), that there is no substantial evidence that the project will have a significant effect on the environment and that the negative declaration or mitigated negative declaration reflects the lead agency's independent judgment and analysis.

- (c) When adopting a negative declaration or mitigated negative declaration, the lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.
- (d) When adopting a mitigated negative declaration, the lead agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects.
- (e) A lead agency shall not adopt a negative declaration or mitigated negative declaration for a project within the boundaries of a comprehensive airport land use plan or, if a comprehensive airport land use plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, without first considering whether the project will result in a safety hazard or noise problem for persons using the airport or for persons residing or working in the project area.
- (f) When a non-elected official or decision-making body of a local lead agency adopts a negative declaration or mitigated negative declaration, that adoption may be appealed to the agency's elected decision-making body, if one exists. For example, adoption of a negative declaration for a project by a city's planning commission may be appealed to the city council. A local lead agency may establish procedures governing such appeals.

Upon review and consideration of the MND, the City may take action to adopt, revise, or reject the proposed project. A decision to approve the proposed project would be made in a resolution recommending adoption of the MND as part of consideration of the proposed project. The City of St. Helena has prepared this MND and has determined that the environmental impacts of the proposed project have been reduced to a less than significant level through mitigation measures adopted as part of a Mitigation Monitoring and Reporting Program (MMRP). A decision to approve the proposed project would include adoption of the MMRP by way of resolution.

1.3 ORGANIZATION AND SCOPE OF THIS DOCUMENT

This document is organized in the following manner:

SECTION 1.0 – INTRODUCTION

Section 1.0 provides an overview of the environmental review process to date and discusses the CEQA requirements for consideration and adoption of a mitigated negative declaration.

SECTION 2.0 – COMMENTS AND RESPONSES TO COMMENTS

Section 2.0 lists the commenter, summarizes written comments (coded for reference), and includes responses to those comments made on the MND. No revisions to the MND are required.

COMMENTS AND RESPONSES TO COMMENTS

2.1 LIST OF COMMENTERS

The following organizations submitted written comments on the MND.

Letter	Agencies	Date
A	California Department of Fish and Wildlife	June 18, 2020
B	California Department of Transportation (Caltrans)	June 26, 2020
C	Napa County	June 29, 2020

Letter	Organizations or Individuals	Date
D	Thomas W. Allen	June 29, 2020
E	Brittany Anderson, HBIC	June 27, 2020
F	Iris Barrie	June 29, 2020
G	Tom and Margot Belt	July 8, 2020
H	George Caloyannidis	July 12, 2020
I	Christopher Cole	June 29, 2020
J	Nicole and Scott Dale	June 26, 2020
K	Patricia Damery	June 29, 2020
L	George and Kimberly David	July 10, 2020
M	Elaine de Man	June 29, 2020
N	Pat Dell	June 27, 2020
O	Nancy Dervin	July 13, 2020
P	Mike Hackett	June 27, 2020
Q	Duane Hoff	July 14, 2020
R	Shackteau Humphries	June 29, 2020
S	Stephanie Iocobacci	July 7, 2020
T	Institute for Conservation Advocacy Research and Education (ICARE)	July 14, 2020
U	Eve Kahn	June 29, 2020
V	Hector Fernando Lopez	June 24, 2020
W	Anthony Micheli	July 13, 2020
X	Jack Miller, Pacific College of Health and Science	June 26, 2020
Y	Napa County Bicycle Coalition	June 29, 2020
Z	Ann Nevero	July 14, 2020
AA	Eileen Pereira	June 29, 2020
BB	Greg Pitts	July 13, 2020
CC	Pamela Smithers	June 29, 2020

COMMENTS AND RESPONSES TO COMMENTS

Letter	Organizations or Individuals	Date
DD	Doug Stanton, Stanton Vineyards	June 26, 2020
EE	Leslie Stanton	June 28, 2020
FF	Loraine Stuart	June 30, 2020
GG	Jim Wilson	June 29, 2020
HH	Napa Housing Coalition	June 23, 2020

2.2 COMMENTS AND RESPONSES

RESPONSES TO COMMENT LETTERS

Written comments on the draft MND are reproduced on the following pages, along with responses to those comments. CEQA does not require lead agencies to provide formal responses to comments received on initial studies supporting proposed mitigated negative declarations. However, the City prepared this response to comments document to provide responses to comments received on the MND in order to provide comprehensive information and disclosure for both the public and the City's decision-makers.

Where changes deemed necessary to clarify the draft MND text result from responding to comments, those minor changes are included in the response and demarcated with revision marks (underline for new text, ~~strikeout~~ for deleted text). The comment letters are listed alphabetically in each section.

To address issues that were raised by multiple commenters and avoid redundancy, the City has developed "Master Responses" to comments on the MND. Where applicable, responses to comments direct back to the Master Responses by topic.

Master Response 1: Preparation of an MND.

Many comments state that an Environmental Impact Report (EIR) should have been prepared instead of an Initial Study / Mitigated Negative Declaration (MND). The comments suggest that only an EIR is capable of disclosing the Project's environmental effects and informing the public. Some suggest that the Project's size require preparation of an EIR.

The comments misunderstand the nature and role of an MND. The size of a project does not dictate whether or not an EIR must be prepared. Further, an MND is not a short cut designed to avoid disclosing environmental effects. An MND addresses each environmental checklist question in Appendix G of the State CEQA Guidelines in the same way as an EIR. An MND fully analyzes each and every potential impact that is analyzed in an EIR. That is, an impact that is identified in an EIR will also be identified in an MND.

An MND is a well-established, long-standing process under CEQA. Under Public Resources Code Section 21064.5, an MND is properly used "when the Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may

COMMENTS AND RESPONSES TO COMMENTS

have a significant effect on the environment." A lead agency "shall"—a mandatory term meaning "must"—adopt a negative declaration or mitigated negative declaration instead of preparing an EIR if there is no substantial evidence in light of the whole record that the project, as proposed or revised, may have a significant effect on the environment. (Pub. Resources Code, § 21080(c); CEQA Guidelines § 15070(a); see 1 Kostka & Zischke, Practice Under the California Environmental Quality Act (CEB2d Ed, 2012 Update), section 7.2, p. 393.)

"Substantial evidence" is defined as "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (State CEQA Guidelines, § 15384.) Substantial evidence includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts," but does not include "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment." (*Ibid.*) "Members of the public may ... provide opinion evidence where special expertise is not required." (*Joshua Tree Downtown Business Alliance v. County of San Bernardino* (2016) 1 Cal.App.5th 677, 690.) However, "[i]nterpretation of technical or scientific information requires an expert evaluation." (*Ibid.*) "Testimony by members of the public on such issues does not qualify as substantial evidence" (*Id.* at pp. 690-691.) "[I]n the absence of a specific factual foundation in the record, dire predictions by nonexperts regarding the consequences of a project do not constitute substantial evidence." (*Id.* at p. 691 quoting *Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1417; see also *Placerville Historic Preservation League v. Judicial Council of California* (2017) 16 Cal.App.5th 187, 199.)

Here, the City's MND addresses each environmental checklist question in Appendix G of the CEQA Guidelines in the same way as an EIR and provides analysis and supporting documentation for all conclusions. The MND complies with all applicable substantive and procedural requirements for an MND as set forth in CEQA and the CEQA Guidelines. Information about the potential impacts of the Project has been disclosed through the MND and circulated for public review and comment. In this case, the City has gone beyond CEQA requirements and prepared responses to comments on the MND. All potentially significant impacts are reduced to less than significant by the recommended mitigation measures. Because mitigation measures incorporated into the project reduce all potentially significant impacts, an EIR is not needed to analyze the proposed project. That is, based on the review of the application, the MND, the comments and these responses, and the other documentation in the record, the City has concluded that there is no substantial evidence in light of the whole record that the Project may have a significant effect on the environment. Therefore, in accordance with Pub. Resources Code section 21080(c) and State CEQA Guidelines section 15070(a), an MND is the appropriate CEQA document for the Project.

Master Response 2: Water.

Many comments express concern about the Project's impact on water supply and availability. The MND fully analyzes the Project's water supply and availability effects in Section XIX (page 131 et seq.).

For the Farmstead component, the existing Farmstead facility currently operates and maintains its own Public Water System, which is fed from an existing on-site well. The proposed uses for the Farmstead Project will not increase water demand, and no modifications to the Public Water System are proposed. No new or expanded entitlements are needed. Therefore, the project will have less-than-significant impact to water supply.

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The lodging and related facilities' needs for potable water (identified as approximately 5.8 acre-feet annual requirement) will be fulfilled through a connection to the City of St. Helena water system. Existing on-site non-potable wells will service all agricultural and landscaping activities. The pool will initially be filled by water from outside the City of St. Helena. Additionally, in order to comply with the City's requirements to mitigate water use in accordance with St. Helena Municipal Code Section 13.12.030, the Project will also install piping for the conveyance of recycled water along Mills Lane from Highway 29 to the eastern end of Mills Lane to be used as the City moves towards utilizing recycled water for irrigation and landscaping on select properties. This additional improvement, which is required through the Development Agreement entered into between the Developer and City, is an alternative, innovative method of mitigating water use for new development, as permitted under Section 13.12.030(B) of the City's Municipal Code.

The existing Lodging site is currently serviced by site wells and has no connection to the City of St. Helena water system, so the baseline water use is zero gallons annually. The Lodging will serve its irrigation water needs using an existing on-site well. However, to serve the potable water needs, a new connection and new entitlements to the existing City of St. Helena water supply in La Fata Street will be required.

The potable water demand associated with the proposed site improvements will connect to the existing City water service in La Fata Street, south of the project entrance. Potable water will be distributed throughout the site to supply the multi-purpose building, guest rooms and fitness center. The 8" water line extended from La Fata Street will branch at the property line into the metered domestic supply system for the property and a separate fire protection loop that will feed hydrants and building sprinkler systems. Additionally, a new 8" line will be extended down Mills Lane to connect to the existing water line in Highway 29, creating a looped system.

The project's civil design team prepared a Water Use Analysis, included as Attachment I-2, which demonstrates that the proposed Lodging component will use approximately 5.8 acre-feet of water per year. The estimate was based on accepted industry standards found in EPA's WaterSense program, LEED standards, and published research of water use in the hotel sector. It included all facets of the proposed Project, including toilets, lavatories, shower heads, cooking, laundry, cooling, and swimming pool. The project will use water efficient fixtures and water conservation practices to the maximum extent possible. The project will require a will-serve water agreement with the City assuring adequate water supply to serve the Project.

It is important to note that the City analyzed impacts that future development would have on its water supply as part of the Environmental Impact Report prepared for the City's 2040 General Plan Update adopted in 2019, and determined that the City potable water demand is within its safe yield parameters and demand has declined in recent years due to improved water use efficiency and short term demand reductions (See 2040 General Plan Draft EIR, p. 3.14-4.) The 2040 General Plan EIR determined that based on the existing potable water availability, the various General Plan policies adopted to reduce water demand and the City's implementation of Municipal Code Chapter 13.12 requirements for new development to mitigate their water use, the impacts to water demand based on new development contemplated in the General Plan was less than significant. This Project complies with the City's General Plan policies intended to reduce water demand as applicable to this Project, and Developer has also agreed to implement an alternative innovative method of mitigating water use as allowed under Section 13.12.030(B) of the City's Municipal Code to offset the water demand from the project. Rather than pay the retrofit in-lieu fees described in the draft Mitigated Negative Declaration, Developer has committed through the Development Agreement to construct and install recycled water infrastructure (i.e., purple pipe) in Mills Lane extending from Highway 29 easterly

COMMENTS AND RESPONSES TO COMMENTS

to the eastern end of Mills Lane. As the City's wastewater treatment plant transitions to tertiary treatment, the City plans to implement a water recycling system that would allow for use of recycled water for irrigation and landscaping purposes. The piping that the Developer has agreed to install will, at a minimum, provide the ability to irrigate the landscaping at Crane Park and the fields at St. Helena Elementary School with recycled water, which would provide projected annual water savings of more than two times the annual water usage for the lodging project. Crane Park and the St. Helena Elementary School fields used 4,215,260 gallons of water in 2019, as compared to 1,879,029 gallons per year projected for the lodging project. This alternative solution will facilitate dramatically more significant water savings than would be available through payment of the in-lieu fee. Developer has agreed to fund these improvements at a cost of up to \$256,549, which is more than \$100,000 more than the in-lieu fees that Developer would pay under the City's water neutrality ordinance (the in-lieu fee would have been \$142,341.73). The City will reimburse developer for costs of the improvement in excess of the \$256,549 limit.

With the installation of the recycled water piping which can be incorporated into the City's plans for implementation of recycled water usage, the Lodging Project will facilitate significantly greater water savings than the water demand created by the Project. Developer's compliance with Municipal Code Section 13.12.030(B), combined with the City's recent documentation that the City's existing policies ensure a less than significant impact from future development as contemplated in the City's General Plan, results in a less-than-significant impact after mitigation incorporated. This revision to the mitigation measure does not require recirculation of the MND because it does not constitute a substantial revision under State CEQA Guidelines section 15073.5.

Regarding groundwater, the Farmstead component will create a small amount of new impervious surface, resulting in a small increase in stormwater runoff that could potentially contain pollutants. However, the new impervious area is a small enough area (less than 1,300 square feet) that the reduced infiltration of stormwater is not anticipated to substantially affect groundwater recharge, and thus will have Less Than Significant impact on groundwater recharge. Specifically, the Farmstead Project will fall below 5,000 square feet of impervious surface, and thus is below the impact threshold in the BASMAA Post-Construction Manual that triggers requirements for improving water quality of stormwater runoff, and therefore can be evaluated to have less than significant impact.

The Lodging component's potential impacts to groundwater supply are from increased demand at the two existing on-site wells. The existing wells have adequately served agricultural activities. Under the proposed Lot Line Adjustment, one of the existing wells will no longer be located on the Lodging Project parcel and will instead be located on the adjacent parcel belonging to David and Katherine Gold. A private water well easement agreement will be recorded to allow the Lodging Project access and to utilize the water from the well. Therefore, both existing wells will continue to be used and will supply water to the Lodging Project's farm and landscape irrigation.

Well reports submitted with this application indicate that well production rates far exceed estimated irrigation demands. Well reports indicate production rates of 75 gpm (west well) and 15 gpm (east well), requiring approximately 220 hours run time annually at peak rates to meet estimated irrigation demand of 3.6 acre-feet. Assuming the wells will not always produce at peak rates, a conservative assumption of 50% production results in 440 hours of run time annually. Therefore, no new wells will be required to meet the irrigation demands of the Lodging component.

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The Lodging component landscaping and irrigation system will be designed to meet the requirements of the State of California Model Water Efficient Landscape Ordinance, ensuring that the irrigation demands from the project are as low as possible.

As the Lodging Project does not require any new wells and will minimize use of existing wells by following the guidelines in MWELD, the project will have less than significant impact with the following mitigation incorporated: Prior to construction, the applicant shall submit landscape and irrigation plans to be approved by the City of St. Helena demonstrating compliance with the State of California's Model Water Efficient Landscape Ordinance.

Although many commenters express concern about the Project's effects on water, substantial evidence demonstrates that the Project will comply with the City's requirements for water neutrality and that there will not be a significant impact. That is, based on the review of the application, the MND, the comments and these responses, and the other documentation in the record, the City has concluded that there is no substantial evidence in light of the whole record that the Project may have a significant effect on the environment.

Master Response 3: Traffic.

Many comments were received expressing concern about the Project effects on traffic. The MND fully analyzes the Project transportation effects in Section XVII (page 105 et seq.) As noted in Attachment b (Traffic Study Revised) to the MND, the traffic analysis included all anticipated traffic, including employees.

Notably, recent changes in CEQA explain that, with limited exceptions, automobile delay may no longer be considered a significant effect on the environment. (See Public Resources Code, § 21099; State CEQA Guidelines, § 15064.3.) Nevertheless, the MND analyzes vehicle delay.

Regarding vehicle miles traveled (VMT), the Project includes (by design) many of the mitigation features and programs recommended by the Office of Planning and Research to reduce VMT. Among these are features which reduce the use of petroleum fuel powered vehicles (which reduce CO₂ emissions, a related objective of VMT). These compact growth measures capture the travelling population and/or provide convenient access to alternative modes of travel while supporting the City of St. Helena's downtown. Those Project features include:

- Incorporating a neighborhood electric vehicle network through the use of electric cars.
- Provision of 4 EV charging stations.
- Dedicated EV/clean fuel spaces.
- Orienting the Project toward current and future transit, bicycle, and pedestrian facilities.
- Improving access to pedestrian or bicycle networks, and transit service, by providing transit passes to employees, showers, lockers, and secure, covered bicycle storage for employees and managed by the Transportation Coordinator (as will be detailed in the TDM).
- Providing bicycle parking.
- Limiting parking supply to basic needs.

COMMENTS AND RESPONSES TO COMMENTS

- Encouraging car sharing, bicycle sharing, and ride sharing programs through its reservation program per the TDM.
- Applicant is leading Napa Valley Forward, an industry task force sponsoring a two-year pilot program to reduce commuter traffic in Napa Valley.
- A network of pathways connecting the restaurant and lodging activities to ensure the Projects operate as a campus, allowing guests and staff to move back and forth by foot, bicycle or electric cart on the multi-use internal paths.
- A multi-purpose barn-like building on the northeast side of the property that will serve as the agricultural learning center. This multi-purpose building will provide lodging guests with indoor and outdoor areas for:
 - Breakfast (for lodging guests only).
 - A service kitchen which will prepare daily breakfast, assemble room service meals, provide prep for cooking demonstrations, and support the daily chef's table featuring wine and food pairings at lunch and dinner for up to 20 people per sitting (relocated from the general store); primary food service will be provided by Farmstead restaurant.
 - A service bar for beverage service for lodging guests.
 - Meeting room(s) and classroom(s) on site to reduce offsite trips.
 - Adjacent event lawn area.
 - Farm-to-table food and agriculture education programs for guests and limited numbers of non-guests.
 - Culinary skills, animal husbandry, farmhouse craft classes.
 - Growing-for-the-table gardening and farming lessons.

Given the pass-by traffic capture estimate of 10% the ability of guests to walk or bicycle to nearby downtown St. Helena and several wineries plus the focus on the alternative transportation/healthy living focus of the design, the Project could lower vehicles miles travelled by over 15% as compared to a project located in the outlying areas of St Helena or Napa County where visitors must drive for all services.

Regarding vehicle delay, Project lodging trip generation was developed assuming 100 percent occupancy using the traffic engineering profession's standard source of trip rate data: Trip Generation Manual, 10th Edition, by the Institute of Transportation Engineers, 2017. The analysis determined that impacts would be less than significant after incorporating mitigation. In the year 2040, at the SR 29/Grayson Avenue-Mills Lane signalized intersection, operation would be an unacceptable LOS E during the Friday AM peak hour with a fourth intersection leg. Friday AM peak hour operation would change from an acceptable LOS D to an unacceptable LOS E (with a 23.7 second increase in delay). But with the implementation of the recommended mitigation(s) the impact would be reduced to less than significant.

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Regarding the farmstead component, in the year 2022, Table 4 in Attachment B of the MND shows that at the SR 29/Charter Oak Avenue intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. While the volume increase would be less than 1 percent during the AM peak hour, the increases during the Friday PM peak hour and Saturday PM peak hour would be greater than 1 percent and would therefore be a significant impact (2.3% during the Friday PM peak hour and 2.2% during the Saturday PM peak hour). With the implementation of the recommended mitigation(s) the impact would be reduced to less than significant.

In the year 2022, at the SR 29/Dowdell Lane intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. While the volume increase would be less than 1 percent during the AM peak hour, the increases during the Friday PM peak hour and Saturday PM peak hour would be greater than 1 percent and would therefore be a significant impact (1.1% both hours). With the implementation of the recommended mitigation(s) the impact would be reduced to less than significant.

In year 2040, at the SR 29/Grayson Avenue-Mills Lane signalized intersection operation would be an unacceptable LOS E during the Friday AM peak hour. Friday AM peak hour operation with a fourth intersection leg would change from an acceptable LOS D to an unacceptable LOS E (with a 23.7 second increase in delay). This change would all be due to lodge traffic. With implementation of the recommended mitigation(s), this impact would be reduced to less than significant.

In the year 2040, Table 4 in Attachment B of the MND shows that at the SR 29/Charter Oak Avenue intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. While the volume increase would be less than 1 percent during the AM peak hour, the increases during the Friday PM peak hour and Saturday PM peak hour would be greater than 1 percent and would therefore be a significant impact (2.2% during the Friday PM peak hour and 2.1% during the Saturday PM peak hour). With implementation of the recommended mitigation(s), this impact would be reduced to less than significant.

The proposed mitigation involves the following measures:

TRAF-1. SR 29/Grayson Avenue – Mills Lane Intersection. Minor additional improvements are needed when Mills Lane is realigned and widened to connect to SR 29 at Grayson Lane. The Mills Lane approach should be striped to provide an exclusive left turn lane and a combined through/right turn lane. In addition, the Grayson Avenue approach should be re-striped or widened to provide two lanes, one exclusively for left turns and one for combined through/right turns. Protected left turn phasing should be provided on the Mills-Grayson approaches. Resultant AM peak hour operation: LOS D - 52.7 seconds delay (acceptable operation).

TRAF-2. SR 29/Charter Oak Avenue Intersection – SR 29 Pedestrian Crossing. Provide a fair share contribution to the "HAWK" pedestrian hybrid flashing beacon proposed for the SR 29/Charter Oak Avenue intersection.

TRAF-3. SR 29/Dowdell Lane Intersection – Signal Warrant Impact. Provide a fair share contribution towards the signal planned at the SR 29/Dowell Lane intersection (as detailed in the Highway 29 Specific Plan).

COMMENTS AND RESPONSES TO COMMENTS

TRAF-4. SR 29/Charter Oak Avenue Intersection – Signal Warrant Impact. Since City Public Works has indicated they are not in favor of signalizing this intersection, provide one of the following two measures:

a. Start and end all special events with more than 75 people at times that will not add traffic to SR 29 during the weekday and Saturday PM peak traffic periods (3:30-6:00 PM on weekdays and 1:30-4:00 PM on weekend days).

– or –

b. Provide additional funding for the "HAWK" pedestrian hybrid flashing beacon. The beacon shall be in operation before major events are permitted to add traffic to the existing weekday and weekend peak traffic hours along SR 29. Please note that Caltrans approval will be required for provision of the HAWK hybrid flashing beacon. If they do not approve of its installation, then the only measure to reduce the project impact to a level of insignificance is to eliminate traffic from the 200-person events during the Friday and Saturday PM peak hours.

With implementation of the mitigation measures listed above, impacts related to traffic and transportation would be reduced to a less than significant level. Based on the review of the application, the MND, the comments and these responses, and the other documentation in the record, the City has concluded that there is no substantial evidence in light of the whole record that the Project may have a significant effect on the environment.

Master Response 4: Parking.

Some comments expressed concern about the Project's effects on parking. Absent evidence of secondary impacts, parking is not considered an environmental impact under CEQA. CEQA specifically provides that parking impacts for certain employment centers and residential projects when located on an infill site and within a transit priority area. (Public Resources Code Section 21099; see also *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002), 102 Cal.App.4th 658 (parking deficits not significant environmental impacts in an urban context).).

Further, the Project will comply with all City codes regarding parking. Nevertheless, the MND fully discloses and explains the parking plan for employees and Project users. See MND at pp. 6, 9, 106-107, 115-116, 125-126.)

Parking for the restaurant, general store and tasting room, farmer's market, and garden nursery (which has since ceased operation) was originally approved at 48 spaces. Farmstead at Long Meadow Ranch has added 11 spaces including three electric car-charging stations for a total of 59 spaces (as required per SHMC). On high activity days and evenings, Farmstead at Long Meadow Ranch provides free valet parking, using the onsite lot. For 40+ person events client hosts are required to use buses or vans for transporting their guests. Employees are required to park in the 73 space lot at McCormick and Dowdell. This lot is under lease to the applicant for 5 years, with extensions possible. All employees park their vehicles in the supplemental parking lot. Employees are never allowed to park on-site or on any adjacent city streets. Should the lease not be renewed, the applicant will be required to find parking at another similar location or a use permit amendment may be required. Further, secure covered bicycle storage, showers and lockers will also be provided for employees. A transportation demand manager (TDM) will be appointed to facilitate employee car-pooling and other programs to reduce vehicle miles traveled (VMT).

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As part of the Project and in the context of the Project's lodging component, Mills Lane will be realigned with Grayson Avenue at Highway 29 and widened to accommodate two lanes of traffic and parallel parking on both sides of the street. In addition, a 10' class 1 sidewalk and landscaping strip will be added on the north side of the street to accommodate pedestrian and bicycle traffic. Stop signs will be added at the north end of La Fata and at the exit from the Lodging driveway entrance. With the improvements of Mills Lane, a proper connection to La Fata will be completed at the same time. Also, a sidewalk will be added to the west side of La Fata. LMR will complete the construction of the Mills Lane and La Fata Street improvements prior to the opening of the lodging with costs allocated per the Highway 29 Specific plan.

The entrance to the registration parking court and parking lot will be aligned with La Fata Street. There will be 80 onsite parking spaces, 15 more than is required by city code. All employee parking will be at the supplemental lot located at McCormick and Dowdell. Employees will not be allowed to park on site or on neighboring side streets. The applicant will provide an on-call shuttle for employees to both sites when needed at night.

Secure bicycle parking will also be available for general public guests not staying at the lodging.

In sum, the Project will provide more parking than required by City code and there is not substantial evidence that the project will result in a significant impacts or secondary impacts due to parking.

Master Response 5: Housing

Many comments were received expressing a desire for the Project to include affordable housing and concerns about the impacts associated with future employees of the Project. The MND fully analyzed the Project potential to induce population growth in Section XIV (page 96 et seq.).

A project would be considered growth-inducing if it were to provide new housing, new employment, or expand existing infrastructure not planned for by a local plan. Both the Existing Farmstead at Long Meadow Ranch (Farmstead) and the Farmstead at Long Meadow Ranch Lodging Project (Lodging Project) are commercial projects. There is no population that will be displaced and, while new employment will be provided, a population exists within St. Helena and Napa County that can meet projected needs, as discussed below. The Projects are located in areas designated for service commercial uses.

Changes to existing Farmstead operations are for repurposing existing facilities and providing additional storage space. The remodeling will relieve existing overcrowding and modernize existing operations. No new employees would be added; however, several employees will be relocated from the restaurant kitchen to the butchery and bakery.

The lodging component would generate approximately 65 new employees on site and expand infrastructure to the 10-acre site proposed for development. Although fewer employees may ultimately be needed, this was number was conservatively estimated based on standard metrics for this particular type of Project, which amounts to 1 worker per room. See e.g., City of Santa Rosa Commercial Linkage Fee Nexus Study and Feasibility Study (May 2019) at p. 15 (noting metric of 1 worker per room); citing Vallen and Vallen, "Chapter 1: The Traditional Hotel Industry," Check-In, Check-Out, 2012; Sonoma County Housing Needs Study, Economic & Planning Systems, 2006; A.C. Nelson, "Reshaping Metropolitan America," 2013; Jobs Housing Impact Fee Draft Nexus Study: City of Napa, CA, Vernazza Wolfe Associates Inc., 2011; City of Santa Rosa; Strategic Economics, 2019.

COMMENTS AND RESPONSES TO COMMENTS

Eleven additional employees for marketing, sales and accounting would be added off-site to support the lodging operation. Food service workers currently employed at the Farmstead restaurant will also provide food services for the lodging component. All increases in employees, along with the accompanying infrastructure to serve this Lodging component, were anticipated and previously analyzed in the Highway 29 Specific Plan as noted in Figures 10 and 11 and discussed in pages 34-42 of the Highway 29 Specific Plan, which anticipated service commercial uses on a portion of the site. The Proposed Project is consistent with these anticipated uses and will extend service onto the site, for project use only and not including any future growth. While new employment will be provided, a population exists within St. Helena and Napa County that can meet projected needs. As such, the Project will not induce substantial population growth in the area directly or indirectly.

Even so, the Project's Development Agreement will require a \$3.2 million contribution to affordable housing.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter A – California Department of Fish and Wildlife

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Comment Letter A

State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 Bay Delta Region
 2825 Cordelia Road, Suite 100
 Fairfield, CA 94534
 (707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director




June 18, 2020

Mr. Aaron Hecock
 City of St. Helena
 1572 Railroad Avenue
 St. Helena, CA 94574
AHecock@cityofsthelema.org

Subject: Farmstead at Long Meadow Ranch, Draft Mitigated Negative Declaration,
 SCH #2020050553, City of St. Helena, Napa County

Dear Mr. Hecock:

California Department of Fish and Wildlife (CDFW) personnel have reviewed the draft Mitigated Negative Declaration (MND) for the Farmstead at Long Meadow Ranch (Project). CDFW is submitting comments on the draft MND to inform the City of St. Helena, as the Lead Agency, of our concerns regarding specific language in Mitigation Measures BIO-1 and BIO-2.

A-1

CDFW ROLE

CDFW is providing comments as a Trustee Agency pursuant to the California Environmental Quality Act (CEQA) Section 15386 and is responsible for the conservation, protection, and management of the State's biological resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources.

A-2

ENVIRONMENTAL SETTING

The Project will occur on a 10-acre site located at 783 Main Street (i.e. the Farmstead Restaurant site) and 1000 Mills Lane (i.e. the Long Meadow Ranch Lodging Project site) in the City of St. Helena, Napa County. Sulphur Creek, a tributary to the Napa River, lies approximately 0.25 miles to the north of the Project site and the Napa River lies approximately 0.75 miles to the east. Site topography is relatively flat, approximately 230 feet above sea level. There are no streams, wetlands, or trees within the Project limits. However, there are mature trees that could support nesting birds and raptors, and potentially roosting bats, approximately 300 feet from the Project limits. The Project site is composed of approximately 6 acres of ruderal grassland. The remaining 4 acres are currently used to grow vegetables.

A-3

Conserving California's Wildlife Since 1870

2.0 COMMENTS AND RESPONSES TO COMMENTS

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PROJECT DESCRIPTION

The Project will develop approximately 32,100 square feet of lodging buildings as part of the Long Meadow Ranch Lodging Project and Farmstead Restaurant on 6.1 acres. The remaining 3.9 acres will continue to be used for agricultural purposes.

A-4

COMMENTS AND CONCERNS

Nesting Birds and Raptors

The Project will impact ruderal grassland habitat that could support ground nesting birds and raptors. Additionally, Project construction could disturb active nests located adjacent to the Project site. As written, Mitigation Measure BIO-1 could result in potentially significant impacts to nesting birds and raptors because conducting a nesting bird survey 30 days prior to the start of construction does not provide adequate protection. CDFW recommends that Mitigation Measure BIO-1 be replaced with the following measure:

If construction, grading, vegetation removal, or other Project-related improvements must occur during the nesting season of protected raptors and migratory birds (i.e. February 1 – August 31), a focused survey for active nests of such birds shall be conducted by a qualified biologist, who has documented experience conducting pre-construction nesting bird and raptor surveys, within 7 days prior to the beginning of Project activities. If an active nest is found, the qualified biologist who performed the survey shall determine species-specific no-disturbance buffer distances from all active nests. All no-disturbance buffers shall be clearly demarcated in the field with high visibility fencing or similar material. Active nests shall be monitored each day by a qualified biologist or trained biological monitor for the first week during Project activities to ensure Project activities do not result in nest disturbance. Weekly follow up visits shall also be performed by a qualified biologist or trained biological monitor to determine nest status. Weekly nest monitoring checks shall occur until the young have fledged or the nest is no longer active, as determined by a qualified biologist. If an active nest of a special-status bird or raptor species is discovered during the survey, the nest shall be monitored by a qualified biologist or trained biological monitor each day during Project activities until the young have fledged or the nest is no longer active, as determined by a qualified biologist. If the qualified biologist or trained biological monitor, or any personnel working on the Project observe potential nest disturbance behavior any time during Project activities, all Project activities shall cease and CDFW shall be consulted with prior to resuming Project activities. If a lapse in Project-related work of 7 days or longer occurs during the nesting season, a qualified biologist shall perform another survey for nesting birds and raptors prior to resuming Project activities. If active nests are

A-5

2.0 COMMENTS AND RESPONSES TO COMMENTS

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discovered during the follow up survey, the abovementioned measures shall also be implemented. | A-5

Roosting Bats

Mitigation Measure BIO-1 also includes measures to avoid impacts to special-status bats. However, the draft MND states that no buildings/structures or trees that could support roosting bats will be impacted as a result of the Project. If true, CDFW recommends that all language pertaining to special-status bats in Mitigation Measure BIO-1 be removed. If the Project could result in the removal of trees or buildings/structures that potentially contain suitable bat roosting habitat, CDFW recommends the following revisions to Mitigation Measure BIO-1 (additions shown in **bold**, deletions shown as ~~strikethrough~~):

*In order to avoid impacts to **roosting special-status** bats, a **qualified biologist** shall conduct a **bat habitat assessment preconstruction-survey** of structures and trees that ~~will~~ **would** be impacted by the project **at least 30 -45 days prior to removal or commencement of groundwork.** ~~The bat habitat assessment~~ **All bat surveys shall be conducted by a biologist with experience conducting such assessments surveying-for bats.** **If any trees contain suitable bat roosting habitat (e.g. cavities, crevices, deep bark fissures), they shall be clearly marked and removed in the following two-day phased method: On day 1, under the supervision of a qualified biologist, all tree limbs not containing suitable bat roosting habitat shall be removed using chainsaws only. The next day, the rest of the tree shall be removed. Bat habitat trees should be removed during seasonal periods of bat activity: prior to the maternity season – from approximately March 1 (or when night temperatures are above 45 degrees Fahrenheit and rains have ceased) through April 15 (when females begin to give birth to young); and prior to winter torpor – from September 1 (when young bats are self-sufficiently volant) through October 15 (before night temperatures fall below 45 degrees Fahrenheit and rains begin). If trees containing suitable bat roosting habitat must be removed outside the abovementioned seasonal periods, a qualified biologist shall survey the tree via climbing and using an endoscope to determine if maternity or winter torpor colonies are present. If maternity or winter torpor colonies are present, the tree shall only be removed during the abovementioned seasonal periods. If roosting bats are discovered, but not maternity or winter torpor colonies, then the tree shall be removed using the two-day phased method mentioned above. If no evidence of roosting bats is found, the two-day phased method is not required.***

A-6

If the qualified biologist discovers any evidence of bat roosting activity within structures proposed for removal, the qualified biologist shall

A-7

2.0 COMMENTS AND RESPONSES TO COMMENTS

DocuSign Envelope ID: D6398EA4-1C3C-4D6B-82F8-93CFD8CDBC8F Comment Letter A

Mr. Aaron Hecock
City of St. Helena
June 15, 2020
Page 4

prepare a project-specific Avoidance and Minimization Plan for CDFW review and approval prior to starting Project activities. no special-status bats are found during the surveys, then there would be no further regard for special-status bat species. If special-status bat species are found roosting on the project site, the biologist shall determine if there are young present (i.e., the biologist should determine if there are maternal roosts). If young are found roosting in any tree or structure that will be impacted by the project, such impacts shall be avoided until the young are flying and feeding on their own. A non-disturbance buffer installed with orange construction fencing shall also be established around the maternity site. The size of the buffer zone should be determined by a qualified bat biologist at the time of the surveys. If adults are found roosting in a tree or structure on the project site but no maternal sites are found, then the adult bats can be flushed or a one-way eviction door can be placed over the tree cavity (or structure access opening) for a 48-hour period prior to the time the tree or structure in question would be removed or disturbed. At that point, no other mitigation compensation would be required.

A-7

Please note that Fish and Game Code section 4150 prohibits the taking of all non-game mammals (e.g. bats). At no time shall bats be flushed from roosting locations.

A-8

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish & Game Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

A-9

CDFW appreciates the opportunity to provide comments on the draft MND for the proposed Project and is available to meet with you to further discuss our concerns. If you have any questions, please contact Mr. Garrett Allen, Environmental Scientist, at Garrett.Allen@wildlife.ca.gov, or Ms. Karen Weiss, Senior Environmental Scientist (Supervisory), at Karen.Weiss@wildlife.ca.gov.

A-10

Sincerely,


DETA00000004EA
Gregg Erickson
Regional Manager
Bay Delta Region

cc: State Clearinghouse #2020050553

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter A – California Department of Fish and Wildlife

- A-1 The commenter states that the California Department of Fish and Wildlife (CDFW) personnel have reviewed the draft Mitigated Negative Declaration (MND) for the Project. CDFW are submitting comments regarding specific language in Mitigation Measures BIO-1 and BIO-2**

This comment is introductory in nature. The general concerns about the mitigation measures language are where specifically raised later in the letter. No response is warranted.

- A-2 The commenter explains CDFW's role.**

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

- A-3 The commenter describes the environmental setting.**

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

- A-4 The commenter describes aspects of the project.**

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

- A-5 The commenter suggests that the proposed mitigation measure BIO-1 be revised.**

Per the commenter's request, Mitigation Measure BIO-1 has been revised to further ensure that impacts will be less than significant (see Errata). The revision to the mitigation measure does not require recirculation of the MND because it does not constitute a substantial revision under State CEQA Guidelines section 15073.5.

- A-6 The commenter suggests that the proposed mitigation measure BIO-1 be further revised.**

Per the commenter's request, Mitigation Measure BIO-1 has been revised to further ensure that impacts will be less than significant (see Errata). The revision to the mitigation measure does not require recirculation of the MND because it does not constitute a substantial revision under State CEQA Guidelines section 15073.5.

- A-7 The commenter suggests additional revisions to mitigation measure BIO-1.**

Per the commenter's request, Mitigation Measure BIO-1 has been revised to further ensure that impacts will be less than significant (see Errata). The revision to the mitigation measure does not require recirculation of the MND because it does not constitute a substantial revision under State CEQA Guidelines section 15073.5.

- A-8 The commenter states that the Fish and Game Code section 4150 prohibits the taking of all non-game mammals (e.g.bats). At no time shall bats be flushed from roosting locations.**

Comment noted. The project will be required to comply with all laws, including Fish and Game Code section 4150.

- A-9 The commenter states that the filing fees for the Project will be payable upon filing of the Notice of Determination by the City.**

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment noted. All filing fees will be paid upon filing of the Notice of Determination.

A-10 The commenter states that it appreciates the opportunity to provide comments on the draft MND and is available to meet with the City to further discuss CDFW's concerns.

No response is warranted for this comment.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter B – California Department of Transportation (Caltrans)

STATE OF CALIFORNIA----- CALIFORNIA STATE TRANSPORTATION AGENCY

Comment Letter B

Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-100
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
TTY 711
www.dot.ca.gov



Making Conservation
a California Way of Life.

June 26, 2020

SCH # 2020050553
GTS # 04-NAP-2016-00201
GTS ID: 1527
NAP-29-28.109 & 28.251

Aaron Hecock, AICP
City of St. Helena
1572 Railroad Avenue
St. Helena, CA 94574

Farmstead at Long Meadow Ranch Projects- Initial Study and Mitigated Negative Declaration (IS/MND)

Dear Aaron Hecock:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Farmstead at Long Meadow Ranch Projects. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the May 2020 IS/MND.

B-1

Project Understanding

The proposed project consists of two components: a Farmstead Restaurant at 738 Main Street and a lodging project at 1000 Mills Lane. For the restaurant component, the existing farmer's market building would be configured by remodeling and expanding the existing structure by 408 s.f. to accommodate a butchery and retail meat sales. A 510 s.f. of storage space would be added to the existing south wing building and a 355 s.f. dry storage addition would be added to the existing restaurant building. For the lodging component, a 65-room, single-story hotel project is proposed in 14 new buildings on approximately 6.1 acres of the 10-acre site. The 10 guest loading buildings are configured with either 6 or 7 guest rooms per building. The remaining approximately 3.9 acres of the property, zoned for agricultural use, is proposed to be operated as an

B-2

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."

2.0 COMMENTS AND RESPONSES TO COMMENTS

Aaron Hecock
June 26, 2020
Page 2

Comment Letter B

organically-certified fruit and vegetable farm supplying restaurants and the farmer's market.	B-2
The proposed project also includes Farmstead employee paved parking lot at the southwest corner of the Dowdell Lane/McCormick Street Intersection that would provide 73 parking spaces for employee use only.	B-3
Vehicle access to Farmstead Restaurant is provided via Charter Oak Avenue and to lodge via Mills Lane. Both projects are directly adjacent to State Route (SR)-29.	B-4
Traffic Operations Modifications to intersection controls along SR-29 at Charter Oak Avenue and at Dowdell Lane should be coordinated with Caltrans prior to implementation as they require an Intersection Control Evaluation (ICE) policy documentation. Please consult with Caltrans D4 ICE Coordinator, Whitney Lawrence, via whitney.lawrence@dot.ca.gov .	B-5
Signal warrants and the proposed High-Intensity Activated Crosswalk Beacon (HAWK) pedestrian crossing should be coordinated with the District Traffic Safety Engineer, Bahman Zarechian, via bahman.zarechian@dot.ca.gov .	B-6
Please coordinate with Caltrans Office of Traffic Management Chief, Raoul Maltez, via raoul.maltez@dot.ca.gov on proposed construction work hours in advance of construction activities.	B-7
Hydraulics The IS/MND stated that the stormwater from the new development will either be self-retained or discharged to a new storm drain system on Mills Lane. Please confirm that no new discharge would be drained to the State ROW. If any stormwater runoff drains to the State storm drain system, the stormwater runoff would need to be metered to pre-construction levels.	B-8
Based on Attachment I-1, Preliminary Stormwater Control Plan, some of the existing stormwater runoff drains into the existing swale that runs along the southwest property line would discharge to the 36" culvert. However, there is limited chance for soil infiltration due to the sandy clay. Please clarify where the rest of the existing site stormwater runoff would be directed to.	B-9
In addition, as for Attachment I-3, Hydrology Analysis, please provide an analysis for a 25-year rainfall event if any of the stormwater runoff drains to the State ROW.	B-10

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

2.0 COMMENTS AND RESPONSES TO COMMENTS

Aaron Hecock
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Comment Letter B

Transportation Impact Fees

Please identify project-generated travel demand and estimate the costs of transit and active transportation improvements necessitated by the proposed project; viable funding sources such as development and/or transportation impact fees should also be identified. We encourage a sufficient allocation of fair share contributions toward multi-modal and regional transit improvements to fully mitigate cumulative impacts on regional transportation. We also strongly support measures to increase sustainable mode shares, thereby reducing vehicle miles traveled (VMT).

B-11

Lead Agency

As the Lead Agency, the City of St. Helena is responsible for all project mitigation, including any needed improvements to the State Transportation Network (STN). The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

B-12

Encroachment Permit

Please be advised that any permanent work or temporary traffic control that encroaches onto the ROW requires a Caltrans-issued encroachment permit. If any Caltrans facilities are impacted by the project, those facilities, including the sidewalk and curb, must meet American Disabilities Act (ADA) Standards as well as other Caltrans Standard Plan after project completion. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application, six (6) sets of plans clearly delineating the State ROW, six (6) copies of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement. To download the permit application and to obtain more information on all required documentation, visit <https://dot.ca.gov/programs/traffic-operations/ep/applications>.

B-13

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter B

Aaron Hecock
June 26, 2020
Page 4

Thank you again for including Caltrans in the environmental review process.
Should you have any questions regarding this letter, please contact Yunsheng
Luo at Yunsheng.Luo@dot.ca.gov.

B-14

Sincerely,



Mark Leong
District Branch Chief
Local Development - Intergovernmental Review

cc: State Clearinghouse

*"Provide a safe, sustainable, integrated and efficient transportation
system to enhance California's economy and livability"*

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter B – California Department of Transportation (Caltrans)

B-1 The commenter provides an introduction.

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

B-2 The commenter restates certain aspects of the project.

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

B-3 The commenter restates certain aspects of the project.

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

B-4 The commenter restates certain aspects of the project.

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

B-5 The commenter states that coordination with Caltrans is required for certain traffic modifications.

Comment noted. Coordination with Caltrans will occur before modifications to state highway facilities occur. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

B-6 The commenter states that coordination with Caltrans is required for certain traffic modifications.

Comment noted. Coordination with Caltrans will occur before modifications to state highway facilities occur. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

B-7 The commenter states that coordination with Caltrans is required for certain traffic modifications.

Comment noted. Coordination with Caltrans will occur before modifications to state highway facilities occur. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

B-8 The commenter asks that it be confirmed that no new stormwater would be drained to the State ROW or that such discharge be metered to pre-construction levels.

The Project's stormwater effects are analyzed in Section X of the MND (page 72 et seq.).

The Farmstead Project will create a small amount of new impervious surface, resulting in a small increase in stormwater runoff that could potentially contain pollutants. However, the new impervious area is a small enough area (less than 1,300 square feet) that the reduced infiltration of stormwater is not anticipated to substantially affect groundwater recharge, and thus will have Less Than Significant impact on groundwater recharge. Specifically, the Farmstead Project will fall below 5,000 square feet of impervious surface, and thus is below the impact threshold in the BASMAA Post-Construction Manual that

2.0 COMMENTS AND RESPONSES TO COMMENTS

triggers requirements for improving water quality of stormwater runoff, and therefore can be evaluated to have less than significant impact.

The Lodging Project will construct a new storm drain system. Stormwater runoff will be conveyed to facilities like raingardens, landscaped self-retaining areas, and permeable pavement to encourage infiltration. Stormwater runoff that does not infiltrate on site will primarily be collected in storm drainpipes that will connect to a new storm drain line in Mills Lane per the Highway 29 Specific Plan and City of St. Helena Storm Drain Master Plan that will discharge into the Napa River.

The project's civil design team prepared a Hydrology Analysis, included as Attachment I, which demonstrates that the proposed project improvements will not increase the 10-year runoff volume above the pre-development 10-year runoff volume by utilizing the storage volume provided in the on-site raingardens.

As the proposed project will not increase the 10-year runoff volume the alteration of the existing drainage pattern of the site will have less than significant impact on erosion or siltation.

Per the discussion in X(c), the Lodging Project will substantially alter the existing drainage pattern of the site. However, per the Hydrology Analysis, the proposed project improvements will not increase the 10-year runoff volume above the pre-development 10-year runoff volume. In addition, the proposed project will reduce the amount of surface conveyance of stormwater runoff, as most of the runoff will be conveyed in storm drain pipes rather than sheet flowing on the surface. All storm drain conveyances will be designed to be capable of collecting and conveying runoff generated by a 10-year flood.

By ensuring that the proposed project does not increase the 10-year runoff volume above the pre-development 10-year runoff volume and sizing all storm drain conveyances to be capable of collecting and conveying runoff generated by a 10-year flood, the project will have less than significant impact with mitigation incorporated on flooding.

Per the discussion in X(c-d), the Lodging Project will not increase the 10-year runoff volume above the pre-development runoff volume and proposed stormwater drainage conveyances will be designed to have sufficient capacity to convey the runoff generated by a 10-year food. Per the Highway 29 Specific Plan and the Storm Drain Master Plan, the new storm drain in Mills Lane is a planned storm drainage system and will be designed to have capacity for the runoff from the Lodging Project.

As described in the discussion in X(a) above, the Lodging Project will comply with the requirements of the BASMAA Post-Construction Manual to ensure that stormwater runoff from impervious surfaces will be treated to improve water quality. Therefore, the project will not contribute runoff water which will exceed the capacity of the planned storm drainage system and will not provide additional sources of polluted runoff. Thus, the project will have less than significant impact with mitigation incorporated.

B-9 The commenter asks for clarification on where stormwater not directed to the 36" culvert would be directed.

2.0 COMMENTS AND RESPONSES TO COMMENTS

See Response to Comment B-8. Stormwater runoff that does not infiltrate on site will be collected in storm drainpipes that will connect to a new storm drain line in Mills Lane per the Highway 29 Specific Plan and City of St. Helena Storm Drain Master Plan that will discharge into the Napa River.

B-10 The commenter asks for an analysis for a 25-year rainfall event if any of the stormwater runoff drains to the state ROW.

See Response to Comment B-8. The MND demonstrates that stormwater runoff that does not infiltrate on site will be collected in storm drainpipes that will connect to a new storm drain line in Mills Lane per the Highway 29 Specific Plan and City of St. Helena Storm Drain Master Plan that will discharge into the Napa River.

B-11 The commenter requests that project-generated travel demand be identified, along with the costs of transit and active transportation improvements necessitated by the project. The comment also requests that viable funding sources and/or impact fees be identified.

Please see Master Response on Traffic. The comment does not provide any substantial evidence that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels.

B-12 The commenter asks that all project impacts to the state transportation network be mitigated.

Please see Master Response on Traffic. The comment does not provide any substantial evidence that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels.

B-13 The commenter states that any work that encroaches on the ROW requires an encroachment permit.

Comment noted. The project will be required to comply with the law. Any work in the state ROW will obtain an encroachment permit. This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

B-14 The commenter includes closing statements.

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter C – Napa County



A Tradition of Stewardship
A Commitment to Service

Comment Letter C

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

David Morrison
Director

June 29, 2020

Aaron Hecock, AICP
City of St. Helena
1572 Railroad Avenue
St. Helena, CA 94574

RE: **Farmstead at Long Meadow Ranch Restaurant and Lodging Projects**
Comment Letter on Draft Mitigated Negative Declaration

Dear Mr. Hecock;

Thank you for providing Napa County an opportunity to comment on the Draft Mitigated Negative Declaration (DMND) for the proposed Farmstead at Long Meadow Ranch Restaurant and Lodging Projects. Napa County requests consideration of the following items:

C-1

1. Regional Traffic Generation – The project traffic study does not appear to evaluate the project's potential to contribute significantly to traffic conditions on the arterial roads located outside of the City of St. Helena, and which most project patrons and employees will depend upon to access the subject property. It is requested that the project's potential to contribute significantly to regional roadway traffic conditions be considered, and that conditions of approval and/or mitigation measures be applied to ensure the project contributes a fair share toward regional roadway network improvements.

C-2

2. Affordable Housing – The DMND states that project approvals will include a Development Agreement "covering" affordable housing, but there is no explanation of the extent or form of the affordable housing that will result from the Development Agreement. Napa County supports the development of affordable housing concurrent with the construction of the project. It is requested that the terms of the Development Agreement's affordable housing measures be disclosed and evaluated for their effectiveness in reducing the project's potential to result in significant impacts to housing supply.

C-3

Planning Division (707) 253-4417	Building Division (707) 253-4417	Engineering & Conservation (707) 253-4417	Environmental Health (707) 253-4471	Parks & Open Space (707) 259-5933
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2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter C

Farmstead at Long Meadow Ranch Projects
June 29, 2020
Page 2 of 2

Napa County thanks you for providing an opportunity to review and comment on the DMND. If you should have any questions regarding of the items listed above, please feel free to contact John McDowell at 707-299-1354, or john.mcdowell@countyofnapa.org. C-4

Sincerely,

John McDowell, for

David Morrison
Director of Planning Building and Environmental Services

cc: Napa County Board of Supervisors
Minh C. Tran, County Executive Officer

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter C – Napa County

C-1 The commenter asserts that

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

C-2 The commenter requests that the project's impact on regional roadways be disclosed.

Please see Master Response on Traffic. The traffic analysis considered all intersections and roadways where a potentially significant impact would occur. As explained in the MND, all potentially significant roadway effects by the Project will be mitigated to a less than significant level.

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

C-3 The commenter requests that the project's impacts on housing supply be disclosed.

Please see Master Response on Housing.

C-4 The commenter states that they thank the City for providing an opportunity to review and comment on the Draft MND.

This is not a comment on the adequacy of the CEQA analysis. No response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter D – Thomas W. Allen

Comment Letter D

Aaron Hecock

From: tallen@northbaymgt.com
Sent: Monday, June 29, 2020 12:10 PM
To: Aaron Hecock
Subject: [External] Public Comment on Farmstead at Long Meadow Ranch Projects Initial Study/Mitigated Negative Declaration - May 29, 2010

Mr. Hecock -

Having reviewed the above mentioned report, in response to the City's request for public comment, I write to enthusiastically endorse and support the project largely as proposed by the Hall family as described in the IS/MND, and believe that the plans to date appropriately and adequately address environmental concerns. | D-1

I trust the Hall family, as evidenced by their significant contribution to the livelihood of the town of St. Helena so far, to do what is right to build in appropriate environmental protections as required by law and responsible stewardship. | D-2

Further, I believe we have two exceptional attorneys on the City Council -- Paul Dohring and Mary Koberstein - who are exceptionally well qualified to lead negotiations with the Hall family to develop a project that will bring immense benefits to the St. Helena community while being environmentally responsible. | D-3


Thomas W. Allen
 1703 Madrona Avenue
 St. Helena, CA 94574
 Mobile 415-990-0240
tallen@northbaymgt.com

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter D – Thomas W. Allen

D-1 to D-3 The commenter expresses support for the project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter E – Brittany Anderson

Comment Letter E

Cindy Tzafopoulos

From: Brittany Payton <britt@mtgawines.com>
Sent: Wednesday, July 8, 2020 3:47 PM
To: Public Comment
Subject: Fwd: [External] LMR Project

Follow Up Flag: Follow up
Flag Status: Flagged

Sent from my iPhone

Begin forwarded message:

From: Brittany Anderson <britt@mtgawines.com>
Date: June 27, 2020 at 11:16:39 AM PDT
To: citycouncil@cityofstheleena.org
Subject: LMR Project

Greetings!

I hope this email finds you well. I wanted to voice my support for LMR's lodging plan that would turn the Grayson/29 intersection to a 4-way light. I have lived here in St. Helena for 15 years - moving when I was fresh out of college and now a business owner & proud resident.

E-1

The main reason that I am in support of this project is that I would LOVE to see St. Helena become "Napa Valley's Main Street" once again. For years that was our motto, but competition has increased as Yountville, Calistoga and downtown Napa have undergone huge changes causing that to no longer be the case. Our current lack of visitation to St. Helena has had an awful impact on downtown business which has only been exacerbated by the recent lockdowns and quarantines due to COVID-19.

E-2

If I remember correctly our town still has the fewest rooms available for visitors in the entire valley, or very close to it. Without enough nearby lodging St. Helena seems to have become more of a pass-through town rather than a place where our booming tourist industry can take root. With more guests and rooms being booked we will no doubt see more tax revenue from LMR's propose lodging and from dollars spent downtown which would allow for more improvements and long-term gains for our community. Between this site, as well as some of rumblings for the Adam's Street location (though I am far less familiar with those discussions), I truly believe that this could be an amazing boon to our local business and create a much livelier, enjoyable atmosphere not just for visitors to the valley but for locals as well.

E-3

I really hope that we continue to grow and progress as a community. I believe that giving guests to our amazing valley more reasons to stay, eat and shop in St. Helena is to our benefit and will allow us to do both of those things in the years to come.

E-4

I think we can only benefit from growth in our town - I would hate to see us become just a pass through on their way to other local cities.

E-5

Thank you!

1

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter E

--
Brittany Anderson | HBIC
MTGA Wines
Cell: 775.544.5376
www.mtgawines.com

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter E – Brittany Anderson

E-1 to E-5 The commenter expresses support for the project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter F – Iris Barrie

Comment Letter F

Aaron Hecock

From: Iris Barrie <barrie001@comcast.net>
Sent: Monday, June 29, 2020 4:37 PM
To: Aaron Hecock
Subject: [External] Farmstead hotel project

To: Aaron Hecock, Senior Planner

Geoff Ellsworth, Mayor

Mark Prestwich, City Manager

Maya De Rosa, P&B Director

Members of City Council and Planning Commission

Re: Comments to St. Helena City Council and Planning Staff regarding Farmstead hotel project

Thank you for taking the time to read and analyze my input about Ted Hall's potential hotel/event center project adjacent to his restaurant and encompassing a large parcel along Mills Lane in St. Helena.

F-1

I have several concerns herein: (1) It is an inescapable fact that this project will have significant negative impacts on the environment and the idea that a Mitigated Negative Declaration is proposed by the city's planning staff is outlandish and totally inappropriate. The City requires that all developments must be "water neutral," which of course must be analyzed through creation of an Environmental Impact Report (EIR). In my reading of the development proposed, it appears that "smoke and mirrors" are used to show that it will be water neutral. By utilizing disclaimers like low flow toilets and shower heads are used in the hotel rooms, the project claims the water savings somehow equate to abate the overall water use. Does this mean no increase in water usage? Obviously not. The surrounding area has been farmed in wine grapes for 40 decades. In preliminary inquiries with nearby well owners, the ground water table must be at risk. A homeowner on nearby Dowdell Ln. just had their well run dry because a neighbor drilled a 300' well. This certainly does not bode well for the water table. St. Helena just entered a Phase 1 water emergency. The water supply from Bell Canyon, the wells upon which St. Helena depends and the 600 acre feet purchased from Napa is tenuous at best. The cumulative impacts must be analyzed through an EIR. Clearly a qualified hydrologist must be brought into this study.

F-2

(2) An EIR must be requested, also, because of the traffic that will be generated. In the St. Helena Star article, it states "Hall doesn't even use the word "hotel" He says it would merely add a lodging component to the existing Farmstead at Long Meadow Ranch property." This is on the surface true. But what is most significant is that this will be primarily an event center, catering to weddings, large conventions and large parties. One can't blame Mr. Hall for wanting to expand his influence in St. Helena, but it should not be at the expense of the citizens. There will obviously be increases in traffic, and noise/lights pollution. All this creates a negative effect on the environment and must be analyzed through an EIR. It is already a fact that the service workers at the already-established-restaurant cannot afford to live in St. Helena. A hotel/event center with 65 guest rooms will require around 200 employees. They will live elsewhere and commute in and out of the area. This equates to increased traffic and increased pollution. An EIR will tell us what we need to know about the obvious negative effects.

F-3

1

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter F

(3) Mr. Hall's timing of this project couldn't come at a better time. The City of St. Helena is a crossroads, politically and environmentally. Discussions are currently on-going to determine if its residents want more development and therefore more profits from tax, which some believe can only be achieved through hotel (s) development. Will St. Helena take the tourism-central focus as Calistoga and Yountville or diversify the economy and keep it focused on its agricultural heritage and small town atmosphere? It seems apparent then, that all potential developments in St. Helena be thoroughly analyzed through a demand for an EIR. Only then will the residents fully understand the huge potential impacts of event centers like this Long Meadow Ranch property.

F-4

(4) The City Council of St. Helena recently signed a Proclamation/Resolution that all developments would be analyzed to ensure all will be carbon neutral. In other words, with the climate crisis in which we find our planet, our city planners are required to mandate that this and all projects not increase our carbon footprint and we will bring this municipality into compliance with the movement towards becoming carbon neutral by 2030. Can this be done in a hotel/event center project? In my humble opinion, not the way this one is now designed. Will the city live up to its goals? Not with a mitigated negative declaration in lieu of a full EIR.

F-5

Protect the rights of St. Helena's residents. Protect the water supply, protect us from environmental degradation. Please mandate an EIR and let's inform the folks that love living here what's at stake.

F-6

I live in Napa. But what is built in St. Helena effects the entire valley's water supply.

F-7

Regards,

Iris Barrie

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter F – Iris Barrie

F-1 The commenter expresses thanks for the opportunity to comment.

This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

F-2 The commenter states that an EIR must be prepared because of the project's water usage and impacts on water supply and groundwater.

Please see the Master Response on Preparation of an MND and Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

F-3 The commenter states that an EIR must be prepared because of impacts from traffic, noise and light pollution, and employees commuting to the site.

Please see the Master Response on Preparation of an MND and Master Response on Traffic.

The MND fully analyzes the Project's potential noise and light impacts in Sections XIII and I(d). Impacts were determined to be less than significant.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

F-4 The commenter states that an EIR must be prepared to understand the project's full impacts and evaluate whether residents want more development and tourism or keep the City focused on its agricultural heritage and small town atmosphere.

Please see the Master Response on Preparation of an MND. Further, under CEQA, economic or social effects of a project are not treated as significant effects on the environment. (State CEQA Guidelines Section 15131.) CEQA is not an economic protection statute. (*Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, 903, citing *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 157 Cal.App.4th 1184, 1205 [CEQA is "not a fair competition statutory scheme" and "[t]herefore, the economic and social effects of proposed projects are outside CEQA's purview."].) Further, "A social or economic change by itself shall not be considered a significant effect on the environment." (State CEQA Guidelines, 15382.) The focus of CEQA is on physical changes in the environment.

The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

F-5 The commenter states that an EIR must be prepared to evaluate whether the project will be carbon neutral.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Please see the Master Response on Preparation of an MND. The Project's impacts on climate change are fully analyzed in Section VIII. All impacts were determined to be less than significant. It is unclear what policy the commenter references that would require all projects be carbon neutral. There is no binding City requirement that all project be carbon neutral. The Project will be consistent with all applicable City and State requirements.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

F-6 The commenter states that an EIR must be prepared to protect the water supply and avoid environmental degradation.

See responses to comments F-2 through F-5.

F-7 The commenter states that she resides in Napa, but opines that what happens in St. Helena affects the entire valley's water supply.

See response to comment F-2.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter G – Tom and Margot Belt

Comment Letter G

July 8, 2020

From: Tom and Margot Belt (tmbelt@comcast.net)

To: St. Helena City Council Members

Subject: Public Comment Regarding Farmstead Lodging Informational Presentation

Dear St. Helena City Council Members,

I am writing to object to the proposed Farmstead Lodging project as it has been submitted. Mr. Hall, the project's creator, claims his proposal: "Is right for our community and its values." I disagree for the following reason.

G-1

In the past ten years, California has sustained its most severe drought period in the State's history. St. Helena's City Council has imposed water restrictions three times in the last six years with the most recent restriction approved on July 1, 2020. City council imposed its latest restriction as a warning to remind our community that we need to, once again employ additional water conservation practices or be subject to greater restrictions later in the year. If Phase Two water restrictions are approved, occupants of single-family homes will be allotted 65 gallons per day per occupant.

G-2

Mr. Hall's proposed lodging concept includes 65 lodging rooms, two swimming pools, a fitness center, spa, and a multipurpose building consisting of a demonstration kitchen, customary kitchen, bar, and breakfast room. According to consultants, the entire facility will only use 1.8 million gallons per year. However, it's doubtful this estimate is realistic. The figures beg the question: how many customers, paying more than \$900 a night for lodging, will be mindful of the number of showers or toilet flushes made in a day?

G-3

My question to Mr. Hall and to our city council is; where is the additional water going to come from to support this project? Hundreds of low-flow shower heads, faucets, and toilets will still use a large quantity of water. In consideration of our city's limited water supply, Mr. Hall's project will use more water than we can afford to share. And, as things currently stand, the only way to provide Mr. Hall the water he is seeking is to require current water customers to use less.

G-4

I understand our city is in search for more revenue to provide the services we want and need. I just want our city leaders to concurrently find ways to provide the water for new developments as they arise, rather than expect the rest of us to use less.

G-5

Respectfully,

Tom and Margot Belt

1520 Hillview Place, St Helena

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter G – Tom and Margot Belt

G-1 The commenters state that they do not believe the Project is right for the community.

The commenters' opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

G-2 The commenter recounts some water restrictions that have occurred recently.

This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

G-3 The commenter expresses doubt that the lodging facility will only use 1.8 million gallons per year.

Please see the Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

G-4 The commenter questions how the project's water needs will be met.

Please see the Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

G-5 The commenter states that he would like City leaders to find ways to provide the water for new developments as they arise, rather than expect existing users to use less water.

The comment will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter H – George Caloyannidis

Comment Letter H

George Caloyannidis
2202 Diamond Mountain Road
Calistoga, CA 94515

July 12, 2020

COMMENTS ON THE PROPOSED FARMSTEAD HOTEL

ADMINISTRATIVE PROCESS:

The time between the applicant's project presentation (July 15, 2020) and the window for public comment in addition to the difficulty in accessing the full underlying documents has been inadequate. The Governor's order that during the time of the pandemic, necessary public business may be conducted remotely, has resulted in dismal public participation both in St. Helena and Napa County. The City has not made the case that this particular project which will have a major impact on its future is urgent or necessary at this time.

H-1

GENERAL COMMENT:

If the City were to approve one hotel, it would be the one at Farmstead, because a major part of the infrastructure is already in place. The current virus pandemic with many more to come due to globalization (according to the Smithsonian there are some 850,000 unexamined viruses around) forces us to recognize the need towards a more diversified economy. However, part of such an economy can be developed around symposia which require appropriate venues. A hotel which provides them is worth consideration. On the negative side of this project are a number of major unresolved issues.

H-2

NUMBER OF EMPLOYEES:

The accepted employee number for luxury hotels is 2 to 2½ per room. At almost \$1,000 per night average room rates, this hotel belongs in this category. The above ratio also formed the basis for the EIR review for the Four Seasons and Calistoga Hills hotels in Calistoga. According to this industry formula, 65 rooms will require 130 – 150 additional employees. The applicant has not provided a detailed accounting on why this hotel deviates so widely from the norm. The employees for the current restaurant operation may not be discounted from the overall count as their number will be more than offset by full and part time employees needed for the multiple additional functions of the proposed operation. I believe that the new employee analysis is not adequate. Each of the proposed functions' full and part time employees (consultants, providers, demonstrators, instructors, wine makers etc.) must be analyzed individually.

H-3

PARKING:

The current parking spaces even for the existing operation are inadequate. On most evenings during the past years, parking demand generated by this facility spills over on to Charter Oak Street with almost no parking left for residents and their guests. Not only is the existing parking inadequate for the current operation but the proposed added functions and events require more on-site parking.

H-4

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter H

LEASED PARKING LOT:

The employee parking lot is leased by the applicant who states that should the lease not be renewed, he will "seek another location". There are four problems with this proposition:

- 1) As per the above, the parking spaces provided for employees is inadequate by a factor of 40 - 50%.
- 2) The specific location of the parking lot which provides a walking option of employees to their place of employment is an integral part of the project's traffic and environmental impacts analysis.
- 3) Any replacement site must provide the same walkability characteristics. Unless such site is identified prior to a project approval, the total project impacts are impossible to evaluate.

H-5

TRAFFIC:

Everyone who uses Hwy 29 through town, has experienced the additional delays generated by the recent traffic light at Grayson. The impacts of this traffic light were never rigorously evaluated at the time in terms of time lost, or on air quality.

In evaluating the impact of the new 4-way over the 3-way traffic light, the traffic study is only required to evaluate additional impacts on to existing conditions, meaning the ones on top of the ones before. There are two service level E conditions (ABL and NBL) and one level F (SBR) at Main Street and Grayson. And a level F (SW) at Main Street and Charter Oak.

Every citizen up and down the Napa Valley including the all-important visitors we are trying to attract, are keenly aware that traffic conditions through St. Helena are frustrating. Any addition to them in the *absence of comprehensive, structural traffic calming measures* discourage rather than encourage visitors to visit the town for a second time.

At a time when all of western Europe is replacing the defunct traffic light model with roundabouts, we are still adding them. In my opinion, *only a roundabout at the Grayson location will solve the traffic congestion both existing and amplified by this hotel.*

It has been commented that the project's location at the south end of town gives it a traffic advantage. Visitors to the Napa Valley do not exclusively arrive from the south. Even so, they venture to the wine country to the north.

H-6

WATER:

Several comments have been made regarding the water shortages St. Helena and the entire Napa Valley. All science-backed indications are that it will get worse for many years in the future.

My comment here addresses the increased water rates.

With no changes in water demand, the water charges for the month of April for our four apartments on Edwards Street (2 studios and 2 one-bedrooms) were \$133.55 in 2015 v. \$409.55 in 2020.

Even so, in 5 short years, while rents at these apartments have increased by 15 - 20%, water rates have increased by 300%. This constitutes a disproportionate level of the total rent for the typical work force tenants. Water rates in St. Helena are in a trajectory of making even the smallest apartments unaffordable to our low-income work force.

H-7

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter H

Any increase in the demand for water increases its cost. A hotel does just that with the higher cost being borne by every resident in St. Helena who essentially subsidizes its operation. H-7

WORK FORCE HOUSING:

The hospitality industry generates the lowest paying jobs in the entire Napa Valley, even lower than those in the wine industry which is second. H-8
The applicant proposes to “substantially fund” work force housing. This vague component of the application is potentially the most serious one.

- 1) Presumably, only a portion of the added work force housing need of approx. 50-70 units the hotel will generate will be funded by it (whatever this number is), the residual balance will generate more commuters. I do not need to elaborate on the associated environmental impact (traffic, air quality, water).
- 2) Just as with the unknown and potentially non-existent alternate work force parking site in St. Helena, the same problem exists for the work force housing location itself.
- 3) We are all aware of how unpopular work force housing in established neighborhoods is. The single best solution has been the Solage hotel in Calistoga where the owners provided the site right adjacent (walkable) to the hotel. All other hotels made a grossly unrealistic monetary contribution towards the high construction costs, never providing a site for it. *The only realistic solution to this generic problem is for such housing to be built on-site.*
- 4) In the absence of an identified site and a realistic monetary contribution the project should not be approved.

H-9

LOCALLY OWNED AND OPERATED:

Much value has been placed on the applicant's high personal standing and credibility in the community. True and correct as this may be, we have seen that Solage, Four Seasons, Calistoga Hills and not least Las Alcobas – every single major such development in both towns – has experienced multiple ownership changes, some almost immediately following completion or shortly thereafter. H-10
The overwhelming evidence is that what today may be locally owned and operated, is highly unlikely to remain so even in the short future.

NEGATIVE DECLARATION:

Both the above referenced large hotel developments in Calistoga, even though they are approx. 50% larger, had the benefit of the far fewer traffic issues and adequate water availability at the time. Nevertheless, they both were evaluated by an EIR. H-11

- We have seen how vulnerable the Las Alcobas hotel's parking situation remains, only temporarily solved by a leased adjacent lot. No one can predict the impacts if such lease becomes unavailable in the future. *It is incumbent upon the City not to repeat the same mistake.* The impact of a provisional work force parking site when its lease becomes unavailable is likely to have substantial and unexamined environmental impacts.
- The traffic impacts - more impactful than in Calistoga's environment - have not been fully evaluated. Even at that, the EIR of Calistoga Hills determined that its impact on the intersection of Hwy 29 and Main Street (Lincoln Avenue) was impossible to mitigate. Only an EIR identified this problem.

H-12

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter H

- The city-wide impact of the project's additional water demand and associated escalating cost as it specifically affects low wage earners and housing affordability has not been fully addressed.
- The unspecified extent of the applicant's monetary contribution to the creation of affordable housing is too vague in order to evaluate its potentially significant environmental impact.

H-12

ADDITIONAL EIR BENEFIT:

In addition to the above benefits an EIR review mandates the consideration of alternative projects. For example, the possibility of providing 15 or so work force housing units on site. The possibility of creating additional space by having a mix of one and two-story guest units.

H-13

CLOSING COMMENT:

In view of the above considerations, I believe an EIR is required so that the citizens of St. Helena become fully aware of the true impacts and associated mitigations of this project.

Three of the unresolved issues highlighted above should be considered within the specific potentially available sites in St. Helena so that the project is reviewed in its complete iteration. At this time though closely interrelated, major portions of the project once again summarized below, and their potential environmental impacts are unknown due to the vagueness of the application.

H-14

- An alternative site for the fragile relationship between the long-term availability of the leased employee parking has not been identified - nor is it likely to be - in ways which duplicate the characteristics of the proposed site, precipitating in new unexamined impacts of its own.
- The size of the on-site as well as of the employee parking is inadequate.
- The same applies to the vagueness of both the monetary contribution toward affordable housing and the availability of an available site, also with unexamined impacts of their own.
- Both these vague components have the potential to fundamentally influence the findings of the traffic study and other environmental impacts.
- The impacts introduced by a 4-way intersection of Main Street and Grayson, with the 4th leg adding substantial new traffic, especially one which is not continuous but very heavy at times - time windows which themselves remain unidentified. Such impacts in the context of both residents', drive-through business traffic, likely negative visitor experience, let alone air quality have not been evaluated.

H-15

In considering the impacts of the Calistoga Hills (and Four Seasons) hotel, the city of Calistoga had ordered an EIR which among other findings, identified that the traffic impact at the Hwy 29 and Main Street (Lincoln Avenue) intersection was *unmitigatable*. It approved this hotel anyway citing "overriding considerations". To its credit, it placed both hotels on the ballot and the citizens approved them *fully cognizant of the impacts*. At this point this is not the case with this project. *Being fully cognizant of the impacts of this project, is something the citizens of St. Helena deserve as well. Only an EIR will identify them.*

H-16

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter H – George Caloyannidis

H-1 The commenter states that this project is not urgent insinuates that more time for public comment is warranted.

The City has complied with all public notice and participation requirements, and even done more than required. The City has made substantial efforts to ensure the public has all necessary information regarding the Project and an opportunity to comment and participate. Notice of the Project and an invitation to attend an informational presentation sent to all property owners/residents within 300 feet sent out November 17, 2016. A neighborhood meeting was held to introduce the project and answer questions on December 7, 2016. The MND was prepared and posted on the City's website. Comments were accepted between May 29, 2020 and June 29, 2020. Further, an informational presentation and public comment opportunity was held at a noticed City Council meeting on July 14, 2020.

The comment does not note any errors in the City's CEQA process. No further response is required.

H-2 The commenter states that the site makes the most sense for a hotel, but that there are unresolved issues.

The comment will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

H-3 The commenter states that the estimated number of employees is incorrect based on other hotels.

See Master Response on Housing.

H-4 The commenter states that the number of parking spaces is inadequate.

Please see Master Response on Parking. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-5 The commenter states that parking situation for employees of the Project is inadequate.

Please see Master Response on Parking. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-6 The commenter states that the Project will make traffic congestion worse unless there are traffic calming measures and a roundabout at the Grayson location.

Please see the Master Response on Traffic. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

2.0 COMMENTS AND RESPONSES TO COMMENTS

H-7 The commenter expresses concern about water rates and states that the increase in demand from the Project will be borne by residents.

Please see the Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-8 The commenter expresses concern over the need for work force housing.

Please see the Master Response on Housing. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-9 The commenter expresses concern over the need for work force housing and suggests there be an identified site and realistic monetary contribution before the Project is approved.

Please see the Master Response on Housing. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-10 The commenter states that it is unlikely the Project will remain locally-owned over the long-term.

This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

H-11 The commenter references other hotel projects that involved preparation of an EIR.

Please see the Master Response on Preparation of an MND. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-12 The commenter expresses concern with the Project's parking and traffic impacts and states that only an EIR can identify those problems. The commenter also expresses concern with water demand and affordable housing.

Please see the Master Response on Preparation of an MND, Master Response on Traffic, Master Response on Water, Master Response on Parking, and Master Response on Housing.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to

2.0 COMMENTS AND RESPONSES TO COMMENTS

reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-13 The commenter states that an EIR should be prepared to analyze alternatives to the Project, including adding housing on the site.

Please see the Master Response on Preparation of an MND and Master Response on Housing.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-14 The commenter reiterates that an EIR should be prepared to make the public fully aware of the Project's environmental impacts. The commenter restates concerns raised elsewhere in the letter about parking, housing affordability, and traffic.

See Response to Comment H-12.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-15 This is a continuation of Comment H-14.

See Response to Comment H-14.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

H-16 The commenter states that only an EIR can make the citizens of St. Helena fully cognizant of the Project's impacts.

See Response to Comment H-12.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter I – Christopher Cole

Comment Letter I

From: ckcole@comcast.net <ckcole@comcast.net>
Sent: Monday, June 29, 2020 9:16 PM
To: Public Comment <publiccomment@cityofstheleena.org>
Subject: [External] Public Comment: Farmstead at Long Meadow Ranch Hotel

I request that this comment be read out loud at the public meeting.

Re: Farmstead at Long Meadow Ranch Hotel

This is not the project for St. Helena, for one simple reason: zero workforce housing.

I-1

This project will further contribute to the erosion of our once vibrant community by creating service jobs that will be filled by a commuting work force. This project is an extension of the problem that is killing our schools with declining enrollment, creating a community of soulless second homes and devastating our local serving businesses. We are all familiar with the problem, so let those at fault contribute to the solution.

I-2

"Substantial funds" will be contributed with the impact fees. This is a familiar song, with no one dancing. Here are two solutions:

1. For 65 employees, provide workforce housing on-site for 20. This would take 1/3 of the daily traffic off the road and bring some measure of vitality back to the City. This is not a deal killer. This is called fair employment.
2. Pay every employee a living wage. Please use your standards for this calculation. Perhaps \$50,000 annually could allow a working couple to live nearby? This would be an easy audit for the city, done annually each February. For the developer, this means starting with the salaries and making an adjustment to the \$967 daily rate.

I-3

Staff Reports always look at water scarcity, the treatment plant, traffic, failing tourist based storefronts, escalating city operating budgets and the like. Please look at the deeper challenges that face St. Helena. If our schools, local businesses and local service organizations collapse, there is nothing left. There will be no reason to visit.

I-4

Please consider one of the suggested options, or perhaps something even more tangible, before approving this project. The Conditions of Approval should support the vitality of this City.

I-5

Thank you,

Christopher Cole
 St. Helena
ckcole@comcast.net

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter I – Christopher Cole

- I-1 The commenter asserts that this is not the Project for St. Helena because it lacks workforce housing.**

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

- I-2 The commenter states that the Project will result in more service jobs, declining enrollment, and hurt local businesses.**

The commenter's opinion will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

- I-3 The commenter states that the Project should include workforce housing and pay employees a living wage.**

Please see the Master Response on Housing. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

The commenter's opinion will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

- I-4 The commenter requests that the staff report consider changes facing schools, local businesses and local service organizations.**

Under CEQA, economic or social effects of a project are not treated as significant effects on the environment. (State CEQA Guidelines Section 15131.) CEQA is not an economic protection statute. (*Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, 903, citing *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 157 Cal.App.4th 1184, 1205 [CEQA is "not a fair competition statutory scheme" and "[t]herefore, the economic and social effects of proposed projects are outside CEQA's purview."].) Further, "A social or economic change by itself shall not be considered a significant effect on the environment." (State CEQA Guidelines, 15382.) The focus of CEQA is on physical changes in the environment.

The commenter's opinion will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

- I-5 The commenter restates concerns raised earlier in the letter and suggests that the Project's Conditions of Approval support the vitality of the City.**

See previous responses to commenter's concerns. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter J – Nicole and Scott Dale

Comment Letter J

Cindy Tzafopoulos

From: Nicole Dale <nicole.garriott@gmail.com>
Sent: Tuesday, July 7, 2020 8:43 PM
To: Anna Chouteau; Public Comment
Cc: Scott Dale
Subject: Re: [External] Long Meadow Ranch Hotel Project

Hi Anna,

I see our comment is not included in the 7/14 agenda item 6.1 (<https://sthelena.civicweb.net/Portal/MeetingInformation.aspx?Org=Cal&id=558>). Can we request that it be added? Apologies if I should have included the 'publiccomment@cityofsthelena.org' email address to begin with.

Best Regards,
 Nicole and Scott Dale

On Sat, Jun 27, 2020 at 2:15 AM Anna Chouteau <AChouteau@cityofsthelena.org> wrote:
 ?Thank you, Nicole and Scott, ?

Good to know your thoughts.

Best regards,

Anna

Anna Chouteau
 St. Helena City Councilmember
 C: 707-968-1865
www.cityofsthelena.org<<http://www.cityofsthelena.org>>

During COVID-19: Be safe, wear a mask & stay 6 feet apart

From: Nicole Dale <nicole.garriott@gmail.com>
 Sent: Friday, June 26, 2020 4:12 PM
 To: CityCouncil
 Cc: Scott Dale
 Subject: [External] Long Meadow Ranch Hotel Project

Dear St. Helena City Council,

We are writing in support of the proposed Long Meadow Ranch hotel project.

I have lived in St. Helena for 8 years and my husband grew up here. Not much has changed in town since I have lived here and we see all of the other towns in the valley growing and prospering, while St. Helena lags behind. We are aware that "no change" is a sentiment of others that live here but are afraid to see more businesses close and our town suffer financially.

J-1

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter J

We also are lucky enough to have an STR permit and submit TOT tax to the city. While we are happy to be able to contribute, our Airbnb of course is a very small fraction of what the tax revenue the proposed hotel would bring in. It is not a big enough hotel to add much traffic to town and it will greatly improve the aesthetics while driving into town. Of course, it would also bring much needed business to all of the hotels, tasting rooms, and shops. J-2

Thank you for allowing us to comment.

Best Regards,
Nicole and Scott Dale
1326 Monte Vista Avenue
707-287-5417

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter J – Nicole and Scott Dale

J-1 and J-2 **The commenters express support for the Project.**

The commenters' opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter K – Patricia Damery

Comment Letter K

From: Patricia Damery <pdamery@patriciadamery.com>
 Sent: Monday, June 29, 2020 3:12 PM
 To: Public Comment <publiccomment@cityofstheleena.org>
 Subject: [External] Comment to Commission: Agenda item: Farmsted

Dear Commissioners,

I understand that Ted Hall has applied to expand his Farmsted to include 65 lodging rooms. This is at the same time that St. Helena is in a Stage One Water Emergency. | K-1

It seems crazy to add more development, and particularly hotel rooms, at the same time that St. Helena homes and businesses are being restricted on water use. I understand that we may well be entering a period of more drought. Under these circumstances, it seems the water security of our residences and businesses needs to come first and that expansion needs to be put on hold. | K-2

I urge you to deny this expansion. | K-3

Patricia Damery

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter K – Patricia Damery

K-1 to K-3 The commenter states that the Project should be denied because there is a Stage One Water Emergency and the needs of existing residences and businesses should come before any expansion occurs

Please see the Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter L – George and Kimberly David

Comment Letter L

July 10, 2020

TO: City of Saint Helena City Council and Planning Commission Members

FROM: George and Kimberly David

RE: Approval of Farmstead Request to Add a 65 Room Inn

Dear Council and Commission Members

We urge you to support and approve the application submitted by the Hall family to add a 65-room hotel and related amenities.

L-1

The Hall's have proven that they are very capable operators in bringing the highly successful and community-oriented Farmstead complex to Saint Helena. We are fortunate to have Farmstead which is without a doubt our most popular and busiest restaurant and a focal point for the younger generations of St. Helenin's'.

L-2

The adjacent Inn is a natural extension of the existing facilities and will enhance the tourism experience while contributing very substantial TOT and Tax revenue to the City. As a result of using present employees to provide services the total number of employees added for the Inn will be significantly reduced and will require substantially less housing than a comparable property not benefitting from the existing Farmstead. The expanded complex will bring something special to St. Helena in a form that presently does not exist.

L-3

The agricultural and farming elements and the Farm to Table experience and hands on participation will allow children of all ages to experience what was once common in Saint Helena – an agricultural property - but with an ecologic focus.

L-4



George and Kim David

451 Pope Street

Saint Helena CA 94574

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter L – George and Kimberly David

L-1 to L-4 The commenters express support for the Project

The commenters' opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter M – Elaine de Man

Comment Letter M

Aaron Hecock

From: Elaine de Man <elainede@sbcglobal.net>
Sent: Monday, June 29, 2020 4:46 PM
To: Aaron Hecock; Mark Prestwich; Geoff Ellsworth; Maya DeRosa
Subject: [External] Farmstead Resort Project & Expansion of Existing Operations

To: Aaron Hecock, Senior Planner

Geoff Ellsworth, Mayor

Mark Prestwich, City Manager

Maya De Rosa, P&B Director

Members of City Council and Planning Commission

Comments regarding Farmstead Hotel Project

There are a number of provisions in this proposal that are compelling, particularly as they incorporate some elements of a farming enterprise. And I understand the allure of the potential for increased revenues this project might bring to the city's coffers in terms of TOT and sales tax. However, none of this can outweigh the potential threat this project poses to the water security of every resident, existing business, and water customer in St. Helena. M-1

Good grief! In light of the current levels of Bell Canyon Reservoir and the prospect of more years of drought and climate change, the city has just imposed the Phase 1 water rationing on all its water customers. Consequently, it seems unconscionable to even consider a project that would put even more pressure on our existing water supplies. And even though there are certain water conservation efforts in this proposal, the very language seems somewhat ambiguous and a little misleading. M-2

For example, the proposed "in-lieu retrofit fees" may provide some tiny temporary monetary relief to the city, but it will not replace the water this new project will use. The proposed "in-lieu retrofit fees," assumes water savings based on retrofitting existing fixtures, but there are no existing fixtures! To base any kind of "mitigation" on that is just screwy. M-3

On top of that, no amount of retrofit fees will achieve a savings of 5,148 gallons of water a day unless the project actually replaces the 5,148 gallons a day it's going to use with 5,148 gallons of water. M-4

I also suspect that the calculation of 5,148 gallons of water a day for the resort is on the low side, as there doesn't seem to be any mention of replacing the water that will evaporate from the two proposed swimming pools...unless it is to come from the wells on the property, in which case there will be a groundwater impact. In any case, and even though the pools will, according to the proposal, initially be filled with water from outside of St. Helena, a M-5

1

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter M

swimming pool evaporates at a rate of ¼ inch per day, assuming it is not terribly hot or windy, no one is plashing in the pool and there are no bodies entering or leaving the pool, in which cases the ¼ inch per day number goes up. No dimensions for the two pools seem to have been given, but, for reference, a single 10 X 30 foot swimming pool loses at least 47 gallons of water a day to the atmosphere.

M-5

The water report also calculates an amount of water for “cooling water usage,” at 681 gallons per day. However, the data used to arrive at the number of days water would be needed for cooling is based on an average for climate data collected between 1931 & 2006. Given the current climate crisis and increasing global temperatures, this number cannot reflect the current situation or that going into the future. There will be much more “cooling water usage” than assumed in this report.

M-6

There will presumably be some accommodations made for workforce housing associated with this project. And while this proposal accounts for employee water use while the employees are at work, there is no mention of the increased impact the additional housing for these employees and their families will have on our current water supply or how that will be mitigated by this project.

M-7

And while there is an entire report dedicated to the increased water use that will be imposed by the new resort, there is no discussion of the increased water use that will result from the increased activity and number of large events at the existing event center, which are significant.

M-8

This increased activity, too, will have an impact on parking in the neighborhood in spite of tour buses and limos (all of which park on Charter Oak) and valet parking.....once the lots are full, the valets do park in the adjoining neighborhoods.

M-9

At this point there are too many unanswered questions for this project to be given a green light. The consequences, particularly in light of the current water emergency, of getting this wrong are just too severe to rush ahead and to not look very, very closely at the all the cumulative impacts. Given the current water emergency, unless the project can supply all the water necessary from its own sources, it should not be allowed to go ahead.

M-10

Elaine de Man
St. Helena, CA 94574

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter M – Elaine de Man

M-1 The commenter states that the Project has benefits but is a threat to water security.

Please see the Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

M-2 The commenter states that the Project will put more pressure on the existing water supply and that the conservation efforts are ambiguous and misleading.

Please see the Master Response on Water. The comment does not explain what is ambiguous or misleading about the proposed water conservation and mitigation efforts.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

M-3 The commenter states that in-lieu retrofit fees assume retrofitting of fixtures that do not exist.

Please see the Master Response on Water. In addition to using water-conserving fixtures as part of the Project, the Developer has agreed as part of the Project to install recycled water piping in Mills Lane at a cost well in excess of the in-lieu fees, which will result in overall water savings well in excess of the water usage of the lodging project once the water recycling program is implemented..

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

M-4 The commenter states that no amount of retrofit will mitigate the Project's water usage.

See Response to Comment M-3.

M-5 The commenter states that the water usage calculation is too low because it does not mention pool evaporation, splashing, or the size of the pools.

See Master Response on Water. See also Response to Comment M-3.

M-6 The commenter states that the water usage calculation is too low because the water needed for cooling will be higher.

See Master Response on Water. See also Response to Comment M-3. The anticipated water need for cooling was based on industry standards for this type of Project and accounted for St. Helena's climate. CEQA does not require analysis of speculative effects.

2.0 COMMENTS AND RESPONSES TO COMMENTS

M-7 The commenter states that the water usage from additional employees and their families needs to be calculated.

See Response to Comment M-3. See also Master Response on Housing. Employee needs are anticipated to be met by existing workforce in the area, thus, their water needs will not be new impacts.

M-8 The commenter states that the increased water usage at the new events center needs to be calculated.

See Response to Comment M-3. The water needs for the entire Project were calculated and determined to cause a less than significant impact on the environment.

M-9 The commenter asserts that there will be an impact on parking in adjoining neighborhoods.

Please see the Master Response on Parking. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

M-10 The commenter states that there are too many unanswered questions regarding water and, unless the Project can supply all water necessary from its own sources, it should not be approved.

See Response to Comment M-3. The commenter's opinion on the Project will be considered by the City's decisionmakers.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter N – Pat Dell

Comment Letter N

June 27, 2020

To Whom It May Concern

The headline of the St. Helena Star this week said that the City seeks input on Farmstead hotel plan. It didn't say exactly who wanted the input so I have asked the City Clerk to send this to Lester Hardy, Chairman of the Planning Commission, Mayor Ellsworth, Vice-Mayor Paul Dohring, all City Council members, the City Manager and Planning Director.

N-1

I have some questions.

1. Who made the decision to allow this project to go forward without an EIR but rather a mitigated negative declaration? This should have been a full blown EIR because of the traffic impacts, housing and water, not to mention parking with is at an absolute premium in that neighborhood.
2. Negotiation between the City and Mr. Hall regarding his contribution to affordable workforce housing should absolutely be totally out in the open. The public deserves to know. I think he should find the land and get an affordable housing developer to build the housing. When he built the restaurant, I asked him at a City Council meeting why he didn't contribute to or buy some housing for his employees. He looked me straight in the eye and said, "because they didn't ask me to." That has caused me to look with some caution at his statements and willingness to provide housing. Why is this information not public?

N-2

N-3

I read some of Mr. Hall's comment with amusement. He knows hotel is a very emotive word in our City right now so he uses "lodging." He knows housing is an important issue so he tried to minimize how much staff is required. It is traditional knowledge that it is 1 employee per key. I am not sure how this can be reduced to 47. Will his current workers have to now do maid service? He quickly skirts around the information about events bringing 2400 people to events. Even with 4 people in a car that is 600 additional cars on our already overcrowded roads.

N-4

I am pleased that he is building an agricultural lodging experience on his property but let's be honest about the impacts. I understand that the downtown is dependent on more tourists and the City is dependent on the sales tax from downtown business. We all want the City to be a success. So, let's bite the bullet and have all the negotiations transparent and above board.

N-5

Pat Dell

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter N – Pat Dell

N-1 The commenter provides background on the comment letter.

This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

N-2 The commenter states that an EIR should have been prepared because there are traffic, housing, water, and parking impacts.

Please see the Master Response on Preparation of an MND, Master Response on Water, Master Response on Traffic, Master Response on Housing, and Master Response on Parking.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

N-3 The commenter states that negotiations over the Project's contribution to affordable housing should be public.

Please see Master Response on Housing. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

N-4 The commenter suggests that the Project's employment numbers are incorrect.

Please see Master Response on Housing and Master Response on Traffic.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

N-5 The commenter states that all negotiations should be transparent.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter O – Nancy Dervin

Comment Letter O

Cindy Tzafopoulos

From: Nancy Dervin <nancydervin@hotmail.com>
Sent: Monday, July 13, 2020 5:33 PM
To: Public Comment
Subject: [External] Public Comment 6.1 Farmstead

July 13, 2020

Farmstead Hotel Project

A project of this magnitude requires a comprehensive EIR. Providing that is done and all identified issues are appropriately mitigated, I support this project 100%.

| O-1

To bypass a complete EIR on the Farmstead project would be negligence on the part of the City.

| O-2

Sincerely,
 Nancy Dervin

Sent from my iPhone

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter O – Nancy Dervin

O-1 and O-2 The commenter states that an EIR should be prepared and that, if an EIR is done and all impacts mitigated, she will support the Project.

Please see the Master Response on Preparation of an MND. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter P – Mike Hackett

Comment Letter P

June 27, 2020

Mike Hackett
282 White Cottage Rd. S
Angwin, Ca. 94508

To: Aaron Hecock, Senior Planner
Geoff Ellsworth, Mayor
Mark Prestwich, City Manager
Maya De Rosa, P&B Director
Members of City Council and Planning Commission

Re: Comments to St. Helena City Council and Planning Staff regarding Farmstead hotel project

Thank you for taking the time to read and analyze my input about Ted Hall's potential hotel/event center project adjacent to his restaurant and encompassing a large parcel along Mills Lane in St. Helena.

P-1

I have several concerns herein: (1) It is an inescapable fact that this project will have significant negative impacts on the environment and the idea that a Mitigated Negative Declaration is proposed by the city's planning staff is outlandish and totally inappropriate. The City requires that all developments must be "water neutral," which of course must be analyzed through creation of an Environmental Impact Report (EIR). In my reading of the development proposed, it appears that "smoke and mirrors" are used to show that it will be water neutral. By utilizing disclaimers like low flow toilets and shower heads are used in the hotel rooms, the project claims the water savings somehow equate to abate the overall water use. Does this mean no increase in water usage? Obviously not. The surrounding area has been farmed in wine grapes for 40 decades. In preliminary inquiries with nearby well owners, the ground water table must be at risk. A homeowner on nearby Dowdell Ln. just had their well run dry because a neighbor drilled a 300' well. This certainly does not bode well for the water table. St. Helena just entered a Phase 1 water emergency. The water supply from Bell Canyon, the wells upon which St Helena depends and the 600 acre feet purchased from Napa is tenuous at best. The cumulative impacts must be analyzed through an EIR. Clearly a qualified hydrologist must be brought into this study.

P-2

(2) An EIR must be requested, also, because of the traffic that will be generated. In the St. Helena Star article, it states "Hall doesn't even use the word "hotel" He says it would merely add a lodging component to the existing Farmstead at Long Meadow Ranch property," This is on the surface true. But what is most significant is that this will be primarily an event center, catering to weddings, large conventions and large parties.

P-3

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter P

One can't blame Mr. Hall for wanting to expand his influence in St. Helena, but it should not be at the expense of the citizens. There will obviously be increases in traffic, and noise/lights pollution. All this creates a negative effect on the environment and must be analyzed through an EIR. It is already a fact that the service workers at the already-established-restaurant cannot afford to live in St. Helena. A hotel/event center with 65 guest rooms will require around 200 employees. They will live elsewhere and commute in and out of the area. This equates to increased traffic and increased pollution. An EIR will tell us what we need to know about the obvious negative effects.

P-4

(3) Mr. Hall's timing of this project couldn't come at a better time. The City of St. Helena is a crossroads, politically and environmentally. Discussions are currently on-going to determine if its residents want more development and therefore more profits from tax, which some believe can only be achieved through hotel (s) development. Will St. Helena take the tourism-central focus as Calistoga and Yountville or diversify the economy and keep it focused on its agricultural heritage and small town atmosphere? It seems apparent then, that all potential developments in St. Helena be thoroughly analyzed through a demand for an EIR. Only then will the residents fully understand the huge potential impacts of event centers like this Long Meadow Ranch property.

P-5

(4) The City Council of St. Helena recently signed a Proclamation/Resolution that all developments would be analyzed to ensure all will be carbon neutral. In other words, with the climate crisis in which we find our planet, our city planners are required to mandate that this and all projects not increase our carbon footprint and we will bring this municipality into compliance with the movement towards becoming carbon neutral by 2030. Can this be done in a hotel/event center project? In my humble opinion, not the way this one is now designed. Will the city live up to its goals? Not with a mitigated negative declaration in lieu of a full EIR.

P-6

Protect the rights of St. Helena's residents. Protect the water supply, protect us from environmental degradation. Please mandate an EIR and let's inform the folks that love living here what's at stake.

P-7

Respectfully submitted,

Mike Hackett

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter P – Mike Hackett

P-1 The comment is introductory.

This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

P-2 The commenter states that an EIR should be prepared because the Project will impact water supply.

Please see Response to Comment F-2.

P-3 The commenter states that an EIR should be prepared to evaluate the Project's traffic impacts.

Please see Response to Comment F-3.

P-4 The commenter states that an EIR should be prepared to analyze the traffic, noise, and light pollution. Additionally, the commenter states that employees will need to commute.

Please see Response to Comment F-3.

P-5 The commenter states that an EIR should be prepared to evaluate which direction the City should go economically.

Please see Response to Comment F-4.

P-6 The commenter questions whether the Project will be carbon neutral.

Please see Response to Comment F-5.

P-7 The commenter asks that an EIR be prepared to protect from environmental degradation.

Please see Response to Comment F-6.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter Q – Duane Hoff

Comment Letter Q

July 14, 2020

Public Comment to the Council

Agenda Item 6.1: Farmstead at Long Meadow Ranch Hotel

I request that this comment be read out loud at the public meeting.

Re: Farmstead at Long Meadow Ranch Hotel

My name is Duane Hoff. My wife and I own Fantesca Estate & Winery on Spring Mountain. We've lived on Spring Mountain for the past 13 years. Both of our children graduated from St. Helena High School. I am the past President of the St. Helena Ag Boosters and the former Chair of the Measure B Committee that raised \$30 Million for new buildings and repairs for the school district in 2011.

Q-1

I wish to speak in support of Ted and Laddie Hall's Long Meadow Ranch Hotel Project.

Q-2

For the city to contemplate a project like this, three fundamental questions must be answered.

Q-3

First, should a hotel project in St. Helena move forward? The city has formed a task force to look into this question and their thoughtful research and response is Yes. No other revenue raising measures would be as effective as adding a hotel. In fact, the recommendation was for more than one hotel to be considered.

Q-4

Second, where should a hotel project be located in town? The site that Long Meadow Ranch would develop is on the south edge of town. Putting a hotel there would be a wonderful sight as we, and visitors, drive into town. The foot traffic from the hotel guests would be a godsend to our St. Helena downtown businesses. There are far too many empty storefronts in St. Helena. This would be a wonderful step towards revitalizing downtown.

Q-5

And finally, Who should be entrusted to create a property that not only is financially successful but serves the needs of the community as well. Ted, Laddie, and their son Chris have shown themselves to be generous and thoughtful members of the community. Ted served with me on the Measure B Committee and as many times before and since, showed himself to be thoughtful and fair. He went to great lengths to listen to input from all sides.

Q-6

The Halls have a tremendous commitment to the land, their employees, and the community.

Q-7

I encourage the City to embrace this opportunity to improve our community and support the Long Meadow Ranch Hotel project. Thank you for your time.

Q-8

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter Q – Duane Hoff

Q-1 to Q-8 The commenter expresses support for the Project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter R – Fonia Humphries

Comment Letter R

From: Fonia Humphries <fonia@dudum.com>
Sent: Monday, June 29, 2020 3:34 PM
To: Maya DeRosa <MDeRosa@cityofstheleena.org>
Subject: [External] Farmstead Hotel Project

I had a difficult time trying to figure out from the article in the Star how to comment on this project. | R-1

I think we definitely need to move forward with this, there are far too few alternatives for guest accommodations in SH. I appreciate those who don't want SH to ever change, but economically this isn't a viable alternative. | R-2

The downtown is suffering with retail, restaurants etc. It is moving toward tasting rooms, not the best atmosphere for the tourist consumer who has already been to wineries. | R-3

Please let me know if I can help in any way, | R-4

Fonia Humphries

--
Shackteau Humphries
 2080 Palmer Drive
 St. Helena, CA. 94574
 707-968-9666

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter R – Fonia Humphries

R-1 to R-4 The commenter expresses support for the Project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter S – Stephanie Iacobacci

Comment Letter S

Cindy Tzafopoulos

From: stephanie.iacobacci <stephanie.iacobacci@gmail.com>
Sent: Tuesday, July 7, 2020 5:55 PM
To: Public Comment; CityCouncil
Subject: [External] Council 7/14 Meeting | Presentation 6.1

Good Evening Council,

I wanted to submit Public Comment in favor of the proposed Long Meadow Ranch Lodging Complex. I don't feel as if our precautionary Stage 1 Water restriction is enough of an argument to deny this great project. It's been made clear by multiple tasks force working groups that in order to fund a new city hall, a new police department, and build our reserves, that the City needs additional revenue through TOT. It's challenging at minimum to find the right location and developer. The halls proposed lodging complex provides an excellent location, utilizing an already existing stoplight, on a parcel that doesn't currently serve locals (unlike the walking path at Adams Street), and on the south end of town which has the potential of expanding "downtown". In addition, Farmstead Restaurant, Winery, Cafe, and Farm stand has proven to be a slam dunk for St. Helena. Both a local and visitor's favorite. Their proven track record of building such a successful establishment should provide St. Helena with a sense of relief, that they will develop an aesthetically pleasing complex that is aligned with the culture of St. Helena. Unlike an outside developer coming in and developing something similar to the Archer Hotel which would not be a good fit for our town.

S-1

Farmstead not only provides great sales tax to the City but is also supportive of community enrichment programs and events. Having sponsored the Fireworks multiple times, giving back to local schools, donating gift certificates to events, and so on. It's a locally owned business that puts money BACK into the community. I have no doubts the Halls would continue to invest in St. Helena's future with the approval of their lodging complex.

S-2

I hope you put St. Helena's future first by approving and expediting this project!

S-3

Be Well and Do Well,

Stephanie Iacobacci

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter S – Stephanie Iacobacci

S-1 The commenter expresses support for the Project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter T – Institute for Conservation Advocacy Research and Education (ICARE)

Comment Letter T



INSTITUTE FOR CONSERVATION ADVOCACY RESEARCH AND EDUCATION

ICARE
PO BOX 4256
NAPA, CA. 94558
cmalan1earth@gmail.com
icarenapa.org
707.322.8677

The Institute for Conservation Advocacy Research & Education, (ICARE) established in 2004, is a non profit community-based organization located in Napa County, California. ICARE's mission is to restore and conserve the biological integrity and ecosystems health of watersheds, the Napa River estuary and the greater San Francisco Bay Area through science-based advocacy, research and education.

July 14, 2020

St. Helena City Council and Mayor,

The Institute for Conservation Advocacy, Research and Education/ICARE is a local environmental nonprofit that has for 14 years done rigorous water quality and stream flow monitoring of the Napa River to conserve and protect fish plants and animals. We work closely with collaborative partners for the public's right to fish, swim and recreate in our local water resources.

T-1

Last year, just as we were about to kayak the entire River in the spring, Clover Flat Landfill had a catastrophic pollution event that caused our kayakers to cancel our trip after months of planning and where a San Francisco Bay Regional Water Quality Board /SFBRWQCB member, had planned to join us. In past kayaking trips we struggled through low flows and poor water quality. Trying to enjoy our own river for recreation is a brutal experience dodging pollution events, garbage, habitat destruction by vineyards deforestation of the riparian areas, a deeply incised river channel with 30 foot vertical banks and extremely low flows from extensive groundwater pumping.

T-2

The City of St. Helena should be doing everything It can to protect the Napa River from more pollution events. On 2.26.2019 St. Helena Wastewater Treatment plant spilled 41,536 gallons of sewer onto surface waters and then another 1,285 gallons again on 2.27.19 resulting in a \$57,000 fine issued on 1.15.2020. The SFBRWQCB had already issued a Cease and Desist order to St. Helena in 2016 for past illegal discharges of wastewater contaminants such as: fecal-coliform, copper, cyanide, chlorine, total dissolved solids, e-coli plus 17 other contaminants.

T-3

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter T

The continuous illegal discharge of wastewater violates the Clean Water Act and the limits of pollution set by the SFBRWQCB through the 2006 Pathogen Total Maximum Daily Load/TMDL allowed for the Napa River restricting the release of pathogens into the Napa River hence the San Francisco Bay.

T-4

Because the City of St. Helena has not expedited the upgrade of their Wastewater Treatment Plant, therefore, the River and people are suffering extremely poor water quality, such that in November of 2017 Napa flunked a water quality report card, for exceeding limits of pathogens in spite of the 2006 TMDL regulations. This means all the polluters keep on polluting despite regulations!

T-5

Additionally, all of these wastewater spills create nutrient enrichment conditions for hazardous algae blooms that turn deadly due to neurotoxins created by certain algae and can cause red tides in the San Francisco Bay and ocean, destroying fishers and driving people out of the water all along the discharge flow.

T-6

The St. Helena Wastewater Treatment plant is over capacity and the sewer pipes are broken and aging due to numerous over flow violations for many years.

T-7

No new hotels should be built until the Wastewater Treatment plant is upgraded and there is evidence that the new capacity can accept and process new waste on top the waste already driving the plant into over flow hazards.

T-8

Napa County is undergoing the development of a Groundwater Sustainability Plan, required by the new groundwater State law the Sustainable Groundwater Management Act of 2014. At the site of the City of St. Helena's groundwater pumps near the Napa River, pumping is depleting the flows of the Napa River, yearly dewatering aquatic habitat where California Fresh Water Shrimp, Chinook Salmon and steelhead. Approving more development calls into question if there is adequate groundwater availability given the unreasonable over draft of groundwater already.

T-9

Accordingly, the Institute for Conservation Advocacy, Research and Education, therefore, would like the St. Helena City Council to pass a moratorium on any future development of hotels given the severe problems with water quality and water availability.

T-10

Therefore, the City should require an Environmental Impact Report due to the significant environmental impacts to surface and groundwater.

T-11

Chris Malan
Executive Director
ICARE
707.322.8677

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter T – Institute for Conservation Advocacy Research and Education (ICARE)

T-1 to T-11 The commenter recounts experiences with the Napa River and general concerns about wastewater treatment and water availability. The commenter suggests a moratorium on development of hotels and preparation of an EIR. The commenter opposes the Project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. The comments do not describe any inadequacies in the CEQA analysis.

Please see Response to Comment B-8. Additionally, as the project will disturb more than one acre of soil during construction, the project will be required to prepare a SWPPP per the NPDES Construction General Permit prior to beginning construction. The SWPPP will describe the Best Management Practices (BMPs) for erosion and sediment control during construction. The BMPs will ensure that stormwater runoff from the project site during construction will adhere to water quality standards, so the project will have less than significant impact with mitigation incorporated.

As the project creates more than 5,000 square feet of impervious surface, the project will be required to follow the requirements of the BASMAA Post-Construction Manual (Manual) and demonstrate compliance by preparing a Stormwater Control Plan. The project's civil design team has prepared a Preliminary Stormwater Control Plan that demonstrates that proposed project is able to detain and treat stormwater runoff per the requirements of the Manual by utilizing strategies such as bioretention facilities and landscaped self-retaining areas. Refer to the Preliminary Stormwater Control Plan, included as an attachment, for a detailed description of project's post-construction stormwater management. The proposed project is able to meet the requirements of the Manual, so stormwater runoff from the project site post-construction will adhere to water quality standards. Therefore, the project will have less than significant impact with mitigation incorporated.

To mitigate water quality impacts, the applicant will be required to comply with the requirements in the BASMAA Post-Construction Manual. Compliance will be demonstrated by completion of a Stormwater Control Plan to be approved by the City of St. Helena prior to construction.

Please see the Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter U – Eve Kahn

Comment Letter U

Aaron Hecock

From: Eve Kahn <evekahn@yahoo.com>
Sent: Monday, June 29, 2020 1:48 PM
To: Aaron Hecock
Subject: [External] Farmstead Lodging Proposal

I wish to thank you for giving the public an opportunity to comment on this proposed project. | U-1

While there are many attractive features and amenities listed, in my opinion, it is unrealistic to convert a 10 acre farm to an intensity of use, as defined, without some significant environmental impact. A negative declaration under-estimates the impact on water, air quality, noise, wildlife, and transportation (for guests and employees). | U-2

The applicant has indicated a willingness to include low flow toilets and low flow showerheads - which I believe are already industry standards at the state level. A spa, indoor and outdoor pools are typically high water users (and require additional showering for guests). Adding to these are planned events and their associated water use. To consider this project water neutral is fantasy. And just this week, St. Helena has declared a Stage 1 Water Emergency. | U-3

I believe it is inappropriate to consider any and all new hotel development until the City of St. Helena has verifiable long term water availability. | U-4

Please take the time to do a full EIR to better understand all the impacts of this project and, concurrently, a complete and thorough analysis of water availability. | U-5

Thanks and regards,

Eve Kahn, Chair
 Get a Grip on Growth
 707-363-1512

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter U – Eve Kahn

U-1 to U-5 The commenter states that it is unrealistic for there to be no significant environmental effects from the Project, that an MND underestimates impacts, an EIR should be prepared, and that there should be no new development until there is verifiable long-term water availability.

Please see the Master Response on Preparation of an MND and Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

The commenter's opinion on the Project will be considered by the City's decisionmakers. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter V – Hector Fernando Lopez

Comment Letter V

From: Hector Lopez <pescamosquero@yahoo.com>
Sent: Wednesday, June 24, 2020 10:37 AM
To: Maya DeRosa <MDeRosa@cityofsthelela.org>
Subject: [External] Long Meadows Hotel Expansion

Dear DeRosa,

I am a resident and home owner of 1007 Charter Oak Avenue. I am in support of the plans to expand Farmstead. I believe they have communicated with all of us local residents of their plans and have looked into limiting the negative impacts of having a hotel and also found positive ways to give a better economy to the town of St. Helena. They are always thoughtful of being green and organic and creating the least footprint on our city and planet. I look forward to attending meetings for this amazing and thoughtful expansion of Farmstead. The only suggestion I have is to maybe to give local residents a day we can go eat at Farmstead at a discounted price! 😊

V-1

Sincerely, Hector Fernando Lopez

[Sent from Yahoo Mail on Android](#)

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter V – Hector Fernando Lopez

V-1 The commenter expresses support for the Project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter W – Anthony Micheli

Comment Letter W

Cindy Tzafopoulos

From: Anna Chouteau
Sent: Monday, July 13, 2020 9:19 AM
To: Mark Prestwich; Cindy Tzafopoulos
Subject: Fwd: [External] Hall hotel

Forwarding since I didn't see you on the email.

Sent from my iPhone

Begin forwarded message:

From: Anthony Micheli <anthonymicheli@yahoo.com>
Date: July 13, 2020 at 8:14:03 AM PDT
To: geoff Ellsworth <geoffellsworth@yahoo.com>, Paul Dohring <PDohring@cityofsthelena.org>, Mary Koberstein <MKoberstein@cityofsthelena.org>, "dkundsen@cityofsthelena.org" <dkundsen@cityofsthelena.org>, Anna Chouteau <AChouteau@cityofsthelena.org>
Subject: [External] Hall hotel

I have two concerns on approval of this hotel.

Water: We have a limited amount of water. Presently we are in Phase 1. The last hotel that was approved was Las Alcobas, it has a water agreement. There should be a water agreement with all hotels. These developers say they are water neutral or other fancy terms for water conservation. Then if they say they will not use much water, then let the water contract reflect that. That is when you are going to see the truth about how much water they are really going to use. The water contract could be based on how many rooms they have and factor in for a spa and other facilities.

Housing: Hotels need to provide housing for some of their employees. What the city did for Las Alcobas was a disgrace. They were supposed to build 22 low income units at \$300,000 each which equals \$6.6 million dollars. Instead the city let them donate \$750,000 dollars to the housing fund. This is what the Hall Hotel wants to do. A standard needs to be set up for every hotel going forward. The amount of rooms should dictate how many units should be built. These units could look like the development with landscaping. If they are going to donate to the housing fund it should be at \$300,000 PER UNIT. ANTHONY MICHELI

W-1

W-2

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter W – Anthony Micheli

W-1 The commenter expresses concern with the Project's water impacts.

Please see the Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

W-2 The commenter states that more housing needs to be provided.

Please see the Master Response on Housing. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter X – Jack Miller

Comment Letter X

From: Jack Miller <jmiller@pacificcollege.edu>
Sent: Friday, June 26, 2020 2:14 PM
To: Maya DeRosa <MDeRosa@cityofstheleena.org>
Subject: [External] Farmstead

Can you tell me how or where I can register my support for the Farmstead hotel project? I'm a resident of St. Helena and believe it will help vitalize all of our services. | X-1
Thanks,
Jack

Jack Miller, President
www.PacificCollege.edu
San Diego, New York, Chicago, Online
Best reached via cell or email



2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter X – Jack Miller

X-1 The commenter expresses support for the Project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter Y – Napa County Bicycle Coalition

Comment Letter Y



June 29, 2020

Aaron Hecock
1572 Railroad Avenue
St. Helena, CA 94575

Re: Farmstead at Long Meadow Ranch Lodging Project Public Comment

Dear Mr. Hecock,

The Napa County Bicycle Coalition represents over 2,000 members and supporters throughout Napa County in advocating to make riding a bicycle in our communities safe, convenient, and accessible for riders of all ages and abilities. Since 2008, the Napa County Bicycle Coalition has worked with local organizations, businesses, elected officials, and the public to align our transportation infrastructure with the needs of cyclists and other active transportation users.

Y-1

We are supportive of the efforts made in the Farmstead at Long Meadow Ranch Lodging Project to encourage bicycle use amongst its guests, particularly the Class I multi-use path along Mills Lane, which is included in both the 2012 and 2019 Countywide Bicycle Plan. This new pathway will provide benefits to both St. Helena residents and visitors.

Y-2

Nevertheless, we feel strongly that additional bicycle and pedestrian improvements are required in the project area to address deficiencies in the active transportation network, and support safe, convenient walking and bicycling options to users. Our recommendations are as follows:

Y-3

1. Improvements at Mills/Greyson & SR 29 Intersection –

We recommend that the signalized intersection at SR 29 and Mills/Greyson be upgraded to include High Visibility crosswalks across SR 29 for both eastbound and westbound directions. This intersection is already used – without any dedicated pedestrian facilities – by students at St. Helena High School to access the bus stop at SR 29 and Dowdell. This project will only increase bicycle and pedestrian volumes at this intersection. The proposed Class I on the north side (Westbound) of Mills will likely force walkers and bicyclists to attempt to jaywalk across a high speed, high volume roadway from the existing sidewalk or road shoulder.

Y-4

2. Addition of Sidewalk from Mills Lane to Dowdell Lane along Northbound SR 29 –

As noted above, there is currently no safe access from the existing signal at SR 29 and Greyson to Dowdell Lane. Due to the location of the northbound “Vine Transit” bus stop, this corridor is regularly traveled by students, as well as employees from nearby businesses (including the existing Long Meadow Ranch restaurant), and occasional out-of-town visitors. In an effort to improve the safety of these users, the estimated 65 additional employees for the lodging property, and promote expanded access to the Vine Transit system, we recommend the addition of a sidewalk between Mills Lane and Dowdell Lane.

Y-5

These recommendations are informed in large part by our work under the Napa County Safe Routes to School program, in which NCBC staff have been conducting Walk Audits at each of the

Y-6

1100 Lincoln Ave, Suite 202-B | Napa, CA 94558 | (707) 258-6318 | www.napabike.org

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter Y

public schools in Napa County since 2019. This program seeks to identify safety barriers that may reduce rates of walking and bicycling, and work with relevant public agency stakeholders and the local community to develop solutions to promote more walking and bicycling.

Y-6

At St. Helena High School, we determined that two significant barriers to students using active transportation to travel to and from school were the inability to cross SR 29 at Grayson Avenue and the lack of access to the northbound Vine bus stop at Dowdell Lane. Students are currently forced to jaywalk across SR 29 to reach the northbound Vine bus stop and the several businesses south of the bus stop, including an orthodontist's office, a pediatrician's office, and a gym. The high volume and speeds of vehicles on SR 29, even in the school zone, make this unsafe and infeasible for students, and anyone else not using a personal vehicle.

Y-7

As noted above, providing this minimal additional infrastructure will greatly benefit future guests at the Long Meadow Ranch Lodge who wish to walk or bike into town using lodge-provided bicycles. Without these improvements, guests would not be able to safely cross SR 29 to access the Vine Trail and other local destinations without making unnecessary additional pedestrian crossings, and use of existing public transit stop will remain challenging for many users, and impossible for others.

Y-8

We request that the City of St. Helena support our recommendations for the Long Meadow Ranch Lodging Project, and ensure that they are included as part of project approval.

Y-9

Should you have any questions, please contact Carlotta Sainato at csainato@napabike.org or (707) 258-6317.

Sincerely,



Carlotta Sainato
Program Coordinator

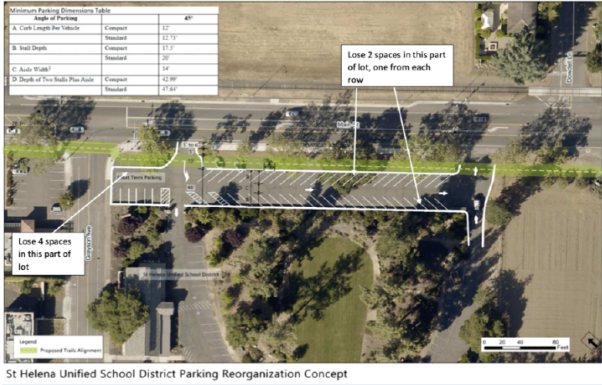
Napa County Bicycle Coalition

1100 Lincoln Ave, Suite 202-B | Napa, CA 94558 | (707) 258-6318 | www.napabike.org

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter Y

Attachment 1:
Proposed Napa Valley Vine Trail
Alignment at Greyson Avenue/Mills Lane & SR 29



1100 Lincoln Ave, Suite 202-B | Napa, CA 94558 | (707) 258-6318 | www.napabike.org

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter Y – Napa County Bicycle Coalition

Y-1 to Y-9 The commenter expresses general support for the Project, but recommends that additional bicycle and pedestrian improvements be made to address deficiencies in the active transportation network.

The commenter's opinion on the Project will be considered by the City's decisionmakers.

The Project's impacts on the existing bicycle/pedestrian network are analyzed in Section XVII. Impacts were determined to be less than significant after mitigation.

The additional mitigation measures proposed by the commenter may be considered for inclusion as conditions of project approval. However, based on the finding that the project's impact would be less than significant, there is no essential nexus under CEQA to require the recommended measures.

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter Z – Ann Nevero

Comment Letter Z

Cindy Tzafopoulos

From: ann@nieman.org
Sent: Tuesday, July 14, 2020 1:04 PM
To: Cindy Tzafopoulos
Cc: CityCouncil
Subject: [External] Long Meadow Ranch Projects - Public comment

July 14, 2020

City Council,

I am writing in support of the Long Meadow Ranch Restaurant and Lodging projects.

First, the city of St Helena has long discussed the need for some additional TOT as an added source of city revenue, and increased foot traffic to help support Main St businesses. This project accomplishes both in my opinion by allowing an vacant property on Highway 29 to provide a small scale, non-chain lodging option. Because of its location on our commercial corridor, the walkability to downtown businesses and other eateries is a natural extension of Main St. This minimizes parking needs of visitors while increasing foot traffic downtown, and enhances the southern entry into St Helena which was a topic of importance during the General Plan Update. Z-1

In addition, and importantly, St Helena residents have consistently stated in numerous surveys and public workshops, that they value the agricultural, small town, friendly character of our community. Balance is often the key word in descriptions of development forward. Residents have preferred uniqueness over large chains, and value developments that can serve both visitors and locals alike. The Farmstead Restaurant and associated offerings have successfully accomplished that balance. On any given day, a visit to Farmstead reveals a stream of locals, visitors, old and young enjoying the unique open setting, agricultural foundation, farm to table options and local wines. Z-2

Further, this locally owned and developed business is a true community partner and has actively and continuously contributed to St Helena through generous programs and donations that directly benefit our community's non-profits and organizations. Z-3

The proposed Long Meadow Restaurant and Lodging projects fit into an already tested and successful model for St Helena. It is located along Highway 29 on a vacant property, and does not destroy active agriculture, eliminate public land, or pave over community owned open space. Z-4

A significant payment will benefit the City's Housing Trust Fund, which has helped make two new affordable housing projects in St Helena possible; Turley Flats and Brenkle Ct. Z-5

No project is ever perfect. There are always very real impacts from any additional development, whether it be commercial or residential. Topics of water use, neighbors' concerns, traffic flow, etc. should be discussed further, with a goal to find and approve the right project design that optimally balances fiscal needs with community needs. Z-6

Thank you for your service to St Helena,

Ann Nevero

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter Z – Ann Nevero

Z-1 to Z-6 The commenter expresses support for the Project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter AA – Eileen Pereira

Comment Letter AA

From: Eileen Pereira <eileen@aston.com>
Sent: Monday, June 29, 2020 3:02 PM
To: Public Comment <publiccomment@cityofstheleena.org>
Subject: [External] Comments to St. Helena City Council and Planning Staff regarding Farmstead hotel project

To: Aaron Hecock, Senior Planner
 Geoff Ellsworth, Mayor
 Mark Prestwich, City Manager
 Maya De Rosa, P&B Director
 Members of City Council and Planning Commission

Re: Comments to St. Helena City Council and Planning Staff regarding Farmstead hotel project

Dear Members:

I am very confused. I do not understand how 65 additional rooms for rent, whether it be a hotel or otherwise, and occupied by anywhere from 65 to 120 + people would not add to water usage in your significantly impacted City of St. Helena. (See LAFCO excerpt from the Executive Summary of their report) | AA-1

Water saving devices are not devices that do not use water. | AA-2

An EIR would put this in the right perspective and help your town balance its water needs. | AA-3

WATER SERVICE This report reviews indicators of water service adequacy for each of the service providers, including distribution system integrity as defined by breaks and leaks and system water loss, and drinking water quality. Based on these indicators, it was found that all agencies in Napa provide at least minimally adequate services. Certain improvements could be made to the services offered. In particular, the City of Calistoga, Lake Berryessa Resort Improvement District, and Napa Berryessa Resort Improvement District need to address the relatively high levels of water loss in the water systems. Additionally, Lake Berryessa Resort Improvement District and Spanish Flat Water District could greatly improve on regulatory compliance for the water systems. It is apparent that the smaller agencies with limited budgets and staffing constraints struggled most with planning for and | AA-4

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter AA

addressing infrastructure needs and complying with regulatory requirements. These districts would greatly benefit from technical support from one of the larger agencies or through reorganization as a single large provider as discussed in Governance Structure Options. Ensuring adequate water supply availability is a priority for all agencies. It was found that during normal year scenarios, all of the public water retailers in Napa have sufficient water supply under normal conditions given existing demand. However, the City of St. Helena and Circle Oaks County Water District need to institute additional water conservation measures to prevent fluctuation in demand. Also, it is recommended that Circle Oaks CWD perform an assessment on its water system to determine firm and safe yield of its existing water sources and identify an appropriate location for another well

AA-4
cont.

Thank you for your efforts.

My best, Eileen Pereira

Eileen M. Pereira
2145 First Avenue
Napa, CA 94558

Tel: 415-577-8338

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter AA – Eileen Pereira

AA-1 to AA-4 The commenter states that the Project must have a significant impact on water due to its size, requests an EIR be prepared, and quotes part of a report from LAFCO regarding water supply availability.

Please see the Master Response on Preparation of an MND and Master Response on Water.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter BB – Greg Pitts

Comment Letter BB

July 13, 2020

TO: City of St. Helena City Council and Planning Commission Members
FROM: Greg Pitts

RE: Farmstead Lodging Expansion

Dear City Council and Planning Commission Members,

Firstly, thank you for all that you continue to do for St. Helena during a very challenging period of time. Your efforts are most appreciated. BB-1

As a previous St. Helena Planning Commission, City Council member and citizen I am writing to you today to voice my support for the expansion of Farmstead at Longmeadow Ranch to include a 65-unit lodging component. Simply put, for a community that needs more people to stay in St. Helena and spend money at local restaurants and retail outlets, this is the single best option for St. Helena. In addition, the expansion will also generate substantial transient occupancy tax for the City. BB-2

Compared to other potential hotel projects in St. Helena, this project will generate the strongest economic impact with the least impact on the community. This is due to the fact that most of the elements of a new resort project (other than the hotel rooms themselves) already exist in this case, as do the majority of the jobs that come with a new resort. BB-3

Furthermore, many of the folks that would lodge at Farmstead are likely already coming to Farmstead to have dinner (as it is one of the most well known restaurants in Napa Valley), but aren't staying in St. Helena...but instead heading to Calistoga or Yountville to stay the night. Thus, we are already incurring the impact of the car coming to St. Helena but then sending the guest away to stay north or south of us following dinner. To me, this has always and continues to make little sense. BB-4

Finally, I would also add that the lodging project at Farmstead is not just another hotel, but instead, will be a unique property and experience unlike anything else in Napa Valley or the Western U.S. for that matter. The guest programming, classes and workshops and overall experience will revolve around sustainable agriculture, health and nutrition and will result in something that St. Helena will be proud of for decades to come. BB-5

For these reasons, and many more, I am in support of this expansion and hope that you will support the request. BB-6

All the Best,

Greg Pitts

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter BB – Greg Pitts

BB-1 to BB-6 The commenter expresses support for the Project.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter CC – Pamela Smithers

Comment Letter CC

Aaron Hecock

From: Pamela Smithers <psmithers@comcast.net>
Sent: Monday, June 29, 2020 10:51 AM
To: Aaron Hecock; Maya DeRosa
Cc: Cindy Tzafopoulos; Lester Hardy; Mark Smithers
Subject: [External] Farmstead public comment

Dear Planning Department and Commission Chair,
 We appreciate the opportunity to comment on the Hall project.

Looking over the documents provided on the project on the City website, the applicants have certainly provided years of research and reams of pages on the impacts of the project. For the sake of fairness, we hope and assume the City will require the same level of commitment by any other hotel project in St Helena in the future. | CC-1

We are in favor of the project in general and offer the following comments. | CC-2

- Ted and Laddie Hall are local individuals, rather than a lodging syndicate. This means we should continue to see them at Soroptomists Crab Feeds and at the local Farmers Market. As such, there should be direct accountability to the public. A project by a hotel developer, who then sells the hotel to a third party for operations offers no such accountability. | CC-3
- The Halls have proven themselves to be adept marketers. Their current restaurant is proof that they know how to produce a successful business. This matters because it indicates we can trust their projections (% occupancy numbers, prices, etc) as doable/likely. In the past, we have been promised occupancy %/TOT revenue that quickly fell short of the projections and required delayed receipt of the TOT promised. This predictability matters. Better to have an accurate prediction, than a lofty one that falls short. | CC-4
- Inclusion of sustainability measures such as solar power and non-glycol cooling systems is definitely a plus. | CC-5
- The restaurant and coffee bar are currently local hangouts, and we can only hope that these will continue to be available to locals. Special events such as weddings often rent the entire venue, locking out locals. As such, limiting the number of events could mean more accessibility for locals. We have seen this at a hotel/restaurant that was developed a couple of years ago on the west shore of lake tahoe. The project sounded great, but it has turned into a constant wedding venue, and the restaurant is closed to all but the private parties during almost all weekends of the summer months. We certainly hope that this will not be the case with the Farmstead project. A balance of both would be best. | CC-6
- The location south of town, as compared to a hotel situated downtown or north of downtown, is better for traffic. The requirement for installation of bicycle lanes on La Fata and Mills Lane are a good step. Hopefully the project will not block any "potential future roadway extension" shown in our General Plan (Fig 5.3) that connects Allison to Mills Lane. This should be given serious consideration. | CC-7

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter CC

- There is currently a bus stop location at Grayson and Hwy 29, but no facilities (covered seating) or a crosswalk across Hwy 29. We would request that this infrastructure be installed for approval of the project (by either NVTa or the applicant) when the turn lane at Grayson to Mills Lane is installed. Any employees of the project who would consider taking public transportation to/from the project would be encouraged to do so if this infrastructure was in place.

CC-8

Thank you very much for your consideration of our comments. We are supportive of the project and look forward to this project being implemented as soon as possible!

CC-9

Pam and Mark Smithers
30 year residents
1819 Vallejo Street
St Helena, CA

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter CC – Pamela and Mark Smithers

CC-1 to CC-9 The commenters express support for the Project.

The commenters' opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter DD – Doug Stanton, Stanton Vineyards

Comment Letter DD

Aaron Hecock

From: Doug Stanton <doug@stantonvineyards.com>
Sent: Friday, June 26, 2020 4:01 PM
To: Geoff Ellsworth; Paul Dohring; Anna Chouteau; Mary Koberstein; David Knudsen; Aaron Hecock
Subject: [External] Long Meadow Ranch/Event Center

Dear all,

The Hotel and event center that is proposed at [1000 Mills Lane](#) would forever change the rural-agricultural character of our neighborhood and negatively alter the small town charm that so many of the citizens have come to enjoy. | DD-1

Gone would be the quiet, warm summer evenings, gazing at the sky and listening to the sounds of crickets, replaced with rowdy-noisy wedding crowds, loud music, parking lot lights and a blocked view to The Western Hills. | DD-2

This project is yet another example of a greedy entrepreneur trying to exploit the natural beauty of the Napa Valley for the sake of tourist dollars. In my opinion, Saint Helena is not yet destroyed. One only has to venture a few miles north to see the destruction that has occurred with the Four Seasons project - outside Calistoga. | DD-3

I have been living and farming in this neighborhood for over three decades. Besides the aforementioned, I'm also concerned with the water table. Regardless if this project uses its own wells, how will this affect our wells and our ability to farm? In my opinion, this project would result in inmitigable alterations to our adjacent vineyards and home - even to the extent that it will negatively affect our property value. | DD-4

For this and other reasons, we, the Stanton Family, strongly oppose this project. | DD-5

Doug and Kristen Stanton

Thanks,
Doug Stanton
Stanton Vineyards
862 Mills Lane
St. Helena, CA 94574
(707)967-0482 (Office Phone)
doug@stantonvineyards.com

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter DD – Doug Stanton, Stanton Vineyards

DD-1 The commenter states that the Project will negatively change the character of the neighborhood.

Under CEQA, economic or social effects of a project are not treated as significant effects on the environment. (State CEQA Guidelines Section 15131.) CEQA is not an economic protection statute. (*Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, 903, citing *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 157 Cal.App.4th 1184, 1205 [CEQA is "not a fair competition statutory scheme" and "[t]herefore, the economic and social effects of proposed projects are outside CEQA's purview."].) Further, "A social or economic change by itself shall not be considered a significant effect on the environment." (State CEQA Guidelines, 15382.) The focus of CEQA is on physical changes in the environment.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

DD-2 The commenter states that the Project will cause noise, light and aesthetic impacts.

The MND fully analyzes the Project's potential noise, aesthetic, and light impacts in Sections XIII and I. Impacts were determined to be less than significant.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts. The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

DD-3 The commenter states that the Project is an example of greed and exploitation of natural beauty, and references another project in the region.

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

DD-4 The commenter expresses concern about the water table and property values.

Please see the Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

See also Response to Comment DD-1.

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

DD-5 The commenter states that

2.0 COMMENTS AND RESPONSES TO COMMENTS

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter EE – Leslie Stanton

Comment Letter EE

6/28/2020

To Aaron Hecock (please ask the City Clerk to send on to Council),

This project, *Farmstead @ Long Meadow Ranch Lodging*, would forever alter aspects of Mills Lane, La Fata Avenue, Dowdell Lane, Hwy 29 and all of Saint Helena. 65 rooms and 65 employees daily are a lot of people and vehicles. | EE-1

Reading through the 144-page document I found several passages about “generous landscaped areas”, and “buffer plantings”, and pathways lined with fruit trees and edible plantings, in addition to the farmed acres. Two existing wells were listed as adequate to supply the substantially increased need for water. The document also stated that groundwater would not be adversely affected. | EE-2

Not a ½ mile away on Dowdell Lane our 170+/- year old Ranch House had its well run dry just after the new neighbor, to the East, dug a deep well to irrigate his extensive landscaping. Perhaps a coincidence but I doubt it. I worry that just such a thing may happen to our vineyard property well, just East and downslope from the proposed Farmstead Lodging. | EE-3

To the West of the vineyard property, owned by my family on Dowdell Lane, bordering the industrial area of Saint Helena, fencing was put up the entire distance, directly on the property line. A resulting problem with large overgrown oleander bushes has been a continual farming impediment for my family. Historically, neighboring farmers left a set-back from the property line so tractors and implements could be maneuvered. On our Mills Lane property, we left a 23-foot set-back along the whole West side which borders the Farmstead property. Fencing the Lodging parking lot will be necessary as we have an active farming operation. The “wonderful views” from the proposed Farmstead event center will be of our vineyard looking East to the hills. | EE-4

This 144-page Initial Study /Mitigated Negative Declaration, prepared by the City of Saint Helena for Farmstead @Long Meadow Ranch Lodging is seeking to change zoning from Agricultural (it was once partially zoned View Shed) to a 14 building, 65 room lodging, on 6 acres. Considering the drastic changes proposed for this property there should be analysis of the issues included water, traffic, and the neighbor's farming operation. | EE-5

Respectfully submitted by, Leslie Stanton

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter EE – Leslie Stanton

EE-1 The commenter restates aspects of the Project.

This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

EE-2 The commenter restates aspects of the Project.

This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

EE-3 The commenter expresses concern about groundwater impacts from the Project.

Please see the Master Response on Water. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

EE-4 The commenter states that fencing the lodging component's parking lot will be necessary.

The Project's design includes fencing between the Project and adjacent private property. The Lodging component's parking area is adjacent to Mills Lane and does not warrant fencing to mitigate a significant environmental effect.

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

EE-5 The commenter states that the Project seeks a change in zoning and that there should be an analysis of the Project's impacts on water, traffic, and neighbor's farming operation.

Please see Response to Comment EE-3. Please also see the Master Response on Traffic. The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts.

The comment does not describe what impacts on neighboring farming operations might occur, aside from the need to analyze groundwater impacts and the desire for fencing. Both of those issues are addressed above.

There is no zone change proposed by the Project. The lodging portion is located in the Service Commercial zone and a hotel is an allowed use with a use permit approval.

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter FF – Loraine Stuart

Comment Letter FF

From: Loraine Stuart <loraine.a.stuart@gmail.com>
 Sent: Tuesday, June 30, 2020 2:00 PM
 To: Paul Dohring <PDohring@cityofsthelena.org>; Mary Koberstein <MKoberstein@cityofsthelena.org>
 Cc: Maya DeRosa <MDeRosa@cityofsthelena.org>; Mark Prestwich <MPrestwich@cityofsthelena.org>
 Subject: [External] Farmstead Hotel

Hi to you both,

I am writing to say that I was disappointed that Ted Hall decided to drop the workforce housing component of his hotel project at Farmstead. I know that he made this decision quite a while ago but the plan has just been made public recently. FF-1

Having been connected with him in the past in regards to local farmworker housing I know he understands the logic and need. And, obviously, including housing makes his project much more onerous in numerous ways. FF-2

The sad truth is we lose an opportunity when we just take contributions to our housing fund in lieu of permanent units. In order to actually use those dollars we are stuck with the time- consuming and usually unsuccessful project of finding land, piecing together funding, getting non-profit partners, dealing with Nimbys and the whole public process including Council deliberation. I'm not telling you anything you don't know better than I do but I am afraid we're losing another opportunity. Council decisions for Alcobas in this regard have not added to our housing stock. Conversely, somehow Bardessono in Yountville has made workforce housing on the property work well. FF-3

If ever there was a geographic location, a well-funded and well-designed project proposed by locals who have already been very successful here, this is it. All the more reason we should be able to achieve some housing with this hotel. FF-4

As always, thank you for your work and for listening!

Best regards,
 Loraine Stuart

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter FF – Loraine Stuart

FF-1 to FF-4 The commenter states that the Project should include workforce housing and believes that this is a missed opportunity.

Please see Master Response on Housing.

The commenter's opinion on the Project will be considered by the City's decisionmakers. This is not a comment on the adequacy of the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter GG – Jim Wilson

Comment Letter GG

June 29, 2020

To: Aaron Hecock, Senior Planner
Geoff Ellsworth, Mayor
Mark Prestwich, City Manager
Maya De Rosa, P&B Director
St. Helena City Councilmembers and Planning Commissioners

Re: Farmstead at Long Meadow Ranch Restaurant and Lodging Project

Dear Mr. Hecock,

Thank you for the opportunity to comment on the project. While the applicant's sustainable farming ethic is thoughtfully practiced and graciously shared with the community, it's always difficult to see more valley floor lost to an expanding tourism industry. Recently, the climate crisis and now the pandemic have given us opportunity to pause. Is it a coincidence that in St. Helena this week a phase one water emergency was declared, and in the mountains above town a red flag warning went into effect? If not now, when can we take a step back, rethink our frenetic fossil fueled lifestyle, extravagant travel and consumption behavior? Rethink everything. Start with the organizing principle of the carbon budget. Find the money and political will to do something about it. No more permits to pollute.

GG-1

We have the rare chance to get real about capping further climate pollution and commit to restoring a livable climate for all. Paris said whatever you do, don't even think of going past 2deg C. But here we are at 1.1 with 1.5+ baked in. Like the virus, it looks far away, then it hits. Exponentially rising heat is hitting us right now. We have to plan on overshoot. Every day we do nothing - or enact a cowardly half-way measure - adds to exponential increases in hothouse effects and suffering. What is St. Helena's plan?

GG-2

The UNEP's new interactive report is blunt. 7.6% reduction in carbon emissions, each year for the next 10 years, starting this year. Does the City of St. Helena recognize the fundamental climatic emergency? Will it require the Farmstead at Long Meadow Ranch Restaurant and Lodging Project to result in immediate emissions reductions in conformance to the goal?

GG-3

<https://www.unenvironment.org/interactive/emissions-gap-report/2019/>

The Climate Center's new Climate-Safe California campaign is blunt. Emissions reductions and increased carbon sequestration to achieve net negative emissions by 2030. Their endorsement platform provides details. Does the Farmstead at Long Meadow Ranch Restaurant and Lodging Project result in rapid decarbonization -10% per year - consistent with the plan?

GG-4

<https://thelimatecenter.org/wp-content/uploads/2020/04/Platform-Climate-Safe-CA-Mar-30-2020.pdf>

Governor Brown's recent (2018) [Executive Order B-55-18](#) sets a goal of "...carbon neutrality as soon as possible and no later than 2045." (The target is often misrepresented as 2045; "as soon

GG-5

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter GG

as possible” really means “as soon as possible!”) How does the City of St. Helena interpret the order?

GG-5
cont.

In June of last year, the St. Helena City Council voted unanimously to adopt the Countywide Commitment to Address Climate Change. It reads, in part:

WHEREAS, on October 8, 2018, the IPCC released a report, “Global Warming of 1.5°C,” which states that “Limiting global warming to 1.5°C would require rapid, far-reaching and unprecedented changes in all aspects of society,” and projected that the earth could reach and exceed this temperature threshold by as early as 2030, far earlier than previously anticipated; and

GG-6

WHEREAS, Climate modelling shows that it is not possible to stabilize global mean temperature rise at or below 1.5°C without undertaking additional pre-2030 climate mitigation and restoration actions focused on reducing radiative forcing levels associated with excess trapped heat. These urgent actions are additional and complementary to current efforts to reduce greenhouse gas emissions being undertaken by the state; and...

Unfortunately, the above proclamation stopped short of declaring a climate emergency. But importantly, it does recognize that urgent additional measures are needed. The City of St. Helena joined the effort. What emergency countermeasures has it contributed to the cause over the past year? Will it require the project be consistent with the massive emissions reductions called for?

GG-7

Students voiced hope and frustration in public comment during last month's Climate Action Committee (CAC) meeting. Their climate emergency resolution was adopted last May by NVUSD, and calls for leaders to acknowledge the climate emergency exists and threatens the residents of Napa County and the entire world. It calls for leaders to respond with the necessary emergency actions to achieve net zero climate pollution by or before 2030. They asked that the CAC support their pledge and acknowledge the climate emergency, and mobilize to stop it. They haven't heard back. What is the City of St. Helena's position on climate leadership and accountability? How does that position guide its decisions on discretionary polluting projects?

GG-8

The NVUSD climate emergency declaration reads, in part:

WHEREAS, today's children represent a particularly vulnerable group because increasing greenhouse gases and trapped heat will almost certainly have a profound negative impact throughout their lives, as well as the lives of future generations; and,

GG-9

WHEREAS, the global impact, urgency, and magnitude of the challenge of addressing climate change calls for courageous leadership in all sectors of society, in all institutions and from all elected leaders; and all those in positions of power must be held accountable. To preserve the health and longevity of the Earth for generations to come, leaders need to acknowledge that a climate emergency threatens the residents of Napa County and the entire world, and they must respond with the necessary emergency measures; and...

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter GG

The following is a small sampling of entities that have set a target date of 2030 (or sooner) for **net zero emissions or carbon neutrality**:

<u>Entity</u>	<u>Target date</u>
Norway	2030
Uruguay	2030
Church of England	2030
Adelaide, Australia	2025
Melbourne, Australia	2020
Copenhagen, Denmark	2025
Birmingham, England	2030
Bristol, England	2030
Liverpool, England	2030
Oslo, Norway	2030
Asheville, NC	2030
Burlington, VT	2030
Montpelier, VT	2030
Chico, CA	2030
Hoboken, NJ	2027
Sacramento, CA	2030
Portland, ME	2030
Worcester, MA	2030
Los Angeles, CA	2030
UC System	2025
Over 700 B Corps	2030
Microsoft	2030

GG-10

In addition, **two of our neighbors** in Sonoma County passed Climate Emergency Resolutions that clearly state a 2030 target date for net zero emissions. They are:

GG-11

[Santa Rosa](#): "...with the goal of reaching carbon neutrality by 2030."

[Sebastopol](#): "...reducing city-wide greenhouse gas emissions to net zero by no later than 2030"

How do they do it? Find out now. Climate breakdown is a global problem needing global, collective, systemic solutions at every level. Our life path has changed for all of us. It's hard to handle but there's no denying we need to get busy. Where does the City of St. Helena stand?

GG-12

"We are careening towards the edge of the abyss. It is not too late to shift course, but every day that passes means the world heats up a little more and the cost of our inaction mounts. Every day we fail to act is a day that we step a little closer towards a fate that none of us wants -- a fate that will resonate through generations in the damage done to humankind and life on earth. Our fate is in our hands. The world is counting on all of us to rise to the challenge before it's too late."

GG-13

— UN Secretary-General Antonio Guterres, September 10, 2018

Is it too late? Ultimately what I think doesn't matter. What does the City of St. Helena think? If

GG-14

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter GG

you read the science, it's perfectly obvious. If you ignore it any more, it's self-sabotage. How can I help make it any more clear? It's upsetting. If there's something most upsetting to you, I want to hear about it. But does St. Helena just move on like there's nothing to be done? Is it even a question anymore whether there's something to be done or not? Are you going to go home and continue reading the science over again and get back to us when you're done?

GG-14
cont.

I just want to breathe and get well. We won't survive without results. That includes yours.

GG-15

With appreciation,
Jim Wilson
5000 Monticello Road
Napa CA 94558

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter GG – Jim Wilson

GG-1 to GG-15 The commenter quotes and references various goals, resolutions, and plans regarding climate change and states that more must be done to address it. The commenter asks what the Project will do to address climate change.

The Project's impacts on climate change are fully analyzed in Section VIII. All impacts were determined to be less than significant.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts..

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter HH – Napa Housing Coalition

Napa Housing Coalition

c/o 1040 Main Street, Napa, CA 94559

July 23, 2020

Ms. Maya DeRosa, Director
Aaron Hecock, Senior Planner
St. Helena Planning Department

Re: Housing Impacts; Farmstead Hotel

Via Email

Dear Ms. DeRosa and Mr. Hecock,

The Napa Housing Coalition wishes to express its concerns about housing impacts that would be caused by the approval and development of the proposed Farmstead Hotel. We addressed the larger issue of potential St. Helena hotels in our June 3rd letter to the City Council and Infrastructure Committee.

We applaud the owners' intention to address the housing issues in their negotiations with the City and we appreciate their willingness to face the issue directly. We want to make sure that there is a clear understanding of the real impacts resulting from such a new hotel.

The Project Description suggests an average of 65 employees per day on site, split into three shifts; over the course of a seven-day week, that would appear to result in about 90 employees. Taking into consideration that the project will utilize some of the current employees, it appears that there might be 70 to 80 new employees altogether. As such, development of the Farmstead Hotel could result in 36 to 41 new households with about half of those in the "affordable" housing range. As our reference, we used housing need estimates from the "Napa Valley Lodging Study" May 2018, prepared by Cushman & Wakefield and BAE Urban Economics.

As noted above, we applaud the owners' intention to address housing. We hope that the final housing agreement will address the very real impacts of the hotel's development.

Thank you for your consideration.

Sincerely yours,

Joelle Gallagher
Co-Chair NHC

Teresa Zimny
Co-Chair NHC

cc: Mayor Geoff Ellsworth

2.0 COMMENTS AND RESPONSES TO COMMENTS

Comment Letter HH – Napa Housing Coalition

HH-1 The commenter applauds the owners' intention to address housing but expresses concern about affordable housing impacts.

Please see Master Response on Housing.

The comment does not provide any substantial evidence to support the contention that the project will cause a significant impact. The MND presents mitigation measures to reduce all potentially significant impacts to less than significant levels. An EIR is not necessary to further analyze project impacts..

The comments do not describe any inadequacies in the CEQA analysis. No further response is warranted.

2.0 COMMENTS AND RESPONSES TO COMMENTS

3.1 ERRATA TO THE MITIGATED NEGATIVE DECLARATION

Revisions to the Mitigated Negative Declaration

The following identifies errata relative to the Initial Study/Mitigated Negative Declaration (May 2020) which do not represent substantial revisions that would require recirculation of the environmental document, as described in State CEQA Guidelines 15073.5. That is, the revisions do not result in new significant environmental impacts, do not constitute significant new information, and do not alter the conclusions of the environmental analysis or effectiveness of the mitigation measures. Changes are provided in tracked changes format (underline for new text and ~~strikeout~~ for deleted text).

Mitigation Measures BIO-1 on page 42 is revised as follows:

BIO-1. Nesting Raptors, Passerines: ~~A pre-construction survey for ground-nesting birds shall be performed within thirty (30) days prior to the start of construction. A qualified avian biologist will conduct passerine nest surveys prior to ground disturbing activities, or construction activities at the Project site to locate any active nests on or adjacent to the Project site. If land-clearing activities can be performed outside of the nesting season, that is, between August 16 and January 31, no preconstruction surveys for nesting birds are warranted.~~

~~If an active raptor nest is identified during the surveys of the project site and within 300 feet of the project site, a 300-foot buffer around the nest site shall be established. It can be established via installation of orange construction fencing or placement of bright orange lath on 10-foot centers along the arc of the protection buffer. If nesting passerines are identified nesting then a 75-foot protection buffer shall be established using the same buffer demarcation fence or lath as prescribed above.~~

~~If nests are located off the project site, then the buffer shall be demarcated as per above but only where the buffer intersects the project site. The size of the nest protection buffer may be altered if a qualified ornithologist with extensive construction-related nest protection experience conducts behavioral observations and determines the nesting raptors or passerines are well acclimated to disturbance. If this occurs, the qualified ornithologist may prescribe a modified buffer that provides sufficient buffer to prevent undue disturbance/harassment that would otherwise result in construction related nest failure. Physical harm to the nest or sufficient disturbance that results in adult inattentiveness to eggs or young will cause nest failure.~~

~~No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. In the area of the project site, this typically occurs by July 15th. However, this date may be earlier or later, and would have to be determined by the qualified ornithologist. If a qualified ornithologist is not hired to watch the nesting raptors/passerines then the buffers shall be maintained in place through the month of August and work within the buffer can commence September 1st.~~

If construction, grading, vegetation removal, or other Project-related improvements must occur during the nesting season of protected raptors and migratory birds (i.e. February 1 – August 31), a focused survey for active nests of such birds shall be conducted by a qualified biologist, who has documented experience conducting pre-construction nesting bird and raptor surveys, within 7 days prior to the beginning of Project activities. If an active nest is found, the qualified

2.0 COMMENTS AND RESPONSES TO COMMENTS

biologist who performed the survey shall determine species-specific no-disturbance buffer distances from all active nests. All no-disturbance buffers shall be clearly demarcated in the field with high visibility fencing or similar material. Active nests shall be monitored each day by a qualified biologist or trained biological monitor for the first week during Project activities to ensure Project activities do not result in nest disturbance. Weekly follow up visits shall also be performed by a qualified biologist or trained biological monitor to determine nest status. Weekly nest monitoring checks shall occur until the young have fledged or the nest is no longer active, as determined by a qualified biologist. If an active nest of a special-status bird or raptor species is discovered during the survey, the nest shall be monitored by a qualified biologist or trained biological monitor each day during Project activities until the young have fledged or the nest is no longer active, as determined by a qualified biologist. If the qualified biologist or trained biological monitor, or any personnel working on the Project observe potential nest disturbance behavior any time during Project activities, all Project activities shall cease and CDFW shall be consulted with prior to resuming Project activities. If a lapse in Project-related work of 7 days or longer occurs during the nesting season, a qualified biologist shall perform another survey for nesting birds and raptors prior to resuming Project activities. If active nests are discovered during the follow up survey, the abovementioned measures shall also be implemented.

In order to avoid impacts to roosting special-status bats, a qualified biologist shall conduct a bat habitat assessment preconstruction survey of structures and trees that will ~~would~~ be impacted by the project at least 30-45 days prior to removal or commencement of groundwork. ~~The bat habitat assessment~~ All bat surveys shall be conducted by a biologist with experience conducting such assessments surveying for bats. If any trees contain suitable bat roosting habitat (e.g. cavities, crevices, deep bark fissures), they shall be clearly marked and removed in the following two-day phased method: On day 1, under the supervision of a qualified biologist, all tree limbs not containing suitable bat roosting habitat shall be removed using chainsaws only. The next day, the rest of the tree shall be removed. Bat habitat trees should be removed during seasonal periods of bat activity: prior to the maternity season – from approximately March 1 (or when night temperatures are above 45 degrees Fahrenheit and rains have ceased) through April 15 (when females begin to give birth to young); and prior to winter torpor – from September 1 (when young bats are self-sufficiently volant) through October 15 (before night temperatures fall below 45 degrees Fahrenheit and rains begin). If trees containing suitable bat roosting habitat must be removed outside the abovementioned seasonal periods, a qualified biologist shall survey the tree via climbing and using an endoscope to determine if maternity or winter torpor colonies are present. If maternity or winter torpor colonies are present, the tree shall only be removed during the abovementioned seasonal periods. If roosting bats are discovered, but not maternity or winter torpor colonies, then the tree shall be removed using the two-day phased method mentioned above. If no evidence of roosting bats is found, the two-day phased method is not required.

If the qualified biologist discovers any evidence of bat roosting activity within structures proposed for removal, the qualified biologist shall prepare a project-specific Avoidance and Minimization Plan for CDFW review and approval prior to starting Project activities. ~~no special-status bats are found during the surveys, then there would be no further regard for special-status bat species.~~ If special-status bat species are found roosting on the project site, the biologist shall determine if there are young present (i.e., the biologist should determine if there are maternal roosts). If young are found roosting in any tree or structure that will be impacted by the project, such impacts shall be avoided until the young are flying and feeding on their own. A non-disturbance buffer installed with orange construction fencing shall also be established around the maternity site. The size of the buffer zone should be determined by a qualified bat biologist at the time of the surveys. If adults are found roosting in a tree or structure on the project site but no maternal sites are found, then the adult bats can be flushed or a one-way eviction door can

2.0 COMMENTS AND RESPONSES TO COMMENTS

~~be placed over the tree cavity (or structure access opening) for a 48-hour period prior to the time the tree or structure in question would be removed or disturbed. At that point, no other mitigation compensation would be required.~~

Item C on page 136 is revised as follows:

Less than Significant With Mitigation Incorporated: Stormwater. There are no downstream drainage facilities to serve the Lodging Project. Therefore, as described in the City of St. Helena Highway 29 Specific Plan, the Lodging Project will need to construct new drainage facilities to connect with a new storm drain in Mills Lane. As described in the City's Storm Drain Master Plan, a proposed outfall in the Napa River is planned to serve the project area. Construction of the new storm drain in Mills Lane and outfall in the Napa River will be undertaken by the ~~developer~~City, consistent with the Highway 29 Specific Plan and the St. Helena Storm Drain Master Plan.

Mitigation Measure UTL-2 on page 137 is revised as follows:

Water. The Project shall connect to City water service and ~~comply with all requirements related to water as detailed in the Development Agreement. Namely, Developer shall construct and install recycled water infrastructure (i.e., purple pipe) in Mills Lane extending from Highway 29 easterly to the eastern end of Mills Lane. Developer shall fund these improvements at a cost of up to \$256,549.~~the Project shall pay an in-lieu retrofit fee to be negotiated and approved by the City of St. Helena ~~equal to the cost of retrofitting existing buildings with low flow fixtures to result in a water savings equal to the proposed Lodging Project water use.~~

2.0 COMMENTS AND RESPONSES TO COMMENTS

APPENDIX A-1

MITIGATION MONITORING & REPORTING PROGRAM EXISTING FARMSTEAD AT LONG MEADOW RANCH PROJECT

APPENDIX A: MITIGATION MONITORING AND REPORTING PROGRAM
Existing Farmstead at Long Meadow Ranch Project (Farmstead)

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
IV. BIOLOGICAL RESOURCES					
BIO-1. Nesting Raptors, Passerines: If construction, grading, vegetation removal, or other Project-related improvements must occur during the nesting season of protected raptors and migratory birds (i.e. February 1 – August 31), a focused survey for active nests of such birds shall be conducted by a qualified biologist, who has documented experience conducting pre-construction nesting bird and raptor surveys, within 7 days prior to the beginning of Project activities. If an active nest is found, the qualified biologist who performed the survey shall determine species-specific no-disturbance buffer distances from all active nests. All no-disturbance buffers shall be clearly demarcated in the field with high visibility fencing or similar material. Active nests shall be monitored each day by a qualified biologist or trained biological monitor for the first week during Project activities to ensure Project activities do not result in nest disturbance. Weekly follow up visits shall also be performed by a qualified biologist or trained biological monitor to determine nest status. Weekly nest monitoring checks shall occur until the young have fledged or the nest is no longer active, as determined by a qualified biologist. If an active nest of a special-status bird or raptor species is discovered during the survey, the nest shall be monitored by a qualified biologist or trained biological monitor each day during Project activities until the young have fledged or the nest is no longer active, as determined by a qualified biologist. If the qualified biologist or trained biological monitor, or any personnel working on the Project observe potential nest disturbance behavior any time during Project activities, all Project activities shall cease and CDFW shall be consulted with prior to resuming Project activities. If a lapse in Project-related work of 7 days or longer occurs during the nesting season, a qualified biologist shall perform another survey for	Require as a condition of project approval	Planning & Building Departments	Prior to construction	No building permit will be issued	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
nesting birds and raptors prior to resuming Project activities. If active nests are discovered during the follow up survey, the abovementioned measures shall also be implemented. <u>Ground Nesting Raptors and Passerines</u> In order to determine if ground-nesting raptors or passerines are nesting onsite, a qualified ornithologist would have to conduct walking transects through the project site's grassland habitat searching for nests. If ground-nesting raptors (e.g. northern harrier) or passerines are identified during the surveys within 300 feet of the project site (or 75-feet in the case of passerines), a 300-foot buffer (or 75-feet in the case of passerines) around the nest site shall be fenced with orange construction fencing or brightly painted orange lath. If the nest is located off the project site, then the buffer shall be demarcated as per above where the buffer intersects the project site. The size of the buffer may be altered if a qualified ornithologist conducts behavioral observations and determines the nesting raptors or passerines are well acclimated to disturbance. If this occurs, the ornithologist should prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors/passerines. No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by July 15th. This date may be earlier or later, and would have to be determined by a qualified ornithologist. If a qualified ornithologist is not hired to watch the nesting raptors/passerines then the buffers shall be maintained in place through the month of August and work within the buffer can commence September 1st. <u>Special Status Bats</u>					

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
In order to avoid impacts to roosting bats, a qualified biologist shall conduct a bat habitat assessment of structures and trees that will be impacted by the project at least 30 days prior to removal. The bat habitat assessment shall be conducted by a biologist with experience conducting such assessments. If any trees contain suitable bat roosting habitat (e.g. cavities, crevices, deep bark fissures), they shall be clearly marked and removed in the following two-day phased method: On day 1, under the supervision of a qualified biologist, all tree limbs not containing suitable bat roosting habitat shall be removed using chainsaws only. The next day, the rest of the tree shall be removed. Bat habitat trees should be removed during seasonal periods of bat activity: prior to the maternity season – from approximately March 1 (or when night temperatures are above 45 degrees Fahrenheit and rains have ceased) through April 15 (when females begin to give birth to young); and prior to winter torpor – from September 1 (when young bats are self-sufficiently volant) through October 15 (before night temperatures fall below 45 degrees Fahrenheit and rains begin). If trees containing suitable bat roosting habitat must be removed outside the abovementioned seasonal periods, a qualified biologist shall survey the tree via climbing and using an endoscope to determine if maternity or winter torpor colonies are present. If maternity or winter torpor colonies are present, the tree shall only be removed during the abovementioned seasonal periods. If roosting bats are discovered, but not maternity or winter torpor colonies, then the tree shall be removed using the two-day phased method mentioned above. If no evidence of roosting bats is found, the two-day phased method is not required. If the qualified biologist discovers any evidence of bat roosting activity within structures proposed for removal, the qualified biologist shall prepare a project-specific Avoidance and Minimization Plan for CDFW review and approval prior to starting Project activities.					

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
XV. PUBLIC SERVICES					
PS-1. The Projects shall be required to pay project impacts fees: - o Evidence showing payment of school impact fees, in accordance with Government Code Section 65996, from the applicable school district, will be provided prior to City issuance of any building permits. - o Evidence showing payment of park fees, Civic Improvement Fees and Public Safety Fees will be provided to the City prior to issuance of any building permits. - o Other standard conditions of approval will apply, including provision of a fire flow analysis to ensure adequate water pressure and flow rates and that the project has a less than significant impact on fire flows.	Require as a condition of project approval	Building Department	Prior to construction	Building permit will not be issued until fees are paid	
XVII. TRANSPORTATION					
TOTAL PROJECT					
TRAF-3. SR 29/Dowdell Lane Intersection – Signal Warrant Impact. Provide a fair share contribution towards the signal planned at the SR 29/Dowell Lane intersection (as detailed in the Highway 29 Specific Plan).	Require as a condition of project approval	Public Works Department	Prior to construction	Building permit will not be issued until fair share has been paid	
TRAF-4. SR 29/Charter Oak Avenue Intersection – Signal Warrant Impact. Provide one of the following two measures: • Start and end all special events with more than 75 people at times that will not add traffic to SR 29 during the weekday and Saturday PM peak traffic periods (3:30-6:00 PM on weekdays and 1:30-4:00 PM on weekend days).	Require as a condition of project approval	Public Works Department	During construction or project operation	Final occupancy permit will be withheld until improvements are completed	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
– or – Provide additional funding for the “HAWK” pedestrian hybrid flashing beacon. The beacon shall be in operation before major events are allowed to add traffic to the existing weekday and weekend peak traffic hours along SR 29. Please note that Caltrans approval will be required for provision of the HAWK hybrid flashing beacon. If they do not approve of its installation, then the only measure to reduce the project impact to a level of insignificance is to eliminate traffic from the 200-person events during the Friday and Saturday PM peak hours.					

APPENDIX A-2

MITIGATION MONITORING & REPORTING PROGRAM FARMSTEAD AT LONG MEADOW RANCH LODGING PROJECT

APPENDIX A: MITIGATION MONITORING AND REPORTING PROGRAM
Farmstead at Long Meadow Ranch Lodging Project (Lodging)

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
III. AIR QUALITY					
AQ-1. Construction Dust and Exhaust Control: During any construction period ground disturbance, the applicant shall ensure that the Project contractor implements measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less than significant level. The contractor shall implement the following best management practices that are required of all projects: 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the	Require as a condition of project approval	Building Department	Building Department to monitor construction implementation of BAAQMD-required best management practices	Construction shall cease until compliance has been verified	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. AQ-2. Community Risk: The project evaluated is at a preliminary design phase and the actual measures to reduce diesel particulate matter emissions may change. A performance standard and feasible measure to achieve that standard are presented in below construction parameters. It is possible that a different set of measures could be developed, or the project could be reduced in scope following entitlement that would change the requirements to reduce DPM emissions. 1. Select equipment during construction to minimize emissions. 2. The Project shall develop a plan demonstrating that the off-road equipment used on-site to construct the Project would achieve a fleet-wide 72 percent reduction in PM2.5 exhaust emissions or more by requiring that all mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet, at a minimum, U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent.	Require as a condition of project approval	Building Department	Prior to and during construction	Construction shall cease until compliance has been verified	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
3. The construction contractor shall use all measures to minimize construction period DPM emissions to reduce the calculated cancer risk and annual PM2.5 concentrations below the thresholds. The use of equipment shall include CARB-certified Level 3 Diesel Particulate Filters or alternatively-fueled equipment (i.e., non-diesel) to meet this requirement. Other measures shall include the use of added exhaust devices, or a combination of measures, provided that these measures are approved by the City and demonstrated to reduce community risk impacts.					
IV. BIOLOGICAL RESOURCES					
BIO-1. Nesting Raptors, Passerines: If construction, grading, vegetation removal, or other Project-related improvements must occur during the nesting season of protected raptors and migratory birds (i.e. February 1 – August 31), a focused survey for active nests of such birds shall be conducted by a qualified biologist, who has documented experience conducting pre-construction nesting bird and raptor surveys, within 7 days prior to the beginning of Project activities. If an active nest is found, the qualified biologist who performed the survey shall determine species-specific no-disturbance buffer distances from all active nests. All no-disturbance buffers shall be clearly demarcated in the field with high visibility fencing or similar material. Active nests shall be monitored each day by a qualified biologist or trained biological monitor for the first week during Project activities to ensure Project activities do not result in nest disturbance. Weekly follow up visits shall also be performed by a qualified biologist or trained biological monitor to determine nest status. Weekly nest monitoring checks shall occur until the young have fledged or the nest is no longer active, as determined by a qualified biologist. If an active nest of a special-status bird or raptor species is discovered during the survey, the nest shall be monitored by a qualified biologist or trained biological monitor each day during Project activities until the young have fledged or the nest is no longer active, as determined by a qualified biologist. If the	Require as a condition of project approval	Planning & Building Departments	Prior to construction	No building permit will be issued	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
qualified biologist or trained biological monitor, or any personnel working on the Project observe potential nest disturbance behavior any time during Project activities, all Project activities shall cease and CDFW shall be consulted with prior to resuming Project activities. If a lapse in Project-related work of 7 days or longer occurs during the nesting season, a qualified biologist shall perform another survey for nesting birds and raptors prior to resuming Project activities. If active nests are discovered during the follow up survey, the abovementioned measures shall also be implemented. <u>Ground Nesting Raptors and Passerines</u> In order to determine if ground-nesting raptors or passerines are nesting onsite, a qualified ornithologist would have to conduct walking transects through the project site's grassland habitat searching for nests. If ground-nesting raptors (e.g. northern harrier) or passerines are identified during the surveys within 300 feet of the project site (or 75-feet in the case of passerines), a 300-foot buffer (or 75-feet in the case of passerines) around the nest site shall be fenced with orange construction fencing or brightly painted orange lath. If the nest is located off the project site, then the buffer shall be demarcated as per above where the buffer intersects the project site. The size of the buffer may be altered if a qualified ornithologist conducts behavioral observations and determines the nesting raptors or passerines are well acclimated to disturbance. If this occurs, the ornithologist should prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors/passerines. No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by July 15th. This date may be earlier or later, and would have to be determined by a qualified ornithologist. If a qualified					

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
ornithologist is not hired to watch the nesting raptors/passerines then the buffers shall be maintained in place through the month of August and work within the buffer can commence September 1st. <u>Special Status Bats</u> In order to avoid impacts to roosting bats, a qualified biologist shall conduct a bat habitat assessment of structures and trees that will be impacted by the project at least 30 days prior to removal. The bat habitat assessment shall be conducted by a biologist with experience conducting such assessments. If any trees contain suitable bat roosting habitat (e.g. cavities, crevices, deep bark fissures), they shall be clearly marked and removed in the following two-day phased method: On day 1, under the supervision of a qualified biologist, all tree limbs not containing suitable bat roosting habitat shall be removed using chainsaws only. The next day, the rest of the tree shall be removed. Bat habitat trees should be removed during seasonal periods of bat activity: prior to the maternity season – from approximately March 1 (or when night temperatures are above 45 degrees Fahrenheit and rains have ceased) through April 15 (when females begin to give birth to young); and prior to winter torpor – from September 1 (when young bats are self-sufficiently volant) through October 15 (before night temperatures fall below 45 degrees Fahrenheit and rains begin). If trees containing suitable bat roosting habitat must be removed outside the abovementioned seasonal periods, a qualified biologist shall survey the tree via climbing and using an endoscope to determine if maternity or winter torpor colonies are present. If maternity or winter torpor colonies are present, the tree shall only be removed during the abovementioned seasonal periods. If roosting bats are discovered, but not maternity or winter torpor colonies, then the tree shall be removed using the two-day phased method mentioned above. If no evidence of roosting bats is found, the two-day phased method is not required. If the qualified biologist discovers any evidence of bat					

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
roosting activity within structures proposed for removal, the qualified biologist shall prepare a project-specific Avoidance and Minimization Plan for CDFW review and approval prior to starting Project activities.					
V. CULTURAL RESOURCES					
CUL-1. If any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during any construction activities, the Contractor shall implement measures deemed necessary and feasible to avoid or minimize significant effects to the cultural resources including the following: • Suspend work within 100 feet of the find; and, • Immediately notify the City's Community Development Director and coordinate any necessary investigation of the site with a qualified archaeologist as needed to assess the resources (i.e., whether it is a "historical resource" or a "unique archaeological resource"); and, • Provide management recommendations should potential impacts to the resources be found to be significant: - o Possible management recommendations for historical or unique archaeological resources could include resource avoidance or data recovery excavations, where avoidance is infeasible in light of project design or layout, or is unnecessary to avoid significant effects. - o In addition, the Contractor in consultation with the Preservation Director, State Historic Preservation Officer, and if applicable, Tribal representatives, may include preparation of reports for resources identified as potentially eligible for listing in the California Register of Historical Resources.	Require as a condition of project approval	Building Department	During Construction	Construction shall cease until compliance has been verified	
CUL-2. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner	Require as a condition of project approval	Building Department	During Construction	Construction shall cease until compliance has been verified	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.					
X. HYDROLOGY AND WATER QUALITY					
HYDRO-1. Water Quality: The applicant shall comply with the requirements in the BASMAA Post-Construction Manual. Compliance will be demonstrated by completion of a Stormwater Control Plan to be approved by the City of St. Helena.	Require as a condition of project approval	Public Works Department	Prior to construction	No building permit will be issued	
HYDRO-2. Groundwater: The applicant shall submit landscape and irrigation plans to be approved by the City of St. Helena demonstrating compliance with the State of California's Model Water Efficient Landscape Ordinance.	Require as a condition of project approval	Public Works Department	Prior to construction	No building permit will be issued	
HYDRO-3. Drainage, Stormwater, Runoff: The applicant shall submit a hydrology analysis, to be approved by the City of St. Helena, demonstrating that the proposed project will not increase the 10-year runoff volume above the pre-development 10-year runoff volume.	Require as a condition of project approval	Public Works Department	Prior to construction	No building permit will be issued	
XIII. NOISE					
NOI-1. The following mitigation measures shall be included in the Project to reduce the impact to a less-than-significant level: Mechanical equipment shall be selected and designed to reduce impacts on surrounding uses to meet the City's noise level requirements. A qualified acoustical consultant shall be retained to review mechanical noise as these systems are selected to determine specific noise reduction measures necessary to reduce noise to comply with the City's noise level requirements. Noise reduction measures could include, but are not	Require as a condition of project approval	Building Department	Prior to construction	Permits will not be issued until approved	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
limited to, selection of equipment that emits low noise levels and installation of noise barriers such as enclosures and parapet walls to block the line-of-sight between the noise source and the nearest receptors. Alternate measures may include locating equipment in less noise-sensitive areas, such as the rooftop of the hotel buildings away from the building's edge nearest the residences, where feasible. NOI-2. The St. Helena Municipal Code limits construction activities to the hours between 8:00 AM and 5:00 PM, Monday through Saturday. Construction is not allowed on Sundays and holidays (federal and local) if noise can be heard at the property line of any parcel of real property within the city limits. In accordance with Implementing Action PS2.F, noise suppression devices and techniques developed as part of a typical construction noise control plan would include, but not be limited to, the following measures: - o Use "quiet" models of air compressors and other stationary noise sources where technology exists; - o Equip all internal combustion engine-driven equipment with mufflers that are in good condition and appropriate for the equipment; - o Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses; - o Locate staging areas and construction material areas as far away as possible from adjacent land uses; - o Prohibit all unnecessary idling of internal combustion engines;	Require as a condition of project approval	Building Department	During construction	Construction shall cease until compliance has been verified	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
- o Notify all adjacent land uses of the construction schedule in writing; and - o Designate a “disturbance coordinator” who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.					
XV. PUBLIC SERVICES					
PS-1. The Projects shall be required to pay project impacts fees: - o Evidence showing payment of school impact fees, in accordance with Government Code Section 65996, from the applicable school district, will be provided prior to City issuance of any building permits. - o Evidence showing payment of park fees, Civic Improvement Fees and Public Safety Fees will be provided to the City prior to issuance of any building permits. - o Other standard conditions of approval will apply, including provision of a fire flow analysis to ensure adequate water pressure and flow rates and that the project has a less than significant impact on fire flows.	Require as a condition of project approval	Building Department	Prior to construction	Building permit will not be issued until fees are paid	
XVI. RECREATION					
REC-1. The project shall be required to pay project impact fees:	Require as a condition of project approval	Building Department	Prior to construction	Building permit will not be issued until fees are paid	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
o Evidence showing payment of park impact fees shall be provided prior to the issuance of building permit.					
XVII. TRANSPORTATION					
TRAF-1. SR 29/Grayson Avenue – Mills Lane Intersection. Minor additional improvements are needed when Mills Lane is realigned and widened to connect to SR 29 at Grayson Lane. The Mills Lane approach should be striped to provide an exclusive left turn lane and a combined through/right turn lane. In addition, the Grayson Avenue approach should be re-striped or widened to provide two lanes, one exclusively for left turns and one for combined through/right turns. Protected left turn phasing should be provided on the Mills-Grayson approaches. Applicant will provide a fair share contribution to the costs.	Require as a condition of project approval	Public Works Department	During construction	Final occupancy permit will be withheld until improvements are completed	
TRAF-2. SR 29/Charter Oak Avenue Intersection – SR 29 Pedestrian Crossing. Provide a fair share contribution to the “HAWK” pedestrian hybrid flashing beacon proposed for the SR 29/Charter Oak Avenue intersection.	Require as a condition of project approval	Public Works Department	During construction	Final occupancy permit will be withheld until improvements are completed	
XVIII. TRIBAL CULTURAL RESOURCES					
CUL-1. If any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during any construction activities, the Contractor shall implement measures deemed necessary and feasible to avoid or minimize significant effects to the cultural resources including the following: - Suspend work within 100 feet of the find; and, - Immediately notify the City’s Community Development Director and coordinate any necessary investigation of the site with a qualified archaeologist as needed to assess the resources (i.e., whether it is a “historical resource” or a “unique archaeological resource”); and,	Require as a condition of project approval	Building Department	During Construction	Construction shall cease until compliance has been verified	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
- Provide management recommendations should potential impacts to the resources be found to be significant: - Possible management recommendations for historical or unique archaeological resources could include resource avoidance or data recovery excavations, where avoidance is infeasible in light of project design or layout, or is unnecessary to avoid significant effects. - In addition, the Contractor in consultation with the Preservation Director, State Historic Preservation Officer, and if applicable, Tribal representatives, may include preparation of reports for resources identified as potentially eligible for listing in the California Register of Historical Resources. CUL-2. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.	Require as a condition of project approval	Building Department	During Construction	Construction shall cease until compliance has been verified	
XIX. UTILITIES AND SERVICE SYSTEMS					
UTL-1. Storm Drain. The applicant shall connect to a storm drain capable of conveying the City's Master Planned 100-year storm water run-off in Mills Lane and outfall in the Napa River per the City of St. Helena Highway 29 Specific Plan and the City of St. Helena Storm Drain Master Plan.	Require as a condition of project approval	Public Works Department	Public Works to confirm storm drain connection meets requirements	Final occupancy permit will be withheld until compliance has been verified	
UTL-2. Water. The Project shall connect to City water service and comply with all requirements related to water as detailed in the Development Agreement. Namely, Developer shall construct and install recycled water infrastructure (i.e., purple pipe) in Mills Lane extending from Highway 29	Require as a condition of project approval	Public Works Department	Public Works to confirm fees have been paid	Building permits will be withheld until fees have been paid	

Mitigation Measure	Implementation Procedure	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Non-Compliance Sanction/Activity	Monitoring Compliance Record (Name/Date)
easterly to the eastern end of Mills Lane. Developer shall fund these improvements at a cost of up to \$256,549.					
UTL-3. Water. The Project shall demonstrate that the irrigation demands for the Project do not exceed well water in excess of well capacity. Annual reports shall be provided for 5 years after occupancy.	Require as a condition of project approval	Public Works Department	Public Works to approve irrigation plan	Permits will not be issued until plans have been approved	
UTL-4. Water. The Project shall include all water saving devices and methodology as required by CalGreen and City code.	Require as a condition of project approval	Public Works Department	Public Works to approve water usage plan	Permits will not be issued until plans have been approved	
UTL-5. Wastewater. Prior to issuance of Project approvals, the Project shall provide an analysis of wastewater capacity and availability in a formal study that: 1. Shall confirm availability of sewer lines and establish connections; and 2. Shall confirm plant capacity.	Require as a condition of project approval	Public Works Department	Public Works to approve water capacity analysis	Permits will not be issued until plans have been approved	

TRAFFIC IMPACT REPORT

**PROPOSED FARMSTEAD AT
LONG MEADOW RANCH PROJECT**

November 21, 2019

Prepared for: CITY OF ST. HELENA

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I. INTRODUCTION

This report has been prepared at the request of the City of St. Helena to determine if the traffic associated with two development scenarios for the Farmstead at Long Meadow Ranch project would result in any significant traffic, pedestrian or bicycle rider impacts. The first would be a proposed 65-unit lodging facility to be located along the east side of State Route 29 north of Mills Lane, while the second would include the 65-unit lodge as well as a new retail butcher shop within the Farmstead Farmers Market along Charter Oak Avenue east of SR 29 and traffic from a 200-guest event at the Charter Oak Avenue facility. The project location is shown in **Figures 1 & 2**. At City request, impacts due to both scenarios have been determined for harvest Friday AM and PM peak hour and Saturday afternoon peak hour traffic conditions for existing (2018), year 2022 and Cumulative (year 2040) conditions. Both year 2022 and 2040 “Without Project” analyses have been conducted assuming no improvements to Mills Lane, while all “With Project” analyses have assumed Mills Lane widening and realignment to intersect SR 29 at the Grayson Avenue signal. “With Project” conditions for both scenarios have also included construction of an improved parking lot in the southwest corner of the Dowdell Lane/McCormick Street intersection for use by lodging as well as Farmstead restaurant and farmers market employees in conjunction with elimination of the existing Farmstead restaurant and farmers market employee parking in a lot along Charter Oak Avenue west of SR 29. Evaluation has been conducted at the Pope Street-Mitchell Street, Charter Oak, Grayson Avenue-Mills Lane and Dowdell Lane intersections along SR 29 as well as along Mills Lane, Dowdell Lane and La Fata Street. Significant impacts, if any, have been identified and measures recommended to reduce all impacts to a less than significant level.

II. EXECUTIVE SUMMARY OF PROJECT IMPACTS & MITIGATIONS

A. LODGE ONLY

- **SIGNIFICANT OFF-SITE OPERATIONAL IMPACTS**
 - **SR 29/Grayson Avenue-Mills Lane** signalized intersection (2040).
Operation as a four-leg signalized intersection will be an unacceptable Level of Service E during the Friday AM peak hour. Before Mills Lane realignment, operation of the SR 29/Grayson signal would be an acceptable Level of Service D.
- **SIGNIFICANT PEDESTRIAN/BICYCLE IMPACTS.**
 - **SR 29/Charter Oak Avenue** intersection (Existing, 2022 & 2040). Lodge guests will use the SR 29 crosswalk at Charter Oak Avenue which will continue to have pedestrian crossing numbers exceeding Caltrans’ warrant criteria for a pedestrian hybrid flashing beacon.

- **RECOMMENDED MITIGATIONS.**

- **SR 29/Grayson Avenue-Mills Lane** intersection. Minor additional improvements are needed when Mills Lane is realigned and widened to connect to SR 29 at Grayson Avenue. The Mills Lane approach should be striped to provide an exclusive left turn lane and a combined through/right turn lane. In addition, the Grayson Avenue approach should be widened to provide a two-lane approach, one exclusively for left turns and one for combined through/right turns. Protected left turn phasing should be provided on the Mills-Grayson approaches.
- **SR 29/Charter Oak Avenue** intersection. Provide a fair share contribution towards a pedestrian hybrid flashing beacon (a High Intensity Activated Crosswalk (HAWK) pedestrian signal) on SR 29 at the Charter Oak Avenue intersection.

B. TOTAL PROJECT

- **SIGNIFICANT OFF-SITE OPERATIONAL IMPACTS**

- **SR 29/Grayson Avenue-Mills Lane** (2040) – None additional, see impact listed above for the lodge.
- **SR 29/Dowdell Lane intersection** (Existing & 2022) – signal warrant
- **SR 29/Charter Oak Avenue intersection** (Existing, 2022 & 2040) – signal warrant

- **SIGNIFICANT PEDESTRIAN/BICYCLE IMPACTS.**

- None additional, see impact listed above for the lodge.

- **RECOMMENDED MITIGATIONS**

- **SR 29/Grayson Avenue-Mills Lane intersection**
Minor additional improvements are needed when Mills Lane is realigned and widened to connect to SR 29 at Grayson Lane. The Mills Lane approach should be striped to provide an additional left turn lane and a combined through/right turn lane. In addition, the Grayson Avenue approach should be widened to provide a two-lane approach, one exclusively for left turns and one for combined through/right turns. Protected left turn phasing should be provided on the Mills-Grayson approaches.
- **SR 29/Dowdell Lane intersection**
Provide a fair share contribution towards future signalization.
- **SR 29/Charter Oak Avenue intersection**
Because City Public Works has indicated they are not in favor of a signal at this location, there are two possible options:

1. Schedule all large events to preclude any event traffic on the roadway system from 3:30-6:00 PM on weekdays and from 1:30-4:00 PM on weekend days. Measure 3 would also eliminate the need for the SR 29/Dowell Lane mitigation.

— or —

2. Provide additional funding to fully install the HAWK pedestrian signal at the SR 29/Charter Oak Avenue intersection – assuming Caltrans approval.

III. SUMMARY OF “WITH” VERSUS “WITHOUT” PROJECT CONDITIONS

A. WITHOUT PROJECT CONDITIONS

1. EXISTING (2018) HARVEST VOLUMES

Peak hour traffic volumes along Main Street (SR 29) in the project vicinity are similar during the Friday AM and PM commute and Saturday afternoon peak traffic hours (1,511 to 1,643 vehicles per hour [VPH]). Volumes on Mills Lane are minimal during all peak hours (11-25 VPH), while those on La Fata Street are higher on weekdays (31-36 VPH) compared to Saturday (13 VPH). Peak hour volumes on Dowdell Lane are also higher during the week (172 VPH) compared to Saturday (66 VPH).

2-WAY PEAK HOUR VOLUMES – HARVEST 2017

LOCATION	FRIDAY		SATURDAY AFTERNOON
	AM PEAK HOUR	PM PEAK HOUR	PEAK HOUR
Mills Lane (just east of SR 29)	25	20	11
La Fata Street (just north of Dowdell Lane)	31	36	13
Dowdell Lane (just east of SR 29)	172	172	66
SR 29 (just north of Mills Lane)	1,643	1,560	1,511

Source: Komes Traffic Study by Omni Means (2017)

2. UNACCEPTABLE WITHOUT PROJECT INTERSECTION LEVEL OF SERVICE

a. EXISTING (2018) HARVEST

- **SR 29/Pope Street** (signal)
 - Friday AM & PM + Saturday PM peak hours
- **SR 29/Charter Oak Avenue** (unsignalized)
 - Friday AM peak hour – westbound stop sign controlled approach

b. YEAR 2022 HARVEST – MILLS LANE NOT IMPROVED OR REALIGNED

- **SR 29/Pope Street** (signal)
 - Friday AM & PM + Saturday PM peak hours
- **SR 29/ Charter Oak Avenue** (unsignalized)
 - Friday AM peak hour – westbound stop sign controlled approach

c. CUMULATIVE (YEAR 2040) HARVEST – MILLS LANE NOT IMPROVED OR REALIGNED

- **SR 29/Pope Street** (signal)
 - Friday AM & PM + Saturday PM peak hours
- **SR 29/Charter Oak Avenue** (unsignalized)
 - Friday AM & PM peak hours – westbound stop sign controlled approach

3. INTERSECTIONS WITH VOLUMES MEETING CALTRANS PEAK HOUR RURAL SIGNAL WARRANT #3 CRITERIA (WITHOUT PROJECT)

a. EXISTING HARVEST

- **SR 29/Dowdell Lane**
 - Friday AM & PM peak hours
- **SR 29/Charter Oak Avenue**
 - Friday AM & Saturday PM peak hours

b. YEAR 2022 HARVEST

- **SR 29/Dowdell Lane**
 - Friday AM & PM peak hours
 - Saturday PM peak hour
- **SR 29/Charter Oak Avenue**
 - Friday AM & PM peak hours
 - Saturday PM peak hour

c. CUMULATIVE (YEAR 2040) HARVEST

- **SR 29/Dowdell Lane**
 - Friday AM & PM peak hours
 - Saturday PM peak hour
- **SR 29/Charter Oak Avenue**
 - Friday AM & PM peak hours
 - Saturday PM peak hour

4. EXISTING PEDESTRIAN ACTIVITY

There is minimal pedestrian activity along either Mills Lane, Dowdell Lane or La Fata Street in the immediate project area, while some pedestrians (in particular high school students) walk along SR 29 both north and south of the Grayson Avenue signal. The location along SR 29 in the study area having the highest pedestrian crossings was at Charter Oak Avenue. There were from 9 to 73 crossings per hour during the 10 hours surveyed on Friday and Saturday for the report. This crossing, which now has pedestrian activated in-pavement lights, also has combined pedestrian and traffic volumes meeting Caltrans warrant guidelines for provision of a pedestrian hybrid flashing beacon (also called a High Intensity Activated Crosswalk – or HAWK pedestrian signal).

5. EXISTING BICYCLE ACTIVITY

There is minimal bicycle activity now along SR 29 in the study area due to the high traffic volumes and lack of bicycle lanes or paths (1 to 7 riders per hour depending upon the hour and the location). There is little or no bicycle activity along Mills Lane, La Fata Street or Dowdell Lane.

B. PROJECT TRIP GENERATION, DISTRIBUTION & IMPROVEMENTS

1. LODGE

a. Lodging Trip Generation

During a harvest Friday the proposed 65-unit lodging facility at 100 percent occupancy would be expected to generate 544 daily two-way trips with 19 inbound and 13 outbound trips during the AM commute peak traffic hour, as well as 20 inbound and 20 outbound trips during the PM commute peak traffic hour.

During a harvest Saturday the lodging facility at 100 percent occupancy would be expected to generate 534 daily two-way trips, with 17 inbound and 14 outbound trips during the peak traffic hour on SR 29, which would occur in the middle of the afternoon.

All project guests will park at the lodging facility which will be accessed at the Mills Lane/La Fata Street intersection, while all lodging employees will park in an improved parking lot on the southwest corner of the Dowdell Lane/McCormick Street intersection, about a quarter mile south of the lodging facility.

b. Relocation of Farmstead Restaurant/Farmers Market Employee Parking

All restaurant/farmers market employees will relocate from a lot on Charter Oak Avenue west of SR 29 to the new improved parking lot at the Dowdell Lane/McCormick Street intersection.

c. Mills Lane Improvements

Mills Lane will be widened with hotel development from La Fata Street to SR 29 to a 40-foot curb-to-curb width adjacent to the site and a 44-foot width near SR 29 at the signalized Grayson Avenue intersection. In addition, a 10-foot-wide Class I bicycle path/pedestrian walkway will be constructed on the north side of Mills Lane from SR 29 to La Fata Street.

d. La Fata Street Improvements

Large boulders along both side of La Fata Street near Mills Lane will be removed and the street section widened to 40 feet, curb to curb. In addition, a paved walkway will be provided on the west side of La Fata Street between Dowdell Lane and Mills Lane. This will complete the paved walkway system between the lodge and the improved parking lot at the Dowdell Lane/McCormick Street intersection.

e. Lodge Traffic Trip Distribution

Project employees will park in the new lot on the southwest corner of the Dowdell Lane/McCormick Street intersection, while project guests will park on site. Guest parking will be accessed via a driveway connecting to Mills Lane opposite La Fata Street.

Project guest and employee traffic was projected to distribute 50 percent south on SR 29, with 45 percent north on SR 29 and 5 percent on Grayson Avenue during all time periods except the Friday PM peak hour. During this period up to 60 percent of inbound guest traffic would be expected to come from the south on SR 29.

2. TOTAL PROJECT

a. Retail Butcher Shop Trip Generation & Distribution

Three retail customers are projected to be driving to/from the farmers market on Charter Oak Avenue during the Friday & Saturday PM peak hours. The shop will be closed during the Friday AM peak hour.

b. 200-Person Event Trip Generation & Distribution

Fourteen shuttle buses (applicant estimate) and a minor level of non-shuttle auto traffic are projected during the hour before and after an event. All access will be via Charter Oak Avenue and buses will park off site during an event. A vast majority of buses are projected to use SR 29 to/from south of the site.

C. PROJECT SIGNIFICANT OFF-SITE CIRCULATION IMPACTS

1. EXISTING (2018)

a. LODGE ONLY

i. Intersection Level of Service

None.

ii. Signal Warrant

None.

iii. Local Roadways

None.

b. TOTAL PROJECT

i. Intersection Level of Service

None.

ii. Signal Warrant

- **SR 29/Dowdell Lane**
 - Friday PM peak hour
- **SR 29/Charter Oak Avenue**
 - Friday PM peak hour
 - Saturday PM peak hour

- iii. **Local Roadways**
None.

Less than significant with mitigation.

2. YEAR 2022

a. LODGE ONLY

- i. **Intersection Level of Service**
None.
- ii. **Signal Warrant**
None.
- iii. **Local Roadways**
None.

b. TOTAL PROJECT

- i. **Intersection Level of Service**
None.
- ii. **Signal Warrant**
 - **SR 29/Dowdell Lane**
 - Friday PM peak hour
 - Saturday PM peak hour
 - **SR 29/Charter Oak Avenue**
 - Friday PM peak hour
 - Saturday PM peak hour
- iii. **Local Roadways**
None.

Less than significant with mitigation.

3. CUMULATIVE (YEAR 2040)

a. LODGE ONLY

- i. **Intersection Level of Service**
 - **SR 29/Grayson Avenue-Mills Lane**
 - Friday AM peak hour – unacceptable signalized operation
- ii. **Signal Warrant**
None.
- iii. **Local Roadways**
None.

b. TOTAL PROJECT**i. Intersection Level of Service**

- **SR 29/Grayson Avenue-Mills Lane**
 - Friday AM peak hour – unacceptable signalized operation

ii. Signal Warrant

- **SR 29/Charter Oak Avenue**
 - Friday PM peak hour
 - Saturday PM peak hour

iii. Local Roadways

None.

Less than significant with mitigation.

D. PROJECT SIGNIFICANT PEDESTRIAN IMPACTS

- Existing Farmstead restaurant and farmers market employee parking will be moved from a lot along Charter Oak Avenue west of SR 29 to a new lot in the southwest corner of the Dowdell Lane/McCormick Street intersection. This will reduce, or at a minimum not increase pedestrian crossings of SR 29 at Charter Oak Avenue. Lodge guests would primarily walk to/from downtown St. Helena via SR 29, traveling through the Farmstead property to Charter Oak Avenue. Some guests will cross SR 29 at Charter Oak Avenue. Since the SR 29 crosswalk at Charter Oak Avenue already meets traffic and pedestrian criteria for provision of a pedestrian hybrid flashing beacon, continued use of the crossing due to project guests would be considered significant.

Less than significant with mitigation.

E. PROJECT BICYCLE RIDER IMPACTS

- There are no bicycle lanes or paths currently in the project area and little bike riding on local streets would initially be expected by lodging guests. However, a Class I bicycle path/pedestrian walkway will be constructed on the north side of Mills Lane from La Fata Street to SR 29. In addition, bicycles will be provided in each room for guests and bicycle lockers will be provided for employees.

Less than significant impact.

F. PROPOSED DOWDELL LANE EMPLOYEE PARKING LOT – SPACES PROVIDED VERSUS DEMAND

- The employee parking lot at the Dowdell Lane/McCormick Street intersection would be paved and have 73 striped parking spaces. Based upon applicant supplied total project employee numbers and shift change times, the maximum parking demand would occur for a one half hour period during the day (2:30-3:00 PM) when there would be up to 73 employees on-site at the same time. However, parking demand would be expected to be 15 to 20 percent less than this total due to car/vanpooling, transit use, drop off/pickup by friends and walking/biking by employees living near the project. The number of spaces to be provided in this lot should be adequate for the employee parking demand as detailed by the applicant.

Less than significant impact.

G. RECOMMENDED MITIGATIONS

A. LODGE

1. SR 29/GRAYSON AVENUE-MILLS LANE – LEVEL OF SERVICE IMPACT

- Minor additional improvements are needed when Mills Lane is realigned and widened to connect to SR 29 at Grayson Lane. The Mills Lane approach should be striped to provide an additional left turn lane and a combined through/right turn lane. In addition, the Grayson Avenue approach should be widened to provide a two-lane approach, one exclusively for left turns and one for combined through/right turns. Protected left turn phasing should be provided on the Mills-Grayson approaches.

2. SR 29/CHARTER OAK AVENUE INTERSECTION – SR 29 PEDESTRIAN CROSSINGS

- Provide a fair share contribution to the “HAWK” pedestrian hybrid flashing beacon proposed for the SR 29/Charter Oak Avenue intersection.

Impacts reduced to less than significant level.

B. TOTAL PROJECT

1. SR 29/GRAYSON AVENUE-MILLS LANE – LEVEL OF SERVICE IMPACT

- Minor additional improvements are needed when Mills Lane is realigned and widened to connect to SR 29 at Grayson Lane. The Mills Lane approach should be striped to provide an additional left turn lane and a combined through/right turn lane. In addition, the Grayson Avenue approach should be widened to provide a two-lane approach, one exclusively for left turns and one for combined through/right turns. Protected left turn phasing should be provided on the Mills-Grayson approaches.

2. SR 29/DOWDELL LANE INTERSECTION – SIGNAL WARRANT IMPACT

- Provide a fair share contribution towards the signal planned at the SR 29/Dowell Lane intersection (as detailed in the Highway 29 Specific Plan).

3. SR 29/CHARTER OAK AVENUE INTERSECTION – SIGNAL WARRANT IMPACTS

- Provide one of the following two measures.
 - a. Start and end all special events with more than 75 people at times that will not add traffic to SR 29 during the weekday and Saturday PM peak traffic periods (3:30-6:00 PM on weekdays and 1:30-4:00 PM on weekend days).
— or —
 - b. Provide additional funding for the “HAWK” pedestrian hybrid flashing beacon. The beacon will need to be in operation before major events are allowed to add traffic to the existing weekday and weekend peak traffic hours along SR 29. Should Caltrans not approve installation of the HAWK hybrid flashing beacon, then the only measure to reduce the impact to a level of insignificance is measure “a” – eliminating 200-person event traffic during the Friday and Saturday PM peak traffic hours.

Impacts reduced to less than significant level.

IV. PROJECT LOCATION & DESCRIPTION

A. LODGE

The proposed 65-unit Farmstead at Long Meadow Ranch lodging facility would be located east of SR 29 and north of Mills Lane in the southern section of the City of St. Helena (see **Figures 1 & 2 – Regional and Local Area Maps, Figure 3 – Existing Intersection Geometrics & Control, and Figure 4 – Site Plan**). Currently, the vast majority of the lodge site is vacant with the exception of a vegetable garden. The only street bordering the lodge site is Mills Lane, on the south. The site extends along Mills Lane from the Napa Valley Wine Train right-of-way to just east of the La Fata Street intersection. Lodge guest parking would be on-site and accessed via a driveway which would be the north leg of the Mills Lane/La Fata Street intersection, while lodge employee parking would be in a new paved lot on the southwest corner of the Dowdell Lane/McCormick Street intersection (see **Figure 5**). This lot is currently undeveloped and will also be used by employees of the existing Farmstead restaurant and farmers market. Overall the lodge will employ 65 staff, with a maximum of 47 on site during any given day. An on-call shuttle bus will be provided for all staff unable to walk between the new lot and either the lodge or restaurant/farmers market. A shelter will also be provided adjacent to the lot.

Mills Lane is planned to be widened between La Fata Street and SR 29 as well as realigned to intersect SR 29 as the fourth leg of the signalized Grayson Avenue intersection in conjunction with development of the Farmstead Lodge. The existing Mills Lane crossing of the Wine Train track would be eliminated and a new at-grade crossing provided. The new Mills Lane at-grade crossing of the Napa Valley Wine Train track would be protected by gates and flashing lights. Mills Lane will have two travel lanes, on-street parking on both sides of the street adjacent to the lodge and a Class I bicycle path and pedestrian walkway on the north side of the street from SR 29 to La Fata Street. The Mills Lane approach to the SR 29/Grayson Avenue signal will have two lanes, one exclusively for right turns and one for combined through/left turns.

The northwest end of the project site would extend to the Napa Valley Wine Train right-of-way and be adjacent to the existing Farmstead at Long Meadow Ranch restaurant and farmers market. Access between the two parcels would be possible for pedestrians and bicycles, but not autos. Guests walking to/from downtown St. Helena would use this route through the restaurant property to access SR 29 at the Charter Oak intersection.

The proposed lodging facility will contain 65 rooms as well as spa facilities for guests only. The existing Farmstead restaurant will be available for meals. There will be an expansion of existing cooking classes as well as gardening and crafts demonstrations (now taking place at the Farmstead restaurant to the north) in conjunction with the new lodging units. However, classes will be during non-peak restaurant and farmers market traffic hours (9:00 a.m. to noon).

As part of project development a Class I paved path/pedestrian walkway will be provided on the north side of Mills Lane between La Fata Street and SR 29. In addition, a paved pathway will be provided along the west side of La Fata Street between Mills Lane and Dowdell Lane that will complete a paved walkway system between the employee improved parking lot and the lodge entrance.

La Fata Street will be widened to 40 feet (curb to curb) just south of Mills Lane in conjunction with removal of the boulders that now line both sides of the street in this area. Finally, stop signs will be provided on the La Fata Street-Lodge driveway approaches to Mills Lane.

A Transportation Demand Management (TDM) coordinator will be provided in order to establish and maintain ongoing programs to reduce vehicle trips by guests and employees. Such measures will include car and vanpooling programs for employees, winery tours for guests with pickup/drop off at the lodge, etc.

B. RETAIL BUTCHER SHOP & 200-PERSON EVENT

A 408-square-foot butcher shop will be added to the farmers market and be open to the public. Hours will be 10:00 AM to 6:00 PM. Existing farmers market butchers and staff will work in the new retail facility. Local customers will either walk or drive to/from the site.

Based upon the applicant's request for four 200-person events per week with no restrictions on beginning or end times, for analysis purposes the City has requested that traffic from this size event be assumed on the local roadway network during the Friday and Saturday PM peak traffic hours. Access would be via 14 shuttle buses, although a few attendees would also be likely to drive. All shuttle buses will access the restaurant/farmers market parking lot along Charter Oak Avenue. They are assumed to park off site during the event.

V. SCOPE OF SERVICES

The following scope of services was requested by City of St. Helena staff for the traffic analysis.

I. ANALYSIS LOCATIONS

- SR 29/Pope Street-Mitchell Street intersection (signal)
- SR 29/Charter Oak Avenue intersection
- SR 29/Mills Lane intersection
- SR 29/Grayson Avenue intersection (signal)
- SR 29/Dowdell Lane intersection
- Mills Lane
- La Fata Street
- Dowdell Lane

II. ANALYSIS TIME PERIODS

- Harvest Friday AM and PM commute peak traffic hours
- Harvest Saturday afternoon peak traffic hour

III. ANALYSIS SCENARIOS

- A. **Existing Without Project** (with Mills Lane remaining unimproved and not realigned at SR 29)
- B. **Existing + Lodge** (with Mills Lane widened and realigned as the fourth leg of the SR 29/Grayson Avenue signal)
- C. **Existing + Total Project** (lodge, retail butcher shop + 200-person event)
- D. **Year 2022 Without Project** (with Mills Lane remaining unimproved and not realigned at SR 29)
- E. **Year 2022 + Lodge** (with Mills Lane widened and realigned as the fourth leg of the SR 29/Grayson Avenue signal)
- F. **Year 2022 + Total Project** (lodge, retail butcher shop + 200-person event)
- G. **Cumulative (Year 2040) Without Project** (with Mills Lane remaining unimproved and not realigned at SR 29)
- H. **Cumulative (Year 2040) + Lodge** (with Mills Lane widened and realigned as the fourth leg of the SR 29/Grayson Avenue signal)
- I. **Cumulative (Year 2040) + Total Project** (lodge, retail butcher shop + 200-person event)

VI. EXISTING CONDITIONS (WITHOUT PROJECT)

A. ROADWAYS

Main Street (State Routes 29 & 128) is the primary north-south travel route through the Napa Valley and the major north-south route through the City of St. Helena. In this study it is referred to as SR 29. North of St. Helena SR 29 extends to Calistoga and Lake County, while to the south it extends to the cities of Napa and American Canyon. Main Street is classified as a Regional Connector Street in the St. Helena General Plan Update 2030 Circulation Element. In the project vicinity SR 29 has recently been reconstructed and has single travel lanes in each direction and a median continuous two-way left turn lane extending south for about three miles to the Mee Lane intersection. The posted speed limit in the vicinity of Mills Lane is 35 miles per hour and no on-street parking is allowed, while just south of Charter Oak Avenue the speed limit is reduced to 25 miles per hour. Curb and gutter along with two- to four-foot-wide paved shoulder are in place along both sides of the street. The SR 29/Grayson Avenue intersection was signalized about two years ago. There is a crosswalk on the west leg of the intersection (across Grayson Avenue), but none across SR 29. The signal is vehicle activated on the Grayson Avenue approach with SR 29 traffic receiving a continuous green light unless traffic approaches on Grayson Avenue, or a left turn is made from northbound SR 29 to Grayson Avenue. The SR 29 Specific Plan indicates that the SR 29/Dowdell Lane intersection will ultimately be signalized, while the SR 29/Pope Street-Mitchell Street intersection has been signalized for more than 50 years.

Mills Lane is a 14- to 15-foot-wide street extending easterly from SR 29 for about 0.85 miles before ending. It provides access to vineyards and intermittent residences. There are no curbs, gutters, sidewalks or paved shoulders, but grass and gravel shoulders are in place. Two-way

traffic flow is possible by slow-moving vehicles, but it requires one or both drivers to partially pull off to the gravel and grass shoulders. Mills Lane is stop sign controlled on its approach to SR 29 and the posted speed limit is 25 miles per hour. Mills Lane also has about a 20-foot-wide at-grade crossing of the Napa Valley Wine Train single track about 20 feet from the east edge of SR 29. The crossing is protected by stop signs and “Railroad Crossing” crossbucks.

La Fata Street is primarily a 40-foot-wide curb-to-curb street extending southerly from Mills Lane to Dowdell Lane and then further south to Vintage Avenue. The La Fata Street centerlines are offset by about 40 feet at Dowdell Lane. Along the 40-foot section curb and gutter are in place along both sides of the street and on-street parking is allowed. La Fata Street primarily serves wine-related warehousing and production facilities. It is stop sign controlled on both approaches to Dowdell Lane, but not on its approach to Mills Lane. La Fata Street has been narrowed to about 14 to 15 feet for the first 60 feet south of Mills Lane by dirt being placed in the street. Large rocks also line the narrowed roadway and the north side of Mills Lane, potentially to preclude truck turns. There are no sidewalks or pathways along La Fata Street between Mills Lane and Dowdell Lane.

Dowdell Lane is a 40-foot-wide curb-to-curb street extending easterly from SR 29 to the east of La Fata Street, where it continues through a light industrial area and then narrows to serve vineyards and residences. Dowdell Lane between SR 29 and La Fata Street has curb, gutter and sidewalk along the south side of the street and on-street parking is allowed, while curb, gutter, minimal sidewalk and on-street parking is provided on the north side of the street. The posted speed limit is 25 miles per hour. Dowdell Lane is wide enough to allow right and left turning vehicles to separate on its stop sign controlled approach to SR 29. Dowdell Lane also has an at-grade crossing of the Napa Valley Wine Train single track about 20 feet from the east edge of SR 29. The crossing is protected by gates and flashing lights.

Charter Oak Avenue is a two-lane, 38-foot-wide street east and west of SR 29. Their “Tee” intersections with SR 29 are offset by about 90 feet, the west leg being to the north. Both Charter Oak Avenue approaches to SR 29 are stop sign controlled. There is a crosswalk across SR 29 between the offset intersections. The east leg of Charter Oak Avenue also has an at-grade crossing of the Napa Valley Wine Train about 20 feet from the east edge of SR 29. It is protected by gates and flashing lights.

Figure 3 provides a schematic presentation of analysis intersection approach lanes and control. For description purposes in this study, SR 29 and La Fata Street were designated to run in a north-south direction, while Mills Lane, Grayson Avenue, Dowdell Lane and Charter Oak Avenue were designated to run in an east-west direction.

B. RAILWAY

The Napa Valley Wine Train has a single track line extending between St. Helena and the City of Napa. In the project area it runs parallel to and about 20 feet to the east of the east curb of SR 29. Gates and flashing red lights are in place at the railroad’s at-grade crossings of Pope Street, Dowdell Lane and Charter Oak Avenue, but not at Mills Lane. The Mills Lane crossing has top signs and “Railroad Crossing” crossbucks on both approaches. Currently, there are, at most, three round trips per day during the summer and fall. The train speed limit is 15 miles per hour.

C. VOLUMES

1. EXISTING COUNTS (2017-2019)

The Napa County Travel Behavioral Study¹ shows that the highest weekday volumes in Napa Valley occur on a Friday, with the highest weekend volumes occurring on a Saturday. In addition, historical count data from the City of Napa show that Friday has the highest volumes of any weekday, while Caltrans historical counts for SR 29 between St. Helena and Napa also show that weekday AM and PM peak hour volumes are higher on a Friday than on either a Wednesday or Thursday. Therefore, Friday and Saturday peak traffic conditions were evaluated in this study at the request of St. Helena City staff.

Year 2018 fall weekday AM and PM peak hour and Saturday afternoon peak hour turn movement traffic counts were obtained from the City's General Plan Update Draft EIR traffic analysis for the SR 29 intersections with Pope Street-Mitchell Street, Mills Lane and Grayson Avenue. Year 2019 Friday and Saturday peak hour turn movement counts were conducted by Crane Transportation Group at the SR 29/Charter Oak Avenue intersection, while 2017 Friday and Saturday peak hour turn movement counts at the SR 29/Dowdell, Mills/La Fata and Dowdell/La Fata intersections were obtained from the Komes Winery traffic study by Omni Means (March 2018). The SR 29/Grayson Avenue signal was in operation and all local schools were open and had normal schedules on all count days. The peak traffic hours were determined to be 7:45-8:45 AM and 4:30-5:30 PM on Friday, and 2:00-3:00 PM on Saturday. The 2017 and 2019 counts were adjusted to match the 2018 count system used in the General Plan Update Circulation Element. No hose counts were utilized to obtain volume data or peak traffic hours for this study.

Traffic volumes along northbound SR 29 in the project area frequently exhibited stop-and-go flow, particularly during the Friday and Saturday afternoon peak traffic periods. This was due to capacity constraints at the signalized intersections along SR 29 in downtown St. Helena, particularly Pope Street-Mitchell Street. However, many drivers on SR 29 were courteous and stopped to allow turns to or from all side streets and driveways.

2. SEASONAL ADJUSTMENT

Project traffic impacts have been evaluated during September harvest conditions at the request of St. Helena City staff. Based upon more than four years of historical information from Caltrans PeMS (Performance Measurement System) count surveys along SR 29 in the Napa Valley, September has the highest daily volumes of the year (during harvest).

February 2017 peak hour traffic counts in the Komes traffic study and May 2019 traffic counts by Crane Transportation Group were seasonally adjusted to reflect September 2018 harvest conditions based upon historical traffic count data from Caltrans. Resultant harvest 2018 Friday AM and PM peak hour and Saturday afternoon peak hour volumes are presented in **Figures 6, 7 and 8**.

¹ Fehr & Peers, December 8, 2014.

The following chart presents a comparison of projected Harvest 2018 two-way peak hour traffic flows on the roads in close proximity to the project site.

2-WAY PEAK HOUR VOLUMES – HARVEST 2018

LOCATION	FRIDAY		SATURDAY AFTERNOON
	AM PEAK HOUR	PM PEAK HOUR	PEAK HOUR
Mills Lane (just east of SR 29)	25	20	11
La Fata Street (just north of Dowdell Lane)	31	36	13
Dowdell Lane (just east of SR 29)	172	172	66
SR 29 (just north of Mills Lane)	1,643	1,560	1,511

Source: Crane Transportation Group

As shown, two-way volumes along SR 29 are projected to be similar during the Friday AM and PM and Saturday afternoon peak traffic hours (between about 1,511 to 1,643 VPH). Volumes on Mills Lane are minimal during all peak hours (11-25 VPH), while those on La Fata Street are higher on weekdays (31-36 VPH) compared to Saturday (13 VPH). Peak hour volumes on Dowdell Lane are also higher during the week (172 VPH) compared to Saturday (66 VPH).

D. INTERSECTION LEVEL OF SERVICE

1. ANALYSIS METHODOLOGY

Transportation engineers and planners commonly use a grading system called level of service (LOS) to measure and describe the operational status of the local roadway network. LOS is a description of the quality of a roadway facility's operation, ranging from LOS A (indicating free-flow traffic conditions with little or no delay) to LOS F (representing oversaturated conditions where traffic flows exceed design capacity, resulting in long queues and delays). Intersections, rather than roadway segments between intersections, are almost always the capacity controlling locations for any circulation system.

Signalized Intersections. For signalized intersections, the Year 2017 6th Edition *Highway Capacity Manual* (Transportation Research Board, National Research Council) methodology was utilized. With this methodology, operations are defined by the level of service and average control delay per vehicle (measured in seconds) for the entire intersection. For a signalized intersection, control delay is the portion of the total delay attributed to traffic signal operation. This includes delay associated with deceleration, acceleration, stopping, and moving up in the queue. **Table 1** summarizes the relationship between delay and LOS for signalized intersections.

Unsignalized Intersections. For unsignalized (all-way stop-controlled and side-street stop-controlled) intersections, the Year 2017 6th Edition *Highway Capacity Manual* (Transportation Research Board, National Research Council) methodology for unsignalized intersections was utilized. For side-street stop-controlled intersections, operations are defined by the level of service and average control delay per vehicle (measured in seconds), with delay reported for the

stop sign controlled approaches or turn movements. For all-way stop-controlled intersections, operations are defined by the average control delay for the entire intersection (measured in seconds per vehicle). The delay at an unsignalized intersection incorporates delay associated with deceleration, acceleration, stopping, and moving up in the queue. **Table 2** summarizes the relationship between delay and LOS for unsignalized intersections.

The Synchro software program was utilized for all level of service analysis. The software is not impacted by speed limits. However, methodology to reflect the impact of vehicle queuing along Main Street was worked out between the City and Fehr & Peers as part of their General Plan Update Circulation Element analysis. This same methodology was utilized in this revised Farmstead Traffic Impact Study.

2. MINIMUM ACCEPTABLE OPERATION

a. Signalized Intersections on Main Street (SR 29)

The City of St. Helena uses LOS D as the poorest acceptable operation at a signalized intersection along Main Street.

b. Unsignalized Intersections on Main Street (SR 29)

The City of St. Helena uses LOS D at unsignalized intersections along Main Street as the poorest acceptable operation for the side street stop sign controlled approach.

3. EXISTING INTERSECTION OPERATION

Table 3 shows that for harvest 2018 conditions three of the five analyzed intersections were experiencing acceptable operation during both the Friday and Saturday peak traffic hours.

HARVEST 2018 ACCEPTABLE OPERATION (FRIDAY & SATURDAY PEAK TRAFFIC HOURS)

SR 29/Mills Lane (Mills Lane single lane stop sign controlled approach)	LOS B
SR 29/Grayson Avenue (signal)	LOS C or D
SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C

It should be noted that the new median continuous two-way left turn lane provided on SR 29 greatly facilitates left turn movements from Dowdell Lane, as do the older continuous two-way left turn lanes north and south of Charter Oak Avenue.

Table 3 also shows that two of the intersections were experiencing unacceptable operation.

HARVEST 2018 UNACCEPTABLE OPERATION

SR 29/Pope Street-Mitchell Street
SR 29/Charter Oak Avenue

LOS F during all Friday & Saturday peak hours
 LOS E during the Friday AM peak hour

The SR 29/Charter Oak Avenue intersection experienced acceptable levels of service (LOS C or D) on both Charter Oak Avenue stop sign controlled intersection approaches during the Friday and Saturday PM peak traffic hours. However, during the Friday AM peak hour, while the eastbound approach was operating at an acceptable LOS C, the westbound approach was operating at an unacceptable LOS E. Level of service worksheets are contained in **Appendix A**.

E. INTERSECTION SIGNAL WARRANTS

1. ANALYSIS METHODOLOGY

Traffic signals are used to provide an orderly flow of traffic through an intersection. Many times they are needed to offer side street traffic an opportunity to access a major road where high volumes and/or high vehicle speeds block crossing or turn movements. They do not, however, increase the capacity of an intersection (i.e., increase the overall intersection's ability to accommodate additional vehicles) and, in fact, often slightly reduce the number of total vehicles that can pass through an intersection in a given period of time. Signals can also cause an increase in traffic accidents if installed at inappropriate locations.

There are 10 possible tests for determining whether a traffic signal should be considered for installation. These tests, called "warrants", consider criteria such as actual traffic volume, pedestrian volume, presence of school children, and accident history. The intersection volume data together with the available collision histories were compared to warrants contained in the *California Manual on Uniform Traffic Control Devices, 2014, Revision 3 (2014 CMUTCD Rev. 2)*. Section 4C of the 2014 CMUTCD Rev. 3 provides guidelines, or warrants, which may indicate need for a traffic signal at an unsignalized intersection. As indicated in the 2014 CMUTCD Rev. 3, satisfaction of one or more warrants does not necessarily require immediate installation of a traffic signal. It is merely an indication that the local jurisdiction should begin monitoring conditions at that location and that a signal may ultimately be required.

Warrant 3, the peak hour volume warrant, is often used as an initial check of signalization needs since peak hour volume data is typically available and this warrant is usually the first one to be met. Warrant 3 is based on a logarithmic curve and takes only the hour with the highest volume of the day into account. Please see **Appendix B Figures A-1 to A-2** for the warrant charts.

Caltrans "rural" peak hour volume signal warrant has been used for all unsignalized intersection analysis along SR 29 in this study. Rural warrant criteria are used where speeds on the uncontrolled approaches are 40 mph or greater, or where the local population is less than 10,000 people. Although the speeds on SR 29 at the analysis intersections in this study are less than 40 mph, the St. Helena population is less than 10,000 people. Therefore, based upon direction from the City, rural warrants were used for evaluation purposes.

2. MINIMUM ACCEPTABLE OPERATION

Table 4 shows that the **SR 29/Charter Oak Avenue** intersection would have volumes meeting rural signal warrant criteria during the Friday AM and Saturday PM peak hours, while the **SR 29/Dowdell Lane** intersection would have volumes meeting rural warrant criteria during the Friday AM and PM peak hours.

F. PLANNED OR ONGOING IMPROVEMENTS

Mills Lane widening and realignment at SR 29. Mills Lane is planned to be widened between La Fata Street and SR 29 as well as realigned to intersect SR 29 as the fourth leg of the signalized Grayson Avenue intersection in conjunction with development of the Farmstead Lodge. Mills Lane will have a two-lane approach to SR 29, currently planned as an exclusive right turn lane and a shared through/left turn lane. This will necessitate split signal phasing on the Mills Lane and Grayson Avenue intersection approaches.

SR 29/Dowdell Lane signalization. The Highway 29 Specific Plan (February 2005) indicates that the SR 29/Dowdell Lane intersection will be signalized at some unspecified time in the future. At direction of City staff, this intersection has not been assumed signalized for any analysis horizon year.

G. PEDESTRIAN & BICYCLE FACILITIES AND VOLUMES

1. PEDESTRIAN

a. Facilities

Sidewalks are provided along the following streets in the project area.

- SR 29 along both sides of street north of Charter Oak Avenue.
- SR 29 along the west side of the street, Charter Oak Avenue to Grayson Avenue.
- SR 29 gravel pathway along west side of street from Grayson Avenue to Dowdell Lane.
- Grayson Avenue along both sides of the street.
- Charter Oak Avenue east of SR 29, both sides of the street.
- Charter Oak Avenue west side of SR 29, south side of the street (sidewalk or paved path).
- Dowdell Lane, south side of the street from La Fata Street to McCormick Street.

There are no sidewalks along Mills Lane or along La Fata Street between Mills Lane and Dowdell Lane. There are crosswalks of SR 29 at the following locations.

- Charter Oak Avenue between the two offset Charter Oak Tee intersections. This crossing also includes pedestrian activated “in pavement” flashing lights on each side of the crosswalk.

b. Volumes

Figure 9 presents pedestrian volumes at the five analysis intersections along SR 29 as well as along Mills Lane, La Fata Street and Dowdell Lane during the Friday AM & PM and Saturday afternoon peak traffic hours. Counts at the Pope Street-Mitchell Street, Charter Oak, Mills Lane and Grayson Avenue intersections were from 2018 or 2019 unless a 2016 count had a higher pedestrian total. Counts along Mills Lane, La Fata Street and Dowdell Lane were from 2016. As shown, the highest volume location for pedestrian crossings of SR 29 was at the Charter Oak Avenue crosswalk. **Table 5** provides the total pedestrian crossings by hour at this location. Friday and Saturday pedestrian crossings of SR 29 at Charter Oak Avenue were conducted in both 2016 (May and June) and 2019 (September). As shown, the 2016 crossings were typically higher each hour than those in 2019.

SR 29 PEDESTRIAN CROSSINGS AT CHARTER OAK AVENUE

DAY & TIME	HIGHEST HOURLY VOLUME	
	2016	2019
Friday AM Peak Period (7:00-9:00 AM)	31	20
Friday PM Peak Period (3:00-6:00 PM)	58	45
Saturday PM Peak Period (1:00-6:00 PM)	73	41

Source: Crane Transportation Group

Pedestrian crossings of SR 29 in 2016 at Grayson Avenue-Mills Lane intersections ranged from 5 to 14 people per hour during the three peak traffic hours evaluated, while crossings at Dowdell Lane ranged from 7 to 10 people per hour during the same hours.

c. Pedestrian Hybrid Beacon Guidelines

The California Manual of Uniform Traffic Control Devices 2014 (California MUTCD, Revision 4, March 29, 2019) has guidelines for the installation of pedestrian hybrid beacons on high and low speed roadways. These devices are also referred to as High Intensity Activated Crosswalk or “HAWK” pedestrian signals. Low speed roadways are those where vehicle speeds are 35 mile per hour or less, which would be appropriate for SR 29 at Charter Oak Avenue. The chart for installation with vehicular and pedestrian input values is presented in **Appendix C-Figure A-3**. With two-way hourly volumes on SR 29 of more than 1,350 vehicles per hour and a crosswalk length of about 46 feet at Charter Oak Avenue, the chart indicates that a pedestrian hybrid beacon would be appropriate with more than 20 pedestrian crossings an hour. The number of pedestrian crossings during 9 of the 10 survey hours exceeded this number of pedestrians. It should be noted that activation of the HAWK beacon will provide a red light to north and southbound traffic flow on SR 29. This will allow left turn movements to proceed from both Charter Oak Avenue approaches.

In contrast, at the Dowdell Lane intersection based upon similar vehicular volumes and a curb-to-curb width of about 40 feet on SR 29, the number of pedestrian crossings would not meet guideline criteria for provision of a beacon at this location.

2. BICYCLE

a. Facilities

There are no Class I bicycle paths, signed and striped Class II bicycle lanes or signed Class III bike routes in the project vicinity.

b. Volumes

Figure 10 presents 2018, 2019 and 2016 bicycle rider counts. As shown, there were more bicycle riders along SR 29 at Charter Oak Avenue than at Dowdell Lane: During the Friday AM peak hour there were 9 at Charter Oak Avenue and 7 at Dowdell Lane; during the Friday PM peak hour there were 10 at Charter Oak Avenue and 2 at Dowdell Lane; and during the Saturday afternoon peak hour there were 6 at Charter Oak Avenue and 2 at Dowdell Lane. Bike ridership along Mills Lane, La Fata Street and Dowdell Lane was minimal during all peak hours; one or zero bike riders on any of these three streets.

H. PLANNED PEDESTRIAN AND BICYCLE FACILITIES

1. PEDESTRIAN

A combined sidewalk/Class I bike path will be provided by the project along the north side of Mills Lane when it is widened between SR 29 and La Fata Street as part of project development. In addition, a paved pathway will be provided on the west side of La Fata Street between Mills and Dowdell lanes as part of project development.

2. BICYCLE

Based upon the St. Helena Bicycle Plan and current updates provided by City staff,² bike routes are planned in the following locations in the project area.

- SR 29 – Class II bicycle lanes.
- Mills Lane – Class II bicycle lanes extending from SR 29 to the east of La Fata Street. However, the City has agreed that a Class I path on the north side of Mills Lane between SR 29 and La Fata Street can replace the previously proposed Class II bike lanes as part of the Farmstead lodge project.
- Charter Oak Avenue (east of SR 29) – Class I multiuse path.
- It was formerly planned that the Class I Vine Trail bicycle/pedestrian path be located along the Wine Train right-of-way. However, it has been determined by the City that there is insufficient right-of-way to accommodate the Vine Trail in this location.

² By Whitlock & Weinberger Transportation, Inc. & Questa Engineering Corp., January 2012.

VII. FUTURE HORIZON (WITHOUT PROJECT) ANALYSIS CONDITIONS

Traffic analysis has also been conducted in this study for two future horizon years as requested by St. Helena City staff:

- The year after estimated project completion – year 2022
- Cumulative Conditions – year 2040

A. YEAR 2022 WITHOUT PROJECT CONDITIONS

1. NO MILLS LANE WIDENING OR REALIGNMENT

a. Volumes

Year 2022 peak hour traffic volumes have been developed using both a specific list of known projects supplied by the City of St. Helena Planning Department and a 1 percent per year growth rate along SR 29 to reflect regional growth. Specific projects and their projected Friday AM & PM peak hour and Saturday afternoon peak hour trip generation are presented in **Table 6** with resultant year 2022 harvest Friday AM and PM peak hour and Saturday afternoon peak hour (Without Project) traffic volumes presented in **Figures 11, 12 and 13**, respectively.

b. Intersection Level of Service

Table 7 shows that for harvest 2022 conditions three of the five analyzed intersections would be experiencing acceptable operation during the harvest Friday and Saturday peak traffic hours.

HARVEST 2022 ACCEPTABLE OPERATION (FRIDAY & SATURDAY PEAK TRAFFIC HOURS)

SR 29/Mills Lane (Mills Lane stop sign controlled)	LOS B or C
SR 29/Grayson Avenue (signal)	LOS C or D
SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C

Table 7 also shows that two of the intersections were experiencing unacceptable operation.

HARVEST 2018 UNACCEPTABLE OPERATION

SR 29/Pope Street-Mitchell Street	LOS F during all peak hour
SR 29/Charter Oak Avenue	LOS E during the Friday AM peak hour

The SR 29/Charter Oak Avenue intersection would experience acceptable levels of service (LOS C or D) on both Charter Oak Avenue stop sign controlled intersection approaches during the Friday and Saturday PM peak traffic hours. However, during the Friday AM peak hour, while the eastbound approach would be operating at an acceptable LOS C, the westbound approach

would be operating at an unacceptable LOS E. Level of service worksheets are contained in **Appendix A**.

c. Intersection Signal Warrant

Table 4 shows that both the SR 29/Charter Oak Avenue and SR 29/Dowdell Lane intersections would have harvest 2022 Friday AM & PM peak hour and Saturday PM peak hour volumes meeting rural signal Warrant #3 volume criteria levels.

B. CUMULATIVE (YEAR 2040) WITHOUT PROJECT CONDITIONS

1. NO MILLS LANE WIDENING OR REALIGNMENT

a. Volumes

Cumulative (year 2040) weekday AM and PM peak hour and Saturday PM peak hour volumes for the SR 29/Pope Street-Mitchell Street, SR 29/Grayson Avenue and SR 29/Mills Lane intersections were obtained from the City's General Plan Update Circulation Element traffic analysis as directed by St. Helena Planning staff. In addition, cumulative projections were developed for the SR 29/Charter Oak Avenue and SR 29/Dowdell Lane intersections as well as for Dowdell Lane, Mills Lane and La Fata Street based upon traffic from the list of cumulative projects considered in the General Plan Update Circulation Element for the project area (see **Table 6**).

Resultant cumulative (year 2040) harvest Friday AM and PM peak hour and Saturday afternoon peak hour Without Project volumes are presented in **Figures 14, 15 and 16**, respectively. It should be noted that cumulative traffic projections from the 2040 General Plan Update analysis included a 75-unit hotel on the Farmstead project site. Trip generation from this lodging facility (using standard Institute of Transportation Engineers *Trip Generation Manual*, 10th Edition trip rates)³ was removed from the Cumulative projections to reflect a true "Without Project" condition for the analysis roadways.

b. Intersection Level of Service

Table 8 shows that for cumulative (year 2040) conditions three of the five analyzed intersections would be experiencing acceptable operation during both the Friday and Saturday peak traffic hours.

³ Institute of Transportation Engineers, 2017.

**CUMULATIVE (YEAR 2040) ACCEPTABLE OPERATION
(FRIDAY & SATURDAY PEAK TRAFFIC HOURS)**

SR 29/Mills Lane (Mills Lane stop sign controlled)	LOS B or C
SR 29/Grayson Avenue (signal)	LOS C or D
SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C

Table 8 also shows that there would be unacceptable operation at two intersections.

CUMULATIVE (YEAR 2040) UNACCEPTABLE OPERATION

SR 29/Pope Street-Mitchell Street (signal): LOS F during all Friday & Saturday peak hours

SR 29/Charter Oak Avenue (Charter Oak stop sign controlled approach): LOS F westbound approach Friday AM peak hour, LOS E westbound approach Friday PM peak hour

c. Intersection Signal Warrant

Table 4 shows that both the SR 29/Charter Oak Avenue and SR 29/Dowdell Lane intersections would have 2040 harvest Friday AM and PM peak hour and Saturday PM peak hour volumes meeting rural signal warrant #3 volume criteria levels.

VIII. PROJECT IMPACTS

A. SIGNIFICANCE CRITERIA

The significance criteria utilized in this study are based on the City of St. Helena's General Plan Circulation Element documentation for roadway and intersection operations.

The City's current LOS standard is LOS D for signalized intersections on Main Street (SR 29/128) and LOS C elsewhere. Based on City of St. Helena and CEQA standards, a project's impact would be considered significant if any of the following conditions occur.

- If operating conditions at a signalized intersection on Main Street (SR 29/128) deteriorate from LOS D without the project to LOS E or F with the project and an increase in delay of five seconds or greater.
- If operating conditions at a signalized intersection on Main Street (SR 29/128) operating at LOS E without the project deteriorate to LOS F with the project.
- If the average intersection delays at a signalized intersection on Main Street (SR 29/128) operating at LOS E or F without the project increases by more than five seconds with the project.

- If operating conditions at an unsignalized intersection on Main Street (SR 29/128) operating at LOS D or better without the project degrade to LOS E or F with the project and the volumes would qualify for signalization under the Caltrans peak hour volume warrants for signalization. If operating conditions at an unsignalized intersection not on Main Street operating at LOS C or better without the project degrade to LOS D, E or F with the project and the volumes would qualify for signalization under the Caltrans peak hour volume warrants for signalization.
- If average delay at an unsignalized intersection on Main Street (SR 29/128) operating at LOS E or F without the project increases by five or more seconds with the project and the volumes qualify for signalization under the Caltrans peak hour volume warrants for signalization. If average delay at an unsignalized intersection not on Main Street operating at LOS D, E or F without the project increases by five or more seconds with the project and the volumes qualify for signalization under the Caltrans peak hour volume warrants for signalization.
- If traffic volumes at an unsignalized intersection meet the peak hour signal warrant thresholds, then a significant impact is considered if total volumes passing through the intersection increase by 1 percent or greater with the project.
- For vehicle queuing, if the lane storage length sufficiently accommodates the 95th percentile vehicle queue length without the project and the vehicle queue length would increase to exceed the available storage with the project. If the 95th percentile queue length exceeds the available storage length without the project and the turning movement volume would increase by 3 percent or more with the project and increase the total intersection volume by 1 percent.
- If, in the opinion of the registered traffic engineer conducting this study, the addition of project traffic, pedestrians or bicycle riders would result in a significant safety impact.

B. PROJECT TRIP GENERATION & REASSIGNMENT OF LOCAL AREA VOLUMES

1. FARMSTEAD LODGE

a. TRIP GENERATION

Project lodging trip generation has been developed assuming 100 percent occupancy using the traffic engineering profession's standard source of trip rate data: *Trip Generation Manual*, 10th Edition, by the Institute of Transportation Engineers (ITE), 2017.

There are five lodging categories in the ITE manual.

Hotel
All Suites Hotel
Business Hotel
Motel
Resort Hotel

- Hotel trip rates were used because they provided the most conservative projection of lodge traffic activity.
- The Business Hotel and Motel uses were dismissed immediately from consideration.
- The All Suites Hotel category was dismissed because of a limited survey sample size and the description of a small restaurant, limited kitchen facilities and small amounts of meeting space did not seem to fit the proposed use. Also, Hotel trip rates are much higher.
- The Resort Hotel category also has a limited survey sample size (only 6 to 9 facilities surveyed in the 1980s and 1990s in California, Florida and South Carolina). Surveyed facilities provided golf courses, tennis courts, beach access, etc. Due to the significant number of attractions in the Napa Valley requiring use of an automobile, and due to Hotel trip rates being conservatively higher than those from the resort facilities, the Resort Hotel trip rates were also dismissed.

Table 9 shows that on a harvest Friday the proposed 65-unit lodging facility at 100 percent occupancy would be expected to generate 544 daily two-way trips (272 in and 272 out), with 19 inbound and 13 outbound trips during the AM commute peak traffic hour and 20 inbound and 20 outbound trips during the PM commute peak traffic hour. For a harvest Saturday, lodging peak hour trip rates are only available for the facility's peak traffic generation hour, and not during the local roadway system peak traffic hour. On a Saturday midafternoon the peak traffic hour on SR 29 is 2:00-3:00 when less traffic activity would be expected at the lodging facility, whereas the lodging facility's peak traffic hour would likely be in the early evening as some guests are leaving for dinner while others are arriving from a day's tourist activities. It was projected that the lodging facility trip generation on a Saturday afternoon during the time of peak traffic volumes on SR 29 (2:00-3:00) would be about 65 percent of the trip generation during the lodging facility's busiest traffic hour during the day, resulting in 17 inbound and 14 outbound trips during the SR 29 peak traffic hour on Saturday afternoon. This projection is supported by hourly hotel parking demand data from both the Institute of Transportation Engineers⁴ and the Urban Land Institute, which show low parking accumulation at hotels during the middle of the afternoon. In addition, hourly hotel trip generation data from the 10th Edition *Trip Generation Manual* also support the 65 percent of maximum trip generation occurring during the middle of a Saturday afternoon.

Lodge employee trip generation by shift was developed by the project applicant for each hour of the day and is presented in **Appendix D**, while a summary presentation is contained in **Table 10**. Based upon this data, projected lodge employee versus guest trip generation was determined for each of the three peak analysis hours on Friday and Saturday and is presented in **Table 11**.

⁴ *Parking Generation*, 4th Edition, 2010.

It is likely that a small proportion of traffic during the Friday and Saturday PM peak traffic hours would be traveling along SR 29 with or without the project being in operation. After consultation with City staff, 90 percent of project traffic was projected to be newly added to SR 29, with 10 percent captured from the ambient traffic flow on the state highway. This passby capture would result in 100 percent of guest traffic being newly added to Mills Lane, La Fata Street and Dowdell Lane, while only 90 percent would be newly added to SR 29.

b. TRIP DISTRIBUTION

Based upon discussion with City of St. Helena staff, project guest traffic was distributed to SR 29 as shown in **Table 12** for the Friday and Saturday peak traffic hours. Overall, a 50-50 north-south distribution pattern on SR 29 was projected for all in and outbound guest traffic, with an exception during the Friday PM peak hour when 60 percent of the inbound traffic was projected to come from the south. The same 50-50 distribution was also considered acceptable for employee traffic during all peak time periods. **Appendix E Figures A-4 to A-7** present lodge guest and employee trip distribution during the Friday AM and PM and Saturday PM peak traffic hours, respectively.

c. REASSIGNMENT OF FARMSTEAD RESTAURANT/FARMERS MARKET EMPLOYEE TRAFFIC TO THE NEW DOWDELL IMPROVED PARKING LOT

In addition to the 65-unit lodging facility, the proposed project would also result in the transfer of Farmstead restaurant/farmers market employee traffic from a lot on Charter Oak Avenue west of SR 29 to the new improved parking lot at the Dowdell/McCormick intersection. **Table 13** presents the amount of restaurant/farmers market employee traffic that would be transferred to the new parking lot.

d. MILLS LANE WIDENING & REALIGNMENT TO THE SR 29/GRAYSON AVENUE SIGNALIZED INTERSECTION

The widening and realignment of Mills Lane to connect to SR 29 at the signalized Grayson Avenue intersection by itself will produce a change in traffic patterns east of SR 29. Some traffic now using Dowdell Lane to access SR 29 will shift to Mills Lane due to the easier signalized access provided to the state highway and Grayson Avenue. **Figure 5** presents the intersection approach lanes and control after proposed improvements.

2. TOTAL PROJECT

a. LODGE

Trip generation and distribution are detailed above.

b. RETAIL BUTCHER SHOP

Butcher shop traffic is estimated to be three local customer auto trips in/out during the Friday and Saturday PM peak traffic hours. The shop will be closed during the Friday AM peak hour. Volumes are shown on **Appendix E Figure A-7**. The majority of local area customers driving to/from the butcher shop during the PM peak traffic hours on SR 29 would be expected to use Charter Oak Avenue east of the project driveway.

c. 200-PERSON EVENT

Shuttle buses will be required by the City for events this large. The applicant will be providing 14 shuttle buses to provide access for guests staying in Napa and Sonoma Valley lodging facilities. Also, it is projected that a few guests will drive to the event (up to five vehicles/hour) or walk from nearby lodging. Event traffic volumes are shown on **Appendix E Figure A-8**. The majority of shuttle buses would be expected to travel to/from the south on SR 29.

C. EXISTING + PROJECT CIRCULATION IMPACTS

1. LODGE ONLY

a. Volumes

Resultant Existing + Lodge Friday AM and PM and Saturday afternoon peak hour harvest volumes are presented in **Figures 17, 18 and 19**, respectively.

b. Intersection Level of Service Impacts

Table 3 shows that acceptable operation would result at the following two intersections along SR 29 with the addition of lodge traffic during Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C
SR 29/Grayson Avenue-Mills Lane (signal)	LOS C or D

Table 3 also shows that the SR 29/Charter Oak Avenue intersection would maintain acceptable operation during the Friday and Saturday PM peak hour analysis time periods with the addition of lodge traffic (LOS C or D), while during the Friday AM peak hour operation of the westbound approach would remain an unacceptable LOS E. However, there would only be a 2.8-second increase in delay on the westbound approach during this time period, which would be less than the 5-second minimum change significance criteria limit. In addition, **Table 3** shows that the

SR 29/Pope Street-Mitchell Street intersection, which would already be experiencing unacceptable LOS F operation during the Friday and Saturday peak hours would have delay increased by lodge traffic. However, the increases during each peak hour would be less than 3 seconds, which would also be less than the 5-second minimum change significance criteria limits.

Less than significant.

c. Signal Warrant Impacts

Table 4 shows that while the **SR 29/Charter Oak Avenue** intersection volumes would already be exceeding rural signal warrant #3 volume criteria levels during the Friday AM peak hour and Saturday PM peak hour, the addition of project traffic would not increase volumes passing through the intersection by 1 percent or greater during either time period, which is the City's significance criteria limit. Also, the addition of project traffic to Friday PM peak hour volumes would not increase traffic to meet rural warrant #3 volume criteria during this time period.

At the **SR 29/Dowdell Lane** intersection volumes would already be exceeding rural signal warrant #3 volume criteria levels during the Friday AM and PM peak hours. However, project traffic would not increase volumes passing through the intersection by 1 percent or greater during either time period. Also, the addition of project traffic to Saturday PM peak hour volumes would not increase traffic to meet rural warrant #3 volume criteria during this time period.

Less than significant.

d. Impacts to Mills Lane, La Fata Street and Dowdell Lane

The net change in traffic due to the 65-unit lodging facility, relocation of Farmstead restaurant/farmers market employee parking and change in traffic patterns east of SR 29 due to the realignment of an improved Mills Lane to the SR 29/Grayson Avenue signal would increase existing volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts.

YEAR 2018 HARVEST VOLUMES WITH & W/O THE LODGE

TIME PERIOD	MILLS LANE 2-WAY VOLUMES		LA FATA STREET 2-WAY VOLUMES		DOWDELL LANE 2-WAY VOLUMES	
	W/O PROJECT	WITH PROJECT	W/O PROJECT	WITH PROJECT	W/O PROJECT	WITH PROJECT
Friday AM Peak Hour	25	71	31	46	172	163
Friday PM Peak Hour	20	77	36	63	172	161
Saturday Afternoon Peak Hour	11	33	13	26	66	68

Source: Crane Transportation Group

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the lodge and improvement/realignment of Mills Lane to the SR 29/Grayson Avenue signal.

2. TOTAL PROJECT

a. Volumes

Resultant Existing + Total Project Friday AM and PM and Saturday afternoon peak hour harvest volumes are presented in **Figures 20, 21 and 22**, respectively.

b. Intersection Level of Service Impacts

Table 3 shows that acceptable operation would remain at the following two intersections along SR 29 with the addition of total project traffic during Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C
SR 29/Grayson Avenue-Mills Lane (signal)	LOS C or D

Table 3 also shows that the **SR 29/Charter Oak Avenue** intersection would maintain acceptable operation during the Friday and Saturday PM peak hour analysis time periods with the addition of total project traffic (LOS C or D), while during the Friday AM peak hour operation of the westbound approach would remain an unacceptable LOS E. However, there would only be a 2.8-second increase in delay on the westbound approach during this time period, which would be less than the 5-second minimum change significance criteria limit. In addition, **Table 3** shows that the **SR 29/Pope Street-Mitchell Street** intersection, which would already be experiencing unacceptable LOS F operation during the Friday and Saturday peak hours would have delay increased by total project traffic. However, the increases during each peak hour would be less than 4.3 seconds, which would also be less than the 5-second minimum change significance criteria limits.

Less than significant.

c. Signal Warrant Impacts

Table 4 shows that at the **SR 29/Charter Oak Avenue** intersection the addition of project traffic would increase Friday PM peak hour volumes to exceed rural signal warrant #3 volume criteria levels, while during the Saturday PM peak hour project traffic would increase total volumes entering the intersection by 2.3 percent during a period when “Without Project” volumes would already be exceeding warrant criteria. This would be a significant impact. During the AM peak hour, a time period when “Without Project” traffic would already be exceeding rural warrant #3 volume criteria the addition of project traffic would increase volumes by less than 1 percent, and not produce a significant impact.

At the **SR 29/Dowdell Lane** intersection the addition of project traffic would only produce a significant impact during the Friday PM peak hour, when volumes passing through the intersection would increase by 1.6 percent during a period when “Without Project” volumes would already be exceeding rural warrant volume criteria. During the AM peak hour, a time

period when “Without Project” traffic would already be exceeding rural warrant #3 volume criteria the addition of project traffic would increase volumes by less than 1 percent, and not produce a significant impact. Finally, during the Saturday PM peak hour project traffic would not increase volumes to meet rural warrant #3 volume criteria levels. It should be noted that levels of service at the Dowdell Lane intersection will remain acceptable even though rural signal warrant criteria are met during the Friday peak hours.

Less than significant with mitigation.

d. Impacts to Mills Lane, La Fata Street and Dowdell Lane

The net change in traffic due to the total project would increase existing volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts.

YEAR 2018 HARVEST VOLUMES WITH & W/O THE TOTAL PROJECT

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ DOWDELL LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT
Friday AM Peak Hour	25	71	31	46	172	163
Friday PM Peak Hour	20	77	36	63	172	161
Saturday Afternoon Peak Hour	11	33	13	26	66	68

Source: Crane Transportation Group

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the total project.

D. YEAR 2022 + PROJECT VEHICLE IMPACTS

1. LODGE ONLY

a. Volumes

Year 2022 + Lodge Friday AM and PM and Saturday afternoon peak hour volumes are presented in **Figures 23, 24** and **25**, respectively.

b. Intersection Level of Service Impacts

Table 7 shows that acceptable operation would remain at the following two intersections along SR 29 with the addition of lodge traffic during Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C
SR 29/Grayson Avenue-Mills Lane (signal)	LOS D

Table 7 also shows that the **SR 29/Charter Oak Avenue** intersection would maintain acceptable operation during the Friday and Saturday PM peak hours with the addition of lodge traffic (LOS D), while during the Friday AM peak hour operation of the westbound approach would remain an unacceptable LOS E. However, there would only be a 2.6-second increase in delay on the westbound approach during this time period, which would be less than the City's 5-second minimum change significance criteria limit. In addition, **Table 3** shows that the **SR 29/Pope Street-Mitchell Street** intersection, which would already be experiencing unacceptable LOS F operation during the Friday and Saturday peak hours would have delay increased by lodge traffic. However, the increases during each peak hour would be 3 seconds or less, which would also be less than the 5-second minimum change significance criteria limits.

Less than significant.

c. Signal Warrant Impacts

Table 4 shows that at the **SR 29/Charter Oak Avenue** intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without lodge traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, volume increases due to the lodge would be less than the City's minimum significance criteria limit of 1 percent during all peak hours.

At the **SR 29/Dowdell Lane** intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without lodge traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, volume increases due to the lodge would be less than the City's minimum significance criteria limit of 1 percent during all peak hours.

Less than significant.

d. Impacts to Mills Lane, La Fata Street and Dowdell Lane

The net change in traffic due to the 65-unit lodging facility, relocation of Farmstead restaurant/farmers market employee parking and change in traffic patterns east of SR 29 due to the realignment of an improved Mills Lane to the SR 29/Grayson Avenue signal would increase 2022 Without Project volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts.

YEAR 2022 HARVEST VOLUMES WITH & W/O THE LODGE

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ DOWDELL LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH LODGE	W/O PROJECT	WITH LODGE	W/O PROJECT	WITH LODGE
Friday AM Peak Hour	26	77	43	62	235	223
Friday PM Peak Hour	29	91	53	84	227	208
Saturday Afternoon Peak Hour	11	41	30	53	137	131

Source: Crane Transportation Group

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the lodge and improvement/realignment of Mills Lane to the SR 29/Grayson Avenue signal.

Less than significant.

2. TOTAL PROJECT

a. Volumes

Year 2022 + Total Project Friday AM and PM and Saturday afternoon peak hour volumes are presented in **Figures 26, 27 and 28**, respectively.

b. Intersection Level of Service Impacts

Table 7 shows that acceptable operation would remain at the following two intersections along SR 29 with the addition of lodge traffic during the Friday AM and PM and Saturday afternoon peak hour conditions with the addition of project traffic.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C
SR 29/Grayson Avenue-Mills Lane (signal)	LOS D

Table 7 also shows that the **SR 29/Charter Oak Avenue** intersection would maintain acceptable operation during the Saturday PM peak hour with the addition of total project traffic (LOS D), while during the Friday AM peak hour operation of the westbound approach would remain an unacceptable LOS E. However, there would only be a 2.6-second increase in delay on the westbound approach during this time period, which would be less than the 5-second minimum change significance criteria limit. During the Friday PM peak hour operations of the westbound approach would change from an acceptable LOS D to an unacceptable LOS E. However, the delay increase would only be 3.3 seconds. For these reasons, the impact is considered less than significant.

Less than significant.

c. Signal Warrant Impacts

Table 4 shows that at the SR 29/Charter Oak Avenue intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. While the volume increase would be less than 1 percent during the AM peak hour, the increases during the Friday PM peak hour and Saturday PM peak hour would be greater than 1 percent and would therefore be a significant impact (2.3% during the Friday PM peak hour and 2.2% during the Saturday PM peak hour).

At the **SR 29/Dowdell Lane** intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. While the volume increase would be less than 1 percent during the AM peak hour, the increases during the Friday PM peak hour and Saturday PM peak hour would be greater than 1 percent and would therefore be a significant impact (1.1% both hours).

Less than significant with mitigation.

d. Impacts to Mills Lane, La Fata Street and Dowdell Lane

The net change in traffic due to the total project would increase 2022 Without Project volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts.

YEAR 2022 HARVEST VOLUMES WITH & W/O THE TOTAL PROJECT

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ MILLS LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT
Friday AM Peak Hour	26	77	43	62	235	223
Friday PM Peak Hour	29	91	53	84	227	208
Saturday Afternoon Peak Hour	11	41	30	53	137	131

Source: Crane Transportation Group

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the total project.

Less than significant.

E. CUMULATIVE (YEAR 2040) CIRCULATION IMPACTS

1. LODGE ONLY

a. Volumes

Cumulative (year 2040) + Lodge Friday AM and PM and Saturday afternoon peak hour volumes are presented in **Figures 29, 30** and **31**, respectively.

b. Intersection Level of Service Impacts

Table 8 shows that acceptable operation would remain at the following intersection along SR 29 with the addition of lodge traffic during the Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach)	LOS C
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Table 8 shows that at the **SR 29/Pope Street-Mitchell Street** intersection signalized operation would remain an unacceptable LOS F with or without lodge traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, the increases in delay due to lodge traffic would be less than 5 seconds during each peak hour (3.2 seconds Friday AM, 2.9 seconds Friday PM and 3.0 seconds Saturday PM).

At the **SR 29/Charter Oak Avenue** intersection operation of the stop sign controlled westbound Charter Oak Avenue approach would remain an unacceptable LOS F with or without lodge traffic during the Friday AM peak hour and an unacceptable LOS E during the Friday PM peak hour. However, the increases in delay due to lodge traffic would be less than 5 seconds during either peak hour (3.7 seconds Friday AM & 0.3 seconds Friday PM). Operation would remain acceptable during the Saturday PM peak hour with the addition of lodge traffic.

At the **SR 29/Grayson Avenue-Mills Lane** signalized intersection operation would be an unacceptable LOS E during the Friday AM peak hour with a fourth intersection leg. Friday AM peak hour operation would change from an acceptable LOS D to an unacceptable LOS E (with a 23.7 second increase in delay). This would be a significant impact.

Less than significant with mitigation.

c. Signal Warrant Impacts

Table 4 shows that at the **SR 29/Charter Oak Avenue** intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, volume increases would be less than 1 percent during all three peak hours.

At the **SR 29/Dowdell Lane** intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, volume increases would be less than 1 percent during all three peak hours.

Less than significant.

d. Impacts to Mills Lane, La Fata Street and Dowdell Lane

The net change in traffic due to the 65-unit lodging facility, relocation of Farmstead restaurant/farmers market employee parking and change in traffic patterns east of SR 29 due to the realignment of an improved Mills Lane to the SR 29/Grayson Avenue signal would increase year 2040 Without Project volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts.

CUMULATIVE (YEAR 2040) HARVEST VOLUMES WITH & W/O THE LODGE

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ DOWDELL LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH PROJECT	W/O PROJECT	WITH PROJECT	W/O PROJECT	WITH PROJECT
Friday AM Peak Hour	26	80	43	69	235	216
Friday PM Peak Hour	29	100	53	96	227	202
Saturday Afternoon Peak Hour	12	47	30	58	137	126

Source: Crane Transportation Group

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the lodge, and improvement/realignment of Mills Lane to the SR 29/Grayson Avenue signal.

Less than significant.

2. TOTAL PROJECT

a. Volumes

Cumulative (year 2040) + Total Project Friday AM and PM and Saturday afternoon peak hour volumes are presented in **Figures 32, 33 and 34**, respectively.

b. Intersection Level of Service Impacts

Table 8 shows that acceptable operation would remain at the following intersection along SR 29 with the addition of total project traffic during the Friday AM and PM and Saturday afternoon peak hour conditions.

SR 29/Dowdell Lane (Dowdell Lane 2-lane stop sign controlled approach) LOS C

Table 8 shows that at the **SR 29/Pope Street-Mitchell Street** intersection signalized operation would remain an unacceptable LOS F with or without lodge traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. However, the increases in delay due to lodge traffic would be less than 5 seconds during each peak hour (3.2 seconds Friday AM, 4.4 seconds Friday PM and 4.8 seconds Saturday PM).

At **SR 29/Charter Oak Avenue** operation of the stop sign controlled westbound Charter Oak Avenue approach would remain an unacceptable LOS F with or without lodge traffic during the Friday AM peak hour and an unacceptable LOS E during the Friday PM peak hour. However, the increases in delay due to lodge traffic would be less than 5 seconds during either peak hour (3.7 seconds Friday AM & 4.6 seconds Friday PM). Operation would remain acceptable during the Saturday PM peak hour with the addition of lodge traffic.

At the **SR 29/Grayson Avenue-Mills Lane** signalized intersection operation would be an unacceptable LOS E during the Friday AM peak hour. Friday AM peak hour operation with a fourth intersection leg would change from an acceptable LOS D to an unacceptable LOS E (with a 23.7 second increase in delay). This change would all be due to lodge traffic.

Less than significant with mitigation.

c. Signal Warrant Impacts

Table 4 shows that at the **SR 29/Charter Oak Avenue** intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. While the volume increase would be less than 1 percent during the AM peak hour, the increases during the Friday PM peak hour and Saturday PM peak hour would be greater than 1 percent and would therefore be a significant impact (2.2% during the Friday PM peak hour and 2.1% during the Saturday PM peak hour).

At the **SR 29/Dowdell Lane** intersection, volumes would be exceeding rural peak hour signal warrant volume criteria levels with or without total project traffic during the Friday AM and PM peak hours and the Saturday PM peak hour. The volume increase would be less than 1 percent during the all three peak hours.

Less than significant with mitigation.

d. Impacts to Mills Lane, La Fata Street and Dowdell Lane

The net change in traffic due to the total project would increase 2035 Without Project volumes on Mills Lane, La Fata Street and Dowdell Lane by the following amounts.

**CUMULATIVE (YEAR 2040) HARVEST VOLUMES
WITH & W/O THE TOTAL PROJECT**

TIME PERIOD	MILLS LANE @ SR 29 2-WAY VOLUMES		LA FATA STREET @ DOWDELL LANE 2-WAY VOLUMES		DOWDELL LANE @ SR 29 2-WAY VOLUMES	
	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT	W/O PROJECT	WITH TOTAL PROJECT
Friday AM Peak Hour	26	80	43	69	235	216
Friday PM Peak Hour	29	100	53	96	227	202
Saturday Afternoon Peak Hour	12	47	30	58	137	126

Source: Crane Transportation Group

The 40-foot-wide curb-to-curb sections of Mills Lane, La Fata Street and Dowdell Lane could easily accommodate the expected volume increases due to the lodge, which includes realignment of Mills Lane to the SR 29/Grayson Avenue signal.

Less than significant.

F. PROJECT PEDESTRIAN IMPACTS & CONCERNS

**1. PEDESTRIAN ACTIVITY ALONG MILLS LANE AND
LA FATA STREET**

Figure 35 shows the project employee walking route between the proposed Dowdell Lane/McCormick Street parking lot and the lodge/restaurant/farmers market facilities, while **Table 14** shows the maximum number of total project employees (lodge/restaurant & farmers market) that would be expected to walk between the Dowdell Lane employee parking lot and the uses on the project site. The lodge will be providing a pedestrian walkway system throughout their site connecting to the Farmstead restaurant and farmers market. There would be at most a total of about 100 walking trips in each direction over a 24-hour period if all employees drove alone. However, this number would potentially be reduced a little due to a few employees being dropped off/picked up, taking transit or walking and biking if they lived nearby. Paved pathways

will be provided along the west side of La Fata Street (Mills Lane to Dowdell Lane) and along the north side of Mills Lane (from La Fata Street to SR 29). Due to the distance between the employee improved parking lot at the Dowdell Lane/McCormick Street intersection and the lodging facility (a quarter mile to the north) and the restaurant-farmers market facilities (about half a mile to the north), there may be some employees unable to walk this distance – or – bad weather may make this walk difficult. In addition, there would be safety concerns regarding employees walking at night to/from the Dowdell Lane parking lot through a deserted industrial area. As shown in **Table 14**, about a third of all employees would be walking at night.

In order to reduce concerns about employees walking between the Dowdell Lane parking lot and the lodge/restaurant-farmers market, the project will be providing on-call shuttle service during all hours. A shelter will also be provided at the Dowdell Lane parking lot.

Less than significant.

2. SR 29 CROSSING AT CHARTER OAK AVENUE

The project would result in minor changes in pedestrian crossings of SR 29 at Charter Oak Avenue, and potentially there may even be a reduction during some hours due to the removal of restaurant-farmers market employee traffic formerly crossing at this location being greater than the increase from lodge guests. The vast majority of lodge guest pedestrian activity would be to/from downtown St. Helena, with a much smaller amount to/from the Grayson Avenue signal. (See **Figure 36**) Those pedestrians traveling between the project and downtown would walk through the Farmstead restaurant property and travel along SR 29 north of Charter Oak Avenue. Some would cross SR 29 at Charter Oak Avenue on their way to or from downtown.

The City of St. Helena does not have a significance criteria for pedestrian crossing impacts. However, the SR 29 crosswalk at Charter Oak Avenue already has existing traffic and pedestrian crossing volumes exceeding minimum guidelines for provision of a pedestrian hybrid flashing beacon during 9 of the 10 surveyed hours in 2016 and eight of the nine surveyed hours in 2019. Therefore, it is projected that the additional lodge traffic and pedestrians would continue to result in a significant safety impact for pedestrian crossings at the SR 29 Charter Oak crosswalk.

Less than significant with mitigation.

G. PROJECT BICYCLE IMPACTS

The project is proposing a Class I bicycle path along the north side of Mills Lane between SR 29 and La Fata Street. In addition, bicycles will be provided in each guest's room and bicycle lockers will be provided for employees.

Less than significant.

H. PROPOSED DOWDELL LANE EMPLOYEE PARKING LOT ADEQUACY

The proposed Farmstead employee paved parking lot at the southwest corner of the Dowdell Lane/McCormick Street intersection would provide 73 parking spaces. Three driveway connections would be provided to Dowdell Lane. See **Figure 37**. The most westerly would be for inbound vehicles only and would serve a “U” shaped parking lot with one-way flow parking aisles that would have an exit just west of McCormick Street. A third driveway for two-way flow would be provided between the one-way inbound and outbound driveways and would serve a dead end parking aisle with 90-degree parking. All parking spaces would be striped, so it would be possible to drive across empty parking stalls between the two distinct parking areas.

Based upon applicant provided lodge and restaurant/farmers market employee numbers and shift change times, there would be one time during the day (between 2:30 and 3:00 PM) when there would be an overlap of 73 employees on the project site at the same time (see **Appendix D**). However, the employee parking demand would potentially be at least 15 to 20 percent less than 73 spaces due to TDM program car and vanpooling, employee drop off and pickup by a friend or family member, and walking or biking by employees living nearby. Therefore, the proposed employee parking lot should have an adequate parking supply for the currently proposed total project employee levels. Surveys by the project applicant of employee travel modes at the existing restaurant-farmers market facilities show about a 30 percent elimination of drive alone auto travel.

Less than significant.

IX. RECOMMENDED MITIGATIONS

A. LODGE – See Figure 38

1. SR 29/GRAYSON AVENUE-MILLS LANE INTERSECTION

- Minor additional improvements are needed when Mills Lane is realigned and widened to connect to SR 29 at Grayson Lane. The Mills Lane approach should be striped to provide an exclusive left turn lane and a combined through/right turn lane. In addition, the Grayson Avenue approach should be widened to provide a two-lane approach, one exclusively for left turns and one for combined through/right turns. Protected left turn phasing should be provided on the Mills-Grayson approaches.

Resultant AM peak hour operation: LOS D-52.7 seconds delay

2. SR 29/CHARTER OAK AVENUE INTERSECTION – SR 29 PEDESTRIAN CROSSINGS

- Provide a fair share contribution to the “HAWK” pedestrian hybrid flashing beacon proposed for the SR 29/Charter Oak Avenue intersection.

Impacts reduced to a less than significant level.

B. TOTAL PROJECT – See Figure 39

1. SR 29/DOWDELL LANE INTERSECTION – SIGNAL WARRANT IMPACT

- Provide a fair share contribution towards the signal planned at the SR 29/Dowell Lane intersection (as detailed in the Highway 29 Specific Plan).

There is sufficient storage between the Dowdell and Grayson-Mills intersections (when both are signalized) to accommodate southbound left turns to Dowdell Lane and northbound left turns to Grayson Avenue in the SR 29 median storage lane during the Friday AM and PM peak hours as well as during the Saturday PM peak hour. As shown below, there is a total of 450 feet of storage in the continuous two-way left turn lane between intersections and the maximum 95th percentile left turn lane queues total (NB + SB) between intersections (if both are signalized) is 175 feet.

**VEHICLE 95TH PERCENTILE QUEUEING
@ SR 29 SIGNALIZED INTERSECTIONS WITH
DOWDELL LANE & GRAYSON-MILLS**

CUMULATIVE (YEAR 2040) + TOTAL PROJECT

TIME PERIOD	TOTAL STORAGE BETWEEN INTERSECTIONS (FT.)	95% QUEUES (FT.)		
		NB LT TO GRAYSON-MILLS	SB LT TO DOWDELL	TOTAL NB + SB LT STORAGE DEMAND
Weekday AM Peak Hour	450	100	75	175
Weekday PM Peak Hour	450	150	25	175
Saturday PM Peak Hour	450	75	25	100

Synchro software results

Source: Crane Transportation Group

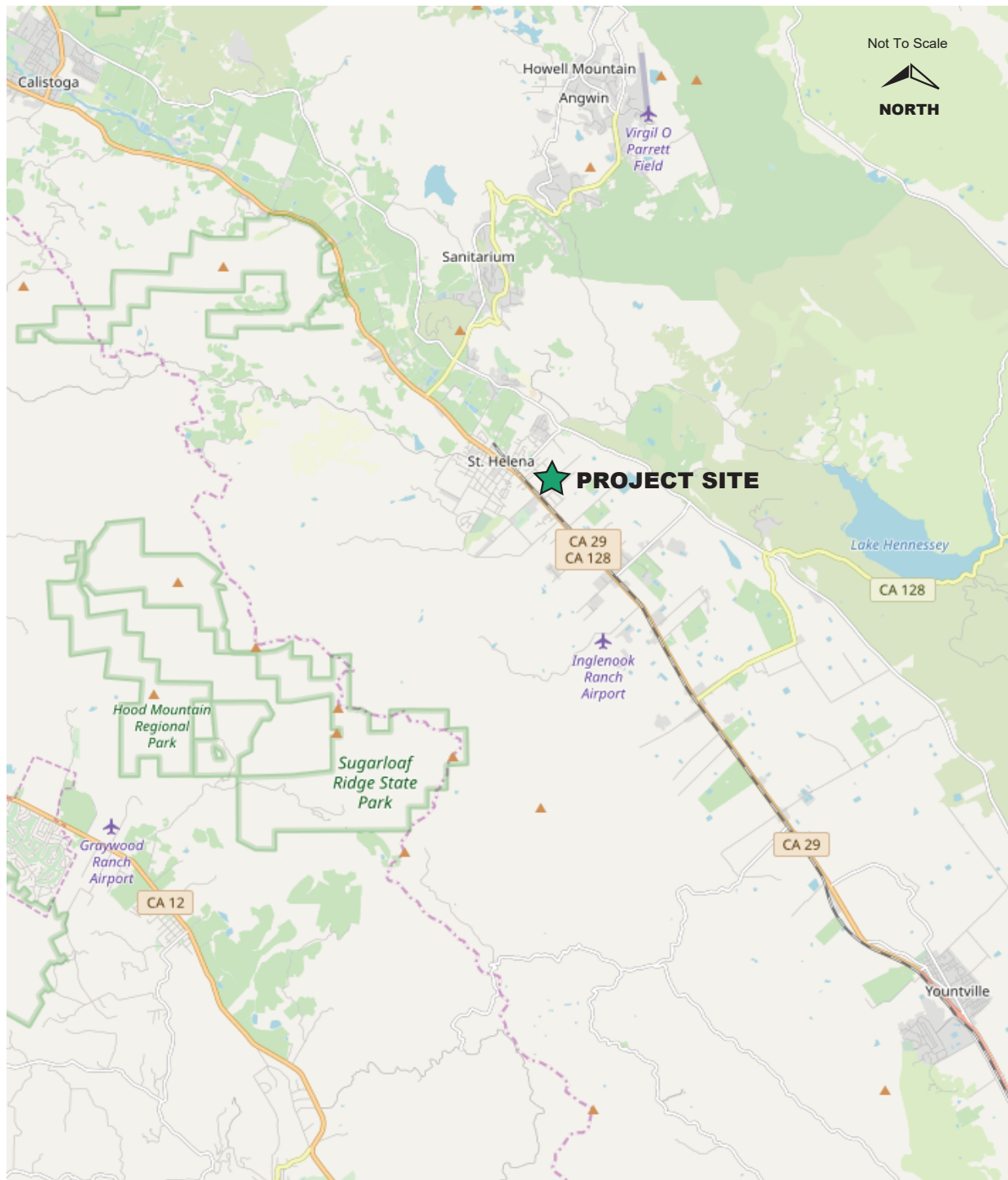
2. SR 29/CHARTER OAK AVENUE INTERSECTION – SIGNAL WARRANT IMPACTS

- Since City Public Works has indicated they are not in favor of signalizing this intersection, provide one of the following two measures.
 - a. Start and end all special events with more than 75 people at times that will not add traffic to SR 29 during the weekday and Saturday PM peak traffic periods (3:30-6:00 PM on weekdays and 1:30-4:00 PM on weekend days).
 - or —
 - b. Provide additional funding for the “HAWK” pedestrian hybrid flashing beacon. The beacon will need to be in operation before major events are allowed to add traffic to the existing weekday and weekend peak traffic hours along SR 29. Please note that Caltrans approval will be required for provision of the HAWK hybrid flashing beacon. If they do not approve of its installation, then the only measure to reduce the project impact to a level of insignificance is to eliminate traffic from the 200-person events during the Friday and Saturday PM peak hours.

Impacts reduced to a less than significant level.

This Report is intended for presentation and use in its entirety, together with all of its supporting exhibits, schedules, and appendices. Crane Transportation Group will have no liability for any use of the Report other than in its entirety, such as providing an excerpt to a third party or quoting a portion of the Report. If you provide a portion of the Report to a third party, you agree to hold CTG harmless against any liability to such third parties based upon their use of or reliance upon a less than complete version of the Report.

Figures

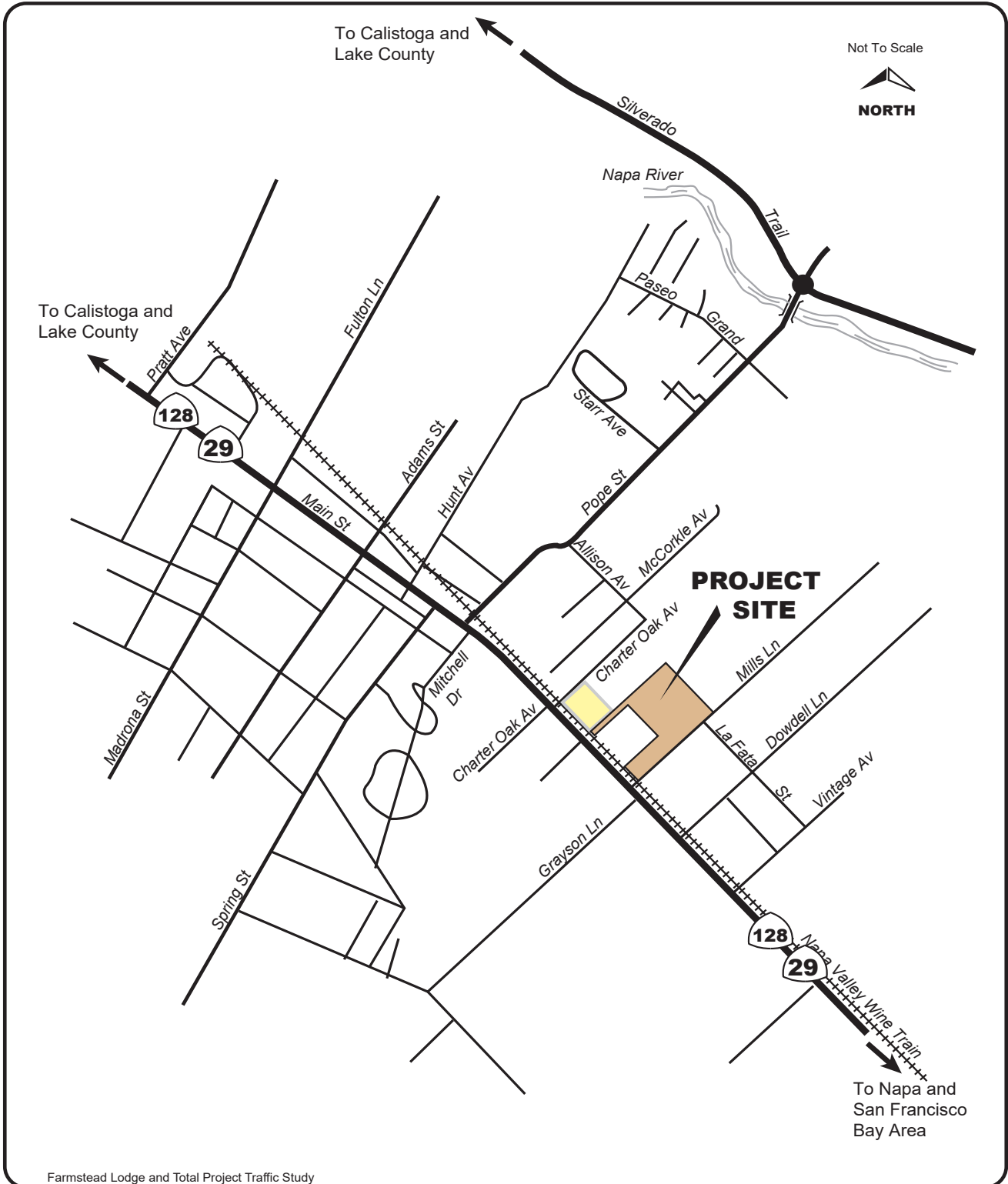


Farmstead Lodge and Total Project Traffic Study

Figure 1
Regional Area Map



CRANE TRANSPORTATION GROUP

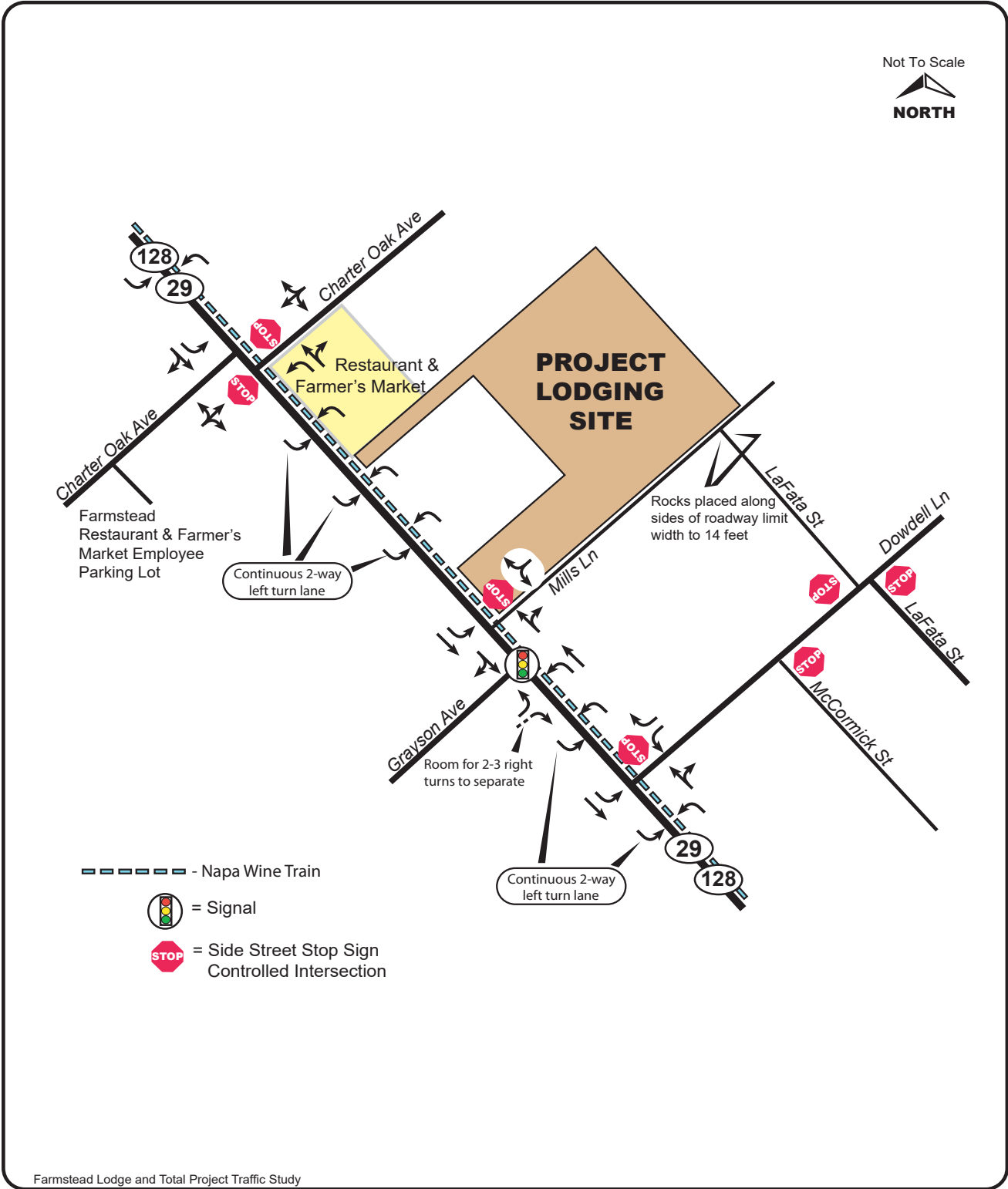


Farmstead Lodge and Total Project Traffic Study

Figure 2
Local Area Map



CRANE TRANSPORTATION GROUP



CRANE TRANSPORTATION GROUP

Figure 3
Existing Intersection
Lane Geometrics and Control

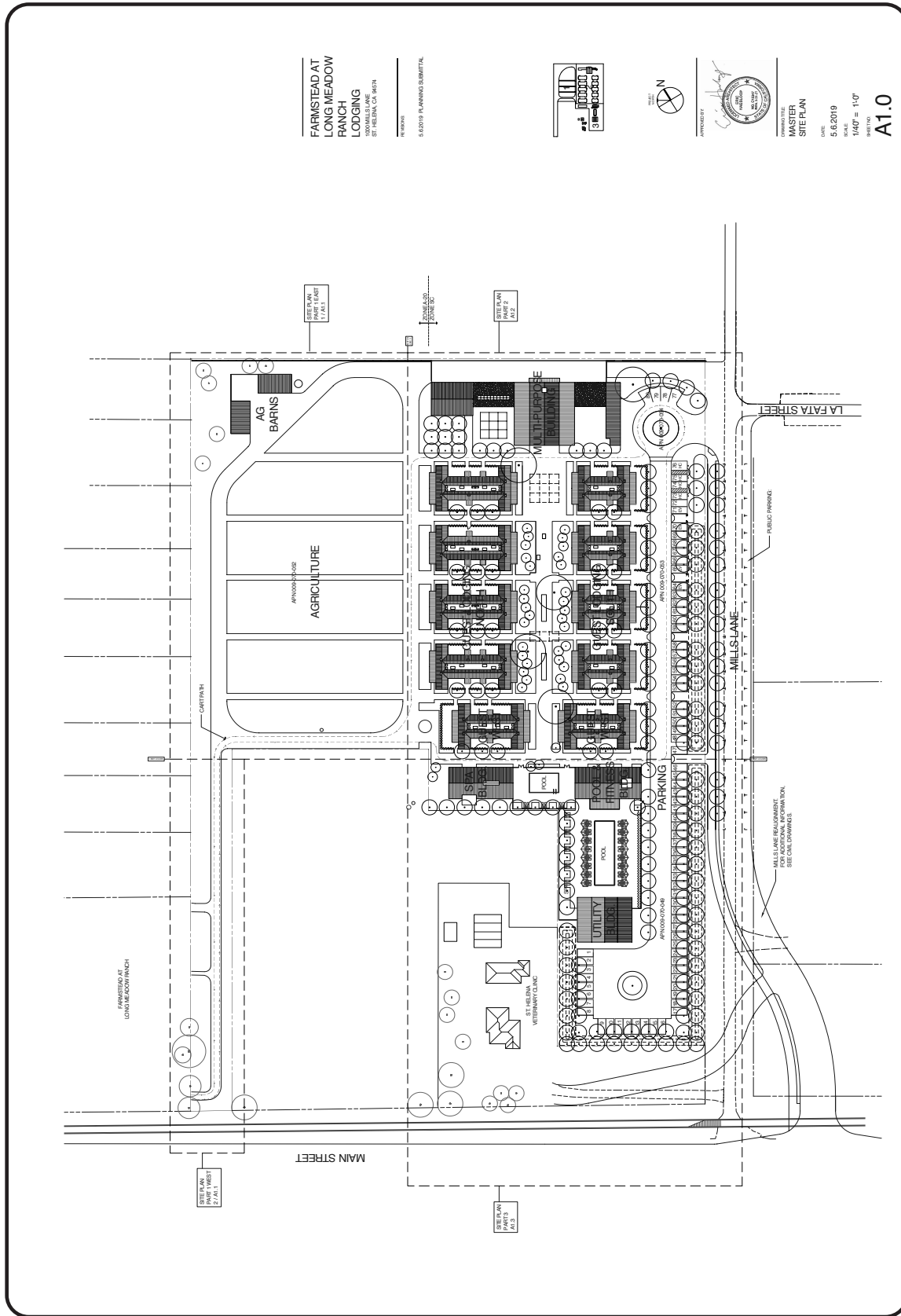


Figure 4
Lodge Site Plan

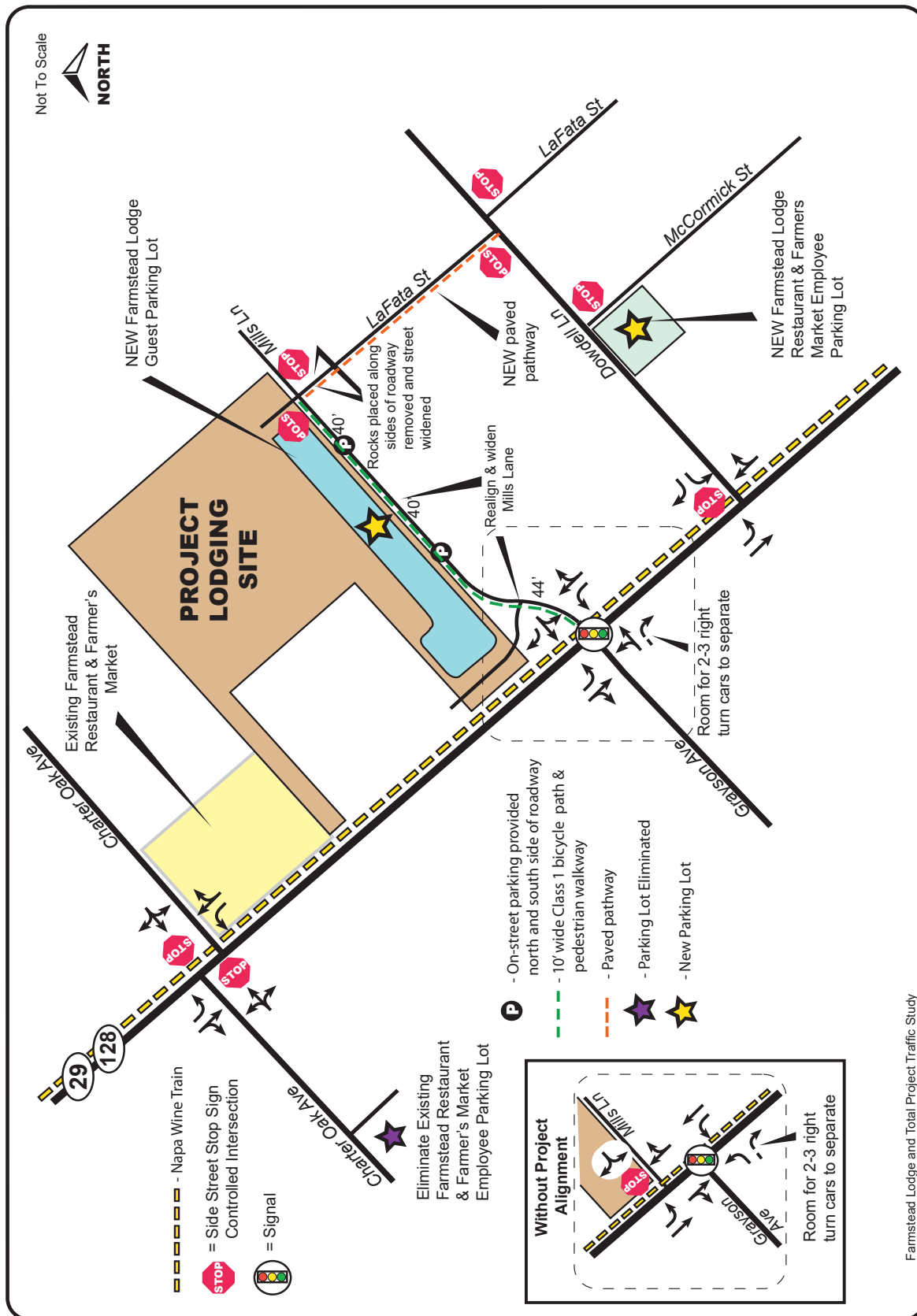
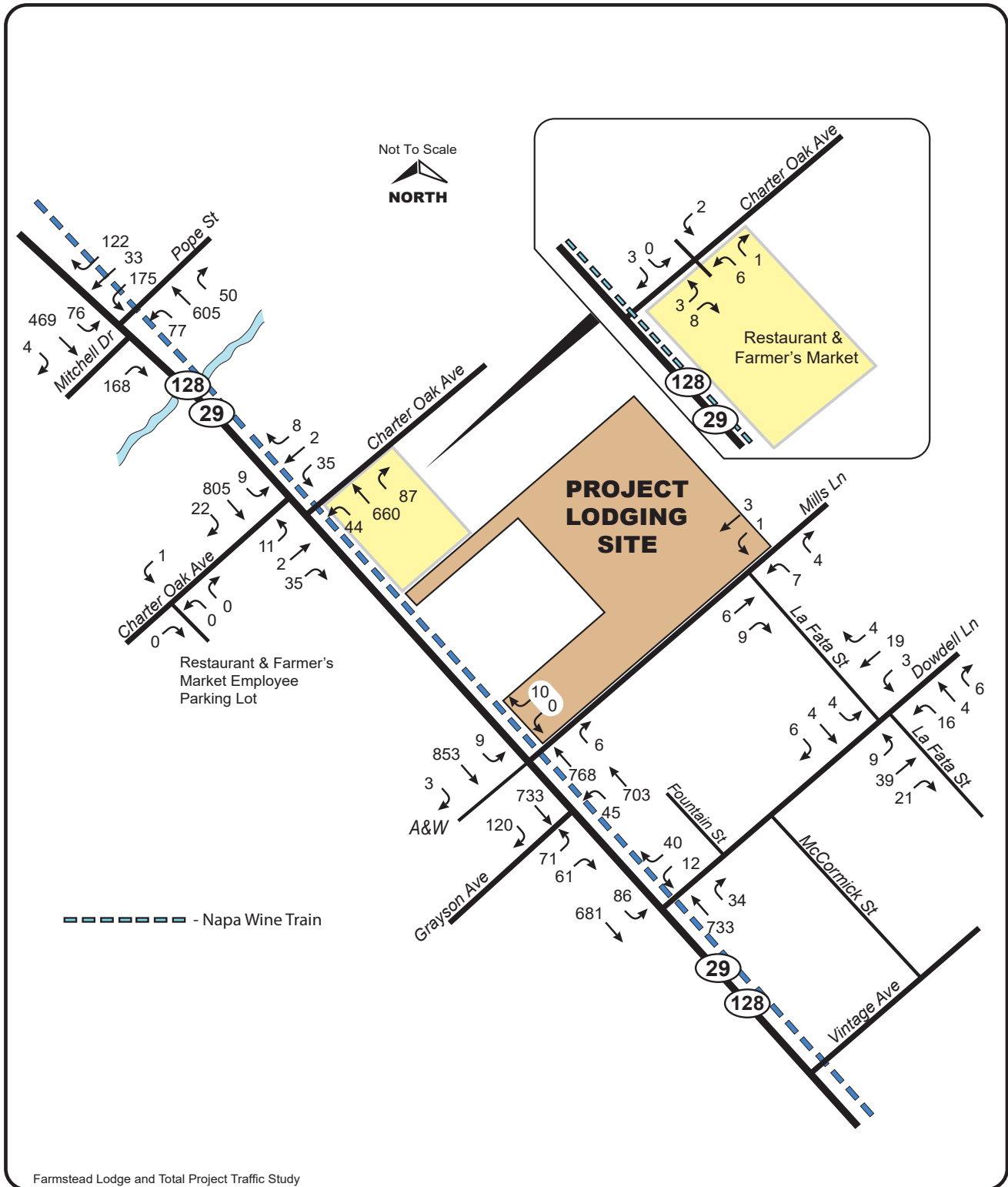


Figure 5
Lodge Roadway, Pedestrian, Bicycle & Parking Changes



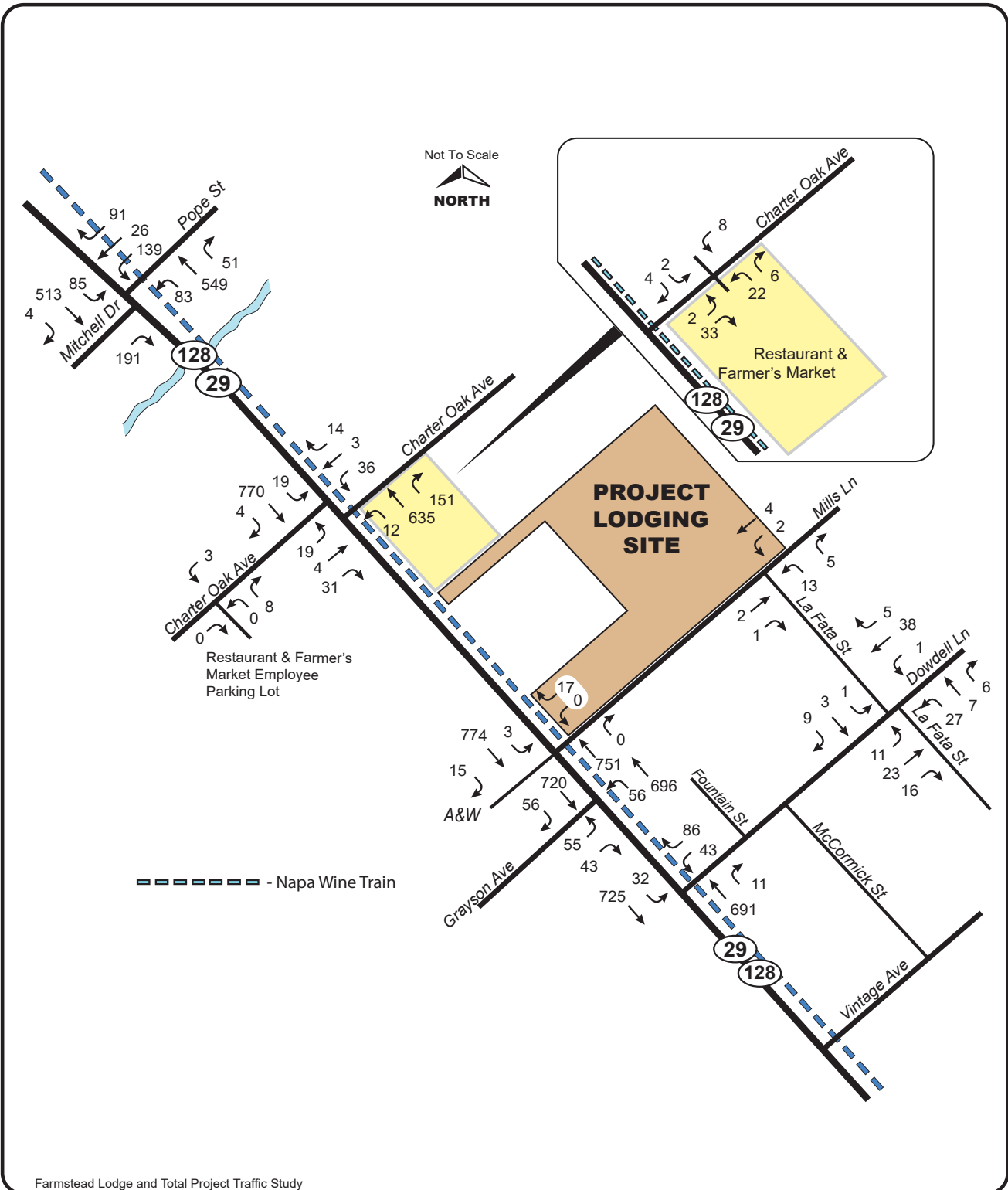
Farmstead Lodge and Total Project Traffic Study

Figure 6

**Existing Harvest Friday (without Project)
AM Peak Hour Volumes**



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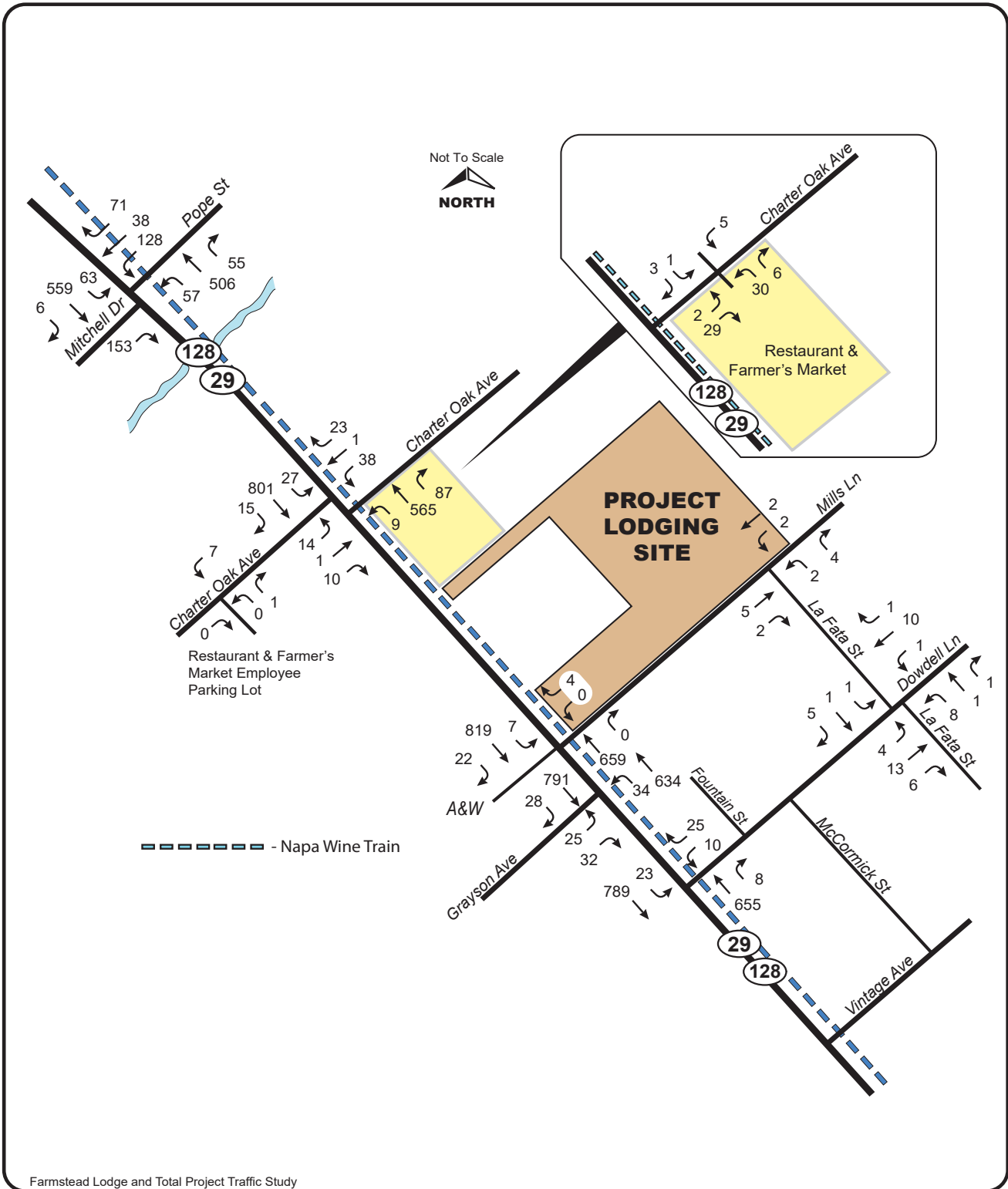


Farmstead Lodge and Total Project Traffic Study



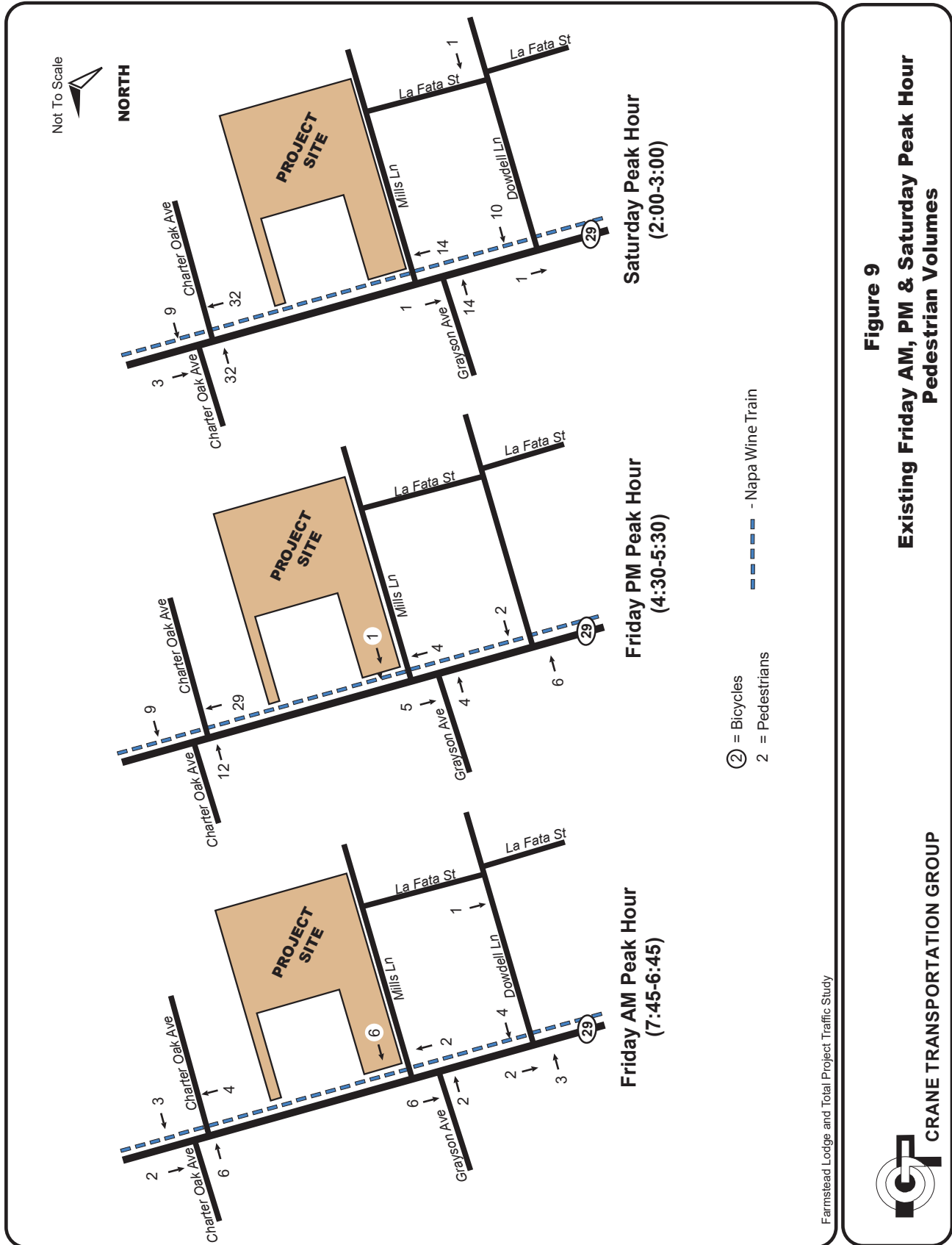
CRANE TRANSPORTATION GROUP

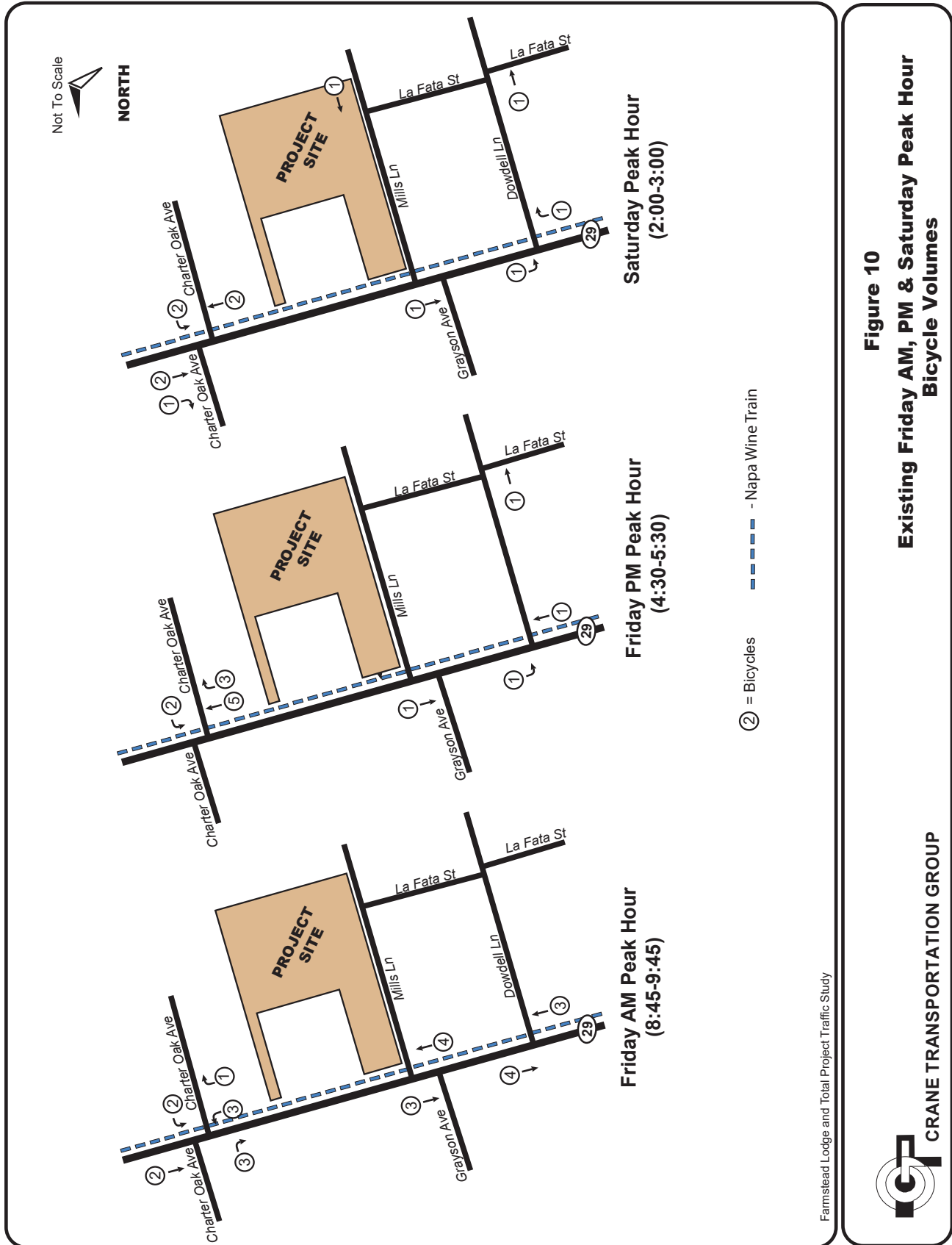
Figure 7
Existing Harvest Friday (without Project)
PM Peak Hour Volumes



CRANE TRANSPORTATION GROUP

Figure 8
Existing Harvest Saturday (without Project)
PM Peak Hour Volumes





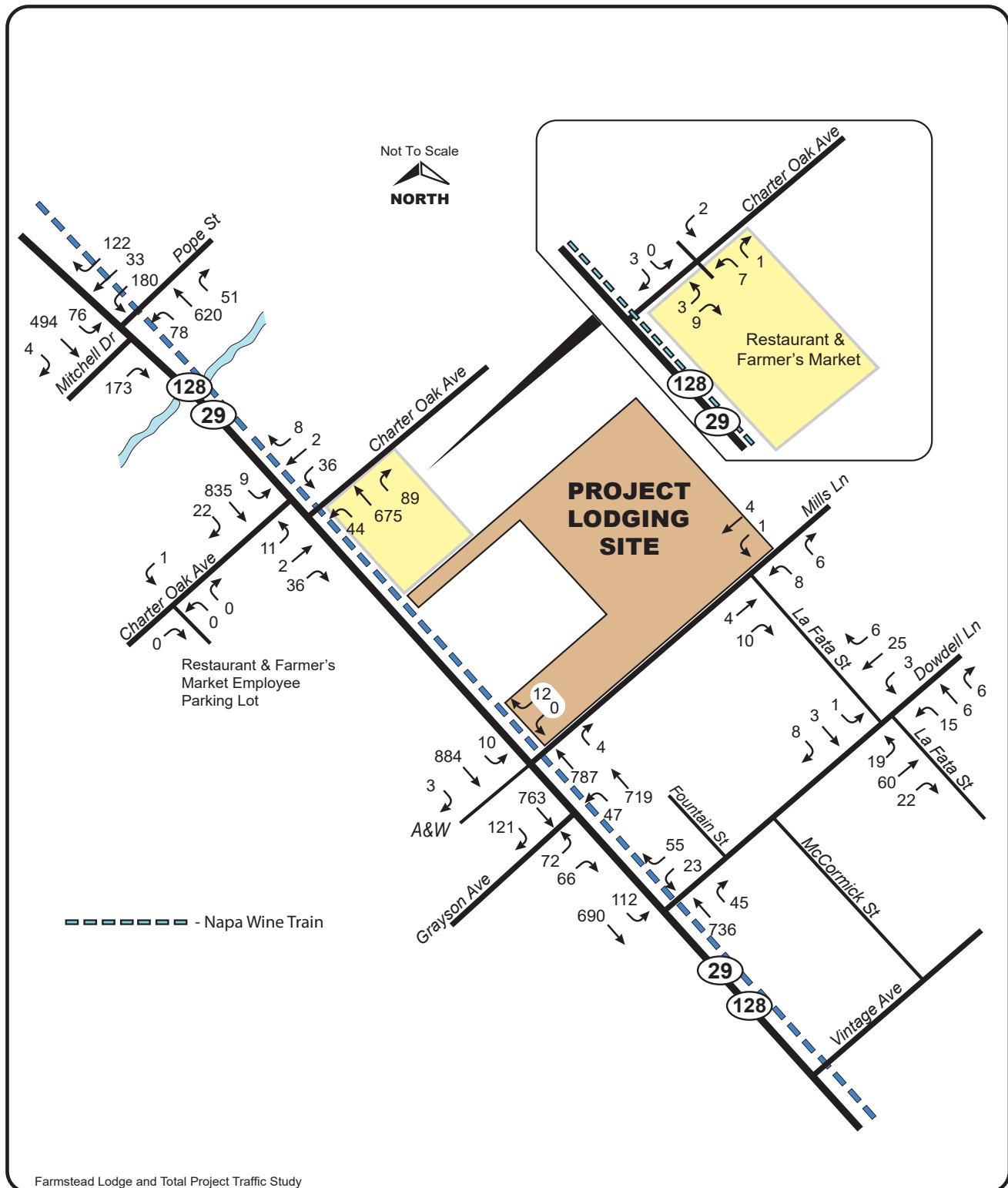
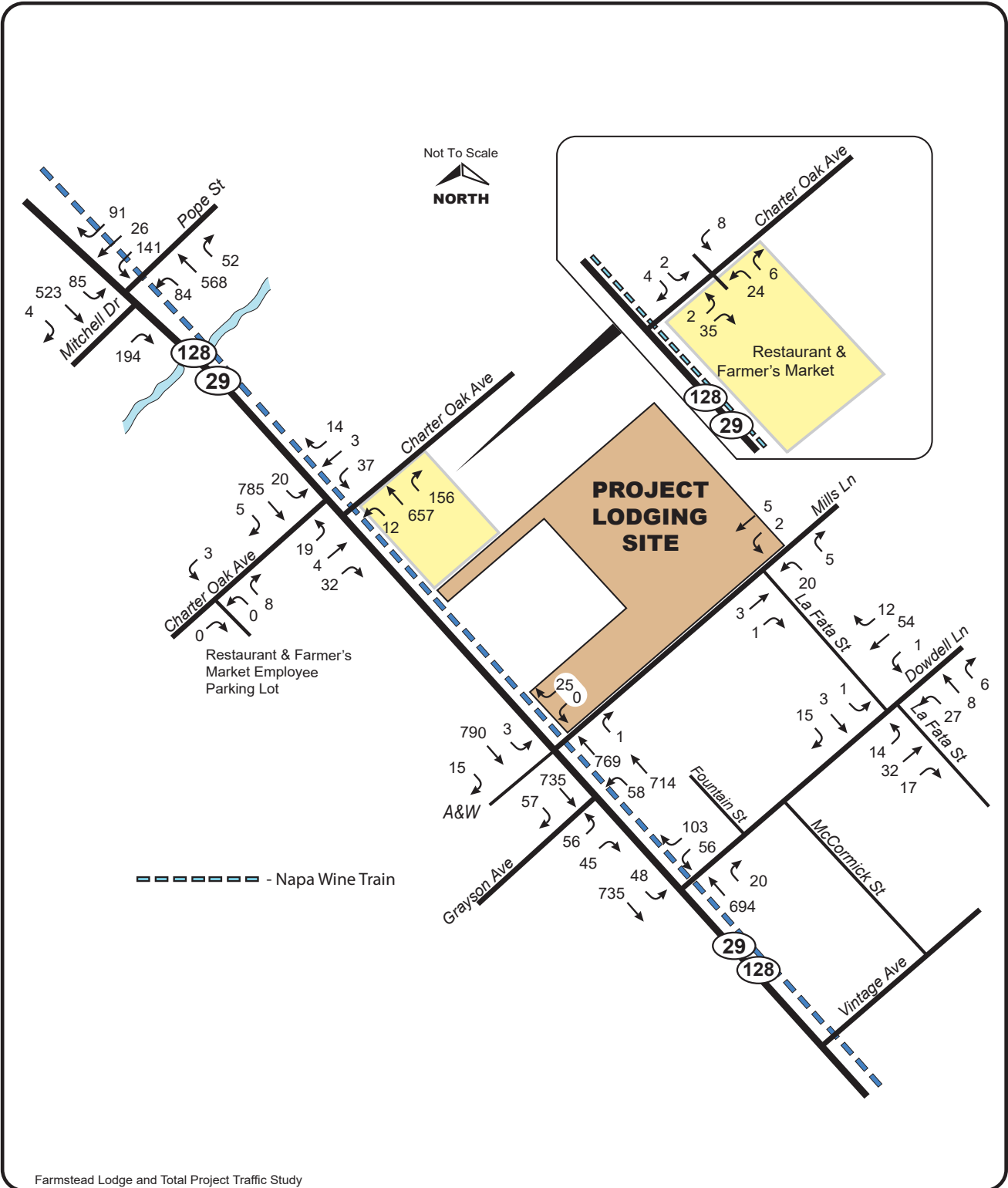
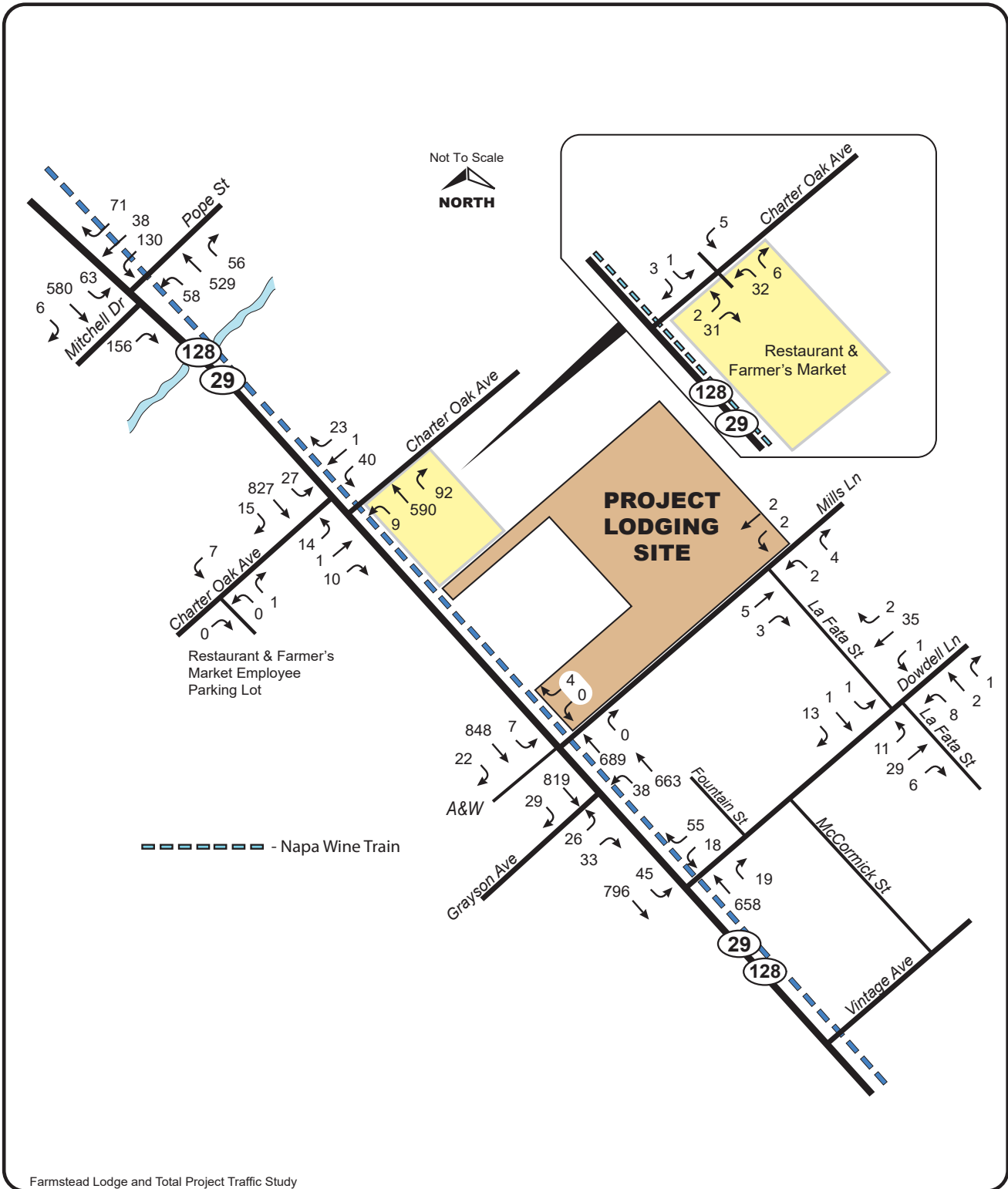


Figure 11
2022 Harvest Friday (without Project)
AM Peak Hour Volumes



CRANE TRANSPORTATION GROUP



Farmstead Lodge and Total Project Traffic Study



CRANE TRANSPORTATION GROUP

Figure 13
2022 Harvest Saturday (without Project)
PM Peak Hour Volumes

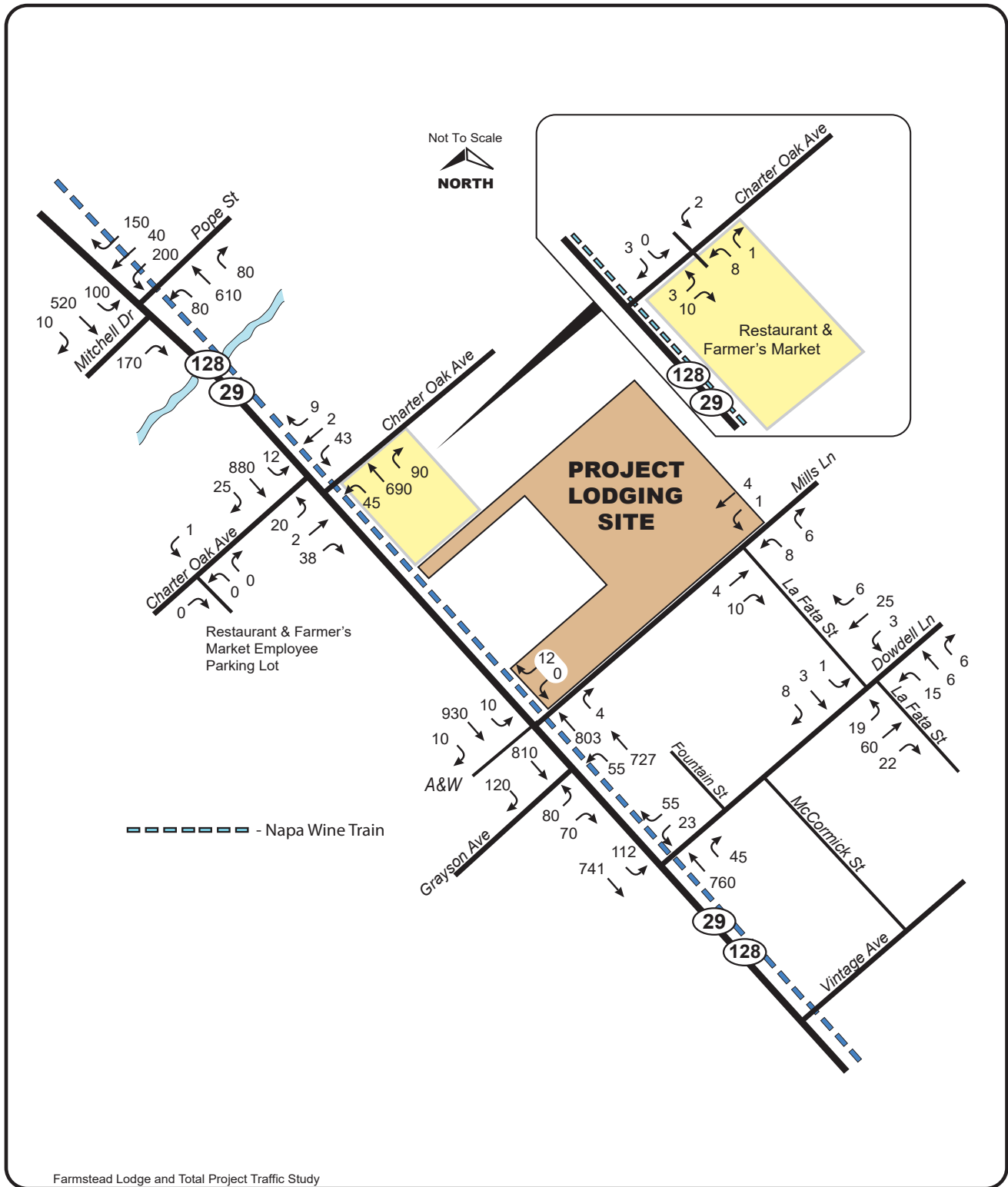
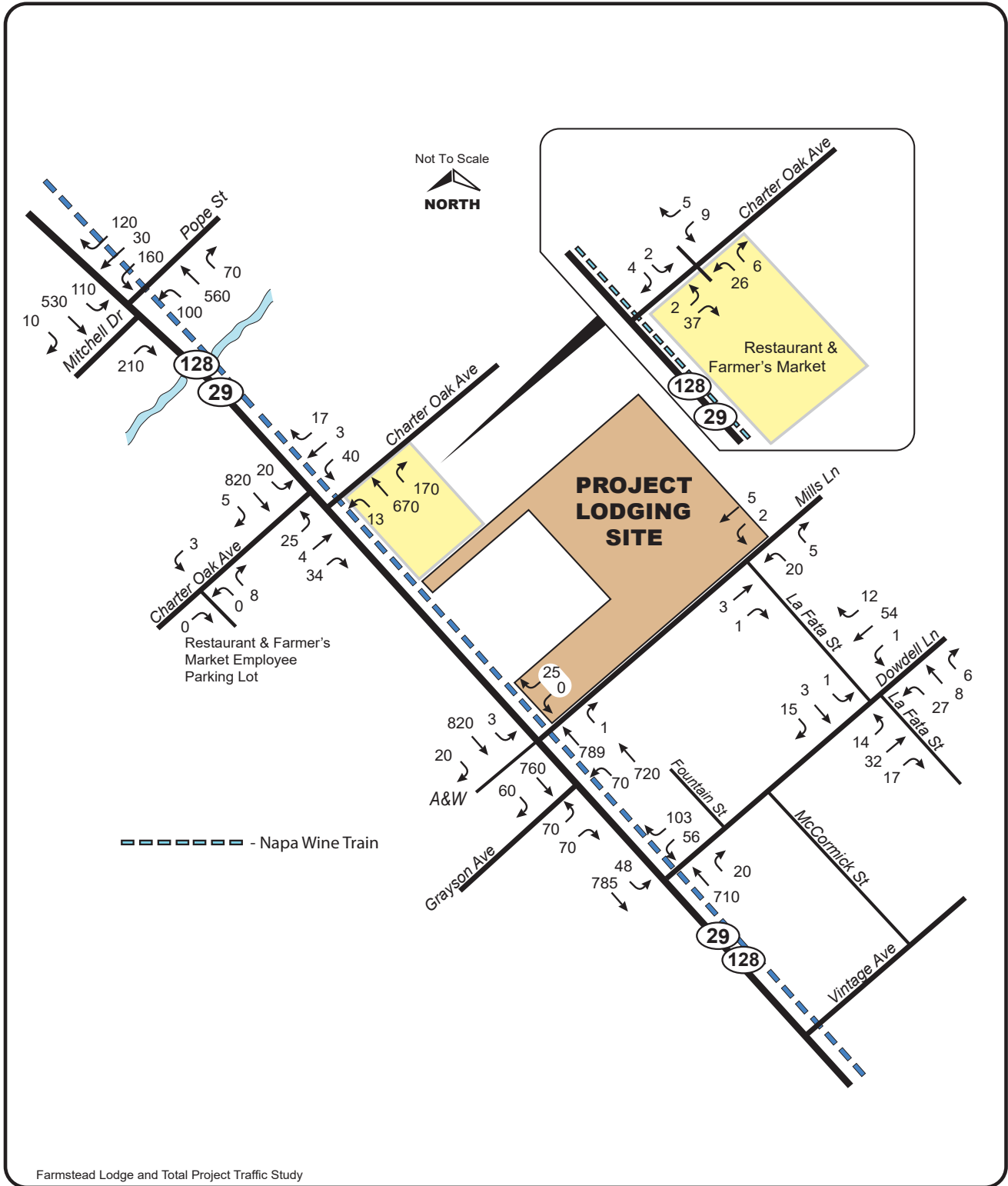


Figure 14
2040 Harvest Friday (without Project)
AM Peak Hour Volumes

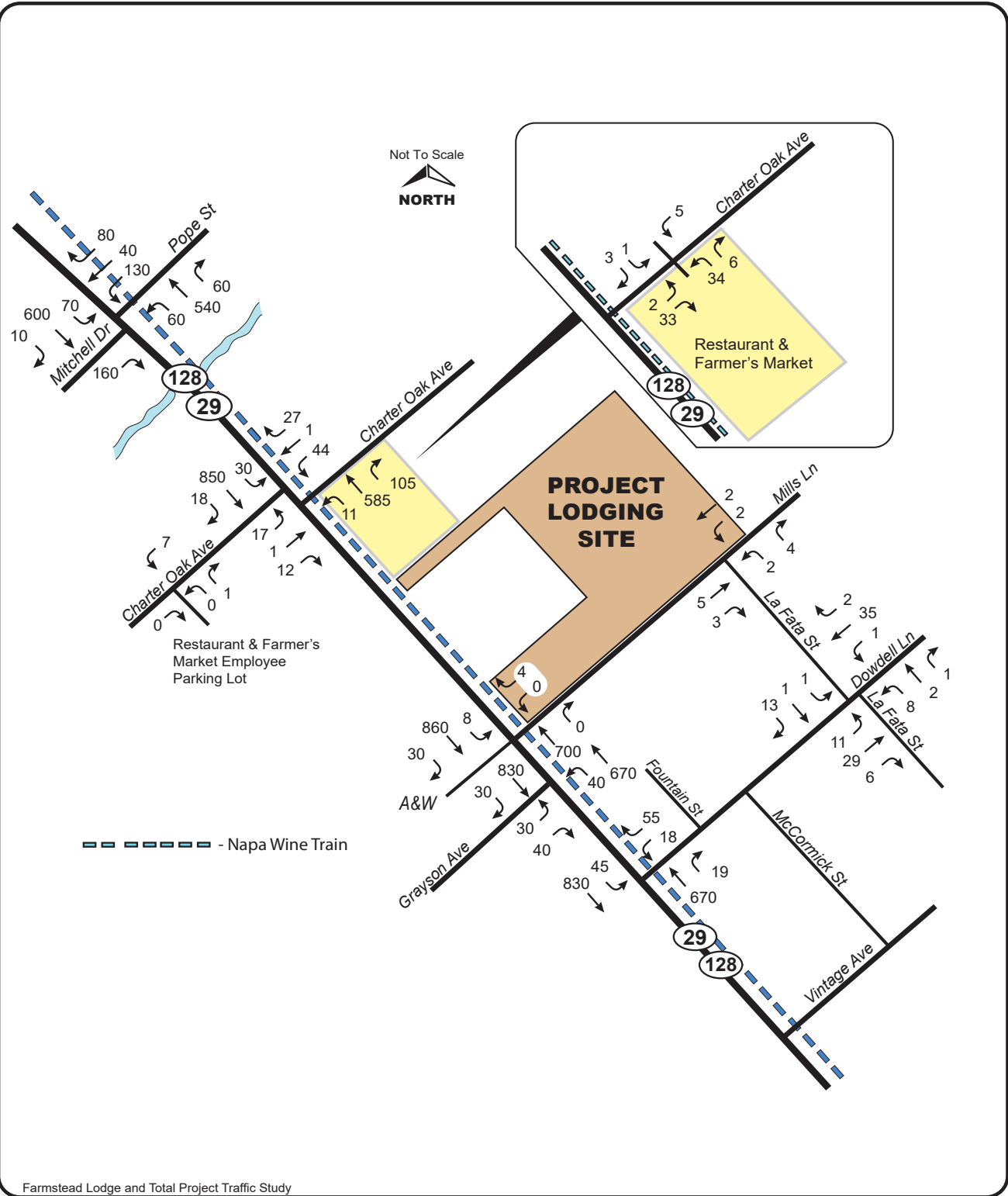


Farmstead Lodge and Total Project Traffic Study



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Figure 15
2040 Harvest Friday (without Project)
PM Peak Hour Volumes



CRANE TRANSPORTATION GROUP

Figure 16
2040 Harvest Saturday (without Project)
PM Peak Hour Volumes

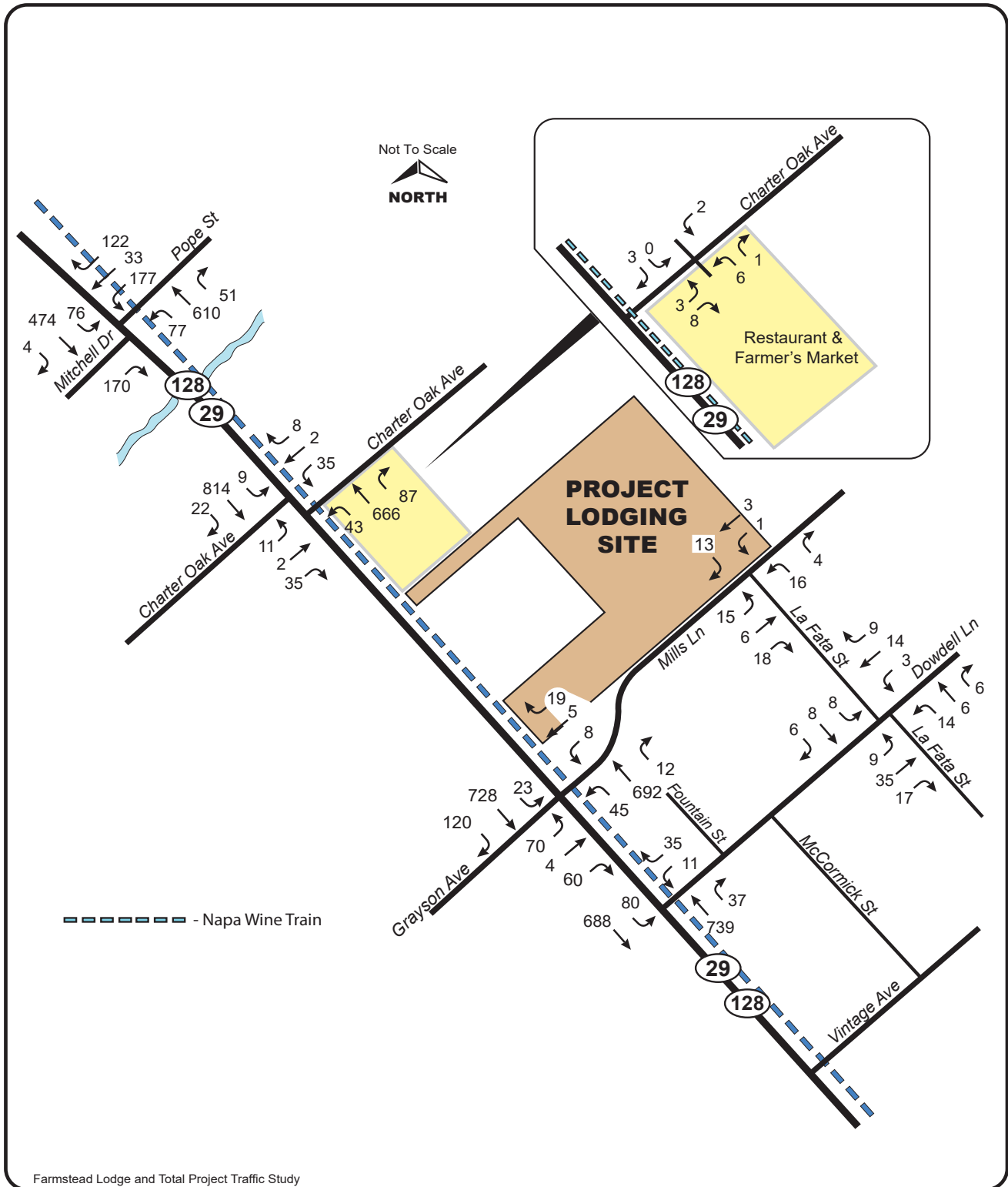


Figure 17
Existing Harvest Friday + Lodge
AM Peak Hour Volumes



Figure 18
Existing Harvest Friday with Lodge
PM Peak Hour Volumes

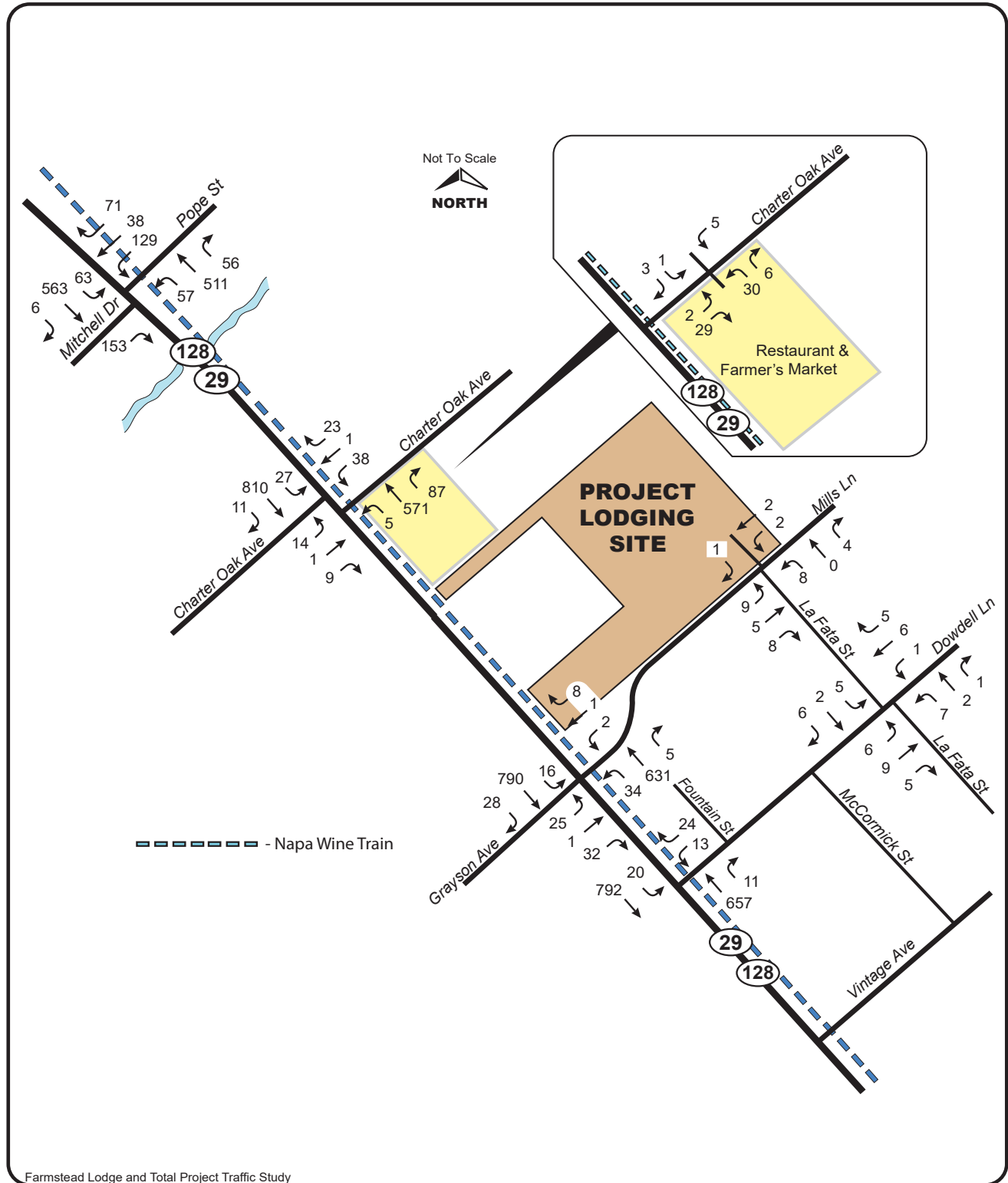


Figure 19
Existing Harvest Saturday with Lodge
PM Peak Hour Volumes

 **CRANE TRANSPORTATION GROUP**

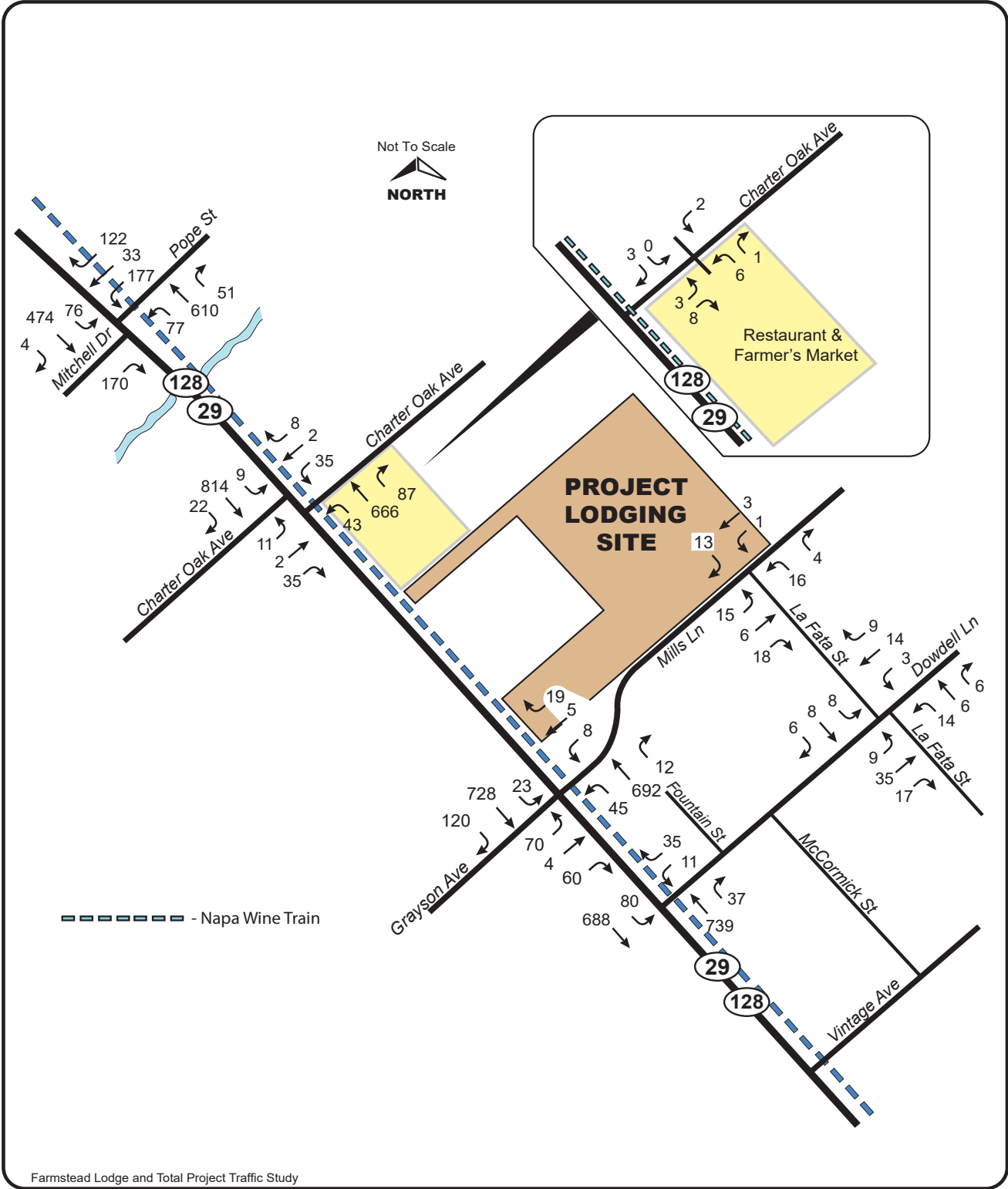


Figure 20
Existing Harvest Friday + Total Project
AM Peak Hour Volumes

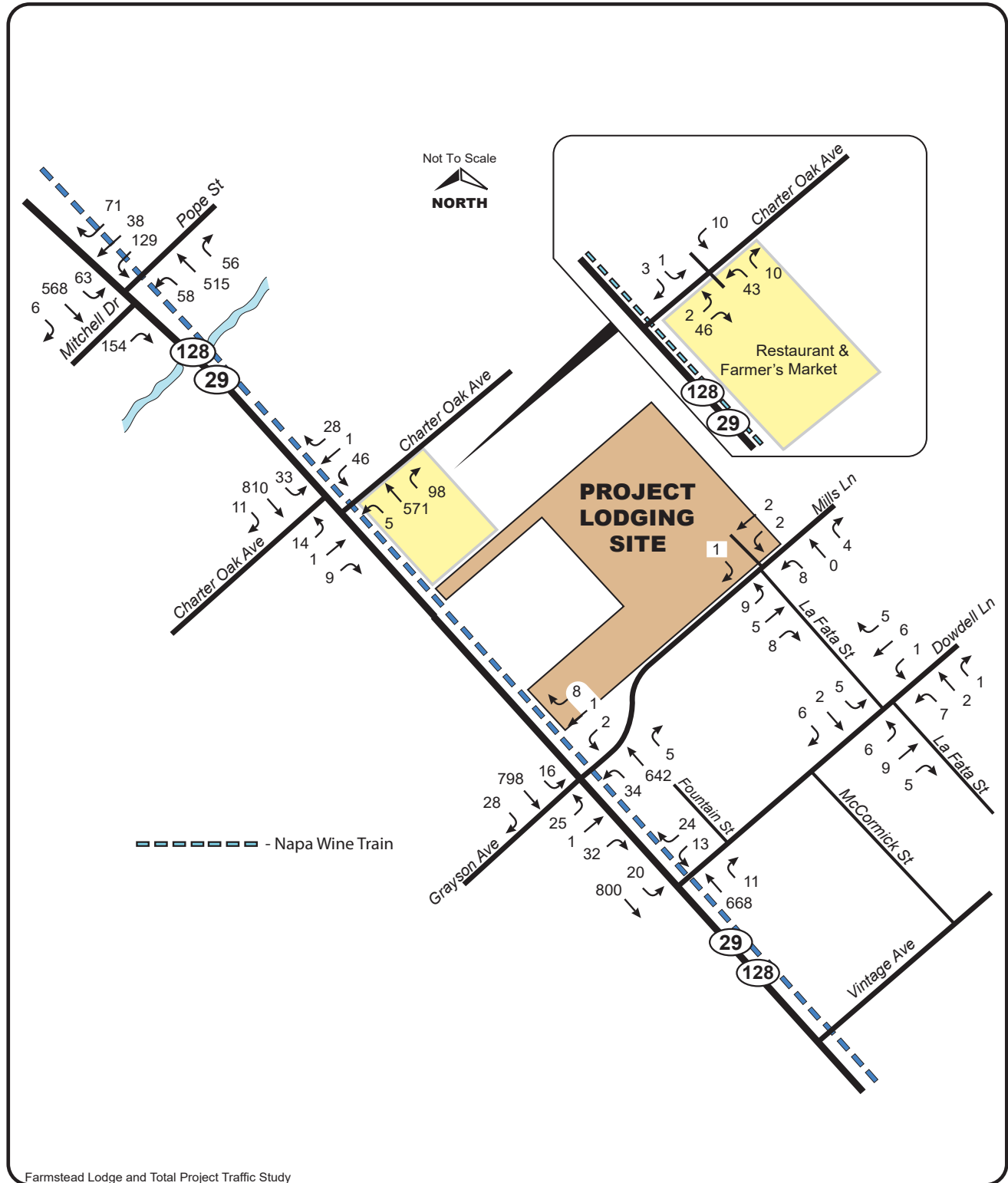
 **CRANE TRANSPORTATION GROUP**



Figure 21
Existing Harvest Friday with Total Project
PM Peak Hour Volumes



CRANE TRANSPORTATION GROUP

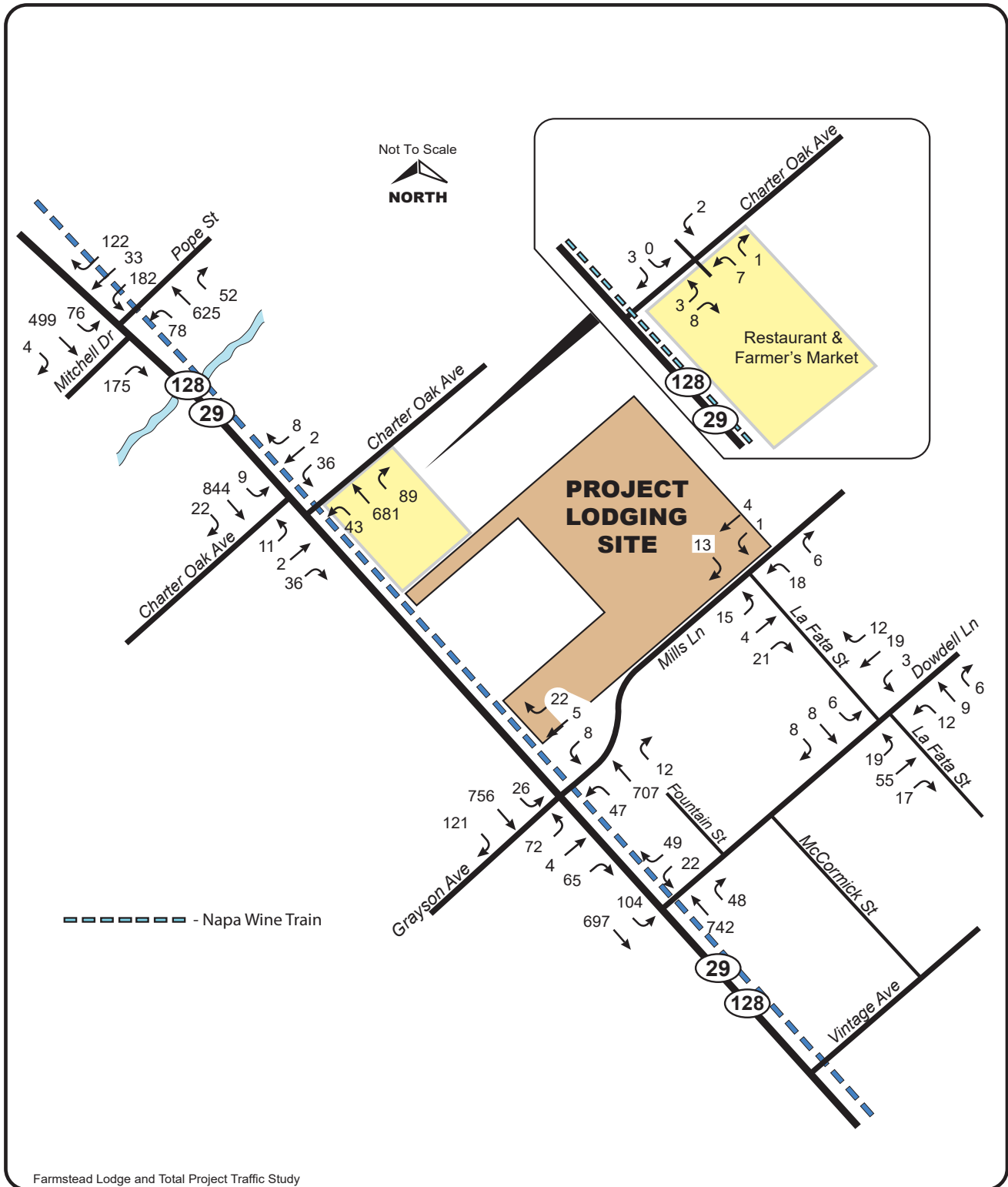


Farmstead Lodge and Total Project Traffic Study



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Figure 22
Existing Harvest Saturday with Total Project
PM Peak Hour Volumes



Farmstead Lodge and Total Project Traffic Study



CRANE TRANSPORTATION GROUP

Figure 23
Year 2022 Harvest Friday + Lodge
AM Peak Hour Volumes

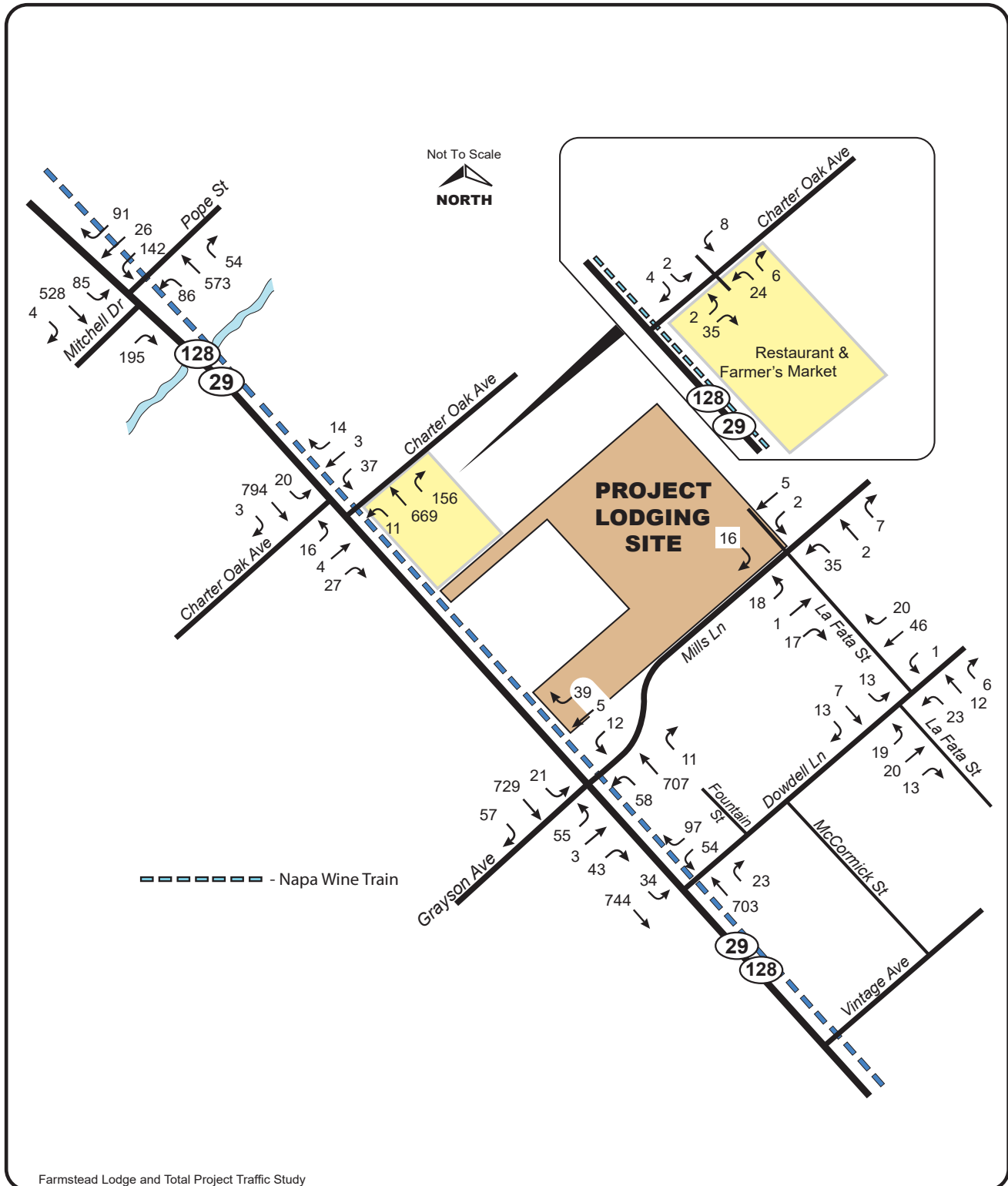
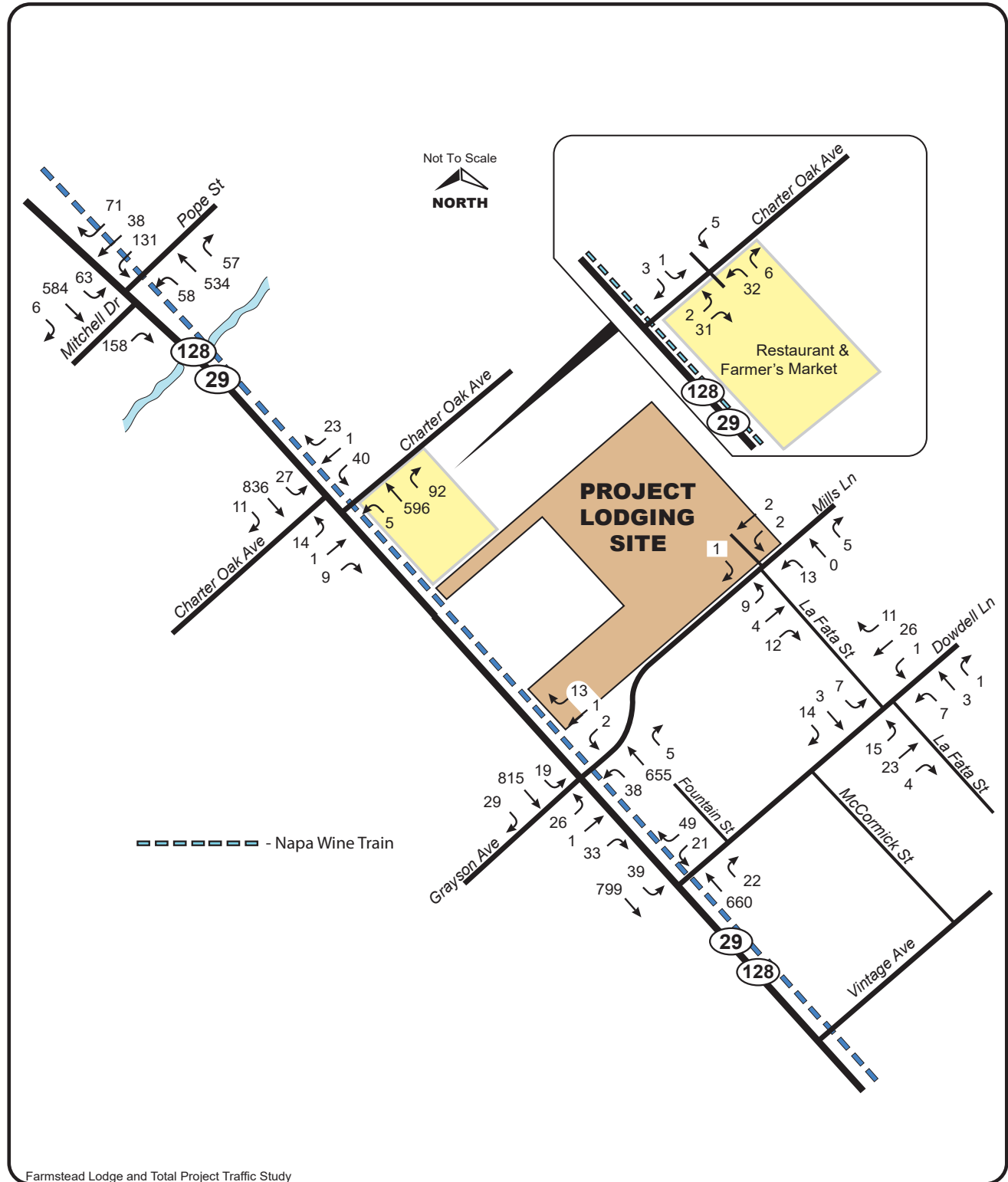


Figure 24
Year 2022 Harvest Friday with Lodge
PM Peak Hour Volumes



Farmstead Lodge and Total Project Traffic Study



CRANE TRANSPORTATION GROUP

Figure 25
Year 2022 Harvest Saturday with Lodge
PM Peak Hour Volumes

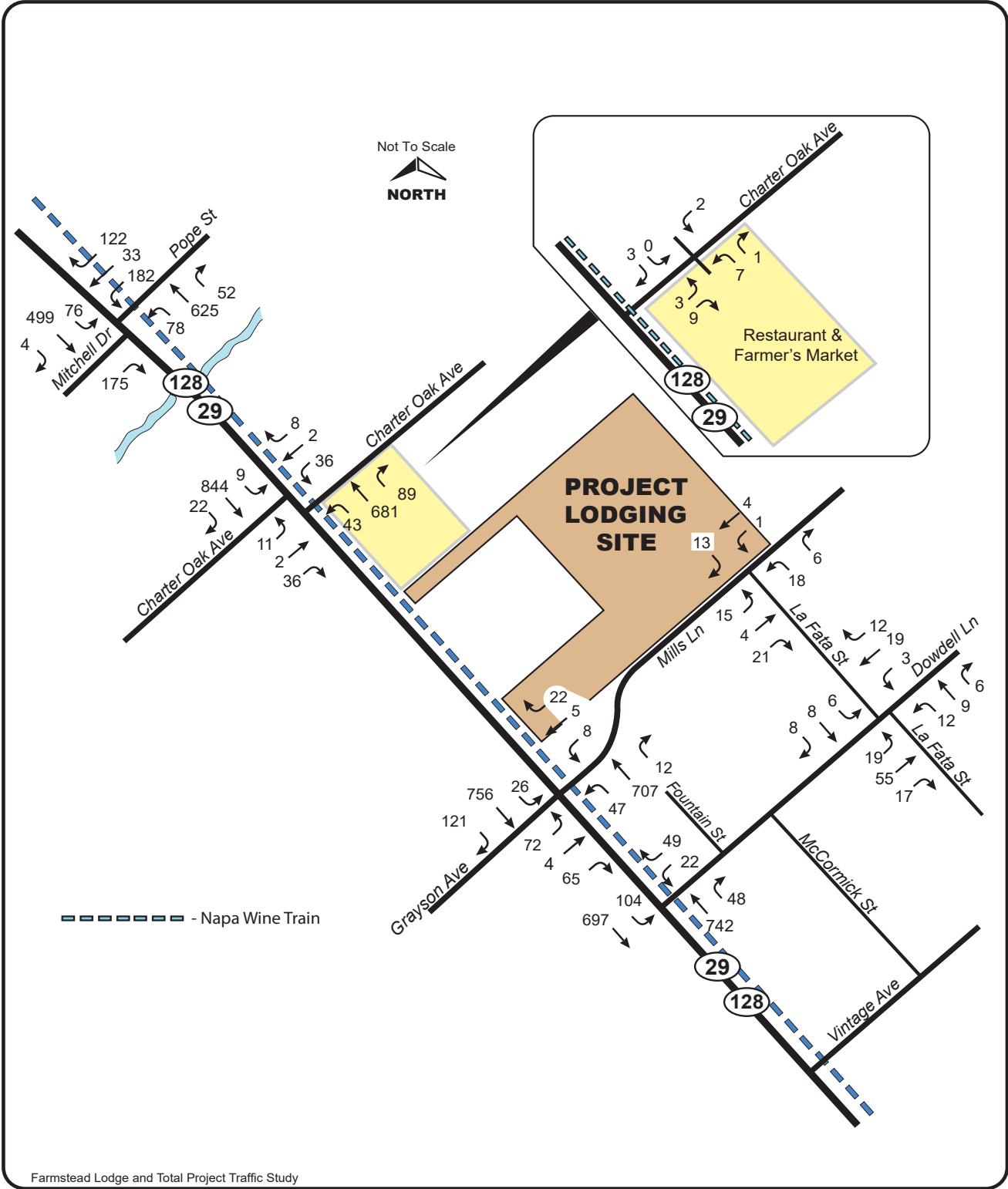
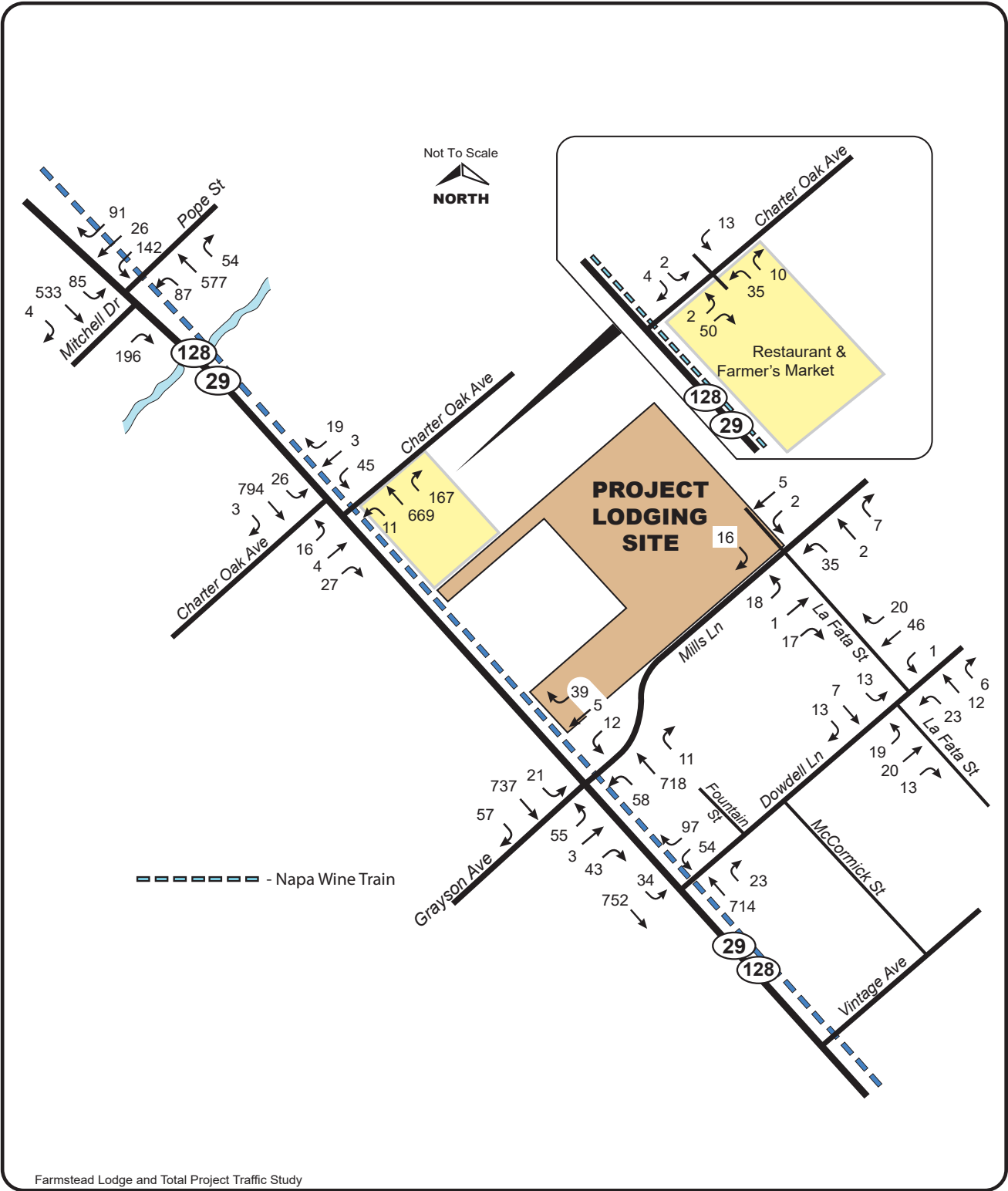


Figure 26
Year 2022 Harvest Friday + Total Project
AM Peak Hour Volumes

 **CRANE TRANSPORTATION GROUP**

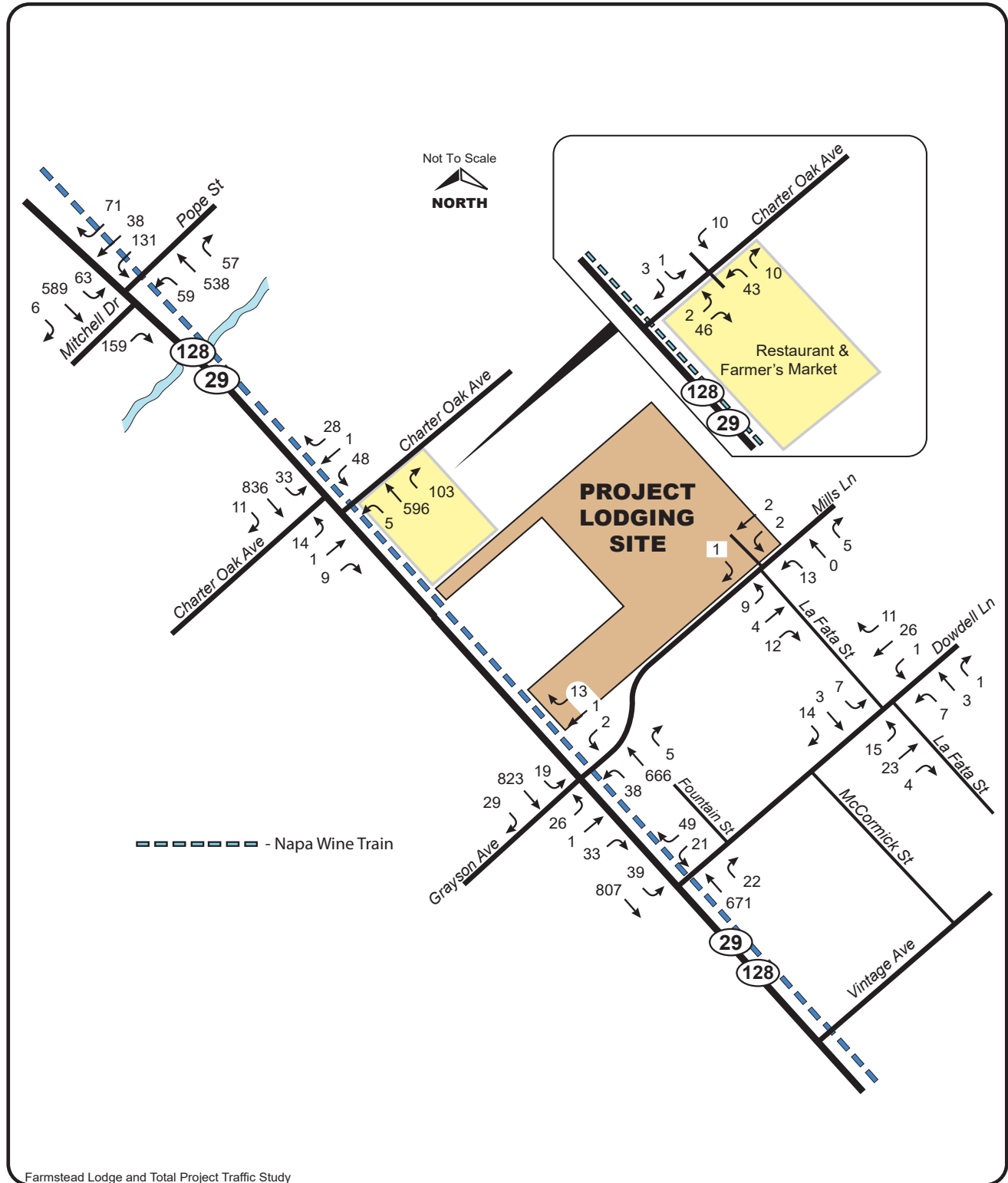


Farmstead Lodge and Total Project Traffic Study



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Figure 27
Year 2022 Harvest Friday with Total Project
PM Peak Hour Volumes



Farmstead Lodge and Total Project Traffic Study



CRANE TRANSPORTATION GROUP

Figure 28
Year 2022 Harvest Saturday with Total Project
PM Peak Hour Volumes

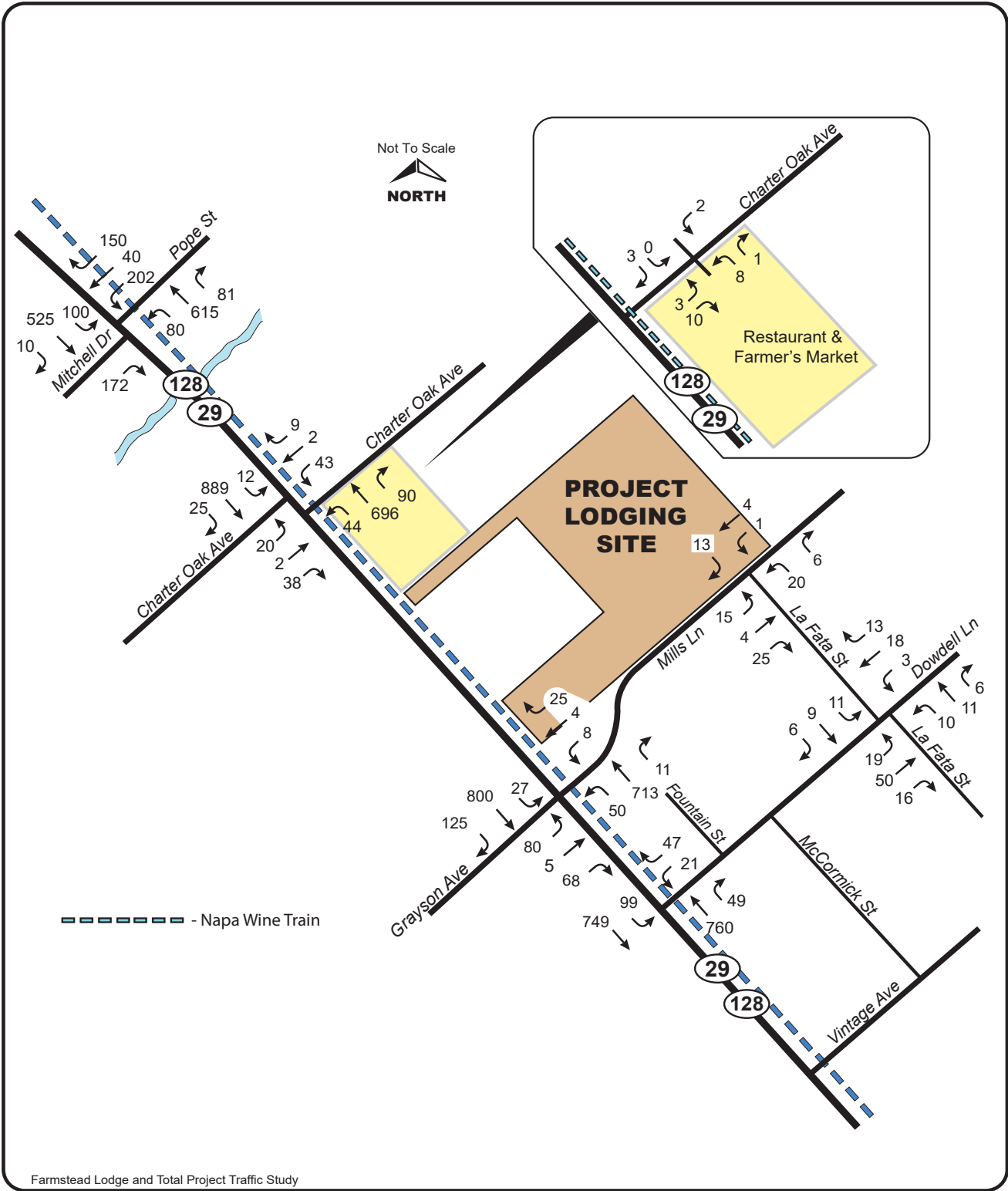
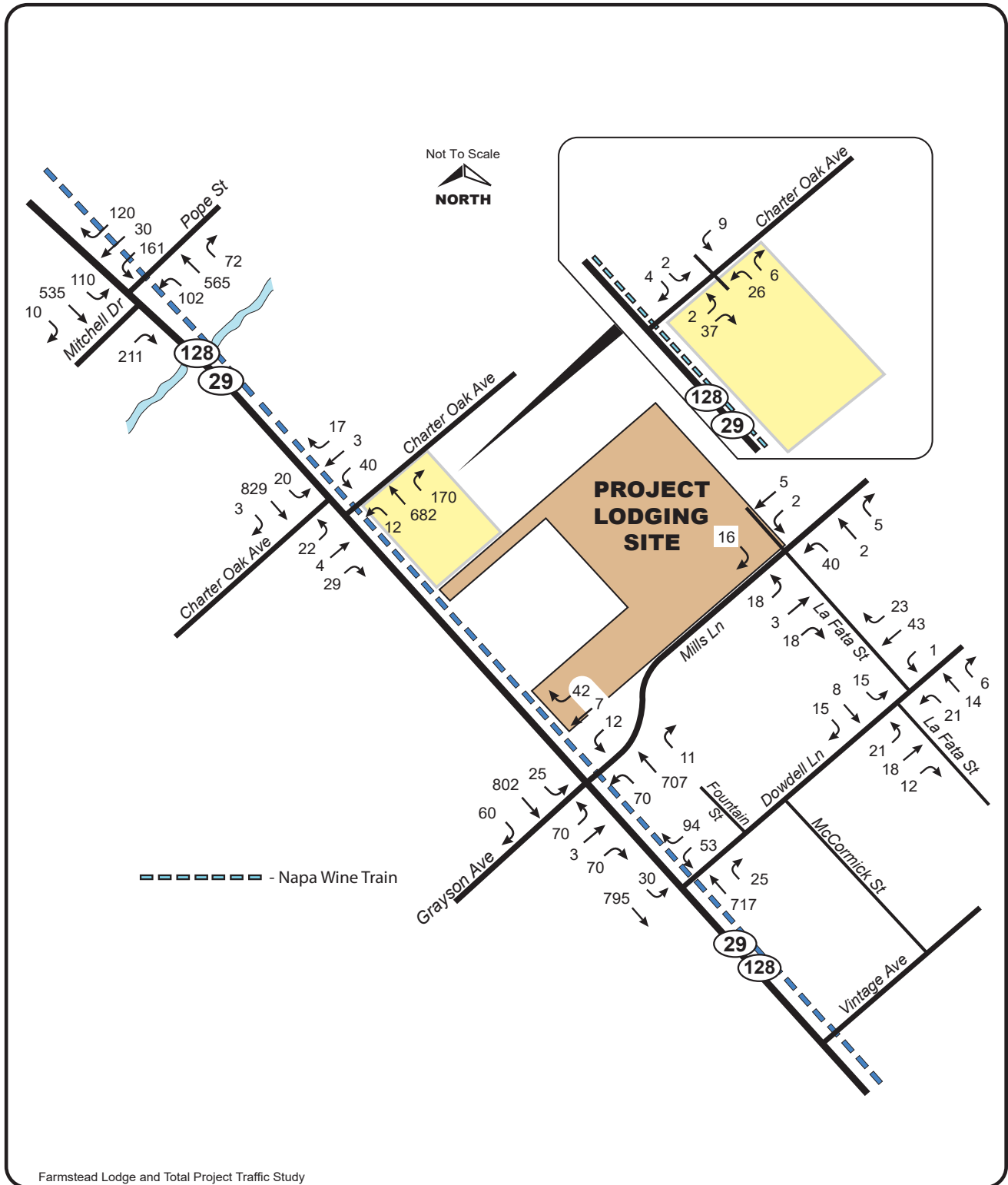
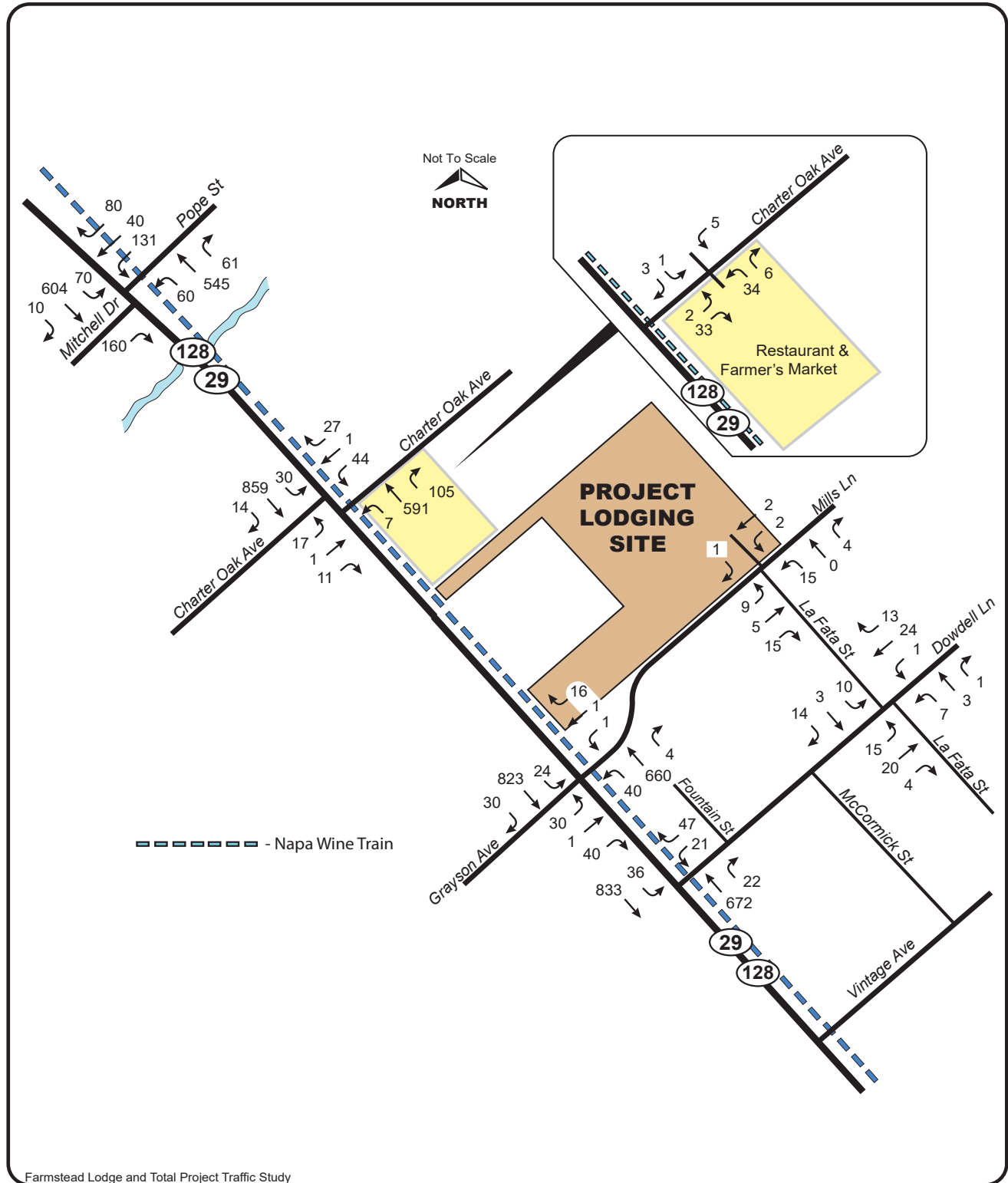


Figure 29
Year 2040 Harvest Friday + Lodge
AM Peak Hour Volumes



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Figure 30
Year 2040 Harvest Friday with Lodge
PM Peak Hour Volumes



Farmstead Lodge and Total Project Traffic Study



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Figure 31
Year 2040 Harvest Saturday with Lodge
PM Peak Hour Volumes

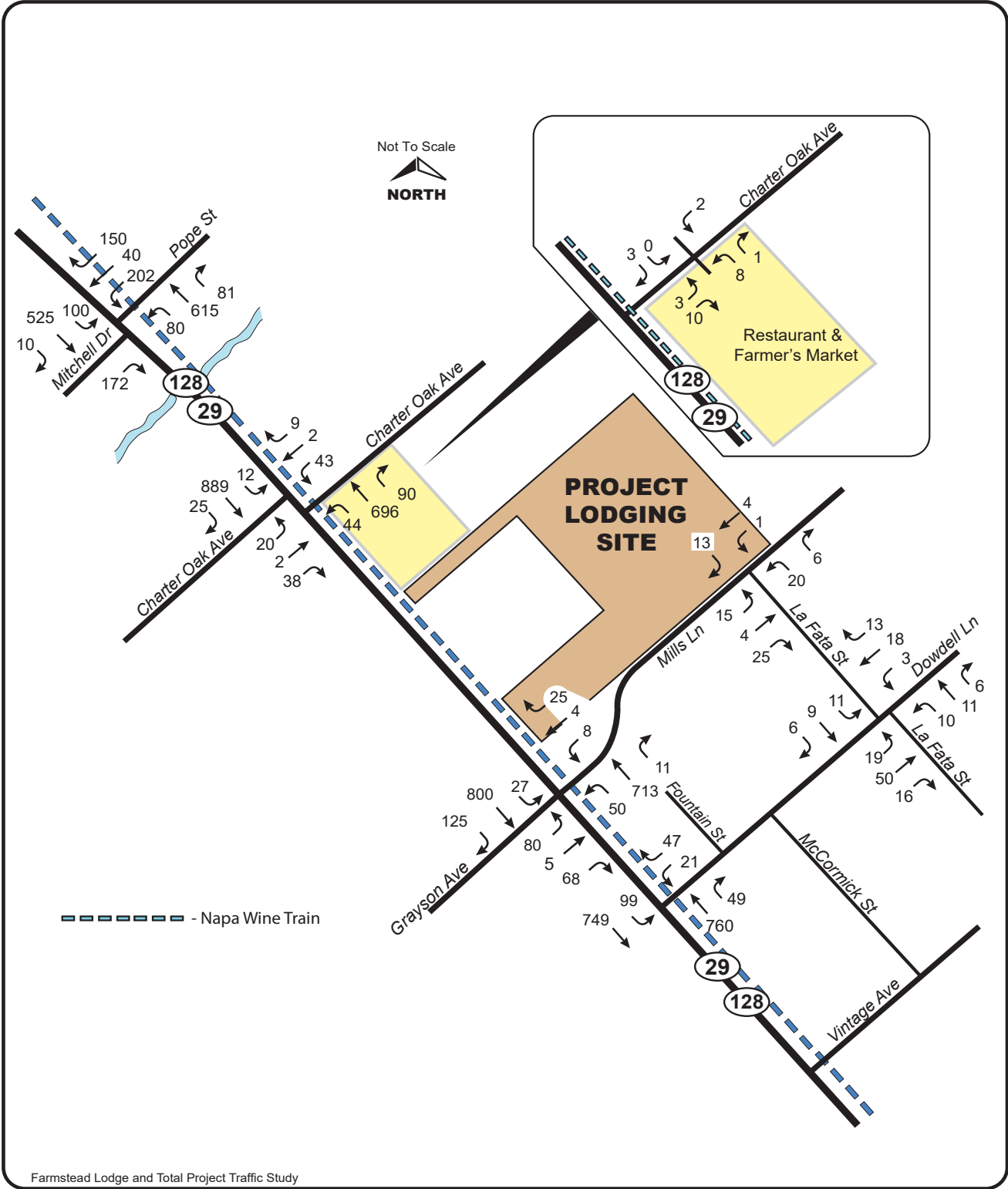
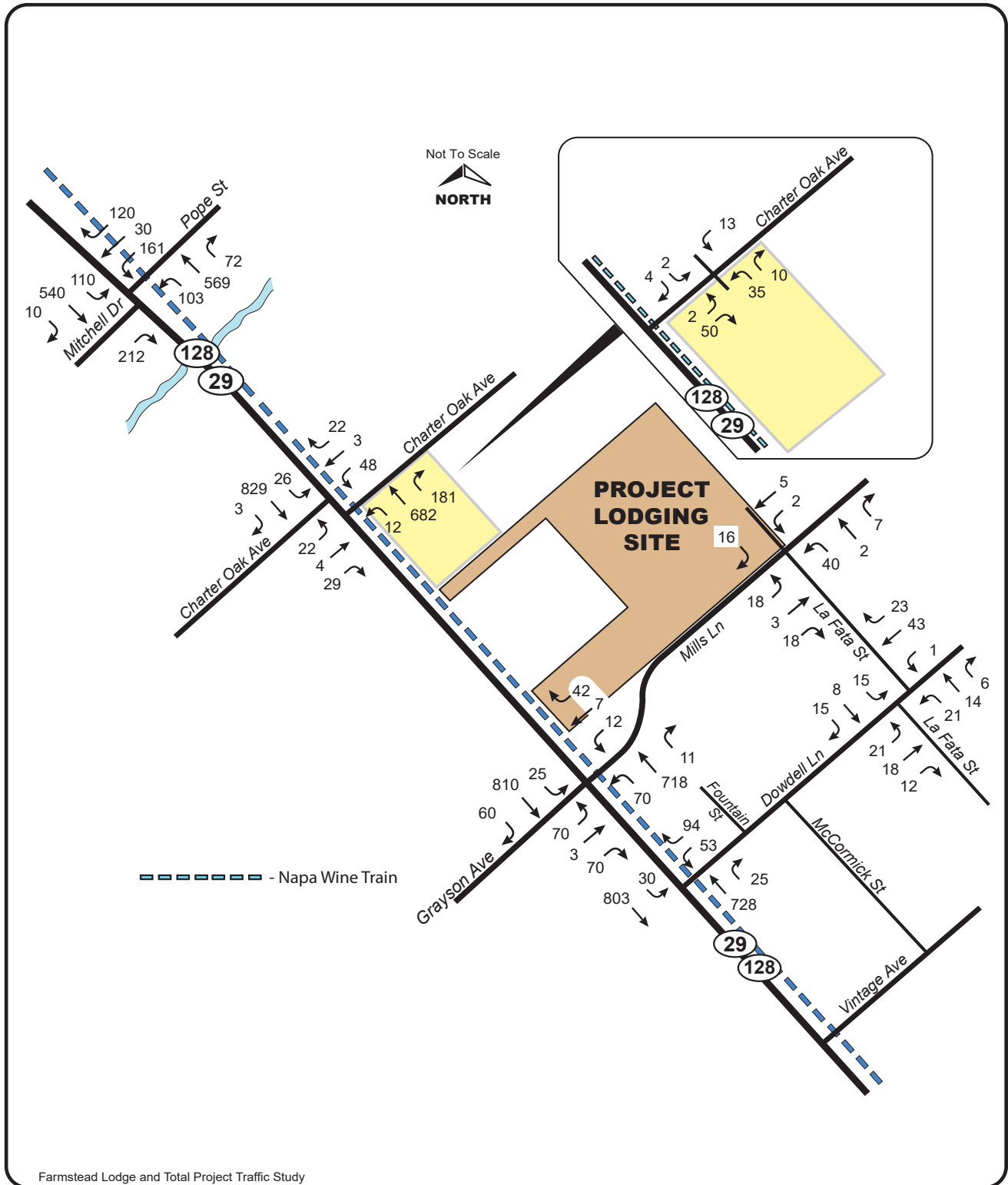
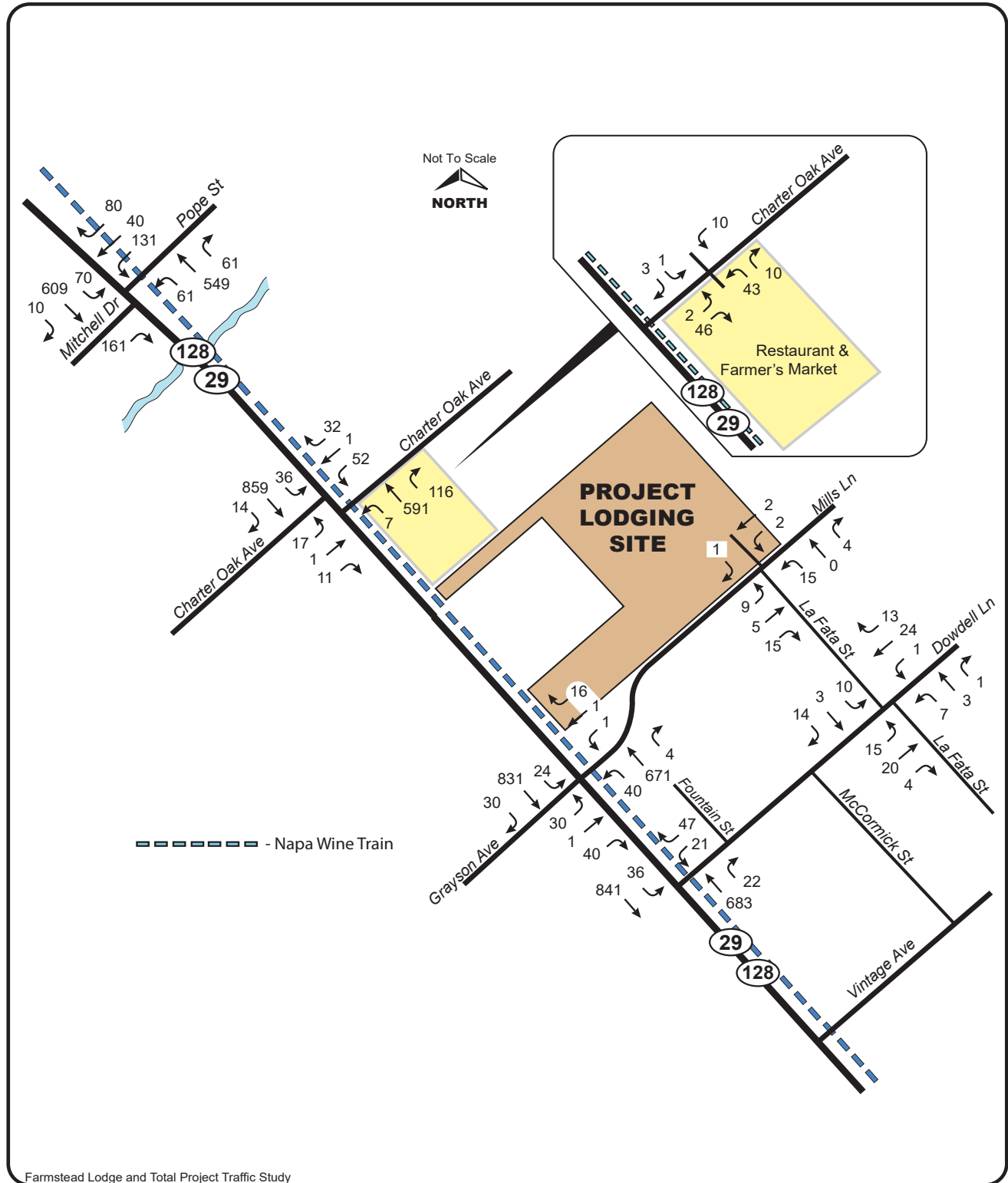


Figure 32
Year 2040 Harvest Friday + Total Project
AM Peak Hour Volumes

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Farmstead Lodge and Total Project Traffic Study



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Figure 34
Year 2040 Harvest Saturday with Total Project
PM Peak Hour Volumes

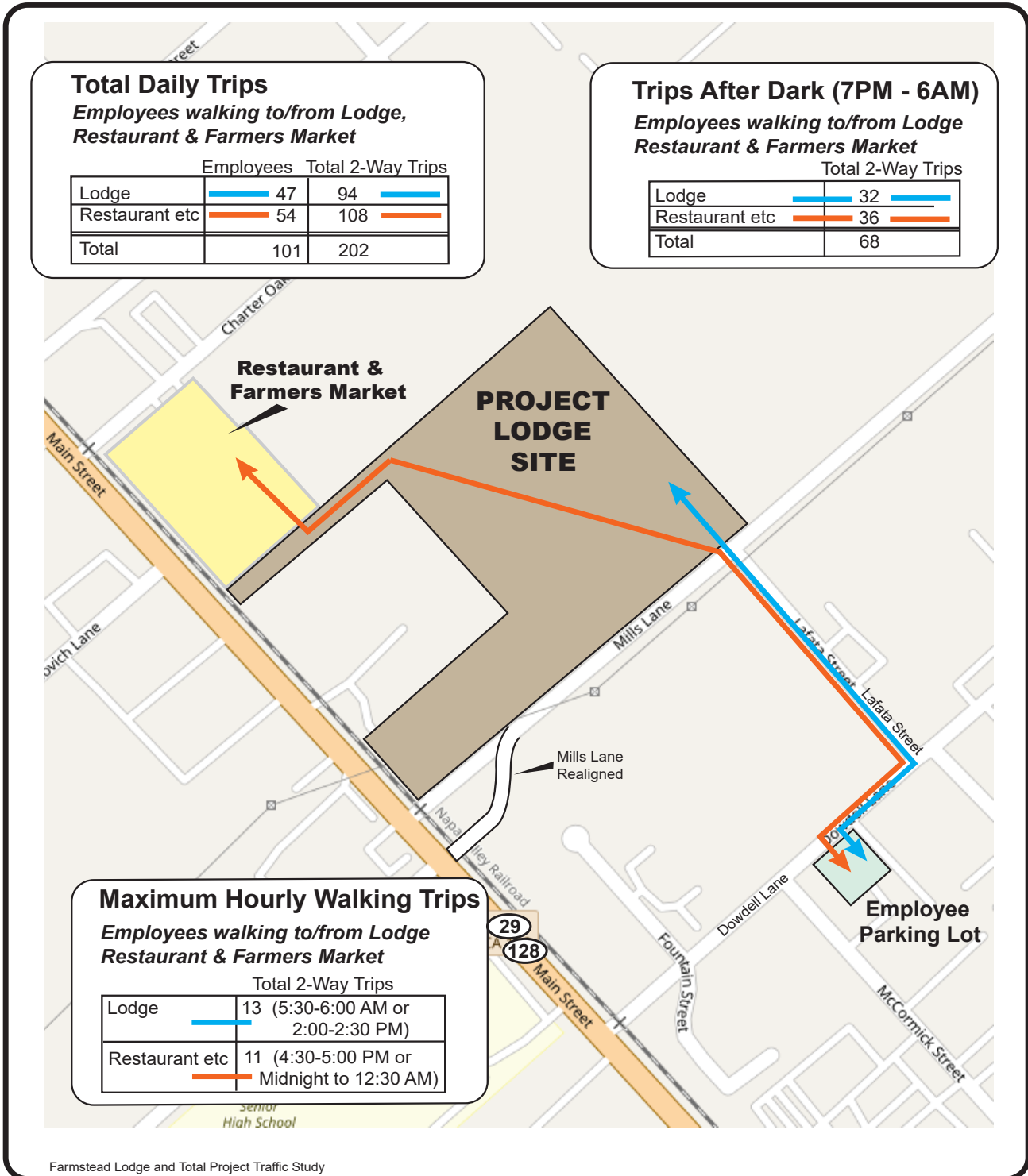


Figure 35
Employees Walking between Dowdell Lane Parking Lot and Project Restaurant/Farmers Marker & Lodge

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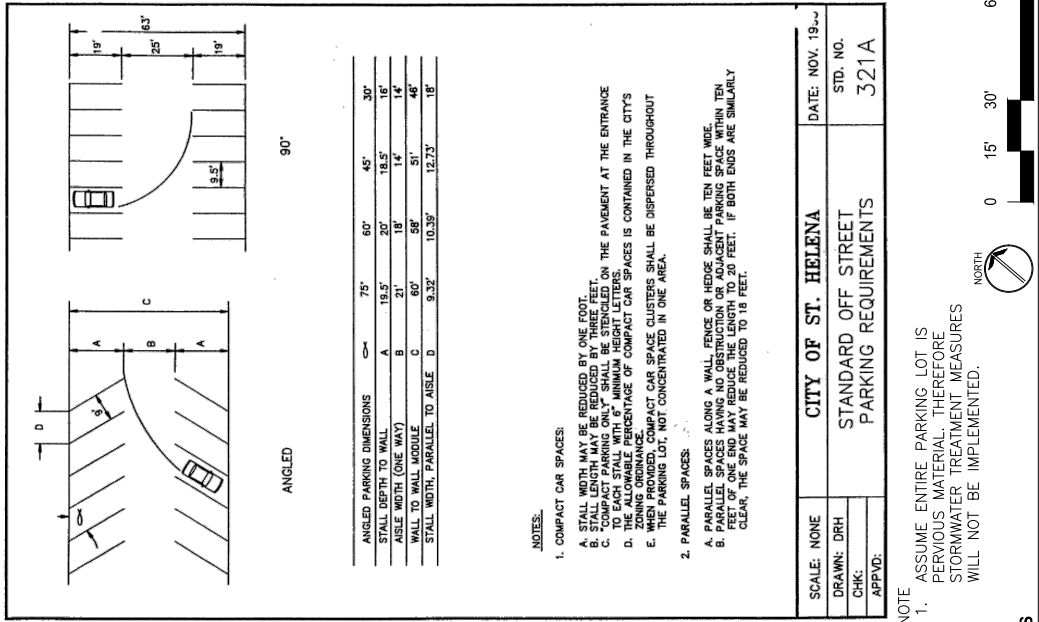


Farmstead Lodge and Total Project Traffic Study



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Figure 36
Guest Walking Routes between
Project Site and Downtown St Helena



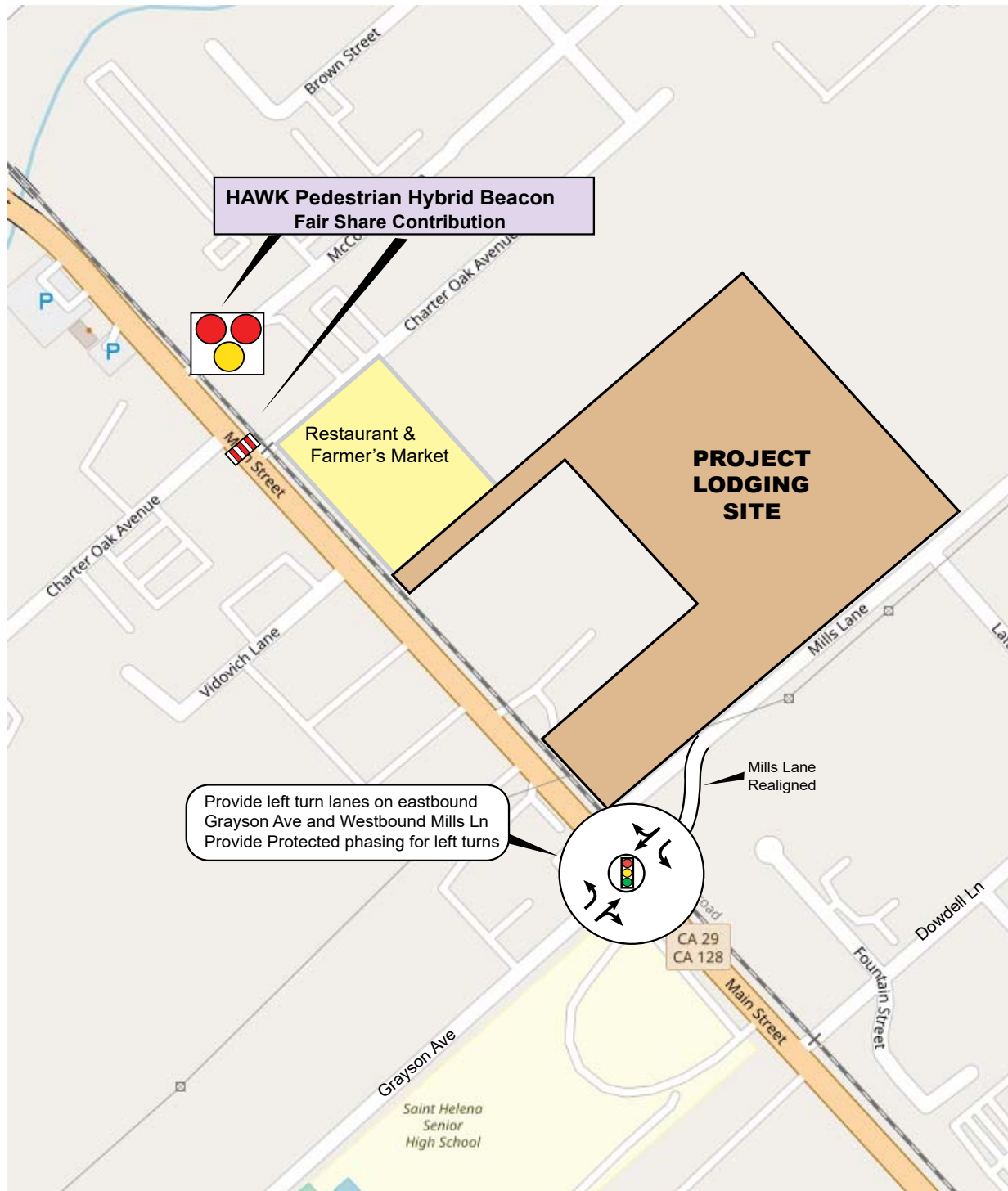
DOWDELL AND MCCORMICK PARKING - 73 STALLS

FARMSTEAD
ST HELENA, CA

Farmstead Lodge and Total Project Traffic Study

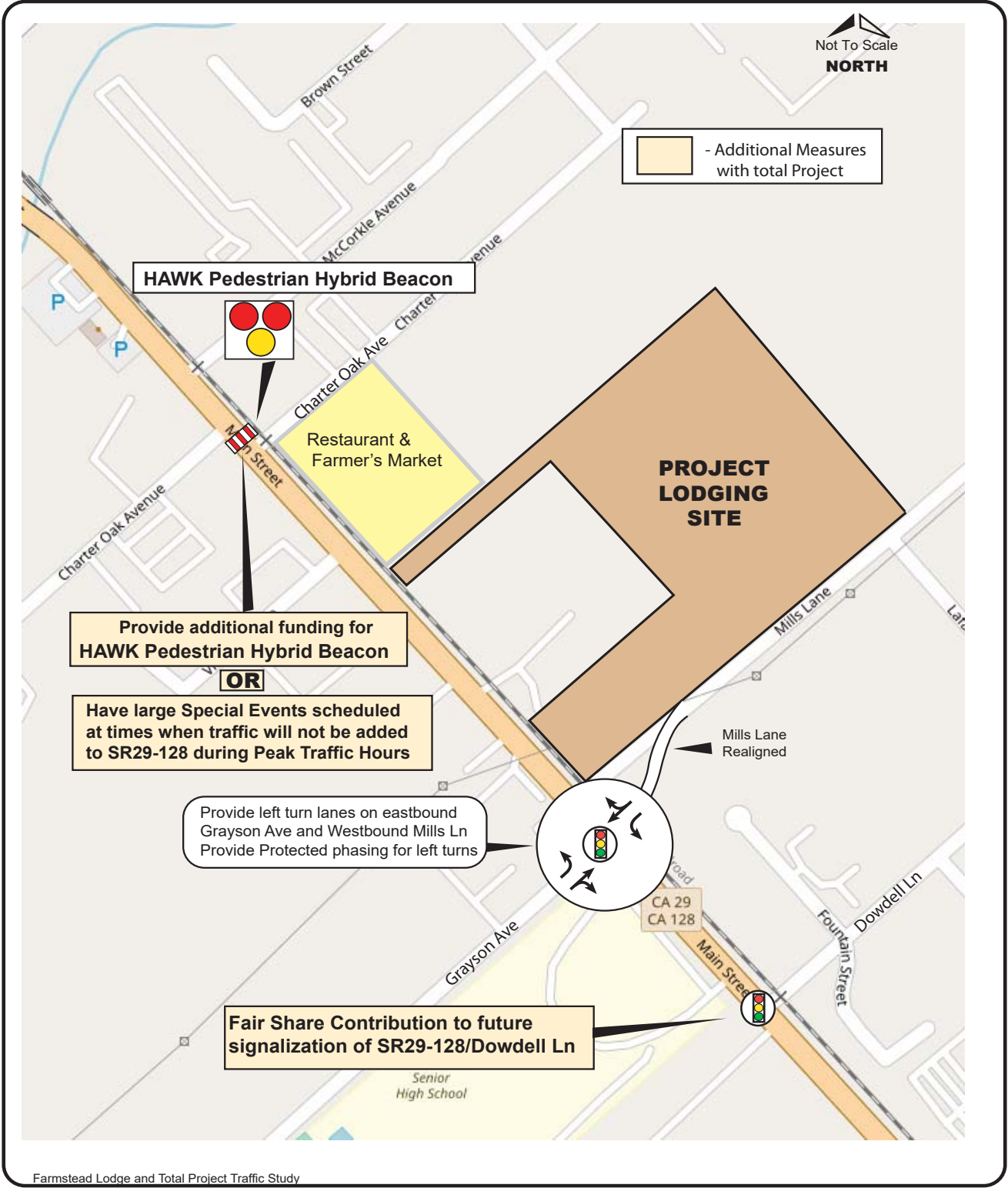
Figure 37
Dowdell Lane Employee Parking Lot
Site Plan





Farmstead Lodge and Total Project Traffic Study

Figure 38
Lodge only Mitigations



Farmstead Lodge and Total Project Traffic Study



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Figure 39
Total Project Mitigations

Tables

Table 1

SIGNALIZED INTERSECTION LOS CRITERIA

Level of Service	Description	Average Control Delay (Seconds Per Vehicle)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.0 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.0 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and/or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.0 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.0 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	> 80.0

Source: Year 2017 6th Edition Highway Capacity Manual (Transportation Research Board).

Table 2

UNSIGNALIZED INTERSECTION LOS CRITERIA

Level of Service	Description	Average Control Delay (Seconds Per Vehicle)
A	Little or no delays	≤ 10.0
B	Short traffic delays	10.0 to 15.0
C	Average traffic delays	15.0 to 25.0
D	Long traffic delays	25.0 to 35.0
E	Very long traffic delays	35.0 to 50.0
F	Extreme traffic delays with intersection capacity exceeded (for an all-way stop), or with approach/turn movement capacity exceeded (for a side street stop controlled intersection)	> 50.0

Source: Year 2017 6th Edition Highway Capacity Manual (Transportation Research Board).

Table 3

**INTERSECTION LEVEL OF SERVICE
EXISTING (2018)
(No Mills Lane Realignment to the Signalized SR 29/Grayson Avenue Intersection W/O Project)**

HARVEST

INTERSECTION	FRIDAY						SATURDAY		
	AM PEAK HOUR			PM PEAK HOUR			PM PEAK HOUR		
	EXISTING	EXISTING		EXISTING	EXISTING		EXISTING	EXISTING	
		+ HOTEL	+ TOTAL PROJECT		+ HOTEL	+ TOTAL PROJECT		+ HOTEL	+ TOTAL PROJECT
SR 29/Pope St-Mitchell St. (Signal)	F-147.7 ⁽¹⁾	F-150.6	F-150.6	F-109.4	F-111.9	F-113.6	F-122.8	F-124.8	F-126.8
SR 29/Charter Oak Ave. (Charter Oak Ave. Stop Sign Controlled Approaches)	C-23.7/ E-37.4 ⁽²⁾	C-25.1/ E-40.2	C-25.1/ E-40.2	D-25.9/ D-30.9	D-25.4/ D-30.9	D-26.0/ D-34.0	C-22.7/ D-25.2	C-22.9/ D-25.1	C-23.5/ D-27.1
SR 29/Mills Lane (Mills Lane Stop Sign Controlled Approach)	B-14.7*	na	na	B-14.4 ⁽³⁾	na	na	B-13.0	na	na
SR 29/Grayson Ave. (Signal)	D-36.7 ⁽⁴⁾	na	na	C-21.9	na	na	C-26.1	na	na
SR 29/Grayson Ave./Mills Lane (Signal)	na	D-41.5 ⁽⁵⁾	D-41.5	na	C-33.1	C-33.9	na	C-31.6	C-32.5
SR 29/Dowdell Lane (Dowdell Lane Stop Sign Controlled Approach)	C-17.5 ⁽⁶⁾	C-17.5	C-17.5	C-17.4	C-17.4	C-17.6	C-15.1	C-15.5	C-15.7

⁽¹⁾ Signalized level of service – control delay in seconds for SR 29/Pope Street-Mitchell Street.

⁽²⁾ Unsignalized level of service – control delay in seconds: Charter Oak Ave. eastbound stop sign controlled approach/Charter Oak Ave. westbound stop sign controlled approach.

⁽³⁾ Unsignalized level of service – control delay in seconds: Mills Lane stop sign controlled approach.

⁽⁴⁾ Signalized level of service – control delay in seconds for SR 29/Grayson Ave.

⁽⁵⁾ Signalized level of service – control delay in seconds for SR 29/Grayson Ave.-Mills Lane.

⁽⁶⁾ Unsignalized level of service – control delay in seconds: Dowdell Lane stop sign controlled approach.

* - Level of Service/Delay is not applicable – no westbound approach vehicles

Year 2017 6th Edition Highway Capacity Manual Methodology

Source: Crane Transportation Group

CTG

11/21/19 Farmstead at Long Meadow Ranch Lodging
MARK D. CRANE, P.E. • CRANE TRANSPORTATION GROUP

Table 4
INTERSECTION SIGNALIZATION NEEDS
Do Harvest Volumes Meet Peak Hour
Rural Warrant #3 Volume Criteria?

YEAR 2018

INTERSECTION	FRIDAY						SATURDAY		
	AM PEAK HOUR			PM PEAK HOUR			PM PEAK HOUR		
	W/O PROJECT	+ PROJECT		W/O PROJECT	+ PROJECT		W/O PROJECT	+ PROJECT	
		HOTEL ONLY	TOTAL PROJECT		HOTEL ONLY	TOTAL PROJECT		HOTEL ONLY	TOTAL PROJECT
SR 29/Charter Oak Ave.	Yes	Yes (<1%)	Yes (<1%)	No	No	Yes (2.4%)	Yes	Yes (<1%)	Yes (2.3%)
SR 29/Dowdell Lane	Yes	Yes (<1%)	Yes (<1%)	Yes	Yes (<1%)	Yes (1.6%)	No	No	No

YEAR 2022

INTERSECTION	FRIDAY						SATURDAY		
	AM PEAK HOUR			PM PEAK HOUR			PM PEAK HOUR		
	W/O PROJECT	+ PROJECT		W/O PROJECT	+ PROJECT		W/O PROJECT	+ PROJECT	
		HOTEL ONLY	TOTAL PROJECT		HOTEL ONLY	TOTAL PROJECT		HOTEL ONLY	TOTAL PROJECT
SR 29/Charter Oak Ave.	Yes	Yes (<1%)	Yes (<1%)	Yes	Yes (<1%)	Yes (2.3%)	Yes	Yes (<1%)	Yes (2.2%)
SR 29/Dowdell Lane	Yes	Yes (<1%)	Yes (<1%)	Yes	Yes (<1%)	Yes (1.1%)	Yes	Yes (<1%)	Yes (1.1%)

CUMULATIVE (YEAR 2040)

INTERSECTION	FRIDAY						SATURDAY		
	AM PEAK HOUR			PM PEAK HOUR			PM PEAK HOUR		
	W/O PROJECT	+ PROJECT		W/O PROJECT	+ PROJECT		W/O PROJECT	+ PROJECT	
		HOTEL ONLY	TOTAL PROJECT		HOTEL ONLY	TOTAL PROJECT		HOTEL ONLY	TOTAL PROJECT
SR 29/Charter Oak Ave.	Yes	Yes (<1%)	Yes (<1%)	Yes	Yes (<1%)	Yes (2.2%)	Yes	Yes (<1%)	Yes (2.1%)
SR 29/Dowdell Lane	Yes	Yes (<1%)	Yes (<1%)	Yes	Yes (<1%)	Yes (<1%)	Yes	Yes (<1%)	Yes (<1%)

* Percent traffic increase entering intersection due to project

Bolded = Significant impact (an increase of 1% or greater).

California Manual on Uniform Traffic Control Devices, 2014, Revision 3 (2014 CMUTCD Rev. 3) Source: Crane Transportation Group

CTG

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Table 5

**EXISTING PEDESTRIANS CROSSING SR 29
AT CHARTER OAK AVENUE CROSSWALK
(W/O PROJECT)**

FRIDAY

	MAY 20, 2016			SEPT. 20, 2019
	EASTBOUND	WESTBOUND	TOTAL 2-WAY	
7:00-8:00 AM	30	1	31	20
8:00-9:00 AM	6 (1)	3	9 (1)	20
3:00-4:00 PM	51	8	59	45
4:00-5:00 PM	17 (2)	21 (6)	38 (8)	45
5:00-6:00 PM	13 (1)	16 (2)	29 (3)	24

SATURDAY

	JUNE 4, 2016			SEPT. 21, 2019
	EASTBOUND	WESTBOUND	TOTAL 2-WAY	
1:00-2:00 PM	60	13	73	28
2:00-3:00 PM	34 (7)	16 (1)	50 (8)	18
3:00-4:00 PM	29	9	38	32
4:00-5:00 PM	34	11	45	41
5:00-6:00 PM	20	14	34	—

(XX) = Existing Farmstead restaurant & farmers market employees walking to/from employee parking lot on Charter Oak Avenue west of SR 29.

Source: Crane Transportation Group

Table 6

APPROVED & PROPOSED PROJECTS CONTAINED IN THE 2018 GENERAL PLAN UPDATE CIRCULATION ELEMENT

PROJECT NAME	QUANTITY (UNITS)	AM PEAK HOUR TRIPS (8:00-9:00)			PM PEAK HOUR TRIPS (3:15-4:15)			SATURDAY PEAK HOUR TRIPS (3:45-4:45)		
		TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT
Redmond Winery Conversion (867 Dowdell Lane)	24,000 gallons/year winery uses + commercial kitchen	9	6	3	9	3	6	12	3	9
Vineland Station Hotel & Commercial (633 Main Street)	60-unit hotel 75,000 SQ.FT. service commercial	126	81	45	231	103	128	243	124	119
Montessori Middle School	25 students	32	16	16	32	16	16	0	0	0
Hunter Subdivision Single & Multi Family	51 SF units 36 MF units	55	13	42	72	45	27	74	39	35
Komes Custom Crush Facility 890 Dowdell Lane, La Fata Street	15,000 gallons	11	9	2	11	2	9	18	9	9
Salvestrin Winery	Production increase from 11,500 to 20,000 gallons	3	3	0	0	0	0	0	0	0
Davies Winery	75,000 gallons + tours	9	7	2	33	12	21	27	13	14
St. Helena Estates & Winery	20 SF units, 20 ADU units, 15 farmworker rental units, 15,000 gallon winery	40	9	31	46	31	17	43	24	21
Fulton Office Building (1030 Fulton Lane)	6,000 SQ.FT.	18	15	3	17	3	14	6	3	3
OK Tire (1025 Dowdell Lane)	4,700 SQ.FT.	13	8	5	19	8	11	24	11	13
Herdell Printing (office/industrial) (320 McCormick Street)	21,000 SQ.FT.	15	13	2	14	2	12	9	4	5
500 Mills Lane	1 S.F. unit	1	0	1	1	1	0	1	1	0
2525 Madron Ave	1 S.F. unit	1	0	1	1	1	0	1	1	0

Trip generation sources: 1030 Fulton Project Traffic Analysis, Crane Transportation Group, January 2018.
 Redmon Kitchen and Commercial Kitchen Project – Focused Traffic Impact Analysis, Omni Means, April 2016.
 Brenkle Court Project Traffic Impact Analysis, Transpedia Consulting Engineers, June 2016.
 McCorkle Apartments Project Traffic Impact Analysis, Transpedia Consulting Engineers, June 2016.
 St. Helena Apartments and Montessori Farm School Phase II Traffic Impact Analysis, Crane Transportation Group, January 2008.
 Hunter Residential Subdivision Traffic Impact Analysis, Crane Transportation Group, April 2012, updated to July 2018 with current unit mix.
 Komes Custom Crush Winery Project – Focused Traffic Impact Analysis, Omni Means, March 2017.
 St. Helena Estates & Winery Traffic Study, Crane Transportation Group, January 2018.

Project list source: City of St. Helena General Plan Update EIR Buildout Projections, by Dyett & Bhatia, July 20, 2018

Trip generation projections compiled by: Crane Transportation Group

Table 7

INTERSECTION LEVEL OF SERVICE
YEAR 2022
(No Mills Lane Realignment to the Signalized SR 29/Grayson Avenue Intersection W/O Project)

HARVEST

INTERSECTION	FRIDAY						SATURDAY		
	AM PEAK HOUR			PM PEAK HOUR			PM PEAK HOUR		
	YEAR 2022			YEAR 2022			YEAR 2022		
	W/O PROJECT	+ HOTEL	+ TOTAL PROJECT	W/O PROJECT	+ HOTEL	+ TOTAL PROJECT	W/O PROJECT	+ HOTEL	+ TOTAL PROJECT
SR 29/Pope St-Mitchell St. (Signal)	F-153.2 ⁽¹⁾	F-154.8	F-154.8	F-117.0	F-120.0	F-121.6	F-132.2	F-134.8	F-136.6
SR 29/Charter Oak Ave. (Charter Oak Ave. Stop Sign Controlled Approaches)	C-24.9/ E-40.9 ⁽²⁾	C-26.1/ E-43.5	C-26.1/ E-43.5	D-26.9/ D-32.5	D-26.2/ D-32.7	D-26.7/ E-36.0	C-23.6/ D-26.7	C-23.8/ D-26.6	C-24.4/ D-29.2
SR 29/Mills Lane (Mills Lane Stop Sign Controlled Approach)	C-15.0*	na	na	B-14.8 ⁽³⁾	na	na	B-13.3	na	na
SR 29/Grayson Ave. (Signal)	D-43.4 ⁽⁴⁾	na	na	C-23.3	na	na	C-29.5	na	na
SR 29/Grayson Ave./Mills Lane (Signal)	na	D-54.6 ⁽⁵⁾	D-54.6 ⁽⁵⁾	na	D-36.5	D-37.4	na	D-37.6	D-38.8
SR 29/Dowdell Lane (Dowdell Lane Stop Sign Controlled Approach)	C-19.3 ⁽⁶⁾	C-19.3	C-19.3	C-18.8	C-18.6	C-18.8	C-15.8	C-16.0	C-16.2

(1) Signalized level of service – control delay in seconds for SR 29/Pope Street-Mitchell Street.

(2) Unsignalized level of service – control delay in seconds: Charter Oak Ave. eastbound stop sign controlled approach/Charter Oak Ave. westbound stop sign controlled approach.

(3) Unsignalized level of service – control delay in seconds: Mills Lane stop sign controlled approach.

(4) Signalized level of service – control delay in seconds for SR 29/Grayson Ave.

(5) Signalized level of service – control delay in seconds for SR 29/Grayson Ave.-Mills Lane.

(6) Unsignalized level of service – control delay in seconds: Dowdell Lane stop sign controlled approach.

* - Level of Service/Delay is not applicable – no westbound approach vehicles

Year 2017 6th Edition Highway Capacity Manual Methodology

Source: Crane Transportation Group

CTG

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Table 8

**INTERSECTION LEVEL OF SERVICE
CUMULATIVE (YEAR 2040)
(No Mills Lane Realignment to the Signalized SR 29/Grayson Avenue Intersection W/O Project)**

HARVEST

INTERSECTION	FRIDAY						SATURDAY		
	AM PEAK HOUR			PM PEAK HOUR			PM PEAK HOUR		
	W/O PROJECT	YEAR 2035		W/O PROJECT	YEAR 2035		W/O PROJECT	YEAR 2035	
		+ HOTEL	+ TOTAL PROJECT		+ HOTEL	+ TOTAL PROJECT		+ HOTEL	+ TOTAL PROJECT
SR 29/Pope St-Mitchell St. (Signal)	F-157.1 ⁽¹⁾	F-158.8	F-158.8	F-130.4	F-133.3	F-134.8	F-140.3	F-143.3	F-145.1
SR 29/Charter Oak Ave. (Charter Oak Ave. Stop Sign Controlled Approaches)	D-31.1/ F-51.3 ⁽²⁾	D-32.9/ F-55.0	D-32.9/ F-55.0	D-30.4/ E-35.7	D-29.9/ E-36.0	D-30.6/ E-40.3	C-24.9/ D-28.9	D-25.3/ D-28.7	D-25.9/ D-31.6
SR 29/Mills Lane (Mills Lane Stop Sign Controlled Approach)	C-15.2 ⁽³⁾	na	na	C-15.2	na	na	B-13.5	na	na
SR 29/Grayson Ave. (Signal)	D-43.3 ⁽⁴⁾	na	na	C-28.0	na	na	C-32.0	na	na
SR 29/Grayson Ave./Mills Lane (Signal)	na	E-67.0 ⁽⁵⁾ mitigated: D-52.7	E-67.0 ⁽⁵⁾ mitigated: D-52.7	na	D-45.4	D46.9	na	D-41.5	D-42.9
SR 29/Dowdell Lane (Dowdell Lane Stop Sign Controlled Approach)	C-20.1 ⁽⁶⁾	C-19.8	C-19.8	C-19.4	C-19.1	C-19.3	C-15.1	C-16.4	C-16.5

Bold = Significant impact.

- (1) Signalized level of service – control delay in seconds for SR 29/Pope Street-Mitchell Street.
 (2) Unsignalized level of service – control delay in seconds: Charter Oak Ave. eastbound stop sign controlled approach/Charter Oak Ave. westbound stop sign controlled approach.
 (3) Unsignalized level of service – control delay in seconds: Mills Lane stop sign controlled approach.
 (4) Signalized level of service – control delay in seconds for SR 29/Grayson Ave.
 (5) Signalized level of service – control delay in seconds for SR 29/Grayson Ave.-Mills Lane.
 (6) Unsignalized level of service – control delay in seconds: Dowdell Lane stop sign controlled approach.
 * - Level of Service/Delay is not applicable – no westbound approach vehicles

Year 2017 6th Edition Highway Capacity Manual Methodology; Source: Crane Transportation Group

Table 9

PROJECT LODGE TRIP GENERATION**FRIDAY (WITH 100% OCCUPANCY)
(HOURS OF PEAK TRAFFIC ON SR 29)**

# ROOMS	DAILY 2-WAY TRIPS		AMBIENT AM PEAK HOUR (7:45-8:45)				AMBIENT PM PEAK HOUR (4:30-5:30)			
			INBOUND		OUTBOUND		INBOUND		OUTBOUND	
	RATE	VOL	RATE	VOL	RATE	VOL	RATE	VOL	RATE	VOL
65	8.36	544	.28	19	.19	13	.30	20	.30	20

SATURDAY (WITH 100% OCCUPANCY)

# ROOMS	DAILY 2-WAY TRIPS		LODGING PEAK TRIP GENERATION HOUR*				HOUR OF PEAK TRAFFIC ON SR 29 (2:00-3:00 PM)			
			INBOUND		OUTBOUND		INBOUND		OUTBOUND	
	RATE	VOL	RATE	VOL	RATE	VOL	RATE	VOL	RATE	VOL
65	8.19	534	.40	26	.32	21	.26	17	.21	14

* Potentially between 6:00 and 8:00 PM. Trip generation from 2:00-3:00 PM = 65% of peak hour trip generation during the day based upon ITE research.

FRIDAY TRIPS				SATURDAY TRIPS	
AM PEAK HOUR		PM PEAK HOUR		IN	OUT
IN	OUT	IN	OUT		
19	13	20	20	17	14

Trip rate source: *Trip Generation Manual, 10th Edition, by the Institute of Transportation Engineers, 2017.*
Compiled by: Crane Transportation Group

Table 10

**FARMSTEAD LODGE EMPLOYEE ARRIVALS
& DEPARTURES
47 EMPLOYEES/DAY**

TIME	ARRIVE	DEPART
5:00-6:00 AM	13	0
6:00-7:00 AM	9	2
7:00-8:00 AM	4	0
8:00-9:00 AM	0	0
1:00-2:00 PM	10	0
2:00-3:00 PM	7	13
3:00-4:00 PM	2	9
4:00-5:00 PM	0	4
5:00-6:00 PM	0	0
10:00-11:00 PM	0	11
11:00 PM-12:00 AM	0	7
12:00-1:00 AM	0	2

Source: Farmstead project applicant

Table 11

**PROJECT LODGE GUEST VERSUS EMPLOYEE
TRIP GENERATION DURING PEAK TRAFFIC HOURS
47 EMPLOYEES**

CATEGORY	FRIDAY				SATURDAY	
	AM PEAK HOUR (7:45-8:45)		PM PEAK HOUR (4:30-5:30)		PM PEAK HOUR (2:00-3:00)	
	IN	OUT	IN	OUT	IN	OUT
Employee/Delivery	5	1*	0	4	7	13
Guests/Friends of Guests/ Limo Pickup & Drop Off	14	12	20	16	10	1
Total	19	13	20	20	17	14

* Includes one delivery vehicle in/out via lodge driveway.

Source: Crane Transportation Group, based upon total trip generation from Institute of Transportation Engineers trip rates and applicant's projection of employee numbers and shift change times.

Table 12

**DISTRIBUTION OF PROJECT LODGE
GUEST TRAFFIC ALONG SR 29**

INTERSECTION	FRIDAY				SATURDAY	
	AM PEAK HOUR		PM PEAK HOUR		PM PEAK HOUR	
	INBOUND	OUTBOUND	INBOUND	OUTBOUND	INBOUND	OUTBOUND
SR 29 to the North	50%	50%	40%	50%	50%	50%
SR 29 to the South	50%	50%	60%	50%	50%	50%

Source: Crane Transportation Group, City of St. Helena

Table 13

**FARMSTEAD RESTAURANT/FARMERS MARKET
EMPLOYEE VEHICLES THAT WILL TRANSFER
FROM THE EXISTING CHARTER OAK PARKING LOT
TO THE PROPOSED EMPLOYEE PARKING LOT AT
THE DOWDELL LANE/McCORMICK INTERSECTION**

FRIDAY TRIPS				SATURDAY	
AM PEAK HOUR (7:45-8:45)		PM PEAK HOUR (4:30-5:30)		PM PEAK HOUR (2:00-3:00)	
IN	OUT	IN	OUT	IN	OUT
1	0	3	8	8	1

Source: Based upon counts at the Charter Oak employee parking lot by Crane Transportation Group

Table 14

**FARMSTEAD EMPLOYEES WALKING TO/FROM
DOWDELL LANE PARKING LOT
(assuming 1 employee/vehicle and all employees driving)**

A. DAILY TRIPS

USE	EMPLOYEES	TOTAL 2-WAY DAILY WALKING TRIPS
Lodging	47	94
Restaurant	54	108
TOTAL	101	202

B. WALKING TRIPS AFTER DARK (BETWEEN 7:00 PM & 6:00 AM)

Lodging	32
Restaurant	<u>36</u>
TOTAL	68

C. MAXIMUM HOURLY WALKING TRIPS

Lodging	13	5:30-6:00 AM or 2:00-2:30 PM
Restaurant	11	4:30-5:00 PM or midnight to 12:30 AM

Source: Project Applicant

Compiled by: Crane Transportation Group

Appendix

Appendix A

HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	168	175	33	122	77	605	50	76	469	4
Future Volume (veh/h)	0	0	168	175	33	122	77	605	50	76	469	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	181	188	35	131	83	651	54	82	504	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	121	192	231	43	221	111	693	21	111	712	6
Arrive On Green	0.00	0.00	0.07	0.15	0.15	0.15	0.06	0.55	0.55	0.06	0.54	0.54
Sat Flow, veh/h	0	1856	1428	1501	279	1434	1767	1198	99	1767	1306	10
Grp Volume(v), veh/h	0	0	181	223	0	131	83	0	705	82	0	508
Grp Sat Flow(s),veh/h/ln	0	1856	1428	1780	0	1434	1767	0	1297	1767	0	1316
Q Serve(g_s), s	0.0	0.0	9.0	16.7	0.0	11.7	6.4	0.0	74.6	6.3	0.0	39.4
Cycle Q Clear(g_c), s	0.0	0.0	9.0	16.7	0.0	11.7	6.4	0.0	74.6	6.3	0.0	39.4
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	121	192	274	0	221	111	0	714	111	0	717
V/C Ratio(X)	0.00	0.00	0.94	0.81	0.00	0.59	0.75	0.00	0.99	0.74	0.00	0.71
Avail Cap(c_a), veh/h	0	121	192	453	0	365	321	0	707	321	0	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.7	56.3	0.0	54.2	63.4	0.0	31.3	63.4	0.0	23.2
Incr Delay (d2), s/veh	0.0	0.0	48.2	5.8	0.0	2.5	3.8	0.0	30.7	3.6	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	246.4	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	8.9	8.0	0.0	4.4	3.0	0.0	78.1	3.0	0.0	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	107.9	62.0	0.0	56.7	67.2	0.0	308.4	67.0	0.0	26.0
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		181			354			788			590	
Approach Delay, s/veh		107.9			60.1			283.0			31.7	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	82.7		28.9	12.3	82.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	8.4	41.4		18.7	8.3	76.6		11.0				
Green Ext Time (p_c), s	0.1	2.4		1.7	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			147.7									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing AM Peak Hour
without Project

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HCM 6th Signalized Intersection Summary 19: Main St & Grayson Avenue

11-13-2019

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	71	61	45	703	733	120
Future Volume (veh/h)	71	61	45	703	733	120
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.92	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1318	1318	1318
Adj Flow Rate, veh/h	75	64	47	740	772	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	3	3	3	3
Cap, veh/h	95	81	118	1038	738	120
Arrive On Green	0.11	0.11	0.07	0.79	0.67	0.67
Sat Flow, veh/h	859	733	1767	1318	1098	179
Grp Volume(v), veh/h	140	0	47	740	0	898
Grp Sat Flow(s),veh/h/ln	1604	0	1767	1318	0	1277
Q Serve(g_s), s	8.2	0.0	2.5	26.3	0.0	65.0
Cycle Q Clear(g_c), s	8.2	0.0	2.5	26.3	0.0	65.0
Prop In Lane	0.54	0.46	1.00			0.14
Lane Grp Cap(c), veh/h	178	0	118	1038	0	859
V/C Ratio(X)	0.79	0.00	0.40	0.71	0.00	1.05
Avail Cap(c_a), veh/h	663	0	731	1038	0	859
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.9	0.0	43.3	5.0	0.0	15.8
Incr Delay (d2), s/veh	2.9	0.0	0.8	2.3	0.0	43.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	1.1	5.1	0.0	25.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.7	0.0	44.1	7.3	0.0	59.2
LnGrp LOS	D	A	D	A	A	F
Approach Vol, veh/h	140			787	898	
Approach Delay, s/veh	44.7			9.5	59.2	
Approach LOS	D			A	E	
Timer - Assigned Phs	1	2		6		8
Phs Duration (G+Y+Rc), s	11.2	70.1		81.3		15.4
Change Period (Y+Rc), s	* 4.7	5.1		5.1		4.7
Max Green Setting (Gmax), s	* 40	65.0		65.0		40.0
Max Q Clear Time (g_c+l1), s	4.5	67.0		28.3		10.2
Green Ext Time (p_c), s	0.0	0.0		6.0		0.1
Intersection Summary						
HCM 6th Ctrl Delay			36.7			
HCM 6th LOS			D			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Existing AM Peak Hour
without Project

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HCM 6th TWSC
27: Main St & Mills Ln

11-13-2019

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↔	↔	
Traffic Vol, veh/h	0	0	0	0	0	10	0	768	6	9	853	3
Future Vol, veh/h	0	0	0	0	0	10	0	768	6	9	853	3
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	0	0	10	0	784	6	9	870	3

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	1692	1690	882	1687	1688	797	-	0
Stage 1	895	895	-	792	792	-	-	-
Stage 2	797	795	-	895	896	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	-	-
Pot Cap-1 Maneuver	73	93	344	74	93	385	0	-
Stage 1	334	358	-	381	399	-	0	-
Stage 2	379	398	-	334	357	-	0	-
Platoon blocked, %							-	-
Mov Cap-1 Maneuver	70	91	341	73	91	381	-	-
Mov Cap-2 Maneuver	190	210	-	194	211	-	-	-
Stage 1	334	352	-	381	397	-	-	-
Stage 2	367	396	-	329	351	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	14.7	0	0.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	-	381	818	-
HCM Lane V/C Ratio	-	-	-	0.027	0.011	-
HCM Control Delay (s)	-	-	0	14.7	9.5	-
HCM Lane LOS	-	-	A	B	A	-
HCM 95th %tile Q(veh)	-	-	-	0.1	0	-

Existing AM Peak Hour
without Project

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	805	22	44	660	87	11	2	35	35	2	8
Future Vol, veh/h	9	805	22	44	660	87	11	2	35	35	2	8
Conflicting Peds, #/hr	0	0	25	0	0	5	22	0	5	25	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	875	24	48	717	95	12	2	38	38	2	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	817	0	0	924	0	0	1840	1845	937	1818	1810	812
Stage 1	-	-	-	-	-	-	932	932	-	866	866	-
Stage 2	-	-	-	-	-	-	908	913	-	952	944	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	807	-	-	735	-	-	58	74	320	60	78	377
Stage 1	-	-	-	-	-	-	318	344	-	347	369	-
Stage 2	-	-	-	-	-	-	328	351	-	310	340	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	803	-	-	718	-	-	49	66	305	48	70	360
Mov Cap-2 Maneuver	-	-	-	-	-	-	155	178	-	140	172	-
Stage 1	-	-	-	-	-	-	307	332	-	341	342	-
Stage 2	-	-	-	-	-	-	285	326	-	260	328	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0.6	23.7	37.4
HCM LOS			C	E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	244	718	-	-	803	-	159
HCM Lane V/C Ratio	0.214	0.067	-	-	0.012	-	0.308
HCM Control Delay (s)	23.7	10.4	-	-	9.5	-	37.4
HCM Lane LOS	C	B	-	-	A	-	E
HCM 95th %tile Q(veh)	0.8	0.2	-	-	0	-	1.2

Existing AM Peak Hour
without Project

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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	1.1					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	86	681	733	34	12	40
Future Vol, veh/h	86	681	733	34	12	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	93	740	797	37	13	43
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	834	0	-	0	1742	816
Stage 1	-	-	-	-	816	-
Stage 2	-	-	-	-	926	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	795	-	-	-	95	375
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	384	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	795	-	-	-	84	375
Mov Cap-2 Maneuver	-	-	-	-	213	-
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	384	-
Approach	SE	NW		SW		
HCM Control Delay, s	1.1	0		17.5		
HCM LOS	C					
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	795	-	213	375
HCM Lane V/C Ratio	-	-	0.118	-	0.061	0.116
HCM Control Delay (s)	-	-	10.1	-	23	15.9
HCM Lane LOS	-	-	B	-	C	C
HCM 95th %tile Q(veh)	-	-	0.4	-	0.2	0.4

Existing AM Peak Hour
without Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-15-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	191	139	26	91	83	549	51	85	513	4
Future Volume (veh/h)	0	0	191	139	26	91	83	549	51	85	513	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	203	148	28	97	88	584	54	90	546	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	126	204	192	36	188	115	720	22	116	740	5
Arrive On Green	0.00	0.00	0.08	0.13	0.13	0.13	0.07	0.51	0.51	0.07	0.51	0.51
Sat Flow, veh/h	0	1870	1511	1509	286	1479	1781	1192	110	1781	1317	10
Grp Volume(v), veh/h	0	0	203	176	0	97	88	0	638	90	0	550
Grp Sat Flow(s),veh/h/ln	0	1870	1511	1795	0	1479	1781	0	1303	1781	0	1327
Q Serve(g_s), s	0.0	0.0	9.0	11.0	0.0	7.1	5.6	0.0	54.5	5.7	0.0	40.2
Cycle Q Clear(g_c), s	0.0	0.0	9.0	11.0	0.0	7.1	5.6	0.0	54.5	5.7	0.0	40.2
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	126	204	229	0	188	115	0	741	116	0	746
V/C Ratio(X)	0.00	0.00	1.00	0.77	0.00	0.52	0.76	0.00	0.86	0.78	0.00	0.74
Avail Cap(c_a), veh/h	0	145	233	540	0	445	383	0	840	383	0	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	58.0	56.3	0.0	54.4	61.4	0.0	29.3	61.5	0.0	21.9
Incr Delay (d2), s/veh	0.0	0.0	54.0	2.1	0.0	0.8	3.9	0.0	7.5	4.2	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	180.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.0	5.9	0.0	3.1	3.1	0.0	61.6	3.2	0.0	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	112.1	58.4	0.0	55.2	65.3	0.0	216.7	65.6	0.0	24.2
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		203			273			726			640	
Approach Delay, s/veh		112.1			57.3			198.3			30.0	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	67.2		23.2	12.2	67.2		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	7.6	42.2		13.0	7.7	56.5		11.0				
Green Ext Time (p_c), s	0.1	2.7		0.9	0.1	3.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			109.4									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing PM Peak hour
without Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue

11-15-2019

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	55	43	56	698	720	56
Future Volume (veh/h)	55	43	56	698	720	56
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1318	1318	1318
Adj Flow Rate, veh/h	56	43	57	705	727	57
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	3	3	3	3
Cap, veh/h	111	85	139	1010	763	60
Arrive On Green	0.12	0.12	0.08	0.77	0.63	0.63
Sat Flow, veh/h	940	722	1767	1318	1207	95
Grp Volume(v), veh/h	100	0	57	705	0	784
Grp Sat Flow(s),veh/h/ln	1679	0	1767	1318	0	1301
Q Serve(g_s), s	4.7	0.0	2.6	22.7	0.0	47.1
Cycle Q Clear(g_c), s	4.7	0.0	2.6	22.7	0.0	47.1
Prop In Lane	0.56	0.43	1.00			0.07
Lane Grp Cap(c), veh/h	198	0	139	1010	0	823
V/C Ratio(X)	0.51	0.00	0.41	0.70	0.00	0.95
Avail Cap(c_a), veh/h	890	0	822	1014	0	938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.0	0.0	37.1	5.0	0.0	14.4
Incr Delay (d2), s/veh	0.7	0.0	0.7	2.1	0.0	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.1	4.2	0.0	15.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.7	0.0	37.8	7.1	0.0	32.3
LnGrp LOS	D	A	D	A	A	C
Approach Vol, veh/h	100			762	784	
Approach Delay, s/veh	35.7			9.4	32.3	
Approach LOS	D			A	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.3	58.5			69.8	14.6
Change Period (Y+Rc), s	* 4.7	5.1			5.1	4.7
Max Green Setting (Gmax), s	* 39	60.9			65.0	44.8
Max Q Clear Time (g_c+I1), s	4.6	49.1			24.7	6.7
Green Ext Time (p_c), s	0.0	4.3			5.6	0.1
Intersection Summary						
HCM 6th Ctrl Delay			21.9			
HCM 6th LOS			C			
Notes						
User approved volume balancing among the lanes for turning movement.						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Existing PM Peak hour
without Project

Synchro 10 Report
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HCM 6th TWSC
27: Main St & Mills Ln

11-13-2019

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↔	↔	
Traffic Vol, veh/h	0	0	0	0	0	17	0	751	0	3	774	15
Future Vol, veh/h	0	0	0	0	0	17	0	751	0	3	774	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	0	0	17	0	766	0	3	790	15
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1579	1570	798	1570	1577	766	-	0	0	766	0	0
Stage 1	804	804	-	766	766	-	-	-	-	-	-	-
Stage 2	775	766	-	804	811	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	-	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	-	-	-	2.227	-	-
Pot Cap-1 Maneuver	88	110	384	89	109	401	0	-	-	843	-	-
Stage 1	375	394	-	394	410	-	0	-	-	-	-	-
Stage 2	389	410	-	375	391	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	84	110	384	89	109	401	-	-	-	843	-	-
Mov Cap-2 Maneuver	208	232	-	216	232	-	-	-	-	-	-	-
Stage 1	375	392	-	394	410	-	-	-	-	-	-	-
Stage 2	372	410	-	374	389	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			14.4			0			0		
HCM LOS	A			B								
Minor Lane/Major Mvmt	NBT		NBR		EBLn1WBLn1		SBL	SBT	SBR			
Capacity (veh/h)	-		-		-		401	843	-	-		
HCM Lane V/C Ratio	-		-		-		0.043	0.004	-	-		
HCM Control Delay (s)	-		-		0		14.4	9.3	-	-		
HCM Lane LOS	-		-		A		B	A	-	-		
HCM 95th %tile Q(veh)	-		-		-		0.1	0	-	-		

Existing PM Peak hour
without Project

Synchro 10 Report
Page 1

HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	19	770	4	12	635	151	19	4	31	36	3	14
Future Vol, veh/h	19	770	4	12	635	151	19	4	31	36	3	14
Conflicting Peds, #/hr	11	0	30	71	0	41	30	0	30	52	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	19	786	4	12	648	154	19	4	32	37	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	843	0	0	861	0	0	1685	1764	911	1686	1689	796
Stage 1	-	-	-	-	-	-	897	897	-	790	790	-
Stage 2	-	-	-	-	-	-	788	867	-	896	899	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	789	-	-	776	-	-	74	84	331	74	93	385
Stage 1	-	-	-	-	-	-	333	357	-	382	400	-
Stage 2	-	-	-	-	-	-	383	369	-	333	356	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	758	-	-	724	-	-	62	72	293	57	80	359
Mov Cap-2 Maneuver	-	-	-	-	-	-	172	182	-	163	192	-
Stage 1	-	-	-	-	-	-	303	325	-	358	378	-
Stage 2	-	-	-	-	-	-	348	349	-	272	324	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.2	0.2	25.9	30.9
HCM LOS			D	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	227	724	-	-	758	-	192
HCM Lane V/C Ratio	0.243	0.017	-	-	0.026	-	0.282
HCM Control Delay (s)	25.9	10.1	-	-	9.9	-	30.9
HCM Lane LOS	D	B	-	-	A	-	D
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0.1	-	1.1

Existing PM Peak hour
without Project

Synchro 10 Report
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HCM 6th TWSC
62: Main St & Dowdell Ln

11-13-2019

Intersection						
Int Delay, s/veh	1.6					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	32	725	691	11	43	86
Future Vol, veh/h	32	725	691	11	43	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	33	740	705	11	44	88
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	716	0	-	0	1517	711
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	806	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	880	-	-	-	131	431
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	438	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	880	-	-	-	126	431
Mov Cap-2 Maneuver	-	-	-	-	264	-
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	438	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.4	0		17.4		
HCM LOS	C					
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	SWLn2	
Capacity (veh/h)	-	-	880	-	264	431
HCM Lane V/C Ratio	-	-	0.037	-	0.166	0.204
HCM Control Delay (s)	-	-	9.2	-	21.3	15.5
HCM Lane LOS	-	-	A	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.6	0.8

Existing PM Peak hour
without Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary 18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	153	128	38	71	57	506	55	63	559	6
Future Volume (veh/h)	0	0	153	128	38	71	57	506	55	63	559	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.69	1.00		0.74	1.00		0.90	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	156	131	39	72	58	516	56	64	570	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	125	165	221	66	179	105	668	21	108	701	4
Arrive On Green	0.00	0.00	0.08	0.18	0.18	0.18	0.07	0.47	0.47	0.07	0.47	0.47
Sat Flow, veh/h	0	1856	1088	1377	410	1157	1767	1155	125	1767	1301	14
Grp Volume(v), veh/h	0	0	156	170	0	72	58	0	572	64	0	576
Grp Sat Flow(s),veh/h/ln	0	1856	1088	1787	0	1157	1767	0	1280	1767	0	1315
Q Serve(g_s), s	0.0	0.0	9.0	10.0	0.0	6.3	3.7	0.0	49.6	4.1	0.0	47.7
Cycle Q Clear(g_c), s	0.0	0.0	9.0	10.0	0.0	6.3	3.7	0.0	49.6	4.1	0.0	47.7
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	0	125	165	287	0	179	105	0	712	108	0	689
V/C Ratio(X)	0.00	0.00	0.94	0.59	0.00	0.40	0.55	0.00	0.80	0.59	0.00	0.84
Avail Cap(c_a), veh/h	0	144	188	541	0	350	382	0	830	382	0	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.1	52.4	0.0	50.7	61.5	0.0	31.3	61.5	0.0	30.5
Incr Delay (d2), s/veh	0.0	0.0	44.9	1.9	0.0	1.5	1.7	0.0	4.2	1.9	0.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	164.3	0.0	0.0	57.6
%ile BackOfQ(50%),veh/ln	0.0	0.0	7.4	5.5	0.0	2.3	2.0	0.0	56.4	2.2	0.0	32.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	104.0	54.3	0.0	52.1	63.2	0.0	199.9	63.4	0.0	93.1
LnGrp LOS	A	A	F	D	A	D	E	A	F	E	A	F
Approach Vol, veh/h		156			242			630			640	
Approach Delay, s/veh		104.0			53.7			187.3			90.1	
Approach LOS		F			D			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	62.3		28.4	11.5	62.0		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	5.7	49.7		12.0	6.1	51.6		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.3	0.1	2.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			122.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing Saturday PM Peak Hour
without ProjectSynchro 10 Report
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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue

11-13-2019

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	32	34	634	791	28
Future Volume (veh/h)	25	32	34	634	791	28
Initial Q (Qb), veh	0	0	0	30	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1318	1318	1318
Adj Flow Rate, veh/h	25	32	34	640	799	28
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	3	3	3	3
Cap, veh/h	70	90	105	1031	843	30
Arrive On Green	0.10	0.10	0.06	0.78	0.66	0.66
Sat Flow, veh/h	714	913	1767	1318	1266	44
Grp Volume(v), veh/h	58	0	34	640	0	827
Grp Sat Flow(s),veh/h/ln	1655	0	1767	1318	0	1310
Q Serve(g_s), s	2.7	0.0	1.5	16.8	0.0	46.9
Cycle Q Clear(g_c), s	2.7	0.0	1.5	16.8	0.0	46.9
Prop In Lane	0.43	0.55	1.00			0.03
Lane Grp Cap(c), veh/h	163	0	105	1031	0	873
V/C Ratio(X)	0.36	0.00	0.33	0.62	0.00	0.95
Avail Cap(c_a), veh/h	810	0	865	1049	0	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	37.0	5.4	0.0	12.4
Incr Delay (d2), s/veh	0.5	0.0	0.7	1.1	0.0	15.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	16.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.7	9.3	0.0	13.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.1	0.0	37.7	22.5	0.0	27.7
LnGrp LOS	D	A	D	C	A	C
Approach Vol, veh/h	58			674	827	
Approach Delay, s/veh	35.1			23.3	27.7	
Approach LOS	D			C	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.5	59.4			69.0	12.8
Change Period (Y+Rc), s	* 4.7	5.1			5.1	4.7
Max Green Setting (Gmax), s	* 40	65.0			65.0	40.0
Max Q Clear Time (g_c+l1), s	3.5	48.9			18.8	4.7
Green Ext Time (p_c), s	0.0	5.5			4.9	0.0
Intersection Summary						
HCM 6th Ctrl Delay			26.1			
HCM 6th LOS			C			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Existing Saturday PM Peak Hour
without Project

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HCM 6th TWSC
27: Main St & Mills Ln

11-13-2019

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↔	↔	
Traffic Vol, veh/h	0	0	0	0	0	4	0	659	0	7	819	22
Future Vol, veh/h	0	0	0	0	0	4	0	659	0	7	819	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	0	0	4	0	672	0	7	836	22
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1535	1533	847	1533	1544	672	-	0	0	672	0	0
Stage 1	861	861	-	672	672	-	-	-	-	-	-	-
Stage 2	674	672	-	861	872	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	-	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	-	-	-	2.227	-	-
Pot Cap-1 Maneuver	94	116	360	95	114	454	0	-	-	914	-	-
Stage 1	349	371	-	444	453	-	0	-	-	-	-	-
Stage 2	443	453	-	349	367	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	93	115	360	94	113	454	-	-	-	914	-	-
Mov Cap-2 Maneuver	218	236	-	220	235	-	-	-	-	-	-	-
Stage 1	349	368	-	444	453	-	-	-	-	-	-	-
Stage 2	439	453	-	346	364	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			13			0			0.1		
HCM LOS	A			B								
Minor Lane/Major Mvmt	NBT			NBR EBLn1WBLn1			SBL SBT SBR					
Capacity (veh/h)	-			-			454 914			-		
HCM Lane V/C Ratio	-			-			0.009 0.008			-		
HCM Control Delay (s)	-			0			13 9			-		
HCM Lane LOS	-			A B			A -			-		
HCM 95th %tile Q(veh)	-			-			0 0			-		

Existing Saturday PM Peak Hour
without Project

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	1.5											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	27	801	15	9	565	87	14	1	10	38	1	23
Future Vol, veh/h	27	801	15	9	565	87	14	1	10	38	1	23
Conflicting Peds, #/hr	25	0	25	25	0	25	25	0	25	25	0	25
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	28	817	15	9	577	89	14	1	10	39	1	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	691	0	0	857	0	0	1583	1615	875	1576	1578	672
Stage 1	-	-	-	-	-	-	906	906	-	665	665	-
Stage 2	-	-	-	-	-	-	677	709	-	911	913	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	899	-	-	779	-	-	87	103	347	88	109	454
Stage 1	-	-	-	-	-	-	329	354	-	448	456	-
Stage 2	-	-	-	-	-	-	441	436	-	327	351	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	878	-	-	760	-	-	76	94	331	78	99	433
Mov Cap-2 Maneuver	-	-	-	-	-	-	189	207	-	191	214	-
Stage 1	-	-	-	-	-	-	311	335	-	423	440	-
Stage 2	-	-	-	-	-	-	401	420	-	299	332	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.3	0.1	22.7	25.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	229	760	-	-	878	-	241
HCM Lane V/C Ratio	0.111	0.012	-	-	0.031	-	0.263
HCM Control Delay (s)	22.7	9.8	-	-	9.2	-	25.2
HCM Lane LOS	C	A	-	-	A	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	1

Existing Saturday PM Peak Hour
without Project

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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	0.5					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations	↰	↱	↰		↰	↱
Traffic Vol, veh/h	23	789	655	8	10	25
Future Vol, veh/h	23	789	655	8	10	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	23	805	668	8	10	26
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	676	0	-	0	1523	672
Stage 1	-	-	-	-	672	-
Stage 2	-	-	-	-	851	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	911	-	-	-	129	454
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	417	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	911	-	-	-	126	454
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	417	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.3	0		15.1		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	911	-	263	454
HCM Lane V/C Ratio	-	-	0.026	-	0.039	0.056
HCM Control Delay (s)	-	-	9.1	-	19.2	13.4
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.1	0.2

Existing Saturday PM Peak Hour
without Project

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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	173	180	33	122	78	620	51	76	494	4
Future Volume (veh/h)	0	0	173	180	33	122	78	620	51	76	494	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	186	194	35	131	84	667	55	82	531	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	121	192	236	43	224	111	691	21	110	710	5
Arrive On Green	0.00	0.00	0.07	0.16	0.16	0.16	0.06	0.54	0.54	0.06	0.54	0.54
Sat Flow, veh/h	0	1856	1428	1508	272	1435	1767	1198	99	1767	1307	10
Grp Volume(v), veh/h	0	0	186	229	0	131	84	0	722	82	0	535
Grp Sat Flow(s),veh/h/ln	0	1856	1428	1780	0	1435	1767	0	1297	1767	0	1317
Q Serve(g_s), s	0.0	0.0	9.0	17.2	0.0	11.7	6.5	0.0	75.0	6.3	0.0	43.1
Cycle Q Clear(g_c), s	0.0	0.0	9.0	17.2	0.0	11.7	6.5	0.0	75.0	6.3	0.0	43.1
Prop In Lane	0.00		1.00	0.85		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	121	192	278	0	224	111	0	712	110	0	715
V/C Ratio(X)	0.00	0.00	0.97	0.82	0.00	0.58	0.76	0.00	1.01	0.74	0.00	0.75
Avail Cap(c_a), veh/h	0	121	192	452	0	364	320	0	705	320	0	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	60.1	56.4	0.0	54.0	63.6	0.0	31.5	63.6	0.0	24.2
Incr Delay (d2), s/veh	0.0	0.0	56.1	6.3	0.0	2.4	4.0	0.0	37.3	3.7	0.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	252.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.5	8.3	0.0	4.4	3.1	0.0	80.5	3.0	0.0	14.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	116.2	62.7	0.0	56.4	67.6	0.0	321.5	67.3	0.0	28.1
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		186			360			806			617	
Approach Delay, s/veh		116.2			60.4			295.1			33.3	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	82.7		29.3	12.3	82.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	8.5	45.1		19.2	8.3	77.0		11.0				
Green Ext Time (p_c), s	0.1	2.6		1.7	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			153.2									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary 19: Main St & Grayson Avenue

11-13-2019

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	72	66	47	719	763	121
Future Volume (veh/h)	72	66	47	719	763	121
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.92	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1318	1318	1318
Adj Flow Rate, veh/h	76	69	49	757	803	127
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	3	3	3	3
Cap, veh/h	93	84	120	1038	741	117
Arrive On Green	0.11	0.11	0.07	0.79	0.67	0.67
Sat Flow, veh/h	832	755	1767	1318	1104	175
Grp Volume(v), veh/h	146	0	49	757	0	930
Grp Sat Flow(s),veh/h/ln	1598	0	1767	1318	0	1278
Q Serve(g_s), s	8.7	0.0	2.6	27.8	0.0	65.0
Cycle Q Clear(g_c), s	8.7	0.0	2.6	27.8	0.0	65.0
Prop In Lane	0.52	0.47	1.00			0.14
Lane Grp Cap(c), veh/h	178	0	120	1038	0	858
V/C Ratio(X)	0.82	0.00	0.41	0.73	0.00	1.08
Avail Cap(c_a), veh/h	660	0	730	1038	0	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.1	0.0	43.3	5.1	0.0	15.9
Incr Delay (d2), s/veh	3.5	0.0	0.8	2.6	0.0	56.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	1.1	5.4	0.0	28.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.6	0.0	44.1	7.8	0.0	72.1
LnGrp LOS	D	A	D	A	A	F
Approach Vol, veh/h	146			806	930	
Approach Delay, s/veh	45.6			10.0	72.1	
Approach LOS	D			A	E	
Timer - Assigned Phs	1	2		6	8	
Phs Duration (G+Y+Rc), s	11.3	70.1		81.4	15.5	
Change Period (Y+Rc), s	* 4.7	5.1		5.1	4.7	
Max Green Setting (Gmax), s	* 40	65.0		65.0	40.0	
Max Q Clear Time (g_c+l1), s	4.6	67.0		29.8	10.7	
Green Ext Time (p_c), s	0.0	0.0		6.1	0.1	
Intersection Summary						
HCM 6th Ctrl Delay			43.4			
HCM 6th LOS			D			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Year 2022 AM Peak Hour
without Project

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HCM 6th TWSC
27: Main St & Mills Ln

11-13-2019

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↔	↔	
Traffic Vol, veh/h	0	0	0	0	0	12	0	787	4	10	884	3
Future Vol, veh/h	0	0	0	0	0	12	0	787	4	10	884	3
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	0	0	12	0	803	4	10	902	3

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	1745	1741	914	1739	1740	815	-	0
Stage 1	929	929	-	810	810	-	-	-
Stage 2	816	812	-	929	930	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	-	-
Pot Cap-1 Maneuver	67	86	330	68	86	376	0	-
Stage 1	320	345	-	372	392	-	0	-
Stage 2	369	391	-	320	345	-	0	-
Platoon blocked, %							-	-
Mov Cap-1 Maneuver	64	84	327	67	84	372	-	-
Mov Cap-2 Maneuver	181	202	-	186	204	-	-	-
Stage 1	320	339	-	372	390	-	-	-
Stage 2	355	389	-	315	339	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	15	0	0.1
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	-	372	806	-
HCM Lane V/C Ratio	-	-	-	0.033	0.013	-
HCM Control Delay (s)	-	-	0	15	9.5	-
HCM Lane LOS	-	-	A	C	A	-
HCM 95th %tile Q(veh)	-	-	-	0.1	0	-

Year 2022 AM Peak Hour
without Project

Synchro 10 Report
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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.1											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	835	22	44	675	89	11	2	36	36	2	8
Future Vol, veh/h	9	835	22	44	675	89	11	2	36	36	2	8
Conflicting Peds, #/hr	0	0	25	0	0	5	22	0	5	25	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	908	24	48	734	97	12	2	39	39	2	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	836	0	0	957	0	0	1891	1897	970	1870	1861	830
Stage 1	-	-	-	-	-	-	965	965	-	884	884	-
Stage 2	-	-	-	-	-	-	926	932	-	986	977	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	793	-	-	715	-	-	53	69	306	55	73	368
Stage 1	-	-	-	-	-	-	305	332	-	339	362	-
Stage 2	-	-	-	-	-	-	321	344	-	297	328	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	789	-	-	698	-	-	45	62	292	43	65	352
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	172	-	131	165	-
Stage 1	-	-	-	-	-	-	294	320	-	333	335	-
Stage 2	-	-	-	-	-	-	278	319	-	246	316	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0.6	24.9	40.9
HCM LOS			C	E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	234	698	-	-	789	-	149
HCM Lane V/C Ratio	0.228	0.069	-	-	0.012	-	0.336
HCM Control Delay (s)	24.9	10.5	-	-	9.6	-	40.9
HCM Lane LOS	C	B	-	-	A	-	E
HCM 95th %tile Q(veh)	0.9	0.2	-	-	0	-	1.4

Year 2022 AM Peak Hour
without Project

Synchro 10 Report
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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	1.6					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	112	690	736	45	23	55
Future Vol, veh/h	112	690	736	45	23	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	122	750	800	49	25	60
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	849	0	-	0	1819	825
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	994	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	785	-	-	-	85	371
Stage 1	-	-	-	-	429	-
Stage 2	-	-	-	-	357	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	785	-	-	-	72	371
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	357	-
Approach	SE		NW		SW	
HCM Control Delay, s	1.5		0		19.3	
HCM LOS					C	
Minor Lane/Major Mvmt	NWT		NWR		SEL SETSWLn1SWLn2	
Capacity (veh/h)	-		-		785 - 197 371	
HCM Lane V/C Ratio	-		-		0.155 - 0.127 0.161	
HCM Control Delay (s)	-		-		10.4 - 25.9 16.6	
HCM Lane LOS	-		-		B D C	
HCM 95th %tile Q(veh)	-		-		0.5 - 0.4 0.6	

Year 2022 AM Peak Hour
without Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-15-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	191	139	26	91	83	549	51	85	513	4
Future Volume (veh/h)	0	0	191	139	26	91	83	549	51	85	513	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	203	148	28	97	88	584	54	90	546	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	126	204	192	36	188	115	720	22	116	740	5
Arrive On Green	0.00	0.00	0.08	0.13	0.13	0.13	0.07	0.51	0.51	0.07	0.51	0.51
Sat Flow, veh/h	0	1870	1511	1509	286	1479	1781	1192	110	1781	1317	10
Grp Volume(v), veh/h	0	0	203	176	0	97	88	0	638	90	0	550
Grp Sat Flow(s),veh/h/ln	0	1870	1511	1795	0	1479	1781	0	1303	1781	0	1327
Q Serve(g_s), s	0.0	0.0	9.0	11.0	0.0	7.1	5.6	0.0	54.5	5.7	0.0	40.2
Cycle Q Clear(g_c), s	0.0	0.0	9.0	11.0	0.0	7.1	5.6	0.0	54.5	5.7	0.0	40.2
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	126	204	229	0	188	115	0	741	116	0	746
V/C Ratio(X)	0.00	0.00	1.00	0.77	0.00	0.52	0.76	0.00	0.86	0.78	0.00	0.74
Avail Cap(c_a), veh/h	0	145	233	540	0	445	383	0	840	383	0	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	58.0	56.3	0.0	54.4	61.4	0.0	29.3	61.5	0.0	21.9
Incr Delay (d2), s/veh	0.0	0.0	54.0	2.1	0.0	0.8	3.9	0.0	7.5	4.2	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	180.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.0	5.9	0.0	3.1	3.1	0.0	61.6	3.2	0.0	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	112.1	58.4	0.0	55.2	65.3	0.0	216.7	65.6	0.0	24.2
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		203			273			726			640	
Approach Delay, s/veh		112.1			57.3			198.3			30.0	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	67.2		23.2	12.2	67.2		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	7.6	42.2		13.0	7.7	56.5		11.0				
Green Ext Time (p_c), s	0.1	2.7		0.9	0.1	3.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			109.4									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing PM Peak hour
without Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary 19: Main St & Grayson Avenue

11-15-2019

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	55	43	56	698	720	56
Future Volume (veh/h)	55	43	56	698	720	56
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1318	1318	1318
Adj Flow Rate, veh/h	56	43	57	705	727	57
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	3	3	3	3
Cap, veh/h	111	85	139	1010	763	60
Arrive On Green	0.12	0.12	0.08	0.77	0.63	0.63
Sat Flow, veh/h	940	722	1767	1318	1207	95
Grp Volume(v), veh/h	100	0	57	705	0	784
Grp Sat Flow(s),veh/h/ln	1679	0	1767	1318	0	1301
Q Serve(g_s), s	4.7	0.0	2.6	22.7	0.0	47.1
Cycle Q Clear(g_c), s	4.7	0.0	2.6	22.7	0.0	47.1
Prop In Lane	0.56	0.43	1.00			0.07
Lane Grp Cap(c), veh/h	198	0	139	1010	0	823
V/C Ratio(X)	0.51	0.00	0.41	0.70	0.00	0.95
Avail Cap(c_a), veh/h	890	0	822	1014	0	938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.0	0.0	37.1	5.0	0.0	14.4
Incr Delay (d2), s/veh	0.7	0.0	0.7	2.1	0.0	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.1	4.2	0.0	15.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.7	0.0	37.8	7.1	0.0	32.3
LnGrp LOS	D	A	D	A	A	C
Approach Vol, veh/h	100			762	784	
Approach Delay, s/veh	35.7			9.4	32.3	
Approach LOS	D			A	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.3	58.5			69.8	14.6
Change Period (Y+Rc), s	* 4.7	5.1			5.1	4.7
Max Green Setting (Gmax), s	* 39	60.9			65.0	44.8
Max Q Clear Time (g_c+l1), s	4.6	49.1			24.7	6.7
Green Ext Time (p_c), s	0.0	4.3			5.6	0.1
Intersection Summary						
HCM 6th Ctrl Delay			21.9			
HCM 6th LOS			C			
Notes						
User approved volume balancing among the lanes for turning movement.						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Existing PM Peak hour
without Project

Synchro 10 Report
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HCM 6th TWSC
27: Main St & Mills Ln

11-13-2019

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↔	↔	
Traffic Vol, veh/h	0	0	0	0	0	17	0	751	0	3	774	15
Future Vol, veh/h	0	0	0	0	0	17	0	751	0	3	774	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	0	0	17	0	766	0	3	790	15
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1579	1570	798	1570	1577	766	-	0	0	766	0	0
Stage 1	804	804	-	766	766	-	-	-	-	-	-	-
Stage 2	775	766	-	804	811	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	-	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	-	-	-	2.227	-	-
Pot Cap-1 Maneuver	88	110	384	89	109	401	0	-	-	843	-	-
Stage 1	375	394	-	394	410	-	0	-	-	-	-	-
Stage 2	389	410	-	375	391	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	84	110	384	89	109	401	-	-	-	843	-	-
Mov Cap-2 Maneuver	208	232	-	216	232	-	-	-	-	-	-	-
Stage 1	375	392	-	394	410	-	-	-	-	-	-	-
Stage 2	372	410	-	374	389	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			14.4			0			0		
HCM LOS	A			B								
Minor Lane/Major Mvmt	NBT		NBR		EBLn1WBLn1		SBL	SBT	SBR			
Capacity (veh/h)	-		-		-		401	843	-	-		
HCM Lane V/C Ratio	-		-		-		0.043	0.004	-	-		
HCM Control Delay (s)	-		-		0		14.4	9.3	-	-		
HCM Lane LOS	-		-		A		B	A	-	-		
HCM 95th %tile Q(veh)	-		-		-		0.1	0	-	-		

Existing PM Peak hour
without Project

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	19	770	4	12	635	151	19	4	31	36	3	14
Future Vol, veh/h	19	770	4	12	635	151	19	4	31	36	3	14
Conflicting Peds, #/hr	11	0	30	71	0	41	30	0	30	52	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	19	786	4	12	648	154	19	4	32	37	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	843	0	0	861	0	0	1685	1764	911	1686	1689	796
Stage 1	-	-	-	-	-	-	897	897	-	790	790	-
Stage 2	-	-	-	-	-	-	788	867	-	896	899	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	789	-	-	776	-	-	74	84	331	74	93	385
Stage 1	-	-	-	-	-	-	333	357	-	382	400	-
Stage 2	-	-	-	-	-	-	383	369	-	333	356	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	758	-	-	724	-	-	62	72	293	57	80	359
Mov Cap-2 Maneuver	-	-	-	-	-	-	172	182	-	163	192	-
Stage 1	-	-	-	-	-	-	303	325	-	358	378	-
Stage 2	-	-	-	-	-	-	348	349	-	272	324	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.2	0.2	25.9	30.9
HCM LOS			D	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	227	724	-	-	758	-	192
HCM Lane V/C Ratio	0.243	0.017	-	-	0.026	-	0.282
HCM Control Delay (s)	25.9	10.1	-	-	9.9	-	30.9
HCM Lane LOS	D	B	-	-	A	-	D
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0.1	-	1.1

Existing PM Peak hour
without Project

Synchro 10 Report
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HCM 6th TWSC
62: Main St & Dowdell Ln

11-13-2019

Intersection						
Int Delay, s/veh	1.6					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	32	725	691	11	43	86
Future Vol, veh/h	32	725	691	11	43	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	33	740	705	11	44	88
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	716	0	-	0	1517	711
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	806	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	880	-	-	-	131	431
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	438	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	880	-	-	-	126	431
Mov Cap-2 Maneuver	-	-	-	-	264	-
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	438	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.4	0		17.4		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1SWLn2		
Capacity (veh/h)	-	-	880	-	264	431
HCM Lane V/C Ratio	-	-	0.037	-	0.166	0.204
HCM Control Delay (s)	-	-	9.2	-	21.3	15.5
HCM Lane LOS	-	-	A	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.6	0.8

Existing PM Peak hour
without Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	153	128	38	71	57	506	55	63	559	6
Future Volume (veh/h)	0	0	153	128	38	71	57	506	55	63	559	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.69	1.00		0.74	1.00		0.90	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	156	131	39	72	58	516	56	64	570	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	125	165	221	66	179	105	668	21	108	701	4
Arrive On Green	0.00	0.00	0.08	0.18	0.18	0.18	0.07	0.47	0.47	0.07	0.47	0.47
Sat Flow, veh/h	0	1856	1088	1377	410	1157	1767	1155	125	1767	1301	14
Grp Volume(v), veh/h	0	0	156	170	0	72	58	0	572	64	0	576
Grp Sat Flow(s),veh/h/ln	0	1856	1088	1787	0	1157	1767	0	1280	1767	0	1315
Q Serve(g_s), s	0.0	0.0	9.0	10.0	0.0	6.3	3.7	0.0	49.6	4.1	0.0	47.7
Cycle Q Clear(g_c), s	0.0	0.0	9.0	10.0	0.0	6.3	3.7	0.0	49.6	4.1	0.0	47.7
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	0	125	165	287	0	179	105	0	712	108	0	689
V/C Ratio(X)	0.00	0.00	0.94	0.59	0.00	0.40	0.55	0.00	0.80	0.59	0.00	0.84
Avail Cap(c_a), veh/h	0	144	188	541	0	350	382	0	830	382	0	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.1	52.4	0.0	50.7	61.5	0.0	31.3	61.5	0.0	30.5
Incr Delay (d2), s/veh	0.0	0.0	44.9	1.9	0.0	1.5	1.7	0.0	4.2	1.9	0.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	164.3	0.0	0.0	57.6
%ile BackOfQ(50%),veh/ln	0.0	0.0	7.4	5.5	0.0	2.3	2.0	0.0	56.4	2.2	0.0	32.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	104.0	54.3	0.0	52.1	63.2	0.0	199.9	63.4	0.0	93.1
LnGrp LOS	A	A	F	D	A	D	E	A	F	E	A	F
Approach Vol, veh/h		156			242			630			640	
Approach Delay, s/veh		104.0			53.7			187.3			90.1	
Approach LOS		F			D			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	62.3		28.4	11.5	62.0		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	5.7	49.7		12.0	6.1	51.6		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.3	0.1	2.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			122.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing Saturday PM Peak Hour
without Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue

11-13-2019

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	32	34	634	791	28
Future Volume (veh/h)	25	32	34	634	791	28
Initial Q (Qb), veh	0	0	0	30	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1318	1318	1318
Adj Flow Rate, veh/h	25	32	34	640	799	28
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	3	3	3	3
Cap, veh/h	70	90	105	1031	843	30
Arrive On Green	0.10	0.10	0.06	0.78	0.66	0.66
Sat Flow, veh/h	714	913	1767	1318	1266	44
Grp Volume(v), veh/h	58	0	34	640	0	827
Grp Sat Flow(s),veh/h/ln	1655	0	1767	1318	0	1310
Q Serve(g_s), s	2.7	0.0	1.5	16.8	0.0	46.9
Cycle Q Clear(g_c), s	2.7	0.0	1.5	16.8	0.0	46.9
Prop In Lane	0.43	0.55	1.00			0.03
Lane Grp Cap(c), veh/h	163	0	105	1031	0	873
V/C Ratio(X)	0.36	0.00	0.33	0.62	0.00	0.95
Avail Cap(c_a), veh/h	810	0	865	1049	0	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	37.0	5.4	0.0	12.4
Incr Delay (d2), s/veh	0.5	0.0	0.7	1.1	0.0	15.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	16.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.7	9.3	0.0	13.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.1	0.0	37.7	22.5	0.0	27.7
LnGrp LOS	D	A	D	C	A	C
Approach Vol, veh/h	58			674	827	
Approach Delay, s/veh	35.1			23.3	27.7	
Approach LOS	D			C	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.5	59.4			69.0	12.8
Change Period (Y+Rc), s	* 4.7	5.1			5.1	4.7
Max Green Setting (Gmax), s	* 40	65.0			65.0	40.0
Max Q Clear Time (g_c+l1), s	3.5	48.9			18.8	4.7
Green Ext Time (p_c), s	0.0	5.5			4.9	0.0
Intersection Summary						
HCM 6th Ctrl Delay			26.1			
HCM 6th LOS			C			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

Existing Saturday PM Peak Hour
without Project

Synchro 10 Report
Page 2

HCM 6th TWSC
27: Main St & Mills Ln

11-13-2019

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↔	↔	
Traffic Vol, veh/h	0	0	0	0	0	4	0	659	0	7	819	22
Future Vol, veh/h	0	0	0	0	0	4	0	659	0	7	819	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	0	0	4	0	672	0	7	836	22
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1535	1533	847	1533	1544	672	-	0	0	672	0	0
Stage 1	861	861	-	672	672	-	-	-	-	-	-	-
Stage 2	674	672	-	861	872	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	-	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	-	-	-	2.227	-	-
Pot Cap-1 Maneuver	94	116	360	95	114	454	0	-	-	914	-	-
Stage 1	349	371	-	444	453	-	0	-	-	-	-	-
Stage 2	443	453	-	349	367	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	93	115	360	94	113	454	-	-	-	914	-	-
Mov Cap-2 Maneuver	218	236	-	220	235	-	-	-	-	-	-	-
Stage 1	349	368	-	444	453	-	-	-	-	-	-	-
Stage 2	439	453	-	346	364	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			13			0			0.1		
HCM LOS	A			B								
Minor Lane/Major Mvmt	NBT		NBR		EBLn1WBLn1		SBL	SBT	SBR			
Capacity (veh/h)	-		-		-		454	914	-	-		
HCM Lane V/C Ratio	-		-		-		0.009	0.008	-	-		
HCM Control Delay (s)	-		-		0		13	9	-	-		
HCM Lane LOS	-		-		A		B	A	-	-		
HCM 95th %tile Q(veh)	-		-		-		0	0	-	-		

Existing Saturday PM Peak Hour
without Project

Synchro 10 Report
Page 1

HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	1.5											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	27	801	15	9	565	87	14	1	10	38	1	23
Future Vol, veh/h	27	801	15	9	565	87	14	1	10	38	1	23
Conflicting Peds, #/hr	25	0	25	25	0	25	25	0	25	25	0	25
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	28	817	15	9	577	89	14	1	10	39	1	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	691	0	0	857	0	0	1583	1615	875	1576	1578	672
Stage 1	-	-	-	-	-	-	906	906	-	665	665	-
Stage 2	-	-	-	-	-	-	677	709	-	911	913	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	899	-	-	779	-	-	87	103	347	88	109	454
Stage 1	-	-	-	-	-	-	329	354	-	448	456	-
Stage 2	-	-	-	-	-	-	441	436	-	327	351	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	878	-	-	760	-	-	76	94	331	78	99	433
Mov Cap-2 Maneuver	-	-	-	-	-	-	189	207	-	191	214	-
Stage 1	-	-	-	-	-	-	311	335	-	423	440	-
Stage 2	-	-	-	-	-	-	401	420	-	299	332	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.3	0.1	22.7	25.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	229	760	-	-	878	-	241
HCM Lane V/C Ratio	0.111	0.012	-	-	0.031	-	0.263
HCM Control Delay (s)	22.7	9.8	-	-	9.2	-	25.2
HCM Lane LOS	C	A	-	-	A	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	1

Existing Saturday PM Peak Hour
without Project

Synchro 10 Report
Page 2

HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	0.5					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations	↰	↱	↰		↰	↱
Traffic Vol, veh/h	23	789	655	8	10	25
Future Vol, veh/h	23	789	655	8	10	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	23	805	668	8	10	26
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	676	0	-	0	1523	672
Stage 1	-	-	-	-	672	-
Stage 2	-	-	-	-	851	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	911	-	-	-	129	454
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	417	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	911	-	-	-	126	454
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	417	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.3	0		15.1		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	911	-	263	454
HCM Lane V/C Ratio	-	-	0.026	-	0.039	0.056
HCM Control Delay (s)	-	-	9.1	-	19.2	13.4
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.1	0.2

Existing Saturday PM Peak Hour
without Project

Synchro 10 Report
Page 3

HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-15-2019

Min green cannot be greater than Max Green.

HCM 6th Signalized Intersection Summary19: Main St & Grayson Avenue

11-15-2019

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	70	55	727	810	120
Future Volume (veh/h)	80	70	55	727	810	120
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.94	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1856	1318	1318	1318
Adj Flow Rate, veh/h	84	74	58	765	853	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	3	3	3	3
Cap, veh/h	96	85	107	1072	801	118
Arrive On Green	0.11	0.11	0.06	0.81	0.72	0.72
Sat Flow, veh/h	857	755	1767	1318	1117	165
Grp Volume(v), veh/h	159	0	58	765	0	979
Grp Sat Flow(s),veh/h/ln	1623	0	1767	1318	0	1282
Q Serve(g_s), s	12.6	0.0	4.2	33.8	0.0	93.9
Cycle Q Clear(g_c), s	12.6	0.0	4.2	33.8	0.0	93.9
Prop In Lane	0.53	0.47	1.00			0.13
Lane Grp Cap(c), veh/h	182	0	107	1072	0	919
V/C Ratio(X)	0.87	0.00	0.54	0.71	0.00	1.06
Avail Cap(c_a), veh/h	444	0	206	1146	0	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.2	0.0	59.8	5.4	0.0	18.5
Incr Delay (d2), s/veh	5.1	0.0	1.6	2.0	0.0	48.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	1.9	7.3	0.0	35.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	62.3	0.0	61.4	7.4	0.0	67.1
LnGrp LOS	E	A	E	A	A	F
Approach Vol, veh/h	159			823	979	
Approach Delay, s/veh	62.3			11.2	67.1	
Approach LOS	E			B	E	
Timer - Assigned Phs	1	2		6	8	
Phs Duration (G+Y+Rc), s	12.6	99.0		111.6	19.4	
Change Period (Y+Rc), s	* 4.7	5.1		5.1	4.7	
Max Green Setting (Gmax), s	* 15	93.9		113.9	35.8	
Max Q Clear Time (g_c+l1), s	6.2	95.9		35.8	14.6	
Green Ext Time (p_c), s	0.0	0.0		6.6	0.1	
Intersection Summary						
HCM 6th Ctrl Delay			43.3			
HCM 6th LOS			D			
Notes						
User approved volume balancing among the lanes for turning movement.						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

2040 AM Peak hour
without Project

Synchro 10 Report
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HCM 6th TWSC
27: Main St & Mills Ln

11-13-2019

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↔	↔	
Traffic Vol, veh/h	0	0	0	0	0	12	0	803	4	10	930	3
Future Vol, veh/h	0	0	0	0	0	12	0	803	4	10	930	3
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	0	0	12	0	819	4	10	949	3
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1808	1804	961	1802	1803	831	-	0	0	828	0	0
Stage 1	976	976	-	826	826	-	-	-	-	-	-	-
Stage 2	832	828	-	976	977	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	-	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	-	-	-	2.227	-	-
Pot Cap-1 Maneuver	61	79	310	61	79	368	0	-	-	799	-	-
Stage 1	301	328	-	365	385	-	0	-	-	-	-	-
Stage 2	362	384	-	301	328	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	58	77	307	60	77	365	-	-	-	795	-	-
Mov Cap-2 Maneuver	172	192	-	176	194	-	-	-	-	-	-	-
Stage 1	301	322	-	365	383	-	-	-	-	-	-	-
Stage 2	348	382	-	296	322	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			15.2			0			0.1		
HCM LOS	A			C								
Minor Lane/Major Mvmt	NBT		NBR		EBLn1WBLn1		SBL	SBT	SBR			
Capacity (veh/h)	-		-		-		365	795	-	-		
HCM Lane V/C Ratio	-		-		-		0.034	0.013	-	-		
HCM Control Delay (s)	-		-		0		15.2	9.6	-	-		
HCM Lane LOS	-		-		A		C	A	-	-		
HCM 95th %tile Q(veh)	-		-		-		0.1	0	-	-		

2040 AM Peak hour
without Project

Synchro 10 Report
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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	12	880	25	45	690	90	20	2	38	43	2	9
Future Vol, veh/h	12	880	25	45	690	90	20	2	38	43	2	9
Conflicting Peds, #/hr	0	0	25	0	0	5	22	0	5	25	0	42
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	13	957	27	49	750	98	22	2	41	47	2	10
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	853	0	0	1009	0	0	1967	1973	1021	1945	1937	846
Stage 1	-	-	-	-	-	-	1022	1022	-	902	902	-
Stage 2	-	-	-	-	-	-	945	951	-	1043	1035	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	782	-	-	683	-	-	47	62	286	49	65	361
Stage 1	-	-	-	-	-	-	283	312	-	331	355	-
Stage 2	-	-	-	-	-	-	313	337	-	276	308	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	778	-	-	667	-	-	39	55	273	~ 37	58	345
Mov Cap-2 Maneuver	-	-	-	-	-	-	138	161	-	118	154	-
Stage 1	-	-	-	-	-	-	272	299	-	324	327	-
Stage 2	-	-	-	-	-	-	269	311	-	223	295	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.1			0.6			31.1			51.3		
HCM LOS							D			F		
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	202	667	-	-	778	-	-	134				
HCM Lane V/C Ratio	0.323	0.073	-	-	0.017	-	-	0.438				
HCM Control Delay (s)	31.1	10.8	-	-	9.7	-	-	51.3				
HCM Lane LOS	D	B	-	-	A	-	-	F				
HCM 95th %tile Q(veh)	1.3	0.2	-	-	0.1	-	-	1.9				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

2040 AM Peak hour
without Project

Synchro 10 Report
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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	1.6					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	112	741	760	45	23	55
Future Vol, veh/h	112	741	760	45	23	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	122	805	826	49	25	60
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	875	0	-	0	1900	851
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	1049	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	767	-	-	-	76	358
Stage 1	-	-	-	-	417	-
Stage 2	-	-	-	-	336	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	767	-	-	-	64	358
Mov Cap-2 Maneuver	-	-	-	-	186	-
Stage 1	-	-	-	-	351	-
Stage 2	-	-	-	-	336	-
Approach	SE	NW		SW		
HCM Control Delay, s	1.4	0		20.1		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	SWLn2	
Capacity (veh/h)	-	-	767	-	186	358
HCM Lane V/C Ratio	-	-	0.159	-	0.134	0.167
HCM Control Delay (s)	-	-	10.6	-	27.3	17.1
HCM Lane LOS	-	-	B	-	D	C
HCM 95th %tile Q(veh)	-	-	0.6	-	0.5	0.6

2040 AM Peak hour
without Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary 18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	170	177	33	122	77	610	51	76	474	4
Future Volume (veh/h)	0	0	170	177	33	122	77	610	51	76	474	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	183	190	35	131	83	656	55	82	510	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	121	192	233	43	222	111	692	21	110	711	6
Arrive On Green	0.00	0.00	0.07	0.15	0.15	0.15	0.06	0.54	0.54	0.06	0.54	0.54
Sat Flow, veh/h	0	1856	1428	1503	277	1434	1767	1196	100	1767	1306	10
Grp Volume(v), veh/h	0	0	183	225	0	131	83	0	711	82	0	514
Grp Sat Flow(s),veh/h/ln	0	1856	1428	1780	0	1434	1767	0	1297	1767	0	1316
Q Serve(g_s), s	0.0	0.0	9.0	16.8	0.0	11.7	6.4	0.0	75.0	6.3	0.0	40.2
Cycle Q Clear(g_c), s	0.0	0.0	9.0	16.8	0.0	11.7	6.4	0.0	75.0	6.3	0.0	40.2
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	121	192	276	0	222	111	0	713	110	0	717
V/C Ratio(X)	0.00	0.00	0.95	0.82	0.00	0.59	0.75	0.00	1.00	0.74	0.00	0.72
Avail Cap(c_a), veh/h	0	121	192	452	0	365	321	0	706	321	0	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.9	56.3	0.0	54.1	63.5	0.0	31.4	63.5	0.0	23.5
Incr Delay (d2), s/veh	0.0	0.0	51.3	5.9	0.0	2.5	3.8	0.0	32.9	3.7	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	250.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.1	8.1	0.0	4.4	3.0	0.0	79.4	3.0	0.0	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	111.2	62.2	0.0	56.6	67.3	0.0	315.2	67.1	0.0	26.4
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		183			356			794			596	
Approach Delay, s/veh		111.2			60.1			289.3			32.0	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	82.7		29.0	12.3	82.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	8.4	42.2		18.8	8.3	77.0		11.0				
Green Ext Time (p_c), s	0.1	2.5		1.7	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			150.6									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing AM Peak Hour
with LodgeSynchro 10 Report
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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	4	60	8	5	19	45	692	12	23	728	120
Future Volume (veh/h)	70	4	60	8	5	19	45	692	12	23	728	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.68	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	74	4	63	8	5	20	47	728	13	24	766	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	101	5	86	26	16	25	60	764	14	192	793	70
Arrive On Green	0.12	0.12	0.12	0.02	0.02	0.02	0.03	0.59	0.59	0.11	0.67	0.67
Sat Flow, veh/h	846	46	720	1108	692	1064	1767	1290	23	1767	1189	106
Grp Volume(v), veh/h	141	0	0	13	0	20	47	0	741	24	0	834
Grp Sat Flow(s),veh/h/ln	1611	0	0	1800	0	1064	1767	0	1313	1767	0	1294
Q Serve(g_s), s	10.3	0.0	0.0	0.9	0.0	2.3	3.2	0.0	64.1	1.5	0.0	73.4
Cycle Q Clear(g_c), s	10.3	0.0	0.0	0.9	0.0	2.3	3.2	0.0	64.1	1.5	0.0	73.4
Prop In Lane	0.52		0.45	0.62		1.00	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	192	0	0	43	0	25	60	0	778	192	0	863
V/C Ratio(X)	0.74	0.00	0.00	0.30	0.00	0.79	0.78	0.00	0.95	0.13	0.00	0.97
Avail Cap(c_a), veh/h	259	0	0	153	0	90	135	0	1047	192	0	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	0.0	58.3	0.0	59.0	58.2	0.0	23.2	48.9	0.0	19.0
Incr Delay (d2), s/veh	7.1	0.0	0.0	1.5	0.0	18.3	7.8	0.0	14.9	0.3	0.0	19.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	0.0	0.4	0.0	0.7	1.6	0.0	21.3	0.7	0.0	23.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	0.0	0.0	59.8	0.0	77.4	66.1	0.0	38.0	49.2	0.0	38.9
LnGrp LOS	E	A	A	E	A	E	E	A	D	D	A	D
Approach Vol, veh/h		141			33			788			858	
Approach Delay, s/veh		58.7			70.4			39.7			39.2	
Approach LOS		E			E			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.9	77.1		19.0	8.8	86.1		7.6				
Change Period (Y+Rc), s	4.7	* 5.1		4.5	4.7	* 5.1		4.7				
Max Green Setting (Gmax), s	4.5	* 97		19.5	9.3	* 92		10.3				
Max Q Clear Time (g_c+l1), s	3.5	66.1		12.3	5.2	75.4		4.3				
Green Ext Time (p_c), s	0.0	5.8		0.4	0.0	5.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				41.5								
HCM 6th LOS				D								
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing AM Peak Hour
with Lodge

Synchro 10 Report
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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.1											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	814	22	43	666	87	11	2	35	35	2	8
Future Vol, veh/h	9	814	22	43	666	87	11	2	35	35	2	8
Conflicting Peds, #/hr	10	0	35	10	0	15	32	0	15	35	0	52
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	885	24	47	724	95	12	2	38	38	2	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	834	0	0	944	0	0	1875	1880	967	1853	1845	839
Stage 1	-	-	-	-	-	-	952	952	-	881	881	-
Stage 2	-	-	-	-	-	-	923	928	-	972	964	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	795	-	-	723	-	-	54	71	307	56	74	364
Stage 1	-	-	-	-	-	-	310	337	-	340	363	-
Stage 2	-	-	-	-	-	-	322	345	-	302	332	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	784	-	-	699	-	-	45	62	287	43	65	341
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	172	-	132	166	-
Stage 1	-	-	-	-	-	-	296	321	-	331	334	-
Stage 2	-	-	-	-	-	-	276	317	-	248	317	-

Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.1			0.6			25.1			40.2		
HCM LOS							D			E		

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	231	699	-	-	784	-	150
HCM Lane V/C Ratio	0.226	0.067	-	-	0.012	-	0.326
HCM Control Delay (s)	25.1	10.5	-	-	9.7	-	40.2
HCM Lane LOS	D	B	-	-	A	-	E
HCM 95th %tile Q(veh)	0.8	0.2	-	-	0	-	1.3

Existing AM Peak Hour
with Lodge

Synchro 10 Report
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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	1					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	80	688	739	37	11	35
Future Vol, veh/h	80	688	739	37	11	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	87	748	803	40	12	38
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	843	0	-	0	1745	823
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	922	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	789	-	-	-	94	372
Stage 1	-	-	-	-	430	-
Stage 2	-	-	-	-	386	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	789	-	-	-	84	372
Mov Cap-2 Maneuver	-	-	-	-	214	-
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	386	-
Approach	SE	NW		SW		
HCM Control Delay, s	1.1	0		17.5		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	SWLn2	
Capacity (veh/h)	-	-	789	-	214	372
HCM Lane V/C Ratio	-	-	0.11	-	0.056	0.102
HCM Control Delay (s)	-	-	10.1	-	22.8	15.8
HCM Lane LOS	-	-	B	-	C	C
HCM 95th %tile Q(veh)	-	-	0.4	-	0.2	0.3

Existing AM Peak Hour
with Lodge

Synchro 10 Report
Page 2

HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	192	140	26	91	85	554	53	85	518	4
Future Volume (veh/h)	0	0	192	140	26	91	85	554	53	85	518	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	204	149	28	97	90	589	56	90	551	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	126	204	193	36	189	116	719	22	116	740	5
Arrive On Green	0.00	0.00	0.08	0.13	0.13	0.13	0.07	0.52	0.52	0.07	0.52	0.52
Sat Flow, veh/h	0	1870	1510	1511	284	1479	1781	1189	113	1781	1317	10
Grp Volume(v), veh/h	0	0	204	177	0	97	90	0	645	90	0	555
Grp Sat Flow(s),veh/h/ln	0	1870	1510	1795	0	1479	1781	0	1302	1781	0	1327
Q Serve(g_s), s	0.0	0.0	9.0	11.2	0.0	7.2	5.8	0.0	56.0	5.8	0.0	41.0
Cycle Q Clear(g_c), s	0.0	0.0	9.0	11.2	0.0	7.2	5.8	0.0	56.0	5.8	0.0	41.0
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	0	126	204	230	0	189	116	0	741	116	0	745
V/C Ratio(X)	0.00	0.00	1.00	0.77	0.00	0.51	0.78	0.00	0.87	0.78	0.00	0.75
Avail Cap(c_a), veh/h	0	143	230	533	0	439	378	0	828	378	0	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	58.1	56.3	0.0	54.4	61.5	0.0	29.3	61.5	0.0	22.1
Incr Delay (d2), s/veh	0.0	0.0	56.0	2.1	0.0	0.8	4.2	0.0	8.5	4.2	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	184.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.1	6.0	0.0	3.1	3.2	0.0	62.7	3.2	0.0	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	114.0	58.4	0.0	55.2	65.7	0.0	222.4	65.7	0.0	24.6
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		204			274			735			645	
Approach Delay, s/veh		114.0			57.3			203.2			30.4	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	68.6		23.4	12.2	68.6		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	7.8	43.0		13.2	7.8	58.0		11.0				
Green Ext Time (p_c), s	0.1	2.7		0.9	0.1	3.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			111.9									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing PM Peak hour
with Lodge

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	3	43	12	5	29	56	691	11	17	709	56
Future Volume (veh/h)	55	3	43	12	5	29	56	691	11	17	709	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	56	3	43	12	5	29	57	698	11	17	716	57
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	79	4	61	90	37	105	111	866	14	32	749	60
Arrive On Green	0.09	0.09	0.09	0.07	0.07	0.07	0.06	0.67	0.67	0.02	0.62	0.62
Sat Flow, veh/h	899	48	690	1265	527	1484	1767	1294	20	1767	1202	96
Grp Volume(v), veh/h	102	0	0	17	0	29	57	0	709	17	0	773
Grp Sat Flow(s),veh/h/ln	1637	0	0	1792	0	1484	1767	0	1314	1767	0	1298
Q Serve(g_s), s	7.4	0.0	0.0	1.1	0.0	2.3	3.8	0.0	47.4	1.2	0.0	68.1
Cycle Q Clear(g_c), s	7.4	0.0	0.0	1.1	0.0	2.3	3.8	0.0	47.4	1.2	0.0	68.1
Prop In Lane	0.55		0.42	0.71		1.00	1.00		0.02	1.00		0.07
Lane Grp Cap(c), veh/h	144	0	0	127	0	105	111	0	880	32	0	809
V/C Ratio(X)	0.71	0.00	0.00	0.13	0.00	0.28	0.51	0.00	0.81	0.54	0.00	0.96
Avail Cap(c_a), veh/h	242	0	0	162	0	134	134	0	1038	74	0	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	0.0	53.4	0.0	54.0	55.6	0.0	14.5	59.7	0.0	21.5
Incr Delay (d2), s/veh	6.3	0.0	0.0	0.2	0.0	0.5	1.4	0.0	4.1	13.4	0.0	17.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.0	0.5	0.0	0.9	1.8	0.0	14.2	0.6	0.0	23.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	0.0	0.0	53.6	0.0	54.5	57.0	0.0	18.6	73.1	0.0	38.8
LnGrp LOS	E	A	A	D	A	D	E	A	B	E	A	D
Approach Vol, veh/h	102			46			766			790		
Approach Delay, s/veh	60.6			54.2			21.4			39.5		
Approach LOS	E			D			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	87.2		15.3	12.4	81.5		13.4				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	5.1	96.9		18.1	* 9.3	92.5		11.1				
Max Q Clear Time (g_c+l1), s	3.2	49.4		9.4	5.8	70.1		4.3				
Green Ext Time (p_c), s	0.0	6.5		0.3	0.0	6.3		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	33.1											
HCM 6th LOS	C											
Notes												

Existing PM Peak hour
with Lodge

Synchro 10 Report
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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	1.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	19	779	2	11	647	151	16	4	26	36	3	14
Future Vol, veh/h	19	779	2	11	647	151	16	4	26	36	3	14
Conflicting Peds, #/hr	11	0	30	71	0	41	30	0	30	52	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	19	795	2	11	660	154	16	4	27	37	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	855	0	0	868	0	0	1703	1782	919	1702	1706	808
Stage 1	-	-	-	-	-	-	905	905	-	800	800	-
Stage 2	-	-	-	-	-	-	798	877	-	902	906	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	781	-	-	772	-	-	72	81	327	72	91	379
Stage 1	-	-	-	-	-	-	330	354	-	377	396	-
Stage 2	-	-	-	-	-	-	378	365	-	331	354	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	751	-	-	720	-	-	60	70	290	57	78	354
Mov Cap-2 Maneuver	-	-	-	-	-	-	170	180	-	163	190	-
Stage 1	-	-	-	-	-	-	300	322	-	353	375	-
Stage 2	-	-	-	-	-	-	344	346	-	275	322	-

Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.2			0.1			25.4			30.9		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	223	720	-	-	751	-	192
HCM Lane V/C Ratio	0.21	0.016	-	-	0.026	-	0.282
HCM Control Delay (s)	25.4	10.1	-	-	9.9	-	30.9
HCM Lane LOS	D	B	-	-	A	-	D
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	1.1

Existing PM Peak hour
with Lodge

Synchro 10 Report
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HCM 6th TWSC
62: Main St & Dowdell Ln

11-13-2019

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	23	733	700	14	42	82
Future Vol, veh/h	23	733	700	14	42	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	23	748	714	14	43	84
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	728	0	-	0	1515	721
Stage 1	-	-	-	-	721	-
Stage 2	-	-	-	-	794	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	871	-	-	-	131	426
Stage 1	-	-	-	-	480	-
Stage 2	-	-	-	-	443	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	871	-	-	-	128	426
Mov Cap-2 Maneuver	-	-	-	-	266	-
Stage 1	-	-	-	-	468	-
Stage 2	-	-	-	-	443	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.3	0		17.4		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1SWLn2		
Capacity (veh/h)	-	-	871	-	266	426
HCM Lane V/C Ratio	-	-	0.027	-	0.161	0.196
HCM Control Delay (s)	-	-	9.2	-	21.1	15.5
HCM Lane LOS	-	-	A	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.6	0.7

Existing PM Peak hour
with Lodge

Synchro 10 Report
Page 2

HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	153	129	38	71	57	511	56	63	563	6
Future Volume (veh/h)	0	0	153	129	38	71	57	511	56	63	563	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.69	1.00		0.73	1.00		0.90	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	156	132	39	72	58	521	57	64	574	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	124	165	221	65	178	105	670	22	107	703	4
Arrive On Green	0.00	0.00	0.08	0.18	0.18	0.18	0.07	0.47	0.47	0.07	0.48	0.48
Sat Flow, veh/h	0	1856	1087	1379	407	1155	1767	1154	126	1767	1301	14
Grp Volume(v), veh/h	0	0	156	171	0	72	58	0	578	64	0	580
Grp Sat Flow(s),veh/h/ln	0	1856	1087	1787	0	1155	1767	0	1280	1767	0	1315
Q Serve(g_s), s	0.0	0.0	9.0	10.2	0.0	6.4	3.7	0.0	50.6	4.1	0.0	48.3
Cycle Q Clear(g_c), s	0.0	0.0	9.0	10.2	0.0	6.4	3.7	0.0	50.6	4.1	0.0	48.3
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	0	124	165	286	0	178	105	0	712	107	0	693
V/C Ratio(X)	0.00	0.00	0.95	0.60	0.00	0.40	0.55	0.00	0.81	0.60	0.00	0.84
Avail Cap(c_a), veh/h	0	143	186	535	0	346	378	0	822	378	0	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.3	52.6	0.0	50.8	61.7	0.0	31.3	61.7	0.0	30.5
Incr Delay (d2), s/veh	0.0	0.0	46.1	2.0	0.0	1.5	1.7	0.0	4.7	2.0	0.0	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	168.3	0.0	0.0	57.5
%ile BackOfQ(50%),veh/ln	0.0	0.0	7.5	5.6	0.0	2.3	2.0	0.0	57.3	2.2	0.0	33.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	105.4	54.6	0.0	52.3	63.4	0.0	204.4	63.6	0.0	93.3
LnGrp LOS	A	A	F	D	A	D	E	A	F	E	A	F
Approach Vol, veh/h		156			243			636			644	
Approach Delay, s/veh		105.4			53.9			191.5			90.3	
Approach LOS		F			D			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	63.3		28.5	11.6	63.1		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	5.7	50.3		12.2	6.1	52.6		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.4	0.1	2.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			124.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing Saturday PM Peak Hour
With Lodge

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1	32	2	1	8	34	631	5	16	790	28
Future Volume (veh/h)	25	1	32	2	1	8	34	631	5	16	790	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	30	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	25	1	32	2	1	8	34	637	5	16	798	28
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	43	2	55	34	17	43	94	940	6	31	861	30
Arrive On Green	0.06	0.06	0.06	0.03	0.03	0.03	0.05	0.70	0.70	0.02	0.66	0.66
Sat Flow, veh/h	682	27	873	1197	599	1496	1767	1306	10	1767	1264	44
Grp Volume(v), veh/h	58	0	0	3	0	8	34	0	642	16	0	826
Grp Sat Flow(s),veh/h/ln	1582	0	0	1796	0	1496	1767	0	1316	1767	0	1309
Q Serve(g_s), s	3.6	0.0	0.0	0.2	0.0	0.5	1.9	0.0	28.5	0.9	0.0	57.9
Cycle Q Clear(g_c), s	3.6	0.0	0.0	0.2	0.0	0.5	1.9	0.0	28.5	0.9	0.0	57.9
Prop In Lane	0.43		0.55	0.67		1.00	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	100	0	0	51	0	43	94	0	945	31	0	891
V/C Ratio(X)	0.58	0.00	0.00	0.06	0.00	0.19	0.36	0.00	0.68	0.51	0.00	0.93
Avail Cap(c_a), veh/h	291	0	0	220	0	183	181	0	1242	97	0	1170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.1	0.0	0.0	52.0	0.0	52.2	50.3	0.0	11.3	53.6	0.0	15.0
Incr Delay (d2), s/veh	5.3	0.0	0.0	0.2	0.0	0.8	0.9	0.0	1.0	12.6	0.0	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.1	0.0	0.2	0.9	0.0	18.4	0.5	0.0	17.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.4	0.0	0.0	52.2	0.0	53.0	51.2	0.0	34.9	66.1	0.0	25.6
LnGrp LOS	E	A	A	D	A	D	D	A	C	E	A	C
Approach Vol, veh/h	58			11			676			842		
Approach Delay, s/veh	55.4			52.7			35.7			26.3		
Approach LOS	E			D			D			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	75.8		10.9	10.2	71.9		7.6				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	5.5	94.9		18.5	* 10	89.9		12.3				
Max Q Clear Time (g_c+I1), s	2.9	30.5		5.6	3.9	59.9		2.5				
Green Ext Time (p_c), s	0.0	5.0		0.2	0.0	6.9		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	31.6											
HCM 6th LOS	C											
Notes												

Existing Saturday PM Peak Hour
With Lodge

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	1.5											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	27	810	11	5	571	87	14	1	9	38	1	23
Future Vol, veh/h	27	810	11	5	571	87	14	1	9	38	1	23
Conflicting Peds, #/hr	25	0	25	25	0	25	25	0	25	25	0	25
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	28	827	11	5	583	89	14	1	9	39	1	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	697	0	0	863	0	0	1589	1621	883	1582	1582	678
Stage 1	-	-	-	-	-	-	914	914	-	663	663	-
Stage 2	-	-	-	-	-	-	675	707	-	919	919	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	895	-	-	775	-	-	87	102	343	88	108	450
Stage 1	-	-	-	-	-	-	326	351	-	449	457	-
Stage 2	-	-	-	-	-	-	442	437	-	324	349	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	874	-	-	757	-	-	76	93	327	79	99	429
Mov Cap-2 Maneuver	-	-	-	-	-	-	189	207	-	192	215	-
Stage 1	-	-	-	-	-	-	308	332	-	424	443	-
Stage 2	-	-	-	-	-	-	404	423	-	297	330	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.3	0.1	22.9	25.1
HCM LOS			C	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	226	757	-	-	874	-	242
HCM Lane V/C Ratio	0.108	0.007	-	-	0.032	-	0.261
HCM Control Delay (s)	22.9	9.8	-	-	9.3	-	25.1
HCM Lane LOS	C	A	-	-	A	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	1

Existing Saturday PM Peak Hour
With Lodge

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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	0.5					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	20	792	657	11	13	24
Future Vol, veh/h	20	792	657	11	13	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	808	670	11	13	24
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	681	0	-	0	1524	676
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	848	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	907	-	-	-	129	452
Stage 1	-	-	-	-	503	-
Stage 2	-	-	-	-	418	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	907	-	-	-	126	452
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	492	-
Stage 2	-	-	-	-	418	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.2	0		15.5		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1SWLn2		
Capacity (veh/h)	-	-	907	-	263	452
HCM Lane V/C Ratio	-	-	0.023	-	0.05	0.054
HCM Control Delay (s)	-	-	9.1	-	19.4	13.4
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.2	0.2

Existing Saturday PM Peak Hour
With Lodge

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	844	22	43	681	89	11	2	36	36	2	8
Future Vol, veh/h	9	844	22	43	681	89	11	2	36	36	2	8
Conflicting Peds, #/hr	10	0	35	10	0	15	32	0	15	35	0	52
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	917	24	47	740	97	12	2	39	39	2	9
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	852	0	0	976	0	0	1924	1930	999	1903	1894	856
Stage 1	-	-	-	-	-	-	984	984	-	898	898	-
Stage 2	-	-	-	-	-	-	940	946	-	1005	996	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	783	-	-	703	-	-	50	66	294	52	69	356
Stage 1	-	-	-	-	-	-	298	325	-	333	357	-
Stage 2	-	-	-	-	-	-	315	339	-	290	321	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	772	-	-	680	-	-	42	58	275	~ 39	60	334
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	166	-	125	159	-
Stage 1	-	-	-	-	-	-	284	310	-	324	328	-
Stage 2	-	-	-	-	-	-	270	311	-	236	306	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.1			0.6			26.1			43.5		
HCM LOS							D			E		
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	223	680	-	-	772	-	-	142				
HCM Lane V/C Ratio	0.239	0.069	-	-	0.013	-	-	0.352				
HCM Control Delay (s)	26.1	10.7	-	-	9.7	-	-	43.5				
HCM Lane LOS	D	B	-	-	A	-	-	E				
HCM 95th %tile Q(veh)	0.9	0.2	-	-	0	-	-	1.4				
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

2022 AM Peak hour
with Lodge

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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations	↰	↱	↰		↰	↱
Traffic Vol, veh/h	104	697	742	48	22	49
Future Vol, veh/h	104	697	742	48	22	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	113	758	807	52	24	53
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	859	0	-	0	1817	833
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	984	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	778	-	-	-	85	367
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	361	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	778	-	-	-	73	367
Mov Cap-2 Maneuver	-	-	-	-	199	-
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	361	-
Approach	SE	NW		SW		
HCM Control Delay, s	1.4	0		19.3		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	778	-	199	367
HCM Lane V/C Ratio	-	-	0.145	-	0.12	0.145
HCM Control Delay (s)	-	-	10.4	-	25.5	16.5
HCM Lane LOS	-	-	B	-	D	C
HCM 95th %tile Q(veh)	-	-	0.5	-	0.4	0.5

2022 AM Peak hour
with Lodge

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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	195	142	26	91	86	573	54	85	528	4
Future Volume (veh/h)	0	0	195	142	26	91	86	573	54	85	528	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	207	151	28	97	91	610	57	90	562	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	126	204	195	36	190	116	717	23	116	739	5
Arrive On Green	0.00	0.00	0.07	0.13	0.13	0.13	0.07	0.53	0.53	0.07	0.53	0.53
Sat Flow, veh/h	0	1870	1507	1514	281	1479	1781	1191	111	1781	1317	9
Grp Volume(v), veh/h	0	0	207	179	0	97	91	0	667	90	0	566
Grp Sat Flow(s),veh/h/ln	0	1870	1507	1795	0	1479	1781	0	1302	1781	0	1327
Q Serve(g_s), s	0.0	0.0	9.0	11.8	0.0	7.5	6.2	0.0	60.5	6.1	0.0	42.9
Cycle Q Clear(g_c), s	0.0	0.0	9.0	11.8	0.0	7.5	6.2	0.0	60.5	6.1	0.0	42.9
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	0	126	204	231	0	190	116	0	740	116	0	744
V/C Ratio(X)	0.00	0.00	1.01	0.77	0.00	0.51	0.79	0.00	0.90	0.78	0.00	0.76
Avail Cap(c_a), veh/h	0	137	221	511	0	421	363	0	795	363	0	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	58.1	56.4	0.0	54.3	61.6	0.0	29.4	61.6	0.0	22.5
Incr Delay (d2), s/veh	0.0	0.0	62.9	2.1	0.0	0.8	4.4	0.0	12.2	4.2	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	198.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.5	6.0	0.0	3.1	3.2	0.0	66.4	3.2	0.0	14.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	121.0	58.5	0.0	55.1	66.0	0.0	240.4	65.8	0.0	25.8
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		207			276			758			656	
Approach Delay, s/veh		121.0			57.3			219.4			31.3	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	72.9		23.9	12.3	72.9		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	8.2	44.9		13.8	8.1	62.5		11.0				
Green Ext Time (p_c), s	0.1	2.8		0.9	0.1	2.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			120.0									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2022 PM Peak hour
with Lodge

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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	3	43	12	5	39	58	707	11	21	729	57
Future Volume (veh/h)	55	3	43	12	5	39	58	707	11	21	729	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	56	3	43	12	5	39	59	714	11	21	736	58
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	78	4	60	93	39	108	107	875	13	36	763	60
Arrive On Green	0.09	0.09	0.09	0.07	0.07	0.07	0.06	0.68	0.68	0.02	0.63	0.63
Sat Flow, veh/h	898	48	690	1265	527	1479	1767	1294	20	1767	1203	95
Grp Volume(v), veh/h	102	0	0	17	0	39	59	0	725	21	0	794
Grp Sat Flow(s),veh/h/ln	1636	0	0	1792	0	1479	1767	0	1314	1767	0	1298
Q Serve(g_s), s	7.9	0.0	0.0	1.2	0.0	3.3	4.2	0.0	52.1	1.5	0.0	75.4
Cycle Q Clear(g_c), s	7.9	0.0	0.0	1.2	0.0	3.3	4.2	0.0	52.1	1.5	0.0	75.4
Prop In Lane	0.55		0.42	0.71		1.00	1.00		0.02	1.00		0.07
Lane Grp Cap(c), veh/h	142	0	0	131	0	108	107	0	888	36	0	823
V/C Ratio(X)	0.72	0.00	0.00	0.13	0.00	0.36	0.55	0.00	0.82	0.58	0.00	0.96
Avail Cap(c_a), veh/h	227	0	0	152	0	126	126	0	974	69	0	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.1	0.0	0.0	56.7	0.0	57.6	59.6	0.0	15.3	63.4	0.0	22.5
Incr Delay (d2), s/veh	6.7	0.0	0.0	0.2	0.0	0.7	1.6	0.0	5.1	14.0	0.0	20.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.0	0.5	0.0	1.3	2.0	0.0	16.0	0.8	0.0	26.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.8	0.0	0.0	56.8	0.0	58.4	61.2	0.0	20.4	77.4	0.0	43.1
LnGrp LOS	E	A	A	E	A	E	E	A	C	E	A	D
Approach Vol, veh/h	102			56			784			815		
Approach Delay, s/veh	64.8			57.9			23.5			44.0		
Approach LOS	E			E			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	93.4		15.8	12.6	88.0		14.3				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	5.1	96.9		18.1	* 9.3	92.5		11.1				
Max Q Clear Time (g_c+l1), s	3.5	54.1		9.9	6.2	77.4		5.3				
Green Ext Time (p_c), s	0.0	6.7		0.3	0.0	5.5		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	36.5											
HCM 6th LOS	D											
Notes												

HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	1.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	20	794	3	11	669	156	16	4	27	37	3	14
Future Vol, veh/h	20	794	3	11	669	156	16	4	27	37	3	14
Conflicting Peds, #/hr	11	0	30	71	0	41	30	0	30	52	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	20	810	3	11	683	159	16	4	28	38	3	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	883	0	0	884	0	0	1746	1828	935	1746	1750	834
Stage 1	-	-	-	-	-	-	923	923	-	826	826	-
Stage 2	-	-	-	-	-	-	823	905	-	920	924	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	762	-	-	761	-	-	67	76	320	67	85	367
Stage 1	-	-	-	-	-	-	322	347	-	365	385	-
Stage 2	-	-	-	-	-	-	366	354	-	323	347	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	732	-	-	710	-	-	56	65	284	53	73	343
Mov Cap-2 Maneuver	-	-	-	-	-	-	163	173	-	157	184	-
Stage 1	-	-	-	-	-	-	292	315	-	341	365	-
Stage 2	-	-	-	-	-	-	333	335	-	266	315	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.2	0.1	26.2	32.7
HCM LOS			D	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	217	710	-	-	732	-	184
HCM Lane V/C Ratio	0.221	0.016	-	-	0.028	-	0.299
HCM Control Delay (s)	26.2	10.2	-	-	10.1	-	32.7
HCM Lane LOS	D	B	-	-	B	-	D
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	1.2

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with Lodge

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HCM 6th TWSC
62: Main St & Dowdell Ln

11-13-2019

Intersection						
Int Delay, s/veh	1.9					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	34	744	703	23	54	97
Future Vol, veh/h	34	744	703	23	54	97
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	35	759	717	23	55	99
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	740	0	-	0	1558	729
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	829	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	862	-	-	-	123	421
Stage 1	-	-	-	-	476	-
Stage 2	-	-	-	-	427	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	862	-	-	-	118	421
Mov Cap-2 Maneuver	-	-	-	-	255	-
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	427	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.4	0		18.6		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1SWLn2		
Capacity (veh/h)	-	-	862	-	255	421
HCM Lane V/C Ratio	-	-	0.04	-	0.216	0.235
HCM Control Delay (s)	-	-	9.4	-	23	16.2
HCM Lane LOS	-	-	A	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.8	0.9

Year 2022 PM Peak hour
with Lodge

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	158	131	38	71	58	534	57	63	584	6
Future Volume (veh/h)	0	0	158	131	38	71	58	534	57	63	584	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.69	1.00		0.73	1.00		0.91	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	161	134	39	72	59	545	58	64	596	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	122	163	220	64	176	104	681	22	106	711	3
Arrive On Green	0.00	0.00	0.07	0.17	0.17	0.17	0.06	0.49	0.49	0.07	0.49	0.49
Sat Flow, veh/h	0	1856	1083	1384	403	1145	1767	1158	123	1767	1302	13
Grp Volume(v), veh/h	0	0	161	173	0	72	59	0	603	64	0	602
Grp Sat Flow(s),veh/h/ln	0	1856	1083	1786	0	1145	1767	0	1281	1767	0	1315
Q Serve(g_s), s	0.0	0.0	9.0	10.8	0.0	6.7	3.9	0.0	54.9	4.3	0.0	52.0
Cycle Q Clear(g_c), s	0.0	0.0	9.0	10.8	0.0	6.7	3.9	0.0	54.9	4.3	0.0	52.0
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	0	122	163	284	0	176	104	0	712	106	0	709
V/C Ratio(X)	0.00	0.00	0.99	0.61	0.00	0.41	0.57	0.00	0.85	0.60	0.00	0.85
Avail Cap(c_a), veh/h	0	137	181	514	0	330	364	0	791	364	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	60.5	53.5	0.0	51.7	62.6	0.0	31.4	62.6	0.0	30.9
Incr Delay (d2), s/veh	0.0	0.0	59.6	2.1	0.0	1.5	1.8	0.0	7.2	2.0	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	184.4	0.0	0.0	59.5
%ile BackOfQ(50%),veh/ln	0.0	0.0	8.3	5.8	0.0	2.3	2.1	0.0	60.9	2.3	0.0	35.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	120.1	55.6	0.0	53.2	64.4	0.0	222.9	64.6	0.0	97.3
LnGrp LOS	A	A	F	E	A	D	E	A	F	E	A	F
Approach Vol, veh/h		161			245			662			666	
Approach Delay, s/veh		120.1			54.9			208.8			94.2	
Approach LOS		F			D			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.5	67.6		28.8	11.7	67.4		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	5.9	54.0		12.8	6.3	56.9		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.4	0.1	2.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			134.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

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With Lodge

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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	1	33	2	1	13	38	655	5	19	815	29
Future Volume (veh/h)	28	1	33	2	1	13	38	655	5	19	815	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	30	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	28	1	33	2	1	13	38	662	5	19	823	29
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	46	2	55	45	23	56	95	944	5	35	866	31
Arrive On Green	0.07	0.07	0.07	0.04	0.04	0.04	0.06	0.71	0.71	0.02	0.68	0.68
Sat Flow, veh/h	718	26	846	1197	599	1488	1767	1306	10	1767	1264	45
Grp Volume(v), veh/h	62	0	0	3	0	13	38	0	667	19	0	852
Grp Sat Flow(s),veh/h/ln	1589	0	0	1796	0	1488	1767	0	1316	1767	0	1309
Q Serve(g_s), s	4.4	0.0	0.0	0.2	0.0	1.0	2.4	0.0	33.8	1.2	0.0	69.4
Cycle Q Clear(g_c), s	4.4	0.0	0.0	0.2	0.0	1.0	2.4	0.0	33.8	1.2	0.0	69.4
Prop In Lane	0.45		0.53	0.67		1.00	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	103	0	0	68	0	56	95	0	950	35	0	897
V/C Ratio(X)	0.60	0.00	0.00	0.04	0.00	0.23	0.40	0.00	0.70	0.55	0.00	0.95
Avail Cap(c_a), veh/h	256	0	0	193	0	160	159	0	1089	85	0	1026
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.8	0.0	0.0	55.9	0.0	56.3	55.1	0.0	12.6	58.6	0.0	17.0
Incr Delay (d2), s/veh	5.6	0.0	0.0	0.1	0.0	0.8	1.0	0.0	1.7	13.0	0.0	16.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	0.1	0.0	0.4	1.1	0.0	21.1	0.7	0.0	22.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	0.0	0.0	56.0	0.0	57.0	56.1	0.0	38.5	71.5	0.0	33.3
LnGrp LOS	E	A	A	E	A	E	E	A	D	E	A	C
Approach Vol, veh/h		62			16			705			871	
Approach Delay, s/veh		60.4			56.8			39.4			34.1	
Approach LOS		E			E			D			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	86.8		12.0	11.0	82.6		9.1				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	5.5	94.9		18.5	* 10	89.9		12.3				
Max Q Clear Time (g_c+l1), s	3.2	35.8		6.4	4.4	71.4		3.0				
Green Ext Time (p_c), s	0.0	5.3		0.2	0.0	6.1		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				37.6								
HCM 6th LOS				D								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2022 Saturday PM Peak Hour
With Lodge

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	1.6											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	27	836	11	5	596	92	14	1	9	40	1	23
Future Vol, veh/h	27	836	11	5	596	92	14	1	9	40	1	23
Conflicting Peds, #/hr	25	0	25	25	0	25	25	0	25	25	0	25
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	28	853	11	5	608	94	14	1	9	41	1	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	727	0	0	889	0	0	1642	1677	909	1635	1635	705
Stage 1	-	-	-	-	-	-	940	940	-	690	690	-
Stage 2	-	-	-	-	-	-	702	737	-	945	945	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	872	-	-	758	-	-	79	95	332	80	100	435
Stage 1	-	-	-	-	-	-	315	341	-	434	445	-
Stage 2	-	-	-	-	-	-	427	423	-	313	339	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	851	-	-	740	-	-	69	87	316	72	92	415
Mov Cap-2 Maneuver	-	-	-	-	-	-	180	199	-	184	207	-
Stage 1	-	-	-	-	-	-	297	322	-	410	431	-
Stage 2	-	-	-	-	-	-	390	410	-	286	320	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.3	0.1	23.8	26.6
HCM LOS			C	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	216	740	-	-	851	-	231
HCM Lane V/C Ratio	0.113	0.007	-	-	0.032	-	0.283
HCM Control Delay (s)	23.8	9.9	-	-	9.4	-	26.6
HCM Lane LOS	C	A	-	-	A	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	1.1

HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	0.9					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	39	799	660	11	21	49
Future Vol, veh/h	39	799	660	11	21	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	40	815	673	11	21	50
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	684	0	-	0	1574	679
Stage 1	-	-	-	-	679	-
Stage 2	-	-	-	-	895	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	905	-	-	-	120	450
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	397	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	905	-	-	-	115	450
Mov Cap-2 Maneuver	-	-	-	-	250	-
Stage 1	-	-	-	-	480	-
Stage 2	-	-	-	-	397	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.4	0		16		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1SWLn2		
Capacity (veh/h)	-	-	905	-	250	450
HCM Lane V/C Ratio	-	-	0.044	-	0.086	0.111
HCM Control Delay (s)	-	-	9.2	-	20.7	14
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.3	0.4

Year 2022 Saturday PM Peak Hour
With Lodge

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-15-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	172	202	40	150	80	615	81	100	525	10
Future Volume (veh/h)	0	0	172	202	40	150	80	615	81	100	525	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.91	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	185	217	43	161	86	661	87	108	565	11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	114	181	234	46	226	105	701	34	128	743	14
Arrive On Green	0.00	0.00	0.06	0.16	0.16	0.16	0.06	0.56	0.56	0.07	0.58	0.58
Sat Flow, veh/h	0	1856	1419	1487	295	1436	1767	1136	150	1767	1289	25
Grp Volume(v), veh/h	0	0	185	260	0	161	86	0	748	108	0	576
Grp Sat Flow(s),veh/h/ln	0	1856	1419	1781	0	1436	1767	0	1286	1767	0	1314
Q Serve(g_s), s	0.0	0.0	10.1	23.6	0.0	17.4	7.9	0.0	92.3	9.9	0.0	54.2
Cycle Q Clear(g_c), s	0.0	0.0	10.1	23.6	0.0	17.4	7.9	0.0	92.3	9.9	0.0	54.2
Prop In Lane	0.00		1.00	0.83		1.00	1.00		0.12	1.00		0.02
Lane Grp Cap(c), veh/h	0	114	181	280	0	226	105	0	735	128	0	757
V/C Ratio(X)	0.00	0.00	1.02	0.93	0.00	0.71	0.82	0.00	1.02	0.84	0.00	0.76
Avail Cap(c_a), veh/h	0	114	181	286	0	231	197	0	724	197	0	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	72.3	68.1	0.0	65.5	76.2	0.0	35.8	75.1	0.0	26.2
Incr Delay (d2), s/veh	0.0	0.0	72.8	34.4	0.0	9.7	5.8	0.0	37.6	11.0	0.0	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	244.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	11.3	13.5	0.0	7.1	3.8	0.0	86.7	4.9	0.0	17.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	145.1	102.5	0.0	75.2	82.0	0.0	318.1	86.0	0.0	30.3
LnGrp LOS	A	A	F	F	A	E	F	A	F	F	A	C
Approach Vol, veh/h		185			421			834			684	
Approach Delay, s/veh		145.1			92.1			293.8			39.1	
Approach LOS		F			F			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	102.1		33.5	15.6	100.0		14.8				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	18.3	* 89		* 26	18.3	* 92		10.1				
Max Q Clear Time (g_c+I1), s	9.9	56.2		25.6	11.9	94.3		12.1				
Green Ext Time (p_c), s	0.1	2.9		0.2	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			158.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary19: Main St & Grayson Avenue/Mills

11-15-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	5	68	8	4	25	50	713	11	27	800	125
Future Volume (veh/h)	80	5	68	8	4	25	50	713	11	27	800	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.72	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	84	5	72	8	4	26	53	751	12	28	842	106
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	102	6	87	34	17	32	68	780	12	191	768	97
Arrive On Green	0.12	0.12	0.12	0.03	0.03	0.03	0.04	0.60	0.60	0.11	0.67	0.67
Sat Flow, veh/h	841	50	721	1197	599	1130	1767	1293	21	1767	1142	144
Grp Volume(v), veh/h	161	0	0	12	0	26	53	0	763	28	0	948
Grp Sat Flow(s),veh/h/ln	1612	0	0	1796	0	1130	1767	0	1314	1767	0	1286
Q Serve(g_s), s	13.3	0.0	0.0	0.9	0.0	3.1	4.1	0.0	75.1	2.0	0.0	91.9
Cycle Q Clear(g_c), s	13.3	0.0	0.0	0.9	0.0	3.1	4.1	0.0	75.1	2.0	0.0	91.9
Prop In Lane	0.52		0.45	0.67		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	195	0	0	52	0	32	68	0	793	191	0	865
V/C Ratio(X)	0.83	0.00	0.00	0.23	0.00	0.80	0.78	0.00	0.96	0.15	0.00	1.10
Avail Cap(c_a), veh/h	230	0	0	135	0	85	120	0	932	191	0	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.6	0.0	0.0	64.9	0.0	65.9	65.1	0.0	25.6	55.2	0.0	22.3
Incr Delay (d2), s/veh	18.7	0.0	0.0	0.8	0.0	15.3	7.0	0.0	19.4	0.4	0.0	60.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	0.0	0.4	0.0	1.0	2.0	0.0	26.0	0.9	0.0	39.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.3	0.0	0.0	65.7	0.0	81.2	72.1	0.0	45.1	55.6	0.0	82.6
LnGrp LOS	E	A	A	E	A	F	E	A	D	E	A	F
Approach Vol, veh/h	161			38			816			976		
Approach Delay, s/veh	77.3			76.3			46.8			81.8		
Approach LOS	E			E			D			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.4	87.5		21.0	10.0	97.0		8.6				
Change Period (Y+Rc), s	4.7	* 5.1		4.5	4.7	* 5.1		4.7				
Max Green Setting (Gmax), s	4.5	* 97		19.5	9.3	* 92		10.3				
Max Q Clear Time (g_c+I1), s	4.0	77.1		15.3	6.1	93.9		5.1				
Green Ext Time (p_c), s	0.0	5.3		0.3	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	67.0											
HCM 6th LOS	E											
Notes												

Year 2040 AM Peak Hour
with Lodge

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HCM 6th TWSC
41: Charter Oak & Main St

11-15-2019

Intersection												
Int Delay, s/veh	3											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	12	889	25	44	696	90	20	2	38	43	2	9
Future Vol, veh/h	12	889	25	44	696	90	20	2	38	43	2	9
Conflicting Peds, #/hr	10	0	35	10	0	15	32	0	15	35	0	52
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	13	966	27	48	757	98	22	2	41	47	2	10
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	870	0	0	1028	0	0	2001	2007	1050	1979	1971	873
Stage 1	-	-	-	-	-	-	1041	1041	-	917	917	-
Stage 2	-	-	-	-	-	-	960	966	-	1062	1054	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	770	-	-	672	-	-	44	59	275	~46	62	348
Stage 1	-	-	-	-	-	-	277	306	-	325	349	-
Stage 2	-	-	-	-	-	-	307	332	-	269	302	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	759	-	-	650	-	-	36	51	257	~34	54	326
Mov Cap-2 Maneuver	-	-	-	-	-	-	133	156	-	113	149	-
Stage 1	-	-	-	-	-	-	263	291	-	315	319	-
Stage 2	-	-	-	-	-	-	260	303	-	213	287	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.1			0.6			32.9			55		
HCM LOS							D			F		
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	193	650	-	-	759	-	-	128				
HCM Lane V/C Ratio	0.338	0.074	-	-	0.017	-	-	0.459				
HCM Control Delay (s)	32.9	11	-	-	9.8	-	-	55				
HCM Lane LOS	D	B	-	-	A	-	-	F				
HCM 95th %tile Q(veh)	1.4	0.2	-	-	0.1	-	-	2.1				
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Year 2040 AM Peak Hour
with Lodge

Synchro 10 Report
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HCM 6th TWSC
62: Main St & Dowdell

11-15-2019

Intersection						
Int Delay, s/veh	1.4					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations	↖	↗	↖		↖	↗
Traffic Vol, veh/h	99	749	760	49	21	47
Future Vol, veh/h	99	749	760	49	21	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	108	814	826	53	23	51
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	879	0	-	0	1883	853
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	1030	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	764	-	-	-	77	357
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	343	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	764	-	-	-	66	357
Mov Cap-2 Maneuver	-	-	-	-	190	-
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	343	-
Approach	SE	NW		SW		
HCM Control Delay, s	1.2	0		19.8		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	SWLn2	
Capacity (veh/h)	-	-	764	-	190	357
HCM Lane V/C Ratio	-	-	0.141	-	0.12	0.143
HCM Control Delay (s)	-	-	10.5	-	26.5	16.8
HCM Lane LOS	-	-	B	-	D	C
HCM 95th %tile Q(veh)	-	-	0.5	-	0.4	0.5

Year 2040 AM Peak Hour
with Lodge

Synchro 10 Report
Page 2

HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-18-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	211	161	30	120	102	565	72	110	535	10
Future Volume (veh/h)	0	0	211	161	30	120	102	565	72	110	535	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.94	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	224	171	32	128	109	601	77	117	569	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	122	216	210	39	206	133	687	29	141	712	14
Arrive On Green	0.00	0.00	0.07	0.14	0.14	0.14	0.07	0.54	0.54	0.08	0.54	0.54
Sat Flow, veh/h	0	1870	1500	1512	283	1483	1781	1147	147	1781	1298	25
Grp Volume(v), veh/h	0	0	224	203	0	128	109	0	678	117	0	580
Grp Sat Flow(s),veh/h/ln	0	1870	1500	1795	0	1483	1781	0	1294	1781	0	1323
Q Serve(g_s), s	0.0	0.0	9.0	14.7	0.0	10.9	8.1	0.0	68.5	8.7	0.0	48.1
Cycle Q Clear(g_c), s	0.0	0.0	9.0	14.7	0.0	10.9	8.1	0.0	68.5	8.7	0.0	48.1
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.11	1.00		0.02
Lane Grp Cap(c), veh/h	0	122	216	249	0	206	133	0	716	141	0	726
V/C Ratio(X)	0.00	0.00	1.04	0.81	0.00	0.62	0.82	0.00	0.95	0.83	0.00	0.80
Avail Cap(c_a), veh/h	0	125	219	468	0	387	332	0	723	332	0	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.4	57.6	0.0	55.9	62.9	0.0	31.4	62.6	0.0	25.0
Incr Delay (d2), s/veh	0.0	0.0	71.5	2.5	0.0	1.1	4.7	0.0	21.1	4.7	0.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	227.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	11.9	7.1	0.0	4.3	4.0	0.0	72.7	4.3	0.0	16.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	131.0	60.1	0.0	57.1	67.6	0.0	280.0	67.2	0.0	30.6
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		224			331			787			697	
Approach Delay, s/veh		131.0			58.9			250.6			36.8	
Approach LOS		F			E			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.7	80.3		26.5	14.4	79.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	10.1	50.1		16.7	10.7	70.5		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.0	0.1	1.5		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			133.3									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-18-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	3	70	12	7	42	70	707	11	25	802	60
Future Volume (veh/h)	70	3	70	12	7	42	70	707	11	25	802	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.89	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	71	3	71	12	7	42	71	714	11	25	810	61
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	83	4	83	45	26	56	89	917	14	31	815	61
Arrive On Green	0.10	0.10	0.10	0.04	0.04	0.04	0.05	0.71	0.71	0.02	0.67	0.67
Sat Flow, veh/h	795	34	795	1136	663	1399	1767	1294	20	1767	1208	91
Grp Volume(v), veh/h	145	0	0	19	0	42	71	0	725	25	0	871
Grp Sat Flow(s),veh/h/ln	1623	0	0	1799	0	1399	1767	0	1314	1767	0	1299
Q Serve(g_s), s	12.8	0.0	0.0	1.5	0.0	4.3	5.8	0.0	52.1	2.0	0.0	96.2
Cycle Q Clear(g_c), s	12.8	0.0	0.0	1.5	0.0	4.3	5.8	0.0	52.1	2.0	0.0	96.2
Prop In Lane	0.49		0.49	0.63		1.00	1.00		0.02	1.00		0.07
Lane Grp Cap(c), veh/h	169	0	0	72	0	56	89	0	931	31	0	876
V/C Ratio(X)	0.86	0.00	0.00	0.26	0.00	0.75	0.80	0.00	0.78	0.80	0.00	0.99
Avail Cap(c_a), veh/h	184	0	0	136	0	106	110	0	931	43	0	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.9	0.0	0.0	67.6	0.0	69.0	68.2	0.0	13.7	71.0	0.0	23.4
Incr Delay (d2), s/veh	29.1	0.0	0.0	0.7	0.0	7.4	22.3	0.0	4.3	51.4	0.0	29.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	0.0	0.7	0.0	1.7	3.2	0.0	15.8	1.4	0.0	34.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.0	0.0	0.0	68.3	0.0	76.3	90.5	0.0	18.0	122.4	0.0	52.3
LnGrp LOS	F	A	A	E	A	E	F	A	B	F	A	D
Approach Vol, veh/h		145			61			796			896	
Approach Delay, s/veh		93.0			73.9			24.5			54.3	
Approach LOS		F			E			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	108.0		19.6	12.0	103.0		10.5				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	3.5	100.9		16.5	* 9	97.9		11.0				
Max Q Clear Time (g_c+l1), s	4.0	54.1		14.8	7.8	98.2		6.3				
Green Ext Time (p_c), s	0.0	6.7		0.1	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				45.4								
HCM 6th LOS				D								
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2040 PM Peak hour
with Lodge

Synchro 10 Report
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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	20	829	3	12	682	170	22	4	29	40	3	17
Future Vol, veh/h	20	829	3	12	682	170	22	4	29	40	3	17
Conflicting Peds, #/hr	11	0	30	71	0	41	30	0	30	52	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	20	846	3	12	696	173	22	4	30	41	3	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	910	0	0	920	0	0	1806	1893	971	1805	1808	854
Stage 1	-	-	-	-	-	-	959	959	-	848	848	-
Stage 2	-	-	-	-	-	-	847	934	-	957	960	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	744	-	-	738	-	-	61	69	305	61	78	357
Stage 1	-	-	-	-	-	-	308	334	-	355	376	-
Stage 2	-	-	-	-	-	-	355	343	-	308	334	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	715	-	-	688	-	-	50	59	270	47	67	333
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	165	-	147	176	-
Stage 1	-	-	-	-	-	-	279	303	-	332	355	-
Stage 2	-	-	-	-	-	-	318	324	-	250	303	-

Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.2			0.1			29.9			36		
HCM LOS							D			E		

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	200	688	-	-	715	-	176
HCM Lane V/C Ratio	0.281	0.018	-	-	0.029	-	0.348
HCM Control Delay (s)	29.9	10.3	-	-	10.2	-	36
HCM Lane LOS	D	B	-	-	B	-	E
HCM 95th %tile Q(veh)	1.1	0.1	-	-	0.1	-	1.5

Year 2040 PM Peak hour
with Lodget

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HCM 6th TWSC
62: Main St & Dowdell Ln

11-13-2019

Intersection						
Int Delay, s/veh	1.8					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	30	795	717	25	53	94
Future Vol, veh/h	30	795	717	25	53	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	31	811	732	26	54	96
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	758	0	-	0	1618	745
Stage 1	-	-	-	-	745	-
Stage 2	-	-	-	-	873	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	849	-	-	-	113	412
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	407	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	849	-	-	-	109	412
Mov Cap-2 Maneuver	-	-	-	-	245	-
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	407	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.3	0		19.1		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	SWLn2	
Capacity (veh/h)	-	-	849	-	245	412
HCM Lane V/C Ratio	-	-	0.036	-	0.221	0.233
HCM Control Delay (s)	-	-	9.4	-	23.8	16.4
HCM Lane LOS	-	-	A	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.8	0.9

Year 2040 PM Peak hour
with Lodget

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	160	131	40	80	60	545	61	70	604	10
Future Volume (veh/h)	0	0	160	131	40	80	60	545	61	70	604	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.69	1.00		0.72	1.00		0.91	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	163	134	41	82	61	556	62	71	616	10
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	121	162	216	66	174	104	686	24	108	714	4
Arrive On Green	0.00	0.00	0.07	0.17	0.17	0.17	0.06	0.50	0.50	0.07	0.50	0.50
Sat Flow, veh/h	0	1856	1080	1368	419	1137	1767	1152	128	1767	1292	21
Grp Volume(v), veh/h	0	0	163	175	0	82	61	0	618	71	0	626
Grp Sat Flow(s),veh/h/ln	0	1856	1080	1787	0	1137	1767	0	1280	1767	0	1313
Q Serve(g_s), s	0.0	0.0	9.0	11.3	0.0	8.1	4.2	0.0	58.1	4.9	0.0	56.5
Cycle Q Clear(g_c), s	0.0	0.0	9.0	11.3	0.0	8.1	4.2	0.0	58.1	4.9	0.0	56.5
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	0	121	162	282	0	174	104	0	710	108	0	718
V/C Ratio(X)	0.00	0.00	1.00	0.62	0.00	0.47	0.59	0.00	0.87	0.66	0.00	0.87
Avail Cap(c_a), veh/h	0	133	177	500	0	318	353	0	767	353	0	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	61.2	54.3	0.0	52.9	63.3	0.0	31.5	63.4	0.0	31.3
Incr Delay (d2), s/veh	0.0	0.0	66.3	2.2	0.0	2.0	1.9	0.0	9.4	2.6	0.0	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	195.3	0.0	0.0	67.4
%ile BackOfQ(50%),veh/ln	0.0	0.0	8.7	5.9	0.0	2.7	2.2	0.0	63.4	2.5	0.0	38.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	127.5	56.5	0.0	54.8	65.2	0.0	236.2	65.9	0.0	107.9
LnGrp LOS	A	A	F	E	A	D	E	A	F	E	A	F
Approach Vol, veh/h		163			257			679			697	
Approach Delay, s/veh		127.5			56.0			220.9			103.6	
Approach LOS		F			E			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	70.8		29.0	11.9	70.5		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	6.2	58.5		13.3	6.9	60.1		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.4	0.1	2.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			143.3									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2040 Saturday PM Peak Hour
With Lodge

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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1	40	1	1	16	40	660	4	24	823	30
Future Volume (veh/h)	30	1	40	1	1	16	40	660	4	24	823	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	30	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	30	1	40	1	1	16	40	667	4	24	831	30
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	2	63	37	37	61	95	940	4	40	864	31
Arrive On Green	0.07	0.07	0.07	0.04	0.04	0.04	0.05	0.71	0.71	0.02	0.68	0.68
Sat Flow, veh/h	669	22	893	905	905	1484	1767	1309	8	1767	1263	46
Grp Volume(v), veh/h	71	0	0	2	0	16	40	0	671	24	0	861
Grp Sat Flow(s),veh/h/ln	1584	0	0	1810	0	1484	1767	0	1317	1767	0	1309
Q Serve(g_s), s	5.3	0.0	0.0	0.1	0.0	1.3	2.7	0.0	36.6	1.6	0.0	75.6
Cycle Q Clear(g_c), s	5.3	0.0	0.0	0.1	0.0	1.3	2.7	0.0	36.6	1.6	0.0	75.6
Prop In Lane	0.42		0.56	0.50		1.00	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	111	0	0	74	0	61	95	0	944	40	0	895
V/C Ratio(X)	0.64	0.00	0.00	0.03	0.00	0.26	0.42	0.00	0.71	0.60	0.00	0.96
Avail Cap(c_a), veh/h	240	0	0	183	0	150	149	0	1025	80	0	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	0.0	57.9	0.0	58.5	57.6	0.0	13.6	60.9	0.0	18.4
Incr Delay (d2), s/veh	5.9	0.0	0.0	0.1	0.0	0.9	1.1	0.0	2.1	13.7	0.0	19.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	0.1	0.0	0.5	1.3	0.0	22.6	0.9	0.0	24.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	0.0	0.0	58.0	0.0	59.3	58.7	0.0	40.9	74.6	0.0	38.1
LnGrp LOS	E	A	A	E	A	E	E	A	D	E	A	D
Approach Vol, veh/h	71			18			711			885		
Approach Delay, s/veh	62.9			59.2			41.9			39.1		
Approach LOS	E			E			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	91.8		13.1	11.4	87.7		9.7				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	5.5	94.9		18.5	* 10	89.9		12.3				
Max Q Clear Time (g_c+I1), s	3.6	38.6		7.3	4.7	77.6		3.3				
Green Ext Time (p_c), s	0.0	5.3		0.2	0.0	5.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	41.5											
HCM 6th LOS	D											
Notes												

Year 2040 Saturday PM Peak Hour
With Lodge

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	1.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	30	859	11	7	591	105	17	1	11	44	1	27
Future Vol, veh/h	30	859	11	7	591	105	17	1	11	44	1	27
Conflicting Peds, #/hr	25	0	25	25	0	25	25	0	25	25	0	25
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	31	877	11	7	603	107	17	1	11	45	1	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	735	0	0	913	0	0	1680	1719	933	1672	1671	707
Stage 1	-	-	-	-	-	-	970	970	-	696	696	-
Stage 2	-	-	-	-	-	-	710	749	-	976	975	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	866	-	-	742	-	-	75	89	321	76	95	434
Stage 1	-	-	-	-	-	-	303	330	-	430	442	-
Stage 2	-	-	-	-	-	-	423	418	-	301	328	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	845	-	-	724	-	-	64	81	306	67	86	414
Mov Cap-2 Maneuver	-	-	-	-	-	-	172	191	-	175	199	-
Stage 1	-	-	-	-	-	-	285	310	-	404	427	-
Stage 2	-	-	-	-	-	-	381	404	-	272	308	-

Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.3			0.1			25.3			28.7		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	207	724	-	-	845	-	224
HCM Lane V/C Ratio	0.143	0.01	-	-	0.036	-	0.328
HCM Control Delay (s)	25.3	10	-	-	9.4	-	28.7
HCM Lane LOS	D	B	-	-	A	-	D
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	1.4

Year 2040 Saturday PM Peak Hour
With Lodge

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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	0.9					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	36	833	672	22	21	47
Future Vol, veh/h	36	833	672	22	21	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	37	850	686	22	21	48
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	708	0	-	0	1621	697
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	924	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	886	-	-	-	113	439
Stage 1	-	-	-	-	492	-
Stage 2	-	-	-	-	385	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	886	-	-	-	108	439
Mov Cap-2 Maneuver	-	-	-	-	242	-
Stage 1	-	-	-	-	471	-
Stage 2	-	-	-	-	385	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.4	0		16.4		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	SWLn2	
Capacity (veh/h)	-	-	886	-	242	439
HCM Lane V/C Ratio	-	-	0.041	-	0.089	0.109
HCM Control Delay (s)	-	-	9.2	-	21.3	14.2
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.3	0.4

Year 2040 Saturday PM Peak Hour
With Lodge

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	170	177	33	122	77	610	51	76	474	4
Future Volume (veh/h)	0	0	170	177	33	122	77	610	51	76	474	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	183	190	35	131	83	656	55	82	510	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	121	192	233	43	222	111	692	21	110	711	6
Arrive On Green	0.00	0.00	0.07	0.15	0.15	0.15	0.06	0.54	0.54	0.06	0.54	0.54
Sat Flow, veh/h	0	1856	1428	1503	277	1434	1767	1196	100	1767	1306	10
Grp Volume(v), veh/h	0	0	183	225	0	131	83	0	711	82	0	514
Grp Sat Flow(s),veh/h/ln	0	1856	1428	1780	0	1434	1767	0	1297	1767	0	1316
Q Serve(g_s), s	0.0	0.0	9.0	16.8	0.0	11.7	6.4	0.0	75.0	6.3	0.0	40.2
Cycle Q Clear(g_c), s	0.0	0.0	9.0	16.8	0.0	11.7	6.4	0.0	75.0	6.3	0.0	40.2
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	121	192	276	0	222	111	0	713	110	0	717
V/C Ratio(X)	0.00	0.00	0.95	0.82	0.00	0.59	0.75	0.00	1.00	0.74	0.00	0.72
Avail Cap(c_a), veh/h	0	121	192	452	0	365	321	0	706	321	0	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.9	56.3	0.0	54.1	63.5	0.0	31.4	63.5	0.0	23.5
Incr Delay (d2), s/veh	0.0	0.0	51.3	5.9	0.0	2.5	3.8	0.0	32.9	3.7	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	250.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.1	8.1	0.0	4.4	3.0	0.0	79.4	3.0	0.0	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	111.2	62.2	0.0	56.6	67.3	0.0	315.2	67.1	0.0	26.4
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		183			356			794			596	
Approach Delay, s/veh		111.2			60.1			289.3			32.0	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	82.7		29.0	12.3	82.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	8.4	42.2		18.8	8.3	77.0		11.0				
Green Ext Time (p_c), s	0.1	2.5		1.7	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			150.6									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing AM Peak Hour
with Total Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	4	60	8	5	19	45	692	12	23	728	120
Future Volume (veh/h)	70	4	60	8	5	19	45	692	12	23	728	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.68	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	74	4	63	8	5	20	47	728	13	24	766	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	101	5	86	26	16	25	60	764	14	192	793	70
Arrive On Green	0.12	0.12	0.12	0.02	0.02	0.02	0.03	0.59	0.59	0.11	0.67	0.67
Sat Flow, veh/h	846	46	720	1108	692	1064	1767	1290	23	1767	1189	106
Grp Volume(v), veh/h	141	0	0	13	0	20	47	0	741	24	0	834
Grp Sat Flow(s),veh/h/ln	1611	0	0	1800	0	1064	1767	0	1313	1767	0	1294
Q Serve(g_s), s	10.3	0.0	0.0	0.9	0.0	2.3	3.2	0.0	64.1	1.5	0.0	73.4
Cycle Q Clear(g_c), s	10.3	0.0	0.0	0.9	0.0	2.3	3.2	0.0	64.1	1.5	0.0	73.4
Prop In Lane	0.52		0.45	0.62		1.00	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	192	0	0	43	0	25	60	0	778	192	0	863
V/C Ratio(X)	0.74	0.00	0.00	0.30	0.00	0.79	0.78	0.00	0.95	0.13	0.00	0.97
Avail Cap(c_a), veh/h	259	0	0	153	0	90	135	0	1047	192	0	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	0.0	58.3	0.0	59.0	58.2	0.0	23.2	48.9	0.0	19.0
Incr Delay (d2), s/veh	7.1	0.0	0.0	1.5	0.0	18.3	7.8	0.0	14.9	0.3	0.0	19.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	0.0	0.4	0.0	0.7	1.6	0.0	21.3	0.7	0.0	23.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	0.0	0.0	59.8	0.0	77.4	66.1	0.0	38.0	49.2	0.0	38.9
LnGrp LOS	E	A	A	E	A	E	E	A	D	D	A	D
Approach Vol, veh/h		141			33			788			858	
Approach Delay, s/veh		58.7			70.4			39.7			39.2	
Approach LOS		E			E			D			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.9	77.1		19.0	8.8	86.1		7.6				
Change Period (Y+Rc), s	4.7	* 5.1		4.5	4.7	* 5.1		4.7				
Max Green Setting (Gmax), s	4.5	* 97		19.5	9.3	* 92		10.3				
Max Q Clear Time (g_c+l1), s	3.5	66.1		12.3	5.2	75.4		4.3				
Green Ext Time (p_c), s	0.0	5.8		0.4	0.0	5.6		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				41.5								
HCM 6th LOS				D								
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing AM Peak Hour
with Total Project

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.1											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	814	22	43	666	87	11	2	35	35	2	8
Future Vol, veh/h	9	814	22	43	666	87	11	2	35	35	2	8
Conflicting Peds, #/hr	10	0	35	10	0	15	32	0	15	35	0	52
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	885	24	47	724	95	12	2	38	38	2	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	834	0	0	944	0	0	1875	1880	967	1853	1845	839
Stage 1	-	-	-	-	-	-	952	952	-	881	881	-
Stage 2	-	-	-	-	-	-	923	928	-	972	964	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	795	-	-	723	-	-	54	71	307	56	74	364
Stage 1	-	-	-	-	-	-	310	337	-	340	363	-
Stage 2	-	-	-	-	-	-	322	345	-	302	332	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	784	-	-	699	-	-	45	62	287	43	65	341
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	172	-	132	166	-
Stage 1	-	-	-	-	-	-	296	321	-	331	334	-
Stage 2	-	-	-	-	-	-	276	317	-	248	317	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0.6	25.1	40.2
HCM LOS			D	E

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	231	699	-	-	784	-	150
HCM Lane V/C Ratio	0.226	0.067	-	-	0.012	-	0.326
HCM Control Delay (s)	25.1	10.5	-	-	9.7	-	40.2
HCM Lane LOS	D	B	-	-	A	-	E
HCM 95th %tile Q(veh)	0.8	0.2	-	-	0	-	1.3

Existing AM Peak Hour
with Total Project

Synchro 10 Report
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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	1					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations	↰	↱	↰		↰	↱
Traffic Vol, veh/h	80	688	739	37	11	35
Future Vol, veh/h	80	688	739	37	11	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	87	748	803	40	12	38
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	843	0	-	0	1745	823
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	922	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	789	-	-	-	94	372
Stage 1	-	-	-	-	430	-
Stage 2	-	-	-	-	386	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	789	-	-	-	84	372
Mov Cap-2 Maneuver	-	-	-	-	214	-
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	386	-
Approach	SE	NW		SW		
HCM Control Delay, s	1.1	0		17.5		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	789	-	214	372
HCM Lane V/C Ratio	-	-	0.11	-	0.056	0.102
HCM Control Delay (s)	-	-	10.1	-	22.8	15.8
HCM Lane LOS	-	-	B	-	C	C
HCM 95th %tile Q(veh)	-	-	0.4	-	0.2	0.3

Existing AM Peak Hour
with Total Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary 18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	193	140	26	91	86	558	53	85	523	4
Future Volume (veh/h)	0	0	193	140	26	91	86	558	53	85	523	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	205	149	28	97	91	594	56	90	556	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	126	204	193	36	189	116	719	22	116	739	5
Arrive On Green	0.00	0.00	0.08	0.13	0.13	0.13	0.07	0.52	0.52	0.07	0.52	0.52
Sat Flow, veh/h	0	1870	1510	1511	284	1479	1781	1190	112	1781	1317	9
Grp Volume(v), veh/h	0	0	205	177	0	97	91	0	650	90	0	560
Grp Sat Flow(s),veh/h/ln	0	1870	1510	1795	0	1479	1781	0	1302	1781	0	1327
Q Serve(g_s), s	0.0	0.0	9.0	11.3	0.0	7.2	5.9	0.0	56.9	5.9	0.0	41.7
Cycle Q Clear(g_c), s	0.0	0.0	9.0	11.3	0.0	7.2	5.9	0.0	56.9	5.9	0.0	41.7
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	0	126	204	230	0	189	116	0	741	116	0	745
V/C Ratio(X)	0.00	0.00	1.00	0.77	0.00	0.51	0.79	0.00	0.88	0.78	0.00	0.75
Avail Cap(c_a), veh/h	0	142	228	528	0	435	374	0	821	374	0	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	58.1	56.3	0.0	54.4	61.5	0.0	29.3	61.5	0.0	22.2
Incr Delay (d2), s/veh	0.0	0.0	57.7	2.1	0.0	0.8	4.4	0.0	9.2	4.2	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	187.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.2	6.0	0.0	3.1	3.2	0.0	63.5	3.2	0.0	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	115.8	58.4	0.0	55.2	65.9	0.0	226.2	65.7	0.0	25.0
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		205			274			741			650	
Approach Delay, s/veh		115.8			57.3			206.5			30.7	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	69.5		23.5	12.2	69.5		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	7.9	43.7		13.3	7.9	58.9		11.0				
Green Ext Time (p_c), s	0.1	2.7		0.9	0.1	2.9		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			113.6									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing PM Peak hour
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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	3	43	12	5	29	56	702	11	17	717	56
Future Volume (veh/h)	55	3	43	12	5	29	56	702	11	17	717	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	56	3	43	12	5	29	57	709	11	17	724	57
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	79	4	60	89	37	104	110	872	14	32	755	59
Arrive On Green	0.09	0.09	0.09	0.07	0.07	0.07	0.06	0.67	0.67	0.02	0.63	0.63
Sat Flow, veh/h	899	48	690	1265	527	1482	1767	1294	20	1767	1203	95
Grp Volume(v), veh/h	102	0	0	17	0	29	57	0	720	17	0	781
Grp Sat Flow(s),veh/h/ln	1637	0	0	1792	0	1482	1767	0	1314	1767	0	1298
Q Serve(g_s), s	7.6	0.0	0.0	1.1	0.0	2.3	3.9	0.0	49.4	1.2	0.0	70.2
Cycle Q Clear(g_c), s	7.6	0.0	0.0	1.1	0.0	2.3	3.9	0.0	49.4	1.2	0.0	70.2
Prop In Lane	0.55		0.42	0.71		1.00	1.00		0.02	1.00		0.07
Lane Grp Cap(c), veh/h	143	0	0	126	0	104	110	0	885	32	0	815
V/C Ratio(X)	0.71	0.00	0.00	0.14	0.00	0.28	0.52	0.00	0.81	0.54	0.00	0.96
Avail Cap(c_a), veh/h	237	0	0	159	0	132	132	0	1020	72	0	962
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.4	0.0	0.0	54.5	0.0	55.0	56.7	0.0	14.7	60.8	0.0	21.7
Incr Delay (d2), s/veh	6.4	0.0	0.0	0.2	0.0	0.5	1.4	0.0	4.5	13.6	0.0	18.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	0.5	0.0	0.9	1.8	0.0	14.9	0.7	0.0	24.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.8	0.0	0.0	54.7	0.0	55.6	58.1	0.0	19.2	74.4	0.0	39.9
LnGrp LOS	E	A	A	D	A	E	E	A	B	E	A	D
Approach Vol, veh/h	102			46			777			798		
Approach Delay, s/veh	61.8			55.2			22.1			40.6		
Approach LOS	E			E			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	89.2		15.4	12.5	83.5		13.5				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	5.1	96.9		18.1	* 9.3	92.5		11.1				
Max Q Clear Time (g_c+I1), s	3.2	51.4		9.6	5.9	72.2		4.3				
Green Ext Time (p_c), s	0.0	6.6		0.3	0.0	6.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	33.9											
HCM 6th LOS	C											
Notes												

Existing PM Peak hour
with Total Project

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	25	779	2	11	647	162	16	4	26	44	3	19
Future Vol, veh/h	25	779	2	11	647	162	16	4	26	44	3	19
Conflicting Peds, #/hr	11	0	30	71	0	41	30	0	30	52	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	26	795	2	11	660	165	16	4	27	45	3	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	866	0	0	868	0	0	1725	1807	919	1722	1726	814
Stage 1	-	-	-	-	-	-	919	919	-	806	806	-
Stage 2	-	-	-	-	-	-	806	888	-	916	920	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	773	-	-	772	-	-	69	79	327	70	88	376
Stage 1	-	-	-	-	-	-	324	349	-	374	393	-
Stage 2	-	-	-	-	-	-	374	360	-	325	348	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	743	-	-	720	-	-	56	67	290	55	75	351
Mov Cap-2 Maneuver	-	-	-	-	-	-	163	174	-	159	186	-
Stage 1	-	-	-	-	-	-	292	314	-	347	372	-
Stage 2	-	-	-	-	-	-	335	341	-	267	313	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.3	0.1	26	34
HCM LOS			D	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	218	720	-	-	743	-	190
HCM Lane V/C Ratio	0.215	0.016	-	-	0.034	-	0.354
HCM Control Delay (s)	26	10.1	-	-	10	-	34
HCM Lane LOS	D	B	-	-	B	-	D
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	1.5

Existing PM Peak hour
with Total Project

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HCM 6th TWSC
62: Main St & Dowdell Ln

11-13-2019

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations	↱	↱	↱		↱	↱
Traffic Vol, veh/h	23	741	711	14	42	82
Future Vol, veh/h	23	741	711	14	42	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	23	756	726	14	43	84
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	740	0	-	0	1535	733
Stage 1	-	-	-	-	733	-
Stage 2	-	-	-	-	802	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	862	-	-	-	127	419
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	440	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	862	-	-	-	124	419
Mov Cap-2 Maneuver	-	-	-	-	262	-
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	440	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.3	0		17.6		
HCM LOS	C					
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	SWLn2	
Capacity (veh/h)	-	-	862	-	262	419
HCM Lane V/C Ratio	-	-	0.027	-	0.164	0.2
HCM Control Delay (s)	-	-	9.3	-	21.4	15.7
HCM Lane LOS	-	-	A	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.6	0.7

Existing PM Peak hour
with Total Project

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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	154	129	38	71	58	515	56	63	568	6
Future Volume (veh/h)	0	0	154	129	38	71	58	515	56	63	568	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.69	1.00		0.73	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	157	132	39	72	59	526	57	64	580	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	124	165	220	65	178	105	673	22	107	705	3
Arrive On Green	0.00	0.00	0.08	0.18	0.18	0.18	0.07	0.48	0.48	0.07	0.48	0.48
Sat Flow, veh/h	0	1856	1086	1379	407	1153	1767	1155	125	1767	1301	13
Grp Volume(v), veh/h	0	0	157	171	0	72	59	0	583	64	0	586
Grp Sat Flow(s),veh/h/ln	0	1856	1086	1787	0	1153	1767	0	1280	1767	0	1315
Q Serve(g_s), s	0.0	0.0	9.0	10.3	0.0	6.5	3.8	0.0	51.4	4.1	0.0	49.3
Cycle Q Clear(g_c), s	0.0	0.0	9.0	10.3	0.0	6.5	3.8	0.0	51.4	4.1	0.0	49.3
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	0	124	165	286	0	178	105	0	712	107	0	697
V/C Ratio(X)	0.00	0.00	0.95	0.60	0.00	0.41	0.56	0.00	0.82	0.60	0.00	0.84
Avail Cap(c_a), veh/h	0	142	186	531	0	343	375	0	816	375	0	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.6	52.8	0.0	51.1	61.9	0.0	31.3	61.9	0.0	30.7
Incr Delay (d2), s/veh	0.0	0.0	48.2	2.0	0.0	1.5	1.8	0.0	5.1	2.0	0.0	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	171.5	0.0	0.0	58.2
%ile BackOfQ(50%),veh/ln	0.0	0.0	7.6	5.6	0.0	2.3	2.0	0.0	58.0	2.2	0.0	33.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	107.7	54.8	0.0	52.6	63.7	0.0	207.9	63.9	0.0	94.5
LnGrp LOS	A	A	F	D	A	D	E	A	F	E	A	F
Approach Vol, veh/h		157			243			642			650	
Approach Delay, s/veh		107.7			54.2			194.7			91.5	
Approach LOS		F			D			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	64.1		28.5	11.6	63.9		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	5.8	51.3		12.3	6.1	53.4		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.4	0.1	2.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			126.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Existing Saturday PM Peak Hour
With Total Project

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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1	32	2	1	8	34	642	5	16	798	28
Future Volume (veh/h)	25	1	32	2	1	8	34	642	5	16	798	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	30	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	25	1	32	2	1	8	34	648	5	16	806	28
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	43	2	55	34	17	42	93	944	6	31	865	30
Arrive On Green	0.06	0.06	0.06	0.03	0.03	0.03	0.05	0.71	0.71	0.02	0.67	0.67
Sat Flow, veh/h	682	27	873	1197	599	1495	1767	1306	10	1767	1265	44
Grp Volume(v), veh/h	58	0	0	3	0	8	34	0	653	16	0	834
Grp Sat Flow(s),veh/h/ln	1582	0	0	1796	0	1495	1767	0	1316	1767	0	1309
Q Serve(g_s), s	3.7	0.0	0.0	0.2	0.0	0.5	1.9	0.0	29.7	0.9	0.0	59.9
Cycle Q Clear(g_c), s	3.7	0.0	0.0	0.2	0.0	0.5	1.9	0.0	29.7	0.9	0.0	59.9
Prop In Lane	0.43		0.55	0.67		1.00	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	99	0	0	51	0	42	93	0	949	31	0	896
V/C Ratio(X)	0.58	0.00	0.00	0.06	0.00	0.19	0.37	0.00	0.69	0.52	0.00	0.93
Avail Cap(c_a), veh/h	285	0	0	215	0	179	177	0	1215	95	0	1145
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.9	0.0	0.0	52.8	0.0	53.0	51.1	0.0	11.5	54.4	0.0	15.2
Incr Delay (d2), s/veh	5.3	0.0	0.0	0.2	0.0	0.8	0.9	0.0	1.1	12.7	0.0	11.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.1	0.0	0.2	0.9	0.0	19.0	0.6	0.0	18.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.3	0.0	0.0	53.0	0.0	53.8	52.0	0.0	35.6	67.1	0.0	26.6
LnGrp LOS	E	A	A	D	A	D	D	A	D	E	A	C
Approach Vol, veh/h	58			11			687			850		
Approach Delay, s/veh	56.3			53.6			36.4			27.4		
Approach LOS	E			D			D			C		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	6.3	77.8	11.0		10.3	73.8	7.7					
Change Period (Y+Rc), s	4.5	5.1	4.5		* 4.7	5.1	4.7					
Max Green Setting (Gmax), s	5.5	94.9	18.5		* 10	89.9	12.3					
Max Q Clear Time (g_c+I1), s	2.9	31.7	5.7		3.9	61.9	2.5					
Green Ext Time (p_c), s	0.0	5.1	0.2		0.0	6.9	0.0					
Intersection Summary												
HCM 6th Ctrl Delay	32.5											
HCM 6th LOS	C											
Notes												

Existing Saturday PM Peak Hour
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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	1.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	33	810	11	5	571	98	14	1	9	46	1	28
Future Vol, veh/h	33	810	11	5	571	98	14	1	9	46	1	28
Conflicting Peds, #/hr	25	0	25	25	0	25	25	0	25	25	0	25
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	34	827	11	5	583	100	14	1	9	47	1	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	708	0	0	863	0	0	1609	1644	883	1599	1599	683
Stage 1	-	-	-	-	-	-	926	926	-	668	668	-
Stage 2	-	-	-	-	-	-	683	718	-	931	931	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	886	-	-	775	-	-	84	99	343	85	106	448
Stage 1	-	-	-	-	-	-	321	346	-	446	455	-
Stage 2	-	-	-	-	-	-	438	432	-	319	344	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	865	-	-	757	-	-	72	90	327	76	96	427
Mov Cap-2 Maneuver	-	-	-	-	-	-	182	202	-	188	211	-
Stage 1	-	-	-	-	-	-	301	325	-	418	441	-
Stage 2	-	-	-	-	-	-	395	419	-	290	323	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.4	0.1	23.5	27.1
HCM LOS			C	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	219	757	-	-	865	-	238
HCM Lane V/C Ratio	0.112	0.007	-	-	0.039	-	0.322
HCM Control Delay (s)	23.5	9.8	-	-	9.3	-	27.1
HCM Lane LOS	C	A	-	-	A	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	1.3

Existing Saturday PM Peak Hour
With Total Project

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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	0.5					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations	↰	↱	↰		↰	↱
Traffic Vol, veh/h	20	800	668	11	13	24
Future Vol, veh/h	20	800	668	11	13	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	816	682	11	13	24
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	693	0	-	0	1544	688
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	856	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	898	-	-	-	126	445
Stage 1	-	-	-	-	497	-
Stage 2	-	-	-	-	415	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	898	-	-	-	123	445
Mov Cap-2 Maneuver	-	-	-	-	260	-
Stage 1	-	-	-	-	486	-
Stage 2	-	-	-	-	415	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.2	0		15.7		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	898	-	260	445
HCM Lane V/C Ratio	-	-	0.023	-	0.051	0.055
HCM Control Delay (s)	-	-	9.1	-	19.6	13.6
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.2	0.2

Existing Saturday PM Peak Hour
With Total Project

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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	175	182	33	122	78	625	52	76	499	4
Future Volume (veh/h)	0	0	175	182	33	122	78	625	52	76	499	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	188	196	35	131	84	672	56	82	537	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	121	191	237	42	226	111	690	21	110	709	5
Arrive On Green	0.00	0.00	0.07	0.16	0.16	0.16	0.06	0.54	0.54	0.06	0.54	0.54
Sat Flow, veh/h	0	1856	1428	1510	270	1436	1767	1197	100	1767	1307	10
Grp Volume(v), veh/h	0	0	188	231	0	131	84	0	728	82	0	541
Grp Sat Flow(s),veh/h/ln	0	1856	1428	1780	0	1436	1767	0	1297	1767	0	1317
Q Serve(g_s), s	0.0	0.0	9.0	17.4	0.0	11.7	6.5	0.0	75.0	6.3	0.0	44.0
Cycle Q Clear(g_c), s	0.0	0.0	9.0	17.4	0.0	11.7	6.5	0.0	75.0	6.3	0.0	44.0
Prop In Lane	0.00		1.00	0.85		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	121	191	280	0	226	111	0	711	110	0	715
V/C Ratio(X)	0.00	0.00	0.98	0.83	0.00	0.58	0.76	0.00	1.02	0.74	0.00	0.76
Avail Cap(c_a), veh/h	0	121	191	451	0	364	320	0	704	320	0	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	60.3	56.4	0.0	54.0	63.7	0.0	31.6	63.7	0.0	24.5
Incr Delay (d2), s/veh	0.0	0.0	59.5	6.6	0.0	2.4	4.0	0.0	39.8	3.7	0.0	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	253.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.8	8.4	0.0	4.4	3.1	0.0	81.0	3.0	0.0	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	119.8	63.0	0.0	56.3	67.7	0.0	324.4	67.4	0.0	28.7
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		188			362			812			623	
Approach Delay, s/veh		119.8			60.6			297.9			33.8	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	82.7		29.4	12.3	82.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	8.5	46.0		19.4	8.3	77.0		11.0				
Green Ext Time (p_c), s	0.1	2.6		1.7	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			154.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	4	65	8	5	22	47	707	12	26	756	121
Future Volume (veh/h)	72	4	65	8	5	22	47	707	12	26	756	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.70	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	76	4	68	8	5	23	49	744	13	27	796	101
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	96	5	86	29	18	29	63	774	14	206	776	98
Arrive On Green	0.12	0.12	0.12	0.03	0.03	0.03	0.04	0.60	0.60	0.12	0.68	0.68
Sat Flow, veh/h	825	43	738	1108	692	1096	1767	1291	23	1767	1141	145
Grp Volume(v), veh/h	148	0	0	13	0	23	49	0	757	27	0	897
Grp Sat Flow(s),veh/h/ln	1606	0	0	1800	0	1096	1767	0	1313	1767	0	1285
Q Serve(g_s), s	12.1	0.0	0.0	1.0	0.0	2.8	3.7	0.0	73.6	1.9	0.0	91.9
Cycle Q Clear(g_c), s	12.1	0.0	0.0	1.0	0.0	2.8	3.7	0.0	73.6	1.9	0.0	91.9
Prop In Lane	0.51		0.46	0.62		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	187	0	0	48	0	29	63	0	788	206	0	875
V/C Ratio(X)	0.79	0.00	0.00	0.27	0.00	0.79	0.78	0.00	0.96	0.13	0.00	1.03
Avail Cap(c_a), veh/h	232	0	0	137	0	84	122	0	942	206	0	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.0	0.0	0.0	64.5	0.0	65.4	64.6	0.0	25.5	53.5	0.0	21.6
Incr Delay (d2), s/veh	13.6	0.0	0.0	1.1	0.0	16.1	7.5	0.0	18.8	0.3	0.0	37.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	0.0	0.5	0.0	0.9	1.8	0.0	25.4	0.8	0.0	33.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.7	0.0	0.0	65.6	0.0	81.5	72.1	0.0	44.4	53.8	0.0	58.7
LnGrp LOS	E	A	A	E	A	F	E	A	D	D	A	F
Approach Vol, veh/h	148			36			806			924		
Approach Delay, s/veh	71.7			75.7			46.1			58.5		
Approach LOS	E			E			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.4	86.1		20.3	9.5	97.0		8.3				
Change Period (Y+Rc), s	4.7	* 5.1		4.5	4.7	* 5.1		4.7				
Max Green Setting (Gmax), s	4.5	* 97		19.5	9.3	* 92		10.3				
Max Q Clear Time (g_c+l1), s	3.9	75.6		14.1	5.7	93.9		4.8				
Green Ext Time (p_c), s	0.0	5.4		0.3	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	54.6											
HCM 6th LOS	D											
Notes												

2022 AM Peak hour
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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	844	22	43	681	89	11	2	36	36	2	8
Future Vol, veh/h	9	844	22	43	681	89	11	2	36	36	2	8
Conflicting Peds, #/hr	10	0	35	10	0	15	32	0	15	35	0	52
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	10	917	24	47	740	97	12	2	39	39	2	9
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	852	0	0	976	0	0	1924	1930	999	1903	1894	856
Stage 1	-	-	-	-	-	-	984	984	-	898	898	-
Stage 2	-	-	-	-	-	-	940	946	-	1005	996	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	783	-	-	703	-	-	50	66	294	52	69	356
Stage 1	-	-	-	-	-	-	298	325	-	333	357	-
Stage 2	-	-	-	-	-	-	315	339	-	290	321	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	772	-	-	680	-	-	42	58	275	~ 39	60	334
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	166	-	125	159	-
Stage 1	-	-	-	-	-	-	284	310	-	324	328	-
Stage 2	-	-	-	-	-	-	270	311	-	236	306	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.1			0.6			26.1			43.5		
HCM LOS							D			E		
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	223	680	-	-	772	-	-	142				
HCM Lane V/C Ratio	0.239	0.069	-	-	0.013	-	-	0.352				
HCM Control Delay (s)	26.1	10.7	-	-	9.7	-	-	43.5				
HCM Lane LOS	D	B	-	-	A	-	-	E				
HCM 95th %tile Q(veh)	0.9	0.2	-	-	0	-	-	1.4				
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

2022 AM Peak hour
with Total Project

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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	104	697	742	48	22	49
Future Vol, veh/h	104	697	742	48	22	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	113	758	807	52	24	53
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	859	0	-	0	1817	833
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	984	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	778	-	-	-	85	367
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	361	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	778	-	-	-	73	367
Mov Cap-2 Maneuver	-	-	-	-	199	-
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	361	-
Approach	SE	NW		SW		
HCM Control Delay, s	1.4	0		19.3		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	SWLn2	
Capacity (veh/h)	-	-	778	-	199	367
HCM Lane V/C Ratio	-	-	0.145	-	0.12	0.145
HCM Control Delay (s)	-	-	10.4	-	25.5	16.5
HCM Lane LOS	-	-	B	-	D	C
HCM 95th %tile Q(veh)	-	-	0.5	-	0.4	0.5

2022 AM Peak hour
with Total Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary 18: Main St & Mitchell Dr/Pope Street

11-13-2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	196	142	26	91	87	577	54	85	533	4
Future Volume (veh/h)	0	0	196	142	26	91	87	577	54	85	533	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	209	151	28	97	93	614	57	90	567	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	126	204	195	36	190	116	717	23	116	739	5
Arrive On Green	0.00	0.00	0.07	0.13	0.13	0.13	0.07	0.53	0.53	0.07	0.53	0.53
Sat Flow, veh/h	0	1870	1507	1514	281	1478	1781	1192	111	1781	1317	9
Grp Volume(v), veh/h	0	0	209	179	0	97	93	0	671	90	0	571
Grp Sat Flow(s),veh/h/ln	0	1870	1507	1795	0	1478	1781	0	1303	1781	0	1327
Q Serve(g_s), s	0.0	0.0	9.0	11.9	0.0	7.5	6.3	0.0	61.3	6.1	0.0	43.6
Cycle Q Clear(g_c), s	0.0	0.0	9.0	11.9	0.0	7.5	6.3	0.0	61.3	6.1	0.0	43.6
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	126	204	231	0	190	116	0	740	116	0	744
V/C Ratio(X)	0.00	0.00	1.02	0.77	0.00	0.51	0.80	0.00	0.91	0.78	0.00	0.77
Avail Cap(c_a), veh/h	0	136	220	508	0	418	360	0	790	360	0	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	58.1	56.4	0.0	54.3	61.6	0.0	29.4	61.6	0.0	22.7
Incr Delay (d2), s/veh	0.0	0.0	66.0	2.1	0.0	0.8	4.8	0.0	13.0	4.2	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	201.2	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.7	6.0	0.0	3.1	3.3	0.0	67.1	3.2	0.0	14.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	124.1	58.5	0.0	55.1	66.4	0.0	243.6	65.8	0.0	26.3
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		209			276			764			661	
Approach Delay, s/veh		124.1			57.3			222.0			31.6	
Approach LOS		F			E			F			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	73.6		24.0	12.3	73.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	8.3	45.6		13.9	8.1	63.3		11.0				
Green Ext Time (p_c), s	0.1	2.8		0.9	0.1	2.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			121.6									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2022 PM Peak hour
with Total Project

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	26	794	3	11	669	167	16	4	27	45	3	19
Future Vol, veh/h	26	794	3	11	669	167	16	4	27	45	3	19
Conflicting Peds, #/hr	11	0	30	71	0	41	30	0	30	52	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	810	3	11	683	170	16	4	28	46	3	19
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	894	0	0	884	0	0	1768	1853	935	1765	1769	839
Stage 1	-	-	-	-	-	-	937	937	-	831	831	-
Stage 2	-	-	-	-	-	-	831	916	-	934	938	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	755	-	-	761	-	-	65	74	320	65	83	364
Stage 1	-	-	-	-	-	-	316	342	-	362	383	-
Stage 2	-	-	-	-	-	-	362	350	-	318	342	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	726	-	-	710	-	-	53	63	284	51	71	340
Mov Cap-2 Maneuver	-	-	-	-	-	-	157	168	-	153	181	-
Stage 1	-	-	-	-	-	-	284	307	-	335	363	-
Stage 2	-	-	-	-	-	-	324	331	-	259	307	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.3			0.1			26.7			36		
HCM LOS							D			E		
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	213	710	-	-	726	-	-	183				
HCM Lane V/C Ratio	0.225	0.016	-	-	0.037	-	-	0.374				
HCM Control Delay (s)	26.7	10.2	-	-	10.1	-	-	36				
HCM Lane LOS	D	B	-	-	B	-	-	E				
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	1.6				

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with Total Project

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HCM 6th TWSC
62: Main St & Dowdell Ln

11-13-2019

Intersection						
Int Delay, s/veh	1.9					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	34	752	714	23	54	97
Future Vol, veh/h	34	752	714	23	54	97
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	35	767	729	23	55	99
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	752	0	-	0	1578	741
Stage 1	-	-	-	-	741	-
Stage 2	-	-	-	-	837	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	853	-	-	-	120	415
Stage 1	-	-	-	-	470	-
Stage 2	-	-	-	-	423	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	853	-	-	-	115	415
Mov Cap-2 Maneuver	-	-	-	-	252	-
Stage 1	-	-	-	-	451	-
Stage 2	-	-	-	-	423	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.4	0		18.8		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1	SWLn2	
Capacity (veh/h)	-	-	853	-	252	415
HCM Lane V/C Ratio	-	-	0.041	-	0.219	0.239
HCM Control Delay (s)	-	-	9.4	-	23.2	16.4
HCM Lane LOS	-	-	A	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.8	0.9

Year 2022 PM Peak hour
with Total Project

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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	159	131	38	71	59	538	57	63	589	6
Future Volume (veh/h)	0	0	159	131	38	71	59	538	57	63	589	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.69	1.00		0.73	1.00		0.91	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	162	134	39	72	60	549	58	64	601	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	122	163	219	64	175	104	683	22	106	712	3
Arrive On Green	0.00	0.00	0.07	0.17	0.17	0.17	0.06	0.49	0.49	0.07	0.50	0.50
Sat Flow, veh/h	0	1856	1082	1384	403	1143	1767	1159	122	1767	1302	13
Grp Volume(v), veh/h	0	0	162	173	0	72	60	0	607	64	0	607
Grp Sat Flow(s),veh/h/ln	0	1856	1082	1786	0	1143	1767	0	1282	1767	0	1315
Q Serve(g_s), s	0.0	0.0	9.0	10.9	0.0	6.8	4.0	0.0	55.7	4.3	0.0	52.9
Cycle Q Clear(g_c), s	0.0	0.0	9.0	10.9	0.0	6.8	4.0	0.0	55.7	4.3	0.0	52.9
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	0	122	163	283	0	175	104	0	712	106	0	712
V/C Ratio(X)	0.00	0.00	0.99	0.61	0.00	0.41	0.58	0.00	0.85	0.60	0.00	0.85
Avail Cap(c_a), veh/h	0	137	180	511	0	327	361	0	786	361	0	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	60.7	53.7	0.0	51.9	62.8	0.0	31.4	62.8	0.0	31.1
Incr Delay (d2), s/veh	0.0	0.0	61.8	2.1	0.0	1.5	1.9	0.0	7.6	2.1	0.0	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	186.9	0.0	0.0	60.5
%ile BackOfQ(50%),veh/ln	0.0	0.0	8.5	5.8	0.0	2.3	2.1	0.0	61.5	2.3	0.0	35.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	122.5	55.8	0.0	53.4	64.6	0.0	225.9	64.8	0.0	98.7
LnGrp LOS	A	A	F	E	A	D	E	A	F	E	A	F
Approach Vol, veh/h		162			245			667			671	
Approach Delay, s/veh		122.5			55.1			211.4			95.5	
Approach LOS		F			E			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.5	68.3		28.8	11.7	68.1		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	6.0	54.9		12.9	6.3	57.7		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.4	0.1	2.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			136.6									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2022 Saturday PM Peak Hour
With Total Project

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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-13-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	1	33	2	1	13	38	666	5	19	823	29
Future Volume (veh/h)	28	1	33	2	1	13	38	666	5	19	823	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	30	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	28	1	33	2	1	13	38	673	5	19	831	29
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	46	2	55	45	23	56	94	948	5	34	870	30
Arrive On Green	0.07	0.07	0.07	0.04	0.04	0.04	0.05	0.72	0.72	0.02	0.68	0.68
Sat Flow, veh/h	718	26	846	1197	599	1487	1767	1307	10	1767	1265	44
Grp Volume(v), veh/h	62	0	0	3	0	13	38	0	678	19	0	860
Grp Sat Flow(s),veh/h/ln	1589	0	0	1796	0	1487	1767	0	1316	1767	0	1309
Q Serve(g_s), s	4.4	0.0	0.0	0.2	0.0	1.0	2.4	0.0	35.2	1.2	0.0	71.8
Cycle Q Clear(g_c), s	4.4	0.0	0.0	0.2	0.0	1.0	2.4	0.0	35.2	1.2	0.0	71.8
Prop In Lane	0.45		0.53	0.67		1.00	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	103	0	0	68	0	56	94	0	953	34	0	901
V/C Ratio(X)	0.60	0.00	0.00	0.04	0.00	0.23	0.40	0.00	0.71	0.55	0.00	0.95
Avail Cap(c_a), veh/h	251	0	0	189	0	156	156	0	1068	83	0	1006
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.6	0.0	0.0	56.6	0.0	57.0	55.9	0.0	12.8	59.3	0.0	17.3
Incr Delay (d2), s/veh	5.6	0.0	0.0	0.1	0.0	0.8	1.0	0.0	2.0	13.1	0.0	17.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	0.1	0.0	0.4	1.2	0.0	21.8	0.7	0.0	23.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.2	0.0	0.0	56.7	0.0	57.8	56.9	0.0	39.5	72.4	0.0	34.8
LnGrp LOS	E	A	A	E	A	E	E	A	D	E	A	C
Approach Vol, veh/h	62			16			716			879		
Approach Delay, s/veh	61.2			57.6			40.4			35.6		
Approach LOS	E			E			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	88.9		12.1	11.1	84.6		9.2				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	5.5	94.9		18.5	* 10	89.9		12.3				
Max Q Clear Time (g_c+l1), s	3.2	37.2		6.4	4.4	73.8		3.0				
Green Ext Time (p_c), s	0.0	5.4		0.2	0.0	5.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	38.8											
HCM 6th LOS	D											
Notes												

HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	1.9											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	33	836	11	5	596	103	14	1	9	48	1	28
Future Vol, veh/h	33	836	11	5	596	103	14	1	9	48	1	28
Conflicting Peds, #/hr	25	0	25	25	0	25	25	0	25	25	0	25
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	34	853	11	5	608	105	14	1	9	49	1	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	738	0	0	889	0	0	1663	1700	909	1653	1653	711
Stage 1	-	-	-	-	-	-	952	952	-	696	696	-
Stage 2	-	-	-	-	-	-	711	748	-	957	957	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	863	-	-	758	-	-	77	92	332	78	98	431
Stage 1	-	-	-	-	-	-	310	337	-	430	442	-
Stage 2	-	-	-	-	-	-	422	418	-	308	335	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	842	-	-	740	-	-	66	84	316	69	89	411
Mov Cap-2 Maneuver	-	-	-	-	-	-	174	194	-	179	203	-
Stage 1	-	-	-	-	-	-	290	316	-	403	428	-
Stage 2	-	-	-	-	-	-	380	405	-	279	314	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.4	0.1	24.4	29.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	210	740	-	-	842	-	226
HCM Lane V/C Ratio	0.117	0.007	-	-	0.04	-	0.348
HCM Control Delay (s)	24.4	9.9	-	-	9.5	-	29.2
HCM Lane LOS	C	A	-	-	A	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	1.5

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With Total Project

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HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	0.9					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	39	807	671	11	21	49
Future Vol, veh/h	39	807	671	11	21	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	40	823	685	11	21	50
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	696	0	-	0	1594	691
Stage 1	-	-	-	-	691	-
Stage 2	-	-	-	-	903	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	895	-	-	-	117	443
Stage 1	-	-	-	-	495	-
Stage 2	-	-	-	-	394	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	895	-	-	-	112	443
Mov Cap-2 Maneuver	-	-	-	-	247	-
Stage 1	-	-	-	-	473	-
Stage 2	-	-	-	-	394	-
Approach	SE		NW		SW	
HCM Control Delay, s	0.4		0		16.2	
HCM LOS					C	
Minor Lane/Major Mvmt		NWT	NWR	SEL	SETSWLn1SWLn2	
Capacity (veh/h)		-	-	895	-	247 443
HCM Lane V/C Ratio		-	-	0.044	-	0.087 0.113
HCM Control Delay (s)		-	-	9.2	-	21 14.2
HCM Lane LOS		-	-	A	-	C B
HCM 95th %tile Q(veh)		-	-	0.1	-	0.3 0.4

Year 2022 Saturday PM Peak Hour
With Total Project

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HCM 6th Signalized Intersection Summary 18: Main St & Mitchell Dr/Pope Street

11-15-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	170	200	40	150	80	610	80	100	520	10
Future Volume (veh/h)	0	0	170	200	40	150	80	610	80	100	520	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	183	215	43	161	86	656	86	108	559	11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	125	190	237	47	229	105	692	33	128	733	14
Arrive On Green	0.00	0.00	0.07	0.16	0.16	0.16	0.06	0.56	0.56	0.07	0.57	0.57
Sat Flow, veh/h	0	1856	1433	1484	297	1438	1767	1137	149	1767	1288	25
Grp Volume(v), veh/h	0	0	183	258	0	161	86	0	742	108	0	570
Grp Sat Flow(s),veh/h/ln	0	1856	1433	1781	0	1438	1767	0	1286	1767	0	1314
Q Serve(g_s), s	0.0	0.0	11.1	23.4	0.0	17.4	7.9	0.0	91.3	9.9	0.0	54.3
Cycle Q Clear(g_c), s	0.0	0.0	11.1	23.4	0.0	17.4	7.9	0.0	91.3	9.9	0.0	54.3
Prop In Lane	0.00		1.00	0.83		1.00	1.00		0.12	1.00		0.02
Lane Grp Cap(c), veh/h	0	125	190	284	0	229	105	0	726	128	0	747
V/C Ratio(X)	0.00	0.00	0.96	0.91	0.00	0.70	0.82	0.00	1.02	0.85	0.00	0.76
Avail Cap(c_a), veh/h	0	125	190	318	0	256	175	0	715	165	0	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	71.6	67.8	0.0	65.3	76.4	0.0	36.5	75.3	0.0	27.0
Incr Delay (d2), s/veh	0.0	0.0	53.9	26.7	0.0	7.3	5.8	0.0	39.3	21.6	0.0	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	248.1	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.6	12.9	0.0	6.9	3.8	0.0	86.7	5.3	0.0	18.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	125.4	94.6	0.0	72.6	82.2	0.0	323.9	97.0	0.0	31.2
LnGrp LOS	A	A	F	F	A	E	F	A	F	F	A	C
Approach Vol, veh/h		183			419			828			678	
Approach Delay, s/veh		125.4			86.2			298.8			41.7	
Approach LOS		F			F			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.5	101.1		33.9	15.6	99.0		15.8				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	16.3	* 87		* 29	15.3	* 91		11.1				
Max Q Clear Time (g_c+l1), s	9.9	56.3		25.4	11.9	93.3		13.1				
Green Ext Time (p_c), s	0.0	2.8		0.8	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			158.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-15-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	4	65	8	5	22	47	707	12	26	756	121
Future Volume (veh/h)	72	4	65	8	5	22	47	707	12	26	756	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.70	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	76	4	68	8	5	23	49	744	13	27	796	101
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	97	5	87	29	18	29	63	774	14	199	772	98
Arrive On Green	0.12	0.12	0.12	0.03	0.03	0.03	0.04	0.60	0.60	0.11	0.68	0.68
Sat Flow, veh/h	825	43	738	1108	692	1096	1767	1291	23	1767	1141	145
Grp Volume(v), veh/h	148	0	0	13	0	23	49	0	757	27	0	897
Grp Sat Flow(s),veh/h/ln	1606	0	0	1800	0	1096	1767	0	1313	1767	0	1285
Q Serve(g_s), s	11.9	0.0	0.0	0.9	0.0	2.8	3.7	0.0	72.3	1.8	0.0	89.9
Cycle Q Clear(g_c), s	11.9	0.0	0.0	0.9	0.0	2.8	3.7	0.0	72.3	1.8	0.0	89.9
Prop In Lane	0.51		0.46	0.62		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	189	0	0	48	0	29	63	0	788	199	0	870
V/C Ratio(X)	0.78	0.00	0.00	0.27	0.00	0.79	0.78	0.00	0.96	0.14	0.00	1.03
Avail Cap(c_a), veh/h	248	0	0	140	0	85	137	0	938	199	0	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	0.0	63.4	0.0	64.3	63.5	0.0	25.1	53.1	0.0	21.4
Incr Delay (d2), s/veh	11.3	0.0	0.0	1.1	0.0	16.2	7.5	0.0	18.9	0.3	0.0	38.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	0.0	0.4	0.0	0.9	1.8	0.0	25.0	0.8	0.0	33.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.2	0.0	0.0	64.5	0.0	80.4	71.0	0.0	44.0	53.4	0.0	60.1
LnGrp LOS	E	A	A	E	A	F	E	A	D	D	A	F
Approach Vol, veh/h		148			36			806			924	
Approach Delay, s/veh		68.2			74.7			45.6			59.9	
Approach LOS		E			E			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.7	84.8		20.1	9.4	95.0		8.2				
Change Period (Y+Rc), s	4.7	* 5.1		4.5	4.7	* 5.1		4.7				
Max Green Setting (Gmax), s	5.5	* 95		20.5	10.3	* 90		10.3				
Max Q Clear Time (g_c+l1), s	3.8	74.3		13.9	5.7	91.9		4.8				
Green Ext Time (p_c), s	0.0	5.3		0.4	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			54.8									
HCM 6th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2040 AM Peak Hour
with Total Project

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HCM 6th TWSC
41: Charter Oak & Main St

11-15-2019

Intersection												
Int Delay, s/veh	3											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	12	889	25	44	696	90	20	2	38	43	2	9
Future Vol, veh/h	12	889	25	44	696	90	20	2	38	43	2	9
Conflicting Peds, #/hr	10	0	35	10	0	15	32	0	15	35	0	52
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	13	966	27	48	757	98	22	2	41	47	2	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	870	0	0	1028	0	0	2001	2007	1050	1979	1971	873
Stage 1	-	-	-	-	-	-	1041	1041	-	917	917	-
Stage 2	-	-	-	-	-	-	960	966	-	1062	1054	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	770	-	-	672	-	-	44	59	275	~46	62	348
Stage 1	-	-	-	-	-	-	277	306	-	325	349	-
Stage 2	-	-	-	-	-	-	307	332	-	269	302	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	759	-	-	650	-	-	36	51	257	~34	54	326
Mov Cap-2 Maneuver	-	-	-	-	-	-	133	156	-	113	149	-
Stage 1	-	-	-	-	-	-	263	291	-	315	319	-
Stage 2	-	-	-	-	-	-	260	303	-	213	287	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0.6	32.9	55
HCM LOS			D	F

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	193	650	-	-	759	-	128
HCM Lane V/C Ratio	0.338	0.074	-	-	0.017	-	0.459
HCM Control Delay (s)	32.9	11	-	-	9.8	-	55
HCM Lane LOS	D	B	-	-	A	-	F
HCM 95th %tile Q(veh)	1.4	0.2	-	-	0.1	-	2.1

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Year 2040 AM Peak Hour
with Total Project

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HCM 6th TWSC
62: Main St & Dowdell

11-15-2019

Intersection						
Int Delay, s/veh	1.4					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	99	749	760	49	21	47
Future Vol, veh/h	99	749	760	49	21	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	108	814	826	53	23	51
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	879	0	-	0	1883	853
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	1030	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	764	-	-	-	77	357
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	343	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	764	-	-	-	66	357
Mov Cap-2 Maneuver	-	-	-	-	190	-
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	343	-
Approach	SE	NW		SW		
HCM Control Delay, s	1.2	0		19.8		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1SWLn2		
Capacity (veh/h)	-	-	764	-	190	357
HCM Lane V/C Ratio	-	-	0.141	-	0.12	0.143
HCM Control Delay (s)	-	-	10.5	-	26.5	16.8
HCM Lane LOS	-	-	B	-	D	C
HCM 95th %tile Q(veh)	-	-	0.5	-	0.4	0.5

Year 2040 AM Peak Hour
with Total Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-18-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	212	161	30	120	103	569	72	110	540	10
Future Volume (veh/h)	0	0	212	161	30	120	103	569	72	110	540	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.94	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	226	171	32	128	110	605	77	117	574	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	122	217	210	39	206	134	687	29	141	712	14
Arrive On Green	0.00	0.00	0.07	0.14	0.14	0.14	0.08	0.54	0.54	0.08	0.54	0.54
Sat Flow, veh/h	0	1870	1499	1512	283	1483	1781	1148	146	1781	1298	25
Grp Volume(v), veh/h	0	0	226	203	0	128	110	0	682	117	0	585
Grp Sat Flow(s),veh/h/ln	0	1870	1499	1795	0	1483	1781	0	1294	1781	0	1323
Q Serve(g_s), s	0.0	0.0	9.0	14.8	0.0	11.0	8.2	0.0	69.5	8.7	0.0	49.0
Cycle Q Clear(g_c), s	0.0	0.0	9.0	14.8	0.0	11.0	8.2	0.0	69.5	8.7	0.0	49.0
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.11	1.00		0.02
Lane Grp Cap(c), veh/h	0	122	217	249	0	206	134	0	716	141	0	725
V/C Ratio(X)	0.00	0.00	1.04	0.81	0.00	0.62	0.82	0.00	0.95	0.83	0.00	0.81
Avail Cap(c_a), veh/h	0	125	219	465	0	384	330	0	718	330	0	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.4	57.6	0.0	55.9	62.9	0.0	31.4	62.6	0.0	25.2
Incr Delay (d2), s/veh	0.0	0.0	72.8	2.5	0.0	1.1	4.7	0.0	22.4	4.7	0.0	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	230.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	12.0	7.1	0.0	4.3	4.0	0.0	73.4	4.3	0.0	16.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	132.2	60.1	0.0	57.1	67.6	0.0	283.8	67.2	0.0	31.3
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		226			331			792			702	
Approach Delay, s/veh		132.2			58.9			253.8			37.3	
Approach LOS		F			E			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.9	81.0		26.6	14.4	80.4		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+l1), s	10.2	51.0		16.8	10.7	71.5		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.0	0.1	1.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			134.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2040 PM Peak hour
with total Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-18-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	3	70	12	7	42	70	718	11	25	810	60
Future Volume (veh/h)	70	3	70	12	7	42	70	718	11	25	810	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.89	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	71	3	71	12	7	42	71	725	11	25	818	61
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	85	4	85	45	26	56	89	910	14	31	808	60
Arrive On Green	0.11	0.11	0.11	0.04	0.04	0.04	0.05	0.70	0.70	0.02	0.67	0.67
Sat Flow, veh/h	795	34	795	1136	663	1400	1767	1295	20	1767	1209	90
Grp Volume(v), veh/h	145	0	0	19	0	42	71	0	736	25	0	879
Grp Sat Flow(s),veh/h/ln	1624	0	0	1799	0	1400	1767	0	1314	1767	0	1299
Q Serve(g_s), s	12.4	0.0	0.0	1.5	0.0	4.2	5.6	0.0	53.8	2.0	0.0	94.9
Cycle Q Clear(g_c), s	12.4	0.0	0.0	1.5	0.0	4.2	5.6	0.0	53.8	2.0	0.0	94.9
Prop In Lane	0.49		0.49	0.63		1.00	1.00		0.01	1.00		0.07
Lane Grp Cap(c), veh/h	174	0	0	72	0	56	89	0	923	31	0	868
V/C Ratio(X)	0.83	0.00	0.00	0.26	0.00	0.75	0.79	0.00	0.80	0.80	0.00	1.01
Avail Cap(c_a), veh/h	212	0	0	142	0	110	116	0	934	44	0	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.1	0.0	0.0	66.1	0.0	67.5	66.7	0.0	14.3	69.5	0.0	23.6
Incr Delay (d2), s/veh	20.3	0.0	0.0	0.7	0.0	7.3	18.7	0.0	4.9	49.5	0.0	33.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	0.0	0.7	0.0	1.6	3.0	0.0	16.4	1.3	0.0	35.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.5	0.0	0.0	66.9	0.0	74.8	85.4	0.0	19.1	119.0	0.0	57.3
LnGrp LOS	F	A	A	E	A	E	F	A	B	F	A	F
Approach Vol, veh/h		145			61			807			904	
Approach Delay, s/veh		82.5			72.3			25.0			59.0	
Approach LOS		F			E			C			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	104.9		19.8	11.9	100.0		10.4				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	3.5	100.9		18.5	* 9.3	94.9		11.2				
Max Q Clear Time (g_c+l1), s	4.0	55.8		14.4	7.6	96.9		6.2				
Green Ext Time (p_c), s	0.0	6.9		0.3	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				46.9								
HCM 6th LOS				D								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2040 PM Peak hour
with total Project

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.7											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	26	829	3	12	682	181	22	4	29	48	3	22
Future Vol, veh/h	26	829	3	12	682	181	22	4	29	48	3	22
Conflicting Peds, #/hr	11	0	30	71	0	41	30	0	30	52	0	11
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	846	3	12	696	185	22	4	30	49	3	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	922	0	0	920	0	0	1828	1919	971	1825	1828	860
Stage 1	-	-	-	-	-	-	973	973	-	854	854	-
Stage 2	-	-	-	-	-	-	855	946	-	971	974	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	737	-	-	738	-	-	59	67	305	59	76	354
Stage 1	-	-	-	-	-	-	302	329	-	352	374	-
Stage 2	-	-	-	-	-	-	351	339	-	303	329	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	708	-	-	688	-	-	47	57	270	~ 45	64	330
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	160	-	143	172	-
Stage 1	-	-	-	-	-	-	271	295	-	325	353	-
Stage 2	-	-	-	-	-	-	310	320	-	243	295	-

Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.3			0.1			30.6			40.3		
HCM LOS							D			E		

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	196	688	-	-	708	-	174
HCM Lane V/C Ratio	0.286	0.018	-	-	0.037	-	0.428
HCM Control Delay (s)	30.6	10.3	-	-	10.3	-	40.3
HCM Lane LOS	D	B	-	-	B	-	E
HCM 95th %tile Q(veh)	1.1	0.1	-	-	0.1	-	1.9

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Year 2040 PM Peak hour
with total Project

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HCM 6th TWSC
62: Main St & Dowdell Ln

11-13-2019

Intersection						
Int Delay, s/veh	1.8					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations	↰	↱	↰		↰	↱
Traffic Vol, veh/h	30	803	728	25	53	94
Future Vol, veh/h	30	803	728	25	53	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	31	819	743	26	54	96
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	769	0	-	0	1637	756
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	881	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	841	-	-	-	110	406
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	403	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	841	-	-	-	106	406
Mov Cap-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	403	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.3	0		19.3		
HCM LOS	C					
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1SWLn2		
Capacity (veh/h)	-	-	841	-	241	406
HCM Lane V/C Ratio	-	-	0.036	-	0.224	0.236
HCM Control Delay (s)	-	-	9.4	-	24.2	16.6
HCM Lane LOS	-	-	A	-	C	C
HCM 95th %tile Q(veh)	-	-	0.1	-	0.8	0.9

Year 2040 PM Peak hour
with total Project

Synchro 10 Report
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HCM 6th Signalized Intersection Summary
18: Main St & Mitchell Dr/Pope Street

11-17-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	161	131	40	80	61	549	61	70	609	10
Future Volume (veh/h)	0	0	161	131	40	80	61	549	61	70	609	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.71	1.00		0.71	1.00		0.91	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	164	134	41	82	62	560	62	71	621	10
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	154	180	206	63	164	100	687	24	103	715	4
Arrive On Green	0.00	0.00	0.09	0.16	0.16	0.16	0.06	0.50	0.50	0.06	0.51	0.51
Sat Flow, veh/h	0	1856	1117	1368	419	1118	1767	1153	128	1767	1292	21
Grp Volume(v), veh/h	0	0	164	175	0	82	62	0	622	71	0	631
Grp Sat Flow(s),veh/h/ln	0	1856	1117	1787	0	1118	1767	0	1280	1767	0	1313
Q Serve(g_s), s	0.0	0.0	12.1	12.1	0.0	8.8	4.5	0.0	62.1	5.2	0.0	60.6
Cycle Q Clear(g_c), s	0.0	0.0	12.1	12.1	0.0	8.8	4.5	0.0	62.1	5.2	0.0	60.6
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	0	154	180	270	0	164	100	0	711	103	0	719
V/C Ratio(X)	0.00	0.00	0.91	0.65	0.00	0.50	0.62	0.00	0.87	0.69	0.00	0.88
Avail Cap(c_a), veh/h	0	169	198	422	0	264	324	0	765	324	0	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	62.7	58.2	0.0	56.8	67.2	0.0	33.2	67.3	0.0	33.1
Incr Delay (d2), s/veh	0.0	0.0	36.5	2.6	0.0	2.4	2.3	0.0	9.9	3.0	0.0	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	197.0	0.0	0.0	70.3
%ile BackOfQ(50%),veh/ln	0.0	0.0	7.9	6.3	0.0	2.9	2.3	0.0	65.4	2.7	0.0	41.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	99.2	60.8	0.0	59.2	69.5	0.0	240.0	70.3	0.0	113.9
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	F
Approach Vol, veh/h		164			257			684			702	
Approach Delay, s/veh		99.2			60.3			224.6			109.5	
Approach LOS		F			E			F			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.8	74.8		29.2	12.0	74.6		16.8				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	24.3	* 76		* 31	24.3	* 79		12.1				
Max Q Clear Time (g_c+l1), s	6.5	62.6		14.1	7.2	64.1		14.1				
Green Ext Time (p_c), s	0.1	2.6		1.3	0.1	2.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			145.1									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Year 2040 Saturday PM Peak Hour
With Total Project

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HCM 6th Signalized Intersection Summary
19: Main St & Grayson Avenue/Mills

11-17-2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1	40	1	1	16	40	671	4	24	831	30
Future Volume (veh/h)	30	1	40	1	1	16	40	671	4	24	831	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	30	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	30	1	40	1	1	16	40	678	4	24	839	30
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	2	63	37	37	60	95	943	4	40	867	31
Arrive On Green	0.07	0.07	0.07	0.04	0.04	0.04	0.05	0.71	0.71	0.02	0.68	0.68
Sat Flow, veh/h	669	22	892	905	905	1483	1767	1309	8	1767	1263	45
Grp Volume(v), veh/h	71	0	0	2	0	16	40	0	682	24	0	869
Grp Sat Flow(s),veh/h/ln	1584	0	0	1810	0	1483	1767	0	1317	1767	0	1309
Q Serve(g_s), s	5.4	0.0	0.0	0.1	0.0	1.3	2.7	0.0	38.1	1.7	0.0	78.2
Cycle Q Clear(g_c), s	5.4	0.0	0.0	0.1	0.0	1.3	2.7	0.0	38.1	1.7	0.0	78.2
Prop In Lane	0.42		0.56	0.50		1.00	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	111	0	0	74	0	60	95	0	947	40	0	898
V/C Ratio(X)	0.64	0.00	0.00	0.03	0.00	0.27	0.42	0.00	0.72	0.60	0.00	0.97
Avail Cap(c_a), veh/h	236	0	0	179	0	147	147	0	1007	78	0	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.5	0.0	0.0	58.6	0.0	59.1	58.3	0.0	13.8	61.6	0.0	18.6
Incr Delay (d2), s/veh	6.0	0.0	0.0	0.1	0.0	0.9	1.1	0.0	2.4	13.9	0.0	21.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	0.1	0.0	0.5	1.3	0.0	23.3	0.9	0.0	26.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.5	0.0	0.0	58.6	0.0	60.0	59.4	0.0	42.1	75.4	0.0	39.9
LnGrp LOS	E	A	A	E	A	E	E	A	D	E	A	D
Approach Vol, veh/h	71			18			722			893		
Approach Delay, s/veh	63.5			59.8			43.0			40.9		
Approach LOS	E			E			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	93.7		13.2	11.4	89.6		9.8				
Change Period (Y+Rc), s	4.5	5.1		4.5	* 4.7	5.1		4.7				
Max Green Setting (Gmax), s	5.5	94.9		18.5	* 10	89.9		12.3				
Max Q Clear Time (g_c+l1), s	3.7	40.1		7.4	4.7	80.2		3.3				
Green Ext Time (p_c), s	0.0	5.4		0.2	0.0	4.3		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	42.9											
HCM 6th LOS	D											
Notes												

Year 2040 Saturday PM Peak Hour
With Total Project

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HCM 6th TWSC
41: Charter Oak & Main St

11-13-2019

Intersection												
Int Delay, s/veh	2.2											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	36	859	11	7	591	116	17	1	11	52	1	32
Future Vol, veh/h	36	859	11	7	591	116	17	1	11	52	1	32
Conflicting Peds, #/hr	25	0	25	25	0	25	25	0	25	25	0	25
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	37	877	11	7	603	118	17	1	11	53	1	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	746	0	0	913	0	0	1700	1742	933	1689	1688	712
Stage 1	-	-	-	-	-	-	982	982	-	701	701	-
Stage 2	-	-	-	-	-	-	718	760	-	988	987	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	858	-	-	742	-	-	72	86	321	74	93	431
Stage 1	-	-	-	-	-	-	299	326	-	428	439	-
Stage 2	-	-	-	-	-	-	419	413	-	296	324	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	838	-	-	724	-	-	60	78	306	65	84	411
Mov Cap-2 Maneuver	-	-	-	-	-	-	166	186	-	171	196	-
Stage 1	-	-	-	-	-	-	279	304	-	399	424	-
Stage 2	-	-	-	-	-	-	372	399	-	265	302	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.4	0.1	25.9	31.6
HCM LOS			D	D

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1
Capacity (veh/h)	202	724	-	-	838	-	220
HCM Lane V/C Ratio	0.146	0.01	-	-	0.044	-	0.394
HCM Control Delay (s)	25.9	10	-	-	9.5	-	31.6
HCM Lane LOS	D	B	-	-	A	-	D
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	1.8

Year 2040 Saturday PM Peak Hour
With Total Project

Synchro 10 Report
Page 1

HCM 6th TWSC
62: Main St & Dowdell

11-13-2019

Intersection						
Int Delay, s/veh	0.9					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	36	841	683	22	21	47
Future Vol, veh/h	36	841	683	22	21	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	37	858	697	22	21	48
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	719	0	-	0	1640	708
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	932	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	878	-	-	-	110	433
Stage 1	-	-	-	-	486	-
Stage 2	-	-	-	-	382	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	878	-	-	-	105	433
Mov Cap-2 Maneuver	-	-	-	-	239	-
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	382	-
Approach	SE	NW		SW		
HCM Control Delay, s	0.4	0		16.5		
HCM LOS				C		
Minor Lane/Major Mvmt	NWT	NWR	SEL	SETSWLn1SWLn2		
Capacity (veh/h)	-	-	878	-	239	433
HCM Lane V/C Ratio	-	-	0.042	-	0.09	0.111
HCM Control Delay (s)	-	-	9.3	-	21.5	14.3
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.3	0.4

Year 2040 Saturday PM Peak Hour
With Total Project

Synchro 10 Report
Page 2

HCM 6th Signalized Intersection Summary 19: Main St & Grayson Avenue/Mills

11-18-2019

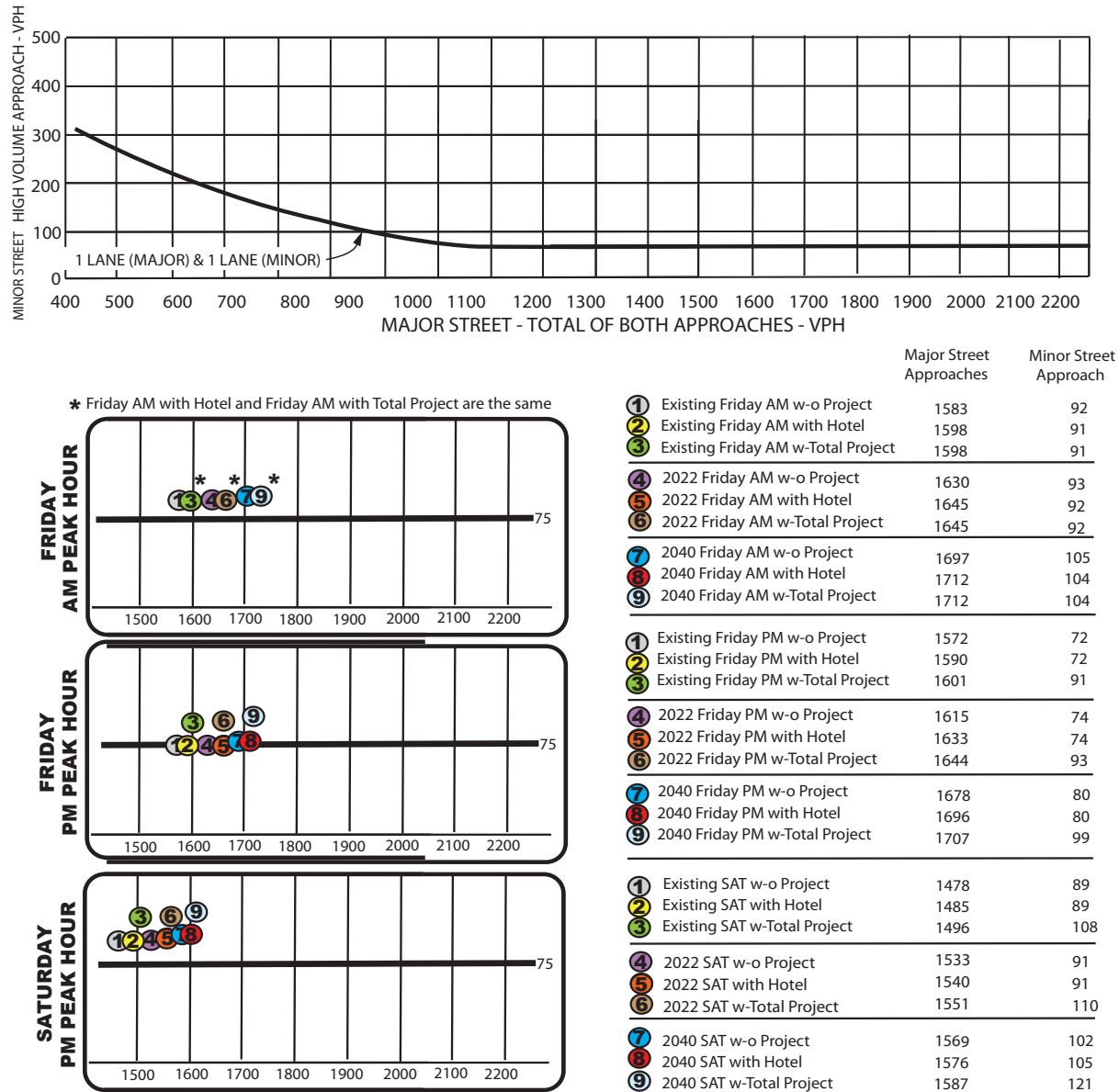
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	5	68	8	4	25	50	713	11	27	800	125
Future Volume (veh/h)	80	5	68	8	4	25	50	713	11	27	800	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.68	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1856	1856	1318	1318
Adj Flow Rate, veh/h	84	5	72	8	4	26	53	751	12	28	842	106
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	93	6	91	9	3	23	66	782	13	327	860	108
Arrive On Green	0.05	0.07	0.07	0.01	0.02	0.02	0.04	0.61	0.61	0.18	0.75	0.75
Sat Flow, veh/h	1767	91	1308	1767	150	976	1767	1293	21	1767	1142	144
Grp Volume(v), veh/h	84	0	77	8	0	30	53	0	763	28	0	948
Grp Sat Flow(s),veh/h/ln	1767	0	1399	1767	0	1126	1767	0	1314	1767	0	1286
Q Serve(g_s), s	6.7	0.0	7.7	0.6	0.0	3.3	4.2	0.0	77.6	1.9	0.0	98.5
Cycle Q Clear(g_c), s	6.7	0.0	7.7	0.6	0.0	3.3	4.2	0.0	77.6	1.9	0.0	98.5
Prop In Lane	1.00		0.94	1.00		0.87	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	93	0	97	9	0	26	66	0	795	327	0	968
V/C Ratio(X)	0.90	0.00	0.79	0.90	0.00	1.15	0.80	0.00	0.96	0.09	0.00	0.98
Avail Cap(c_a), veh/h	93	0	97	29	0	26	66	0	1054	327	0	1041
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	66.8	0.0	65.0	70.6	0.0	69.3	67.8	0.0	26.4	47.9	0.0	16.5
Incr Delay (d2), s/veh	61.5	0.0	34.2	61.3	0.0	223.7	46.5	0.0	16.2	0.1	0.0	22.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	3.7	0.4	0.0	2.6	2.8	0.0	26.3	0.8	0.0	29.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	128.3	0.0	99.2	131.9	0.0	293.0	114.2	0.0	42.6	48.0	0.0	38.9
LnGrp LOS	F	A	F	F	A	F	F	A	D	D	A	D
Approach Vol, veh/h	161			38			816			976		
Approach Delay, s/veh	114.4			259.0			47.2			39.1		
Approach LOS	F			F			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.9	91.0	5.4	14.6	10.0	111.9	12.0	8.0				
Change Period (Y+Rc), s	4.7	* 5.1	* 4.7	* 4.7	4.7	* 5.1	4.5	* 4.7				
Max Green Setting (Gmax), s	6.5	* 1.1E2	* 2.3	* 8.5	5.3	* 1.1E2	7.5	* 3.3				
Max Q Clear Time (g_c+I1), s	3.9	79.6	2.6	9.7	6.2	100.5	8.7	5.3				
Green Ext Time (p_c), s	0.0	6.2	0.0	0.0	0.0	6.3	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	52.7											
HCM 6th LOS	D											
Notes												

Year 2040 AM Peak Hour
with Lodge or Total Project

Synchro 10 Report
MITIGATED

Appendix B

SR29/128 at Charter Oak Ave **PEAK HOUR VOLUME WARRANT #3** **(Rural Area)**



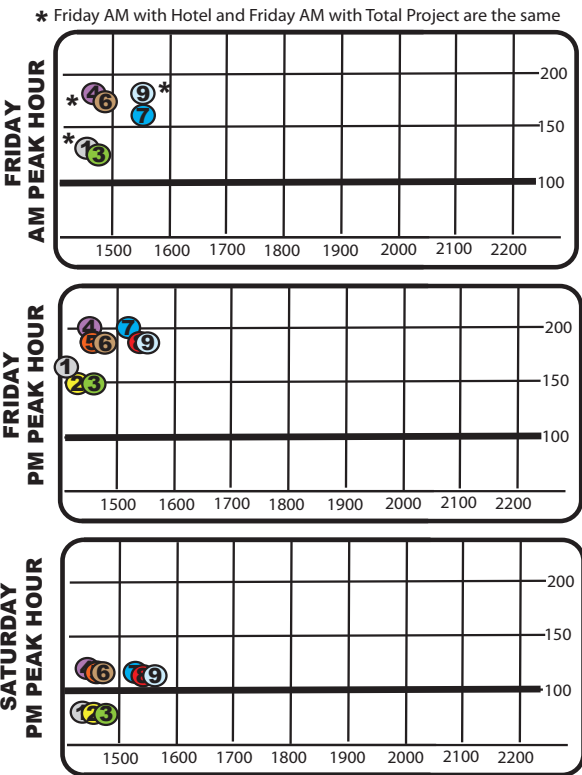
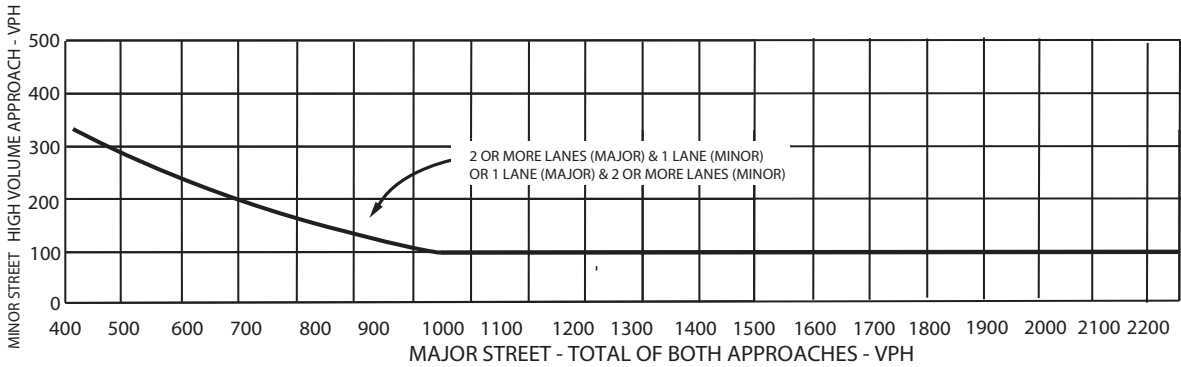
Source: Year 2014 Manual on Uniform Traffic Control Devices, Federal Highway Administration



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Figure A-1
SR29/128 at Charter Oak Ave
PEAK HOUR VOLUME WARRANT #3
(Rural Area)

SR29/128 at Dowdell Lane
PEAK HOUR VOLUME WARRANT #3
(Rural Area)



	Major Street Approaches	Minor Street Approach
① Existing Friday AM w-o Project	1448	138
② Existing Friday AM with Hotel	1464	126
③ Existing Friday AM w-Total Project	1464	126
④ 2022 Friday AM w-o Project	1471	190
⑤ 2022 Friday AM with Hotel	1487	175
⑥ 2022 Friday AM w-Total Project	1487	175
⑦ 2040 Friday AM w-o Project	1546	190
⑧ 2040 Friday AM with Hotel	1558	167
⑨ 2040 Friday AM w-Total Project	1558	167
① Existing Friday PM w-o Project	1427	161
② Existing Friday PM with Hotel	1447	147
③ Existing Friday PM w-Total Project	1466	147
④ 2022 Friday PM w-o Project	1449	207
⑤ 2022 Friday PM with Hotel	1470	185
⑥ 2022 Friday PM w-Total Project	1489	185
⑦ 2040 Friday PM w-o Project	1515	207
⑧ 2040 Friday PM with Hotel	1537	177
⑨ 2040 Friday PM w-Total Project	1556	177
① Existing SAT w-o Project	1452	58
② Existing SAT with Hotel	1460	57
③ Existing SAT w-Total Project	1479	57
④ 2022 SAT w-o Project	1473	118
⑤ 2022 SAT with Hotel	1481	109
⑥ 2022 SAT w-Total Project	1500	109
⑦ 2040 SAT w-o Project	1519	118
⑧ 2040 SAT with Hotel	1527	104
⑨ 2040 SAT w-Total Project	1546	104

Source: Year 2014 Manual on Uniform Traffic Control Devices, Federal Highway Administration

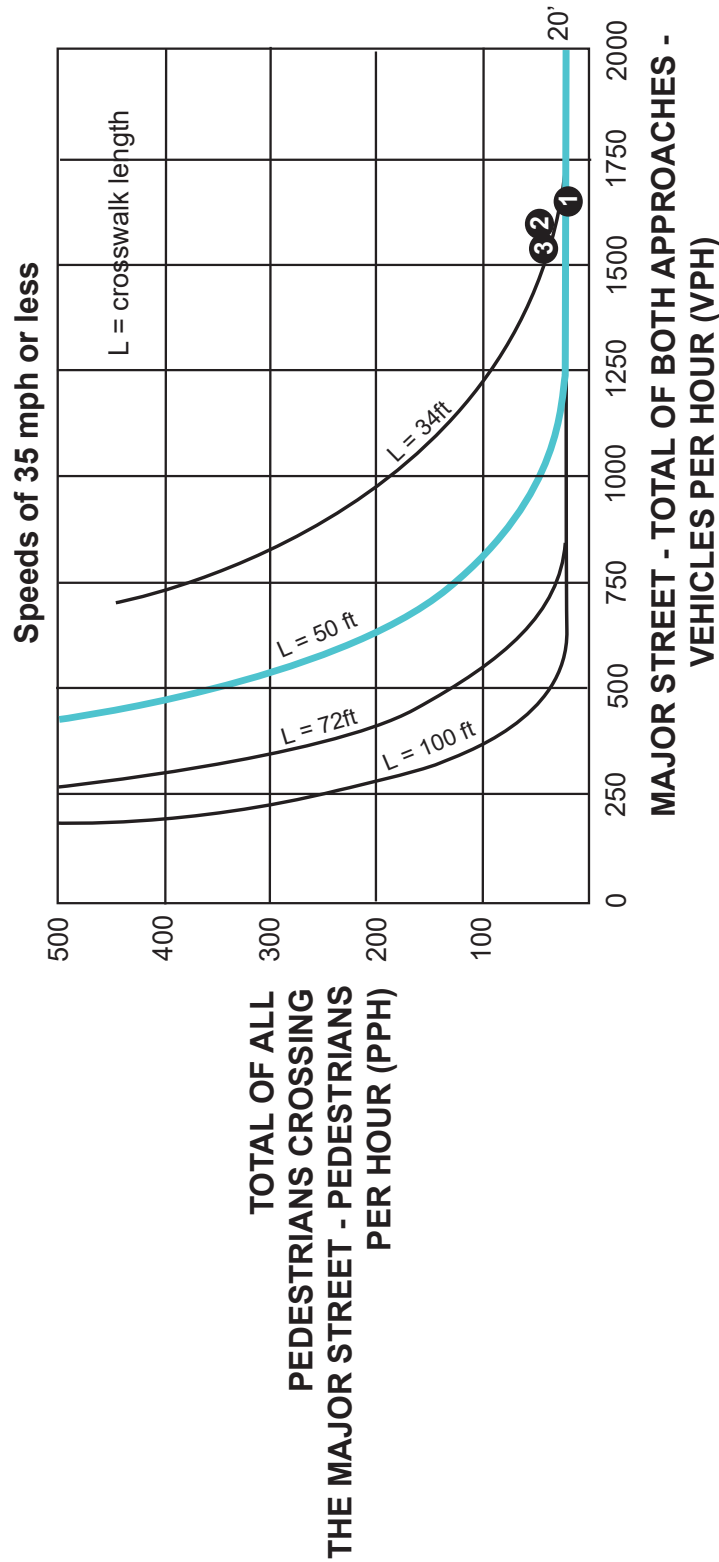


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Figure A-2
SR29/128 at Dowdell Lane
PEAK HOUR VOLUME WARRANT #3
(Rural Area)

Appendix C

Figure 4F-1. Guidelines for the Installation of Pedestrian Hybrid Beacons on Low-Speed Roadways



- ① Harvest Friday AM Peak Hour Existing without Project
- ② Harvest Friday PM Peak Hour Existing without Project
- ③ Harvest Saturday PM Peak Hour Existing without Project

* Note: 20 pph applies as the lower threshold volume

Source: 2014 California Manual on Uniform Traffic Control Devices
Farmstead Lodge and Total Project Traffic Study



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Figure A-3
Guidelines for the Installation of Pedestrian Hybrid Beacons on Low-Speed Roadways
Existing Volumes - SR29/Charter Oak Ave

Appendix D

Appendix D (page 1 of 4)

	Start	End	Lot Start	Lot End	# Employees	12:00 AM	12:30 AM	1:00 AM	1:30 AM	2:00 AM	2:30 AM	3:00 AM	3:30 AM	4:00 AM	4:30 AM	5:00 AM
Lodging	6:00 AM	2:00 PM	5:30 AM	2:30 PM	13											
Lodging	7:00 AM	3:00 PM	6:30 AM	3:30 PM	9											
Lodging	8:00 AM	4:00 PM	7:30 AM	4:30 PM	4											
Lodging	2:00 PM	10:00 PM	1:30 PM	10:30 PM	10											
Lodging	3:00 PM	11:00 PM	2:30 PM	11:30 PM	7											
Lodging	4:00 PM	12:00 AM	3:30 PM	12:30 AM	2	2	2									
Lodging	10:00 PM	6:00 AM	9:30 PM	6:30 AM	2	2	2	2	2	2	2	2	2	2	2	2
Lodging	11:00 PM	7:00 AM	10:30 PM	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
					47	4	4	2	2	2	2	2	2	2	2	2
Restaurant																
Restaurant	5:00 AM	1:00 PM	4:30 AM	1:30 PM	4										4	4
Restaurant	6:30 AM	3:00 PM	6:00 AM	3:30 PM	3											
Restaurant	7:30 AM	4:00 PM	7:00 AM	4:30 PM	2											
Restaurant	9:30 AM	7:30 PM	9:00 AM	8:00 PM	2											
Restaurant	10:00 AM	5:00 PM	9:30 AM	5:30 PM	10											
Restaurant	11:00 AM	7:00 PM	10:30 AM	7:30 PM	3											
Restaurant	11:00 AM	9:00 PM	10:30 AM	9:30 PM	7											
Restaurant	12:00 PM	5:30 PM	11:30 AM	6:00 PM	3											
Restaurant	4:00 PM	12:00 AM	3:30 PM	12:30 AM	9	9	9									
Restaurant	5:00 PM	12:30 AM	4:30 PM	1:00 AM	11	11	11	11								
					54	20	20	11	0	0	0	0	0	0	4	4
					73	24	24	13	2	2	2	2	2	2	6	6

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	Start	End	Lot Start	Lot End	# Employees	5:30 AM	6:00 AM	6:30 AM	7:00 AM	7:30 AM	8:00 AM	8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM
Lodging	6:00 AM	2:00 PM	5:30 AM	2:30 PM	13	13	13	13	13	13	13	13	13	13	13	13	13
Lodging	7:00 AM	3:00 PM	6:30 AM	3:30 PM	9			9	9	9	9	9	9	9	9	9	9
Lodging	8:00 AM	4:00 PM	7:30 AM	4:30 PM	4					4	4	4	4	4	4	4	4
Lodging	2:00 PM	10:00 PM	1:30 PM	10:30 PM	10												
Lodging	3:00 PM	11:00 PM	2:30 PM	11:30 PM	7												
Lodging	4:00 PM	12:00 AM	3:30 PM	12:30 AM	2												
Lodging	10:00 PM	6:00 AM	9:30 PM	6:30 AM	2	2	2	2									
Lodging	11:00 PM	7:00 AM	10:30 PM	7:30 AM	0	0	0	0	0	0							
					47	15	15	24	22	26	26	26	26	26	26	26	26
Restaurant																	
Restaurant	5:00 AM	1:00 PM	4:30 AM	1:30 PM	4	4	4	4	4	4	4	4	4	4	4	4	4
Restaurant	6:30 AM	3:00 PM	6:00 AM	3:30 PM	3		3	3	3	3	3	3	3	3	3	3	3
Restaurant	7:30 AM	4:00 PM	7:00 AM	4:30 PM	2				2	2	2	2	2	2	2	2	2
Restaurant	9:30 AM	7:30 PM	9:00 AM	8:00 PM	2								2	2	2	2	2
Restaurant	10:00 AM	5:00 PM	9:30 AM	5:30 PM	10									10	10	10	10
Restaurant	11:00 AM	7:00 PM	10:30 AM	7:30 PM	3											3	3
Restaurant	11:00 AM	9:00 PM	10:30 AM	9:30 PM	7											7	7
Restaurant	12:00 PM	5:30 PM	11:30 AM	6:00 PM	3												
Restaurant	4:00 PM	12:00 AM	3:30 PM	12:30 AM	9												
Restaurant	5:00 PM	12:30 AM	4:30 PM	1:00 AM	11												
					54	4	7	7	9	9	9	9	11	21	21	31	31
					73	19	22	31	31	35	35	35	37	47	47	57	57

Appendix D (page 3 of 4)

	Start	End	Lot Start	Lot End	# Employees	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM	3:30 PM	4:00 PM	4:30 PM	5:00 PM
Lodging	6:00 AM	2:00 PM	5:30 AM	2:30 PM	13	13	13	13	13	13	13	13					
Lodging	7:00 AM	3:00 PM	6:30 AM	3:30 PM	9	9	9	9	9	9	9	9	9	9			
Lodging	8:00 AM	4:00 PM	7:30 AM	4:30 PM	4	4	4	4	4	4	4	4	4	4	4	4	
Lodging	2:00 PM	10:00 PM	1:30 PM	10:30 PM	10					10	10	10	10	10	10	10	10
Lodging	3:00 PM	11:00 PM	2:30 PM	11:30 PM	7							7	7	7	7	7	7
Lodging	4:00 PM	12:00 AM	3:30 PM	12:30 AM	2									2	2	2	2
Lodging	10:00 PM	6:00 AM	9:30 PM	6:30 AM	2												
Lodging	11:00 PM	7:00 AM	10:30 PM	7:30 AM	0												
					47	26	26	26	26	36	36	43	30	32	23	23	19
Restaurant																	
Restaurant	5:00 AM	1:00 PM	4:30 AM	1:30 PM	4	4	4	4	4	4							
Restaurant	6:30 AM	3:00 PM	6:00 AM	3:30 PM	3	3	3	3	3	3	3	3	3	3			
Restaurant	7:30 AM	4:00 PM	7:00 AM	4:30 PM	2	2	2	2	2	2	2	2	2	2	2	2	
Restaurant	9:30 AM	7:30 PM	9:00 AM	8:00 PM	2	2	2	2	2	2	2	2	2	2	2	2	2
Restaurant	10:00 AM	5:00 PM	9:30 AM	5:30 PM	10	10	10	10	10	10	10	10	10	10	10	10	10
Restaurant	11:00 AM	7:00 PM	10:30 AM	7:30 PM	3	3	3	3	3	3	3	3	3	3	3	3	3
Restaurant	11:00 AM	9:00 PM	10:30 AM	9:30 PM	7	7	7	7	7	7	7	7	7	7	7	7	7
Restaurant	12:00 PM	5:30 PM	11:30 AM	6:00 PM	3	3	3	3	3	3	3	3	3	3	3	3	3
Restaurant	4:00 PM	12:00 AM	3:30 PM	12:30 AM	9									9	9	9	9
Restaurant	5:00 PM	12:30 AM	4:30 PM	1:00 AM	11											11	11
					54	34	34	34	34	34	30	30	30	39	36	47	45
					73	60	60	60	60	70	66	73	60	71	59	70	64

Appendix D (page 4 of 4)

	Start	End	Lot Start	Lot End	# Employees	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM	11:00 PM	11:30 PM
Lodging	6:00 AM	2:00 PM	5:30 AM	2:30 PM	13													
Lodging	7:00 AM	3:00 PM	6:30 AM	3:30 PM	9													
Lodging	8:00 AM	4:00 PM	7:30 AM	4:30 PM	4													
Lodging	2:00 PM	10:00 PM	1:30 PM	10:30 PM	10	10	10	10	10	10	10	10	10	10	10	10		
Lodging	3:00 PM	11:00 PM	2:30 PM	11:30 PM	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Lodging	4:00 PM	12:00 AM	3:30 PM	12:30 AM	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Lodging	10:00 PM	6:00 AM	9:30 PM	6:30 AM	2									2	2	2	2	2
Lodging	11:00 PM	7:00 AM	10:30 PM	7:30 AM	0											0	0	0
					47	19	19	19	19	19	19	19	19	21	21	21	11	11
Restaurant																		
Restaurant	5:00 AM	1:00 PM	4:30 AM	1:30 PM	4													
Restaurant	6:30 AM	3:00 PM	6:00 AM	3:30 PM	3													
Restaurant	7:30 AM	4:00 PM	7:00 AM	4:30 PM	2													
Restaurant	9:30 AM	7:30 PM	9:00 AM	8:00 PM	2	2	2	2	2	2	2							
Restaurant	10:00 AM	5:00 PM	9:30 AM	5:30 PM	10	10												
Restaurant	11:00 AM	7:00 PM	10:30 AM	7:30 PM	3	3	3	3	3	3								
Restaurant	11:00 AM	9:00 PM	10:30 AM	9:30 PM	7	7	7	7	7	7	7	7	7	7				
Restaurant	12:00 PM	5:30 PM	11:30 AM	6:00 PM	3	3	3											
Restaurant	4:00 PM	12:00 AM	3:30 PM	12:30 AM	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Restaurant	5:00 PM	12:30 AM	4:30 PM	1:00 AM	11	11	11	11	11	11	11	11	11	11	11	11	11	11
					54	45	35	32	32	32	29	27	27	27	20	20	20	20
					73	64	54	51	51	51	48	46	46	48	41	41	31	31

Appendix E

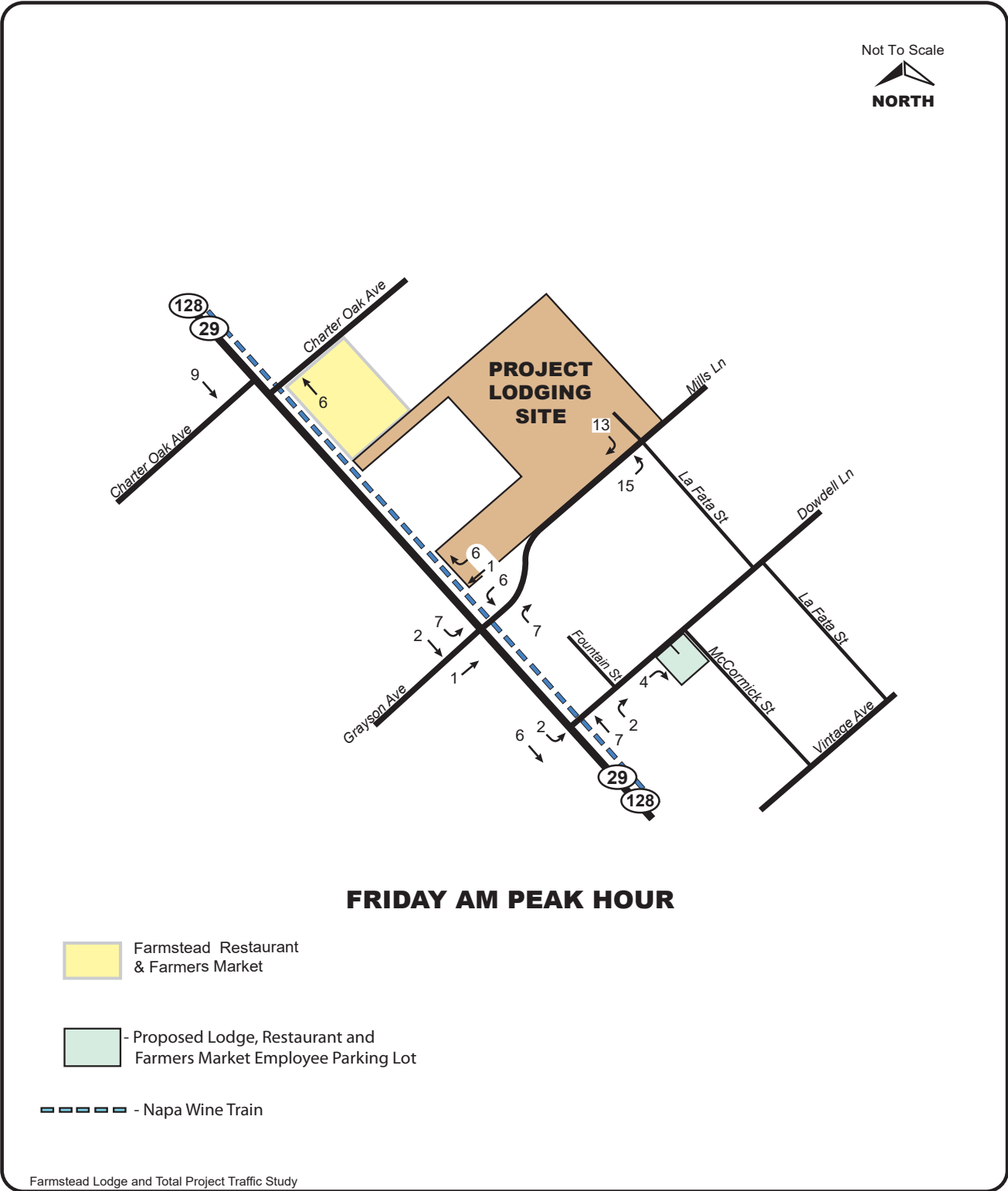


Figure A-4
Friday AM Peak Hour
Lodging Employee & Guest Traffic Distribution

 **CRANE TRANSPORTATION GROUP**

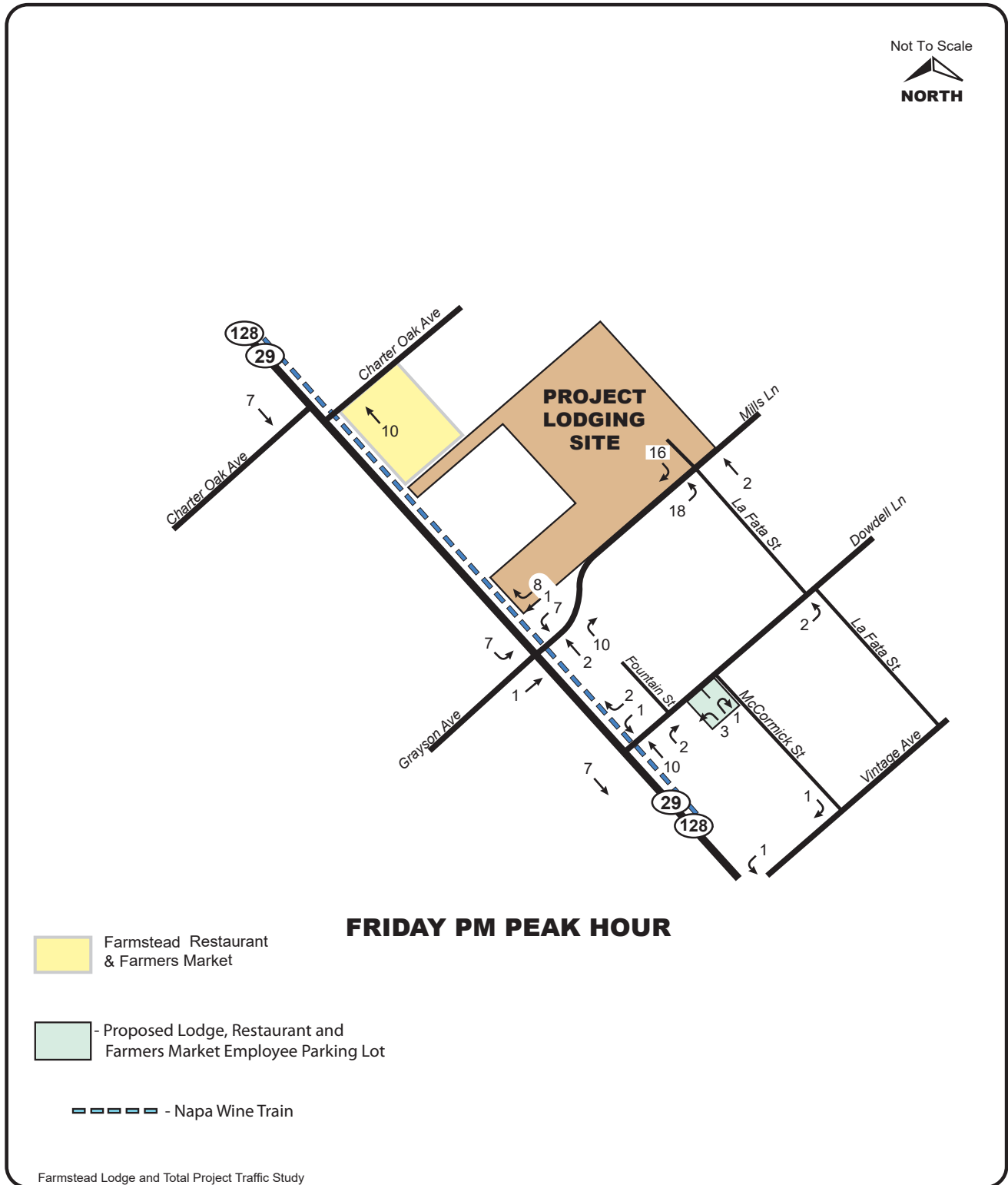


Figure A-5
Friday PM Peak Hour
Lodging Employee & Guest Traffic Distribution

CRANE TRANSPORTATION GROUP

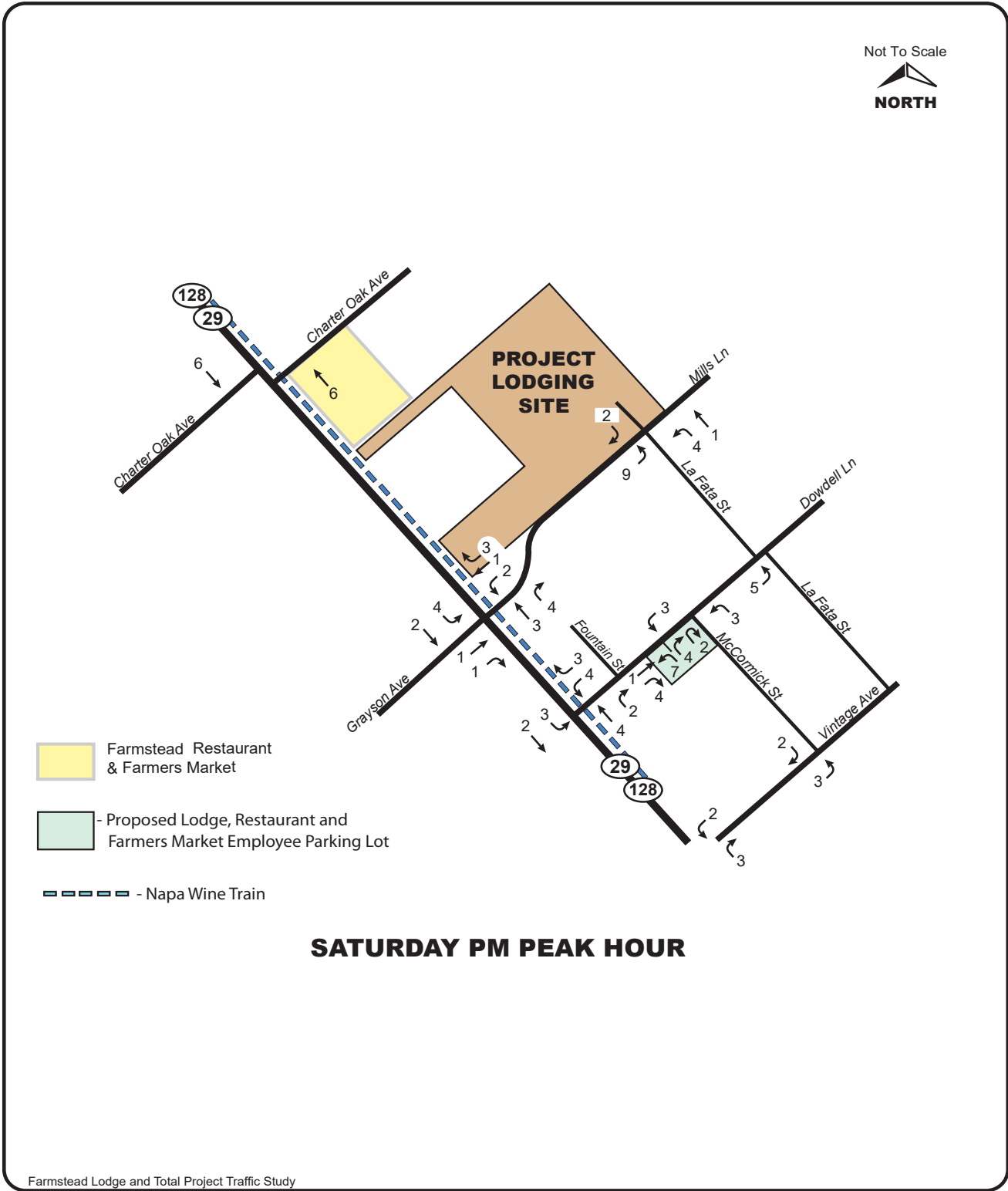


Figure A-6
Saturday PM Peak Hour
Lodging Employee & Guest Traffic Distribution

 **CRANE TRANSPORTATION GROUP**

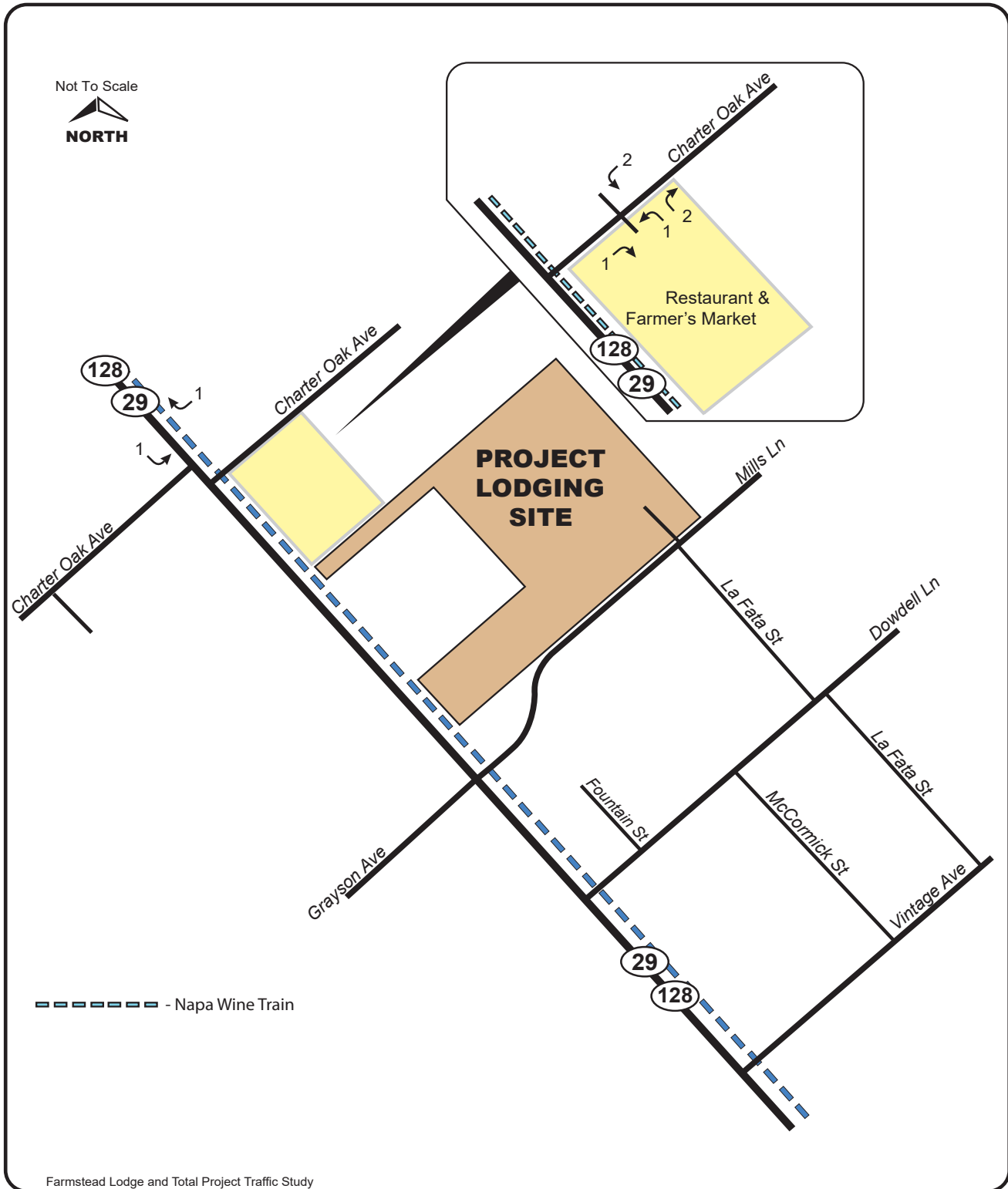
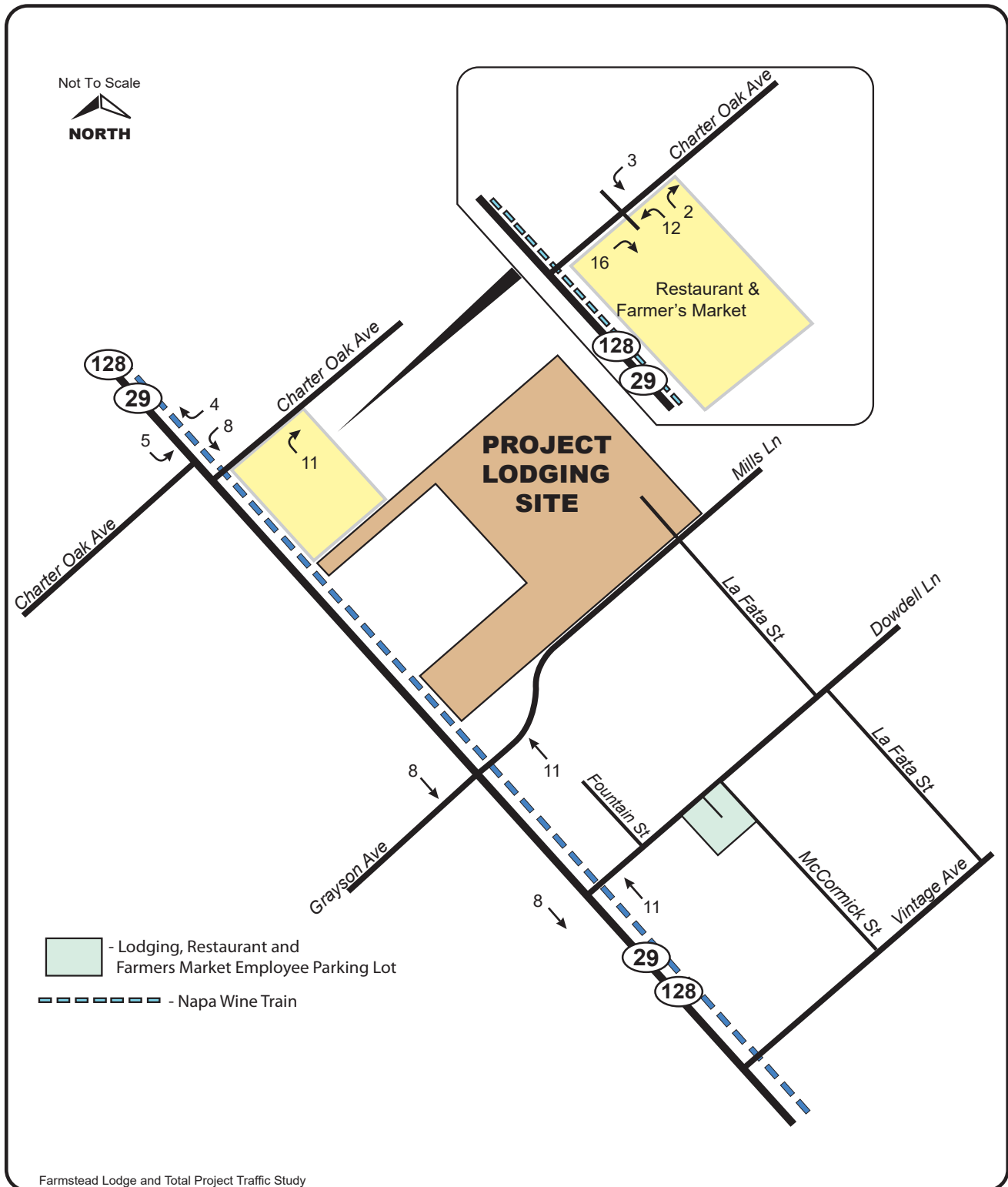


Figure A-7
Butcher Shop Customers
Friday and Saturday PM Peak Hour Volumes



CRANE TRANSPORTATION GROUP

Figure A-8
Harvest Friday or Saturday
200 Person Event - PM Peak Hour Volumes
with Mills Lane Improved and Realigned

ATTACHMENT C

THEORETICAL SEWER CAPACITY ANALYSIS

Farmstead at Long Meadow Ranch Lodging

Sherwood Design Engineers
May 2, 2017



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(415) 677-7300 WWW.SHERWOODENGINEERS.COM

Theoretical Sewer Capacity Analysis

FOR

Farmstead at Long Meadow Ranch Lodging

1000 Mills Lane

St. Helena, CA 94574

PREPARED FOR:

CITY OF ST. HELENA DEPARTMENT OF PUBLIC WORKS

1480 MAIN STREET

ST. HELENA, CA 94574

PREPARED BY:

SHERWOOD DESIGN ENGINEERS

58 MAIDEN LANE, 3RD FLOOR

SAN FRANCISCO, CA 94108

(415) 677-7300



May 2, 2017



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I. Background & Introduction

The Farmstead at Long Meadow Ranch Lodging project is the proposed construction of lodging and related amenities on a 10-acre parcel fronting on Mills Lane. LMR Property Acquisition Partners LLC is applying for a use permit to allow for the proposed uses of the project.

The property slated for improvements, formerly known as the Doumani parcel, is currently vacant land. The proposed project will include 65 guest rooms and suites, a multi-purpose building, including meeting, kitchen, reception, and housekeeping uses, and a fitness center with a pool and spa. A portion of the parcel is zoned for agricultural use and will be operated as a production vegetable farm. Two small barns will be constructed to serve as the farming facility.

The project includes a proposed connection to the nearby 10” sewer main in La Fata Street at the manhole located at the intersection of Dowdell Lane and La Fata Street. See Appendix A for the location of the proposed project point of connection shown on the City of St. Helena Sewer System Map. To ensure that the sewer main has adequate capacity for the increased flows due to the proposed project, a sewer capacity analysis of the sewer main downstream of the project point of connection was performed.

II. Existing Sewer System Capacity

The sewer main that is the focus of this study is the section running from the manhole at the intersection of Dowdell Lane and La Fata Street to the manhole at the intersection of Vintage Avenue and La Fata Street where it connects with the sewer main in Vintage Avenue.

A nearby project, the St. Helena Custom Crush Facility, is also planning to connect to the 10” sewer main in La Fata Street at the Dowdell Lane manhole. Delta Consulting & Engineering completed a sewer capacity study for the project titled “Theoretical Sewer Capacity Analysis for



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the St. Helena Custom Crush Facility,” dated April 6, 2016. Per this report, this section of sewer main is a 10” diameter PVC pipe sloped at approximately 0.5%. See Appendix C for the full report.

Per City of St. Helena standards, maximum sewer main capacity is to be based on a 2/3-full flow depth. Using the Hydraflow Express program, which solves for pipe capacity at a known depth using Manning’s equation, the existing sewer main capacity was found to be 1.576 cubic feet per second = 707 gallons per minute. See Appendix B for the Hydraflow report.

III. Existing and Approved Development Flow

Under existing conditions, the only source of wastewater into the 10” sewer main in La Fata is the Napa Valley Wine Waterhouse. Two new projects have recently been approved to also connect to the 10” sewer main, the Redmon Ranch Winery and the St. Helena Custom Crush Facility projects.

Per the report prepared by Delta Consulting & Engineering titled “Theoretical Sewer Capacity Analysis for the St. Helena Custom Crush Facility,” dated April 6, 2016, the peak wastewater flows for each of these sources are the following:

Source	Peak Flow (gpm)
Napa Valley Wine Waterhouse [Existing]	3
Redmon Ranch Winery [Approved]	40
St. Helena Custom Crush Facility [Approved]	4.2
TOTAL	47.2

The total existing and approved peak flow into the sewer main is 47.2 gallons per minute.

IV. Proposed Project Flow

Per the report prepared by Sherwood Design Engineers titled “Water Use Analysis Report for Farmstead at Long Meadow Ranch Lodging,” the proposed project is anticipated to use 5,148 gallons of water per day. Using the conservative assumption that all of the water demand results in wastewater flow, the proposed project daily wastewater generation is assumed to be 5,148 gallons per day.



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Averaging the daily wastewater generation over 16 hours gives the average flow of 5.4 gallons per minute.

Applying a peaking factor of 2.5 results in the proposed project peak flow of 13.4 gallons per minute. The resulting total flow in the 10" sewer main in La Fata Street is the following:

Source	Peak Flow (gpm)
Existing and Approved Development	47.2
Farmstead at Long Meadow Ranch	13.4
TOTAL	60.6

V. Conclusion

The existing 10" sewer main in La Fata Street has the capacity of 707 gallons per minute when flowing 2/3-full. The proposed project peak flow combined with the existing and approved development peak flow is 60.6 gallons per minute. Therefore, the existing sewer main has capacity for the increased flows due to the proposed project and will still have 91% capacity remaining after the completion of the project.

VI. Appendix

Appendix A – City of St. Helena Sanitary Sewer System Map

Appendix B – Hydraflow Pipe Capacity Report

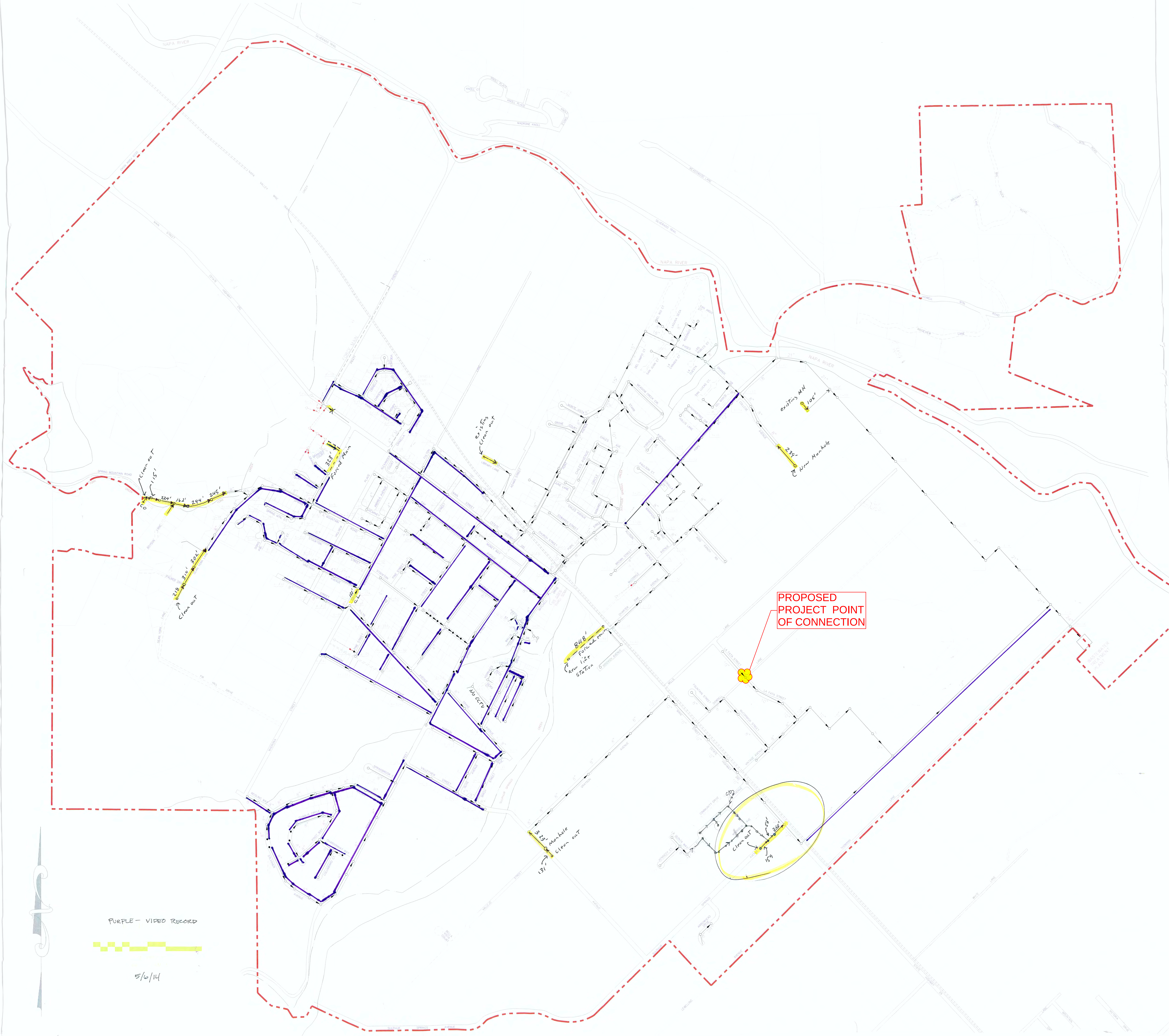
Appendix C – Delta Engineering St. Helena Custom Crush Facility Sewer Capacity Report



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Appendix A

City of St. Helena Sanitary Sewer System Map





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Appendix B

Hydraflow Pipe Capacity Report

Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc.

Friday, Dec 2 2016

10in Sewer Main 2/3 Full Flow Capacity

Circular

Diameter (ft) = 0.83

Invert Elev (ft) = 1.00

Slope (%) = 0.50

N-Value = 0.010

Calculations

Compute by: Known Depth

Known Depth (ft) = 0.56

Highlighted

Depth (ft) = 0.56

Q (cfs) = 1.576

Area (sqft) = 0.39

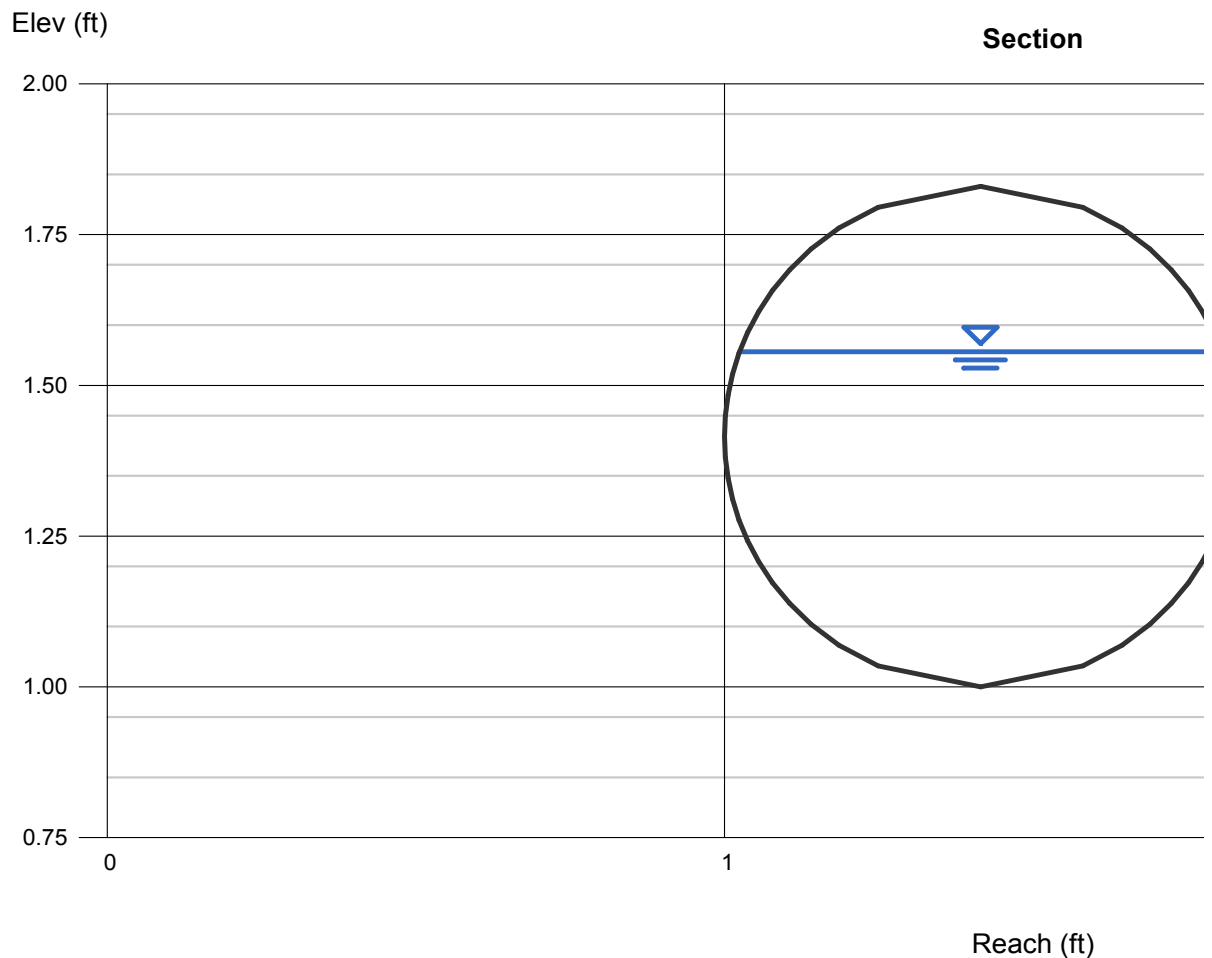
Velocity (ft/s) = 4.08

Wetted Perim (ft) = 1.59

Crit Depth, Yc (ft) = 0.57

Top Width (ft) = 0.78

EGL (ft) = 0.81





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Appendix C

Delta Consulting & Engineering. *Theoretical Sewer Capacity Analysis for the St. Helena Custom Crush Facility.* April 6, 2016.

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OF ST. HELENA**



**THEORETICAL
SEWER CAPACITY ANALYSIS**

FOR THE

**ST. HELENA CUSTOM CRUSH FACILITY
USE PERMIT**

PROJECT LOCATED AT

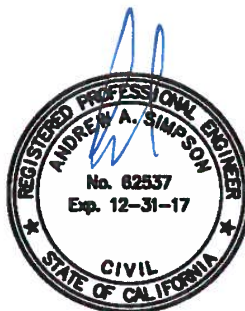
890 DOWDELL LANE
ST. HELENA, CA 94574

COUNTY: NAPA
APN: 009-660-004

INITIAL SUBMITTAL: APRIL 6, 2016

PREPARED FOR REVIEW BY:

CITY OF ST. HELENA
1480 MAIN STREET
ST. HELENA, CA 94574



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DELTA CONSULTING & ENGINEERING
OF ST. HELENA

I. BACKGROUND & INTRODUCTION

St. Helena Custom Crush is applying to the City of St. Helena for a Use Permit to construct and operate a custom crush facility. As part of submitting a complete application, the project is required to conduct a capacity analysis of a portion of the existing City of St. Helena sewer system in the project vicinity. This report describes the sewer main layout in the project vicinity and analyzes the capacity of the existing 10-inch gravity sewer main in La Fata Street, the existing peak daily flow rate demand, and the proposed peak daily flow rate demand based on the proposed development at the St. Helena Custom Crush. A review of the City's sewer system map identified a 10-inch diameter sewer main in La Fata Street as the downstream sewer main affected by the proposed development and this section of the main shall be analyzed.

The existing sewer main information presented in this study is based on the following:

1. The City of St. Helena Sewer System Map dated October 2003.
2. A field survey of 890 Dowdell Lane prepared by Richers Spence and Associated dated December 2015.
3. Project site meeting with Bryan Jackson, Delta Consulting & Engineering and Glenn Price, City of St. Helena Street and Sewer Division Supervisor on December 9, 2015.

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II. EXISTING SEWER SYSTEM & SEWER MAIN CAPACITY

A. System Layout

Based on the sources described above, the existing 10" sewer main installed in La Fata Street flows from a manhole located at the cross section of Dowdell and La Fata streets in a south east direction to a manhole located at the cross section of La Fata and Vintage Avenue. At this intersection, the La Fata Street sewer main joins the Vintage Avenue sewer main which then flows northeast towards the City of St. Helena Wastewater Treatment Plant. Please reference **Appendix 1-Sewer System Map** for a schematic of the existing sewer mains described above.

The St. Helena Custom Crush is proposing to connect to the La Fata Street sewer main at the manhole in Dowdell Lane, the section of La Fata Street sewer main immediately downstream of the manhole will be considered for the capacity analysis. This section of sewer main is a 10-inch diameter PVC pipe, sloped at approximately 0.005. Currently, the only wastewater source upstream of this section of sewer main is the Napa Valley Wine Warehouse (NVWW) located at 410 La Fata Street.

B. System Capacity

According to direction provided by City of St. Helena, the maximum capacity of the existing sewer main should be based on the pipe flowing 2/3 full. Based on industry standards, Manning's Equation can be used to calculate the flow rate of water through a partially full pipe in gravity flow conditions. See the sewer capacity calculations below for the 10-inch gravity sewer main:

Manning's Equation

$$Q = (1.49 / n) * A * R_h^{2/3} * S^{1/2} \quad R_h = A / P_w$$

Where:

Q = Flow Rate (Cubic Feet / Second)

1.49 = Constant (When using English Units)

n = Manning's Coefficient (Based on Pipe Material)

A = Cross-Sectional Area of Water in Pipe (Square Feet)

R_h = Hydraulic Radius (Feet)

P_w = Wetted Perimeter (Feet)

S = Slope (Feet / Feet)

Manning's Equation Component Calculations – Circular Pipe Flowing Partially Full (More than Half)

$$\Theta = 2 * \arcsin [(r - h) / r]$$

$$A = \pi * r^2 - [r^2 * (\Theta - \sin\Theta)] / 2$$

$$P_w = 2 * \pi * r - r * \Theta$$

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Where:

Θ = Angle between radial lines from pipe center to the two high water level points in pipe (Radians)

π = 3.14 (Pi Constant)

h = Distance between pipe crown and high water level in pipe (Feet)

r = Radius (Feet)

Solved Manning's Equation for 2/3 Full Flow in 10-inch Sewer Main in La Fata Street:

Known Components

n = 0.01 (PVC Pipe – Smooth Inner Walls)

r = 0.4167 Feet (Radius of 10-inch Diameter Pipe)

h = 0.277 Feet (Upper 1/3 Vertical Distance of 10-inch Diameter Pipe)

S = 0.005 Feet / Feet

Inputting Known Components into Above Component Calculations Yields:

Θ = 2.462 Radians

A = 0.387 Square Feet

P_w = 1.592 Feet

R_h = 0.243 Square Feet

Q = 1.586 Cubic Feet / Second

Q = 710 Gallons / Minute

Based on the above calculations, the 10-inch sewer main on Dowdell Lane has the capacity to convey 1.586 cubic feet per second (CFS) or 710 gallons per minute (GPM) when the pipe is flowing 2/3 full.

III. EXISTING SEWER MAIN DEMAND

Currently, the only source of wastewater flowing to the manhole at the La Fata Street and Dowdell Lane intersection and corresponding downstream 10-inch sewer main is the Napa Valley Wine Warehouse at 410 La Fata Street. The NVWW consists of several different businesses, all of which are served from a single water meter in Dowdell Lane. The entire building is plumbed to a single sewer main exiting the west side of the building. The building's sewer main conveys wastewater west via gravity flow to a manhole in La Fata Street located approximately 300 feet northwest of the manhole located in the cross section of Dowdell and La Fata.. An 8-inch gravity flow sewer main conveys wastewater from the manhole in La Fata Street to the manhole at the intersection of La Fata Street and Dowdell Lane.

Karen Ames, General Manager of Napa Valley Wine Warehouse, managing tenant of 410 La Fata Street, provided the 2015 annual water use in monthly readings for the entire building. See **Appendix 3** for the breakdown of the monthly water usage for 2015. The Napa Valley Wine Warehouse is approved under the Use Permit Amendment 96-114 to generate up to 2,500 gallons per day. Based on the water meter readings provided, the peak water use of 35,156 gallons occurred in the month of March. This translates to roughly 1,172 gallons per day (GPD) or 3 gallons per minute (GPM). The average estimated GPD and GPM are based on water use occurring during a typical 8-hour work day. Currently the NVWW is only generating about half of their approved wastewater amount. The current

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10-inch sewer main flow rate capacity of 710 GPM vastly exceeds the currently generated peak flow rate of 3 GPM from the NVWW.

IV. PROPOSED SEWER MAIN DEMAND

The proposed increase in wastewater flows entering the 10-inch gravity sewer main on La Fata Street comes from the St. Helena Custom Crush wine production activities. The employees at St. Helena Custom Crush are not considered in the wastewater calculations because the St. Helena Custom Crush office employees will replace the Britton Tree Services Incorporated employees. St. Helena Custom Crush proposes fewer employees than Britton Tree Services Incorporated, therefore the wastewater generated at NVWW is assumed to remain the same.

St. Helena Custom Crush is applying for a use permit for the capacity to produce 120,000 gallons of wine per year. Calculations to develop wastewater flow rates based on the above production capacity are described in the projects Septic Feasibility Report prepared by this office dated April 6th 2016, and was submitted with this Use Permit Application. The report estimated an additional peak daily wastewater flow generation from St. Helena Custom Crush to be 5,700 GPD.

The peak daily flow was averaged over a typical harvest day which is spread over twelve (12) hours, and this resulted in a peak flow rate of approximately 8 GPM. The Septic Feasibility Report noted herein describes the process wastewater will flow into a Lyve pre-treatment unit where it will then be pumped via a lift station at 4.2 GPM into the existing 8-inch gravity sewer main in Dowdell Lane. Based on this analysis, wastewater generated at the St. Helena Custom Crush site will result in a flow rate of 4.2 GPM entering the 10-inch sewer main in La Fata Street.

Delta Consulting & Engineering performed a similar Sewer Capacity Analysis, for the pending Use Permit of the Redmon Ranch Winery, which proposes to contribute flows to the same 10-inch sewer main in La Fata Street. The Redmon Sewer Capacity Analysis was submitted to the City of St. Helena on January 21, 2016 and estimated peak discharge flows from the Redmon Ranch Winery to range between 10 GPM and 40 GPM. The discharge range is due to the pending pump design for the Redmon Ranch Winery project.

Assuming max flow rates a combined wastewater discharge of 44.2 GPM will be added to the Sewer Main in La Fata Street.

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V. CONCLUSION

The capacity of the existing 10-inch sewer main in La Fata Street, on the downstream side of a manhole at the intersection of La Fata Street and Dowdell Lane, was analyzed in this report. This 10-inch sewer main has been identified as the concentration point of all wastewater generated upstream of the proposed St. Helena Custom Crush development. Based on an analysis using Manning's Equation, the 10-inch sewer main has the capacity to convey 710 GPM when the pipe is flowing 2/3 full.

The current wastewater flowing through this pipe comes from the existing NVWW at 410 La Fata Street. An analysis of wastewater flows generated at 410 La Fata estimates an average flow rate of 3 GPM into the sewer system. St. Helena Custom Crush proposes to connect to the sewer system at a rate of 4.2 GPM. Redmon Ranch Winery is estimated to contribute an additional max peak flow of 40 GPM. A summation of the existing and proposed wastewater generation results in a total peak flow of 47.2 GPM.

Based on this analysis, the existing 10-inch sewer main in La Fata Street is adequate to accommodate the proposed wastewater flows from the St. Helena Custom Crush development. The 10-inch sewer main in La Fata will have an additional 662.8 GPM or 93% capacity after development.

R

G

H

REPORT

GEOTECHNICAL INVESTIGATION
MILLS LANE COMMERCIAL PROJECT
ST. HELENA, CALIFORNIA

Project Number: 5700.01.00.2

Prepared For:

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Geotechnical Engineer - 398



May 8, 2001

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INTRODUCTION

This report presents the results of our geotechnical investigation for the Mills Lane Commercial Project to be constructed on the north side of Mills Lane in St. Helena, California. The relatively level property extends northeasterly of Highway 29 over an old vineyard. The site location is shown on Plate 1, Appendix A.

We understand the approximately 6½ acre property will be developed for mixed retail, office and restaurant use. We understand that about 15, one- and two-story, wood-frame structures with slab-on-grade floors will be constructed throughout the property. The structures will be situated among landscaped walkways, driveways and parking areas.

Actual foundation loads are not known at this time. We anticipate the loads will be typical for the light to moderately heavy type of construction planned and that wall loads will range from about 1 to 2 kips per lineal foot.

Grading plans are not available, but we anticipate that the planned grading will be the minimum amount needed to construct level building pads and provide paved areas with positive drainage, and could include cuts and fills on the order of 2 to 3 feet.

SCOPE

The purpose of our investigation, as outlined in our Professional Service Agreement dated April 3, 2001, was to generate geotechnical information for the design and construction of the project. Our scope of services included reviewing selected published geologic data pertinent to the site; evaluating subsurface conditions with test borings and laboratory tests; analyzing the field and laboratory data; and presenting this report with the following geotechnical information:

RGH Geotechnical and Environmental Consultants

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Mills Lane Commercial Project
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1. A brief description of soil and groundwater conditions observed during our investigation;
2. A discussion of seismic hazards that may affect the proposed development;
3. Conclusions and recommendations regarding:
 - a. Primary geotechnical engineering concerns and mitigating measures, as applicable;
 - b. Site preparation and grading including remedial grading of weak, porous, compressible and/or expansive, surface soils;
 - c. Foundation type(s), design criteria and estimated settlement behavior;
 - d. Support of concrete slabs-on-grade;
 - e. Preliminary pavement thickness based on our experience with similar soils and projects and the results of one R-Value test on anticipated subgrade soils;
 - f. Utility trench backfill;
 - g. Geotechnical engineering drainage improvements; and
 - h. Supplemental geotechnical engineering services.

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INVESTIGATION

Site Exploration

We reviewed our previous geotechnical investigations in the vicinity and selected geologic references pertinent to the site. The geologic literature reviewed is listed in Appendix B.

On April 20 and 26, 2001, we performed a geotechnical reconnaissance of the site and explored the subsurface conditions by drilling 11 test borings to depths ranging from about 8 to 15½ feet. The borings were drilled with a truck-mounted drill rig equipped with 6-inch diameter, solid stem augers, at the approximate locations shown on the Exploration Plan, Plate 2. The test boring locations were determined approximately by pacing their distance from features shown on the Exploration Plan and should be considered accurate only to the degree implied by the method used. Our geologist located and logged the borings, and obtained samples of the materials encountered for visual examination, classification and laboratory testing.

Relatively undisturbed samples were obtained from the borings at selected intervals by driving a 2.43-inch inside diameter, split spoon sampler, containing 6-inch long brass liners, using a 140-pound hammer dropping approximately 30 inches. The sampler was driven 12 to 18 inches. The blows required to drive each 6-inch increment were recorded and the blows required to drive the last 12 inches, or portion thereof, were converted to equivalent Standard Penetration blow counts for correlation with empirical data.

The logs of the borings showing the materials encountered, depth to free water, sample depths, and converted blow counts are presented on Plates 3 through 13. The soils are described in accordance with the Unified Soil Classification System, outlined on Plate 14.

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The test boring logs show our interpretation of subsurface soil conditions on the date and at the locations indicated. Subsurface conditions may vary at other locations and times. Our interpretation is based on visual inspection of soil samples, laboratory test results, and interpretation of drilling and sampling resistance. The location of the soil boundaries should be considered approximate. The transition between soil types may be gradual.

Laboratory Testing

The samples obtained from the borings were transported to our office, and re-examined by the project engineer to verify soil classifications, evaluate characteristics, and assign tests pertinent to our analysis. Selected samples were laboratory tested to determine their water content, dry density, classification (Atterberg Limits, percent of silt and clay), unconfined compressive strength, expansion potential (UBC Expansion Index) and R-value. The test results are presented on the test boring logs, with the results of the strength data presented in accordance with the Key to Test Data on Plate 14. Results of the classification, unconfined compression, and R-value tests are presented on Plates 15, 16, and 17, respectively.

SITE CONDITIONS

General

Napa County is located within the California Coast Range geomorphic province. This province is a geologically complex and seismically active region characterized by sub-parallel northwest-trending faults, mountain ranges and valleys. The oldest bedrock

RGH *Geotechnical and Environmental Consultants*

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units are the Jurassic-Cretaceous Franciscan Complex, and the Upper Cretaceous Great Valley sequence sediments originally deposited in a marine environment. Subsequently, younger rocks such as the Tertiary-age Sonoma Volcanics group, the Plio-Pleistocene-age Clear Lake Volcanics and sedimentary rocks such as the Guinda, Domengine, Petaluma, Wilson Grove, Cache, Huichica and Glen Ellen formations were deposited throughout the province. Extensive folding and thrust faulting during late Cretaceous through early Tertiary geologic time created complex geologic conditions that underlie the highly varied topography of today. In valleys, the bedrock is covered by thick alluvial soils. The site is located near the center of the Napa Valley about ½ mile southeast of the City of St. Helena. The Napa Valley is a long, narrow northwest-trending alluvial plain flanked by northwest-trending mountain ridges.

Geology and Soils

The United States Geological Survey (USGS) geologic maps reviewed, Fox et al. (1973), indicate the property is underlain primarily by Quaternary aged alluvial fan deposits (Qyf) grading headward to terrace deposits, and consist of moderately sorted fine sand and silt, with gravel becoming more abundant toward fan heads.

Mapping by the U. S. Soil Conservation Service (Lambert and Kashiwagi, 1978) has classified soil over the portion of this property proposed for development as belonging primarily to the Pleasanton (170) series. The Pleasanton series is said to comprise nearly level, well drained soils on flood plains and alluvial fans with 0 to 2 percent slopes. These soils are shown to exhibit low to moderate plasticity (LL = 25-40; PI = NP-20) and expansion potential. Runoff over these soils is slow. The hazard of erosion is slight. The risk of corrosion is given as moderate for both uncoated steel and for concrete. Performing corrosivity tests to verify these values was not part of our requested and/or proposed scope

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of work. Should the need arise, we would be pleased to provide a proposal to evaluate these characteristics.

Surface

The property extends primarily over an old vineyard. The ground surface is cultivated for weed control and as such is soft and spongy. This is a condition generally associated with weak, porous surface soils. A public utility easement bisects the southern corner of the property.

Natural drainage consists of sheet flow over the ground surface that concentrates on drainage ditches and natural drainage elements such as swales, creeks, and ultimately the Napa River.

Subsurface

Our borings and laboratory tests indicate that the portion of the site we investigated is blanketed by about 2 to 4 feet of weak, porous, compressible surface clayey soils (topsoil and/or subsoil). The surface soils exhibit low to moderate plasticity ($LL = 39$; $PI = 18$) and low expansion potential ($EI = 25-48$). A detailed description of subsurface conditions found in our borings is given in Appendix A.

Groundwater

Free groundwater was first detected in boring B-3 at a depth of about $13\frac{1}{2}$ feet below the ground surface at the time of drilling. When the hole was backfilled about 4 hours after

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drilling was completed, the water level had risen to a depth of about 13 feet. Free water was not encountered in the other boreholes at the time of drilling. Fluctuation in the groundwater level typically occurs because of a variation in rainfall intensity, duration and other factors such as flooding and periodic irrigation.

DISCUSSION AND CONCLUSIONS

Seismic Hazards

General

We did not observe subsurface conditions within the portion of the property we investigated that would suggest the presence of materials that may be susceptible to seismically induced densification, liquefaction, lateral spreading or lurching. Therefore, we judge the potential for occurrence of these phenomena at the Mills Lane site to be low.

Faulting

We did not observe land forms within the area that would indicate the presence of active faults and the site is not within a current Alquist-Priolo Earthquake Fault Zone. Therefore, we believe the risk of fault rupture at the site is low. However, the site is within an area affected by strong seismic activity. Several northwest-trending Earthquake Fault Zones exist in close proximity to, and within several miles of, the site (Brown, 1970; Helley and Herd, 1977; Bortugno, 1982). The shortest distances from the site to these faults are presented below in Table 1.

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TABLE 1
ACTIVE FAULT PROXIMITY

Fault	Direction	Distance-Miles
San Andreas	SW	33
Healdsburg - Rodgers Creek	SW	12½
Concord-Green Valley	SE	17½
Cordelia	SE	19½
West Napa	SE	10
Maacama	NW	15½

The 1997 Uniform Building Code (UBC) has identified the locations of known active fault near-source zones in California and along the California/Nevada border. The purpose of these zones is to determine a near-source factor to be used in design for every site located within Seismic Zone 4. The near-source zones have been mapped considering the surface projection of the source using the dip angle of the fault. For nonvertical faults, the dip of the fault is an important parameter because it determines the location of the fault at depth.

Active faults have been classified as A, B, or C in accordance with the criteria specified in the 1997 UBC (Table 16-U). Only faults classified as A or B are shown on the 1997 UBC maps because the UBC assumes faults classified as C do not increase the near-source factor. The distance from the site to the A and/or B faults that have the potential to control the near-source factors are listed in Table 2 below.

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TABLE 2
1997 UBC NEAR-SOURCE ZONE DISTANCES

Fault	Direction	Fault Type	Distance-km
Rodgers Creek	W	A	21
West Napa	SE	B	12

Seismicity

Historical earthquake records indicate a potential for strong ground shaking throughout the entire San Francisco Bay and Napa County areas, and future seismic shaking should be anticipated at the site. It will be necessary to design and construct the proposed Mills Lane commercial project in strict adherence with current standards for earthquake-resistant construction.

Flooding

Our review of the Federal Emergency Management Agency (FEMA) Flood Zone Map for Napa County, California, City of St. Helena (NO. 060208 0005C) dated September 4, 1987, indicates that the proposed building site is located within Zone "C", an area of minimal flooding. Evaluation of flooding potential is typically the responsibility of the project civil engineer.

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Geotechnical Issues

General

Based on our investigation, we judge the proposed Mills Lane commercial project can be built as planned, provided the recommendations presented in this report are incorporated into its design and construction.

The primary geotechnical concerns during design and construction of the project are:

1. The presence of 2 to 4 feet of weak, porous, compressible, surface clayey soils.
2. The detrimental effects of uncontrolled surface runoff and groundwater seepage on the long-term satisfactory performance of commercial buildings especially those constructed on alluvial plains given the erosion potential and porous nature of the surface soils.
3. The strong ground shaking predicted to impact the site during the life of the project.

Weak, Porous Surface Soils

Weak, porous soils, such as those found at the Mills Lane site, appear hard and strong when dry but will lose strength rapidly and settle under the load of fills, foundations, slabs and pavements as their moisture content increases and approaches saturation. The moisture content of these soils can increase as the result of rainfall, periodic irrigation or when the natural upward migration of water vapor through the soils is impeded by, and condenses under fills, foundations, pavements and slabs. The detrimental effects of such

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movements can be remediated by strengthening the soils during grading. This can be achieved by excavating the weak soils and replacing them as properly compacted (engineered) fill.

Foundation, Slab and Pavement Support

After remedial grading, satisfactory foundation support for the structures can be obtained from spread footings bottomed on the engineered fill. Slab-on-grade floors and pavements can also be satisfactorily supported on the engineered fill.

On-Site Soil Quality

All fill materials used in the building area must be select, as subsequently described. We anticipate that, with the exception of organic matter and of rocks or lumps larger than 6 inches in diameter, the excavated material will be suitable for re-use as general and select fill.

Settlement

If grading is performed and the spread footings are installed in accordance with the recommendations presented in this report, we estimate that post-construction differential settlements across the buildings will be about 1 inch.

Surface Drainage

Surface runoff typically sheet flows over the ground surface but can be concentrated by the planned site grading, landscaping and drainage. The surface runoff can pond against structures and cause deeper than normal soil heave and/or seep into the slab rock.

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Therefore, strict control of surface runoff is necessary to provide long-term satisfactory performance of commercial projects. It will be necessary to divert surface runoff around improvements and provide positive drainage away from structures.

Groundwater

Fluctuations in the groundwater level at the site will probably occur due to variations in rainfall and other factors. Based on our experience in the area, and the observed and measured soil moisture content, it is our opinion that groundwater could rise to near the ground surface, particularly after prolonged periods of rain. Because of the building site proximity to a flood prone area, it will be prudent to construct the building pad with a pronounced gradient to force surface water to flow away from the slab rock.

RECOMMENDATIONS

Seismic Design

The site is within UBC-1997 Edition seismic zone 4; therefore, a Seismic Zone Factor "Z" of 0.4 (Table 16-I), modified as necessary to conform with ordinance(s) adopted by the County of Napa, should be used. The soil profile at the site approximates type S_D (Table 16-J). As presented in Table 2, the site is located within 12 km of the West Napa fault (Type B) and within 21 km of the Rodgers Creek fault (Type A). Using Tables 16-S and 16-T of the 1997 UBC, the near-source factors, N_a and N_v, for the site are 1.0 and 1.0, respectively. The project structural engineer should determine the appropriate seismic response coefficients (C_a and C_v) needed to determine total design lateral force in accordance with the UBC.

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Grading

Site Preparation

Areas to be developed should be cleared of vegetation and debris. Trees and shrubs that will not be part of the proposed development should be removed and their primary root systems grubbed. Cleared and grubbed material should be removed from the site and disposed of in accordance with County Health Department guidelines. We did not observe septic tanks, leach lines or underground fuel tanks during our investigation. Any such appurtenances found during grading should be capped and sealed and/or excavated and removed from the site, respectively, in accordance with established guidelines and requirements of the County Health Department. Voids created during clearing should be backfilled with engineered fill as recommended herein.

Stripping

Areas to be graded should be stripped of the upper few inches of soil containing organic matter. Soil containing more than two percent by weight of organic matter should be considered organic. Actual stripping depth should be determined by a representative of the geotechnical engineer in the field at the time of stripping. The strippings should be removed from the site, or if suitable, stockpiled for re-use as topsoil in landscaping.

Excavations

Following initial site preparation, excavation should be performed as planned or recommended herein. Excavations extending below the proposed finished grade should be backfilled with suitable materials compacted to the requirements given below.

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Within building areas, the weak, porous, compressible surface soils should be excavated to within 6 inches of their entire depth (about 2 to 4 feet in our borings). The excavation of weak, compressible soils should also extend at least 12 inches below exterior slab and/or pavement subgrade.

The excavation of weak, porous, compressible surface soil should extend at least 5 feet beyond the limits of the proposed buildings and 3 feet beyond the edge of exterior slabs and/or pavements. The excavated materials should be stockpiled for later use as compacted fill, or removed from the site, as applicable.

Where evidence of seepage is observed, a subsurface drain should be installed as recommended by the geotechnical engineer, subdrains should also be installed. The subdrain should consist of a 4-inch diameter perforated plastic pipe with SDR 35 or better embedded in Class 2 permeable material. The drain should be at least 12 inches thick and extend at least 4 feet below the ground surface. The depth and extent of subdrains should be determined and approved by the geotechnical engineer in the field during construction.

At all times, temporary construction excavations should conform to the regulations of the State of California, Department of Industrial Relations, Division of Industrial Safety or other stricter governing regulations. The stability of temporary cut slopes, such as those constructed during the installation of underground utilities, should be the responsibility of the contractor. Depending on the time of year when grading is performed, and the surface conditions exposed, temporary cut slopes may need to be excavated to 1½:1, or flatter. The tops of the temporary cut slopes should be rounded back to 2:1 in weak soil zones.

Fill Quality

All fill materials should be free of perishable matter and rocks or lumps over 6 inches in diameter, and must be approved by the geotechnical engineer prior to use. The upper 30 inches of fill beneath and within 5 feet of building areas and the upper 12 inches of

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fill beneath and within 3 feet of exterior slabs and/or pavement edges should be select fill.
 We judge the on-site soils are generally suitable for use as general fill and select fill.

Select Fill

Select fill should be free of organic matter, have a low expansion potential, and conform in general to the following requirements:

SIEVE SIZE	PERCENT PASSING (By Dry Weight)
6 inch	100
4 inch	90 - 100
No. 200	10 - 60
Liquid Limit - 40 Percent Maximum	
Plasticity Index - 15 Percent Maximum	

In general, imported fill, if needed, should be select. Material not conforming to these requirements may be suitable for use as import fill; however, it shall be the contractor's responsibility to demonstrate that the proposed material will perform in an equivalent manner. The geotechnical engineer should approve imported materials prior to use as compacted fill.

Fill Placement

The surface exposed by stripping and removal of weak, compressible surface soils should be scarified to a depth of at least 6 inches, uniformly moisture-conditioned to near optimum, and compacted to at least 90 percent of the maximum dry density of the materials as determined by the ASTM D-1557 laboratory compaction test procedure. Approved on-

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site soils or select fill material should then be spread in thin lifts, uniformly moisture-conditioned to near optimum and compacted to at least 90 percent relative compaction. Only approved select materials should be used for fill within the upper 30 inches of building pad subgrades and within the upper 12 inches of exterior slabs and/or pavement subgrades.

Permanent Cut and Fill Slopes

In general, cut and fill slopes should be no steeper than 2:1. Where steeper slopes are required, retaining walls should be used.

Wet Weather Grading

Generally, grading is performed more economically during the summer months when on-site soils are usually dry of optimum moisture content. Delays should be anticipated in site grading performed during the rainy season or early spring due to excessive moisture in on-site soils. Special and relatively expensive construction procedures, including dewatering of excavations and importing granular soils, should be anticipated if grading must be completed during the winter and early spring or if localized areas of soft saturated soils are found during grading in the summer and fall.

Foundation Support

Provided the weak surface soils are removed or strengthened by grading as recommended herein, the proposed structure can be supported on conventional continuous and isolated spread footings that bottom on select engineered fill.

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Spread Footings

Spread footings should be at least 12 inches wide and should bottom on select compacted fill, at least 12 inches below pad subgrade. The continuous footings should have sufficient reinforcement to span, as a simple beam, an unsupported distance of approximately 10 feet. At corners, the continuous footings should be designed to cantilever at least 5 feet. In the absence of structural calculations that validate this requirement, perimeter footings, except retaining walls, should be reinforced with two No. 4 bars (top and bottom).

The bottoms of all footing excavations should be thoroughly cleaned out or wetted and compacted using hand-operated tamping equipment prior to placing steel and concrete. This will remove the supporting soils disturbed during footing excavations, or restore their adequate bearing capacity, and reduce post-construction settlements.

Bearing Pressures - Footings installed in accordance with these recommendations may be designed using allowable bearing pressures of 2000, 2500, and 3000 pounds per square foot (psf), for dead loads, dead plus code live loads, and total loads (including wind and seismic), respectively.

Lateral Pressures - The portion of spread footing foundations extending into select engineered fill may impose a passive equivalent fluid pressure and a friction factor of 350 pcf and 0.35, respectively, to resist sliding. Passive pressure should be neglected within the upper 6 inches, unless the soils are confined by concrete slabs or pavements.

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Slab-On-Grade

Provided grading is performed in accordance with the recommendations presented herein, slabs should be underlain by firm, select engineered fill.

Slab-on-grade subgrade should be rolled to produce a dense, uniform surface. The future expansion potential of the subgrade soils should be reduced by thoroughly presoaking the slab subgrade prior to concrete placement. The slabs should be underlain with a capillary moisture break consisting of at least 4 inches of clean, free-draining crushed rock or gravel at least 1/4-inch and no larger than 3/4-inch in size. Interior slabs subject to vehicular traffic should be underlain by crushed rock. Class 2 aggregate base can be used for slab rock under exterior slabs subjected to vehicular traffic. Where migration of moisture vapor through slabs would be detrimental, an impermeable membrane moisture vapor barrier should be provided between the drain rock and the slabs.

Slabs-on-grade should be designed by the project civil or structural engineer to support the anticipated loads. Slabs should be at least 4 inches thick, and should be reinforced to reduce cracking. Slabs subjected to heavy concentrated wheel loads, such as forklift or trailer-trucks, should be designed to carry the anticipated wheel loads. Slabs should be grooved at regular intervals to induce and control cracking.

Utility Trenches

Trench excavations shoring and safety is the sole responsibility of the contractor. Attention is drawn to the State of California Safety Orders dealing with "Excavations and Trenches".

Unless otherwise specified by the City of St. Helena, on-site, inorganic soil may be used as general utility trench backfill. Where utility trenches support pavements, slabs and foundations, trench backfill should consist of aggregate baserock. The baserock should

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comply with the minimum requirements in Caltrans Standard Specifications, Section 26 for Class 2 Aggregate Base. Trench backfill should be moisture-conditioned as necessary, and placed in horizontal layers not exceeding 8 inches in thickness, before compaction. Each layer should be compacted to at least 90 percent relative compaction as determined by ASTM Test D-1557. The top lift of trench backfill under vehicle pavements should be moisture conditioned as necessary and compacted to at least 95 percent relative compaction. Jetting or ponding of trench backfill to aid in achieving the recommended degree of compaction should not be attempted.

Pavements

Based on our investigation, we believe the near-surface soils will have a low supporting capacity, after proper compaction, when used as a pavement subgrade. An R-value of 12 was measured on a bulk sample of near-surface soil obtained near boring B-11. Because of potential variation in the on-site soils, we selected an R-value of 10 for use in pavement design calculations. The assumed Traffic Indices (TI) are judged to be representative of the anticipated traffic but are not based on actual truck traffic counts or predictions of counts. Actual truck traffic counts may require revision of these traffic indices.

Based on the selected R-Value and our experience with similar projects and soils, we recommend that the pavement section listed on Table 2, below be used.

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TABLE 2
PAVEMENT SECTIONS

TRAFFIC TYPE	TI	THICKNESS (inches)		
		ASPHALT CONCRETE	CLASS 2 AGGREGATE BASE	AGGREGATE SUBBASE
Heavy Truck Lanes	6.5	3.5	13.5	---
		3.5	6.5	8.0
Parking Lots	4.5	2.5	8.5	---

Pavement thicknesses were computed using Method 301 F of the Caltrans Highway Design Manual and are based on a pavement life of 20 years.

As previously discussed, pavement performance should be enhanced and the incidence of edge cracking and repairs reduced by installation of a supporting layer of select fill at least 12 inches thick under pavement subgrades.

Prior to placement of aggregate base and subbase materials, the upper 6 inches of the pavement subgrade soils should be scarified, uniformly moisture conditioned to near optimum, and compacted to at least 95 percent relative compaction to form a firm, non-yielding surface. Aggregate subbase and aggregate base materials should be spread in thin layers, uniformly moisture conditioned, and compacted to at least 95 percent relative compaction to form a firm non-yielding surface.

The materials and methods used should conform to the requirements of the City of St. Helena and the current edition of the Caltrans Standard Specifications, except that compaction requirements should be based on ASTM Test Method D-1557. Aggregate used for the base course should comply with the minimum requirements specified in Caltrans Standard Specifications, Section 26 for Class 2 Aggregate Base. Aggregate used for the

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subbase course should be non-expansive and should comply with the minimum requirements specified in Section 25 for Class 2 Aggregate Subbase.

These recommendations are intended to provide support for the auto and truck traffic represented by the indicated Traffic Indexes. They are not intended to provide pavement sections for heavy concentrated construction storage or wheel loads such as forklifts, parked truck-trailers and concrete trucks or for post-construction concentrated wheel loads such as self-loading dumpster trucks.

In areas where heavy construction storage and wheel loads are anticipated, the pavements should be designed to support these loads. Support could be provided by increasing pavement sections or by providing reinforced concrete slabs. Alternatively, paving can be deferred until heavy construction storage and wheel loads are no longer present. Loading areas for self loading dumpster trucks should be provided with reinforced concrete slabs at least 6 inches thick, and reinforced with No. 4 bars at 12-inch centers each way. Alternatively, the asphalt concrete section should be increased to at least 8 inches in these areas.

Parking Lot Drainage

Water tends to migrate under pavements and collect in the aggregate courses at low areas on parking lot subgrade soils such as around storm drain inlets and the thread of paved swales leading to inlets. The ponded water will soften subgrade soils and, under repetitive heavy-wheel loads, will induce inordinately high stresses on the subgrade and pavement components that could result in untimely maintenance. Under-pavement drainage can be improved and maintenance reduced by replacing a 12-inch wide strip (extending at least 15 feet on either side of the inlet) of the select subbase layer or subgrade soils with ¾-inch or 1½-inch free-draining Class 2 permeable material. The drain rock should be outletted into the storm drain inlet.

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Where pavements will abut landscaped areas, the pavement baserock layer and subgrade soils should be protected against saturation from irrigation and rain water with a subdrain, similar to that previously discussed. The subdrain should extend to a depth of at least 6 inches below the bottom of the baserock layer.

Wet Weather Paving

In general, the pavements should be constructed during the dry season to avoid the saturation of the subgrade and base materials which often occurs during the wet winter months. If pavements are constructed during the winter, a cost increase relative to drier weather construction should be anticipated. Unstable areas may have to be over-excavated to remove soft soils. The excavations will probably require backfilling with imported crushed (ballast) rock. The geotechnical engineer should be consulted for recommendations at the time of construction.

Geotechnical Drainage

Surface water should be diverted away from foundations and edges of pavements. Surface drainage gradients within 10 feet of building foundations should be constructed with a minimum slope of 2 percent for paved areas and 4 percent for unpaved areas. Roofs should be provided with gutters, and the downspouts should empty onto splash blocks that discharge directly onto paved areas or be connected to closed (glued Schedule 40 PVC or better) conduits discharging well away from foundations, preferably onto paved areas or into the storm drainage system.

Where interior slab subgrades are lower than adjacent exterior grade a subdrain should be installed adjacent to perimeter foundations to prevent surface runoff from entering the slab rock. Foundation drains should be installed adjacent to perimeter

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foundations, except the downhill side. Foundation drains should consist of trenches at least 18 inches deep and sloped to drain by gravity. Three-inch diameter perforated pipe sloped to drain to outlets by gravity should be placed in the bottom of the trenches. The top of subdrain pipes should be at least 6 inches lower than the adjacent slab subgrade. The perimeter subdrain trenches should be backfilled to within 6 inches of the surface with clean, free-draining Class 2 permeable material. The upper 6 inches should be backfilled with compacted soil to exclude surface water. An illustration of this system is shown on Plate 18.

Piped outlets should be provided to allow drainage of water collected in the slab rock through foundations and discharge into the storm drain system. Additional protection against water seepage into slab rock can be obtained by compacting fill placed adjacent to exterior walls to at least 90 percent relative compaction. Roof downspouts and surface drains must be maintained entirely separate from foundation drains.

Water seepage or the spread of extensive root systems into the soil subgrade of footings, slabs or pavements could cause differential movements and consequent distress in these structural elements. Landscaping should be planned with consideration for these potential problems.

Maintenance

Periodic land maintenance will be required. Surface and subsurface drainage facilities should be checked frequently, and cleaned and maintained as necessary. A dense growth of deep-rooted ground cover must be maintained on all slopes to reduce sloughing and erosion. Sloughing and erosion that occurs must be repaired promptly before it can enlarge.

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Supplemental Services

RGH Geotechnical and Environmental Consultants (RGH) recommends that we be retained to review the project plans and specifications to determine if they are consistent with our recommendations. In addition, we should be retained to observe construction, particularly site excavations, compaction of fill, foundation and subdrain installations, and perform appropriate laboratory testing.

If, during construction, we observe subsurface conditions different from those encountered during the explorations, we should be allowed to amend our recommendations accordingly. If different conditions are observed by others, or appear to be present beneath excavations, RGH should be advised at once so that these conditions may be evaluated and our recommendations reviewed and updated, if warranted. The validity of recommendations made in this report is contingent upon our being notified and retained to review the changed conditions.

If more than 18 months have elapsed between the submission of this report and the start of work at the site, or if conditions have changed because of natural causes or construction operations at, or adjacent to, the site, the recommendations made in this report may no longer be valid or appropriate. In such case, we recommend that we be retained to review this report and verify the applicability of the conclusions and recommendations or modify the same considering the time lapsed or changed conditions. The validity of recommendations made in this report is contingent upon such review.

These supplemental services are performed on an as-requested basis and are in addition to this geotechnical investigation. We cannot accept responsibility for items that we are not notified to observe or for changed conditions we are not allowed to review.

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LIMITATIONS

This report has been prepared by RGH for the exclusive use of Mr. Carl Doumani and his consultants as an aid in the design and construction of the proposed Mills Lane commercial project described in this report.

The validity of the recommendations contained in this report depends upon an adequate testing and monitoring program during the construction phase. Unless the construction monitoring and testing program is provided by our firm, we will not be held responsible for compliance with design recommendations presented in this report and other addendum submitted as part of this report.

Our services consist of professional opinions and conclusions developed in accordance with generally accepted geotechnical engineering principles and practices. We provide no other warranty, either expressed or implied. Our conclusions and recommendations are based on the information provided to us regarding the proposed construction, the results of our field exploration, laboratory testing program, and professional judgement. Verification of our conclusions and recommendations is subject to our review of the project plans and specifications, and our observation of construction.

The test borings represent subsurface conditions at the locations and on the date indicated. It is not warranted that they are representative of such conditions elsewhere or at other times. Site conditions and cultural features described in the text of this report are those existing at the time of our field exploration on April 20 and 26, 2001, and may not necessarily be the same or comparable at other times.

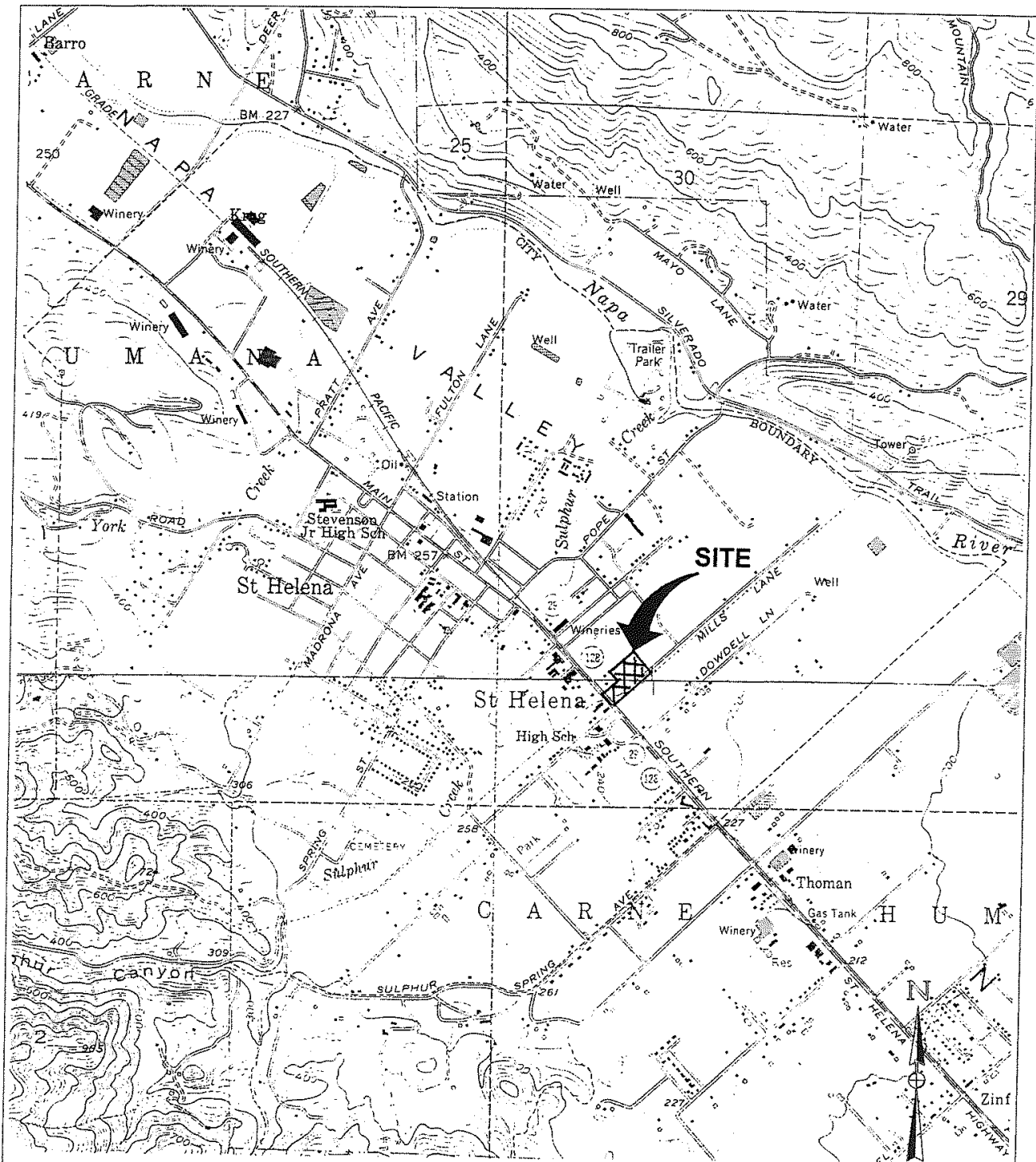
The scope of our services did not include an environmental assessment or an investigation of the presence or absence of hazardous, toxic or corrosive materials in the soil, surface water, groundwater or air (on, below or around this site), nor did it include an evaluation or investigation for the presence or absence of wetlands.

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APPENDIX A - PLATES

LIST OF PLATES

Plate 1	Site Location Map
Plate 2	Exploration Plan
Plates 3 through 13	Log of Borings 1 through 11
Plate 14	Soil Classification Chart and Key to Test Data
Plate 15	Classification Test Data
Plate 16	Unconfined Compression Strength
Plate 17	Resistance (R) Value Data
Plate 18	Perimeter Foundation Drain Illustration



Reference: U.S.G.S. Rutherford & St. Helena 7½-Minute Quadrangles

Scale: 1" = 2000'

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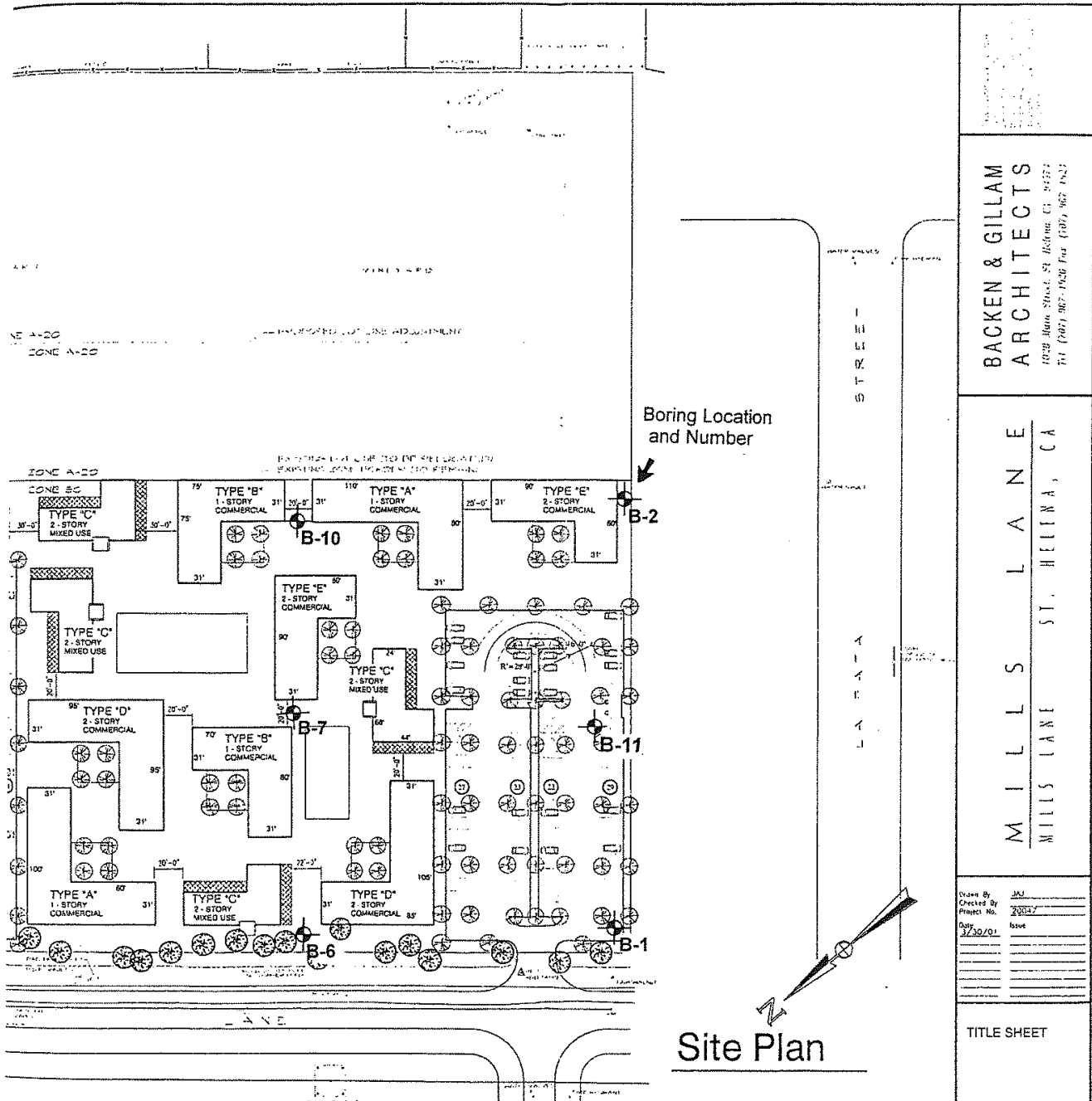
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SITE LOCATION MAP
MILLS LANE COMMERCIAL PROJECT
St. Helena, California

PLATE
1



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EXPLORATION PLAN
MILLS LANE COMMERCIAL PROJECT
St. Helena, California

PLATE
2

Geotechnical and Environmental Consultants				LOG OF BORING B-1 Page 1 of 1		
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/ FOOT*	DEPTH (ft)	SAMPLES SYMBOLS	MATERIALS DESCRIPTION
UBC Expansion Index = 30 (low)	91	13.9	10			DARK BROWN SANDY CLAY (CL) medium stiff, moist; porous, disced, w/ gravel (Topsoil)
	104	15.4				
UBC Expansion Index = 45 (low)	111	16.6	10			BROWN SANDY CLAY (CL) medium stiff, wet; w/ gravel (Subsoil)
	107	19.9	22	5		<i>Becoming stiff to very stiff below 5 feet</i>
			36	10		BROWN CLAYEY GRAVEL (GC) dense, wet;
						NO FREE GROUNDWATER OBSERVED
				15		

*BLOW COUNTS - Converted to Equivalent Standard Penetration Blow Counts

**ELEVATION - Existing Ground Surface

PROJECT <u>Mills Lane Commercial Project</u>	DRILLING COMPANY <u>Pearson Drilling</u>	PLATE 3
LOCATION <u>St. Helena, California</u>	DATE DRILLED <u>04/20/01</u>	
JOB NUMBER <u>5700.01.00.2</u>	SURFACE ELEVATION** <u>Feet</u>	
LOGGED BY <u>LAS</u>	TOTAL DEPTH OF HOLE <u>10.5 Feet</u>	
DRILL RIG <u>6-inch Solid Stem Auger</u>	APPROVED BY <u>[Signature]</u>	

 Geotechnical and Environmental Consultants		LOG OF BORING B-2		Page 1 of 1	
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/ FOOT*	DEPTH (ft)	MATERIALS DESCRIPTION
Strength Test (See Plate 16)	97	22.8	10	0	DARK BROWN SANDY CLAY (CL) medium stiff, moist; porous, disced, w/ roots and gravel (Topsoil)
	106	13.0	13	1	BROWN SANDY CLAY (CL) stiff, wet; w/ gravel (Subsoil)
				5	BROWN CLAYEY GRAVEL (GC) dense, wet;
			50+	10	NO FREE GROUNDWATER OBSERVED
				15	

*BLOW COUNTS - Converted to Equivalent Standard
Penetration Blow Counts
**ELEVATION - Existing Ground Surface

PROJECT	Mills Lane Commercial Project	DRILLING COMPANY	Pearson Drilling	PLATE 4
LOCATION	St. Helena, California	DATE DRILLED	04/20/01	
JOB NUMBER	5700.01.00.2	SURFACE ELEVATION**	Feet	
LOGGED BY	LAS	TOTAL DEPTH OF HOLE	9 Feet	
DRILL RIG	6-inch Solid Stem Auger	APPROVED BY		

Geotechnical and Environmental Consultants				LOG OF BORING B-3	
				Page 1 of 1	
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/ FOOT*	DEPTH (ft)	MATERIALS DESCRIPTION
	107	12.2	12	0	DARK BROWN SANDY CLAY (CL) medium stiff, moist; porous, disced, w/ gravel (Topsoil)
				1	
	108	18.0	7	2	
				3	
	109	17.3	12	4	BROWN SANDY CLAY (CL) medium stiff to stiff, wet; w/ gravel (Subsoil)
				5	
				6	
				7	
				8	
				9	
				10	BROWN CLAYEY GRAVEL (GC) very dense, wet;
			50+	11	
				12	
				13	
				14	
				15	WATER LEVEL AFTER ± 4 HOURS ∇ First Water Encountered
			42	16	

*BLOW COUNTS - Converted to Equivalent Standard Penetration Blow Counts

**ELEVATION - Existing Ground Surface

PROJECT <u>Mills Lane Commercial Project</u>	DRILLING COMPANY <u>Pearson Drilling</u>	PLATE
LOCATION <u>St. Helena, California</u>	DATE DRILLED <u>04/26/01</u>	5
JOB NUMBER <u>5700.01.00.2</u>	SURFACE ELEVATION** <u>Feet</u>	
LOGGED BY <u>LAS</u>	TOTAL DEPTH OF HOLE <u>15.5 Feet</u>	
DRILL RIG <u>6-inch Solid Stem Auger</u>	APPROVED BY <u>[Signature]</u>	

R G H Geotechnical and Environmental Consultants				LOG OF BORING B-4		
				Page 1 of 1		
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/ FOOT*	DEPTH (ft) SAMPLES SYMBOLS	MATERIALS DESCRIPTION	
UBC Expansion Index = 48 (low)	103	19.1	9	0	DARK BROWN SANDY CLAY (CL) medium stiff, wet; porous, disced, w/ gravel (Topsoil)	
Strength Test (See Plate 16)	104	22.4	10	5	BROWN SANDY CLAY (CL) medium stiff to stiff, wet; w/ gravel (Subsoil)	
				25	BROWN CLAYEY GRAVEL (GC) medium dense, wet;	
				10	NO FREE GROUNDWATER OBSERVED	
				15		

*BLOW COUNTS - Converted to Equivalent Standard Penetration Blow Counts

**ELEVATION - Existing Ground Surface

PROJECT <u>Mills Lane Commercial Project</u>	DRILLING COMPANY <u>Pearson Drilling</u>	PLATE
LOCATION <u>St. Helena, California</u>	DATE DRILLED <u>04/26/01</u>	6
JOB NUMBER <u>5700.01.00.2</u>	SURFACE ELEVATION** <u>Feet</u>	
LOGGED BY <u>LAS</u>	TOTAL DEPTH OF HOLE <u>9.5 Feet</u>	
DRILL RIG <u>6-inch Solid Stem Auger</u>	APPROVED BY <u>[Signature]</u>	

Geotechnical and Environmental Consultants				LOG OF BORING B-5 Page 1 of 1	
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/ FOOT*	DEPTH (ft)	SAMPLES SYMBOLS MATERIALS DESCRIPTION
			9		DARK BROWN SANDY CLAY (CL) medium stiff, moist: porous, disced, w/ gravel (Topsoil)
			12		BROWN CLAYEY GRAVEL (GC) medium dense to dense, wet:
			35		With larger gravels @ ±7-8 feet NO FREE GROUNDWATER OBSERVED
				5	
				10	
				15	

*BLOW COUNTS - Converted to Equivalent Standard Penetration Blow Counts
 **ELEVATION - Existing Ground Surface

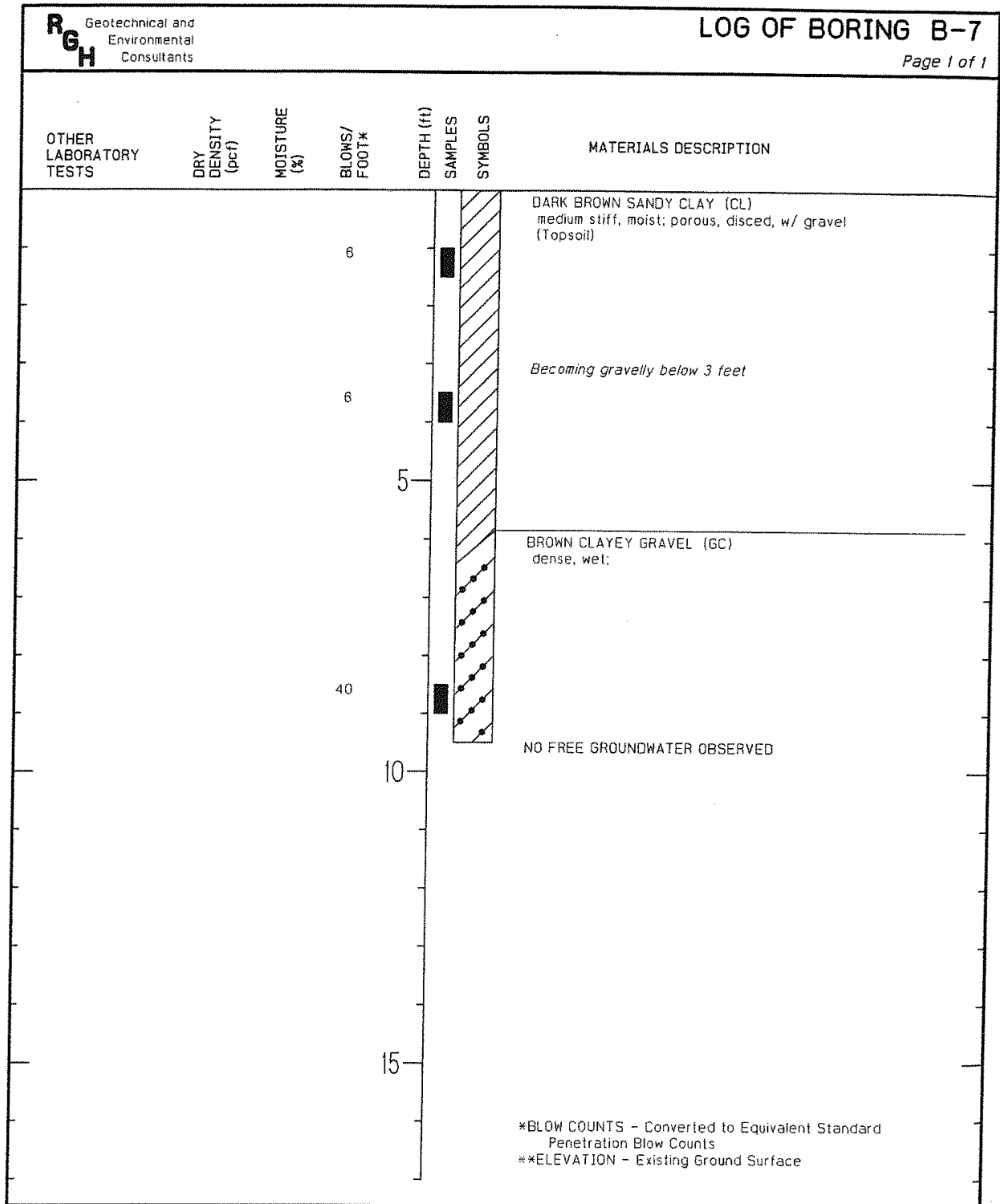
PROJECT <u>Mills Lane Commercial Project</u>	DRILLING COMPANY <u>Pearson Drilling</u>	PLATE 7
LOCATION <u>St. Helena, California</u>	DATE DRILLED <u>04/26/01</u>	
JOB NUMBER <u>5700.01.00.2</u>	SURFACE ELEVATION** <u>Feet</u>	
LOGGED BY <u>LAS</u>	TOTAL DEPTH OF HOLE <u>9.5 Feet</u>	
DRILL RIG <u>6-inch Solid Stem Auger</u>	APPROVED BY	

RGH Geotechnical and Environmental Consultants		LOG OF BORING B-6 <i>Page 1 of 1</i>					
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/FOOT*	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
			8	8	■	■	DARK BROWN SANDY CLAY (CL) medium stiff, moist; porous, disced, w/ gravel (Topsoil)
			8	8	■	■	
				5			BROWN SANDY CLAY (CL) very stiff, wet; w/ gravel (Subsoil)
			19	19	■	■	
				10			
							Becomes gravelly below 12 feet
			25	25	■	■	NO FREE GROUNDWATER OBSERVED
				15			

*BLOW COUNTS - Converted to Equivalent Standard Penetration Blow Counts

**ELEVATION - Existing Ground Surface

PROJECT <u>Mills Lane Commercial Project</u> LOCATION <u>St. Helena, California</u> JOB NUMBER <u>5700.01.00.2</u> LOGGED BY <u>LAS</u> DRILL RIG <u>8-inch Solid Stem Auger</u>	DRILLING COMPANY <u>Pearson Drilling</u> DATE DRILLED <u>04/26/01</u> SURFACE ELEVATION** <u>Feet</u> TOTAL DEPTH OF HOLE <u>13.5 Feet</u> APPROVED BY <u><i>[Signature]</i></u>	PLATE 8
--	--	-------------------



PROJECT <u>Mills Lane Commercial Project</u>	DRILLING COMPANY <u>Pearson Drilling</u>	PLATE 9
LOCATION <u>St. Helena, California</u>	DATE DRILLED <u>04/26/01</u>	
JOB NUMBER <u>5700.01.00.2</u>	SURFACE ELEVATION** <u>Feet</u>	
LOGGED BY <u>LAS</u>	TOTAL DEPTH OF HOLE <u>9.5 Feet</u>	
DRILL RIG <u>6-inch Solid Stem Auger</u>	APPROVED BY <u></u>	

R_GH Geotechnical and Environmental Consultants		LOG OF BORING B-8 <i>Page 1 of 1</i>			
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/ FOOT*	DEPTH (ft) SAMPLES SYMBOLS	MATERIALS DESCRIPTION
UBC Expansion Index = 25 (low)	III	10.0	15		DARK BROWN CLAYEY GRAVELLY SAND (SC) medium dense, moist; porous (Topsoil)
			13		BROWN CLAYEY GRAVEL (GC) medium dense to dense, moist;
			37		NO FREE GROUNDWATER OBSERVED
			10		
			15		

*BLOW COUNTS - Converted to Equivalent Standard Penetration Blow Counts

**ELEVATION - Existing Ground Surface

PROJECT <u>Mills Lane Commercial Project</u>	DRILLING COMPANY <u>Pearson Drilling</u>	PLATE 10
LOCATION <u>St. Helena, California</u>	DATE DRILLED <u>04/26/01</u>	
JOB NUMBER <u>5700.01.00.2</u>	SURFACE ELEVATION** <u>Feet</u>	
LOGGED BY <u>LAS</u>	TOTAL DEPTH OF HOLE <u>8 Feet</u>	
DRILL RIG <u>6-inch Solid Stem Auger</u>	APPROVED BY <u><i>[Signature]</i></u>	

Geotechnical and Environmental Consultants				LOG OF BORING B-9 Page 1 of 1	
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/ FOOT*	DEPTH (ft)	SAMPLES SYMBOLS
Classification Test (See Plate 15)	96	19.6	7	0	DARK BROWN SANDY CLAY (CL) medium stiff, moist; porous, w/ gravel (Topsoil)
Strength Test (See Plate 16)	115	13.6	11	1	Becoming gravelly
				5	BROWN CLAYEY GRAVEL (GC) dense, wet;
			37	10	NO FREE GROUNDWATER OBSERVED
				15	

*BLOW COUNTS - Converted to Equivalent Standard Penetration Blow Counts

**ELEVATION - Existing Ground Surface

PROJECT <u>Mills Lane Commercial Project</u>	DRILLING COMPANY <u>Pearson Drilling</u>	PLATE 11
LOCATION <u>St. Helena, California</u>	DATE DRILLED <u>04/26/01</u>	
JOB NUMBER <u>5700.01.00.2</u>	SURFACE ELEVATION** <u>Feet</u>	
LOGGED BY <u>LAS</u>	TOTAL DEPTH OF HOLE <u>10 Feet</u>	
DRILL RIG <u>6-inch Solid Stem Auger</u>	APPROVED BY <u>[Signature]</u>	

RGH Geotechnical and Environmental Consultants				LOG OF BORING B-10 <i>Page 1 of 1</i>	
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/ FOOT*	DEPTH (ft) SAMPLES SYMBOLS	MATERIALS DESCRIPTION
				<!-- Depth scale --> 8 7 5 10 15 <!-- Blow counts --> 8 7 16 38	DARK BROWN SANDY CLAY (CL) medium stiff, moist; porous, disced, w/ gravel (Topsoil) BROWN CLAYEY GRAVEL (GC) dense, wet; NO FREE GROUNDWATER OBSERVED
					*BLOW COUNTS - Converted to Equivalent Standard Penetration Blow Counts **ELEVATION - Existing Ground Surface

PROJECT <u>Mills Lane Commercial Project</u> LOCATION <u>St. Helena, California</u> JOB NUMBER <u>5700.01.00.2</u> LOGGED BY <u>LAS</u> DRILL RIG <u>6-inch Solid Stem Auger</u>	DRILLING COMPANY <u>Pearson Drilling</u> DATE DRILLED <u>04/26/01</u> SURFACE ELEVATION** <u>Feet</u> TOTAL DEPTH OF HOLE <u>11 Feet</u> APPROVED BY <u>[Signature]</u>	PLATE 12
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Geotechnical and Environmental Consultants		LOG OF BORING B-11 Page 1 of 1			
OTHER LABORATORY TESTS	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS/FOOT*	DEPTH (ft) SAMPLES SYMBOLS	MATERIALS DESCRIPTION
R-Value Data (See Plate 17)			10		DARK BROWN SANDY CLAY (CL) medium stiff, moist; porous, w/ gravel (Topsoil)
			13		BROWN SANDY CLAY (CL) stiff, wet; w/ gravel (Subsoil)
			5		BROWN CLAYEY GRAVEL (GC) dense, wet;
			35		NO FREE GROUNDWATER OBSERVED
			10		NO FREE GROUNDWATER OBSERVED
			15		

*BLOW COUNTS - Converted to Equivalent Standard Penetration Blow Counts

**ELEVATION - Existing Ground Surface

PROJECT <u>Mills Lane Commercial Project</u>	DRILLING COMPANY <u>Pearson Drilling</u>	PLATE
LOCATION <u>St. Helena, California</u>	DATE DRILLED <u>04/26/01</u>	13
JOB NUMBER <u>5700.01.00.2</u>	SURFACE ELEVATION** <u>Feet</u>	
LOGGED BY <u>LAS</u>	TOTAL DEPTH OF HOLE <u>9.5 Feet</u>	
DRILL RIG <u>6-inch Solid Stem Auger</u>	APPROVED BY	

MAJOR DIVISIONS				TYPICAL NAMES
COARSE GRAINED SOILS More Than Half Is Larger Than #200 Sieve	GRAVELS More Than Half Coarse Fraction Is larger Than No. 4 Sieve Size	Clean Gravels With Little or No Fines	GW	Well Graded Gravels, Gravel - Sand Mixtures
			GP	Poorly Graded Gravels, Gravel - Sand Mixtures
		Gravels With Over 12% Fines	GM	Silty Gravels, Poorly Graded Gravel - Silt - Silt Mixtures
			GC	Clayey Gravels, Poorly Graded Gravel - Sand - Clay Mixtures
	SANDS More Than Half Coarse Fraction Is Smaller Than No. 4 Sieve Size	Clean Sands With Little or No Fines	SW	Well Graded Sands, Gravelly Sands
			SP	Poorly Graded Sands, Gravelly Sands
		Sands With Over 12% Fines	SM	Silty Sands, Poorly Graded Sand - Silt Mixtures
			SC	Clayey Sands, Poorly Graded Sand - Clay Mixtures
FINE GRAINED SOILS More Than Half Is Smaller Than #200 Sieve	SILTS AND CLAYS Liquid Limit Less Than 50	ML	Inorganic Silts and Very Fine Sands, Rock Flour, Silty or Clayey Fine Sands, or Clayey Silts with Slight Plasticity	
		CL	Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays	
		OL	Organic Clays and Organic Silty Clays of Low Plasticity	
	SILTS AND CLAYS Liquid Limit Greater Than 50	MH	Organic Silts, Micaceous or Diatomaceous Fine Sandy or Silty Soils, Elastic Silts	
		CH	Inorganic Clays of High Plasticity, Fat Clays	
		OH	Organic Clays of Medium to High Plasticity, Organic Silts	
HIGHLY ORGANIC SOILS		Pt	Peat and Other Highly Organic Soils	

UNIFIED SOIL CLASSIFICATION SYSTEM

				Shear Strength, psf	
				Confining Pressure, psf	
Consol	- Consolidation	Tx	320 (2600)	Unconsolidated Undrained Triaxial	
LL	- Liquid Limit (In %)	Tx CU	320 (2600)	Consolidated Undrained Triaxial	
PL	- Plastic Limit (In %)	DS	2750 (2000)	Consolidated Drained Direct Shear	
PI	- Plastic Index	FVS	470	Field Vane Shear	
G _s	- Specific Gravity	UC	2000	Unconfined Compression	
SA	- Sieve Analysis	LVS	700	Laboratory Vane Shear	
☒	"Undisturbed" Sample	SS	- Shrink Swell		
☒	Bulk or Disturbed Sample	EXP	- Expansion		
☒	Standard Penetration Test	P	- Permeability		
☐	Sample Attempt With No Recovery				

Note: All strength tests on 2.8" or 2.4" diameter sample unless otherwise indicated.

KEY TO TEST DATA

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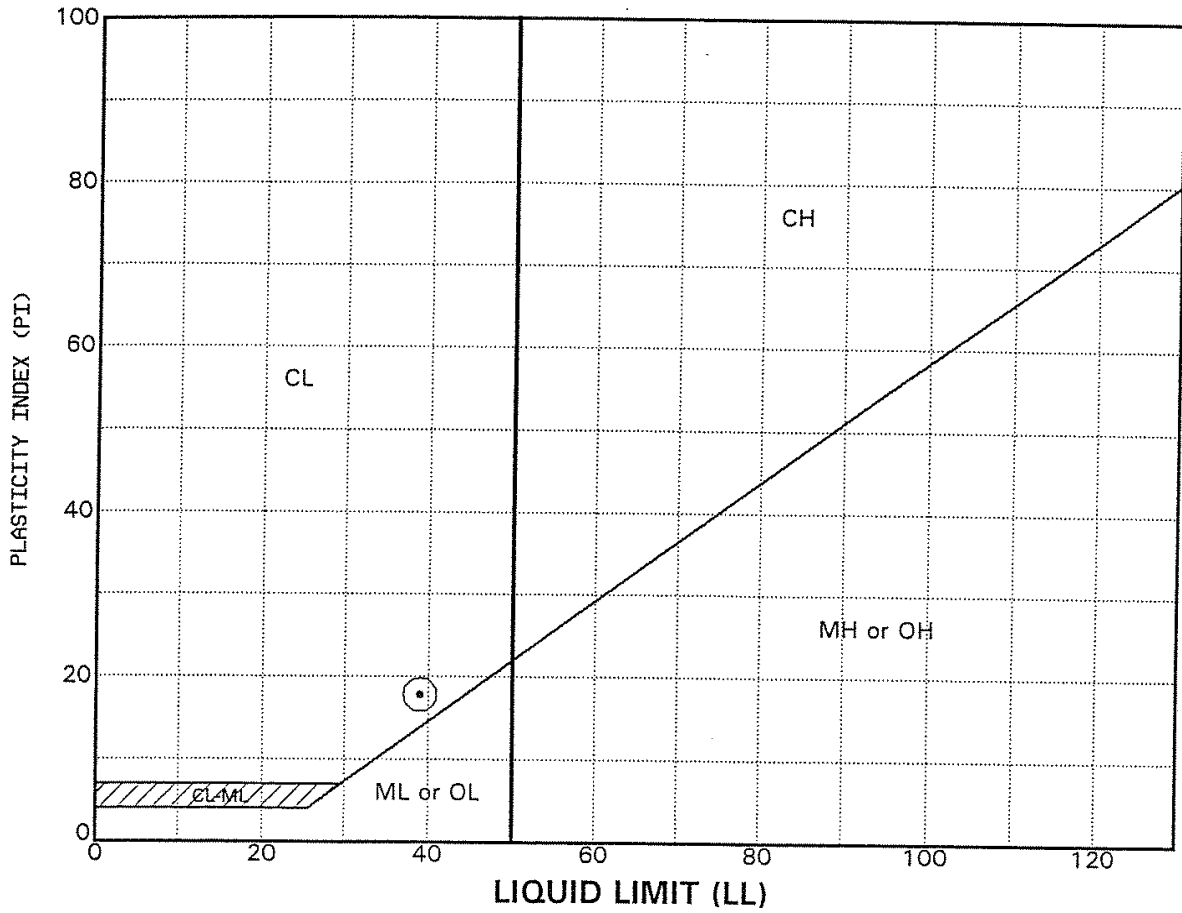
Appr: *[Signature]*

Drwn: kab

Date: Apr. 2001

**SOIL CLASSIFICATION CHART
AND KEY TO TEST DATA**
MILLS LANE COMMERCIAL PROJECT
St. Helena, California

PLATE
14



SAMPLE SOURCE	CLASSIFICATION	LIQUID LIMIT (%)	PLASTIC LIMIT (%)	PLASTICITY INDEX (%)	% PASSING #200 SIEVE
⊙ B- 9 @ 1.0'	Dark Brown Sandy Clay (CL)	39	21	18	65

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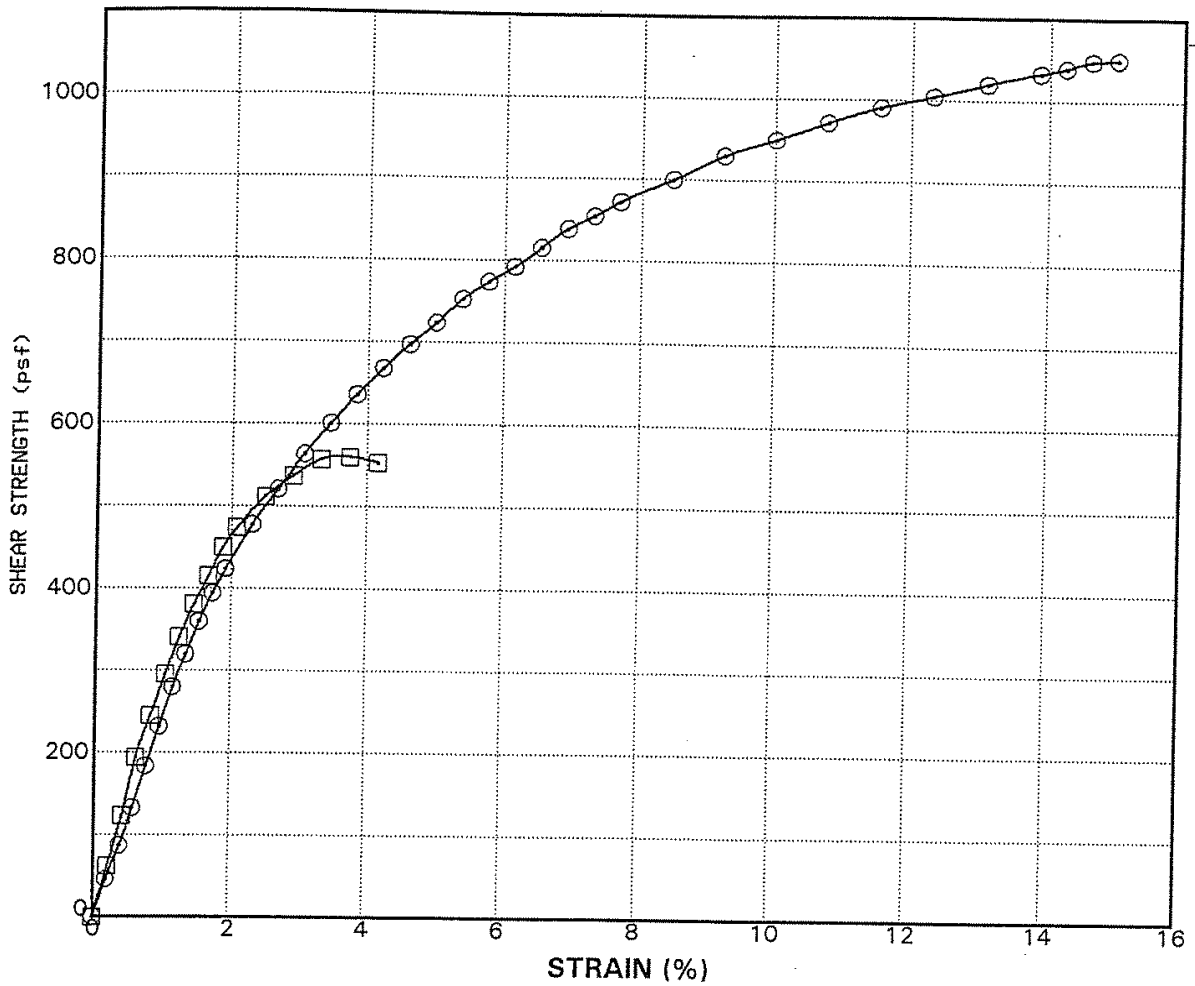
Appr: *[Signature]*

Drwn: kab

Date: Apr. 2001

CLASSIFICATION TEST DATA
MILLS LANE COMMERCIAL PROJECT
St. Helena, California

PLATE
15



Sample Source	Classification	Type of Test	Confinement Pressure (psf)	Ultimate Strength (psf)	Strain (%)	Dry Density (pcf)	Moisture Content (%)
⊙ B- 4 @ 3.5'	Brown Sandy Clay (CL)	UC		1049	15	104	22.4
□ B- 9 @ 3.0'	Dark Brown Clayey Sand W/Gravel (SC)	UC		559	4	115	13.6

UC = Unconfined Compression

TX/UU = Unconsolidated Undrained Triaxial

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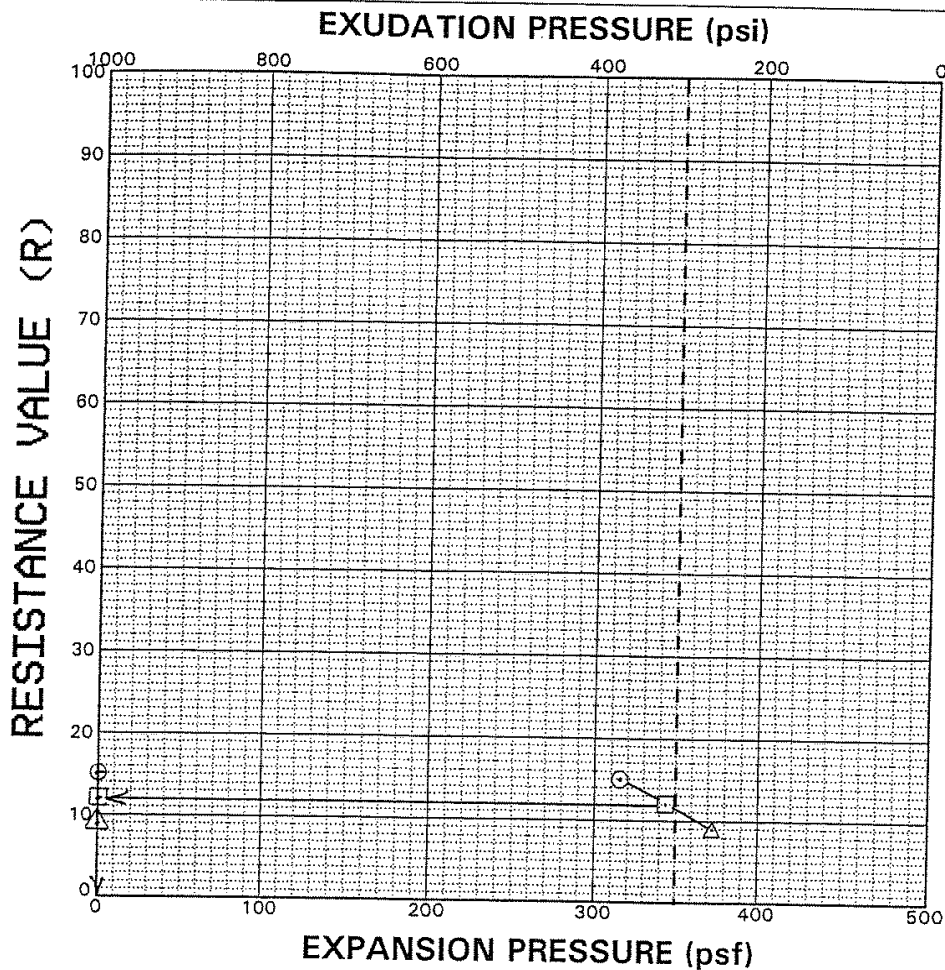
Appr: *[Signature]*

Drwn: kab

Date: Apr. 2001

STRENGTH TEST DATA
MILLS LANE COMMERCIAL PROJECT
St. Helena, California

PLATE
16



SPECIMEN NO.	⊙	⊠	△
MOISTURE CONTENT (%)	16.2	17.1	18.0
DRY DENSITY (PCF)	111	111	110
EXUDATION PRESSURE (PSI)	370	313	255
EXPANSION PRESSURE (PSF)	0	0	0
RESISTANCE VALUE (R)	15	12	9

SAMPLE SOURCE	CLASSIFICATION	SAND EQUIVALENT	EXPANSION PRESSURE	R-VALUE
B-11 @ 1.00	Brown Sandy Clay (CL)		0	12

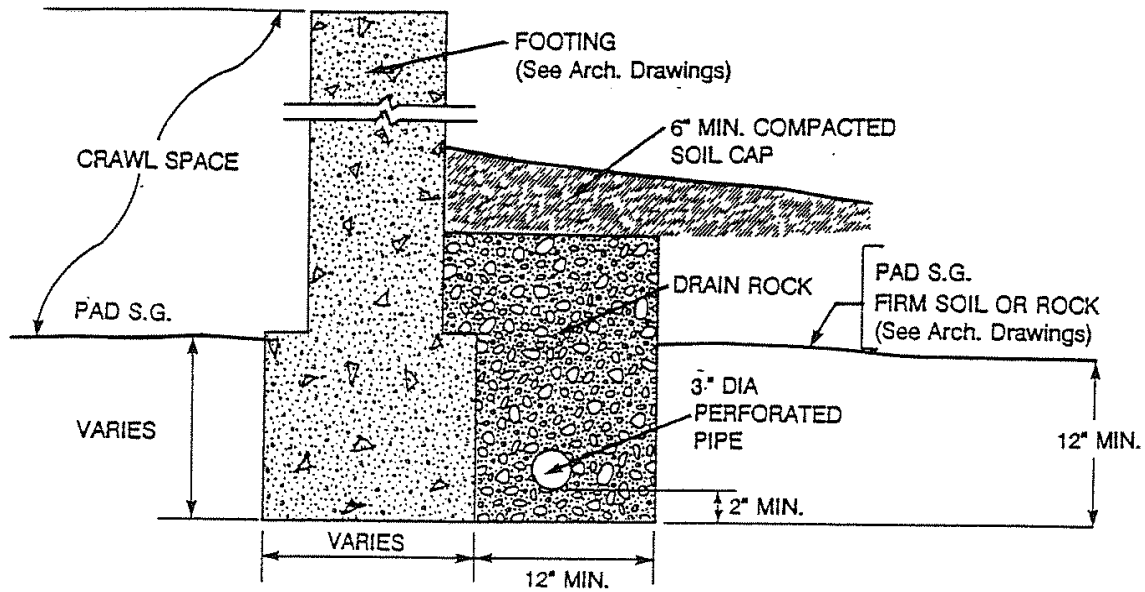
ASTM D 2844, Cal Test 301

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Job No: 5700.01.00.2
Appr: *YAL*
Drwn: kab
Date: Apr. 2001

RESISTANCE (R) VALUE TEST DATA
MILLS LANE COMMERCIAL PROJECT
St. Helena, California

PLATE
17



Notes:

1. Drain rock should meet the requirements for Class 2, Permeable Material, Section 68, State of California "Caltrans" Standard Specification, latest edition.
2. Pipe should conform to the requirements of Section 68 of State of California "Caltrans" Standards, perforations placed down; drain to gravity outlet or storm drain system per plan.
3. On level, graded pads, perimeter subdrains can be deleted if pad surface (S.G.) is graded to at least 12 inches above adjacent exterior surface (at least 12 feet away).

Not to Scale

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Job No: 5700.01.00.2
Appr: *[Signature]*
Drwn: kab
Date: Apr. 2001

**PERIMETER FOUNDATION DRAIN
ILLUSTRATION**
MILLS LANE COMMERCIAL PROJECT
St. Helena, California

PLATE
18

May 8, 2001
Mills Lane Commercial Project
Project Number: 5700.01.00.2

APPENDIX B - REFERENCES

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May 8, 2001
Mills Lane Commercial Project
Project Number: 5700.01.00.2

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May 8, 2001
Mills Lane Commercial Project
Project Number: 5700.01.00.2

APPENDIX C - DISTRIBUTION

Mr. Carl Doumani (5,1)
6126 Silverado Trail
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Backen and Gillam Architects (2,1)
Attn: J. Jacobson
1028 Main Street
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LAS:JBH:hs(5700102.Rpt)

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February 23, 2017

Long Meadow Ranch
Attention: Elliott Faxstein
161 Stone Mountain Circle
Napa, CA 94558
elliott.faxstein@gmail.com

Geotechnical Engineering Report Update
Mills Lane Lodging Project
Mills Lane
St. Helena, California

Project Number: 7008.01.12.2

Introduction

In accordance with your request we have reviewed the geotechnical aspects of the development plans prepared by Turnbull, Griffin & Haesloop, dated September 14, 2016 for the subject project. Those plans indicate that the site will be developed with ten multi-unit guest suite lodges, a fitness center, a multi-purpose building, swimming pool, and associated parking and landscaping. The results of our geotechnical study for a different project on the property were presented in our report dated May 8, 2001. That report addressed a project that included construction of approximately 15 buildings for mixed retail, office, and restaurant use.

Work Performed

For our original study, we explored the subsurface conditions by drilling 11 borings to depths ranging from about 8 to 15½ feet. These borings are shown on Plate 1. On January 20, 2017, we performed a supplemental geotechnical reconnaissance of the site and explored the subsurface conditions by drilling two supplemental borings to depths ranging from about 30½ to 43 feet. The borings were drilled with a track-mounted drill rig equipped with 8-inch diameter, hollow stem augers at the approximate locations shown on the Exploration Plan, Plate 1. The boring locations were determined approximately by pacing their distance from features shown on the Exploration Plan and should be considered accurate only to the degree implied by the method used. Our field engineer located and logged the borings and obtained samples of the materials encountered for visual examination, classification and laboratory testing.

Relatively undisturbed samples were obtained from the borings at selected intervals by driving a 2.43-inch inside diameter, split spoon sampler, containing 6-inch long brass liners, using a 140-pound hammer dropping approximately 30 inches. The sampler was driven 12 to 18 inches. The blows required to drive each 6-inch increment were recorded and the blows required to drive the last 12 inches, or portion thereof, were converted to equivalent Standard Penetration Test (SPT) blow counts for correlation with empirical data. Disturbed samples were also obtained at selected depths by driving a 1.375-inch inside diameter (2-inch outside diameter) SPT sampler, without liners or rings, using a 140-pound hammer dropping approximately 30 inches. The sampler was driven 12 to 18 inches, the blows to drive each 6-inch increment were recorded, and the blows required to drive the final 12 inches, or portion thereof, are provided on the boring logs.



The logs of the borings showing the materials encountered, groundwater conditions, converted blow counts, and sample depths are presented on Plates 2 and 3. The soils are described in accordance with the Unified Soil Classification System, outlined on Plate 4.

The boring logs show our interpretation of the subsurface soil and groundwater conditions on the date and at the locations indicated. Subsurface conditions may vary at other locations and times. Our interpretation is based on visual inspection of soil samples, laboratory test results, and interpretation of drilling and sampling resistance. The location of the soil boundaries should be considered approximate. The transition between soil types may be gradual.

Laboratory Testing

The samples obtained from the borings were transported to our office and re-examined by the project engineer to verify soil classifications, evaluate characteristics, and assign tests pertinent to our analysis. Selected samples were laboratory tested to determine their classification (Atterberg Limits, percent of silt and clay) and expansion potential (Expansion Index - EI). The test results are presented on the boring logs. Results of the classification and expansion potential tests are presented on Plate 5.

Subsurface

Our supplemental borings and laboratory tests indicate that the portion of the site we studied is blanketed by up to 5 feet of weak, porous, compressible, surface soils. It appears that our previous borings were drilled in the access roads as opposed to the agricultural areas, which may explain the difference in the thickness of weak and porous soils. The agricultural areas were likely ripped at about 5 feet. Porous soils appear hard and strong when dry but become weak and compressible as their moisture content increases towards saturation. Our referenced report indicated the presence of 2 to 4 feet of weak and porous soils. The contractor should be aware that additional excavation will be required to strengthen the weak and porous soils.

The weak and porous soils exhibit low plasticity ($LL = 25$; $PI = 6$) and low expansion potential ($EI = 25$). These surface materials are underlain by stiff sandy clays and occasional layers of loose to dense clayey gravels and clayey sands to the maximum depths explored (43 feet).

A detailed description of the subsurface conditions found in our supplemental borings is given on Plates 2 and 3, Appendix A. Based on Table 20.3-1 of American Society of Civil Engineers (ASCE) Standard 7-10, titled "Minimum Design Loads for Buildings and Other Structures" (2010), we have determined a Site Class of D should be used for the site.

Liquefaction and Densification

Liquefaction is a rapid loss of shear strength experienced in saturated, predominantly granular soils below the groundwater level during strong earthquake ground shaking due to an increase in pore water pressure. The occurrence of this phenomenon is dependent on many complex factors including the intensity and duration of ground shaking, particle size distribution and density of the soil.



Granular soils were encountered at the site below the groundwater table. Therefore, we performed an analysis of the blow count data from our borings using the methods of Seed and Idriss (1982), Seed and others (1985), Youd and Idriss (2001), Idriss and Boulanger (2004) and Idriss and Boulanger (2008). These procedures normalize the blow counts to account for overburden pressure, rod length, hammer energy, and fines (percent of silt and clay) content. Once the blow counts are normalized and adjusted to a clean sand blow count, the cyclic resistance ratio (CRR) for each blow count is then determined using the same procedures referenced above. The CRR is compared to the cyclic stress ratio (CSR) induced by the earthquake. Calculating the CSR requires a peak ground acceleration and design earthquake magnitude.

Peak ground acceleration (PGA) was determined using the methods in the 2016 California Building Code (CBC) and ASCE Standard 7-10. Using the U.S. Seismic Design Maps from the United States Geological Survey (USGS) website (<http://earthquake.usgs.gov/designmaps/us/application.php>), the site's latitude and longitude of 38.5016°N and 122.4597°W, respectively, and a site soil Class of D, the PGA for the site is 0.5g. Using this information, the CSR for a M_M 7.5 earthquake at the site ranges from 0.32 to 0.48. The West Napa fault is most likely controlling the ground motions at the site. According to Petersen (1996), the West Napa fault is capable of a M_M 6.5 earthquake. Therefore, the CRR values at the site must be scaled to account for the difference between M_M 6.5 and M_M 7.5. When the scaling factor for magnitude and confining stress corrections presented in Idriss and Boulanger (2004) are applied, the CRR values at the site do not exceed the CSR values. Therefore, we judge that there is potential for liquefaction at the site.

There are three potential consequences of liquefaction: bearing capacity failure, lateral spreading toward a free face (e.g. riverbank) and settlement. Bearing capacity failure is sudden and extreme settlement of foundations that typically occurs when the liquefied layer is relatively close (typically within two times the footing width, depending on the loads) to the bottom of the foundation. Because the liquefiable layer is 6 feet below the ground surface, it is possible that foundations could be susceptible to bearing capacity failure. However, the groundwater in our borings ranged from 5 ½ to 7 feet after an extensive period of rain. It is likely that the groundwater is at a lower level for most of the year. Furthermore, the upper 5 feet of soil will need to be removed. Therefore, we judge the potential for bearing capacity failure is low.

Lateral spreading can occur where continuous layers of liquefiable soil extend to a free face, such as a creek bank. There are no significant free faces in the vicinity of the site. Therefore, we judge the potential for liquefaction-induced lateral spreading at the site is low.

The third potential consequence of liquefaction is settlement due to densification of the liquefied soils. Potential settlements based on the blow count data and cyclic stress ratio were calculated using the methods of Ishihara and Yoshimine (1992). For the layer encountered in our boring, we calculated total settlement ranging from up to ½ inch. Differential settlement could also range up to ½ inch

Densification is the settlement of loose, granular soils above the groundwater level due to earthquake shaking. Typically, granular soils that would be susceptible to liquefaction, if saturated, are susceptible to densification if not saturated. Provided remedial grading is performed as recommended herein and in our referenced report, we judge there is a low potential for densification to impact structures at the site.



Conclusions and Recommendations

Based on our review and reconnaissance it is our opinion that the recommendations in our report, with the updated information presented below, are valid for design and construction of the proposed lodging facilities.

Seismic Design

Seismic design parameters presented below are based on Section 1613 titled "Earthquake Loads" of the 2016 California Building Code (CBC). Based on Table 20.3-1 of American Society of Civil Engineers (ASCE) Standard 7-10, titled "Minimum Design Loads for Buildings and Other Structures" (2010), we have determined a Site Class of D should be used for the site. Using a site latitude and longitude of 38.5016°N and 122.4597°W, respectively, and the U.S. Seismic Design Maps from the United States Geological Survey (USGS) website (<http://earthquake.usgs.gov/designmaps/us/application.php>), we recommend that the following seismic design criteria be used for structures at the site.

2016 CBC Seismic Criteria	
Spectral Response Parameter	Acceleration (g)
S _s (0.2 second period)	1.500
S ₁ (1 second period)	0.600
S _{MS} (0.2 second period)	1.500
S _{M1} (1 second period)	0.900
S _{DS} (0.2 second period)	1.000
S _{D1} (1 second period)	0.600

Excavations

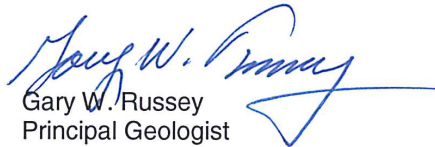
Within building areas, the weak, porous, and compressible surface soils should be excavated to within 6 inches of their entire depth, which should be assumed to be about 5 feet based on our recent borings. All other geotechnical grading recommendations should follow the original report. Contractors bidding for this project should be made aware that the excavations for weak and porous soils extend deeper than the recommendations outlined in our original report.



Geotechnical Study Report
February 21, 2017

Mills Lane Lodging Project
Project Number: 7008.01.12.2

Very truly yours,
RGH Consultants


Gary W. Russey
Principal Geologist




Eric G. Chase
Senior Associate Engineer



BPC:GWR:EGC:bc:ew
Three wet-signs and electronically submitted

s:\work in progress\7008\7008.01.12.2 mills lane commercial project\report update letter with seismic.doc

Attachments: Plate 1
Plates 3 and 4
Plate 4
Plate 5

Exploration Plan
Logs of Borings B-1 and B-2
Soil Classification Chart and Key to Test Data
Classification Test Data



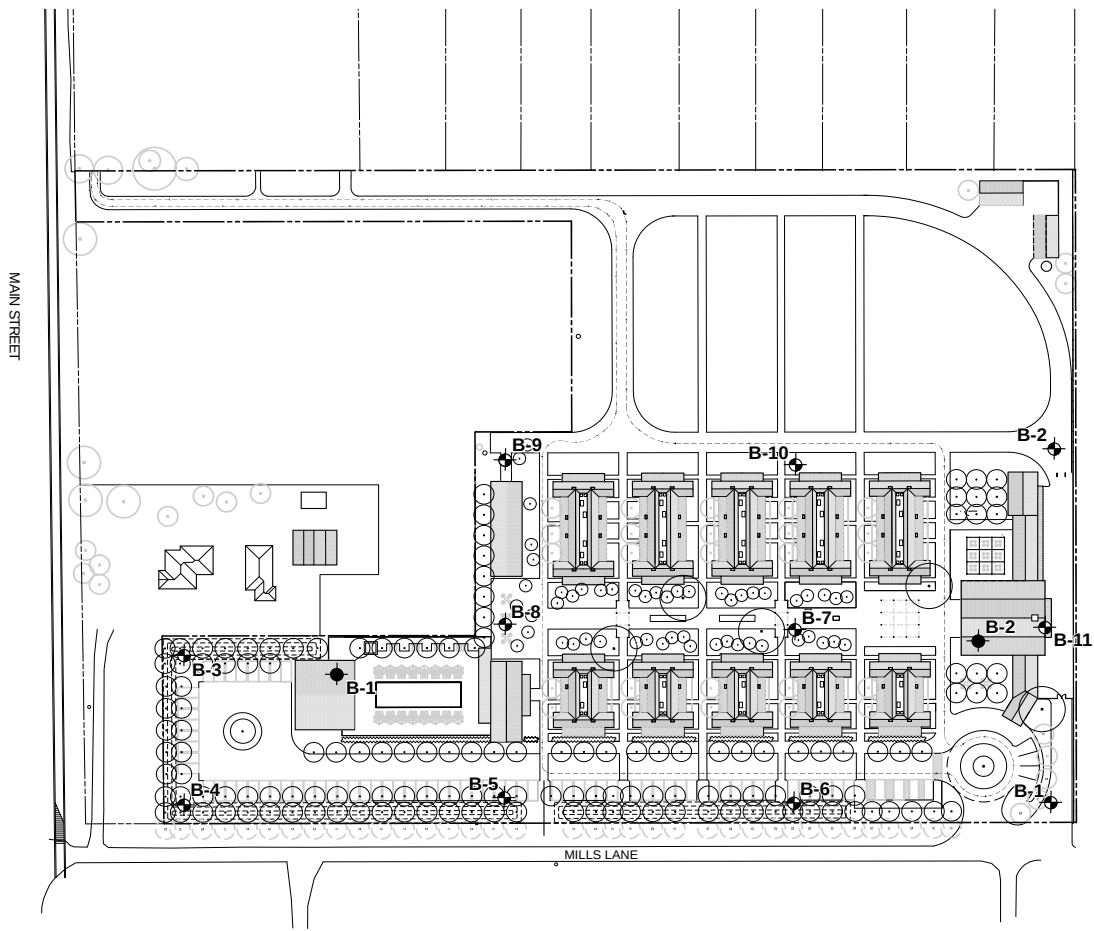
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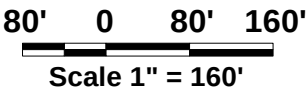
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APPENDIX A – REFERENCES

- American Society of Civil Engineers, 2016, Minimum Design Loads for Buildings and Other Structures, ASCE Standard ASCE/SEI 7-10.
- California Building Code, 2016, California Building Standard Commission.
- Hidalgo, J.B., Scorallo, L. A., 2001, Geotechnical Investigation - Mills Lane Commercial Project, RGH Geotechnical and Environmental Consultants.
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- Petersen, et al., 1996, Probabilistic Seismic Hazard Assessment for the State of California, California Department of Conservation, Division of Mines and Geology, Open File Report 96-08.
- Seed, H.B. and Idriss, I.M., 1982, Ground Motion and Soil Liquefaction During Earthquakes: Earthquake Engineering Research Institute, Berkeley, California.
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- Youd, T.L., and Idriss, I.M., and 19 others, 2001, Liquefaction Resistance of Soils: summary report from the 1996 NCEER and 1998 NCEER/NSF workshops on evaluation of liquefaction resistance of soils: ASCE Geotechnical and Geoenvironmental Journal, v. 127, no. 10, p. 817-833.



EXPLANATION	
B-1	◆ Boring Location and Number, 2016
B-1	◆ Boring Location and Number, 2001



Reference: Master Site Plan prepared by Turnbull, Griffin, and Haesloop, dated January 10, 2016. Scale: 1" = 160'

RGH CONSULTANTS Job No: 7008.01.12.2 Date: FEB 2017	EXPLORATION PLAN Mills Lane Lodging Project Mills Lane St. Helena, California	PLATE 1
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Date(s) Drilled 1/20/2017		Logged By BPC		Checked By EGC	
Drilling Method Hollow Stem Auger		Drill Bit Size/Type 8-inch HSA		Total Depth of Borehole 43 feet	
Drill Rig Type CME-55 Track-Mounted		Drilling Contractor Taber		Approximate Surface Elevation Existing Ground Surface	
Groundwater Level and Date Measured 5-1/2 feet bgs		Sampling Method(s) Modified California, SPT		Hammer Data 140-lb, 30-inch autotrip	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	0				BROWN CLAYEY SAND WITH GRAVEL (SC), loose, wet, fine to coarse sand, many rootlets and organics, porous.								
	2												
	4												
	5				BROWN SAND WITH CLAY AND GRAVEL (SP-SC), loose to medium dense, wet, fine to coarse sand, trace fines, porous to 5 feet.			8.7					
	17												
	10				MOTTLED RED AND BROWN SANDY CLAY WITH GRAVEL (CL), stiff, wet, fine sand.								
	14												
	15												
	13												
					BROWN CLAYEY GRAVEL WITH SAND (GC), medium dense to dense, wet, fine to coarse sand.								

RGH CONSULTANTS	LOG OF BORING B-1 Mills Lane Lodging Project Mills Lane St. Helena, California	PLATE 2a
Job No: 7008.01.12.2	Date: FEB 2017	

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	20		48/11		BROWN CLAYEY GRAVEL WITH SAND (GC), medium dense to dense, wet, fine to coarse sand.								
	25		10		GRAY-BROWN SANDY CLAY (CL), stiff, wet, fine sand.								
	30		10		Becomes mottled brown and blue-gray, increasing fines content.								
	35				GRAY-BROWN CLAYEY SAND (SC), loose, wet, fine to medium sand.								
	36		9		MOTTLED BROWN AND BLUE-GRAY SANDY CLAY (CL), stiff, wet, fine sand.								
					BLUE-GRAY CLAYEY SAND (SC), loose, wet, fine sand.								
	40		36		GRAY AND BROWN CLAYEY GRAVEL WITH SAND (GC), dense, wet, medium to coarse sand, large subrounded gravels.								
			56										
					Boring terminated at 43 feet. Free water encountered at 10 feet during drilling and stabilized at 5-1/2 feet upon completion.								
RGH CONSULTANTS					LOG OF BORING B-1 Mills Lane Lodging Project Mills Lane St. Helena, California							PLATE 2b	
Job No: 7008.01.12.2					Date: FEB 2017								

Page 805 of 1271

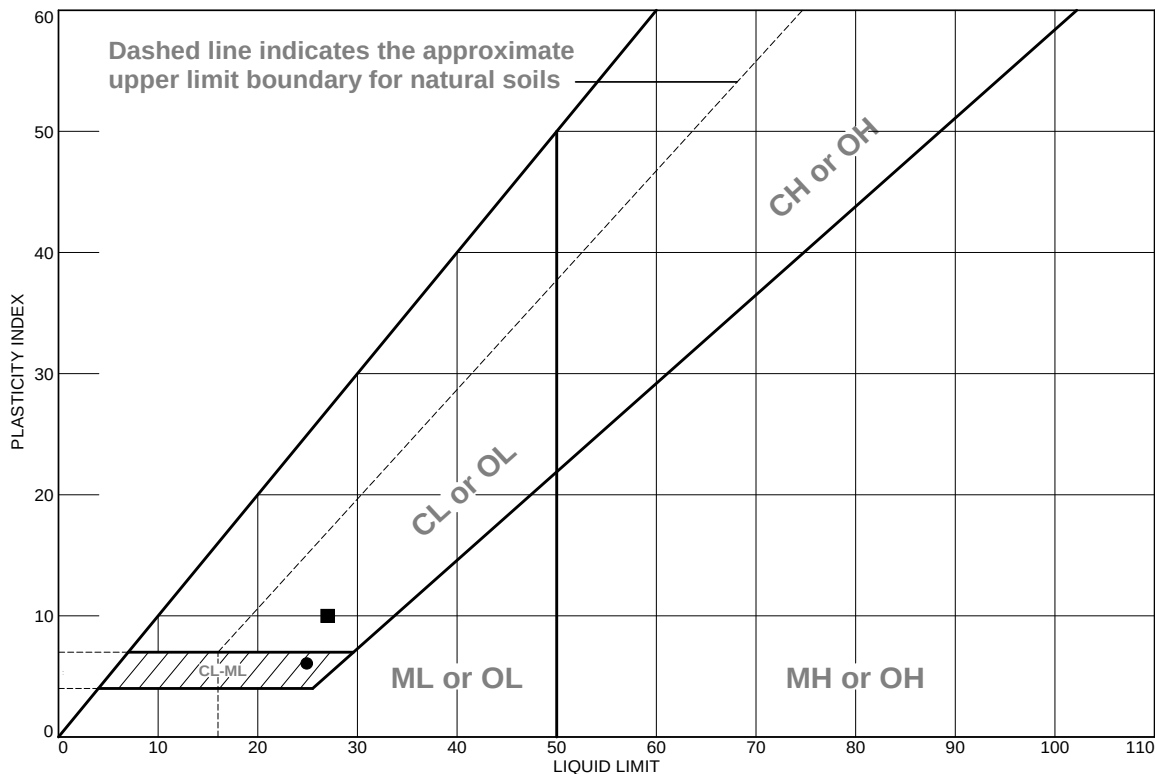
Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
	20												
	17				MOTTLED RED-BROWN AND GRAY SANDY CLAY (CL), very stiff, moist, fine sand.								
					GRAY-BROWN GRAVEL WITH CLAY AND SAND (GP-GC), dense, wet, fine to coarse sand, subrounded gravel to 3".								
	25												
	35												
	30												
		32/4"											
		50/4"			Boring terminated at 31 feet. Free water encountered at 10 feet during drilling and stabilized at 7 feet upon completion.								
	35												
	40												
	45												

RGH CONSULTANTS		LOG OF BORING B-2 Mills Lane Lodging Project Mills Lane St. Helena, California											PLATE 3b
Job No: 7008.01.12.2		Date: FEB 2017											

Elevation (feet)	Depth (feet)	Sample Type	Sampling Resistance, blows/ft	Graphic Log	MATERIAL DESCRIPTION	Dry Density (pcf)	Water Content (%)	% <#200 Sieve	PI, %	LL, %	Expansion Index (EI)	UC, ksf	REMARKS AND OTHER TESTS
1	2	3	4	5	6	7	8	9	10	11	12	13	14
COLUMN DESCRIPTIONS 1 Elevation (feet): Elevation (MSL, feet). 2 Depth (feet): Depth in feet below the ground surface. 3 Sample Type: Type of soil sample collected at the depth interval shown. 4 Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating •interval using the hammer identified on the boring log. 5 Graphic Log: Graphic depiction of the subsurface material encountered. 6 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and •other descriptive text. 7 Dry Density (pcf): Dry density, in pcf. 8 Water Content (%): Water content, percent. 9 % <#200 Sieve: % <#200 Sieve 10 PI, %: Plasticity Index, expressed as a water content. 11 LL, %: Liquid Limit, expressed as a water content. 12 Expansion Index (EI): Expansion Index (EI) 13 UC, ksf: Unconfined compressive strength, in kips per square foot. 14 REMARKS AND •OTHER TESTS: Comments and observations regarding drilling or sampling made by driller or field •personnel. FIELD AND LABORATORY TEST ABBREVIATIONS CHEM: Chemical tests to assess corrosivity COMP: Compaction test CONS: One-dimensional consolidation test LL: Liquid Limit, percent PI: Plasticity Index, percent SA: Sieve analysis (percent passing No. 200 Sieve) UC: Unconfined compressive strength test, Qu, in ksf WA: Wash sieve (percent passing No. 200 Sieve) MATERIAL GRAPHIC SYMBOLS Lean CLAY, CLAY w/SAND, SANDY CLAY (CL) Clayey GRAVEL (GC) Poorly graded SAND with Clay (SP-SC) Poorly graded GRAVEL (GP) Clayey SAND (SC) TYPICAL SAMPLER GRAPHIC SYMBOLS 3-inch-OD Modified California w/ brass liners 2½-inch-OD unlined split spoon (SPT) OTHER GRAPHIC SYMBOLS Water level (at time of drilling, ATD) Water level (after waiting) Minor change in material properties within a stratum Inferred/gradational contact between strata Queried contact between strata GENERAL NOTES 1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests. 2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.													

RGH CONSULTANTS	SOIL CLASSIFICATION AND KEY TO TEST DATA Mills Lane Lodging Project Mills Lane St. Helena, California	PLATE 4
Job No: 7008.01.12.2	Date: FEB 2017	

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Dk Brn Silty Clayey Sand (SC-SM)	25	19	6		42.6	SC
■	Brn Clayey Sand W/ Gravel (SC)	27	17	10		33.9	SC
◆	Brn Sandy Clay (CL)					51.2	CL
▲	Brn Sand W/ Clay & Gravel (SP-SC)					8.7	SP-SC

Project No. 7008.01.12.2 **Client:** RGH Consultants

Project: Mills Lane Commercial Project

● **Source of Sample:** B-2 **Depth:** 1.5' & 2.0'

■ **Source of Sample:** B-2 **Depth:** 6.0'

◆ **Source of Sample:** B-2 **Depth:** 11.0'

▲ **Source of Sample:** B-1 **Depth:** 6.0'

Remarks:

● Expansion Index=25

Tested By: SW

Checked By: GEF

RGH
CONSULTANTS

CLASSIFICATION TEST DATA

Mills Lane Lodging Project
Mills Lane
St. Helena, California

PLATE

5

Job No: 7008.01.12.2 Date: FEB 2017

***FARMSTEAD AT LONG MEADOW RANCH
LODGING PROJECT
NOISE AND VIBRATION ASSESSMENT
ST. HELENA, CALIFORNIA***

September 8, 2016
Updated December 3, 2019

◆ ◆ ◆

Prepared for:

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Job No.: 16-125

INTRODUCTION

Long Meadow Ranch (LMR) is seeking a revised use permit to allow the expansion of the current LMR Farmstead Restaurant and General Store operations to include lodging, which will be constructed on the adjacent 10-acre parcel fronting on Mills Lane. The proposed lodging would include 65 guest rooms and suites spread amongst 10 buildings. In addition to the lodging buildings, the property will have a small reception and administrative center located at the lodging entrance opposite La Fata Street, a multi-purpose building on the northeast side of the property, and a wellness center at the southeast side of the property. Access to the new lodging facilities will initially be from La Fata Street with right-hand turns onto Mills Lane being restricted until Mills Lane is realigned and signaled, per the Highway 29 Specific Plan.

This report evaluates the project's potential to result in significant impacts with respect to applicable California Environmental Quality Act (CEQA) guidelines. The report is divided into three sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions; 2) the General Plan Consistency – Noise and Land use Compatibility section discusses noise and land use compatibility utilizing policies in the City's General Plan; and, 3) the Impacts and Mitigation Measures Section describes the significance criteria used to evaluate project impacts, provides a discussion of each project impact, and presents mitigation measures, where necessary, to provide a compatible project in relation to adjacent noise sources and land uses.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA)*. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This *energy-equivalent sound/noise descriptor* is called L_{eq} . The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level (CNEL)* is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level (DNL or L_{dn})* is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

Sleep and Speech Interference

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA L_{dn} . Typically, the highest steady traffic noise level during the daytime is about equal to the L_{dn} and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12-17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is therefore possible when exterior noise levels are about 57-62 dBA L_{dn} with open windows and 65-70 dBA L_{dn} if the windows are closed. Levels of 55-60 dBA are common along collector streets and secondary arterials, while 65-70 dBA is a typical value for a primary/major arterial. Levels of 75-80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need

to be able to have their windows closed; those facing major roadways and freeways typically need special glass windows.

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA L_{dn} . At a L_{dn} of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the L_{dn} increases to 70 dBA, the percentage of the population highly annoyed increases to about 25-30 percent of the population. There is, therefore, an increase of about 2 percent per dBA between a L_{dn} of 60-70 dBA. Between a L_{dn} of 70-80 dBA, each decibel increase increases by about 3 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the L_{dn} is 60 dBA, approximately 30-35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous vibration levels produce.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at much lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess

groundborne vibration and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as minor cracking of building elements, or may threaten the integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structural damage to the building. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max} , L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime	30 dBA	
		Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
	10 dBA	Broadcast/recording studio
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Virtually no risk of damage to normal buildings
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to newer residential structures

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, September 2013.

Regulatory Background

The State of California and the City of St. Helena have established regulatory criteria that are applicable in this assessment. The State CEQA Guidelines, Appendix G, are used to assess the potential significance of impacts pursuant to local General Plan policies, Municipal Code standards, or the applicable standards of other agencies. A summary of the applicable regulatory criteria is provided below.

State CEQA Guidelines. The CEQA contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

- (a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- (b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- (c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- (d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

- (e) For a project located within an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels;
- (f) For a project within the vicinity of a private airstrip, if the project would expose people residing or working in the project area to excessive noise levels.

Pursuant to recent court decisions, the impacts of site constraints such as exposure of the proposed project to excessive levels of noise and vibration are not included in the Impacts and Mitigation Section of this report. Checklist item (a) is discussed with respect to the compatibility of the project with noise levels at the site in a separate section addressing the consistency of the project with the policies set forth in the City's General Plan. Items (a) through (d) are applicable in the assessment of potential impacts resulting from the proposed project at off-site receptors. Items (e), and (f) are not applicable because the project is not located within an airport land use plan, is not within two miles of an airport, and is not in the vicinity of a private air strip.

2016 California Building Code, Title 24, Part 2. The current version of the California Building Code (CBC) requires interior noise levels attributable to exterior environmental noise sources to be limited to a level not exceeding 45 dBA L_{dn}/CNEL in any habitable room.

St. Helena General Plan Update 2040. The Public Health, Safety, and Noise Chapter of the St. Helena General Plan Update 2040 identifies policies and implementing actions related to noise that are applicable in this assessment.

Policies

PS2.1 Preserve the current low levels of noise in St. Helena to maintain the City's rural atmosphere.

PS2.2 Maintain a citywide environment that balances various City objectives while minimizing the impact of highway, railroad, and industrial noise. The City should manage both indoor and outdoor noise levels to protect health and safety. A combination of noise standards and existing noise levels should be used to determine impacts and mitigation measures.

PS2.3 Minimize potential noise impact conflicts between land uses by regulating incompatible land uses. Encourage noise-generating uses to reduce their impacts while promoting land use patterns that avoid conflicts. Employ compatibility guidelines, interior noise level criteria, the City's noise standards, and noise contour maps to determine the compatibility of land uses.

PS2.4 Require a reduction and/or control of the use of machinery, mechanical systems and other noise-making equipment and sources in and near residential areas where the noise impacts would be considered intrusive to adjacent residential property, unless consistent with the right-to-farm.

PS2.5 An increase in average noise levels of 5 dBA or greater is considered to be significant and to constitute a noise impact by the noise source in question for the purpose of environmental analyses.

The following implementing actions contained in the St. Helena General Plan Update 2040 are also relevant to this project:

Implementing Actions

PS2.A Consider the environmental impact of transportation-related noise and other noise sources in the review of any new projects and approval of subdivision plans and requests for changes in the zoning ordinance.

PS2.B Enforce the Land Use Compatibility Standards presented in the State of California's General Plan guidelines when siting new uses. These standards identify the acceptability of a project based on levels of noise exposure.

PS2.C 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 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.

PS2.D Require an acoustical study, prepared by a qualified acoustical consultant for:

- All proposed projects that are likely to be exposed to noise levels greater than the standards;
- All proposed projects that would generate noise where impacts on other uses would be greater than the standards;
- Any project exposed to outdoor noise at or above a day-night average sound level (Ldn) of 60 or for any noise source that could create such outdoor noise levels for adjacent uses; and
- Any project exposed to or that creates noise which may exceed the adopted City standards.

PS2.E Require new developments to implement noise mitigation measures when built in close proximity to noise sources, such as State Route 29 and the railroad tracks. These developments should consider the exterior and interior noise environment.

PS2.F Require construction operations to use noise suppression devices and techniques and limit noisy construction activities that can be heard at the property line to the least noise-sensitive times, as per the City's noise ordinance.

PS2.G Include appropriate noise attenuation techniques in the design of all new arterial streets. Such techniques could include the use of site planning, building orientation, buffer distances, quiet pavement surfaces, and the use of correctly engineered acoustical barriers and berms where necessary. Adopt the noise standard for intrusive noise at residences given in Table 9.4.

PS2.H Amend the City's noise ordinance to regulate intrusive noise sources, such as the use of machinery and equipment, landscaping and property maintenance devices, animals, and idling buses or trucks in or near uses sensitive to noise.

PS2.I Incorporate right-to-farm legal provisions relative to noise in all newly created deeds where agricultural activities may pose noise impacts in the future. Require similar language in deeds for properties similarly impacted by the Harold Smith & Son gravel plant operations.

St. Helena Municipal Code. The Municipal Code does not quantitatively regulate noise levels, but authorized the chief of police to review complaints of “unnecessary noise” as defined in Chapter 8.24. Similarly, noise that can be heard at the property line of any parcel that is generated by commercial activities, between the hours of 10:00 pm and 7:00 am is prohibited, unless permitted by the chief of police.

Construction activities are limited to the hours between 8:00 am and 5:00 pm Monday through Saturday. Construction is not allowed on Sundays and Holidays (federal and Local). Delivery of materials/equipment and cleaning and servicing of machines/equipment are limited to between 7:00 am and 6:00 pm Sundays and Holidays (federal and Local). Noise generated by contracted landscape maintenance activities is limited to the hours between 8:00 am and 5:00 pm Monday through Saturday and prohibited on Sundays and Holidays (federal and Local).

Existing Noise Environment

Ambient noise levels at the site and at noise-sensitive land uses in the project vicinity were measured by Illingworth & Rodkin, Inc. between July 1, 2016 and July 6, 2016. The noise survey included one-long term noise measurement and four short-term noise measurements as shown on Figure 1. Weather conditions during the survey were good for noise monitoring with clear skies, calm winds, and seasonable temperatures.

The long-term noise measurement (LT-1) was made along the northwest property line of the project site, approximately 600 feet from the center of Main Street and adjacent to Charter oak Avenue residential properties that border the site. Figures 2 - 7 display the measured noise data over a daily basis. Hourly average noise levels typically ranged from 44 to 53 dBA L_{eq} during the daytime period (7:00 a.m. to 10:00 p.m.) and from 38 to 48 dBA L_{eq} at night (10:00 p.m. to 7:00 a.m.). Hourly average noise levels during the 9:00 p.m. hour on Monday, July 4, 2016 reached 68 dBA L_{eq} because of fireworks. The day-night average noise level at LT-1 typically ranged from 50 to 52 dBA L_{dn} with the exception of Monday, July 4, 2016 when the L_{dn} reached 56 dBA L_{dn} because of the sounds attributable to fireworks during the 9:00 p.m. hour.

Four short-term noise measurements were also made on Friday, July 1, 2016 and Tuesday July, 6, 2016 to complete the noise monitoring survey. A 20-minute short-term noise measurement was made at site ST-1 between 6:50 p.m. and 7:10 p.m. on Friday, July 1, 2016 to quantify noise levels produced by a wedding reception held the event lawn east of the Farmstead restaurant. The wedding reception had live, amplified music provided by a bluegrass band known as the “Town Howlers”. The sounds of distant traffic, mechanical equipment, and the amplified music ranged from 46 to 49 dBA, and the sound of the music was barely audible above the sounds produced by the distant traffic and mechanical equipment. Voices on the public address system were measured to range from 48 to 50 dBA, and the cheering of the crowd reached 53 to 54 dBA as the wedding party was introduced. The average noise level during the 20-minute measurement was 48 dBA L_{eq} . Ambient traffic noise levels were monitored at sites ST-2, ST-3, and ST-4 on Tuesday July, 6, 2016. Average traffic noise levels were 45 to 48 dBA L_{eq} depending on the distance between the measurement site and Main Street. Table 4 summarizes the results of the short-term noise measurements.

TABLE 4 Summary of Short-Term Noise Measurements (dBA)

Noise Measurement Location (Date, Time)	L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	L_{eq}
ST-1: 300 feet from the center of the stage at the event lawn. (7/1/2016, 18:50-19:10)	60 ¹	53	49	48	47	48
ST-2: 820 feet from the center of Main Street. (7/6/2016, 13:40-13:50)	52	49	47	45 ²	43	45
ST-3: 600 feet from the center of Main Street. (7/6/2016, 14:00-14:10)	54	51	47	45	43	46
ST-4: 350 feet from the center of Main Street. (7/6/2016, 14:20-14:30)	58 ³	55	49	47	45	48

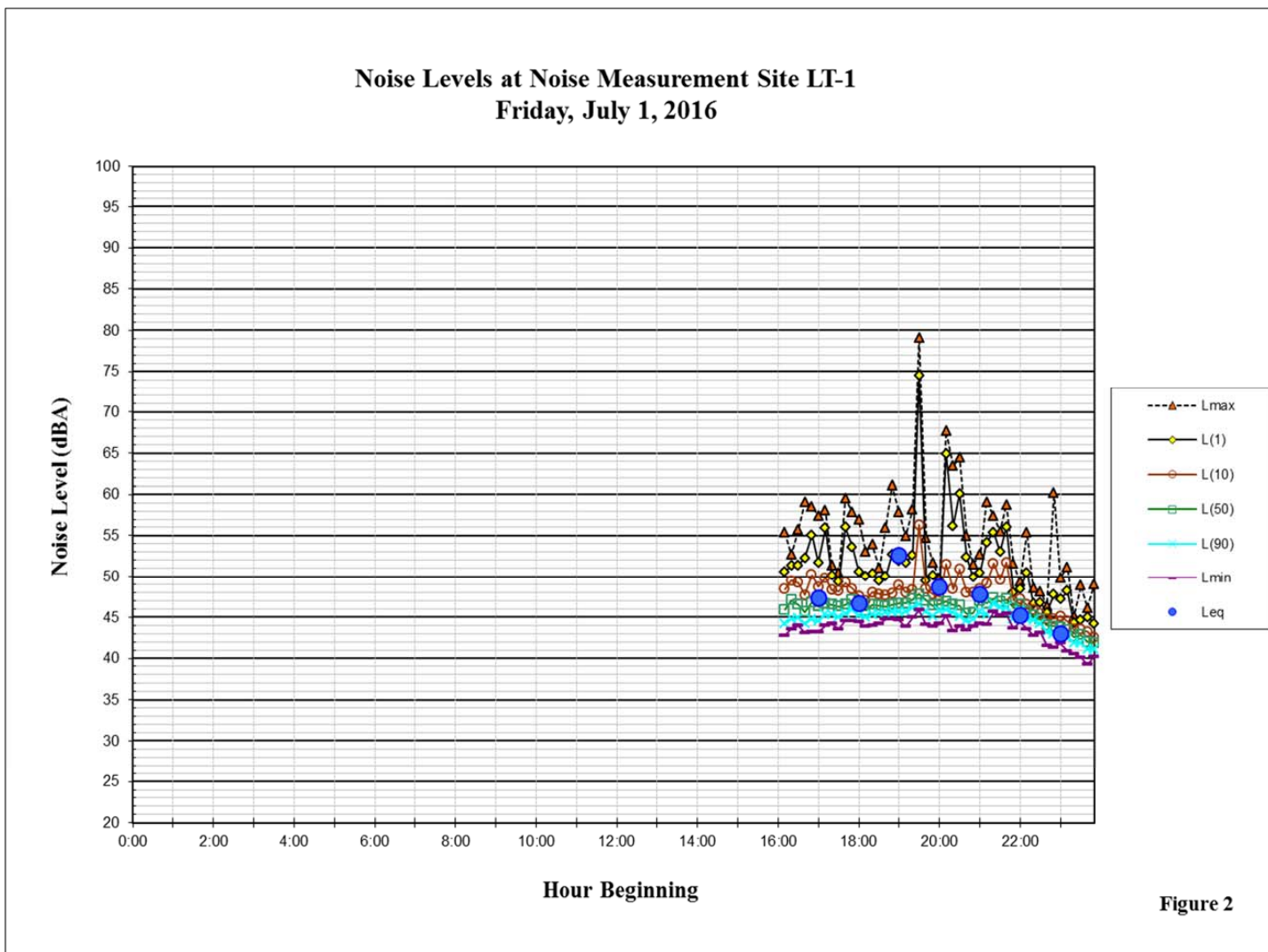
Notes:

1. A motorcycle along Main Street produced the maximum noise level of 60 dBA.
2. PG&E Substation produced noise levels ranging from 44 to 45 dBA.
3. Barking dogs at the nearby vet generated maximum noise levels reaching 58 dBA. After the measurement was complete, the Napa Valley Wine Train warning whistle generated maximum noise levels ranging from 80 to 82 dBA.

FIGURE 1 Noise Measurement Locations



Source: Google Earth



**Noise Levels at Noise Measurement Site LT-1
Saturday, July 2, 2016**

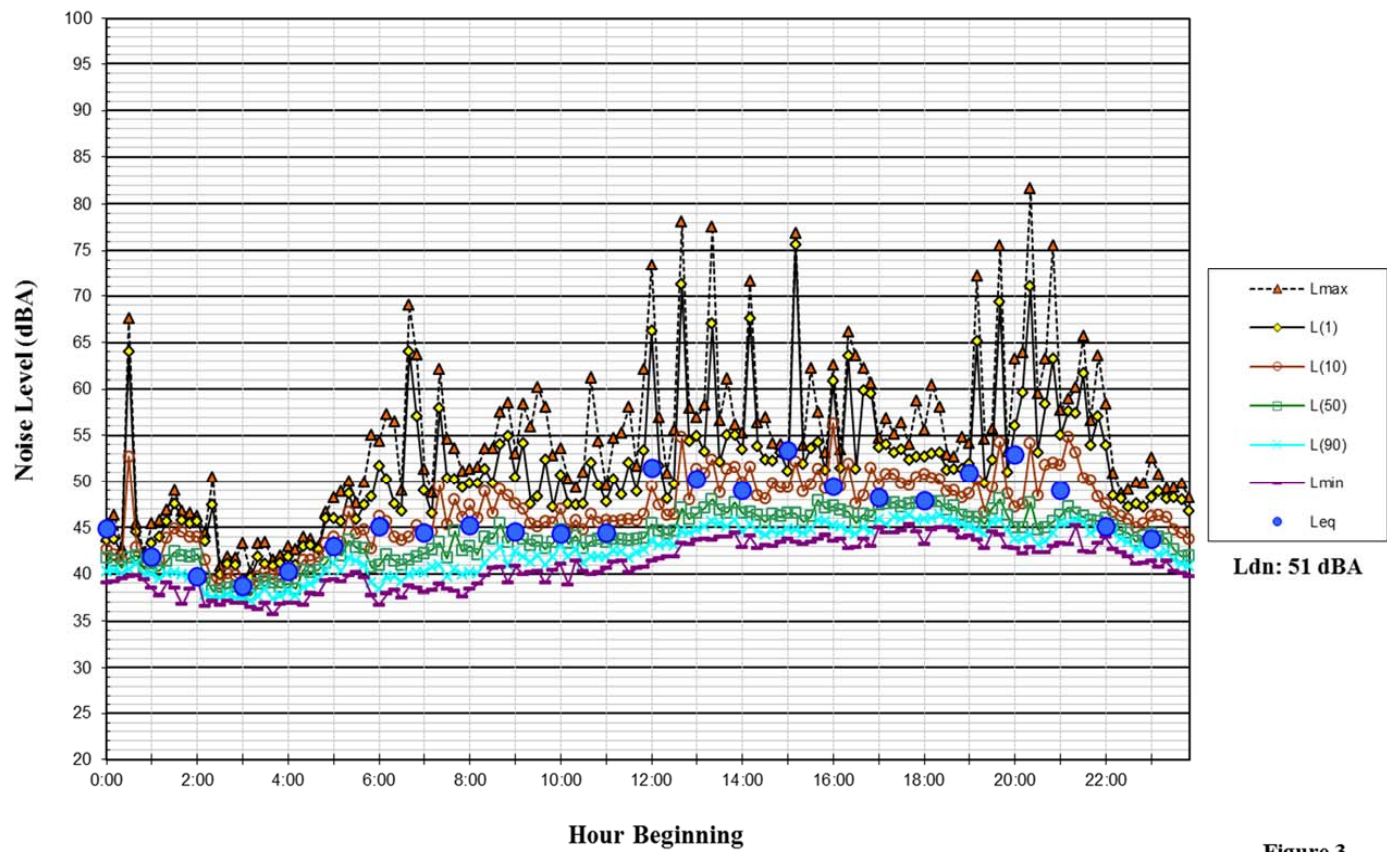


Figure 3

**Noise Levels at Noise Measurement Site LT-1
Sunday, July 3, 2016**

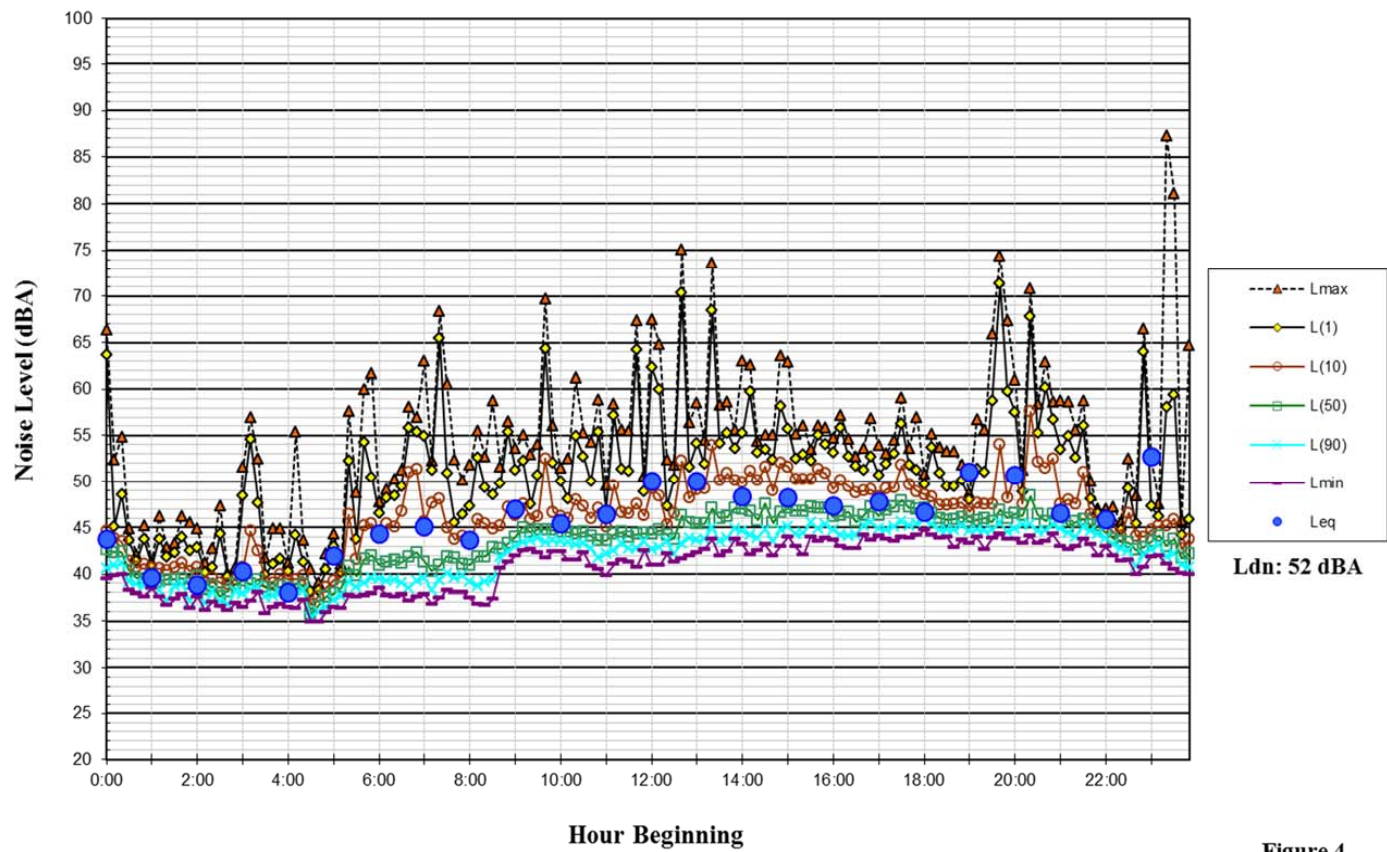


Figure 4

**Noise Levels at Noise Measurement Site LT-1
Monday, July 4, 2016**

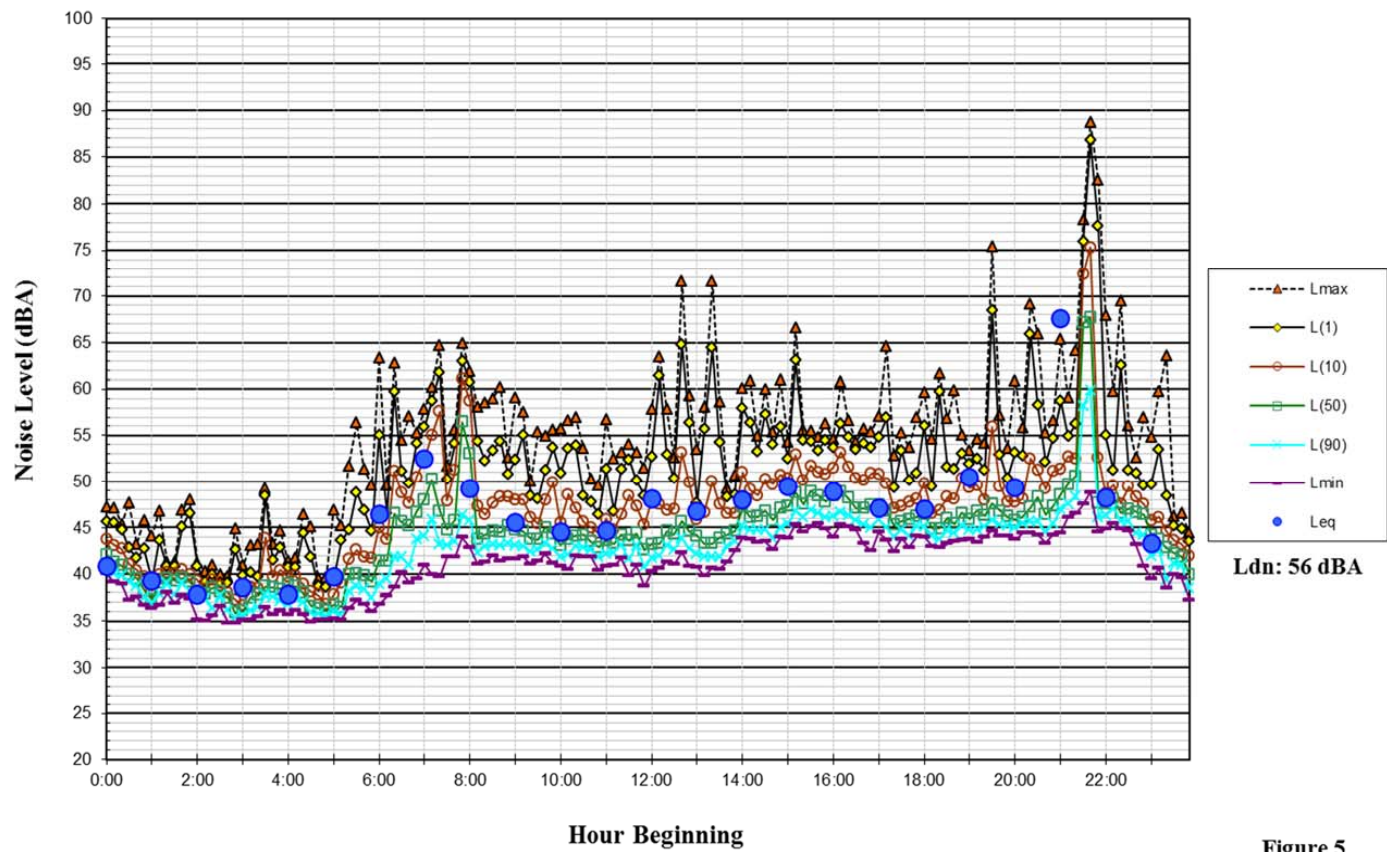


Figure 5

**Noise Levels at Noise Measurement Site LT-1
Tuesday, July 5, 2016**

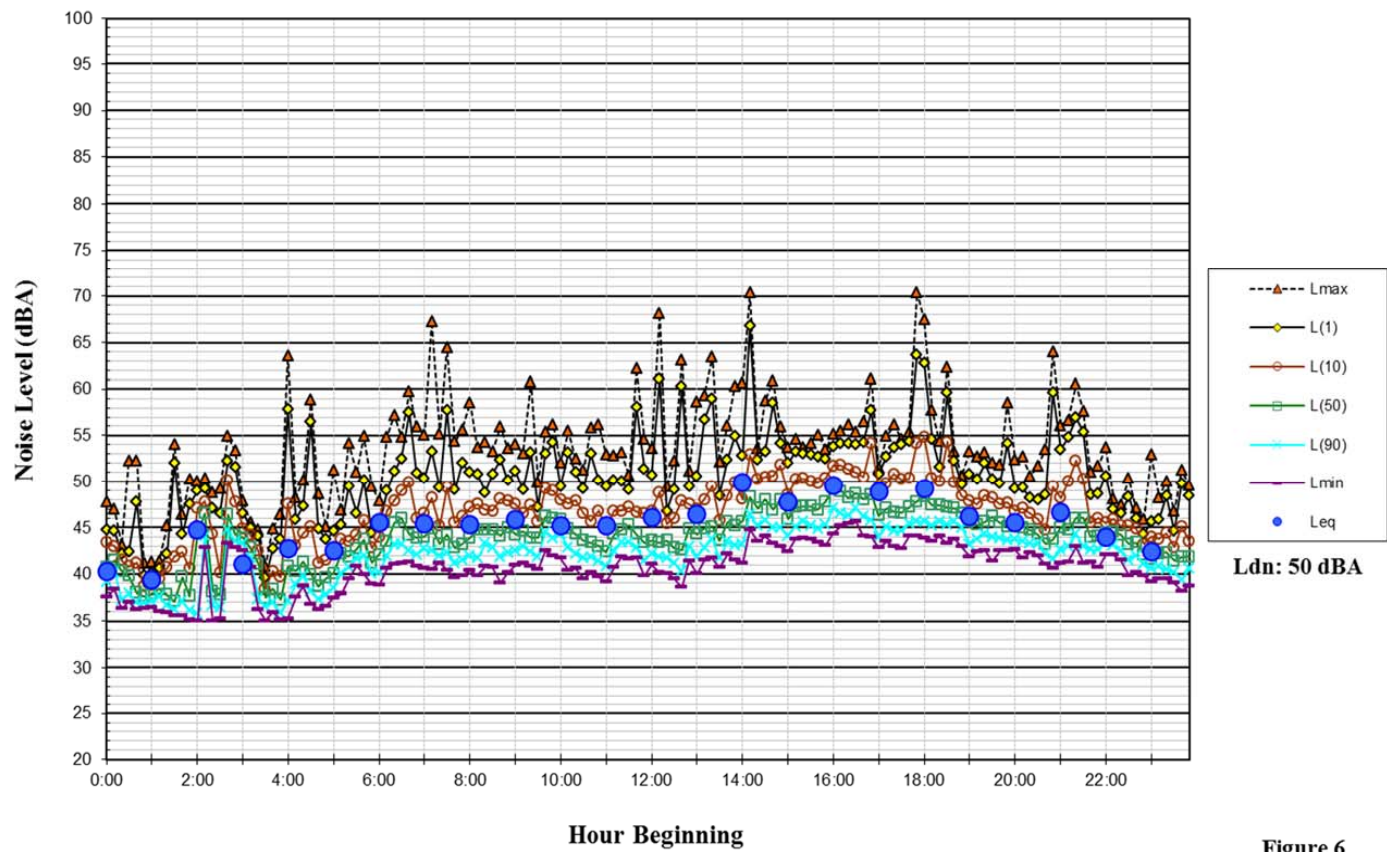


Figure 6

**Noise Levels at Noise Measurement Site LT-1
Wednesday, July 6, 2016**

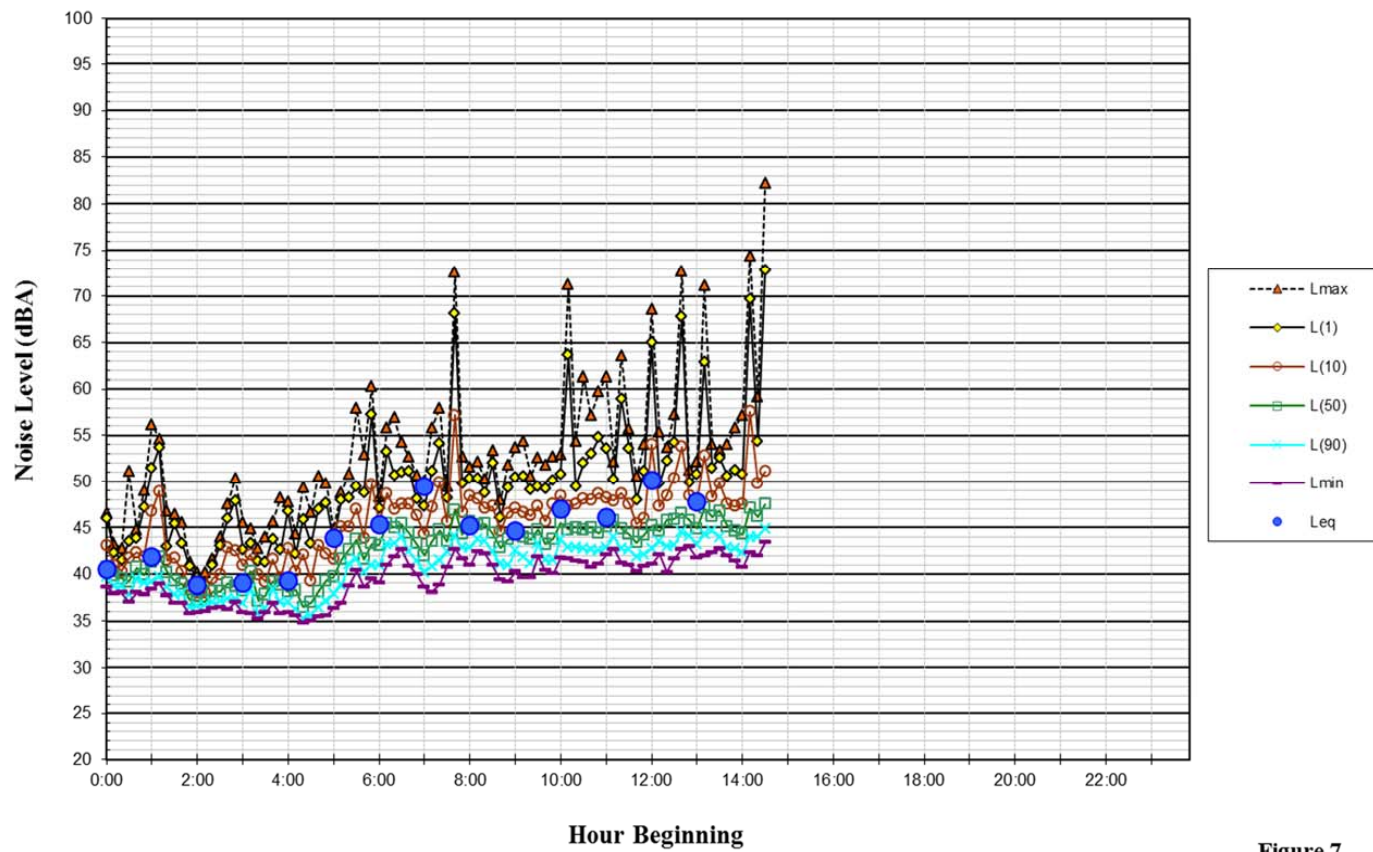


Figure 7

GENERAL PLAN CONSISTENCY ANALYSIS

The Public Health, Safety, and Noise Chapter of the St. Helena General Plan Update sets forth policies and implementing actions in order to prepare for and mitigate the adverse effects of noise. The applicable General Plan policies and implementing actions were presented in detail in the Regulatory Background section of this report. The City of St. Helena considers residential land uses to be completely compatible in noise environments less than 55 dBA L_{dn} . The completely compatible designation assumes that buildings of normal conventional construction would provide sufficient attenuation in order to achieve acceptable interior noise levels (45 dBA L_{dn} or less).

Based on the results of the ambient noise monitoring survey, existing noise levels at the portions of the site proposed for lodging are approximately 50 to 52 dBA L_{dn} . Traffic noise levels along Main Street, between Pope Street and Mills Lane, are not anticipated to measurably increase by 2030; therefore, the future noise environment is expected to remain at or below 52 dBA L_{dn} . The exterior noise environment would be considered to be completely compatible for the proposed land use. Interior noise levels, assuming that buildings are of normal conventional construction with no special noise insulation, would be less than 45 dBA L_{dn} , meeting the interior noise limits established in the General Plan and by the State Building Code. Additional noise controls or noise insulation are not required to conform to the applicable exterior or interior noise limits established in the General Plan and State Building Code.

NOISE IMPACTS AND MITIGATION MEASURES

Significance Criteria

Paraphrasing from the checklist questions in Appendix G of the CEQA Guidelines, a project would normally result in significant noise impact if it would cause traffic or other on-going sources of operational noise to result in a substantial permanent noise increase, if it would cause ambient noise levels at sensitive receivers to increase substantially during construction, or if it would generate excessive groundborne vibration levels. The following criteria were used to evaluate the significance of environmental noise resulting from the project:

- A significant impact would be identified if project generated traffic or operational noise sources would substantially increase noise levels at sensitive receivers in the vicinity. An increase in average noise levels of 5 dBA or greater is considered to be significant and to constitute a noise impact by the noise source in question for the purpose of environmental analyses.
- A significant noise impact would be identified if construction-related noise would temporarily increase ambient noise levels at sensitive receptors. Hourly average noise levels exceeding 60 dBA L_{eq} at the property lines shared with residential land uses, and the ambient by at least 5 dBA L_{eq} , for a period of more than one year would constitute a significant temporary noise increase at adjacent residential land uses.

- A significant impact would be identified if the construction of the project would expose persons to excessive vibration levels. Groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in cosmetic damage to normal buildings.

Impact 1: Project-Generated Traffic Noise. The proposed project would not result in a permanent noise level increase at existing noise sensitive land uses due to project-generated traffic. **This is a less-than-significant impact.**

A significant impact would result if traffic generated by the project would substantially increase noise levels at sensitive receptors in the vicinity. A substantial increase would occur if the noise level increase is 5 dBA L_{dn} or greater. The project's traffic study¹ provided traffic volume information for roadways serving the project site. No noise-sensitive land uses that would be affected by increased traffic noise associated with project vehicle trips are located along Mills Lane or La Fata Street. Noise-sensitive land uses do currently exist along Dowdell Lane. Traffic volume information for Dowdell Lane was reviewed to calculate the permanent noise increase attributable to project-generated traffic. Traffic volumes under the Existing Plus Project scenario were compared to the Existing scenario to calculate the relative increase in the hourly average traffic noise level (L_{eq}) attributable to the proposed project. The change in the L_{dn} would correspond to the change in the peak hour L_{eq} . Based on this review, traffic noise levels are calculated to increase by less than 1 dBA L_{dn} . This increase would not be considered to be substantial as it would not be measureable or perceptible and would result in a less-than-significant impact.

Mitigation Measure 1: None required.

Impact 2: Operational Noise. Mechanical equipment associated with the project could generate noise in excess of the City of St. Helena's noise standards. **This is a significant impact.**

The proposed project would likely include rooftop mechanical equipment, such as heating, ventilation, and air conditioning systems (HVAC) that would produce noise during operation. At the time of this analysis, specific mechanical equipment details were not available.

The City of St. Helena limits operational noise levels from new projects to 45 dBA L_{eq} during the daytime (7:00 a.m. to 7:00 p.m.), 40 dBA L_{eq} during the evening (7:00 p.m. to 10:00 p.m.), and 35 dBA L_{eq} during the night (10:00 p.m. to 7:00 a.m.) at the nearest residential property line or at the nearest affected location on the receiver's property. Maximum noise levels of any intrusive noise shall not exceed the L_{eq} limits by more than 10 dBA.

Typical air conditioning units and heat pumps for hotels produce noise levels of about 60 dBA at a distance of 50 feet. Since this type of equipment could run continuously during the daytime, evening, and nighttime, the 35 dBA L_{eq} noise limit would be the most appropriate regulatory threshold to ensure a conservative analysis. For the proposed project, the worst-case scenario would assume that mechanical equipment would be located approximately 300 feet from the

¹ Traffic Impact Report, Proposed Farmstead at Long Meadow Ranch Project, Crane Transportation Group, November 21, 2019.

residential property line. At a distance of 300 feet, project mechanical equipment could produce noise levels of 44 dBA L_{eq} , which would exceed the 35 dBA L_{eq} noise limit by up to 9 dBA L_{eq} .

Based on these findings, noise associated with the operation of mechanical equipment is expected to exceed the evening and nighttime noise limits established by the City of St. Helena at the nearest residences to the west, assuming a worst-case scenario with regard to the location of the equipment. This would be a significant impact.

Mitigation Measure 2:

The following mitigation measures shall be included in the project to reduce the impact to a less-than-significant level:

- Mechanical equipment shall be selected and designed to reduce impacts on surrounding uses to meet the City's noise level requirements. A qualified acoustical consultant shall be retained to review mechanical noise as these systems are selected to determine specific noise reduction measures necessary to reduce noise to comply with the City's noise level requirements. Noise reduction measures could include, but are not limited to, selection of equipment that emits low noise levels and/installation of noise barriers such as enclosures and parapet walls to block the line-of-sight between the noise source and the nearest receptors. Alternate measures may include locating equipment in less noise-sensitive areas, such as the rooftop of the hotel buildings away from the building's edge nearest the residences, where feasible.

Impact 3: Construction Noise. Noise generated by project construction activities would temporarily elevate ambient noise levels at sensitive land uses in the vicinity. Due to the proximity of existing residential land uses, there is a potential that construction noise levels would exceed 60 dBA L_{eq} , and the ambient by at least 5 dBA L_{eq} , for a period greater than one year. **This is a significant impact.**

Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction noise impacts primarily occur when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods of time. Typically, significant noise impacts do not result when standard construction noise control measures are enforced at the project site and when the duration of the noise generating construction period is limited to one construction season (typically one year) or less. Once construction moves indoors, minimal noise would be generated at off-site locations.

Construction activities for individual projects are typically carried out in stages. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. Typical construction noise levels at a distance of 50 feet are shown in Tables 5 and 6. Table 5 shows the average noise level ranges, by

construction phase, and Table 6 shows the maximum noise level ranges for different construction equipment. Most demolition and construction noise falls with the range of 80 to 90 dBA at a distance of 50 feet from the source.

TABLE 5 Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84
I - All pertinent equipment present at site.								
II - Minimum required equipment present at site.								

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

TABLE 6 Construction Equipment 50-foot Noise Emission Limits

Equipment Category	L_{max} Level (dBA)1,2	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor ³	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact

Equipment Category	L _{max} Level (dBA) ^{1,2}	Impact/Continuous
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

¹ Measured at 50 feet from the construction equipment, with a “slow” (1 sec.) time constant.

² Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

³ Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

Source: Mitigation of Nighttime Construction Noise, Vibrations and Other Nuisances, National Cooperative Highway Research Program, 1999.

Construction activities can generate high noise levels, especially during the construction of project infrastructure when heavy equipment is used. Maximum instantaneous noise levels from the majority of construction equipment ranges from about 73 to 85 dBA L_{max} at a distance of 50 feet. Demolition tools such as concrete saws and hoe rams can result in maximum instantaneous noise levels of about 90 dBA L_{max} at a distance of 50 feet from the noise source. Typical hourly average construction generated noise levels are about 81 to 88 dBA L_{eq} measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.). Construction generated noise levels drop off at a rate of about 6 dBA per doubling of distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

For the proposed project, the larger equipment would be used for approximately 80 work days (Site Preparation – 10 days, Grading/Excavation – 30 days, Trenching – 20 days, and Paving – 20 days). The construction of the lodging units would utilize less heavy equipment and would last approximately 300 work days.

Hourly average noise levels are calculated to range from about 65 to 72 dBA L_{eq} at the nearest residential receptors located approximately 300 feet from the westernmost edge of the proposed lodging area of the site and from about 61 to 68 dBA L_{eq} when located approximately 500 feet from the center of the construction site. During project construction activities, ambient noise levels at Charter Oak Avenue residential land uses could be elevated by 15 to 20 dBA,

depending on the proximity of the portion of the site under construction to the sensitive receptor. Noise from temporary construction activities would exceed 60 dBA L_{eq} and the ambient noise environment by at least 5 dBA L_{eq} at noise-sensitive uses in the project vicinity for a period greater than one year, and the impact would be considered significant.

Mitigation Measure 3:

The St. Helena Municipal Code limits construction activities to the hours between 8:00 AM and 5:00 PM, Monday through Saturday. Construction is not allowed on Sundays and holidays (federal and local) if noise can be heard at the property line of any parcel of real property within the city limits. In accordance with Implementing Action PS2.F, noise suppression devices and techniques developed as part of a typical construction noise control plan would include, but not be limited to, the following measures:

- Use “quiet” models of air compressors and other stationary noise sources where technology exists;
- Equip all internal combustion engine-driven equipment with mufflers that are in good condition and appropriate for the equipment;
- Locate all stationary noise-generating equipment, such as air compressors and portable power generators, as far away as possible from adjacent land uses;
- Locate staging areas and construction material areas as far away as possible from adjacent land uses;
- Prohibit all unnecessary idling of internal combustion engines;
- Notify all adjacent land uses of the construction schedule in writing;
- Designate a “disturbance coordinator” who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

The implementation of reasonable noise reduction measures during all phases of construction activity, in combination with the limitations on hours set forth in the St. Helena Municipal Code, would reduce the impact of temporary construction noise to a less-than-significant level.

Impact 4: Exposure to Excessive Groundborne Vibration due to Construction. Construction-related vibration levels resulting from activities at the project site would not exceed 0.3 in/sec PPV at the nearest residential and commercial land uses. **This is a less-than-significant impact.**

The construction of the project may generate vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used. Construction activities would include site preparation work, foundation work, paving, and new building framing and finishing. The proposed project is not expected to require pile driving, which can cause excessive vibration.

For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.08 in/sec PPV for ancient buildings or buildings that are documented to be structurally weakened. No ancient buildings or buildings that are documented to be structurally weakened border the project site. Therefore, groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in a significant vibration impact.

The critical factors pertaining to the impact of construction vibration on existing sensitive receptors include the proximity of the existing structures to the project site, the structural soundness of the existing buildings, and the methods of construction used. Table 7 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet. Project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity. Jackhammers typically generate vibration levels of 0.035 in/sec PPV, and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used.

The nearest structures to the project site include the St. Helena Veterinary Hospital, approximately 30 feet northwest of the project property line, and wine storage warehouses opposite Mills Lane approximately 100 feet southeast of the site. Charter Oak Avenue residences are located a minimum distance of 60 feet from the project property line. At a minimum distance of 30 feet, vibration levels produced by vibratory construction equipment, such as a vibratory roller, would be 0.2 in/sec PPV or less. Vibration levels produced by a vibratory roller would be 0.08 in/sec PPV or less at a distance of 60 feet and 0.05 in/sec PPV or less at a distance of 100 feet. Vibration levels produced by construction activities occurring near the site boundaries would be expected to be 0.03 in/sec PPV or less, below the 0.3 in/sec PPV significance threshold used to assess the potential for cosmetic damage to structures. Vibration levels may at times be perceptible; however, intermittent, perceptible vibration levels would not be considered excessive. This is a less-than-significant impact.

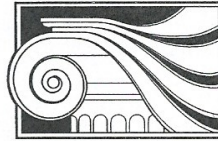
TABLE 7 Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	Approximate L _v at 25 ft. (VdB)
Pile Driver (Impact)	upper range	1.158	112
	typical	0.644	104
Pile Driver (Sonic)	upper range	0.734	105
	typical	0.170	93
Clam shovel drop		0.202	94
Hydromill (slurry wall)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, May 2006.

Mitigation Measure 4: None required.

WALSH ♦ NORRIS & ASSOCIATES, INC.
ARCHITECTURAL ACOUSTICS



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22 August 2018

Mr. Chris Hall
Executive VP and COO
Long Meadow Ranch
738 Main Street
St. Helena, CA 94574

Subject: Evaluation of Property Line Sound Levels from Outdoor Bar Area
Confirmation of Compliance
Long Meadow Ranch
St. Helena, CA

Dear Chris:

Outlined below are the results of our acoustical evaluation of the proposed sound wall design enclosing the outdoor bar area in order to achieve compliance with the allowable property line sound level requirement.

Acoustical Design: The design of the modifications prepared by Turnbull Griffin & Haesloop Architects (TGH) consists, first, of construction of a new dry storage area that extends out approximately 14 feet on the north side of the existing restaurant building providing acoustical shielding of the bar area. An 8-foot high, solid sound wall extends out approximately 28 feet from this building addition on the north side and turns west approximately 20 feet to the existing stone fireplace. The site plan of this acoustical sound wall design prepared by TGH Architects is attached for reference.

Acoustical Design Goal: It is our understanding that the acoustical design criterion for this project is to achieve a sound level at the property line of 40 dBA or less from activities at the outdoor bar area between 7 and 10 p.m. Since environmental noise fluctuates in level over time, codes typically specify that exterior sound measurements be completed over a stated time period and the resultant sound level is an energy average level (L_{eq}) which represents a single sound level containing the same total sound energy as the time-averaged fluctuating sound levels.

Acoustical Variables: As previously discussed, there are a number of acoustical variables that control the sound level at the property line, such as distance, height and extent of sound barrier walls, sound level of the patrons, etc. Each of these variables has been included in the acoustical evaluation.

Summary: Based on the above acoustical variables, including construction of a new dry storage area and the new 8-foot sound wall configuration of the TGH acoustical design attached, the evaluation indicates that the sound level of patrons in the outdoor bar area will be less than an L_{eq} of 40 dBA at all locations along the property line and is in compliance with the code requirement.

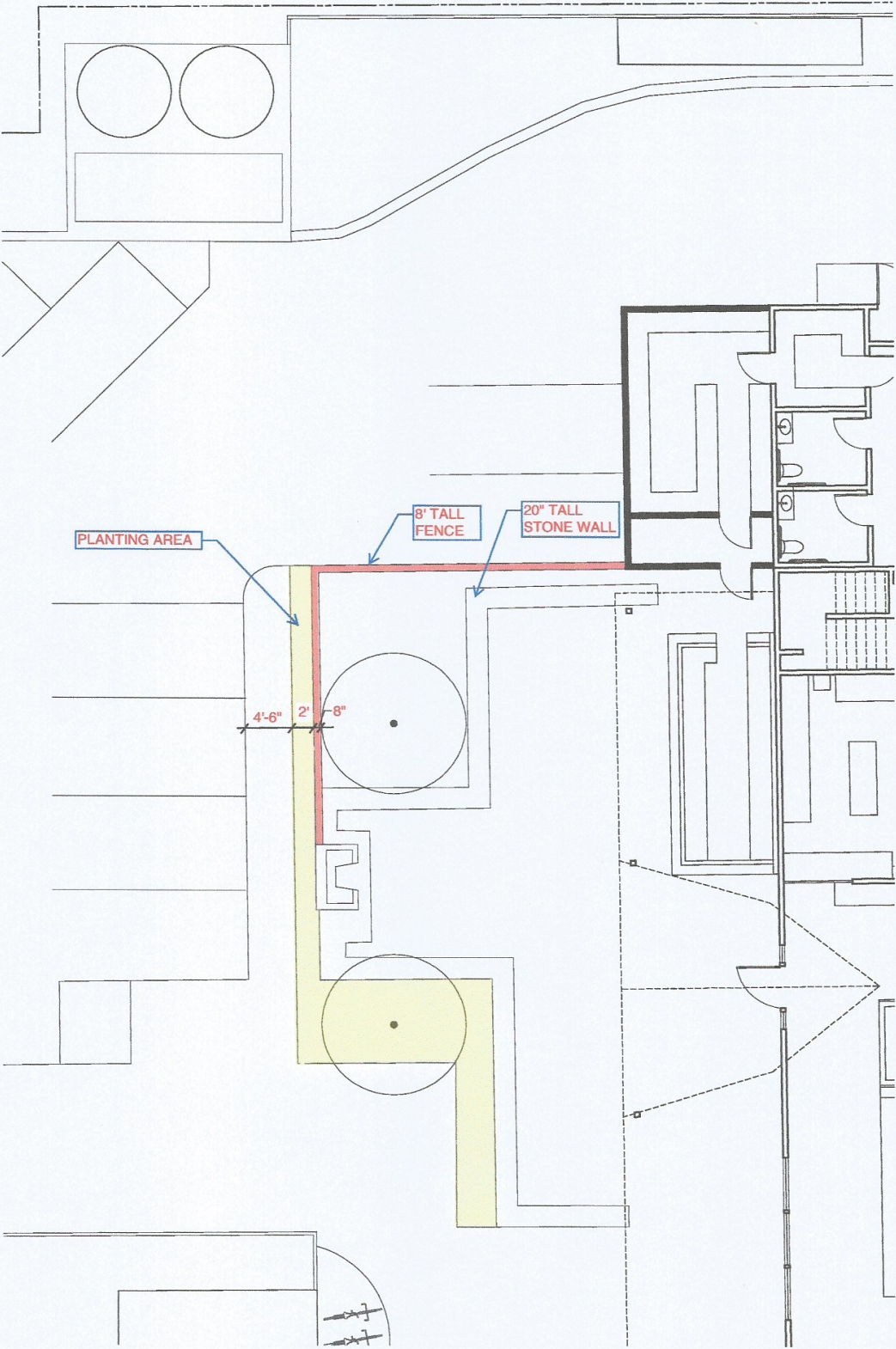
♦ ♦ ♦

Please call if you have any questions regarding this acoustical evaluation.

Very truly yours,
WALSH ♦ NORRIS & ASSOCIATES, INC.


David P. Walsh, FASA
Principal

encl:



MEMO

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 www.papadimosgroup.com

Pages: 11

Date: 15 August 2018

To: Elliott Faxstein – Director of Special Projects, Long Meadow Ranch

From: Carter Howard

SUBJECT: Farmstead at Long Meadow Ranch
 Exterior Noise Analysis

This memo provides results of the noise study of existing mechanical and electrical equipment at Farmstead at Long Meadow Ranch (738 Main St, St Helena, CA 94574) and recommended treatment for limiting noise intrusion on residential properties east of Farmstead to comply with regulations defined in the 1993 St. Helena General Plan.

EXISTING CONDITIONS

To document existing conditions, two noise surveys were performed at Farmstead on 6/7/18 and 6/28/18. Noise output from exterior equipment was measured close to the equipment and at the east property line. The highest measured level at the east property line was 63 dBA and the loudest equipment was exhaust fan EXF-1 serving the barn/catering kitchen and Trane® packaged air-conditioning unit AC-1 serving the main restaurant building. Figure 1 on the next page identifies the equipment observed at Farmstead.

A 3-dimensional computer model of the site and equipment was constructed using SoundPLAN®. This model then was calibrated to match the measurements made during our noise surveys and subsequently used to predict noise levels from individual equipment and cumulative noise levels, both at the east property line and at neighboring residential facades. Table 1 on the next page shows these predictions ordered from highest to lowest noise level at the east property line. Additionally, a color contour map of the existing noise levels is attached in Appendix A.

ACOUSTIC AND VIBRATION CONSULTANTS

Farmstead at Long Meadow Ranch
Exterior Noise Analysis
15 August 2018
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Figure 1 – Equipment at Farmstead

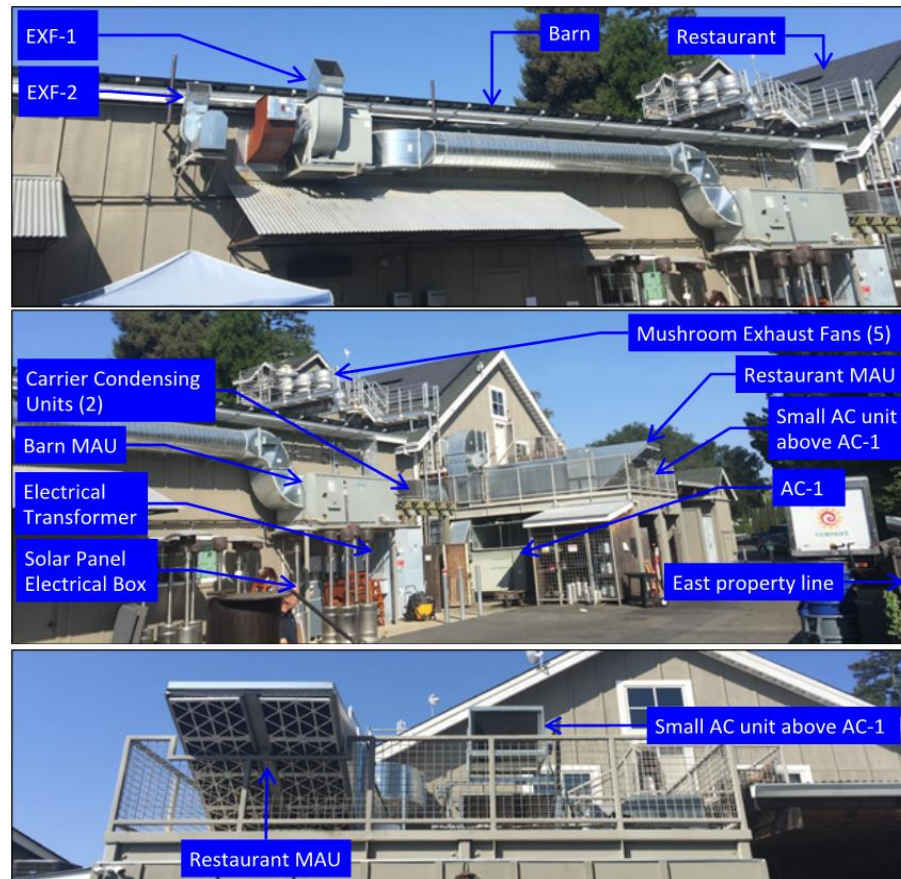


TABLE 1 – Existing Noise Levels

Equipment	Highest noise level at property line (dBA)	Noise level at residential facades (dBA)
Barn Exhaust Fan (EXF-1)	60	45
Trane Packaged Unit (AC-1)	58	33
Restaurant MAU	47	31
Barn Exhaust Fan (EXF-2)	46	32
Small AC unit above AC-1	46	35
Solar Panel Electrical Box	45	23
Mushroom Exhaust Fans (EF-1 thru 5)	44	31
Barn MAU	41	24
Carrier Condensing Units	40	27
Electrical Transformer	37	14
All Equipment (Total)	62	46

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 Exterior Noise Analysis
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The equipment contributing the most noise at the property line are EXF-1 and AC-1, and at the neighboring residential facade primarily EXF-1.

REGULATORY SETTING

The 1993 St. Helena General Plan (Chapter 8, Table 8-5) defines the impact of intrusive noise on residential receivers as significant if the intrusive noise exceeds the A-weighted average (dBA-Leq) ambient noise level without the intrusive noise by more than 5 dBA. This criteria applies at “the nearest receiver property line or at the nearest affected exterior location which is deemed appropriate”. The General Plan also defines noise level corrections for tonal or impulsive noises, but Farmstead’s equipment runs produces continuous, broad-band noise without significant tonal or impulsive qualities as defined by the General Plan, therefore these corrections would not apply in this case. Table 8-5 from the General Plan is attached in Appendix C for reference.

Average noise levels to the east of Farmstead are typically between 45 and 50 dBA during Farmstead’s hours of operation. This is corroborated by the noise study prepared by Illingworth & Rodkin (dated 9/8/16), which reports that hourly average noise levels 300ft from Farmstead’s eastern property line typically do not drop below 45 dBA during the day (7am-10pm).

Given that average noise levels east of Farmstead are typically no less than 45 dBA during Farmstead’s hours of operation, the regulatory limit defined by the 1993 St. Helena General Plan would be 50 dBA at Farmstead’s eastern property line. On this basis, we have based our efforts for noise control on limiting Farmstead’s equipment noise to below 50 dBA at the eastern property line.

RECOMMENDATIONS

Using SoundPLAN®, we recommend the following treatment for limiting noise intrusion on residential properties to the east of Farmstead:

1. A 3ft long sound attenuator in the exhaust outlet duct of AC-1.
2. A 4-sided barrier around EXF-1, 3ft taller than the top of the unit’s discharge duct.
3. A 3-sided barrier around the Small AC unit above AC-1, 1ft taller than the unit.
4. Replacing the existing property line fence with an 8ft tall solid sound barrier.

Predicted noise levels with this treatment are presented in Table 2 below, assessed at the neighbor’s side of the eastern property line and at the neighboring residential facades. Existing noise levels in the same locations are also included in Table 2 for reference.



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TABLE 2 – Noise Levels with Treatments

Condition	Treatments				Noise Levels	
	EXF-1	AC-1	Small AC unit above AC-1	Property Line Barrier	Neighbor's side of the eastern property line (dBA)	Residential facades (dBA)
Existing	None	None	None	None	60*	46
Treated	Barrier 3ft taller than unit	3ft-long sound attenuator	Barrier 1ft taller than unit	8ft tall	44	38

*Note that the highest levels on the neighbor's side of the property line are 2dB less than predicted levels at the property line. This is due to minor shielding from the existing property line fence.

Color contour maps of each condition are attached in Appendix A for reference. Note that these maps show levels 5ft above the ground (approx. head-height).

To implement these treatments appropriately, adhere to the following guidelines:

Property Line Barrier

- Minimum surface weight of 3psf
- No gaps or cracks across the entire surface
- Continuous closure/seal to the ground
- If using a wooden barrier, consider designs with planks/panels overlapping such that future gaps will not appear as the wood shrinks over time.
- Extend barrier along the east property line as shown in Figure 2 below.

EXF-1 Barrier

- 4-sided barrier around EXF-1 (see Figure 2 below)
- Minimum surface weight of 3psf
- No gaps or cracks across the entire surface
- Solid bottom panel below unit sealed to vertical panels (no gaps, min. 3psf)
- Consider prefabricated noise barriers such as IAC Noishield® (see attached cutsheet, Appendix B)

Small AC unit above AC-1 Barrier

- 3-sided barrier around the small AC unit (see Figure 2 below)
- Extend the short sides of the barrier to the end of the unit
- Minimum surface weight of 3psf
- No gaps or cracks across the entire surface
- Solid bottom panel below unit sealed to vertical panels (no gaps, min. 3psf)
- Consider prefabricated noise barriers, such as IAC Noishield® (cutsheet provided in Appendix B).

AC-1 Exhaust Sound Attenuator

- Select 3 feet long sound attenuator and size for air velocities 500fpm

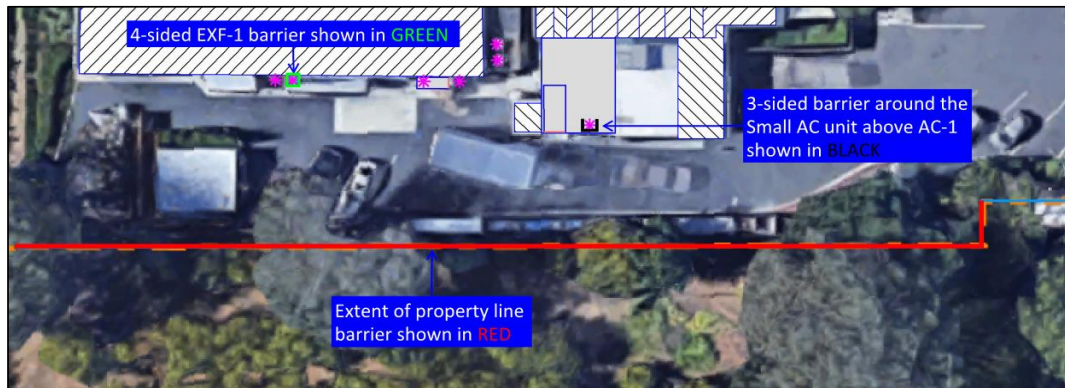


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- Allow minimum 3ft of straight duct after the elbow to minimize pressure drop and regenerated noise.
- Select a sound attenuator with the following minimum insertion loss values (consider reputable manufacturers such as Vibro-Acoustics and IAC):

Minimum Attenuator Insertion Loss (dB) per Octave Band (Hz)					
125	250	500	1000	2000	4000
12	19	23	29	23	15

FIGURE 2 – Barrier Treatments

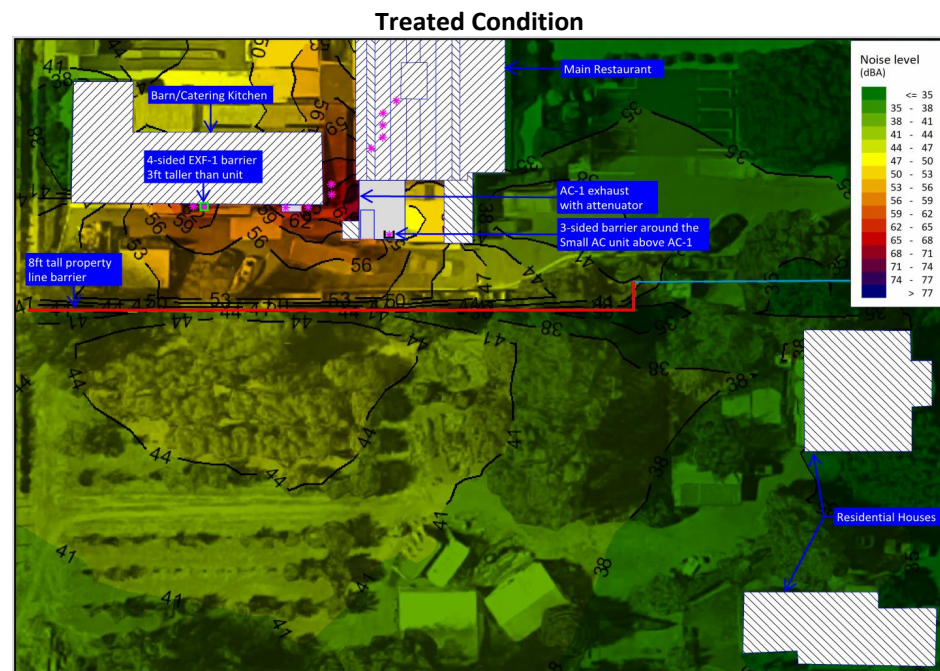
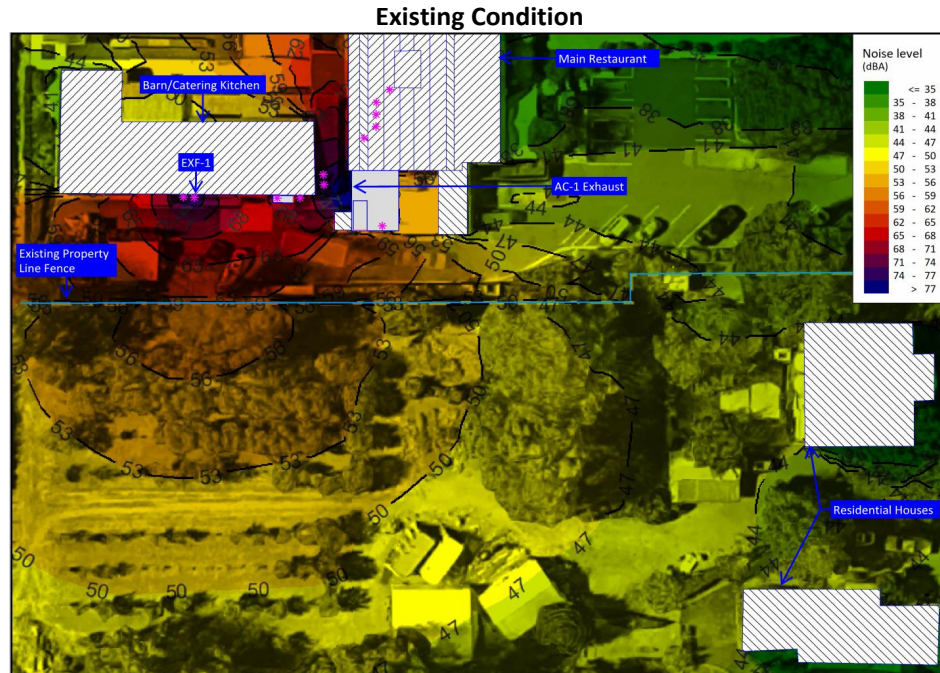


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**APPENDIX A
NOISE MAPS**



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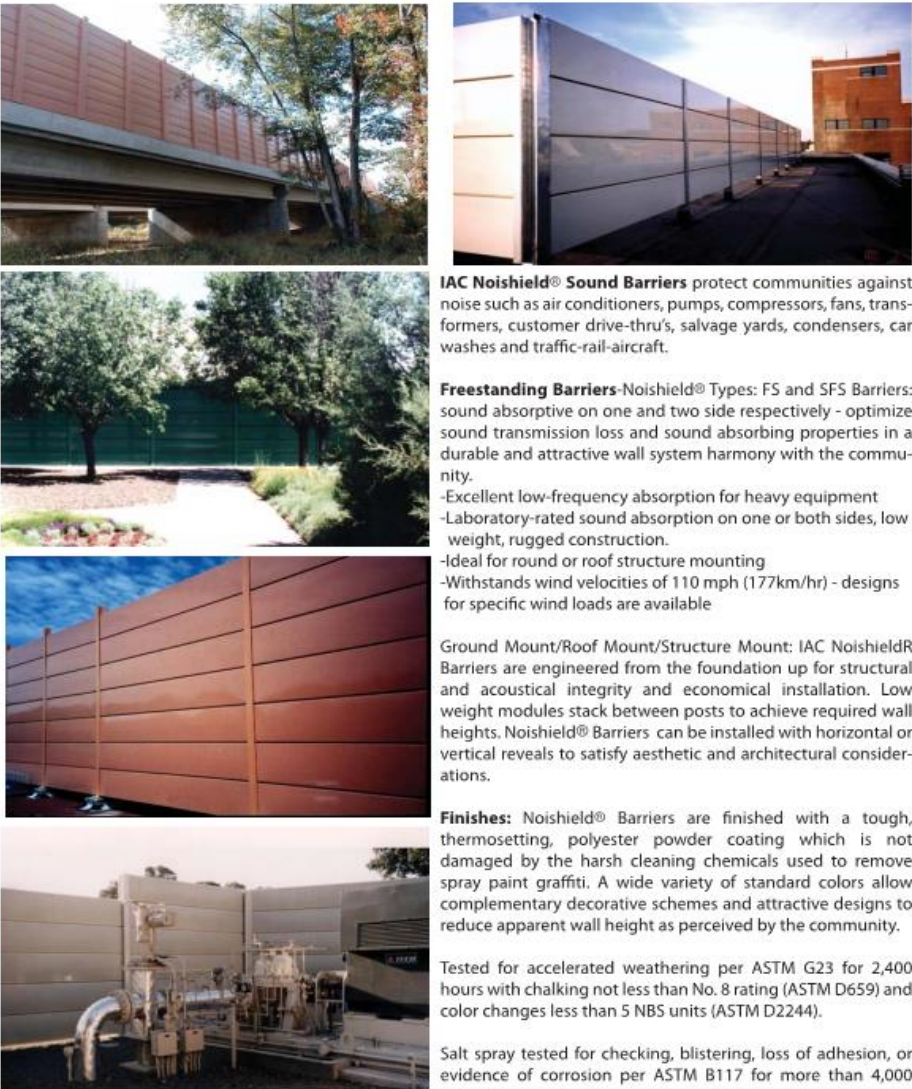


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APPENDIX B
IAC Noishield® Sound Barriers Cutsheet



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IAC Noishield® Sound Barriers protect communities against noise such as air conditioners, pumps, compressors, fans, transformers, customer drive-thru's, salvage yards, condensers, car washes and traffic-rail-aircraft.

Freestanding Barriers-Noishield® Types: FS and SFS Barriers: sound absorptive on one and two side respectively - optimize sound transmission loss and sound absorbing properties in a durable and attractive wall system harmony with the community.

- Excellent low-frequency absorption for heavy equipment
- Laboratory-rated sound absorption on one or both sides, low weight, rugged construction.
- Ideal for round or roof structure mounting
- Withstands wind velocities of 110 mph (177km/hr) - designs for specific wind loads are available

Ground Mount/Roof Mount/Structure Mount: IAC NoishieldR Barriers are engineered from the foundation up for structural and acoustical integrity and economical installation. Low weight modules stack between posts to achieve required wall heights. Noishield® Barriers can be installed with horizontal or vertical reveals to satisfy aesthetic and architectural considerations.

Finishes: Noishield® Barriers are finished with a tough, thermosetting, polyester powder coating which is not damaged by the harsh cleaning chemicals used to remove spray paint graffiti. A wide variety of standard colors allow complementary decorative schemes and attractive designs to reduce apparent wall height as perceived by the community.

Tested for accelerated weathering per ASTM G23 for 2,400 hours with chalking not less than No. 8 rating (ASTM D659) and color changes less than 5 NBS units (ASTM D2244).

Salt spray tested for checking, blistering, loss of adhesion, or evidence of corrosion per ASTM B117 for more than 4,000

Acoustic Performances:

1/3 Octave Band Center Frequency, Hz. 125 250 500 1K 2K 4K 8K STC

SOUND TRANSMISSION LOSS DATA, dB

FS/S and SFS/S	21	34	40	33	32	26	37	30
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SOUND ABSORPTION COEFFICIENTS

FS/S, FS/A and FSt/S	1.12	1.12	1.10	1.01	0.89	0.76	0.57	1.05
SFS/S and SFS/A	0.49	1.04	1.14	1.05	0.96	0.95	0.87	1.05

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IAC NOISHIELD® SOUND BARRIERS



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APPENDIX C
1993 St. Helena General Plan – Table 8-5
“Standard and Adjustments for Determining Noise Impact of Intrusive Noise for Residential Receptors”



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 Exterior Noise Analysis
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Public Health & Safety

TABLE 8-5: STANDARD AND ADJUSTMENTS FOR DETERMINING IMPACT OF INTRUSIVE NOISE FOR RESIDENTIAL RECEPTORS

STANDARD

The L_{eq} over a 10 minute period of time at the relevant time of day (or night) of maximum potential impact shall be the noise level descriptor used to determine the impact of intrusive, continuous or intermittent noise. The L_{eq} of the noise source of concern shall be compared with a similar L_{eq} of the ambient noise alone at the same time. Measurements are to be taken at the nearest receiver property line or at the nearest affected exterior location which is deemed appropriate. The ambient noise level shall be a measure of the composite of noises which occur normally at the given location.

Once the L_{eq} of the potentially intrusive source is determined, it shall be corrected as indicated below.

If, after the corrections are made, the potentially intrusive noise source would cause the exterior noise levels at the receiver position to exceed the measured ambient noise levels by more than 5 dBA, mitigation measures shall be developed to reduce the projected noise increase to be less than 5 dBA above ambient levels.

In addition to the above, the maximum noise level (L_{max}) of any impulsive noise shall not exceed the ambient by more than 10 dBA.

Corrections for Intrusive or Intermittent Noise

<u>Type of Correction</u>	<u>Circumstances of Correction</u>	<u>Correction¹</u>
Seasonal	Summer or year around operation	0 dBA
	Winter Only (or windows always closed)	-5 dBA
Tone or Impulse Characteristics	No Pure Tone or Impulsive Character	0 dBA
	Pure Tones ² Present	+5 dBA
	Impulsive Tones ³	+5 dBA

Notes:

¹ Correction to be added to the measured or predicted 10 minute L_{eq} of the potentially intrusive noise source.

² Tonal element exists when the 1/3 octave noise level of the tone is 5 dB greater than the average level of the two adjacent 1/3 octave noise bands.

³ Repetitions of noise with a period of less than 2 seconds or for a series of events with a duration less than 2 seconds.

8-13



FARMSTEAD AT LONG MEADOW RANCH EXPANSION PROJECT DRAFT AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT

St. Helena, California

August 23, 2016

Updated December 2019 & February 27, 2020

Prepared for:

Elliot S. Faxstein

Director of Special Projects

Long Meadow Ranch

PO Box 477

Rutherford, CA 94573

Prepared by:

James Reyff

ILLINGWORTH & RODKIN, INC.

/// Acoustics • Air Quality ///

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Petaluma, CA 94954

(707) 794-0400

Project: 16-125

Introduction

The purpose of this report is to address air quality, toxic air contaminant (TAC), and greenhouse gas (GHG) emission impacts associated with the proposed lodging facility and Long Meadow Ranch expansion project located on an approximate 10-acre parcel along the east side of State Route 29 at Mills Lane in St. Helena, California. We understand that the lodging facility would consist of 65 units, 908 square feet (sf) of Farmer's Market expansion, and associated parking facility. Air quality and GHG impacts could occur due to temporary construction emissions and as a result of direct and indirect emissions from new employees and customers. The primary issue addressed in this air quality study is localized community risk impacts from emissions of project construction equipment and the emissions resulting from the operation of the project. This analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).

2019 Update to this Analysis

Illingworth & Rodkin, Inc. prepared the air quality study for this project in 2016¹. This report is an update to that analysis, to incorporate the most recent traffic study in predicting operational GHG emissions². Our understanding is that the traffic study was updated to conform with current activity at the Farmstead location. The traffic studies are used in the air quality and GHG emissions assessment to provide the amount of daily traffic that is generated by operation of the project. These data are input to the CalEEMod model to predict annual emissions of GHG and average daily emissions of air pollutants caused by operation of the project. Therefore, the operational emissions forecasted for the project are updated in this report to reflect the latest traffic data and the most recent version of the CalEEMod model, Version 2016.3.2. Note that BAAQMD updated their Clean Air Plan in 2017 (since this report was published); however, that does not affect the findings in this report. The construction portion of the analysis was not affected by the traffic projections, and therefore, that previous analysis is carried forward in this updated report. The 200-person events were included in this update.

Setting

The project is located in Napa County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

Air Pollutants of Concern

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur

¹ Illingworth & Rodkin, Inc. 2016. *Farmstead at Long Meadow Ranch Expansion Project Draft Air Quality & Greenhouse Gas Emissions Assessment*. August 23.

² CTG. 2019. *Traffic Impact Report – Proposed Farmstead at Long Meadow Ranch*. November 21.

in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles.³ The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

The BAAQMD is the regional agency tasked with managing air quality in the region. At the State level, the CARB (a part of the California Environmental Protection Agency [EPA]) oversees regional air district activities and regulates air quality at the State level. The BAAQMD

³ Available online: <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>. Accessed: June 9, 2015.

has recently published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.⁴

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. The closest sensitive receptors include residences to the north of the project site and the St. Helena High School to the southwest of the project site. There are residences further to the west.

Greenhouse Gases

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO₂ being assigned a value of 1 and sulfur hexafluoride being several orders of magnitude stronger with a GWP of 23,900. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO₂ equivalents (CO₂e).

An expanding body of scientific research supports the theory that global warming is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California could be adversely affected by the global warming trend. Increased precipitation and sea level rise could increase coastal flooding,

⁴ Bay Area Air Quality Management District, 2017. *BAAQMD CEQA Air Quality Guidelines*. May.

saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

Significance Thresholds

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. These Thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on BAAQMD's website and included in the Air District's updated CEQA Guidelines (updated May 2011). BAAQMD then updated the guidelines in 2017, which contain the same significance thresholds. The significance thresholds identified by BAAQMD and used in this analysis are summarized in Table 1.

Table 1. Air Quality Significance Thresholds

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (Exhaust)	82	15
PM _{2.5}	54 (Exhaust)	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards	Single Sources Within 1,000-foot Zone of Influence	Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)	
Excess Cancer Risk	>10 per one million	>100 per one million	
Hazard Index	>1.0	>10.0	
Incremental annual PM _{2.5}	>0.3 µg/m ³	>0.8 µg/m ³	
Odors	Complaints	Complaints	
	No threshold	5 confirmed complaints per year averaged over three years	
Note: ROG = reactive organic gases, NO _x = nitrogen oxides, PM ₁₀ = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM _{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less.			

Impacts and Project Measures

Impact 1: Conflict with or obstruct implementation of the applicable air quality plan?
Less than significant.

The most recent clean air plan is the *Bay Area 2010 Clean Air Plan* that was adopted by BAAQMD in September 2010. The proposed project would not conflict with the latest Clean Air planning efforts since the project would have emissions well below the BAAQMD thresholds (see Impact 2). The project is too small to exceed any of the significance thresholds and, thus, it is not required to incorporate project-specific transportation control measures listed in the latest Clean Air Plan.

Impact 2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable State or federal ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? *Less than significant with construction period control measures.*

The Bay Area is considered a non-attainment area for ground-level ozone and PM_{2.5} under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM₁₀ under the California Clean Air Act, but not the federal act. The area has attained both State and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM₁₀, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NO_x), PM₁₀, and PM_{2.5} and apply to both construction period and operational period impacts.

Due to the project size, construction- and operational-period emissions would be less than significant. In the 2011 and 2017 update to the CEQA Air Quality Guidelines, BAAQMD identifies screening criteria for the sizes of land use projects that could result in significant air pollutant emissions. For operational impacts, the screening project size is identified at 489 rooms. For construction impacts, the screening size is identified as 554 rooms. Hotel projects of smaller size would be expected to have less-than-significant impacts. Since the project proposes to develop up to 65 rooms, it is concluded that emissions would be below the BAAQMD significance thresholds. Stationary sources of air pollution (e.g., back-up generators) have not been identified with this project.

Construction activities, particularly during site preparation and grading would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. Fugitive dust emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. Fugitive dust emissions would also depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant

if best management practices are employed to reduce these emissions. *Mitigation Measure 1 would implement BAAQMD-required best management practices.*

Mitigation Measure 1: Include basic measures to control dust and exhaust during construction.

During any construction period ground disturbance, the applicant shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less than significant level. The contractor shall implement the following best management practices that are required of all projects:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Impact 3: Violate any air quality standard or contribute substantially to an existing or projected air quality violation? ***Less than significant.***

As discussed under Impact 2, the project would have emissions less than the BAAQMD screening size for evaluating impacts related to ozone and particulate matter. Therefore, the project would not contribute substantially to existing or projected violations of those standards. Carbon monoxide emissions from traffic generated by the project would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high-localized concentrations of carbon monoxide. Air pollutant monitoring data indicate that carbon monoxide levels have been at healthy levels (i.e., below State and federal standards) in the Bay Area since the early 1990s. As a result, the region has been designated as attainment for the standard. The highest measured level over any 8-hour averaging period during the last 3 years in the Bay Area is less than 3.0 parts per million (ppm), compared to the ambient air quality standard of 9.0 ppm. Intersections affected by the project would have traffic volumes less than the BAAQMD screening criteria and, thus, would not cause a violation of an ambient air quality standard or have a considerable contribution to cumulative violations of these standards.⁵

Impact 4: Expose sensitive receptors to substantial pollutant concentrations? *Less than significant construction period control measures.*

Project impacts related to increased community risk can occur either by introducing a new sensitive receptor, such as a residential use, in proximity to an existing source of TACs or by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity. The BAAQMD recommends using a 1,000-foot screening radius around a project site for purposes of identifying community health risk from siting a new sensitive receptor or a new source of TACs. Operation of the project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy air pollutant levels. No stationary sources of TACs, such as generators, are proposed as part of the project. The project would not introduce new sensitive receptors to the area. There are thresholds that address both the impact of single and cumulative TAC sources upon projects that include new sensitive receptors (see Table 1). Construction activity would generate dust and equipment exhaust on a temporary basis that could affect nearby sensitive receptors (residences and St. Helena High School).

Project Construction Activity

Construction activities, particularly during site preparation and grading would temporarily generate fugitive dust in the form of respirable particulate matter (PM₁₀) and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices are employed to reduce these emissions. *Mitigation Measure 1 would implement BAAQMD-required best management practices.*

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute

⁵ For a land-use project type, the BAAQMD CEQA Air Quality Guidelines state that a proposed project would result in a less than significant impact to localized carbon monoxide concentrations if the project would not increase traffic at affected intersections with more than 44,000 vehicles per hour.

substantially to existing or projected air quality violations. Construction exhaust emissions may still pose community risks for sensitive receptors such as nearby residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A community risk assessment of the project construction activities was conducted that evaluated potential health effects of sensitive receptors at these nearby residences from construction emissions of DPM and PM_{2.5}.⁶ The closest sensitive receptors include single-family residences to the north of the project site and the St. Helena High School to the southwest of the project site. Emissions and dispersion modeling was conducted to predict the off-site DPM concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated. *Attachment 1* includes the detailed health risk calculation methodology.

Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2013.2.2 was used to predict annual emissions for construction. CalEEMod provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The proposed project land uses were input into CalEEMod, which included 65 rooms entered as “Hotel,” 908 square feet (sf) entered as “High Turnover (Sit-down) Restaurant”, and 70 spaces entered as “Parking Lot” on a 10.5-acre site. A construction build-out scenario, including equipment list and phasing schedule provided by the applicant was entered into the model. It is expected that 8,000 cubic yards (cy) of soil import would be necessary, which was entered into the model. In addition, 250 one-way asphalt truck trips based on 2,000 cy of asphalt are expected during the paving phase and were entered into the model. It is anticipated that temporary line power will be available to the site, so no generators are expected. In addition, liquid propane gas (LPG) aerial lifts are anticipated for use in place of diesel lifts. *Attachment 2* includes the CalEEMod input and output values for construction emissions.

The CalEEMod model provided total annual PM_{2.5} exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles, with total emissions from all construction stages of 0.1371 tons (274 pounds). The on-road emissions are a result of haul truck travel during grading activities, worker travel, and vendor deliveries during construction. A trip length of half a mile was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction site. Fugitive PM_{2.5} dust emissions were calculated by CalEEMod as 0.1048 tons (210 pounds) for the overall construction period.

Dispersion Modeling

The U.S. EPA ISCST3 dispersion model was used to predict concentrations of DPM and PM_{2.5} concentrations at existing sensitive receptors (residences and high school) in the vicinity of the project site. The ISCST3 modeling utilized two area sources to represent the on-site construction emissions, one for DPM exhaust emissions and the other for fugitive PM_{2.5} dust emissions. To

⁶ DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

represent the construction equipment exhaust emissions, an emission release height of six meters was used for the area source. The elevated source height reflects the height of the equipment exhaust pipes and buoyancy of the exhaust plume. For modeling fugitive PM_{2.5} emissions, a near ground level release height of two meters was used for the area source. Emissions from vehicle travel around the project site were included in the modeled area sources. Construction emissions were modeled as occurring daily between 7 a.m. - 4 p.m., when the majority of construction activity would occur.

The modeling used a two-year data set (2000-2001) of hourly meteorological data from Napa Sewage Treatment Plant prepared for use with the ICST3 model by the BAAQMD. Annual DPM and PM_{2.5} concentrations from construction activities in 2017 and 2018 were calculated using the model. DPM and PM_{2.5} concentrations were calculated at nearby residential locations. Receptor heights of 1.5 meters (4.9 feet) were used in the modeling to represent the breathing heights of nearby residences. *Figure 1* shows the construction area modeled, and locations of nearby residential receptors.

Predicted Cancer Risk and Hazards

The maximum-modeled DPM and PM_{2.5} concentrations occurred at two different residences to the north of the project site. Using the maximum annual modeled DPM concentrations, the maximum increased cancer risks were calculated using the methods previously described. Due to the short anticipated duration of project construction activities (about 20 months), infant exposures were assumed in calculating cancer risks for residential exposures. Because an infant (0 to 2 years of age) has a breathing rate that is greater than the breathing rate for the 3rd trimester the contribution to total cancer risk from an infant exposure is greater than if the initial exposure assumed for the 3rd trimester is assumed. It was conservatively assumed that an infant exposure to construction emissions would occur over the entire construction period.

Results of this assessment indicate that the maximum increased residential cancer risks would be 34.8 in one million for an infant exposure and 0.6 in one million for an adult exposure. The maximum incremental school site cancer risk would be 1.8 in one million for child exposure. The locations of both the residential and school site Maximally Exposed Individual (MEI) are shown in *Figure 1*. Assuming infant exposure at the residential MEI, the maximum residential excess cancer risk for would be greater than the BAAQMD significance threshold of 10 in one million and would be considered a *significant impact*

The maximum-modeled annual PM_{2.5} concentration, which is based on combined exhaust and fugitive dust emissions, was 0.396 µg/m³ and occurred at a location adjacent to the residential cancer risk MEI. This annual PM_{2.5} concentration would be greater than the BAAQMD significance threshold of 0.3 µg/m³ and would be considered a *significant impact*.

The maximum modeled annual residential DPM concentration (i.e., from construction exhaust) was 0.1540 µg/m³. The maximum computed HI based on this DPM concentration is 0.03, which is lower than the BAAQMD significance criterion of a HI greater than 1.0.

The project would have a *significant impact* with respect to community risk caused by construction activities. *Implementation of Mitigation Measures 1 and 2 would reduce this impact to a level of less than significant.*

Attachment 2 includes the emission calculations used for the area source modeling and the cancer risk calculations.

Combined Construction Risk Assessment

A review of the BAAQMD Google Earth screening analysis tools identified State Route 29 (SR-29) as the only substantial mobile source of TAC with the potential to affect the construction MEI. The construction MEI is located about 940 feet west of SR-29, Link 1046. The *Highway Risk Screening Analysis Tool* was used to identify screening level risk and screening cancer risk was adjusted using a factor of 1.3744 to account for new OEHHA 2015 guidance.⁷ This was added to the calculated maximum construction risk level and reported in *Table 2*. The Napa Valley Wine Train line is located about 930 feet west of the construction MEI. The impact from the train emissions would be less than the impact from SR-29. Therefore, the effect would be less than significant. *Cancer risk, assuming infant exposure, annual PM_{2.5} concentrations and non-cancer hazards would not exceed the significance thresholds for combined TAC source exposures.*

Table 2. Combined Cancer Risks, PM_{2.5} Concentrations, and Hazard Index at Construction MEI

Source	Cancer Risk (per million)	Annual PM _{2.5} (µg/m ³)	Acute or Chronic Hazard Index
Unmitigated Project Construction	34.8	0.396 ²	0.03
SR-29, Link 1046 (6-ft elevation) ¹	2.3	<0.02	<0.01
Total	37.1	<0.42	<0.04
<i>BAAQMD Cumulative Source Threshold</i>	<i>100.0</i>	<i>0.8</i>	<i>10.0</i>
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>

Note: ¹Based on BAAQMD *Highway Screening Analysis Tool* and adjusted for 2015 OEHHA methodology

²While the maximum annual PM_{2.5} concentration occurred at a residence adjacent to the cancer risk MEI, it is reported here as occurring at the same location.

Mitigation Measure 2: Selection of equipment during construction to minimize emissions. Such equipment selection would include the following:

The project shall develop a plan demonstrating that the off-road equipment used on-site to construct the project would achieve a fleet-wide average 72 percent reduction in PM_{2.5} exhaust emissions or more. One feasible plan to achieve this reduction would include the following:

⁷ Correspondence with Alison Kirk, BAAQMD, November 23, 2015.

All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet, at a minimum, U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent. Note that the construction contractor could use other measures to minimize construction period DPM emissions to reduce the calculated cancer risk and annual PM_{2.5} concentrations below the thresholds. The use of equipment that includes CARB-certified Level 3 Diesel Particulate Filters⁸ or alternatively-fueled equipment (i.e., non-diesel) would meet this requirement. Other measures may be the use of added exhaust devices, or a combination of measures, provided that these measures are approved by the City and demonstrated to reduce community risk impacts to less than significant.

Effectiveness of Mitigation Measures 1 and 2

Implementation of Mitigation Measure 1 is considered to reduce exhaust emissions by 5 percent. Implementation of Mitigation Measures 2 would further reduce on-site diesel exhaust emissions. This would reduce the DPM concentrations and cancer risk proportionally, such that the mitigated risk would be less than 1.0 in one million, which is less than the BAAQMD significance threshold of 10 in one million. The annual PM_{2.5} concentration would be less than 0.05 µg/m³, which is less than the BAAQMD significance threshold of 0.3 µg/m³. Therefore, after implementation of these mitigation measures, the project would have a *less-than-significant* impact with respect to community risk caused by construction activities.

⁸ See <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>

Figure 1 Project Construction Site, Locations of Off-Site Sensitive Receptors and Maximum TAC Impact



Impact 5: Create objectionable odors affecting a substantial number of people? ***Less than significant.***

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors. However, they would be localized and are not likely to adversely affect people off site by resulting in confirmed odor complaints. The project would not include any sources of significant odors that would cause complaints from surrounding uses. This would be a *less-than-significant impact*.

Impact 6: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ***Less than significant.***

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy and water usage, and solid waste disposal. Emissions for the proposed project are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

Methodology

GHG emissions for the construction period and the full-build out scenario of the proposed project were computed using CalEEMod. Construction emissions were based on the size and type of the project and phasing, duration and equipment usage information provided by the applicant. The model calculates emissions of GHG in the form of equivalent carbon dioxide emissions or CO₂e. CalEEMod also computes emissions from traffic generated by the project as well as emissions associated with energy usage, water usage and solid waste generation. CalEEMod is the model recommended by BAAQMD for predicting emissions from land use development projects, such as this one. The GHG operational modeling was updated in 2019 to use the most recent traffic projections and the latest version of the CalEEMod model, version 2016.3.2.

Land Use Types

The following land use types were input to the model:

- Hotel = 65 rooms
- High Turnover (Sit Down Restaurant) for the Farmer's Market expansion = 908 square feet
- Parking Lot = 80 spaces

Construction Emissions

The CalEEMod model was used to predict construction GHG emissions, as previously described. Construction of the project would emit 366 MT of CO₂e. Neither the City nor BAAQMD have quantified thresholds for construction activities. However, the annual emissions would be below the lowest project emission threshold considered significant by BAAQMD. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable. Best management practices assumed to be incorporated into construction of the proposed project include but are not limited to: using local building materials of at least 10 percent and recycling or reusing at least 50 percent of construction waste or demolition materials.

Operational Emissions

The CalEEMod model along with the project vehicle trip generation rates were used to calculate operational period GHG emissions associated with operation of a fully developed site under the proposed project. The model uses mobile emission factors from the California Air Resources Board's EMFAC2011 model and adjusts these based on the effect of new regulations to reduce GHG emissions. These regulations include the Pavley Rule that increases fleet efficiency (reducing fuel consumption) and the low carbon fuel standard. This model is sensitive to the year selected, since vehicle emissions have and continue to be reduced due to fuel efficiency standards and low carbon fuels. Adjustments to the modeling are described below.

Year of Analysis

Emissions associated with vehicle travel depend on the year of analysis. The earlier the year, the higher the emission rates as CalEEMod uses the California Air Resources Board's EMFAC2014 motor vehicle emissions model. This model assumes reduced emission rates as newer vehicles with lower emission rates replace older, more polluting vehicles through attrition of the overall vehicle fleet. The earliest full year the project could be possibly constructed and operational would be 2020.

CalEEMod Traffic Inputs

Traffic trip generation rates provided by the project traffic consultant (Crane Transportation Group) were used and input to CalEEMod. The traffic study reports daily trip generation assuming 100 percent occupancy of the proposed lodging facility. The Friday trips rates were assumed to represent all weekdays. The traffic report also provided the Saturday trip rate, which is the same as the CalEEMod default rate. The CalEEMod default rate for Sunday was used. Trip rates for the High Turnover Restaurant (Farmer's Market expansion) were assumed to be zero, as no increase in visitor trips to the Farmer's Market were reported in the traffic report.

Energy Consumption

CalEEMod has a default rate of 641.3 pounds of CO₂ per megawatt of electricity produced, which is based on PG&E's 2008 emissions rate. The PG&E rate was updated to be the most recent rate

reported in the California Climate Registry that was for 2020, which is 290 pounds of CO₂ per megawatt of electricity produced.⁹

Solid Waste Generation

Emissions from solid waste generation are based on CalEEMod model defaults that are based on the project type and size. These are emissions associated with transporting and landfilling of solid waste generated by the project.

Water Usage

Emissions from water usage are based on CalEEMod model defaults that are based on the project type and size. These are emissions associated with electricity usage associated with conveyance and treatment of water and wastewater associated with the project.

Occupancy

GHG emissions are based on annual operations. The hotel is anticipated to have an occupancy rate of 100 percent. Therefore, emissions were modeled for full occupancy.

200-Person Events

Periodically, the Farmstead at Long Meadow Ranch would host events with up to 200 people. These events were assumed to occur, on average, twice per week. This could be more often in summer and less often during winter. Shuttle buses are required by the applicant for events this large. Also, it is projected that a few guests will drive to the event (up to 5 vehicles). GHG emissions were computed using the EMFAC2017 model, assuming 28 shuttle buses trips that were modeled as medium-duty vehicles) and 10 automobiles that were modeled as light-duty automobiles.

Operational Emissions

The CalEEMod model, along with the project vehicle trip generation rates, was used to predict daily emissions associated with operation of the fully-developed site under the proposed project. In 2020, as shown in Table 3, annual increased emissions resulting from operation of the proposed project are predicted to be 649 MT of CO₂e, which would be less than the BAAQMD significance threshold of 1,100 MT of CO₂e/ year.

Impact 7: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ***Less than significant.***

AB 32, the Global Warming Solutions Act of 2006, codifies the State of California's GHG emissions target by directing CARB to reduce the state's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, CARB, CEC, the California Public Utilities Commission (CPUC), and the Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

⁹ See Climate Registry most current version of default emissions factors: <http://www.theclimateregistry.org/tools-resources/reporting-protocols/general-reporting-protocol>. Accessed: May 17, 2016.

Table 3. Annual GHG emissions of CO₂e (MT/year)

Source Category	2020 Proposed Project ¹
Area	<0.1
Energy Consumption	188
Mobile	434
Waste	23
Water Usage	3
200-Person Events	28
Total	677
BAAQMD Threshold	1,100 MT of CO₂e/year

Note: ¹ Assumes 100 percent average occupancy

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State of California's main strategies to reduce GHGs from BAU emissions projected in 2020 back down to 1990 levels. BAU is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It required CARB and other state agencies to develop and adopt regulations and other initiatives reducing GHGs by 2012.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 MMT of CO₂e as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector- or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMT of CO₂e. Two GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMT of CO₂e. Thus, an estimated reduction of 80 MMT of CO₂e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

The proposed project would not conflict or otherwise interfere with the statewide GHG reduction measures identified in CARB's Scoping Plan. The project would comply with requirements of the Green Building Code. For example, proposed buildings would be constructed in conformance with CALGreen and the Title 24 Building Code, which requires high-efficiency water fixtures and water-efficient irrigation systems.

Attachment 1: Health Risk Calculation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.¹⁰ These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.¹¹ This HRA used the recent 2015 OEHHA risk assessment guidelines and CARB guidance. While the OEHHA guidelines use substantially more conservative assumptions than the current Bay Area Air Quality Management District (BAAQMD) guidelines, BAAQMD has not formally adopted recommended procedures for applying the newest OEHHA guidelines. BAAQMD is in the process of developing new guidance and has developed proposed HRA Guidelines as part of the proposed amendments to Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.¹² Exposure parameters from the OEHHA guidelines and newly proposed BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

Potential increased cancer risk from inhalation of TACs are calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency of exposure, and the exposure duration. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day). As recommended by the BAAQMD, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th

¹⁰ OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

¹¹ CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.

¹² BAAQMD, 2016. *Workshop Report. Proposed Amendments to Air District Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants. Appendix C. Proposed Air District HRA Guidelines*. January 2016.

percentile breathing rates for child and adult exposures. Additionally, CARB and the BAAQMD recommend the use of a residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways).

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. BAAQMD recommends using these FAH factors for residential exposures.

Functionally, cancer risk is calculated using the following parameters and formulas:

$$\text{Cancer Risk (per million)} = \text{CPF} \times \text{Inhalation Dose} \times \text{ASF} \times \text{ED/AT} \times \text{FAH} \times 10^6$$

Where:

CPF = Cancer potency factor (mg/kg-day)⁻¹
 ASF = Age sensitivity factor for specified age group
 ED = Exposure duration (years)
 AT = Averaging time for lifetime cancer risk (years)
 FAH = Fraction of time spent at home (unitless)

$$\text{Inhalation Dose} = C_{\text{air}} \times \text{DBR} \times A \times (\text{EF}/365) \times 10^{-6}$$

Where:

C_{air} = concentration in air (µg/m³)
 DBR = daily breathing rate (L/kg body weight-day)
 A = Inhalation absorption factor
 EF = Exposure frequency (days/year)
 10⁻⁶ = Conversion factor

The health risk parameters used in this evaluation are summarized as follows:

Parameter	Exposure Type →	Infant		Child	Adult
	Age Range →	3 rd Trimester	0<2	2 < 16	16 - 30
DPM Cancer Potency Factor (mg/kg-day) ⁻¹		1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day)*		361	1,090	572	261
Inhalation Absorption Factor		1	1	1	1
Averaging Time (years)		70	70	70	70
Exposure Duration (years)		0.25	2	14	14
Exposure Frequency (days/year)		350	350	350	350
Age Sensitivity Factor		10	10	3	1
Fraction of Time at Home		0.85	0.72	0.72	0.73

* 95th percentile breathing rates for 3rd trimester and infants and 80th percentile for children and adults

Non-Cancer Hazards

Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Annual PM_{2.5} Concentrations

While not a TAC, fine particulate matter (PM_{2.5}) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for PM_{2.5} (project level and cumulative) are in terms of an increase in the annual average concentration. When considering PM_{2.5} impacts, the contribution from all sources of PM_{2.5} emissions should be included. For projects with potential impacts from nearby local roadways, the PM_{2.5} impacts should include those from vehicle exhaust emissions, PM_{2.5} generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

Attachment 2: Construction Schedule, CalEEMod Output and Health Risk Calculations

Project Name:		Farmstead at Long Meadow Ranch						Complete ALL Portions in Yellow
See Equipment Type TAB for type, horsepower and load factor								
Project Size		65 Hotel Rooms		10.5 total project acres disturbed				
		s.f. other (specify)						
		s.f. parking garage		spaces				
		s.f. parking lot		spaces				
Construction Hours		7 am to		4 pm				
Qty	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	Comments	
	Site Preparation	Start Date:	1/28/2017	Total phase:	10			
		End Date:	2/15/2017					
	Graders	174	0.41	8	10	8		
3	Rubber Tired Dozers	255	0.4	8	10	8		
4	Tractors/Loaders/Backhoes	97	0.37	8	10	8		
	Grading / Excavation	Start Date:	2/21/2017	Total phase:	30			
		End Date:	3/20/2017					
		Soil Hauling Volume						
2	Excavators	162	0.38	8	30	8	Export volume = 0 cubic yards?	
1	Graders	174	0.41	8	30	8	Import volume = 8,000 cubic yards?	
1	Rubber Tired Dozers	255	0.4	8	30	8		
2	Scrapers	361	0.48	8	30			
2	Tractors/Loaders/Backhoes	97	0.37	8	30	8		
	Other Equipment?							
	Trenching	Start Date:		Total phase:	10			
		End Date:						
1	Tractor/Loader/Backhoe	97	0.37	8	20	16		
	Excavators	162	0.38	8	20	16		
	Other Equipment?							
	Building - Exterior	Start Date:		Total phase:	300		Cement Trucks? _?_ Total Round-Trips	
		End Date:						
1	Cranes	226	0.29	6	10	0.2	Electric? (Y/N) <u>N</u> Otherwise assumed diesel	
3	Forklifts	89	0.2	8	200	5.33333333	Liquid Propane (LPG)? (Y/N) <u>N</u> Otherwise Assumed diesel	
1	Generator Sets	84	0.74	8	0	0	Or temporary line power? (Y/N) <u>Y</u>	
3	Tractors/Loaders/Backhoes	97	0.37	7	100	2.33333333		
1	Welders	46	0.45	8	50	1.33333333		
	Other Equipment?					0		
	Building - Interior/Architectural Coating	Start Date:		Total phase:	20			
		End Date:						
1	Air Compressors	78	0.48	6	50	15		
1	Aerial Lift	62	0.31	6	100	30	Liquid Propane (LPG)? (Y/N) <u>Y</u> Otherwise Assumed diesel	
	Other Equipment?							
	Paving	Start Date:		Total phase:	20			

		Start Date:						
	Cement and Mortar Mixers	9	0.56			0	Asphalt? <u>2000</u> cubic yards or ____ round trips?	
2	Pavers	125	0.42	8	6	2.4		
2	Paving Equipment	130	0.36	8	6	2.4		
2	Rollers	80	0.38	8	6	2.4		
	Tractors/Loaders/Backhoes	97	0.37	8	10	4		
	Other Equipment?							

Emissions Summary

DPM Construction Emissions and Modeling Emission Rates - Unmitigated

Construction		DPM	Area	DPM Emissions			Modeled Area	DPM Emission Rate
Year	Activity	(ton/year)	Source	(lb/yr)	(lb/hr)	(g/s)	(m ²)	(g/s/m ²)
2017	Construction	0.0996	1_DPM	199.2	0.06064	7.64E-03	40,663	1.88E-07
2018	Construction	0.0375	1_DPM	75.0	0.02283	2.88E-03	40,663	7.07E-08
Total		0.1371		274	0	0		

PM2.5 Fugitive Dust Construction Emissions for Modeling - Unmitigated

Construction		Area	PM2.5 Emissions				Modeled Area	PM2.5 Emission Rate
Year	Activity	Source	(ton/year)	(lb/yr)	(lb/hr)	(g/s)	(m ²)	g/s/m ²
2017	Construction	1_FUG	0.1043	208.6	0.06350	8.00E-03	40,663	1.97E-07
2018	Construction	1_FUG	0.0005	1.1	0.00032	4.07E-05	40,663	1.00E-09
Total			0.1048	209.6600	0.0638	0.0080		

Health Risk Calculations- Off-Site Residences

$$\text{Cancer Risk (per million)} = \text{CPF} \times \text{Inhalation Dose} \times \text{ASF} \times \text{ED/AT} \times \text{FAH} \times 1.0\text{E}6$$

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

$$\text{Inhalation Dose} = C_{air} \times \text{DBR} \times A \times (\text{EF}/365) \times 10^{-6}$$

Where: C_{air} = concentration in air (µg/m³)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10⁻⁶ = Conversion factor

Values

Parameter	Infant/Child				Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30	
ASF =	10	10	3	1	
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00	
DBR* =	361	1090	572	261	
A =	1	1	1	1	
EF =	350	350	350	350	
AT =	70	70	70	70	
FAH =	1.00	1.00	1.00	0.73	

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Construction Cancer Risk by Year - Maximum Impact Receptor Location												
Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Fugitive PM2.5	Total PM2.5	
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor			
			Year	Annual			Year	Annual				
0	0.25	-0.25 - 0*	-	0.0000	10	-	-	-	-	-	-	
1	1	0 - 1	2017	0.1540	10	25.29	2017	0.1540	1	0.44	0.2249	
2	1	1 - 2	2018	0.0579	10	9.51	2018	0.0579	1	0.17	0.0011	
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00	0.059	
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00		
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00		
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00		
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00		
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00		
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00		
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00		
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00		
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00		
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00		
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00		
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00		
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00		
17	1	16 - 17		0.0000	1	0.00		0.0000	1	0.00		
18	1	17 - 18		0.0000	1	0.00		0.0000	1	0.00		
19	1	18 - 19		0.0000	1	0.00		0.0000	1	0.00		
20	1	19 - 20		0.0000	1	0.00		0.0000	1	0.00		
21	1	20 - 21		0.0000	1	0.00		0.0000	1	0.00		
22	1	21 - 22		0.0000	1	0.00		0.0000	1	0.00		
23	1	22 - 23		0.0000	1	0.00		0.0000	1	0.00		
24	1	23 - 24		0.0000	1	0.00		0.0000	1	0.00		
25	1	24 - 25		0.0000	1	0.00		0.0000	1	0.00		
26	1	25 - 26		0.0000	1	0.00		0.0000	1	0.00		
27	1	26 - 27		0.0000	1	0.00		0.0000	1	0.00		
28	1	27 - 28		0.0000	1	0.00		0.0000	1	0.00		
29	1	28 - 29		0.0000	1	0.00		0.0000	1	0.00		
30	1	29 - 30		0.0000	1	0.00		0.0000	1	0.00		
Total Increased Cancer Risk						34.8				0.61		

* Third trimester of pregnancy

Maximum Modeled PM 2.5 Concentration- Off Site Residences

$$\text{Cancer Risk (per million)} = \text{CPF} \times \text{Inhalation Dose} \times \text{ASF} \times \text{ED} / \text{AT} \times \text{FAH} \times 1.0\text{E}6$$

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

$$\text{Inhalation Dose} = C_{air} \times \text{DBR} \times A \times (\text{EF}/365) \times 10^{-6}$$

Where: C_{air} = concentration in air (µg/m³)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10⁻⁶ = Conversion factor

Values:

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 90th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor	
			Year	Annual			Year	Annual		
0	0.25	-0.25 - 0*	-	0.0000	10	-	-	-	-	
1	1	0 - 1	2017	0.1540	10	25.29	2017	0.1536	1	0.44
2	1	1 - 2	2018	0.0579	10	9.51	2018	0.0578	1	0.17
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00
Total Increased Cancer Risk						34.8				0.61

* Third trimester of pregnancy

Fugitive
PM2.5
0.2418
0.0012

Total
PM2.5
0.395
0.059

Results Summary- Residences

Construction Year	Unmitigated					
	Maximum Concentrations		Cancer Risk (per million)		Hazard Index	Maximum Annual PM2.5 Concentration
	Exhaust PM2.5/DPM (µg/m³)	Fugitive PM2.5 (µg/m³)				
2017	0.1536	0.2418	25.29	0.44	0.031	0.395
2018	0.0578	0.0012	9.51	0.17	0.012	0.059
Total	-	-	34.8	0.6	-	-
Maximum Annual	0.1536	0.2418	-	-	0.031	0.395

Health Risk Calculations- High School

Off-Site School Receptor Locations - 1.5 meters

$$\text{Cancer Risk (per million)} = \text{CPF} \times \text{Inhalation Dose} \times \text{ASF} \times \text{ED/AT} \times \text{FAH} \times 1.0\text{E}6$$

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

$$\text{Inhalation Dose} = C_{air} \times \text{DBR} \times A \times (\text{EF}/365) \times 10^{-6}$$

Where: C_{air} = concentration in air ($\mu\text{g}/\text{m}^3$)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10^{-6} = Conversion factor

Values:

Age --> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer			Adult - Exposure Information			Fugitive PM2.5	Total PM2.5
			DPM Conc (ug/m3)		Age Sensitivity Factor	Risk (per million)	Modeled		Age Sensitivity Factor	Risk (per million)			
			Year	Annual			Year	Annual					
0	0.25	-0.25 - 0*	-	0.0000	10	-	-	-	-	-	-	-	-
1	1	0 - 1	-	0.0000	10	0.00	0.0000	1	0.00	-	-	-	-
2	1	1 - 2	-	0.0000	10	0.00	0.0000	1	0.00	-	-	-	-
3	1	2 - 3	2017	0.0509	3	1.32	2017	0.0509	1	0.15	0.0731	0.124	-
4	1	3 - 4	2018	0.0191	3	0.49	2018	0.0191	1	0.05	0.0004	0.020	-
5	1	4 - 5	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
6	1	5 - 6	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
7	1	6 - 7	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
8	1	7 - 8	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
9	1	8 - 9	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
10	1	9 - 10	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
11	1	10 - 11	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
12	1	11 - 12	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
13	1	12 - 13	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
14	1	13 - 14	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
15	1	14 - 15	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
16	1	15 - 16	-	0.0000	3	0.00	-	0.0000	1	0.00	-	-	-
17	1	16-17	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
18	1	17-18	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
19	1	18-19	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
20	1	19-20	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
21	1	20-21	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
22	1	21-22	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
23	1	22-23	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
24	1	23-24	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
25	1	24-25	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
26	1	25-26	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
27	1	26-27	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
28	1	27-28	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
29	1	28-29	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
30	1	29-30	-	0.0000	1	0.00	-	0.0000	1	0.00	-	-	-
Total Increased Cancer Risk						1.8				0.20			

* Third trimester of pregnancy

Results Summary

Construction Year	Unmitigated				
	Maximum Concentrations		Cancer Risk (per million) Child	Hazard Index (-)	Maximum Annual PM2.5 Concentration (µg/m³)
	Exhaust PM2.5/DPM (µg/m³)	Fugitive PM2.5 (µg/m³)			
2017	0.0509	0.0731	1.32	0.010	0.124
2018	0.0191	0.0004	0.49	0.004	0.020
Total	-	-	1.8	-	-
Maximum Annual	0.0509	0.0731	-	0.010	0.124

CalEEMod Output- TAC Emissions

Farmstead at LMR, TAC
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	70.00	Space	0.00	51,000.00	0
High Turnover (Sit Down Restaurant)	0.91	1000sqft	0.00	908.00	0
Hotel	65.00	Room	10.50	43,888.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4	Operational Year	2019		
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	429.6	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Revised CO2 Emission Intensity

Land Use - Area summary, Project Description and mail correspondence dated 8/8/2016

Construction Phase - Applicant provided construction information

Off-road Equipment - Applicant provided information

Off-road Equipment - Applicant provided information

Off-road Equipment - Applicant provided information

Assumption: 1 Backhoe

Off-road Equipment - Applicant provided information

Trips and VMT - 250 trips based on 2000 cy of asphalt hauled

Grading - 8000 cy of soil imported

Architectural Coating -

Construction Off-road Equipment Mitigation - Best Management Practice

Tier 4 Mitigation for all equipment >25HP

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	100.00

tblConstructionPhase	PhaseEndDate	1/4/2019	12/7/2018
tblConstructionPhase	PhaseEndDate	7/28/2017	8/17/2018
tblConstructionPhase	PhaseEndDate	8/17/2018	6/30/2017
tblConstructionPhase	PhaseStartDate	8/18/2018	7/21/2018
tblConstructionPhase	PhaseStartDate	4/15/2017	4/17/2017
tblConstructionPhase	PhaseStartDate	7/1/2017	7/21/2018
tblConstructionPhase	PhaseStartDate	7/21/2018	6/5/2017
tblGrading	MaterialImported	0.00	8,000.00
tblLandUse	LandUseSquareFeet	28,000.00	51,000.00
tblLandUse	LandUseSquareFeet	910.00	908.00
tblLandUse	LandUseSquareFeet	94,380.00	43,888.00
tblLandUse	LotAcreage	0.63	0.00
tblLandUse	LotAcreage	0.02	0.00
tblLandUse	LotAcreage	2.17	10.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	3.00
tblOffRoadEquipment	UsageHours	7.00	0.20
tblOffRoadEquipment	UsageHours	8.00	5.40
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	2.40
tblOffRoadEquipment	UsageHours	8.00	2.40
tblOffRoadEquipment	UsageHours	8.00	2.40
tblOffRoadEquipment	UsageHours	7.00	2.40
tblOffRoadEquipment	UsageHours	8.00	1.40
tblProjectCharacteristics	CO2IntensityFactor	641.35	429.6
tblProjectCharacteristics	OperationalYear	2014	2019
tblTripsAndVMT	HaulingTripLength	20.00	0.50
tblTripsAndVMT	HaulingTripLength	20.00	0.50
tblTripsAndVMT	HaulingTripLength	20.00	0.50
tblTripsAndVMT	HaulingTripLength	20.00	0.50

tblTripsAndVMT	HaulingTripLength	20.00	0.50
tblTripsAndVMT	HaulingTripLength	20.00	0.50
tblTripsAndVMT	HaulingTripNumber	0.00	250.00
tblTripsAndVMT	VendorTripLength	7.30	0.50
tblTripsAndVMT	VendorTripLength	7.30	0.50
tblTripsAndVMT	VendorTripLength	7.30	0.50
tblTripsAndVMT	VendorTripLength	7.30	0.50
tblTripsAndVMT	VendorTripLength	7.30	0.50
tblTripsAndVMT	VendorTripLength	7.30	0.50
tblTripsAndVMT	WorkerTripLength	12.40	0.50
tblTripsAndVMT	WorkerTripLength	12.40	0.50
tblTripsAndVMT	WorkerTripLength	12.40	0.50
tblTripsAndVMT	WorkerTripLength	12.40	0.50
tblTripsAndVMT	WorkerTripLength	12.40	0.50
tblTripsAndVMT	WorkerTripLength	12.40	0.50

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.2109	1.9191	1.6171	1.7400e-003	0.2234	0.1081	0.3315	0.1043	0.0996	0.2039	0.0000	159.8480	159.8480	0.0469	0.0000	160.8327
2018	0.3244	0.5843	0.6518	6.9000e-004	1.8900e-003	0.0403	0.0422	5.2000e-004	0.0375	0.0380	0.0000	61.5743	61.5743	0.0161	0.0000	61.9116
Total	0.5353	2.5034	2.2689	2.4300e-003	0.2253	0.1484	0.3737	0.1048	0.1371	0.2419	0.0000	221.4223	221.4223	0.0630	0.0000	222.7443

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0493	0.1482	1.3220	1.7400e-003	0.1017	2.9700e-003	0.1047	0.0239	2.9500e-003	0.0269	0.0000	159.8478	159.8478	0.0469	0.0000	160.8325
2018	0.2683	0.0769	0.6472	6.9000e-004	1.8900e-003	1.1900e-003	3.0900e-003	5.2000e-004	1.1800e-003	1.7000e-003	0.0000	61.5742	61.5742	0.0161	0.0000	61.9115
Total	0.3176	0.2251	1.9691	2.4300e-003	0.1036	4.1600e-003	0.1078	0.0244	4.1300e-003	0.0286	0.0000	221.4220	221.4220	0.0630	0.0000	222.7440

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	40.68	91.01	13.21	0.00	54.02	97.20	71.17	76.69	96.99	88.19	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	4/3/2017	4/14/2017	5	10	
2	Grading	Grading	4/17/2017	5/26/2017	5	30	
3	Building Construction	Building Construction	5/27/2017	7/20/2018	5	300	
4	Trenching	Trenching	6/5/2017	6/30/2017	5	20	
5	Paving	Paving	7/21/2018	8/17/2018	5	20	
6	Architectural Coating	Architectural Coating	7/21/2018	12/7/2018	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 69,489; Non-Residential Outdoor: 23,163 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	0.20	226	0.29
Building Construction	Forklifts	3	5.40	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	2.40	97	0.37
Building Construction	Welders	1	1.40	46	0.45
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	2	2.40	125	0.42
Paving	Paving Equipment	2	2.40	130	0.36
Paving	Rollers	2	2.40	80	0.38
Paving	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Architectural Coating	Aerial Lifts	0	6.00	62	0.31
Architectural Coating	Air Compressors	1	3.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	1,000.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Building Construction	8	40.00	16.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Trenching	1	3.00	0.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	250.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT

Architectural Coating	1	8.00	0.00	0.00	0.50	0.50	0.50	LD_Mix	HDT_Mix	HHDT
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3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0912	0.0000	0.0912	0.0498	0.0000	0.0498	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	0.0242	0.2588	0.1970	2.0000e-004	0.0912	0.0138	0.1050	0.0498	0.0127	0.0625	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.1200e-003	0.0146	0.0994	2.0000e-005	2.2000e-004	7.0000e-005	2.9000e-004	6.0000e-005	6.0000e-005	1.2000e-004	0.0000	1.6042	1.6042	3.0000e-005	0.0000	1.6048
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	2.3000e-004	7.0000e-005	9.8000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0453	0.0453	0.0000	0.0000	0.0454
Total	7.3500e-003	0.0146	0.1004	2.0000e-005	2.5000e-004	7.0000e-005	3.2000e-004	7.0000e-005	6.0000e-005	1.3000e-004	0.0000	1.6495	1.6495	3.0000e-005	0.0000	1.6503

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0410	0.0000	0.0410	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3800e-003	0.0103	0.1062	2.0000e-004		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
Total	2.3800e-003	0.0103	0.1062	2.0000e-004	0.0410	3.2000e-004	0.0414	0.0112	3.2000e-004	0.0115	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.1200e-003	0.0146	0.0994	2.0000e-005	2.2000e-004	7.0000e-005	2.9000e-004	6.0000e-005	6.0000e-005	1.2000e-004	0.0000	1.6042	1.6042	3.0000e-005	0.0000	1.6048
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	7.0000e-005	9.8000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0453	0.0453	0.0000	0.0000	0.0454
Total	7.3500e-003	0.0146	0.1004	2.0000e-005	2.5000e-004	7.0000e-005	3.2000e-004	7.0000e-005	6.0000e-005	1.3000e-004	0.0000	1.6495	1.6495	3.0000e-005	0.0000	1.6503

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0915	1.0439	0.7021	9.3000e-004		0.0498	0.0498		0.0458	0.0458	0.0000	85.9109	85.9109	0.0263	0.0000	86.4637
Total	0.0915	1.0439	0.7021	9.3000e-004	0.1301	0.0498	0.1799	0.0540	0.0458	0.0997	0.0000	85.9109	85.9109	0.0263	0.0000	86.4637

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	2.3000e-004	3.2500e-003	0.0000	1.1000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1511	0.1511	2.0000e-005	0.0000	0.1515
Total	7.7000e-004	2.3000e-004	3.2500e-003	0.0000	1.1000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1511	0.1511	2.0000e-005	0.0000	0.1515

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0586	0.0000	0.0586	0.0121	0.0000	0.0121	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.0492	0.5217	9.3000e-004		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	85.9108	85.9108	0.0263	0.0000	86.4636
Total	0.0114	0.0492	0.5217	9.3000e-004	0.0586	1.5100e-003	0.0601	0.0121	1.5100e-003	0.0137	0.0000	85.9108	85.9108	0.0263	0.0000	86.4636

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	2.3000e-004	3.2500e-003	0.0000	1.1000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1511	0.1511	2.0000e-005	0.0000	0.1515
Total	7.7000e-004	2.3000e-004	3.2500e-003	0.0000	1.1000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1511	0.1511	2.0000e-005	0.0000	0.1515

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0633	0.5375	0.3943	5.0000e-004		0.0420	0.0420		0.0388	0.0388	0.0000	45.9521	45.9521	0.0139	0.0000	46.2430
Total	0.0633	0.5375	0.3943	5.0000e-004		0.0420	0.0420		0.0388	0.0388	0.0000	45.9521	45.9521	0.0139	0.0000	46.2430

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0127	0.0313	0.1622	4.0000e-005	5.7000e-004	1.8000e-004	7.5000e-004	1.7000e-004	1.6000e-004	3.3000e-004	0.0000	3.5627	3.5627	5.0000e-005	0.0000	3.5638
Worker	7.9400e-003	2.4200e-003	0.0336	2.0000e-005	1.1600e-003	4.0000e-005	1.2000e-003	3.1000e-004	3.0000e-005	3.5000e-004	0.0000	1.5616	1.5616	1.7000e-004	0.0000	1.5651
Total	0.0206	0.0337	0.1958	6.0000e-005	1.7300e-003	2.2000e-004	1.9500e-003	4.8000e-004	1.9000e-004	6.8000e-004	0.0000	5.1243	5.1243	2.2000e-004	0.0000	5.1289

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3300e-003	0.0385	0.3709	5.0000e-004		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	45.9521	45.9521	0.0139	0.0000	46.2429
Total	6.3300e-003	0.0385	0.3709	5.0000e-004		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	45.9521	45.9521	0.0139	0.0000	46.2429

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0127	0.0313	0.1622	4.0000e-005	5.7000e-004	1.8000e-004	7.5000e-004	1.7000e-004	1.6000e-004	3.3000e-004	0.0000	3.5627	3.5627	5.0000e-005	0.0000	3.5638
Worker	7.9400e-003	2.4200e-003	0.0336	2.0000e-005	1.1600e-003	4.0000e-005	1.2000e-003	3.1000e-004	3.0000e-005	3.5000e-004	0.0000	1.5616	1.5616	1.7000e-004	0.0000	1.5651
Total	0.0206	0.0337	0.1958	6.0000e-005	1.7300e-003	2.2000e-004	1.9500e-003	4.8000e-004	1.9000e-004	6.8000e-004	0.0000	5.1243	5.1243	2.2000e-004	0.0000	5.1289

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0501	0.4362	0.3584	4.7000e-004		0.0326	0.0326		0.0301	0.0301	0.0000	42.3188	42.3188	0.0129	0.0000	42.5895
Total	0.0501	0.4362	0.3584	4.7000e-004		0.0326	0.0326		0.0301	0.0301	0.0000	42.3188	42.3188	0.0129	0.0000	42.5895

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.5400e-003	0.0275	0.1359	4.0000e-005	5.3000e-004	1.5000e-004	6.8000e-004	1.5000e-004	1.4000e-004	2.9000e-004	0.0000	3.2628	3.2628	5.0000e-005	0.0000	3.2638
Worker	6.7800e-003	2.0100e-003	0.0282	2.0000e-005	1.0900e-003	3.0000e-005	1.1200e-003	2.9000e-004	3.0000e-005	3.2000e-004	0.0000	1.4071	1.4071	1.4000e-004	0.0000	1.4100

Total	0.0163	0.0295	0.1641	6.0000e-005	1.6200e-003	1.8000e-004	1.8000e-003	4.4000e-004	1.7000e-004	6.1000e-004	0.0000	4.6698	4.6698	1.9000e-004	0.0000	4.6738
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9300e-003	0.0360	0.3470	4.7000e-004		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	42.3188	42.3188	0.0129	0.0000	42.5894
Total	5.9300e-003	0.0360	0.3470	4.7000e-004		7.5000e-004	7.5000e-004		7.5000e-004	7.5000e-004	0.0000	42.3188	42.3188	0.0129	0.0000	42.5894

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.5400e-003	0.0275	0.1359	4.0000e-005	5.3000e-004	1.5000e-004	6.8000e-004	1.5000e-004	1.4000e-004	2.9000e-004	0.0000	3.2628	3.2628	5.0000e-005	0.0000	3.2638
Worker	6.7800e-003	2.0100e-003	0.0282	2.0000e-005	1.0900e-003	3.0000e-005	1.1200e-003	2.9000e-004	3.0000e-005	3.2000e-004	0.0000	1.4071	1.4071	1.4000e-004	0.0000	1.4100
Total	0.0163	0.0295	0.1641	6.0000e-005	1.6200e-003	1.8000e-004	1.8000e-003	4.4000e-004	1.7000e-004	6.1000e-004	0.0000	4.6698	4.6698	1.9000e-004	0.0000	4.6738

3.5 Trenching - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1700e-003	0.0304	0.0239	3.0000e-005		2.2900e-003	2.2900e-003		2.1100e-003	2.1100e-003	0.0000	2.8873	2.8873	8.8000e-004	0.0000	2.9058
Total	3.1700e-003	0.0304	0.0239	3.0000e-005		2.2900e-003	2.2900e-003		2.1100e-003	2.1100e-003	0.0000	2.8873	2.8873	8.8000e-004	0.0000	2.9058

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	2.0000e-005	3.3000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0151	0.0151	0.0000	0.0000	0.0152
Total	8.0000e-005	2.0000e-005	3.3000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0151	0.0151	0.0000	0.0000	0.0152

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	3.8000e-004	1.6500e-003	0.0234	3.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	2.8873	2.8873	8.8000e-004	0.0000	2.9058
Total	3.8000e-004	1.6500e-003	0.0234	3.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	2.8873	2.8873	8.8000e-004	0.0000	2.9058

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	2.0000e-005	3.3000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0151	0.0151	0.0000	0.0000	0.0152
Total	8.0000e-005	2.0000e-005	3.3000e-004	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0151	0.0151	0.0000	0.0000	0.0152

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.1600e-003	0.0646	0.0552	8.0000e-005		3.7500e-003	3.7500e-003		3.4500e-003	3.4500e-003	0.0000	7.5294	7.5294	2.3400e-003	0.0000	7.5786
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.1600e-003	0.0646	0.0552	8.0000e-005		3.7500e-003	3.7500e-003		3.4500e-003	3.4500e-003	0.0000	7.5294	7.5294	2.3400e-003	0.0000	7.5786

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	3.4400e-003	0.0222	0.0000	6.0000e-005	2.0000e-005	7.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3918	0.3918	1.0000e-005	0.0000	0.3919
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	1.3000e-004	1.7500e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0873	0.0873	1.0000e-005	0.0000	0.0875
Total	1.8100e-003	3.5700e-003	0.0239	0.0000	1.3000e-004	2.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4791	0.4791	2.0000e-005	0.0000	0.4794

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0100e-003	4.3900e-003	0.0625	8.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	7.5293	7.5293	2.3400e-003	0.0000	7.5786
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0100e-003	4.3900e-003	0.0625	8.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	7.5293	7.5293	2.3400e-003	0.0000	7.5786

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	1.3900e-003	3.4400e-003	0.0222	0.0000	6.0000e-005	2.0000e-005	7.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3918	0.3918	1.0000e-005	0.0000	0.3919
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	1.3000e-004	1.7500e-003	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0873	0.0873	1.0000e-005	0.0000	0.0875
Total	1.8100e-003	3.5700e-003	0.0239	0.0000	1.3000e-004	2.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4791	0.4791	2.0000e-005	0.0000	0.4794

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2416					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4700e-003	0.0501	0.0464	7.0000e-005		3.7600e-003	3.7600e-003		3.7600e-003	3.7600e-003	0.0000	6.3832	6.3832	6.1000e-004	0.0000	6.3959
Total	0.2490	0.0501	0.0464	7.0000e-005		3.7600e-003	3.7600e-003		3.7600e-003	3.7600e-003	0.0000	6.3832	6.3832	6.1000e-004	0.0000	6.3959

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	2.8000e-004	3.8900e-003	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1941	0.1941	2.0000e-005	0.0000	0.1945

Total	9.3000e-004	2.8000e-004	3.8900e-003	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1941	0.1941	2.0000e-005	0.0000	0.1945
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2416					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4000e-004	3.2200e-003	0.0458	7.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	6.3831	6.3831	6.1000e-004	0.0000	6.3959
Total	0.2423	3.2200e-003	0.0458	7.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	6.3831	6.3831	6.1000e-004	0.0000	6.3959

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	2.8000e-004	3.8900e-003	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1941	0.1941	2.0000e-005	0.0000	0.1945
Total	9.3000e-004	2.8000e-004	3.8900e-003	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1941	0.1941	2.0000e-005	0.0000	0.1945

CalEEMod Output- Operational GHG Emissions

Farmstead at LMR, Criteria and Operational - Napa County, Annual

Farmstead at LMR, Criteria and Operational Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	65.00	Room	10.50	51,000.00	0
High Turnover (Sit Down Restaurant)	0.91	1000sqft	0.00	910.00	0
Parking Lot	80.00	Space	0.00	32,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW/hr)	290	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 rate

Land Use - Area summary, project description and mail correspondence dated 8/8/2016 updated to 80 parking spaces

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Trips and VMT - Operational run only

Vehicle Trips - Used traffic report of 8.36 weekday, 8.19 Saturday (similar to CalEEMod). Used CalEEMod for Sunday

Water And Wastewater - wtp treatment

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	10/23/2019	10/9/2019
tblLandUse	LandUseSquareFeet	94,380.00	51,000.00
tblLandUse	LotAcreage	2.17	10.50
tblLandUse	LotAcreage	0.02	0.00
tblLandUse	LotAcreage	0.72	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPerce nt	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPerce nt	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPerce nt	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2327	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
Energy	0.0132	0.1201	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	187.1967	187.1967	8.1600e-003	3.5700e-003	188.4630
Mobile	0.1578	0.8604	1.6637	4.7200e-003	0.3617	5.7200e-003	0.3674	0.0971	5.3900e-003	0.1025	0.0000	433.7663	433.7663	0.0198	0.0000	434.2613
Waste						0.0000	0.0000		0.0000	0.0000	9.4228	0.0000	9.4228	0.5569	0.0000	23.3447
Water						0.0000	0.0000		0.0000	0.0000	0.6811	1.4627	2.1438	2.4900e-003	1.5100e-003	2.6564
Total	0.4037	0.9805	1.7659	5.4400e-003	0.3617	0.0148	0.3765	0.0971	0.0145	0.1116	10.1039	622.4282	632.5322	0.5873	5.0800e-003	648.7281

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2327	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
Energy	0.0132	0.1201	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	187.1967	187.1967	8.1600e-003	3.5700e-003	188.4630
Mobile	0.1578	0.8604	1.6637	4.7200e-003	0.3617	5.7200e-003	0.3674	0.0971	5.3900e-003	0.1025	0.0000	433.7663	433.7663	0.0198	0.0000	434.2613
Waste						0.0000	0.0000		0.0000	0.0000	9.4228	0.0000	9.4228	0.5569	0.0000	23.3447
Water						0.0000	0.0000		0.0000	0.0000	0.6811	1.4627	2.1438	2.4900e-003	1.5100e-003	2.6564
Total	0.4037	0.9805	1.7659	5.4400e-003	0.3617	0.0148	0.3765	0.0971	0.0145	0.1116	10.1039	622.4282	632.5322	0.5873	5.0800e-003	648.7281

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1578	0.8604	1.6637	4.7200e-003	0.3617	5.7200e-003	0.3674	0.0971	5.3900e-003	0.1025	0.0000	433.7663	433.7663	0.0198	0.0000	434.2613
Unmitigated	0.1578	0.8604	1.6637	4.7200e-003	0.3617	5.7200e-003	0.3674	0.0971	5.3900e-003	0.1025	0.0000	433.7663	433.7663	0.0198	0.0000	434.2613

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	531.05	532.35	386.75	970,145	970,145
Parking Lot	0.00	0.00	0.00		
Total	531.05	532.35	386.75	970,145	970,145

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down Restaurant)	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High Turnover (Sit Down Restaurant)	0.569185	0.038999	0.171806	0.120317	0.026328	0.006551	0.017860	0.035422	0.003826	0.001868	0.005693	0.001021	0.001123
Hotel	0.569185	0.038999	0.171806	0.120317	0.026328	0.006551	0.017860	0.035422	0.003826	0.001868	0.005693	0.001021	0.001123
Parking Lot	0.569185	0.038999	0.171806	0.120317	0.026328	0.006551	0.017860	0.035422	0.003826	0.001868	0.005693	0.001021	0.001123

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	56.5097	56.5097	5.6500e-003	1.1700e-003	56.9994
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	56.5097	56.5097	5.6500e-003	1.1700e-003	56.9994
NaturalGas Mitigated	0.0132	0.1201	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6869	130.6869	2.5000e-003	2.4000e-003	131.4636
NaturalGas Unmitigated	0.0132	0.1201	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6869	130.6869	2.5000e-003	2.4000e-003	131.4636

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					

High Turnover (Sit Down Restaurant)	189171	1.0200e-003	9.2700e-003	7.7900e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	10.0949	10.0949	1.9000e-004	1.9000e-004	10.1549
Hotel	2.25981e+006	0.0122	0.1108	0.0931	6.6000e-004		8.4200e-003	8.4200e-003		8.4200e-003	8.4200e-003	0.0000	120.5921	120.5921	2.3100e-003	2.2100e-003	121.3087
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6869	130.6869	2.5000e-003	2.4000e-003	131.4636

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	189171	1.0200e-003	9.2700e-003	7.7900e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	10.0949	10.0949	1.9000e-004	1.9000e-004	10.1549
Hotel	2.25981e+006	0.0122	0.1108	0.0931	6.6000e-004		8.4200e-003	8.4200e-003		8.4200e-003	8.4200e-003	0.0000	120.5921	120.5921	2.3100e-003	2.2100e-003	121.3087
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0132	0.1200	0.1008	7.2000e-004		9.1200e-003	9.1200e-003		9.1200e-003	9.1200e-003	0.0000	130.6869	130.6869	2.5000e-003	2.4000e-003	131.4636

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	29775.2	3.9167	3.9000e-004	8.0000e-005	3.9506
Hotel	388620	51.1198	5.1100e-003	1.0600e-003	51.5628
Parking Lot	11200	1.4733	1.5000e-004	3.0000e-005	1.4860

Total		56.5097	5.6500e-003	1.1700e-003	56.9994
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Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	29775.2	3.9167	3.9000e-004	8.0000e-005	3.9506
Hotel	388620	51.1198	5.1100e-003	1.0600e-003	51.5628
Parking Lot	11200	1.4733	1.5000e-004	3.0000e-005	1.4860
Total		56.5097	5.6500e-003	1.1700e-003	56.9994

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2327	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
Unmitigated	0.2327	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0277					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2048					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
Total	0.2327	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0277					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2048					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
Total	0.2327	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.1438	2.4900e-003	1.5100e-003	2.6564
Unmitigated	2.1438	2.4900e-003	1.5100e-003	2.6564

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	0.276216 / 0.0176308	0.3025	3.6000e-004	2.2000e-004	0.3760
Hotel	1.64884 / 0.183204	1.8413	2.1300e-003	1.2900e-003	2.2805
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.1438	2.4900e-003	1.5100e-003	2.6564

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
--	--------------------	-----------	-----	-----	------

Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	0.276216 / 0.0176308	0.3025	3.6000e-004	2.2000e-004	0.3760
Hotel	1.64884 / 0.183204	1.8413	2.1300e-003	1.2900e-003	2.2805
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.1438	2.4900e-003	1.5100e-003	2.6564

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.4228	0.5569	0.0000	23.3447
Unmitigated	9.4228	0.5569	0.0000	23.3447

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

High Turnover (Sit Down Restaurant)	10.83	2.1984	0.1299	0.0000	5.4464
Hotel	35.59	7.2245	0.4270	0.0000	17.8983
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		9.4228	0.5569	0.0000	23.3447

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	10.83	2.1984	0.1299	0.0000	5.4464
Hotel	35.59	7.2245	0.4270	0.0000	17.8983
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		9.4228	0.5569	0.0000	23.3447

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Air Basin

Region: SAN FRANCISCO BAY AREA

Calendar Year: 2020

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	Trips	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX
SAN FRANCISCO BAY AREA	2020	LDA	Aggregated	Aggregated	GAS	18	10	276	0	58.76293	0.003284	0	0.066074	0.005456	0	0.029212
SAN FRANCISCO BAY AREA	2020	MDV	Aggregated	Aggregated	GAS	18	28	426	0	92.90541	0.006144	0	0.105028	0.009739	0	0.041414
Sum:								49,745		587.6293	0.59113		0.660738	0.982115		0.29212
								<u>214,651</u>		<u>2601.352</u>	<u>3.096353</u>		<u>2.94078</u>	<u>4.908311</u>		<u>1.159589</u>
								264,395		3188.981	3.687483		3.601518	5.890426		1.451709
Sum(GWP):								267,584			153.069			2276.062		
								270,013 grams/event								
								595 lbs/event								
								0.27 MT/event								
								28 MT/110 events								

From: Scott Russell <srussell@pacificacompanies.com>
 Subject: **Phase 1**
 Date: September 16, 2014 4:41:01 PM PDT
 To: Carl Doumani <carl@quixotewinery.com>
 2 Attachments, 3.0 MB

We didn't do a phase 1. We did the attached database search and then had an professional review the findings. He said no testing was necessary.

Scott Russell
 Director of Acquisitions and Development
 Pacifica Companies
 1775 Hancock Street, Suite 200
 San Diego, CA 92110
 Phone 619.296.9000 x 158
 Fax 619.296.9090
srussell@pacificacompanies.com
www.pacificacompanies.com

Scott Russell

From: Andy Rodgers [Andy@econca.com]
 Sent: Tuesday, May 13, 2014 5:12 PM
 To: Scott Russell
 Subject: St Helena summary
 Attachments: Stanton Mills, IR.MHT

Hi Scott, I have some good news for you.

The database search does not show anything new. The file review at the County showed there was an "AST" recorded at the property address, but it was associated with a frost protection wind machine that was somewhere near the center of the property. These AST's store ~750 gallons of gasoline.

As you know, the wind machine, AST and vines are no longer there.

The most recent inspection report from the Napa County inspector is attached for your reference. Chris spoke with a County inspector who confirmed that "no releases from the AST were documented, and no violations were noted".

Based on a site visit, County file review, discussion with the County inspector, and review of a new environmental records search, soil sampling does not appear warranted.

Please let me know if you have any questions.

*Thank you,
 Andy*

Andrew S. Rodgers
 **ECON**
Andy@econca.com
 T 707-823-2324
 F 707-921-7409

425 South Main Street
 Sebastopol, California 95472



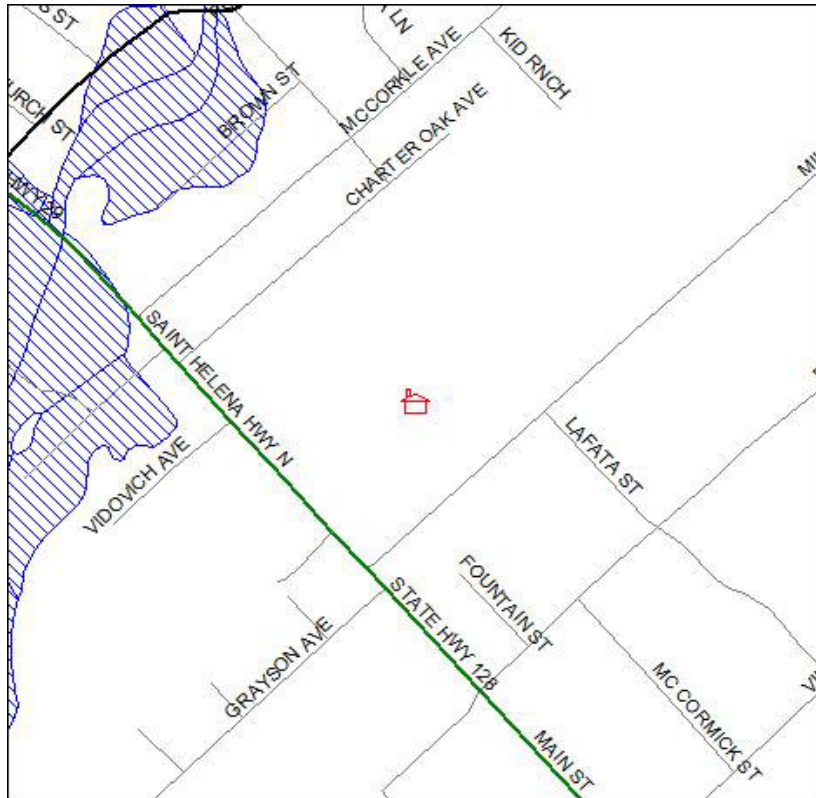
JCP-LGS Commercial Property Disclosure Reports

Natural Hazard Disclosure Report | MAP COVER PAGE

For NAPA County

Property Address: VACANT LAND
SAINT HELENA, NAPA COUNTY, CA 94574
("Property")

APN: SEE ADDENDUM
Report Date: 07/21/2015
Report Number: 1761409



Subject Property

	Special Flood Hazard Area
	Area of Potential Flooding, Dam Failure
	Very High Fire Hazard Severity Zone
	Wildland Area, Substantial Forest Fire Risk
	Earthquake Fault Zone
	Seismic Hazard Zone, Landslide
	Seismic Hazard Zone, Liquefaction



This map is provided for convenience only to show the approximate location of the Property and is not based on a field survey.

This COMMERCIAL PROPERTY DISCLOSURE REPORT contains

THIS REPORT PROVIDES THE STATUTORY DISCLOSURES MANDATED BY CALIFORNIA LAWS SPECIFIED HEREIN AND DELIVERY OF THIS REPORT AND THE EXECUTED STATUTORY FORM IS SUFFICIENT TO MEET THE SAFE HARBOR FOR THE SELLER AND SELLER'S AGENT. THIS REPORT ALSO CONTAINS OTHER IMPORTANT DISCLOSURES AND INFORMATION. SELLER AND SELLER'S AGENT MAY HAVE ADDITIONAL RESPONSIBILITIES FOR CERTAIN DISCLOSURES WITHIN THEIR ACTUAL KNOWLEDGE.



JCP-LGS Commercial Property Disclosure Reports The Natural Hazard Disclosure Report For NAPA County

Property Address: VACANT LAND
SAINT HELENA, NAPA COUNTY, CA 94574
("Property")

APN: SEE ADDENDUM
Report Date: 07/21/2015
Report Number: 1761409

Natural Hazard Disclosure ("NHD") Statement and Acknowledgment of Receipt

The transferor and his or her agent(s) or a third-party consultant disclose the following information with the knowledge that even though this is not a warranty, prospective Transferees may rely on this information in deciding whether and on what terms to purchase the Property. Transferor hereby authorizes any agent(s) representing any principal(s) in this action to provide a copy of this statement to any person or entity in connection with any actual or anticipated sale of the Property.

The following are representations made by the transferor and his or her agent(s) based on their knowledge and maps drawn by the State. This information is a disclosure and is not intended to be part of any contract between the transferee and the transferor. THIS REAL PROPERTY LIES WITHIN THE FOLLOWING HAZARDOUS AREA(S):

A SPECIAL FLOOD HAZARD AREA (Any type Zone "A" or "V") designated by the Federal Emergency Management Agency

Yes ___ No **X** Do not know and information not available from local jurisdiction ___

AN AREA OF POTENTIAL FLOODING shown on a dam failure inundation map pursuant to Section 8589.5 of the Government Code.

Yes ___ No **X** Do not know and information not available from local jurisdiction ___

A VERY HIGH FIRE HAZARD SEVERITY ZONE pursuant to Section 51178 or 51179 of the Government Code. The owner of this Property is subject to the maintenance requirements of Section 51182 of the Government Code.

Yes ___ No **X**

A WILDLAND AREA THAT MAY CONTAIN SUBSTANTIAL FOREST FIRE RISK AND HAZARDS pursuant to Section 4125 of the Public Resources Code. The owner of this Property is subject to the maintenance requirements of Section 4291 of the Public Resources Code. Additionally, it is not the state's responsibility to provide fire protection services to any building or structure located within the wildlands unless the Department of Forestry and Fire Protection has entered into a cooperative agreement with a local agency for those purposes pursuant to Section 4142 of the Public Resources Code.

Yes ___ No **X**

AN EARTHQUAKE FAULT ZONE pursuant to Section 2622 of the Public Resources Code.

Yes ___ No **X**

A SEISMIC HAZARD ZONE pursuant to Section 2696 of the Public Resources Code.

Yes (Landslide Zone) ___ Yes (Liquefaction Zone) ___

No ___ Map not yet released by state **X**

THESE HAZARDS MAY LIMIT YOUR ABILITY TO DEVELOP THE REAL PROPERTY, TO OBTAIN INSURANCE, OR TO RECEIVE ASSISTANCE AFTER A DISASTER. THE MAPS ON WHICH THESE DISCLOSURES ARE BASED ESTIMATE WHERE NATURAL HAZARDS EXIST. THEY ARE NOT DEFINITIVE INDICATORS OF WHETHER OR NOT A PROPERTY WILL BE AFFECTED BY A NATURAL DISASTER. TRANSFEREE(S) AND TRANSFEROR(S) MAY WISH TO OBTAIN PROFESSIONAL ADVICE REGARDING THOSE HAZARDS AND OTHER HAZARDS THAT MAY AFFECT THE PROPERTY.

Signature of Transferor(s) _____ Date _____ Signature of Transferor(s) _____ Date _____

Signature of Agent _____ Date _____ Signature of Agent _____ Date _____

☐ Transferor(s) and their agent(s) represent that the information herein is true and correct to the best of their knowledge as of the date signed by the transferor(s) and agent(s).

☒ Transferor(s) and their agent(s) acknowledge that they have exercised good faith in the selection of a third-party report provider as required in Civil Code Section 1103.7, and that the representations made in this Natural Hazard Disclosure Statement are based upon information provided by the independent third-party disclosure provider as a substituted disclosure pursuant to Civil Code Section 1103.4. Neither transferor(s) nor their agent(s) (1) has independently verified the information contained in this statement and Report or (2) is personally aware of any errors or inaccuracies in the information contained on the statement. This statement was prepared by the provider below:

Third-Party Disclosure Provider(s) FIRST AMERICAN PROFESSIONAL REAL ESTATE SERVICES, INC. Date 21 July 2015

Transferee represents that he or she has read and understands this document. Pursuant to Civil Code Section 1103.8, the representations in this Natural Hazard Disclosure Statement do not constitute all of the transferor's or agent's disclosure obligations in this transaction.

Signature of Transferee(s) _____ Date _____ Signature of Transferee(s) _____ Date _____

TRANSFEREE(S) REPRESENTS ABOVE HE/SHE HAS RECEIVED, READ AND UNDERSTANDS THE COMPLETE JCP-LGS DISCLOSURE REPORT DELIVERED WITH THIS SUMMARY:

- A. Commercial Natural Hazard Disclosure Report.
- B. Additional Property-specific Statutory Disclosures: Former Military Ordnance Site, Airport Influence Area, Airport Noise, San Francisco Bay Conservation and Development District Jurisdiction (in S.F. Bay counties only).
- C. Additional County and City Regulatory Determinations as applicable: Airports, Avalanche, Blow Sand, Coastal Zone, Dam/Levee Failure Inundation, Debris Flow, Erosion, Flood, Fault Zone, Fire, Groundwater, Landslide, Liquefaction, Methane Gas, Mines, Naturally Occurring Asbestos, Redevelopment Area, Right to Farm, Runoff Area, Seiche, Seismic Shaking, Seismic Ground Failure, Slope Stability, Soil Stability, Subsidence, TRPA, Tsunami.
- D. General advisories: Methamphetamine Contamination, Mold, Radon, Endangered Species Act, Abandoned Mines, Oil & Gas Wells, Tsunami Maps (coastal only), Non-residential Building Energy Use.
- E. Government Guides in Combined Booklet with report. Refer to Booklet: Commercial Property Owner's Guide to Earthquake Safety. Government Guides are also available on the Company's "Electronic Bookshelf" at <http://www.disclosures.com/>.



JCP-LGS Commercial Property Disclosure Reports

The Natural Hazard Disclosure Report FOR NAPA COUNTY

Property Address: VACANT LAND,
SAINT HELENA, NAPA COUNTY, CA
("Property")

APN: SEE ADDENDUM
Report Date: 7/21/2015
Report Number: 1761409

ADDENDUM FOR ASSESSOR PARCEL NUMBERS

This Addendum pertains solely to Report No. 1761409 dated Tuesday, July 21, 2015 ("Report Date") for disclosure information with respect to the Property, situated in the County of Napa, State of California, as collectively constituted by only those 4 assessor parcel numbers ("APN") and geographic boundaries thereof listed below as provided to the Company on said Report Date:

009-070-049-000
009-070-052-000
009-070-053-000
009-070-054-000

Responses contained in this Report pertain only to Property as identified above and to no others pursuant to a Transaction. This Report should not to be used for, and liability shall not be applicable to, any transaction involving any fewer or any other parcels than those identified above. For liability purposes a Report should be ordered for an individual parcel should it be sold separately from other parcels in a separate transaction.

This Addendum is attached hereto and made a part of Report No. 1761409 as of this reference and is subject to the Methods and Limitations contained herein.



JCP-LGS Commercial Property Disclosure Reports
The Natural Hazard Disclosure Report
For NAPA County

Property Address: VACANT LAND
SAINT HELENA, NAPA COUNTY, CA 94574
("Property")

APN: SEE ADDENDUM
Report Date: 07/21/2015
Report Number: 1761409

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JCP-LGS Commercial Property Disclosure Reports The Natural Hazard Disclosure Report For NAPA County

Property Address: VACANT LAND
SAINT HELENA, NAPA COUNTY, CA 94574
("Property")

APN: SEE ADDENDUM
Report Date: 07/21/2015
Report Number: 1761409

PROPERTY DISCLOSURE SUMMARY - READ FULL REPORT

Statutory NHD Determinations	IN	NOT IN	Map N/A*	Property is:	NHD Report page:
Flood		X		NOT IN a Special Flood Hazard Area. The Property is IN a FEMA-designated Flood Zone X.	5
Dam		X		NOT IN an area of potential dam inundation.	5
Very High Fire Hazard Severity		X		NOT IN a very high fire hazard severity zone.	6
Wildland Fire Area		X		NOT IN a state responsibility area.	6
Fault		X		NOT IN an earthquake fault zone designated pursuant to the Alquist-Priolo Act.	7
Landslide			X	Map Not Available	7
Liquefaction			X	Map Not Available	7

County-level NHD Determinations	IN	NOT IN	Map N/A*	Property is:	NHD Report page:
Fault		X		NOT IN a mapped fault zone or within one-eighth of one mile of a mapped fault trace	9
Landslide		X		NOT IN a mapped Landslide Area.	9
Liquefaction	X			IN a mapped area of Moderate Liquefaction Susceptibility.	9

Additional Statutory Disclosures	IN	NOT IN	Map N/A*	Property is:	NHD Report page:
Former Military Ordnance		X		NOT WITHIN one mile of a formerly used ordnance site.	11
Airport Influence Area		X		NOT IN an airport influence area.	12
Airport Noise Area for 65 Decibel		X		NOT IN a delineated 65 dB CNEL or greater aviation noise zone.	13
Bay Conservation and Development Commission		X		NOT IN an area that is within the jurisdiction of the San Francisco Bay Conservation and Development Commission.	14

General Advisories	Description	NHD Report page:
Methamphetamine Contamination	Provides an advisory that a disclosure may be required pursuant to the "Methamphetamine Contaminated Property Cleanup Act of 2005".	15
Mold	Provides an advisory that all prospective purchasers of residential and commercial property should thoroughly inspect the subject property for mold and sources for additional information on the origins of and the damage caused by mold.	16
Radon	Provides an advisory on the risk associated with Radon gas concentrations.	17
Endangered Species	Provides an advisory on resources to educate the public on locales of endangered or threatened species.	17
Abandoned Mines	Provides an advisory on resources to educate the public on the hazards posed by, and some of the general locales of, abandoned mines.	18
Oil and Gas Wells	Provides an advisory on the potential existence of oil and gas wells and sources for additional general and/or specific information.	18
Energy Use Disclosure Program Requirement	Provides an advisory on the non-residential building energy use disclosure program requirement effective January 1, 2014.	19
Tsunami Map Advisory	Provides an advisory about maximum tsunami inundation maps issued for jurisdictional emergency planning.	20

Determined by First American Professional Real Estate Services, Inc.

For more detailed information as to the foregoing determinations, please read this entire report.



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Natural Hazard Disclosure Report

PART 1. State Defined Natural Hazard Zones

Statutory Natural Hazard Disclosures

Section 1103 of the California Civil Code mandates the disclosure of six (6) natural hazard zones if the Property is located within any such zone. Those six "statutory" hazard zones, disclosed on the **Natural Hazard Disclosure Statement** ("NHDS") on Page one of this Report, are explained below. Note that the NHDS does not provide for informing buyers if a property is only partially within any of the delineated zones or provide additional flood zone information which could be very important to the process. The following summary is intended to give buyers additional information they may need to help them in the decision-making process and to place the information in perspective.

SPECIAL FLOOD HAZARD AREA

DISCUSSION: Property in a Special Flood Hazard Area (any type of Zone "A" or "V" as designated by the Federal Emergency Management Agency ("FEMA")) is subject to flooding in a "100-year rainstorm." Federally connected lenders are required to have homeowners maintain flood insurance in these zones. A 100-year flood occurs on average once every 100 years, but may not occur in 1,000 years or may occur in successive years. According to FEMA, a home located within a SFHA has a 26% chance of suffering flood damage during the term of a 30-year mortgage. Other types of flooding, such as dam failure, are not considered in developing these zones. In some cases, the insurance requirement may be waived or modified by obtaining a Letter of Map Revision ("LOMR") or Letter of Map Amendment ("LOMA") from the FEMA. This might be possible where flooding is shallow and fill was placed on the site, appropriate flood control measures were taken, or only the lot and no part of the structure is in the zone. Contact FEMA directly for more information. Flood insurance for properties in Zones B, C, D, X, X500, and X500_Levee is available but is not required.

Zones A, AO, AE, AH, AR, A1-A30: Area of "100-year" flooding - a 1% or greater chance of annual flooding.

Zones V, V1-V30: Area of "100-year" flooding in coastal (shore front) areas subject to wave action.

Zone B: Area of moderate flood risk. These are areas between the "100" and "500" year flood-risk levels.

Zones C, D: NOT IN an area of "100-year" flooding. Area of minimal (Zone C) or undetermined (Zone D) flood hazard.

Zones X: An area of minimal flood risk. These are areas outside the "500" year flood-risk level.

Zone X500: An area of moderate flood risk. These are areas between the "100" and "500" year flood-risk levels.

Zone X500_LEVEE: An area of moderate flood risk that is protected from "100-year flood" by levee and that is subject to revision to high risk (Zone A) if levee is decertified by FEMA.

Zone N: Area Not Included, no flood zone designation has been assigned or not participating in the National Flood Insurance Program.

Note: If the Property is subject to a Letter of Map Amendment ("LOMA") or a Letter of Map Revision ("LOMR") issued by FEMA, a copy of the LOMA or LOMR must be attached to the Natural Hazard Disclosure Statement ("NHDS") or appropriate disclosure statement. The Company is not always able to determine if the Property is subject to a LOMA or a LOMR. Even if such information is available to the Company, the Company is unable to attach a copy of the LOMA or LOMR to the NHDS. If Seller is aware that the Property is subject to a LOMR or a LOMA, the Seller shall attach a copy to the NHDS and notify the Company.

For more information about flood zones, visit:

http://www.floodsmart.gov/floodsmart/pages/flooding_flood_risks/defining_flood_risks.jsp

PUBLIC RECORD: Official Flood Insurance Rate Maps ("FIRM") compiled and issued by the Federal Emergency Management Agency ("FEMA") pursuant to 42 United States Code §4001, et seq.

AREA OF POTENTIAL FLOODING (DAM FAILURE)

DISCUSSION: Local governmental agencies, utilities, and owners of certain dams are required to prepare and submit inundation maps for review and approval by the California Office of Emergency Services ("OES"). A property within an Area of Potential Flooding Caused by Dam Failure is subject to potential flooding in the event of a sudden and total dam failure with a full reservoir. Such a failure could result in property damage and/or personal injury. However, dams rarely fail instantaneously and reservoirs are not always filled to capacity. Please note that not all dams (such as federally controlled dams) located within the state have been included within these dam inundation zones. Also these maps do not identify areas of potential flooding resulting from storms or other causes.

PUBLIC RECORD: Official dam inundation maps or digital data thereof made publicly available by the State of California Office of Emergency Services ("OES") pursuant to California Government Code §8589.5.



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VERY HIGH FIRE HAZARD SEVERITY ZONE (VHFHSZ)

DISCUSSION: VHFHSZs can be defined by the California Department of Forestry and Fire Protection ("Calfire") as well as by local fire authorities within "Local Responsibility Areas" where fire suppression is the responsibility of a local fire department. Properties located within VHFHS Zones may have a higher risk for fire damage and, therefore, may be subject to (i) additional construction requirements such as a "Class A" roof for new construction or replacement of existing roofs; and (ii) additional maintenance responsibilities such as adequate vegetation clearance near the structure, spark screens on chimneys and stovepipes, leaf removal from roofs, and other basic fire-safety practices. Contact the local fire department for a complete list of requirements and exceptions.

PUBLIC RECORD: Maps issued by Calfire pursuant to California Government Code § 51178 recommending VHFHSZs to be adopted by the local jurisdiction within its Local Responsibility Area, or VHFHSZs adopted by the local jurisdiction within the statutory 120-day period defined in California Government Code § 51179.

WILDLAND FIRE AREA (STATE RESPONSIBILITY AREA)

DISCUSSION: The State Board of Forestry classifies all lands within the State of California based on various factors such as ground cover, beneficial use of water from watersheds, probable damage from erosion, and fire risks. Fire prevention and suppression in all areas which are not within a Wildland - State Responsibility Area ("WSRA") is primarily the responsibility of the local or federal agencies, as applicable.

For property located within a WSRA, please note that (1) there may be substantial forest fire risks and hazards; (2) except for property located within a county which has assumed responsibility for prevention and suppression of all fires, it is NOT the state's responsibility to provide fire protection services to any building or structure located within a WSRA unless the Department has entered into a cooperative agreement with a local agency; and (3) the property owner may be subject to (i) additional construction requirements such as a "Class A" roof for new construction or replacement of existing roofs; and (ii) additional maintenance responsibilities such as adequate vegetation clearance near the structure, spark screens on chimneys and stovepipes, leaf removal from roofs, and other basic fire-safety practices.

The existence of local agreements for fire service is not available in the Public Record and, therefore, is not included in this disclosure. For very isolated properties with no local fire services or only seasonal fire services there may be significant fire risk. If the Property is located within a WSRA, please contact the local fire department for more detailed information.

PUBLIC RECORD: Official maps issued by the California Department of Forestry and Fire Protection ("Calfire") pursuant to California Public Resources Code § 4125.

SRA Fire Prevention Benefit Fee Advisory

On January 23, 2012, the State Board of Forestry and Fire Protection ("Board") adopted an emergency regulation that implements a Fire Prevention Benefit Fee ("Benefit Fee") imposed annually on property owners in wildland areas where the state has responsibility for providing fire protection. According to the adopted regulation, the Benefit Fee is one hundred fifty-two dollars and thirty-three cents (\$152.33) per habitable structure in the State Responsibility Area ("SRA"), including single-family homes, multi-dwelling structures, mobile and manufactured homes, and condominiums. The Board regulation is pursuant to Chapter 1.5 (commencing with Section 4210) to Part 2 of Division 4 of the Public Resources Code (also known as Assembly Bill X1 29). The regulation allows a fee reduction of thirty-five dollars (\$35.00) per habitable structure located in the SRA and within the boundaries of a local agency that provides fire protection services. For more information, please refer to "Part 6. State Responsibility Area Fire Prevention Fee" in the JCP-LGS Property Tax Report.



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EARTHQUAKE FAULT ZONE

DISCUSSION: Earthquake Fault Zones are delineated and adopted by California as part of the Alquist-Priolo Earthquake Fault Zone Act of 1972. Property in an Earthquake Fault Zone ("EF Zone") does not necessarily have a fault trace existing on the site. EF Zones are areas or bands delineated on both sides of known active earthquake faults. EF Zones vary in width but average one-quarter (1/4) mile in width with the "typical" zone boundaries set back approximately 660 feet on either side of the fault trace. The potential for "fault rupture" damage (ground cracking along the fault trace) is relatively high only if a structure is located directly on a fault trace. If a structure is not on a fault trace, shaking will be the primary effect of an earthquake. During a major earthquake, shaking will be strong in the vicinity of the fault and may be strong at some distance from the fault depending on soil and bedrock conditions. It is generally accepted that properly constructed wood-frame houses are resistant to shaking damage.

PUBLIC RECORD: Official earthquake fault zone or special study zone maps approved by the State Geologist and issued by the California Department of Conservation, California Geological Survey pursuant to California Public Resources Code §2622.

SEISMIC HAZARD MAPPING ACT ZONE

DISCUSSION: Official Seismic Hazard Zone ("SH Zone") maps delineate Areas of Potential Liquefaction and Areas of Earthquake-Induced Landsliding. A property that lies partially or entirely within a designated SH Zone may be subject to requirements for site-specific geologic studies and mitigation before any new or additional construction may take place.

Earthquake-Induced Landslide Hazard Zones are areas where the potential for earthquake-induced landslides is relatively high. Areas most susceptible to these landslides are steep slopes in poorly cemented or highly fractured rocks, areas underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits. The CGS cautions these maps do not capture all potential earthquake-induced landslide hazards and that earthquake-induced ground failures are not addressed by these maps. Furthermore, no effort has been made to map potential run-out areas of triggered landslides. It is possible that such run-out areas may extend beyond the zone boundaries. An earthquake capable of causing liquefaction or triggering a landslide may not uniformly affect all areas within a SH Zone.

Liquefaction Hazard Zones are areas where there is a potential for, or an historic occurrence of liquefaction. Liquefaction is a soil phenomenon that can occur when loose, water saturated granular sediment within 40 feet of the ground surface, are shaken in a significant earthquake. The soil temporarily becomes liquid-like and structures may settle unevenly. The Public Record is intended to identify areas with a relatively high potential for liquefaction but not to predict the amount or direction of liquefaction-related ground displacement, nor the amount of damage caused by liquefaction. The many factors that control ground failure resulting from liquefaction must be evaluated on a site specific basis.

PUBLIC RECORD: Official seismic hazard maps or digital data thereof approved by the State Geologist and issued by the California Department of Conservation, California Geological Survey pursuant to California Public Resources Code §2696.

STATUTORY NATURAL HAZARD DISCLOSURE REPORTING STANDARD: "IN" shall be reported if any portion of the Property is located within any of the above zones as delineated in the Public Record. "NOT IN" shall be reported if no portion of the Property is located within any of the above zones as delineated in the Public Record. Map Not Available shall be reported in areas not yet evaluated by the governing agency according to the Public Record. Please note that "MAP NOT AVAILABLE" will be applicable to most portions of the state. Official Seismic Hazard Zone ("SH Zone") maps delineate Areas of Potential Liquefaction and Areas of Earthquake-Induced Landsliding.



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Part 2. County and City Defined Natural Hazard Zones

HAZARD MAPS IN THE LOCAL GENERAL PLAN

General Plan regulates property development. There are currently over 530 incorporated cities and counties in California. The state Government Code (Sections 65000 et seq.) requires each of those jurisdictions to adopt a comprehensive, long-term "General Plan" for its physical development. That General Plan regulates land uses within the local jurisdiction in order to protect the public from hazards in the environment and conserve local natural resources. The General Plan is the official city or county policy regarding the location of housing, business, industry, roads, parks, and other land uses.

Municipal hazard zones can affect the cost of ownership. Each county and city adopts its own distinct General Plan according to that jurisdiction's unique vegetation, landscape, terrain, and other geographic and geologic conditions. The "Safety Element" (or Seismic Safety Element) of that General Plan identifies the constraints of earthquake fault, landslide, flood, fire and other natural hazards on local land use, and it delineates hazard zones within which private property improvements may be regulated through the building-permit approval process, which can affect the future cost of ownership. Those locally regulated hazard zones are in addition to the federal and state defined hazard zones associated with statutory disclosures in the preceding section.

City and/or County natural hazard zones explained below. Unless otherwise specified, only those officially adopted Safety Element or Seismic Safety Element maps (or digital data thereof) which are publicly available, are of a scale, resolution, and quality that readily enable parcel-specific hazard determinations, and are consistent in character with those statutory federal or state disclosures will be considered for eligible for use as the basis for county- or city-level disclosures set forth in this Report. Please also note:

- If an officially adopted Safety Element or Seismic Safety Element map relies on data which is redundant of that used for state-level disclosures, this Report will indicate so and advise Report recipients to refer to the state-level hazard discussion section for more information.
- If an officially adopted Safety Element or Seismic Safety Element cites underlying maps created by another agency, those maps may be regarded as incorporated by reference and may be used as the basis for parcel-specific determinations if those maps meet the criteria set forth in this section.
- Because county- and city-level maps are developed independently and do not necessarily define or delineate a given hazard the same way, the boundaries for the "same" hazard may be different.

If one or more maps contained in the Safety Element and/or Seismic Safety Element of an officially adopted General Plan are used as the basis for local disclosure, those maps will appear under the "Public Record(s) Searched" for that county or city.

REPORTING STANDARDS

A good faith effort has been made to disclose all hazard features on pertinent Safety Element and Seismic Safety Element maps with well-defined boundaries; however, those hazards with boundaries that are not delineated will be deemed not suitable for parcel-specific hazard determinations. Some map features, such as lines drawn to represent the location of a fault trace, may be buffered to create a zone to facilitate disclosure. Those map features which can not be readily distinguished from those representing hazards may be included to prevent an omission of a hazard feature. If the width of a hazard zone boundary is in question, "IN" will be reported if that boundary impacts any portion of a property. Further explanations concerning specific map features peculiar to a given county or city will appear under the "Reporting Standards" for that jurisdiction.

PUBLIC RECORDS VS. ON-SITE EVALUATIONS

Mapped hazard zones represent evaluations of generalized hazard information. Any specific site within a mapped zone could be at less or more relative risk than is indicated by the zone designation. A site-specific evaluation conducted by a geotechnical consultant or other qualified professional may provide more detailed and definitive information about the Property and any conditions which may or do affect it.

PROPERTY USE AND PERMITTING

No maps beyond those identified as "Public Record(s)" have been consulted for the purpose of these local disclosures. These disclosures are intended solely to make Report recipient(s) aware of the presence of mapped hazards. For this reason -- and because local authorities may use on these or additional maps or data differently to determine property-specific land use and permitting approvals -- Report recipients are advised to contact the appropriate local agency, usually Community Development, Planning, and/or Building, prior to the transaction to ascertain if these or any other conditions or related regulations may impact the Property use or improvement.



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NAPA COUNTY GEOLOGIC ZONES DISCUSSION

PUBLIC RECORD(S) SEARCHED: The following Public Records, contained or referenced in the Safety Element of the General Plan as adopted by the County Board of Supervisors in June 2008, are utilized for those county-level disclosures below: Digital data of "Figure SAF-1: Earthquake Faults," "Figure SAF-4: Liquefaction Susceptibility," "Figure SAF-5: Napa Dam Inundation Areas," "Figure SAF-5: Napa Dam Inundation Areas" as well as "Map 1-8: Landslides" from the Napa County Baseline Data Report as incorporated by reference into the Safety Element of the General Plan.

FAULT

Three mapped faults within the County have been designated as "active" (showing sign of movement over the past 11,000 years) by the California Geological Survey ("CGS") and are regulated by the State as Alquist-Priolo fault zones:

- **West Napa fault:** The southern portion, from the Napa Airport to very near the Solano County border, has been designated active. The northern segment, which ends near Yountville, has not but may have been the source of the 2000 magnitude 5.2 earthquake west of Yountville in which the City of Napa experienced more damage than Yountville itself. (On General Plan Figure SAF-1 this fault is mislabeled as the "Green Valley Fault".)
- **Green Valley fault:** This fault extends northward 4 to 5 miles into the southeast part of the County and ends along the west edge of Wooden Valley. This fault is characterized by aseismic creep, a slow, gradual movement on a fault not associated with felt earthquakes.
- **Hunting Creek fault zone.** This fault zone extends from the vicinity of the Wilson Valley south-southeast to the Cedar Roughs area west of Lake Berryessa.

A fourth fault, the **Cordelia fault**, runs roughly parallel to and a few miles east of the Green Valley fault. This fault may also be active according to sources consulted by Napa County.

Reporting Standards: If any portion of the Property is within an Alquist-Priolo fault as adopted by the County or within one-eighth of one mile (660 feet) of a fault trace delineated in the Public Record, "WITHIN" shall be reported.

LANDSLIDE AREAS

Landsliding is generally considered the most potentially damaging cumulative geologic hazard in the County because of the widespread and frequent occurrence of damaging events. All major ridge and hills systems within the County have experienced landsliding to varying degrees. Even so, rapid slides, such as debris flows and debris avalanches, are much less prevalent in the County. It is important to recognize that landslide maps are not a substitute for detailed site-specific landslide investigations. They are useful, however, to indicate when such investigation may be required or desirable for a particular project and can be used to suggest the extent and detail of the investigation appropriate to the project.

Reporting Standards: If any portion of the Property is within a Landslide Area as delineated in the Public Record, "IN" shall be reported. Please note that individual "landslides" as mapped within and outside of "Landslide Areas" are not disclosed in this Report.

LIQUEFACTION SUSCEPTIBILITY

Liquefaction is the sudden loss of strength in water-saturated soils during strong earthquake shaking, due to increased water pressure within the pores between soil grains. As a result, building foundations on the ground surface can settle and fracture. Liquefied soils on sloping ground may flow in a semi-fluid or plastic state (a lateral spreading), disrupting the original ground surface and damaging pipelines, roadways and other improvements in their path. Even within prone areas, liquefaction potential varies from high to low due to various factors, including soil type, soil thickness and groundwater levels. Estuarine areas, and areas comprising nonengineered, saturated, cohesionless fill are often considered to have relatively high liquefaction potential. The largest contiguous area within the County where liquefaction failures could occur is within the loose saturated estuarine deposits along the Napa River, south of the City of Napa.

Reporting Standards: The most severe Liquefaction Susceptibility (Very High, High, Medium, Low, or Very Low) area as depicted in the Public Record in which the Property is located shall be reported.

DAM INUNDATION

Potential inundation areas for 16 of the 51 dams identified in the County by the California Department of Water Resources as of 2004 are identified in the Public Record.

Reporting Standards: Please refer to the Dam Inundation discussion contained in this Report as the potential inundation boundaries delineated in the Public Record are representative of those shown on official dam inundation maps made publicly available by the California Office of Emergency Services.

OTHER HAZARDS

Information on other geologic and seismic hazards impacting the County but not detailed in this Report (including, but not limited to, ground shaking, expansive soils, erosion, and subsidence) may be found in the Napa County Baseline Data Report online at www.napawatersheds.org/app_pages/view/192.



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CITY-LEVEL GEOLOGIC AND SEISMIC ZONES DISCUSSION

This Report reviews the officially adopted geologic hazard maps in the Safety Element that each city in California is required to include in its General Plan. The city the subject property is located in has either not officially adopted hazard zonation maps in its General Plan at an appropriate scale to delineate where hazards may exist on a single parcel basis or will not make such maps available outside city offices. However, all Parties should be California is "earthquake country." Faults that may exist in this city or in neighboring regions could cause earthquake shaking or other fault related-phenomena on the Property. Other geologic hazards such as, but not limited to liquefaction (a type of soil settling that can occur when loose, water-saturated sediments are shaken significantly in an earthquake) may occur in certain valley floor areas and landslides are a possibility in any hillside area. Such potential natural hazards may exist and be delineated on other sources used by the city in its Planning, Engineering, or Building Departments. Such potential sources are not reviewed in this report.

END OF LOCAL AREA DISCLOSURES AND DISCUSSIONS SECTION



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Part 3. Additional Property Specific Disclosures

FORMER MILITARY ORDNANCE SITE DISCLOSURE

DISCUSSION: Former Military Ordnance (FUD) sites can include sites with common industrial waste (such as fuels), ordnance or other warfare materiel, unsafe structures to be demolished, or debris for removal. California Civil Code Section 1102 requires disclosure of those sites containing unexploded ordnance. "Military ordnance" is any kind of munitions, explosive device/material or chemical agent used in military weapons. Unexploded ordnance are munitions that did not detonate. NOTE: **MOST** FUD sites do not contain unexploded ordnance. Only those FUD sites that the U.S. Army Corps of Engineers (USACE) has identified to contain Military Ordnance or have mitigation projects planned for them are disclosed in this Report. Additional sites may be added as military installations are released under the Federal Base Realignment and Closure (BRAC) Act. Active military sites are NOT included on the FUD site list.

PUBLIC RECORD: Data contained in Inventory Project Reports, Archives Search Reports, and related materials produced for, and made publicly available in conjunction with, the Defense Environmental Restoration Program for Formerly Used Defense Sites by the U.S. Army Corps of Engineers. Sites for which no map has been made publicly available shall not be disclosed.

REPORTING STANDARD: If one or more facility identified in the Public Record is situated within a one (1) mile radius of the Property, "WITHIN" shall be reported. The name of that facility or facilities shall also be reported.



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AIRPORT INFLUENCE AREA DISCLOSURE

DISCUSSION:

Certain airports are not disclosed in this report. JCP-LGS has made a good faith effort to identify the airports covered under Section 1102.6a. Sources consulted include official land use maps and/or digital data made available by a governing Airport Land Use Commission (ALUC) or other designated government body. Most facilities for which an Airport Influence Area has been designated are included on the "California Airports List" maintained by the California Department of Transportation's Division of Aeronautics. Not disclosed in this report are public use airports that are not in the "California Airports List", airports that are physically located outside California, heliports and seaplane bases that do not have regularly scheduled commercial service, and private airports or military air facilities unless specifically identified in the "California Airports List". **If the seller has actual knowledge of an airport in the vicinity of the subject property that is not disclosed in this report, and that is material to the transaction, the seller should disclose this actual knowledge in writing to the buyer.**

Most facilities for which an Airport Influence Area has been designated are included on the "California Airports List" maintained by the California Department of Transportation's Division of Aeronautics. The inclusion of military and private airports varies by County, and heliports and seaplane bases are not included, therefore, airports in these categories may or may not be included in this disclosure.

NOTE: Proximity to an airport does not necessarily mean that the property is exposed to significant aviation noise levels. Alternatively, there may be properties exposed to aviation noise that are greater than two miles from an airport. Factors that affect the level of aviation noise include weather, aircraft type and size, frequency of aircraft operations, airport layout, flight patterns or nighttime operations. Buyer should be aware that aviation noise levels can vary seasonally or change if airport usage changes.

PUBLIC RECORD: Based on officially adopted land use maps and/or digital data made publicly available by the governing ALUC or other designated government body. If the ALUC or other designated government body has not made publicly available a current officially adopted airport influence area map, then California law states that "a written disclosure of an airport within two (2) statute miles shall be deemed to satisfy any city or county requirements for the disclosure of airports in connection with transfers of real property."

REPORTING STANDARD: "IN" shall be reported along with the facility name(s) and the "Notice of Airport in Vicinity" if any portion of the Property is situated within either (a) an Airport Influence Area as designated on officially adopted maps or digital data or (b) a two (2) mile radius of a qualifying facility for which an official Airport Influence Area map or digital data has not been made publicly available by the ALUC or other designated governing body. "NOT IN" shall be reported if no portion of the Property is within either area.



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AIRPORT NOISE DISCLOSURE

DISCUSSION: California Civil Code §1102.17 requires the seller(s) of residential real property who has/have actual knowledge that the property in the transaction is affected by airport use must give written notice of that knowledge, as soon as practicable, before transfer of title.

Under the Federal Aviation Administration's *Airport Noise Compatibility Planning Program Part 150*, certain 65 decibel (dB) Community Noise Equivalent Level (CNEL) contour maps have been produced for some airports. Not all airports have produced noise exposure maps. A property may be near or at some distance from an airport and not be within a delineated noise exposure area, but still experience aviation noise. Unless 65dB CNEL contour maps are published, helipads and military sites are not included in this section of the Report.

The *Airport Noise Compatibility Planning Program* is voluntary and not all airports have elected to participate. Furthermore, not all property in the vicinity of an airport is exposed to 65dB CNEL or greater average aviation noise levels. Conversely a property may be at some distance from an airport and still experience aviation noise. Buyer should be aware that aviation noise levels can vary seasonally or change if airport usage changes after a map is published or after the Report Date. JCP-LGS uses the most seasonally conservative noise exposures provided.

Federal funding may be available to help airports implement noise reduction programs. Such programs vary and may include purchasing properties, rezoning, and insulating homes for sound within 65dB areas delineated on CNEL maps. Airport owners have also cooperated by imposing airport use restrictions that include curfews, modifying flight paths, and aircraft limitations.

PUBLIC RECORD: Certain 65 decibel (dB) Community Noise Equivalent Level (CNEL) contour maps produced under the Federal Aviation Administration's *Airport Noise Compatibility Planning Program Part 150*.

REPORTING STANDARD: "IN" shall be reported if any portion of the Property is situated within a 65 decibel Community Noise Equivalent Level contour identified in the Public Record. "NOT IN" shall be reported if no portion of the Property is situated within a 65 decibel Community Noise Equivalent Level contour identified in the Public Record.



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SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION DISCLOSURE

DISCUSSION: As of July 1, 2005, Civil Code §1103.4 mandates disclosure to buyers of certain real estate if the boundary of the property is determined to be (1) within 100 feet of the San Francisco Bay shoreline as mapped in 1997 by the National Ocean Survey (NOS), an agency of the National Oceanographic and Atmospheric Administration (NOAA); or (2) within another mapped zone established by the Bay Conservation and Development Commission (BCDC). The BCDC has regulatory jurisdiction within 100 feet inland from the point of "mean higher high water" as mapped by the NOS, and within other zones the agency has defined along the San Francisco Bay margin (BCDC Memo entitled "Guidance on Determining Commission Jurisdiction Pursuant to Senate Bill 1568").

Notice is required to prevent unknowing violations of the law by new owners who were unaware that certain activities on the real property are subject to the BCDC's permit requirements. The BCDC notes that the Bay is a highly dynamic environment and the shoreline changes over time (see Discussion below). In addition, there is inherent uncertainty in the shoreline position as mapped by the NOS or any agency. The BCDC advises the buyer and other interested parties to contact its office if a more authoritative jurisdictional determination is desired. The BCDC office is located at 50 California Street, Suite 2600, San Francisco, California 94111, and can be reached at (415) 352-3600, or by email to info@bcdcc.ca.gov

The BCDC has issued maps for some parts of its jurisdiction, including the San Francisco Bay Plan maps (California Code of Regulations, Title 14, Section 10121) and the Suisun Marsh Plan maps (Nejedly-Bagley-Z'berg Suisun Marsh Preservation Act of 1974). Official maps have not been issued for other parts of the BCDC jurisdiction (McAteer-Petris Act areas) because the Bay is a highly dynamic environment and the shoreline changes over time (in part because the sea level also changes over time). In those areas where official BCDC maps are not available or along the edges of the BCDC's mapped jurisdiction, to meet the disclosure requirements, this report will indicate that the property "could be within" the BCDC's jurisdiction and that a location-specific jurisdictional determination should be made by consulting the BCDC. This determination of "could be within" the BCDC's jurisdiction was recommended by the BCDC in that certain Memo entitled "Guidance on Determining Commission Jurisdiction Pursuant to Senate Bill 1568" issued in February 2005 and posted on the BCDC website.

PUBLIC RECORDS: San Francisco Bay Plan maps (California Code of Regulations, Title 14, Section 10121) and the Suisun Marsh Plan maps (Nejedly-Bagley-Z'berg Suisun Marsh Preservation Act of 1974) made publicly available by BCDC and that certain Memo entitled "Guidance on Determining Commission Jurisdiction Pursuant to Senate Bill 1568" issued by BCDC in February 2005 and posted on the BCDC website ("BCDC Memo").

REPORTING STANDARD: "WITHIN" shall be reported if any portion of the Property is situated within an areas mapped by BCDC or is within the 100-foot shoreline band. "COULD BE WITHIN" shall be reported if any portion of the Property is situated within one-quarter (1/4) mile of either an area mapped by BCDC or the 100-foot shoreline band. "NOT WITHIN" shall be reported if no portion of the Property is situated within an area that would otherwise be reported as either "WITHIN" or "COULD BE WITHIN".



**JCP-LGS Commercial Property Disclosure Reports
The Natural Hazard Disclosure Report
For NAPA County**

Property Address: VACANT LAND
SAINT HELENA, NAPA COUNTY, CA 94574
("Property")

APN: SEE ADDENDUM
Report Date: 07/21/2015
Report Number: 1761409

Part 4. General Advisories

METHAMPHETAMINE CONTAMINATED PROPERTY DISCLOSURE ADVISORY

DISCUSSION: According to the "Methamphetamine Contaminated Property Cleanup Act of 2005" a property owner must disclose in writing to a prospective buyer if local health officials have issued an order prohibiting the use or occupancy of a property contaminated by meth lab activity. The owner must also give a copy of the pending order to the buyer to acknowledge receipt in writing. Failure to comply with these requirements may subject an owner to, among other things, a civil penalty up to \$5,000. Aside from disclosure requirements, this new law also sets forth procedures for local authorities to deal with meth-contaminated properties, including the filing of a lien against a property until the owner cleans up the contamination or pays for the cleanup costs.



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MOLD ADVISORY

DISCUSSION: The Buyer is hereby advised that naturally occurring molds may exist both inside and outside of any home and may not be visible to casual inspection. Persons exposed to extensive mold levels can become sensitized and develop allergies to the mold or other health problems. Extensive mold growth can damage a structure and its contents. All prospective purchasers of residential and commercial property are advised to thoroughly inspect the Property for mold. Be sure to inspect the Property inside and out for sources of excess moisture, current water leaks and evidence of past water damage.

As part of a buyer's physical inspection of the condition of a property, the buyer should consider engaging an appropriate and qualified professional to inspect and test for the presence of harmful molds and to advise the buyer of any potential risk and options available. This advisory is not a disclosure of whether harmful mold conditions exist at a property or not. No testing or inspections of any kind have been performed by The Company. Any use of this form is acknowledgement and acceptance that The Company does not disclose, warrant or indemnify mold conditions at a property in any way and is not responsible in any way for mold conditions that may exist. Information is available from the California Department of Health Services Indoor Air Quality Section fact sheet entitled, "Mold in My Home: What Do I Do?" The fact sheet is available at www.cal-iaq.org or by calling (510) 620-3620.

The Toxic Mold Protection Act of 2001 requires that information be developed regarding the potential issues surrounding naturally occurring molds within a home. Information was written by environmental authorities for inclusion in the *Residential Environmental Hazards: A Guide for Homeowners, Buyers, Landlords and Tenants* booklet developed by the California Environmental Protection Agency and the Department of Health Services. It is found in Chapter VII of that booklet, and includes references to sources for additional information.

For local assistance, contact your county or city Department of Health, Housing, or Environmental Health.



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RADON ADVISORY

DISCUSSION: For its Radon Advisory, JCP-LGS uses the updated assessment of radon exposure published in 1999 by the Lawrence Berkeley National Laboratory (LBNL) and Columbia University, under support from the U.S. Environmental Protection Agency (EPA), the National Science Foundation, and the US Department of Energy (published online at <http://energy.lbl.gov/ie/high-radon/USgm.htm>). Based on this recent assessment, JCP-LGS radon advisory is as follows:

All of California's 58 counties have a predicted median annual-average living-area concentration of radon below 2.0 pCi/L (picocuries per liter of indoor air) -- which is well below the EPA's guideline level of 4 pCi/L and equivalent to the lowest hazard zone (Zone 3) on the 1993 EPA Map of Radon Zones.

The "median concentration" means that half of the homes in a county are expected to be below this value and half to be above it. All houses contain some radon, and a few houses will contain much more than the median concentration. **The only way to accurately assess long-term exposure to radon in a specific house is through long-term testing (sampling the indoor air for a year or more).** The EPA recommends that all homes be tested for radon. Columbia University's "Radon Project" website offers help to homeowners in assessing the cost vs. benefit of testing a specific house for radon or modifying it for radon reduction (see <http://www.stat.columbia.edu/~radon/>).

NOTE: JCP-LGS does not use the EPA's 1993 map for advisory purposes because that map shows "short-term" radon exposure averaged by county. It was based on "screening measurements" that were intentionally designed to sample the worst-case conditions for indoor air in US homes--using spot checks (sampling for just a few days), in the poorest air quality (with sealed doors and windows), at the worst time of the year (winter), in the worst part of the house (the basement, if one was available). These short-term, winter, basement measurements are both biased and variable compared to long-term radon concentrations (averaged over a year) in the living area of a house. Long-term concentrations are a more accurate way to judge the long-term health risk from radon. For the above reasons, the EPA expressly disclaims the use of its 1993 map for determining whether any house should be tested for radon, and authorizes no other use of its map for property-specific purposes. For additional information about EPA guidelines and radon testing, see "Chapter VII--Radon", in the California Department of Real Estate's *Residential Environmental Hazards: A Guide for Homeowners, Homebuyers, Landlords and Tenants*.

ENDANGERED SPECIES ACT ADVISORY

DISCUSSION: The Federal Endangered Species Act of 1973 ("ESA"), as amended, requires that plant and animal species identified and classified ("listed") by the Federal government as "threatened" or "endangered" be protected under U.S. law. Areas of habitat considered essential to the conservation of a listed species may be designated as "critical habitat" and may require special management considerations or protection. All threatened and endangered species -- even if critical habitat is not designated for them -- are equally afforded the full range of protections available under the ESA.

In California alone, over 300 species of plants and animals have been designated under the ESA as threatened or endangered, and over 80 species have critical habitats designated for them. Most California counties are host to a dozen or more protected species and, in many cases, 10 or more species have designated critical habitats within a county.

ADVISORY: An awareness of threatened and endangered species and/or critical habitats is not reasonably expected to be within the actual knowledge of a seller.

No federal or state law or regulation requires a seller or seller's agent to disclose threatened or endangered species or critical habitats, or to otherwise investigate their possible existence on real property. Therefore, Buyer is advised that, prior to purchasing a vacant land parcel or other real property, Buyer should consider investigating the existence of threatened or endangered species, or designated critical habitats, on or in the vicinity of the Property which could affect the use of the Property or the success of any proposed (re)development.

FOR MORE INFORMATION: Complete and current information about the threatened and endangered species in California that are Federally listed in each county -- including all critical habitats designated there -- is available on the website of the U.S. Fish & Wildlife Service, the Federal authority which has enforcement responsibility for the ESA.

U.S. Fish & Wildlife Service Endangered Species Database (TESS)
http://ecos.fws.gov/tess_public/



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ABANDONED MINES ADVISORY

DISCUSSION: According to the California Department of Conservation, Office of Mine Reclamation, since the Gold Rush of 1849, tens of thousands of mines have been dug in California. Many were abandoned when they became unproductive or unprofitable. The result is that California's landscape contains many thousands of abandoned mines, which can pose health, safety, or environmental hazards on and around the mine property. Mines can present serious physical safety hazards, such as open shafts or adits (mine tunnel), and they may create the potential to contaminate surface water, groundwater, or air quality. Some abandoned mines are such massive problems as to earn a spot on the Federal Superfund environmental hazard list.

No California law requires the disclosure of abandoned mines in a real estate transaction, unless the existence of an abandoned mine is within the actual knowledge of the Seller and is deemed to be a fact material to the transaction.

The Office of Mine Reclamation (OMR) and the U.S. Geological Survey maintain a database of abandoned mines -- however, it is known to be incomplete and based on maps that are often decades out of date. Many mines are not mapped because they are on private land. The OMR warns that, *"Many old and abandoned mines are not recorded in electronic databases, and when they are, the information may not be detailed enough to accurately define, differentiate or locate the mine feature, such as a potentially hazardous vertical shaft or horizontal adit or mine waste."* (See reference below.)

Accordingly, this Report does not contain an abandoned mines disclosure from any government database or map or any other source, in order to protect the seller from liability for non-disclosure of unrecorded abandoned mines.

Parties concerned about the possible existence or impact of abandoned mines in the vicinity of the Property are advised to retain a State-licensed geotechnical consultant to study the site and issue a report. Other sources of information include, but are not limited to, the State Office of Mine Reclamation at (916) 323-9198 (website: <http://www.conservation.ca.gov/OMR>), and the Engineering, Planning or Building Departments in the subject City and County.

FOR MORE INFORMATION: For more information visit the State Office of Mine Reclamation's website at: http://www.conservation.ca.gov/omr/abandoned_mine_lands/Pages/index.aspx

OIL & GAS WELL ADVISORY

California is currently ranked fourth in the nation among oil producing states. Surface oil production is concentrated mainly in the Los Angeles Basin and Kern County, and in districts elsewhere in the state. In recent decades, real estate development has rapidly encroached into areas where oil production has occurred. Because the state's oil production has been in decline since the 1980's, thousands of oil and gas wells have been shut down or abandoned, and many of those wells are in areas where residential neighborhoods now exist.

According to the California Department of Conservation ("DOC"), to date, about 300,000 oil and gas wells have been drilled in California and around 160,000 are still in use. The majority of remaining wells have been sealed ("capped") under the supervision of the DOC's Division of Oil, Gas and Geothermal Resources. A smaller number have been abandoned and have no known responsible operator -- these are called "orphan" wells. The state has a special fund that pays the cost of safely capping orphan wells, however, that program is limited in its scope and progress.

Buyer should be aware that, while the DOC database is the most comprehensive source available for California oil and gas well information, the DOC makes no warranties that the database is absolutely complete, or that reported well locations are known with absolute accuracy.

For More Information

For a search of the state's databases of oil and gas wells and sites of known environmental contamination on or near the Property, please obtain the JCP-LGS Residential Environmental Report. For general information, visit the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources at <http://www.consrv.ca.gov/dog>.



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NON-RESIDENTIAL BUILDING ENERGY USE DISCLOSURE PROGRAM (REFERRED TO HEREIN AS "AB 1103")

Effective January 1, 2014, California's Assembly Bill (AB) 1103 mandates energy benchmarking and energy disclosure for non-residential buildings. The law requires non-residential business owners to input energy consumption and other building data into the Environmental Protection Agency's ENERGY STAR Portfolio Manager system, which generates an energy efficiency rating for the building. Ratings are from 1 to 100, with 100 being the most energy efficient.

Each building has to generate and disclose the ENERGY STAR Portfolio Manager "Data Verification Checklist" when it is sold, leased, financed, or refinanced if the building is above the minimum sizes and is one of the following occupancy types:

Assembly (A)	Mercantile (M)
Business (B)	Residential – Transient (R-1) (for example, a hotel)
Educational (E)	Storage (S)
Institutional – Assisted Living (I-1, R-1)	Utility – Parking Garage (U)
Institutional – Nonambulatory (I-2)	

Disclosure is required on buildings with total gross floor area measuring more than 10,000 square feet as of January 1, 2014, and on buildings with total gross floor area measuring 5,000 square feet or more as of July 1, 2014 [see Emergency Notice below]. Nonresidential buildings less than 5,000 square feet are not required to comply with these regulations.

EMERGENCY NOTICE REGARDING BUILDINGS MEASURING 5,000 UP TO 10,000 SQUARE FEET

On September 2, 2014, the State of California Office of Administrative Law approved an emergency regulatory action proposed by the California Energy Commission to change from July 1, 2014 to July 1, 2016 the date when the disclosure requirements of Public Resources Code section 25402.10 apply for a nonresidential building with a total gross square foot area measuring 5,000 square feet up to 10,000 square feet.— **Office of Administrative Law File No. 2014-0821-05 E**

A Professional Engineer Stamp is not required for preparation of the Data Verification Checklist. However, the Checklist requires data that may be known only by the building owner or manager (such as energy consumption, annual occupancy, weekly operating hours); therefore, disclosure for compliance with AB 1103 cannot be provided through an ordinary natural hazard disclosure report.

Visit <http://www.energy.ca.gov/ab1103/> for details about the law and how to comply.

(Source: California Energy Commission website, <http://www.energy.ca.gov/ab1103/>)



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TSUNAMI MAP ADVISORY

DISCUSSION: The California Emergency Management Agency (CalEMA), the University of Southern California Tsunami Research Center (USC), and the California Geological Survey (CGS) have prepared maps that depict areas of maximum tsunami inundation for all populated areas at risk to tsunamis in California (20 coastal counties). The maps were publicly released in December 2009 with the stated purpose that the maps are to assist cities and counties in identifying their tsunami hazard and developing their coastal evacuation routes and emergency response plans only.

These maps specifically contain the following disclaimer:

Map Disclaimer: This tsunami inundation map was prepared to assist cities and counties in identifying their tsunami hazard. It is intended for local jurisdictional, coastal evacuation planning uses only. This map, and the information presented herein, **is not a legal document and does not meet disclosure requirements for real estate transactions nor for any other regulatory purpose.** The California Emergency Management Agency (CalEMA), the University of Southern California (USC), and the California Geological Survey (CGS) make no representation or warranties regarding the accuracy of this inundation map nor the data from which the map was derived. Neither the State of California nor USC shall be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.

A tsunami is a series of ocean waves or surges most commonly caused by an earthquake beneath the sea floor. These maps show the maximum tsunami inundation line for each area expected from tsunamis generated by undersea earthquakes and landslides in the Pacific Ocean. Because tsunamis are rare events in the historical record, the maps provide no information about the probability of any tsunami affecting any area within a specific period of time.

Although these maps may not be used as a legal basis for real estate disclosure or any other regulatory purpose, the CGS has, however, provided diagrams of the maps online which the public can view. To see a maximum tsunami inundation map for a specific coastal community, or for additional information about the construction and/or intended use of the tsunami inundation maps, visit the websites below:

State of California Emergency Management Agency, Earthquake and Tsunami Program:
<http://myhazards.calema.ca.gov/>

University of Southern California -- Tsunami Research Center:
<http://www.usc.edu/dept/tsunamis/2005/index.php>

State of California Geological Survey Tsunami Information:
http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/index.htm

National Oceanic and Atmospheric Agency Center for Tsunami Research (MOST model):
<http://nctr.pmel.noaa.gov/time/background/models.html>

END OF NATURAL HAZARD DISCLOSURE REPORT SECTION See Terms and Conditions at end of this Report.



JCP-LGS Commercial Property Disclosure Reports Terms and Conditions

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("Property")

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TERMS and CONDITIONS

The Report ("Report") is subject to each of the following Terms and Conditions. Each Recipient (defined below) of the Report agrees that the Report is subject to the following Terms and Conditions, and each Recipient agrees to be bound by such. Use of this Report by any Recipient constitutes acceptance of the Terms and Conditions to the Report. The Terms and Conditions below are incorporated by this reference into the Report. **This Report is not an insurance policy.**

This Report is made for the real property specifically described in the Report (the "Property") and solely for the transaction for which it was originally purchased ("Transaction"). The Property shall not include any property beyond the boundaries of the real property described in the Report. The Property shall not include any structures (whether located on the Property, or not), easements, or any right, title, interest, estate, or easement in any abutting streets, roads, alleys, lanes, ways, or waterways.

IMPORTANT NOTICE: Transferor(s) and transferee(s) shall read the complete Report in its entirety before the close of escrow. A "Signature Page" or "Summary Pages" document may be included in the electronic delivery of this Report. Those documents do not replace the complete Report or remove the need to read the complete Report, and do not remove the requirement to disclose. The Signature Page and Summary Pages documents are subject to the Terms and Conditions of the complete Report.

- A. **Only the Recipients May Rely on This Report.** Only the transferor(s) and transferee(s), and their agents/brokers, if any, involved in the Transaction (collectively, the "Recipients") may use and rely on this Report and only after they have paid in full for the Report. While disclosures made on the statutory Natural Hazard Disclosure Statement in the Report may indicate certain risks to the Property, the disclosures are only "...between the transferor, the transferor's agents, and the transferee, and shall not be used by any other party, including, but not limited to, insurance companies, lenders, or governmental agencies, for any purpose." Cal. Civil Code section 1103.2, subdivision (g).
- B. **Seller and Seller's Agent's Responsibility of Full Disclosure.** Recipients are obligated to make disclosures, and always disclose material facts, that are within their actual knowledge.
- C. **Scope of Report.** This Report is limited to determining whether the Property is in those specified natural hazard zones and property tax districts, and in proximity to those specified environmental sites (depending on the report product ordered), as defined in the Report. The Report is not a geologic report or a land survey and no site inspection has been made in producing the Report. JCP-LGS makes no determination, expresses no opinion or view, and assumes no responsibility in this Report concerning the right, entitlement, or ability to develop or improve the Property. JCP-LGS has no information concerning whether the Property can be developed or improved. No determination is made and no opinion is expressed, or intended, by this Report concerning structures or soils on or outside of the Property, including, without limitation, habitability of structures or the Property, suitability of the Property for construction or improvement, potential for soil settlement, drainage, soil subsidence, or other soil or site conditions. The Recipient(s) is advised to consult the local Planning Department to determine whether factors beyond the scope of this Report may limit the Transferee(s) ability to use or improve the Property.

The Report is not a title report, and no determination is made and no opinion is expressed, or intended, by this Report as to title to the Property or liens against the Property, recorded or otherwise, or whether the Property is comprised of legal lots in conformance with the California Subdivision Map Act or local ordinances. The Report is not a property inspection report, and no determination is made and no opinion is expressed, or intended, by this Report concerning architectural, structural, mechanical, engineering, or legal matters, or the marketability or value of the Property. JCP-LGS has not conducted any testing or physical or visual examination or inspection of the Property, nor is this Report a substitute for any such testing, physical or visual examination, or inspection.
- D. **Tax and Environmental Disclosures (if included in Report).** No determination is made and no opinion is expressed, or intended, by the Report concerning the existence of property tax liabilities, or the existence of hazardous or toxic materials or substances, or any other defects, on, under, or in proximity to the Property, unless specifically described in the Report.
- E. **Statutory and Additional Disclosures, Advisories, and Local Addenda (if included in Report).** No determination is made and no opinion is expressed, or intended, by this Report concerning the need to purchase earthquake or flood insurance for the Property. In preparing the Report, JCP-LGS accurately reported on information contained in Government Records. JCP-LGS reviewed and relied upon those Government Records specifically identified and described in the Report. JCP-LGS has not reviewed or relied upon any Government Records that are not specifically identified in the Report. JCP-LGS also has not reviewed any plat maps, survey maps, surveyor maps, assessor maps, assessor parcel maps, developer maps, or engineering maps, whether or not such maps have been recorded. No determination is made and no opinion is expressed, or intended, by the Report concerning any matters identified in Government Records that were not reviewed by JCP-LGS. Local Addenda, where applicable, are included "AS IS" as an accommodation to the local real estate board that provided the content; JCP-LGS assumes no responsibility for the accuracy of any information included in the Local Addenda.
- F. **FEMA Flood Determination Certificate (if accompanying the Report).** No determination is made and no opinion is expressed, or intended, by the Report concerning the requirement for or cost of flood insurance on the Property. Recipient(s) understands that a lender may require flood insurance to secure its loan collateral independent of whether FEMA may require flood insurance under the National Flood Insurance Program on a federally backed mortgage. The FEMA Flood Determination Certificate ("Flood Certificate"), which may accompany the Report, is produced by a third-party expert certified by FEMA to provide Flood Certificates. JCP-LGS assumes no liability for errors in that third-party flood determination.
- G. **Changes to Government Record after Report Date.** This Report is issued as of the Report Date identified in the Report. JCP-LGS shall have no obligation to advise any Recipient of any information learned or obtained after the Report Date even if such information would modify or otherwise affect the Report. Subsequent to JCP-LGS acquisition of Government Records, changes may be made to said Government Records and JCP-LGS is not responsible for advising the Recipients of any changes. JCP-LGS will update this Report upon request and at no charge during the transaction process for which this Report was issued, but not to exceed one year from the date of the Report. Likewise, JCP-LGS is not liable for any impact on the Property that any change to the Government Records may have.



JCP-LGS Commercial Property Disclosure Reports Terms and Conditions

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H. **Government Record Sources.** JCP-LGS relies upon the Government Records specifically identified in the Report without conducting an independent investigation of their accuracy. JCP-LGS assumes no responsibility for the accuracy of the Government Records identified in the Report. JCP-LGS makes no warranty or representation of any kind, express or implied, with respect to the Report. JCP-LGS expressly disclaims and excludes any and all other express and implied warranties, including, without limitation, warranties of merchantability or fitness for a particular purpose. The JCP-LGS Report is "AS IS".

I. **Liability Provisions.**

- (1) Recipients are entitled to rely on the provisions of the Report as of the close of escrow for the transaction for which said Report was issued.
- (2) Except as specifically described in the Report, JCP-LGS's total liability and responsibility to any Recipient for any liabilities, causes of action, claim or claims, including but not limited to any claim for breach of Report or negligence, shall be for actual proven damages only and is limited to the difference in fair market value of the Property on the date payment for the Report was received by JCP-LGS. JCP-LGS shall have no responsibility, or liability, for any lost profits, consequential damages, special damages, indirect damages, or incidental damages allegedly suffered as a result of the use of, or reliance on, the Report. JCP-LGS has not conducted an independent investigation of the accuracy of the information provided by the Recipient. JCP-LGS assumes no responsibility for the accuracy of information provided by the Recipient. JCP-LGS shall be subrogated to all rights of any claiming party against anyone including, but not limited to, another party who had actual knowledge of a matter and failed to disclose it to the Recipients in writing prior to the close of escrow.

J. **Governing Law.** The Report shall be governed by, and construed in accordance with, the laws of the State of California.

K. **Small Claims or Arbitration.** This provision constitutes an agreement to arbitrate disputes on an individual basis. Any party may bring an individual action in small claims court instead of pursuing arbitration. All disputes and claims arising out of or relating to the Report must be resolved by binding arbitration. This Report to arbitrate includes, but is not limited to, all disputes and claims between JCP-LGS, transferor(s) and transferee(s) and claims that arose prior to purchase of the Report. This agreement to arbitrate applies to transferor(s) and transferee(s) successors in interest, assigns, heirs, spouses, and children. As noted above, a party may elect to bring an individual action in small claims court instead of arbitration, so long as the dispute falls within the jurisdictional requirements of small claims court.

Any arbitration must take place on an individual basis, JCP-LGS, transferor(s) and transferee(s) agree that they are waiving any right to a jury trial and to bring or participate in a class, representative, or private attorney general action, and further agree that the arbitrator lacks the power to consider claims for injunctive or declaratory relief, or to grant relief effecting anyone other than the individual claimant.

The arbitration is governed by the Commercial Arbitration Rules and the Supplementary Procedures for Consumer Related Disputes (the "AAA Rules") of the American Arbitration Association ("AAA"), as modified by this Agreement, and will be administered by the AAA. Company will pay all AAA filing, administration and arbitrator fees for any arbitration it initiates and for any arbitration initiated by another party for which the value of the claims is \$75,000 or less, unless an arbitrator determines that the claims have been brought in bad faith or for an improper purpose, in which case the payment of AAA fees will be governed by the AAA Rules. **A COPY OF THESE RULES IS AVAILABLE FROM THE AAA'S WEB SITE AT WWW.ADR.ORG OR ON REQUEST FROM THE COMPANY. THE ARBITRATION AWARD MAY INCLUDE ATTORNEY'S FEES IF ALLOWED BY FEDERAL, STATE, OR OTHER APPLICABLE LAW AND MAY BE ENTERED AS A JUDGMENT IN ANY COURT OF PROPER JURISDICTION.**

The arbitration will take place in the same county in which the property covered by the Report is located. The Federal Arbitration Act will govern the interpretation, applicability and enforcement of this arbitration agreement. This arbitration agreement will survive the termination of this Report.

L. **Severability.** If any provision of the Terms and Conditions to this Report is determined to be invalid or unenforceable for any reason, then such provision shall be treated as severed from the remainder of the Terms and Conditions, and shall not affect the validity and enforceability of all of the other provisions of the Terms and Conditions.

M. **Other Agreements.** This Report constitutes the entire, integrated agreement between JCP-LGS and Recipients, and supersedes and replaces all prior statements, representations, negotiations, and agreements.



11291 Pyrites Way, Suite B
Gold River, CA 95670
www.apexenvirotech.com

August 24, 2018

Mr. Elliot Faxstein
161 Stone Mountain Circle
Napa, California 94558

Subject: **Historical Pesticide Use Assessment**
Mills Ranch Property
1000 Mills Lane, St. Helena, California 94574
Apex Project Number: FAX02.002

Dear Mr. Faxstein,

Apex Envirotech, Inc. (Apex) has been authorized by Mr. Elliot Faxstein to perform the following historical pesticide use report in relation to the Mills Ranch Property located at 1000 Mills Lane, St. Helena, Napa County, California (Site). The purpose of this investigation was to determine if historic use of pesticides in conjunction with the Site's current and past agricultural use may present an environmental concern that will limit future site use or be subject to regulatory scrutiny.

This report is based, in part, on information obtained by Apex from Elliot Faxstein, and is subject to modification as newly acquired information may warrant.

SITE DESCRIPTION

The Site is located at 1000 Mills Lane, St Helena, Napa County, California. The Site is located at an approximate latitude and longitude of 38°30'02.9" north and 122°27'38.1" west (38.500795 and -122.460574) (Figure 1) and is comprised of four parcels (Figure 2). The Site is located in Section 31 of Township 8 North, Range 5 West. The four parcels are listed in the table below: The four parcels are currently used for agricultural purposes by the Long Meadow Ranch Wine Estates (Long Meadow). There are not structures on the Site.

Napa County Assessor Parcel Number	Parcel Size (acres)
009-070-049-000	1.58
009-070-052-000	2.53
009-070-053-000	4.03
009-070-054-000	1.89

The Site is bordered to the southeast by Mills Lane and to the southwest by St. Helena Highway (California Highway 128), to the northwest by residential and agricultural properties, and to the northeast by residential properties. The area in the general vicinity of the Site includes residential, commercial and agricultural uses.

(916) 851-0174 • Fax: (916) 851-0177

SITE HISTORY

In order to determine historical uses for the Site, Apex ordered a *The EDR Aerial Photo Decade Package* (EDR Aerial Images; Appendix A) from Environmental Data Resources (EDR). The EDR Aerial Images included aerial photographs from 1947, 1953, 1958, 1968, 1973, 1982, 1993, 2006, 2009, 2012 and 2016. The photographs were used to determine historical uses of the Site. Based on a review of the EDR Aerial Images, the Site has been used for agricultural purposes since at least 1947 although there may have been periods when the Site was not actively being farmed.

INTERVIEW WITH CURRENT PROPERTY OWNER

The current property owner is Long Meadow. On August 13, 2018, Apex personnel contacted Mr. Joseph Hardin of Long Meadow to inquire about the use of pesticides on the property. Mr. Hardin stated that Long Meadow is a certified organic farm and that regulated pesticides are not used on the property and have not been used since Long Meadow purchased the four parcels in 2015.

Apex provided Mr. Hardin with a Pesticide Questionnaire in an email (Appendix C). The questionnaire was completed by Mr. Hardin on August 23, 2018. Based on the responses to the questionnaire, the property is currently and historically used to grow a variety of organic fruits and vegetables. According to Mr. Hardin's responses, no pesticides have been used on the property. Additionally, Mr. Hardin provided a letter from Carl Doumani, the previous property owner, stating that since at least January 1, 2011, no pesticides or herbicides have been used at the property.

INTERVIEW WITH CURRENT PROPERTY OWNER

Based on conversations with Mr. Faxstein and Mr. Hardin, the previous property owner for the Site was Carl Doumani. Apex contact Mr. Doumani on August 13, 2018, to inquire about the use of pesticides on the property. Mr. Doumani stated that it had been several years since he had owned the property and he could not recall the exact details of pesticide use at the Site. However, Mr. Doumani stated that he had provided a letter regarding pesticide use at the Site to Long Meadow when the property was sold. Apex provided Mr. Doumani with a Pesticide Questionnaire (Questionnaire) via email. Mr. Doumani completed the survey on August 20, 2018. Based on Mr. Doumani's responses, he sold the property to Long Meadow in 2015 and he does not recall if pesticides were used on the property.

COUNTY RECORDS REQUEST

On August 13, 2018, Apex contacted the Napa County Agricultural Commissioner's Office (NCACO) to request records of pesticide use at the property. Apex was informed that the NCACO could provide the past three years (2018, 2017, and 2016) of records for the property by requesting the information from the NCACO website. Apex submitted a Request for Public Information for each of the parcels requesting information pertaining to pesticide use or enforcement at the Site. The NCACO responded with the requested records on August 13, 2018. The public information requests submissions and information provided by the NCACO are included in Appendix B.

Historical Pesticide Use Assessment

Mills Ranch Property, 1000 Mills Lane, St. Helena, California

Page 3

The NCACO provided information including Pesticide Use Reports (PURs) from 2016, 2017, and 2018, and a Pest Control Headquarters Inspection Report (PCHIR) from 2017. The PCHIR lists the firm inspected as Long Meadow and reported no violations. The PURs provided are for Long Meadow with the operator and certified applicator listed as Mr. Hardin. The applicator license number listed on the PURs is NAP-3737. The pesticide list in the PURs includes pesticide number 99999 for “Non-Permit Ag Prod” indicating only non-permit agricultural products are used at the property. Each PUR contains information for several properties owned by Long Meadow including the Site. The listings Mills Ranch at 1000 Mills Lane include the following use of pesticide #99999:

Crop	Pesticide #99999 use by year (acres)		
	2016	2017	2018
Watermelon	0.25	0.25	0.25
Cucumber	0.5	0.5	0.5
Pumpkin	1	1	1
Squash	2	2	2
Eggplant	0.25	0.25	0.25
Pepper Fruiting	0.5	0.5	0.5
Tomatillo	0.25	0.25	0.25
Cabbage	0.5	0.5	0.5
Cauliflower	0.2	0.2	0.2
Spinach	0.2	0.2	0.2
Potato	1.5	1.5	1.5
Bean Succulent	0.5	0.5	0.5
Okra	0.25	0.25	0.25
Fennel	0.3	0.3	0.3
Corn, Human Con	3	3	3
Melon	1.5	1.5	1.5
Herb, Spice	0.1	0.1	0.1

Apex did not observe any potential concerns related to pesticide use at the Site after reviewing the information provided by the NCACO.

CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION RECORDS REVIEW

On August 22, 2018, Apex requested information from the California Department of Pesticide Regulation’s (CDPR) California Pesticide Information Portal (CalPIP) for information regarding the Site’s Township, Range, and Section (Section 31 of Township 8 North, Range 5 West) for the years from 2000 through 2016. No records were available in CalPIP for the years 2017 or 2018. Apex found no indication of permitted pesticide use at the Site in the CalPIP database.

Historical Pesticide Use Assessment
Mills Ranch Property, 1000 Mills Lane, St. Helena, California
Page 4

CONCLUSIONS

Apex obtained historic pesticide use information from several data sources including the NCACO, CDPR, and current and past property owners. Based on the information provided, Apex found no evidence of the use of permitted pesticides at the Site. The Site is currently operated by Long Meadow, a certified organic business, which does not use pesticides that require a permit to use. Therefore, it is Apex's opinion that there are no environmental concerns related pesticide use at the Site.

ATTACHMENTS

Figures

Figure 1: Site Vicinity Map

Figure 2: Site Plan Map

Appendices

Appendix A: EDR Aerial Image Report

Appendix B: Pesticide Information from Napa County

Appendix C: Property Owner Questionnaire

Appendix D: Previous Property Owner Questionnaire

Historical Pesticide Use Assessment
Mills Ranch Property, 1000 Mills Lane, St. Helena, California
Page 5

REMARKS AND SIGNATURES

The information contained within this report reflects our professional opinions and was developed in accordance with currently available information, and accepted hydrogeologic and engineering practices.

Apex warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the report. There is a possibility that even with the proper application of these methodologies there may exist on the Site conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Apex believes that the information obtained from the record review and the interviews concerning the Site is reliable. However, Apex cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations.

We appreciate the opportunity to provide you with geologic, engineering and environmental consulting services, and trust this report meets your needs. If you have any questions or comments, please call us at (916) 851-0174.

Sincerely,

APEX ENVIROTECH, INC.

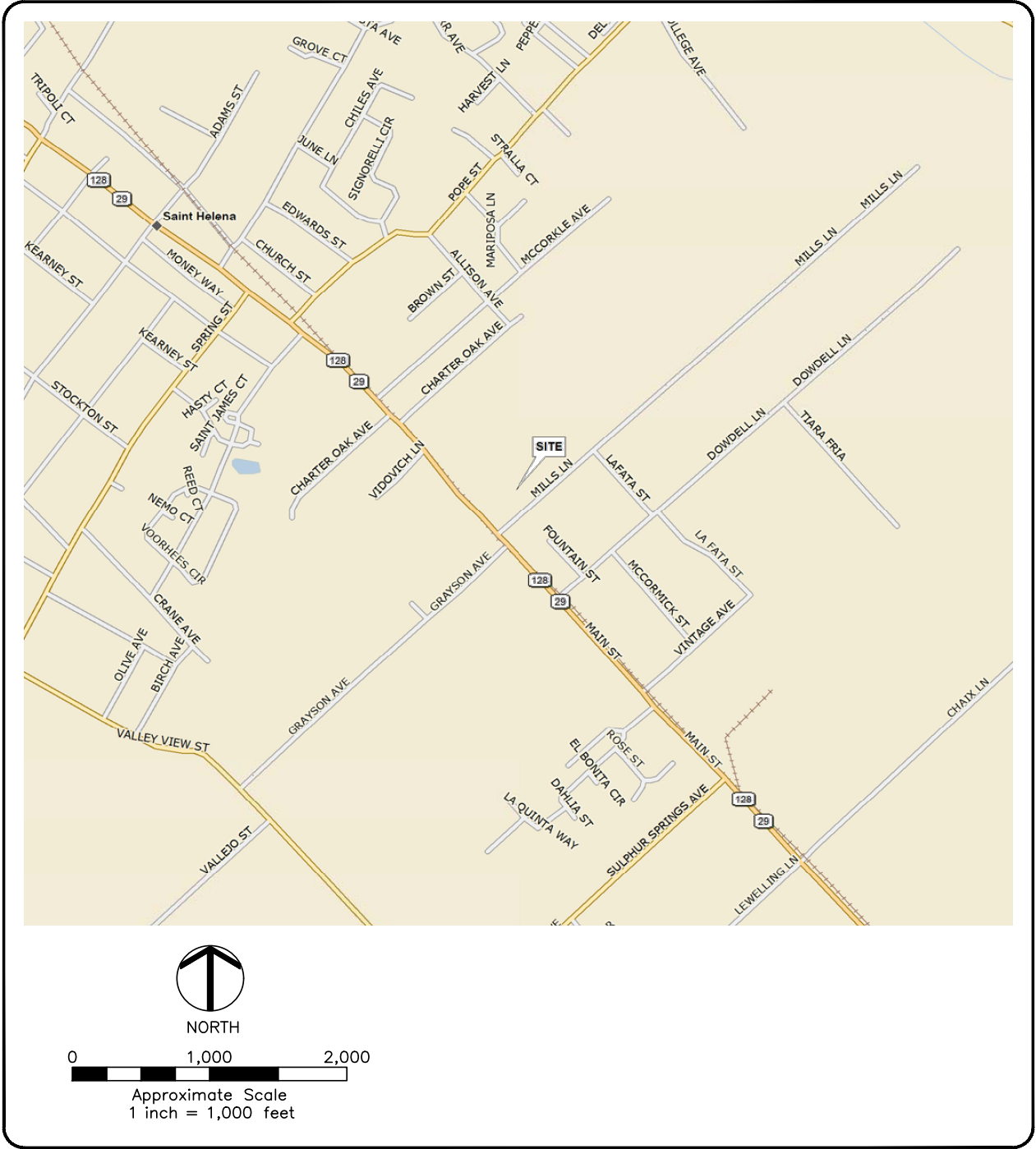
A handwritten signature in blue ink, appearing to read "Tom Sullivan", with a long horizontal flourish extending to the right.

Tom Sullivan
Project Manager

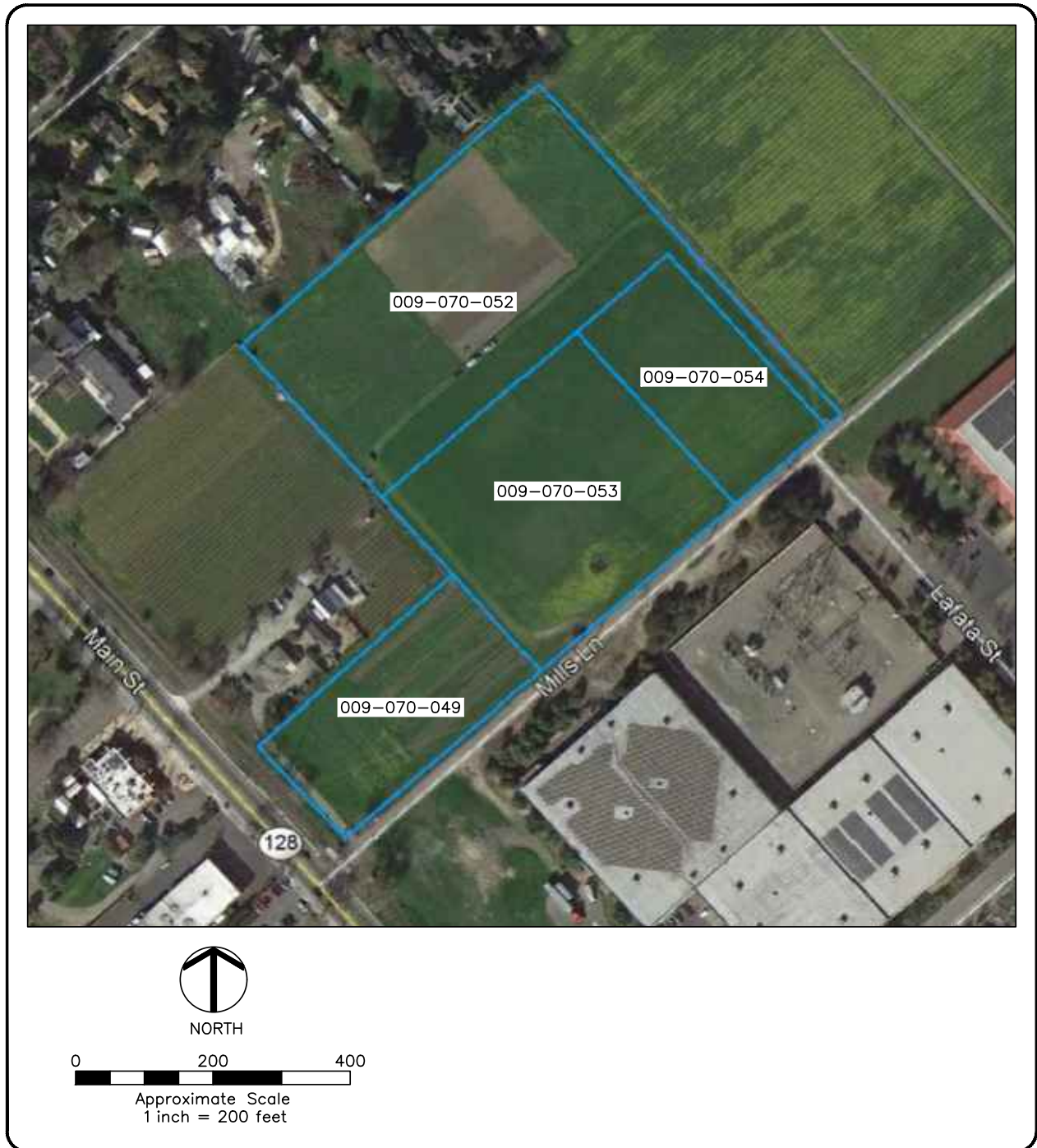
A handwritten signature in blue ink, appearing to read "Tom Landwehr", with a stylized, looped structure.

Tom Landwehr
President

FIGURES



	DRAWN BY: N. Rouillard		SITE VICINITY MAP	FIGURE 1
	DATE: 8/24/18			
	REVISIONS		Mills Ranch Property 1000 Mills Lane St. Helena, California	PROJECT NUMBER: FAX02.002



	DRAWN BY: N. Rouillard	SITE PLAN MAP	FIGURE 2
	DATE: 8/24/18		
	REVISIONS	Mills Ranch Property 1000 Mills Lane St. Helena, California	PROJECT NUMBER: FAX02.002

APPENDIX A
EDR AERIAL IMAGE REPORT

Mills Lane Property

1000 Mills Lane

Saint Helena, CA 94574

Inquiry Number: 5389558.1

August 13, 2018

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package		08/13/18
Site Name:	Client Name:	
Mills Lane Property	Apex Envirotech	
1000 Mills Lane	11291 Pyripes Way Suite B	
Saint Helena, CA 94574	Gold River, CA 95670	
EDR Inquiry # 5389558.1	Contact: Tom Sullivan	

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1993	1"=500'	Acquisition Date: July 10, 1993	USGS/DOQQ
1982	1"=500'	Flight Date: July 08, 1982	USDA
1973	1"=500'	Flight Date: September 27, 1973	USGS
1968	1"=500'	Flight Date: April 18, 1968	USGS
1958	1"=500'	Flight Date: October 02, 1958	USDA
1953	1"=500'	Flight Date: April 24, 1953	USDA
1947	1"=500'	Flight Date: March 01, 1947	USGS

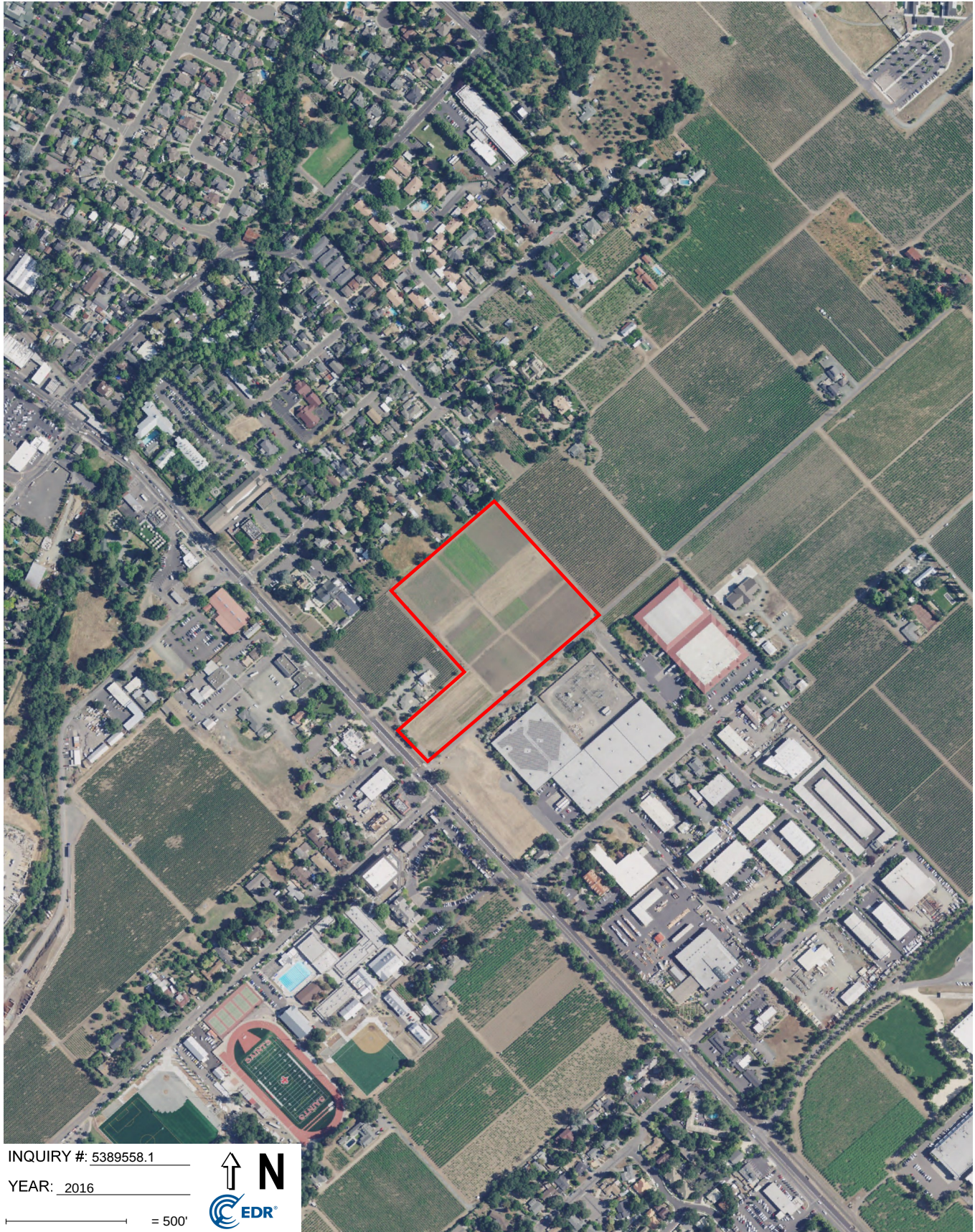
When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

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INQUIRY #: 5389558.1

YEAR: 2016

— = 500'









INQUIRY #: 5389558.1

YEAR: 2006

— = 500'

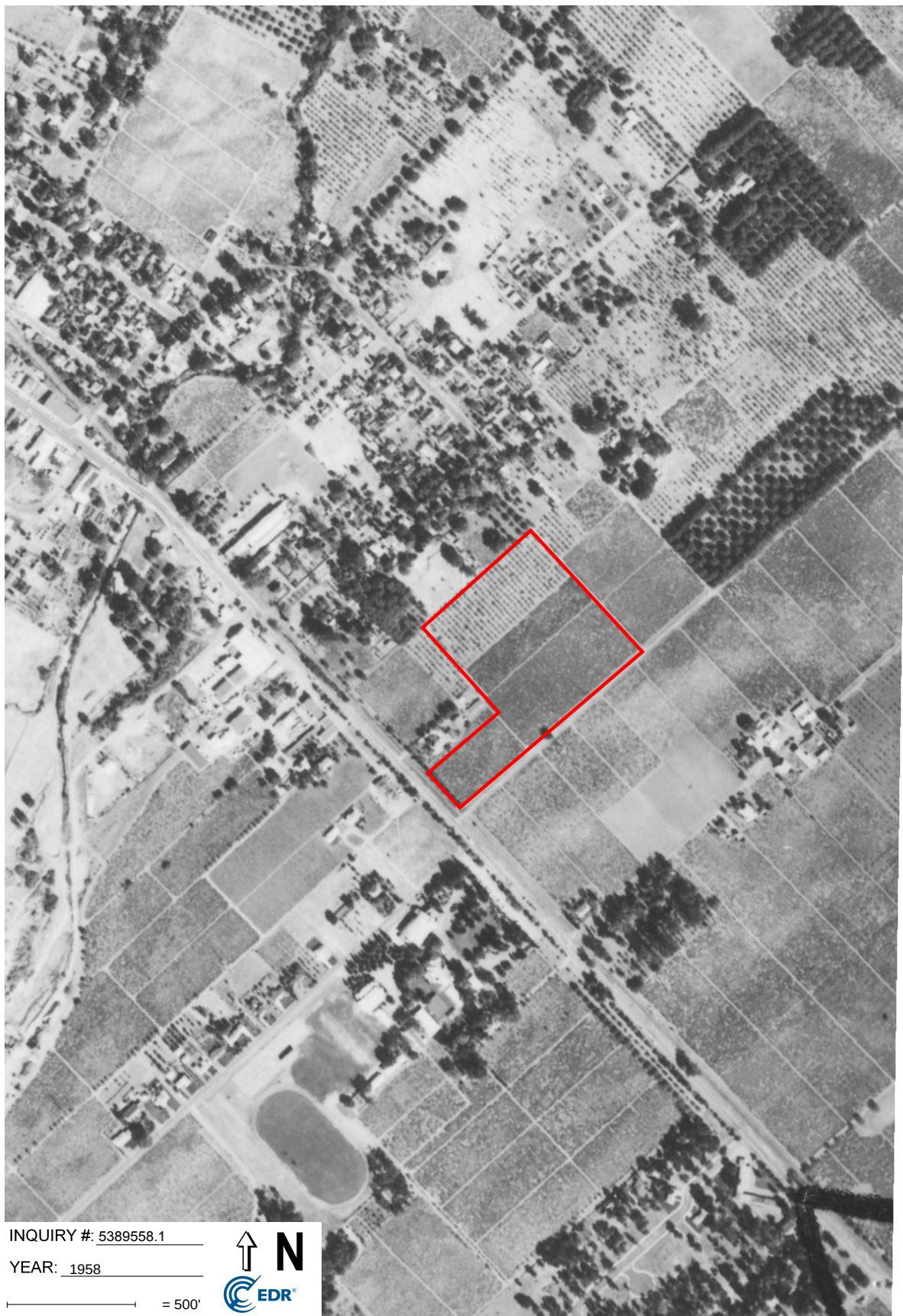
















INQUIRY #: 5389558.1

YEAR: 1947

= 500'



APPENDIX B

PESTICIDE INFORMATION FROM NAPA COUNTY

8/13/2018

Napa County, CA

Request for Public Information**First Name***

Tom

Last Name*

Sullivan

Representing*

Apex Envirotech, Inc.

Fax Number**Phone Number***

916-851-0186

Email Address*

tsullivan@apexenvirotech.com

Company(s) for which data is being requested

Apex Envirotech, Inc.

if applicable

ACCESS TO PUBLIC INFORMATION POLICY

The following is departmental policy concerning access to public information:

A. Requests for access to and/or copies of public records will be processed during normal business hours at the office of the Agricultural Commissioner, 1710 Soscol Avenue, Suite 3, Napa, CA.

B. Any person requesting access to public records will be required to submit such requests in writing, specifying the records to be inspected and stating if copies will be needed.

C. Each request for access to public records will be reviewed by the County Agricultural Commissioner, or his designated representative, to determine if the information should be disclosed.

D. Because the public disclosure status of records and data is often complex, Napa County Counsel may be consulted to make a determination of which records are public and which are confidential.

E. In cases where the Commissioner seeks legal counsel, the Commissioner will respond within seven working days following receipt of request. Records that are determined to be available for public review and inspection shall be made available within a reasonable time thereafter.

F. Generally, all requests will be accommodated on the same day as received, but we reserve the right to require specific appointments to accommodate reviews that would unduly interfere with the regular operation of the Department.

G. The Agricultural Commissioner, or his representative, shall insure the proper care and protection of all records during inspection. A signed, dated and itemized record of inspection may be required.

8/13/2018

Napa County, CA

H. The person or business, whose records are subject to review, will be notified that their records were requested and have been reviewed.

I. Should copies of documents be requested, an appropriate fee to recover costs may be charged. Fees for photocopies are 50 cents for each page up to the first 5 pages and 10 cents per page thereafter. Computer requested information is billed at \$92.00 per hour, with a half-hour minimum charge.

I have read the Napa County Agricultural Commissioner's policy for access to public information. The following is a detailed description of the records I would like to review:*

I am requesting records pertaining to the use of pesticides at Napa County Assessor's Parcel Number 009-070-049 (also known as 1000 Mills Lane, St. Helena, CA). Records of interest include pesticide use reports, Monthly Summary Pesticide Use Reports, Seven Day Use Report, Zero Use Report, permits for application of pesticides, records of inspections relating to pesticide use, and notices of violations relating to pesticide use. If you have any questions, please feel free to contact Tom Sullivan at 916-851-0186.

How would you like to receive this data?*

☒ Email

☐ Fax

☐ In-Office Review

☐ Mail

☐ Pick Up

Number of Copies*

1

Electronic Signature Agreement

By checking the "I agree" box below, you agree and acknowledge that 1) your application will not be signed in the sense of a traditional paper document, 2) by signing in this alternate manner, you authorize your electronic signature to be valid and binding upon you to the same force and effect as a handwritten signature, and 3) you may still be required to provide a traditional signature at a later date.

☒ I agree.

Electronic Signature*

Tom L Sullivan

For Internal Use Only

Approved By:

Approving Agricultural Deputy Signature

8/13/2018

Napa County, CA

Request for Public Information**First Name***

Tom

Last Name*

Sullivan

Representing*

Apex Envirotech, Inc.

Fax Number**Phone Number***

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I have read the Napa County Agricultural Commissioner's policy for access to public information. The following is a detailed description of the records I would like to review:*

I am requesting records pertaining to the use of pesticides at Napa County Assessor's Parcel Number 009-070-052 (also known as 1000 Mills Lane, St. Helena, CA). Records of interest include pesticide use reports, Monthly Summary Pesticide Use Reports, Seven Day Use Report, Zero Use Report, permits for application of pesticides, records of inspections relating to pesticide use, and notices of violations relating to pesticide use. If you have any questions, please feel free to contact Tom Sullivan at 916-851-0186.

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☒ I agree.

Electronic Signature*

Tom L Sullivan

For Internal Use Only

Approved By:

Approving Agricultural Deputy Signature

8/13/2018

Napa County, CA

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Tom

Last Name*

Sullivan

Representing*

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Fax Number**Phone Number***

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I have read the Napa County Agricultural Commissioner's policy for access to public information. The following is a detailed description of the records I would like to review:*

I am requesting records pertaining to the use of pesticides at Napa County Assessor's Parcel Number 009-070-053 (also known as 1000 Mills Lane, St. Helena, CA). Records of interest include pesticide use reports, Monthly Summary Pesticide Use Reports, Seven Day Use Report, Zero Use Report, permits for application of pesticides, records of inspections relating to pesticide use, and notices of violations relating to pesticide use. If you have any questions, please feel free to contact Tom Sullivan at 916-851-0186.

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Electronic Signature*

Tom L Sullivan

For Internal Use Only

Approved By:

Approving Agricultural Deputy Signature

8/13/2018

Napa County, CA

Request for Public Information

First Name*

Tom

Last Name*

Sullivan

Representing*

Apex Envirotech, Inc.

Fax Number

Phone Number*

19168510174

Email Address*

tsullivan@apexenvirotech.com

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8/13/2018

Napa County, CA

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I have read the Napa County Agricultural Commissioner's policy for access to public information. The following is a detailed description of the records I would like to review:*

I am requesting records pertaining to the use of pesticides at Napa County Assessor's Parcel Number 009-070-054 (also known as 1000 Mills Lane, St. Helena, CA). Records of interest include pesticide use reports, Monthly Summary Pesticide Use Reports, Seven Day Use Report, Zero Use Report, permits for application of pesticides, records of inspections relating to pesticide use, and notices of violations relating to pesticide use. If you have any questions, please feel free to contact Tom Sullivan at 916-851-0186.

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☐ I agree.

Electronic Signature*

Tom L Sullivan

For Internal Use Only

Approved By:

Approving Agricultural Deputy Signature

From: Malito, Toosdi <TOOSDI.MALITO@countyofnapa.org>
Sent: Monday, August 13, 2018 3:17 PM
To: Tom Sullivan
Cc: Chang, Jose
Subject: Public Information Request
Attachments: 2018 Op ID.pdf; 2017 Op ID.pdf; 2016 Op ID.pdf; Headquarters inspection.pdf

Hello Tom

Attached is the information you asked for. I have attached Operator IDs for the past 3 years along with a Headquarter Inspection from 2017.

In my search, I found no pesticide use reports for 2016, 2017 and 2018 for all four requested parcels.

If you need anything else, please let me know.

Toosdi Malito
Ag/Weights & Measures Inspector
Napa County Ag Commissioner's Office
1710 Soscol Avenue, Suite 3
Napa, CA 94559
(707)253-4357 phone
(707)253-4881 fax

Follow us on Facebook!



STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION
**PEST CONTROL HEADQUARTERS
INSPECTION REPORT**

☒ COMPLETE
☐ PARTIAL
☐ FOLLOW-UP INSPECTION

109-28-17-M00A-002

Page 1 of 2

ORIGINAL INSP. # _____

NAPA

INSPECTING COUNTY

FIRM INSPECTED LONG MEADOW RANCH WINE ESTATES		TELEPHONE NUMBER (707)963-4555	
FIRM MAILING ADDRESS PO BOX 477, RUTHERFORD, CA 94573		BUSINESS TYPE ☒ Property Operator ☐ Pest Control Dealer	PERMIT / OPERATOR ID # 2801041 EXPIRES 12/31/2017
FIRM LOCATION PO BOX 477, RUTHERFORD, CA 94573		BUSINESS LICENSE # EXPIRES	
PERSON INSPECTED HARDIN, JOSEPH RUTHERFORD		LICENSE NUMBER PAC-NAP-3737	CATEGORY(S) EXPIRES 12/31/2018
Name of Handler Trainer HARDIN, JOSEPH RUTHERFORD	Name of Field Worker Trainer HARDIN, JOSEPH RUTHERFORD	Name of RPA	

Employee Prod Ag REQUIREMENTS	SECTION	COMPLIANCE		
		YES	NO	N/A
1. Valid Restricted Material Permit	6412			X
2. Notice Prior to Application	6618(a)			X
3. App. Completion Records / 2 yrs	6619	X		
4. Operator ID Number Obtained	6622	X		
5. Site ID / Permit Kept / 2years	6623	X		
6. Pest. Use Rec. Available / 2 years	6624	X		
7. Pest. Use Records Submitted	6626/7	X		
8. Emergency Med. Care Planned	6726/66	X		
9. Change Area	6732	X		
10. Proper Storage of PPE	6738(a)	X		
11. MB - Recordkeeping	6784(b)			X
12. Haz Com/Training: Haz. Communication / Handler	6723	X		
13. Haz Com/Training: App. Specific Info / Handler	6723.1	X		
14. Haz Com/Training: Trainer Qualified	6724(f)	X		
15. Haz Com/Training: Written Program	6724(a)	X		
16. Haz Com/Training: Handler Training	6724(b-e)	X		
17. Haz Com/Training: Hazard Communication / FW	6761	X		
18. Haz Com/Training: Application Specific Info / FW	6761.1	X		
19. Haz Com/Training: Field Worker Training	6764	X		
20. Respiratory Protection: Written Program	6739(a),(p)	X		
21. Respiratory Protection: Medical Evaluation	6739(d)	X		
22. Respiratory Protection: Fit Test Records	6739(e),(p)	X		
23. Respiratory Protection: Respirators Inspected	6739(j)(1)	X		
24. Respiratory Protection: Respirator Storage	6739(h)(4)	X		
25. Respiratory Protection: Voluntary Use Display	6739(b)(2)			X
26. Medical Supervision: Use Records Retained / 3 years	6728(a)			X
27. Medical Supervision: Drs. Agreement Available / 3 yrs	6728(b)			X
28. Medical Supervision: Records / 3 years	6728(c)			X
29. Medical Supervision: Medical Supervision Posting	6728(c)(5)			X
30. Pesticide Storage: Possession Permit for Stored RM	6412			X
31. Pesticide Storage: Containers Secured	6672(b)	X		
32. Pesticide Storage: Storage Posted, "Warning/Danger"	6674	X		
33. Pesticide Storage: Containers Labeled / Closures	6676	X		
34. Pesticide Storage: Service Container Labeling	6678	X		
35. Pesticide Storage: Proper Containers	6680	X		
36. Pesticide Storage: Containers Properly Rinsed	6684	X		

STATE OF CALIFORNIA
DEPARTMENT OF PESTICIDE REGULATION

**PEST CONTROL HEADQUARTERS
INSPECTION REPORT**

☒ COMPLETE
☐ PARTIAL
☐ FOLLOW-UP INSPECTION

109-28-17-M00A-002

Page 2 of 2

ORIGINAL INSP. # _____

NAPA

INSPECTING COUNTY

COMPLIANCE ACTIONS:

Cease and Desist Order: No

Correct Noncompliance By: _____

Follow-up Required: No

REMARKS

General Remarks

Requirement Remarks

INSPECTOR (Print Name)	SIGNATURE	TIME AND DATE INSPECTED
Castro, Nelly		03/30/2017
INSPECTION ACKNOWLEDGED BY (Print Name)	SIGNATURE	DATE ACKNOWLEDGED
Joseph Hardin		03/30/2017

VIOLATION NOTICE ☐ YES ☒ NO

BUSINESS/INDIVIDUAL NAME	LICENSE OR PERMIT #	ROLE
None		



A Tradition of Stewardship
A Commitment to Service

NAPA COUNTY AGRICULTURAL COMMISSIONER'S OFFICE
1710 SOSCOL AVENUE, SUITE 3
NAPA, CA 94559

PHONE (707) 253-4357
FAX (707) 253-4881

EMAIL agcommissioner@countyofnapa.org
WEBSITE www.countyofnapa.org/AgCom

Operator Identification Number 28-16-2801041

Operator: LONG MEADOW RANCH WINE ESTATES PO BOX 477 RUTHERFORD, CA 94573	# 2801041-2016-Version: 1 County District #: Issued on: 1/11/2016 Valid as of: 1/11/2016 Expires on: 12/31/2016 Primary Phone: (707) 963-4555 Alternate Phone: Mobile Phone: (707) 287-8146 Fax: Phone: (707) 287-8146 License #: NAP-3737 Expiration: 12/31/2018
Agent: HARDIN, JOSEPH PO BOX 477 RUTHERFORD CA 94573	
Certified Applicator: HARDIN, JOSEPH RUTHERFORD PO BOX 477 RUTHERFORD, CA 94573	

Type of Use: Agricultural Use

Employees Handle Pesticides

Regulatory Notes:

28QEGVM0623 A/B/C/D1
28QLBAMW0002734

I understand this operator identification number does not relieve me from liability for any damage to persons or property caused by the use of pesticides. I acknowledge that duly authorized representatives from the County Department of Agriculture or the Department of Pesticide Regulation may, at reasonable times, enter and inspect fields, areas, structures, greenhouses and equipment (including protective clothing and equipment) where pesticides are handled, stored or applied (ref. 3 CCR 6140).

[Form PR-ENF-125 (Rev 11/06) Pesticide Enforcement Branch]

Applicant: Joseph Rutherford Hardin
(Name & Title)

Applicant Signature: [Signature] Date: 1/11/16

Issuing Officer: [Signature] Date: 1/11/16

OPERATOR IDENTIFICATION NUMBER # 28-16-2801041
LONG MEADOW RANCH WINE ESTATES

Page 2 of 4
Expires: 12/31/2016

CONTACT LIST

<u>Name</u>	<u>Auth Rep.</u>	<u>Phone</u>	<u>License</u>	<u>Expiration</u>	<u>Contact Type</u>
HARDIN, JOSEPH RUTHERFORD	yes	(707) 287-8146	NAP-3737	12/31/2018	Private Applicator Certificate

PESTICIDES LIST

<u>Number</u>	<u>Pesticide</u>	<u>Pests</u>	<u>Forms</u>	<u>Methods</u>	<u>Applicators</u>
99999	NON-PERMIT AG PROD	VARIOUS	All Reg.	Ground	Operator

SITES LIST

<u>Site</u>	<u>Location Site Name</u> <u>Commodity Name/Code</u>	<u>Quantity</u>	<u>District</u>	<u>Section (MTRS)</u>
8C-1	1840 HIGHWAY 29 BODDUM RANCH			M07N05W09
	TOMATO / 11005-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	POTATO / 14013-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	VEGETABLE / 28024-0	2 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	CORN, HUMAN CON / 29119-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	GRAPE, WINE / 29143-0	8 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
8C-2	1790 ST. HELENA HIGHWAY LAIRD			M07N05W09
	GRAPE, WINE / 29143-0	22 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
NAP-1 8B-1	1775 WHITEHALL LANE LONG MEADOW RANCH			M07N06W12
	OLIVE / 28014-0	12 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	GRAPE, WINE / 29143-0	16 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	APPLE / 4001-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			

OPERATOR IDENTIFICATION NUMBER # 28-16-2801041

LONG MEADOW RANCH WINE ESTATES

~~RTH2~~ BC-4 1796 ST HELENA HWY S RUTHERFORD GARDENS

Page 3 of 4

Expires: 12/31/2016

M07N05W09

STRAWBERRY / 1016-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

VEGETABLE LEAF / 13000-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

GARLIC / 14007-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

ONION DRY ETC / 14011-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

POTATO / 14013-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

VEGETABLE / 28024-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

BEET / 29109-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CORN, HUMAN CON / 29119-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

GRAPE / 29141-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

APPLE / 4001-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PEAR / 4003-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

ASIAN PEAR / 4501-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

APRICOT / 5001-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CHERRY / 5002-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

NECTARINE / 5003-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PEACH / 5004-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PLUM / 5005-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PLUOT / 5505-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

FIG / 6005-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

~~RTH2~~ BC-3 1133 MEE LANE SAN MATEO RANCH

M07N05W09

GRAPE, WINE / 29143-0 46 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

OPERATOR IDENTIFICATION NUMBER # 28-16-2801041

LONG MEADOW RANCH WINE ESTATES

~~STAFF~~ 9C-1 MILLS RANCH 1000 MILLS LANE**WATERMELON / 10008-0** 0.25 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CUCUMBER / 10010-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PUMPKIN / 10011-0 1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

SQUASH / 10012-0 2 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

EGGPLANT / 11001-0 0.25 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PEPPER FRUITNG / 11003-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

TOMATILLO / 11008-0 0.25 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CABBAGE / 13007-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CAULIFLOWER / 13008-0 0.2 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

SPINACH / 13024-0 0.2 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

POTATO / 14013-0 1.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

BEAN SUCCULENT / 15003-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

OKRA / 15015-0 0.25 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

FENNEL / 28008-0 0.3 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CORN, HUMAN CON / 29119-0 3 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

MELON / 29122-0 1.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

HERB, SPICE / 8000-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

OPERATION-WIDE CONDITIONS

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Expires: 12/31/2016

M08N05W31



A Tradition of Stewardship
A Commitment to Service

NAPA COUNTY AGRICULTURAL COMMISSIONER'S OFFICE
1710 SOSCOL AVENUE, SUITE 3
NAPA, CA 94559

PHONE (707) 253-4357
FAX (707) 253-4881

EMAIL agcommissioner@countyofnapa.org
WEBSITE www.countyofnapa.org/AgCom

Operator Identification Number 28-17-2801041

Operator: LONG MEADOW RANCH WINE ESTATES
PO BOX 477
RUTHERFORD, CA 94573

Agent: HARDIN, JOSEPH
PO BOX 477
RUTHERFORD
CA 94573

Certified Applicator: HARDIN, JOSEPH RUTHERFORD
P.O. BOX 477
RUTHERFORD, CA 94573

2801041-2017-Version: 1

County District #:

Issued on: 1-4-17

Valid as of: 1/4/2017

Expires on: 12/31/2017

Primary Phone: (707) 963-4555

Alternate Phone:

Mobile Phone: (707) 287-8146

Fax:

Phone: (707) 287-8146

License #: NAP-3737

Expiration: 12/31/2018

Type of Use: Agricultural Use

Employees Handle Pesticides

Regulatory Notes:

I understand this operator identification number does not relieve me from liability for any damage to persons or property caused by the use of pesticides. I acknowledge that duly authorized representatives from the County Department of Agriculture or the Department of Pesticide Regulation may, at reasonable times, enter and inspect fields, areas, structures, greenhouses and equipment (including protective clothing and equipment) where pesticides are handled, stored or applied (ref. 3 CCR 6140).

[Form PR-ENF-125 (Rev 11/06) Pesticide Enforcement Branch]

Applicant:

Joseph Hardin
(Name & Title)

Applicant Signature:

Joseph Hardin

Date:

1/4/17

Issuing Officer:

NELLY CASTRO

Date:

1/4/17

OPERATOR IDENTIFICATION NUMBER # 28-17-2801041
LONG MEADOW RANCH WINE ESTATES

Page 2 of 4
Expires: 12/31/2017

CONTACT LIST

<u>Name</u>	<u>Auth Rep.</u>	<u>Phone</u>	<u>License</u>	<u>Expiration</u>	<u>Contact Type</u>
HARDIN, JOSEPH RUTHERFORD	yes	(707) 287-8146	NAP-373712/31/2018		Private Applicator Certificate

PESTICIDES LIST

<u>Number</u>	<u>Pesticide</u>	<u>Pests</u>	<u>Forms</u>	<u>Methods</u>	<u>Applicators</u>
99999	NON-PERMIT AG PROD	VARIOUS	All Reg.	Ground	Operator

SITES LIST

<u>Site</u>	<u>Location Site Name</u> <u>Commodity Name/Code</u>	<u>Quantity</u>	<u>District</u>	<u>Section (MTRS)</u>
8B-1	1775 WHITEHALL LANE LONG MEADOW RANCH			M07N06W12
	OLIVE / 28014-0	12 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	GRAPE, WINE / 29143-0	16 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	APPLE / 4001-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
8C-1	1840 HIGHWAY 29 BODDUM RANCH			M07N05W09
	TOMATO / 11005-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	POTATO / 14013-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	VEGETABLE / 28024-0	2 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	CORN, HUMAN CON / 29119-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	GRAPE, WINE / 29143-0	8 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
8C-2	1790 ST. HELENA HIGHWAY LAIRD			M07N05W09
	GRAPE, WINE / 29143-0	22 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
8C-3	1133 MEE LANE SAN MATEO RANCH			M07N05W09
	GRAPE, WINE / 29143-0	46 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			

OPERATOR IDENTIFICATION NUMBER # 28-17-2801041

LONG MEADOW RANCH WINE ESTATES

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Expires: 12/31/2017

9C-1 MILLS RANCH 1000 MILLS LANE

M08N05W31

	WATERMELON / 10008-0	0.25 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	CUCUMBER / 10010-0	0.5 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	PUMPKIN / 10011-0	1 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	SQUASH / 10012-0	2 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	EGGPLANT / 11001-0	0.25 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	PEPPER FRUITNG / 11003-0	0.5 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	TOMATILLO / 11008-0	0.25 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	CABBAGE / 13007-0	0.5 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	CAULIFLOWER / 13008-0	0.2 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	SPINACH / 13024-0	0.2 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	POTATO / 14013-0	1.5 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	BEAN SUCCULENT / 15003-0	0.5 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	OKRA / 15015-0	0.25 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	FENNEL / 28008-0	0.3 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	CORN, HUMAN CON / 29119-0	3 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	MELON / 29122-0	1.5 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	
	HERB, SPICE / 8000-0	0.1 ACRES
Pesticide #s:	99999 (NON-PERMIT AG PROD)	

OPERATION-WIDE CONDITIONS

OPERATOR IDENTIFICATION NUMBER # 28-17-2801041

LONG MEADOW RANCH WINE ESTATES

Page 3 of 4

Expires: 12/31/2017

M07N05W09

8C-4 1796 ST HELENA HWY S RUTHERFORD GARDENS

STRAWBERRY / 1016-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

VEGETABLE LEAF / 13000-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

GARLIC / 14007-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

ONION DRY ETC / 14011-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

POTATO / 14013-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

VEGETABLE / 28024-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

BEET / 29109-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CORN, HUMAN CON / 29119-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

GRAPE / 29141-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

APPLE / 4001-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PEAR / 4003-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

ASIAN PEAR / 4501-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

APRICOT / 5001-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CHERRY / 5002-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

NECTARINE / 5003-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PEACH / 5004-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PLUM / 5005-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PLUOT / 5505-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

FIG / 6005-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)



NAPA COUNTY AGRICULTURAL COMMISSIONER'S OFFICE
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NAPA, CA 94559

PHONE (707) 253-4357
FAX (707) 253-4881

EMAIL agcommissioner@countyofnapa.org
WEBSITE www.countyofnapa.org/AgCom

Operator Identification Number 28-18-2801041

Operator: LONG MEADOW RANCH WINE ESTATES PO BOX 477 RUTHERFORD, CA 94573	# 2801041-2018-Version: 1 County District #: Issued on: 1/19/2018 Valid as of: 1/19/2018 Expires on: 12/31/2018 Primary Phone: (707) 963-4555 Alternate Phone: Mobile Phone: (707) 287-8146 Fax: Phone: (707) 287-8146 License #: NAP-3737 Expiration: 12/31/2018
Agent: HARDIN, JOSEPH PO BOX 477 RUTHERFORD CA 94573	
Certified Applicator: HARDIN, JOSEPH RUTHERFORD P.O. BOX 477 RUTHERFORD, CA 94573	
Type of Use: Agricultural Use	

Employees Handle Pesticides

Regulatory Notes:

I understand this operator identification number does not relieve me from liability for any damage to persons or property caused by the use of pesticides. I acknowledge that duly authorized representatives from the County Department of Agriculture or the Department of Pesticide Regulation may, at reasonable times, enter and inspect fields, areas, structures, greenhouses and equipment (including protective clothing and equipment) where pesticides are handled, stored or applied (ref. 3 CCR 6140).

[Form PR-ENF-125 (Rev 11/06) Pesticide Enforcement Branch]

Applicant: Joseph Hardin Director of Agriculture
(Name & Title)
Applicant Signature: Joseph Hardin Date: 1/19/18
Issuing Officer: Jooodi Malito Date: 1.19.18

OPERATOR IDENTIFICATION NUMBER # 28-18-2801041
LONG MEADOW RANCH WINE ESTATES

Page 2 of 4
Expires: 12/31/2018

CONTACT LIST

<u>Name</u>	<u>Auth Rep.</u>	<u>Phone</u>	<u>License</u>	<u>Expiration</u>	<u>Contact Type</u>
HARDIN, JOSEPH RUTHERFORD	yes	(707) 287-8146	NAP-373712/31/2018		Private Applicator Certificate

PESTICIDES LIST

<u>Number</u>	<u>Pesticide</u>	<u>Pests</u>	<u>Forms</u>	<u>Methods</u>	<u>Applicators</u>
99999	NON-PERMIT AG PROD	VARIOUS	All Reg.	Ground	Operator

SITES LIST

<u>Site</u>	<u>Location Site Name</u> <u>Commodity Name/Code</u>	<u>Quantity</u>	<u>District</u>	<u>Section (MTRS)</u>
8B-1	1775 WHITEHALL LANE LONG MEADOW RANCH			M07N06W12
	OLIVE / 28014-0	12 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	GRAPE, WINE / 29143-0	16 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	APPLE / 4001-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
8C-1	1840 HIGHWAY 29 BODDUM RANCH			M07N05W09
	TOMATO / 11005-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	POTATO / 14013-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	VEGETABLE / 28024-0	2 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	CORN, HUMAN CON / 29119-0	1 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
	GRAPE, WINE / 29143-0	11 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
8C-2	1790 ST. HELENA HIGHWAY LAIRD			M07N05W09
	GRAPE, WINE / 29143-0	22 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			
8C-3	1133 MEE LANE SAN MATEO RANCH			M07N05W09
	GRAPE, WINE / 29143-0	46 ACRES		
Pesticide #s:	99999 (NON-PERMIT AG PROD)			

OPERATOR IDENTIFICATION NUMBER # 28-18-2801041

LONG MEADOW RANCH WINE ESTATES

8C-4 1796 ST HELENA HWY S RUTHERFORD GARDENS

Page 3 of 4

Expires: 12/31/2018

M07N05W09

STRAWBERRY / 1016-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

VEGETABLE LEAF / 13000-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

GARLIC / 14007-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

ONION DRY ETC / 14011-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

POTATO / 14013-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

VEGETABLE / 28024-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

BEET / 29109-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CORN, HUMAN CON / 29119-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

GRAPE / 29141-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

APPLE / 4001-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PEAR / 4003-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

ASIAN PEAR / 4501-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

APRICOT / 5001-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CHERRY / 5002-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

NECTARINE / 5003-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PEACH / 5004-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PLUM / 5005-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PLUOT / 5505-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

FIG / 6005-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

OPERATOR IDENTIFICATION NUMBER # 28-18-2801041

LONG MEADOW RANCH WINE ESTATES

9C-1 MILLS RANCH 1000 MILLS LANE

WATERMELON / 10008-0 0.25 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CUCUMBER / 10010-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PUMPKIN / 10011-0 1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

SQUASH / 10012-0 2 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

EGGPLANT / 11001-0 0.25 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

PEPPER FRUITNG / 11003-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

TOMATILLO / 11008-0 0.25 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CABBAGE / 13007-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CAULIFLOWER / 13008-0 0.2 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

SPINACH / 13024-0 0.2 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

POTATO / 14013-0 1.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

BEAN SUCCULENT / 15003-0 0.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

OKRA / 15015-0 0.25 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

FENNEL / 28008-0 0.3 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

CORN, HUMAN CON / 29119-0 3 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

MELON / 29122-0 1.5 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

HERB, SPICE / 8000-0 0.1 ACRES

Pesticide #s: 99999 (NON-PERMIT AG PROD)

Page 4 of 4

Expires: 12/31/2018

M08N05W31

OPERATION-WIDE CONDITIONS

APPENDIX C

PROPERTY OWNER QUESTIONNAIRE

APEX ENVIROTECH, INC.
**INTERVIEW DOCUMENTATION, PESTICIDE QUESTIONNAIRE, AND
DISCLOSURE STATEMENT**

PURCHASER/LENDER: _____

SELLER/BORROWER: _____

PROPERTY LOCATION: 1000 Mills Lane, St. Helena, CA 94574

PARCEL NUMBER(S): 009-070-049, 009-070-052, 009-070-053, and 009-070-054

[Do not leave any questions blank. Write "Unknown" or "Not Applicable" if needed]

A. Current/Former Uses of Property

1. Name of current and all former owner(s) with dates of ownership:

2. Description of current uses of the Property. Please attach copies of any building plans or layout drawings:

Long Meadow Ranch grows certified organic fruits and vegetables which I have overseen since 12/2014.

3. Date of completion of original construction and any substantial renovations (including tenant improvements):

N/A

4. Name(s) of previous occupant(s):

N/A

5. Description of previous use(s) of the Property:

N/A

6: Description of uses of adjacent properties:

Vineyard and residential

B. Pesticides

1. What crops are currently grown on the property?

We grow organic produce year round on the site which includes about 70 different crops.

2. What crops have historically been grown on the property?

Organic fruit and vegetables

3. Have pesticides, herbicides, or other agricultural chemicals been applied to the Property?

We have only applied organic fertilizer and compost to the property.

4. If so, please describe the locations where such pesticides, herbicides, or chemicals were applied; the type of pesticides, herbicides, or chemicals applied in each area; and the results of any soil or groundwater analyses performed to detect pesticides, herbicides, or chemicals used at the site.

The fertilizer was applied prior to plantings incorporated directly into the soil.

5. Have pesticides, herbicides, or other agricultural chemicals been mixed, formulated, rinsed, or disposed of on the Property? If so, please describe the locations where such pesticides, herbicides, or chemicals were mixed, formulated, rinsed, or disposed; the type of pesticides, herbicides, or chemicals mixed, formulated, rinsed, or disposed of in each area; and the results of any soil or groundwater analyses performed to detect pesticides, herbicides, or chemicals mixed, formulated, rinsed, or disposed of at the site.

No

6. Have soil, water, or vapor samples been collected at the site that were analyzed for pesticides, herbicides, or other agricultural chemicals? If yes, please attach the laboratory analytical report(s) and any associated reports describing the results of the laboratory analysis.

No

7. Do any individuals or businesses (you or any business that lease, sub-lease, and/or perform work on property) have a license or permit from the California Department of Pesticide Regulation (CDPR) to apply pesticides? If yes, please list the licensee's holder name and license number for the CDPR license/permit.

No

C. Please provide any other information relevant to the current or historic use of pesticides, herbicides, or other agricultural chemicals at the property.

N/A

D. Please provide copies of the following documents (if applicable):

1. Previously conducted Phase I Environmental Site Assessment reports for the Property.
2. Reports of any environmental investigations previously conducted at the Property.
3. Reports of any geotechnical or soils investigations of the Property.
4. Any other current operator environmental permits and plans not previously noted.

As the present owner of the Property or an officer or a general partner of the present owner of the Property (or the duly authorized representative of such owner), I am familiar with all of the operations presently conducted on the Property, have made a diligent inquiry into the former uses of the Property, and hereby certify to and for the benefit of Purchaser/Lender that to the best of my knowledge, information, and belief, the information disclosed above is true and correct.

Name: Joseph Hanelm

Signature: 

Title: Director of Ag operations
Long Meadow Ranch

Date: 8/23/18

7-8-2012

Land use History:

1000 Mills Lane

Saint Helena, CA 94574

For CCOF on behalf of:

Long Meadow Ranch Rutherford Gardens

Christopher 'Landy' Landercasper Farm Production Manager

(707) 227-9518

Landy@longmeadowranch.com

Owner/Manager for at least the last 3 years:

Carl Doumani

(707) 944-1102

Carl@quixotewinery.com

Since January 1st 2011 I have been the owner/manager of the 10 acre parcel located at 1000 Mills Lane in Saint Helena, CA. Since that time, to the best of my knowledge there has been no application of herbicide or pesticide on this parcel. The ground has been left fallow until rented to Long Meadow Ranch Rutherford Gardens beginning on the 1st of May 2014.

Mr. Carl Doumani

Owner/Manager Signature:



Date: 7/9/14

Mr. Christopher Landercasper

LMR Representative Signature:



Date: 7-21-14

APPENDIX D

PREVIOUS PROPERTY OWNER QUESTIONNAIRE

APEX ENVIROTECH, INC.
INTERVIEW DOCUMENTATION, PESTICIDE QUESTIONNAIRE, AND
DISCLOSURE STATEMENT

PURCHASER/LENDER: _____

SELLER/BORROWER: _____

PROPERTY LOCATION: 1000 Mills Lane, St. Helena, CA 94574

PARCEL NUMBER(S): 009-070-049, 009-070-052, 009-070-053, and 009-070-054

[Do not leave any questions blank. Write "Unknown" or "Not Applicable" if needed]

A. Current/Former Uses of Property

1. Name of current and all former owner(s) with dates of ownership:

LNR PROPERTY ACQUISITION PARTNERS LLC
9/10/15

2. Description of current uses of the Property. Please attach copies of any building plans or layout drawings:

FARMING

3. Date of completion of original construction and any substantial renovations (including tenant improvements):

NONE

4. Name(s) of previous occupant(s):

CARL DOUMANI

5. Description of previous use(s) of the Property:

FARMING - GRAPES

6: Description of uses of adjacent properties:

COMMERCIAL
FARMING
RESIDENTIAL

B. Pesticides

1. What crops are currently grown on the property?

DONT KNOW

2. What crops have historically been grown on the property?

GRAPES

3. Have pesticides, herbicides, or other agricultural chemicals been applied to the Property?

DONT KNOW

4. If so, please describe the locations where such pesticides, herbicides, or chemicals were applied; the type of pesticides, herbicides, or chemicals applied in each area; and the results of any soil or groundwater analyses performed to detect pesticides, herbicides, or chemicals used at the site.

5. Have pesticides, herbicides, or other agricultural chemicals been mixed, formulated, rinsed, or disposed of on the Property? If so, please describe the locations where such pesticides, herbicides, or chemicals were mixed, formulated, rinsed, or disposed; the type of pesticides, herbicides, or chemicals mixed, formulated, rinsed, or disposed of in each area; and the results of any soil or groundwater analyses performed to detect pesticides, herbicides, or chemicals mixed, formulated, rinsed, or disposed of at the site.

DONT KNOW

6. Have soil, water, or vapor samples been collected at the site that were analyzed for pesticides, herbicides, or other agricultural chemicals? If yes, please attach the laboratory analytical report(s) and any associated reports describing the results of the laboratory analysis.

YES -
DON'T HAVE ANY MORE

7. Do any individuals or businesses (you or any business that lease, sub-lease, and/or perform work on property) have a license or permit from the California Department of Pesticide Regulation (CDPR) to apply pesticides? If yes, please list the licensee's holder name and license number for the CDPR license/permit.

NO

C. Please provide any other information relevant to the current or historic use of pesticides, herbicides, or other agricultural chemicals at the property.

NONE

D. Please provide copies of the following documents (if applicable):

1. Previously conducted Phase I Environmental Site Assessment reports for the Property.
2. Reports of any environmental investigations previously conducted at the Property.
3. Reports of any geotechnical or soils investigations of the Property.
4. Any other current operator environmental permits and plans not previously noted.

As the present owner of the Property or an officer or a general partner of the present owner of the Property (or the duly authorized representative of such owner), I am familiar with all of the operations presently conducted on the Property, have made a diligent inquiry into the former uses of the Property, and hereby certify to and for the benefit of Purchaser/Lender that to the best of my knowledge, information, and belief, the information disclosed above is true and correct.

SOLO THE PROPERTY 9/10/15

Name: CARL DOUMAN

Signature: 

Title: _____

Date: 8/20/18



Marcus H. Bole & Associates
An Environmental Consulting Firm

September 8, 2016

LMR Property Acquisition Partners, LLC
 Attn: Elliott Faxstein
 P.O. Box 477
 Rutherford, CA 94573

**FINAL BIOLOGICAL EVALUATION AND WETLAND DETERMINATION FOR THE
 PROPOSED LONG MEADOW RANCH PROJECT, NAPA COUNTY APN'S 009-070-
 049, -052, -053, AND -054, CITY OF ST. HELENA, CALIFORNIA, MHBA FILE 05127-
 2016-3190.**

INTRODUCTION

During June of 2016, a Biological Resources Inventory was conducted on Assessor Parcel Numbers (APNs) 009-070-049, -052, -053, and -054, a 10.0± acre parcel of land located on the U.S. Geological survey (USGS) St. Helena & Rutherford 7.5-minute topographic quadrangles, Township 8 North, Range 5 West, City of St. Helena, Napa County, California (Attachment A, Figure 1.) Particular attention was focused upon the project's potential impact to federal and state special-status plants and wildlife species and their habitats. The site is currently vacant land being used to grow vegetables. Interspersed between the rows of vegetables are non-native grasses and forbs. Elevation of the property is 230 feet in relatively flat terrain. The site is located on the northeast corner of Main Street and Mills Lane, St. Helena, CA. Surrounding land uses include single family residences to the northwest, agricultural land to the northeast and commercial properties to west, southwest and south.

A record search was completed prior to field surveys of the United States Fish & Wildlife Service's (USFWS) *Federal Endangered and Threatened Species List* (NEPA) and the *California Natural Diversity Database* (CEQA) for the St. Helena and Rutherford 7 ½ minute quadrangles and the adjacent eight quadrangles (see Attachment B). These documents list plants and wildlife that have Federal, State and California Native Plant Society (CNPS) special status. The site does not support habitat for any of the species listed by the USFWS or the State of California. Onsite surveys did not reveal the presence of any special status plant or wildlife species or any sensitive habitat (vernal pools, seasonal wetlands, etc.).

Field studies were conducted on foot making observations and noting habitat conditions, surrounding land uses, and plant and wildlife species. In accordance with guidance set forth in the United States Army Corps of Engineer's *1987 Wetlands Delineation Manual* a wetland determination was conducted. Field surveys were conducted to determine the presence of sensitive species, and/or suitable habitat for sensitive species (e.g. elderberry shrubs, seasonal wetlands, riparian habitats, etc.). These surveys also included ocular reconnaissance of the entire study area and buffer zones for nesting (or burrowing) raptors (*Athene cunicularia*, *Buteo swainsoni*, and *Buteo jamaicensis*). Site surveys were conducted by Wildlife Biologist Marcus

Biological Evaluation
 Long Meadow Ranch Project - St. Helena, CA

Marcus H. Bole & Associates
 June, 2016

H. Bole, M.S., and Wetland Biologist Charlene J. Bole, M.S., on June 7, 2016. A total of 10 hours on onsite surveys were conducted.

EXISTING SETTING

Habitat Description

The subject property is located in the City of St. Helena, California. The site is uniformly level with an elevation of 230 feet above sea level. The site is currently vacant land being used to grow vegetables. Interspersed between the rows of vegetables are non-native grasses and forbs. There are no wetlands or riparian habitats on or near the subject property. These features are addressed below.

Undeveloped (Vacant) Land

Interspersed between the rows of vegetables are non-native introduced, annual, grasses and forbs. Due to the phenology of these grasses they tend to dominate the uncultivated landscape. Besides the brome, barley and ryegrass, other grasses found were barbed goatgrass (*Aegilops triuncialis*), and saltgrass (*Distichis spicata*). Non-native forbs found at the site were yellow starthistle (*Centaurea solstitialis*), filaree (*Erodium* spp.), and vetch (*Vicia* spp.).

Wildlife Communities

Undeveloped lands generally provide marginal breeding, cover, and foraging habitat for wildlife species. A limited variety of bird, reptile and mammal species were observed during the recent surveys. Species observed in these habitats include American crow (*Corvus brachyrhynchos*), American robin (*Turdus migratorius*), western scrub jay (*Aphelocoma coerulescens*), western meadowlark (*Sturnella neglecta*), Botta's pocket gopher (*Thomomys bottae*) and the western fence lizard (*Sceloporus occidentalis*). No raptors were observed during over thirty hours of onsite observations.

Special Status Species

The following discussion describes the plant and animal species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions. Listed and special-status species are defined as one of the following:

- Listed or proposed for listing under the state or federal Endangered Species Acts.
- Protected under other regulations (e.g., Migratory Bird Treaty Act).
- California Department of Fish and Game (CDFG) Species of Special Concern.
- Receive consideration during environmental review under NEPA & CEQA.

Special-status species were considered for this analysis based on field survey results, a review of the *Federal Endangered and Threatened Species list for Napa County* (NEPA, 2016), *California*

Natural Diversity Database (CNDDDB, 2016), CNPS literature, and database information provided by the U. S. Fish and Wildlife Service (St. Helena & Rutherford 7 ½ Minute Quads).

Table 1
LISTED AND SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING WITHIN THE STUDY AREA, LONG MEADOW RANCH PROJECT SITE, ST. HELENA, CALIFORNIA

Species	Federal (USFWS) Status ¹	State (CDFG)/CNPS Status ¹	Habitat/Flowering	Potential for Occurrence
Plants				
<i>Amorpha californica</i> var. <i>napensis</i> , Napa false indigo.	None	None/1B.2	Broadleafed upland forest, cismontane woodland, chaparral .	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Astragalus claranus</i> , Clara Hunt's milk-vetch	E	T/1B.1	Cismontane woodland, valley and foothill grassland, chaparral.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Brodiaea leptandra</i> , narrow-antlered brodiaea	None	None/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys
<i>Ceanothus confusus</i> , Rincon Ridge ceanothus	None	None/1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland	None: There is no suitable habitat within or near the property, and none observed during onsite surveys
<i>Ceanothus divergens</i> , <i>Calistoga</i> ceanothus	None	None/1B.2	Chaparral, rocky, serpentine or volcanic sites.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys
<i>Ceanothus purpureus</i> , holly-leaved ceanothus	None	None/1B.2	Chaparral, cismontane woodlands, rocky, volcanic sites	None: There is no suitable habitat within or near the property, and none observed during onsite surveys
<i>Ceanothus sonomensis</i> , Sonoma ceanothus	None	None/1B.2	Chaparral, sandy, serpentine or volcanic soils.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Erigeron greenii</i> , Green's narrow-leaved daisy	None	None/1B.2	Chaparral, serpentine and volcanic substrates, generally in shrubby vegetation.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Hesperolinon sharsmithiae</i> , Sharsmith's western flax	None	None/1B.2	Chaparral, serpentine substrates.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Layia septentrionalis</i> , <i>Colusa</i> layia	None	None/1B.2	Cismontane woodland, valley and foothill grassland, chaparral.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Leptosiphon jepsonii</i> , Jepson's leptosiphon	None	None/1B.2	Chaparral, cismontane woodland	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Lupinus sericatus</i> , Cobb Mountain lupine	None	None/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.

<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> , Baker's navarretia	None	None/1B.1	Vernal pools, cismontane woodland, meadows and seeps.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Penstemon newberryi</i> var. <i>sonomensis</i> , Sonoma beardtongue.	None	None/1B.3	Chaparral, crevices in rock outcrops and talus slopes.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Sidalcea oregana</i> ssp. <i>hydrophila</i> , Marsh checkerbloom.	None	None/1B.2	Meadows and seeps, riparian forest, wet soil of streambanks.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Streptanthus hesperidis</i> , Green jewelflower	None	None/1B.2	Chaparral, cismontane woodland.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Trichostema ruygtii</i> , Napa bluecurls	None	None/1B.2	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools, lower montane coniferous forest.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
Birds				
<i>Haliaeetus leucocephalus</i> , Bald eagle	Delisted	E	Ocean shore, lake margins & rivers for both nesting and wintering, most nests within 1 mile of water.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Progne subis</i> , Purple martin	None	None/SCS	Inhabits woodlands, low elevation coniferous forest of Douglas-fir. Nests in old woodpecker cavities mostly.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
Amphibians and Reptiles				
<i>Dicamptodon ensatus</i> , California giant salamander.	None	None/None	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Aquatic larvae found in cold, clear streams, lakes & ponds.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Rana draytonii</i> , California red-legged frog.	T	None/SCS	Lowlands & foothills in or near permanent sources of deep water with dense shrubby or emergent riparian vegetation.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Emys marmorata</i> , Western pond turtle.	None	None/SCS	Permanent or nearly permanent water in a wide variety of habitats	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
Invertebrates				
<i>Bombus caliginosus</i> , Obscure bumble bee	None	None/None	Coastal areas from Santa Barbara County to north to Washington State. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grinellia and Phacellia.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.

Mammals				
<i>Antrozous pallidus</i> , Pallid bat	None	None/SCS	Deserts, grasslands, shrublands, woodlands and forests. Very sensitive to disturbance of roosting sites.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
<i>Corynorhinus townsendii</i> , Townsend's big-eared bat	None	CT/SCS	Mesic sites. Roosts in the open, hanging from walls & ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	None: There is no suitable habitat within or near the property, and none observed during onsite surveys.
(1) Legal Status Codes: E = Federally or State listed as endangered T = Federally or State listed as threatened SCS = Federal or State special concern species C = Candidate species for future listing as endangered or threatened -- = No designation 1A = Plants presumed extinct in California 1B = CNPS List 1B: Plants rare, threatened or endangered in California and elsewhere 2 = CNPS List 2: Plants rare, threatened or endangered in California, but more common elsewhere 3 = CNPS List 3: Plants about which we need more information – a review list <u>SOURCES:</u> CNPS. 2001. Inventory of Rare and Endangered Plants of California (sixth edition). David Tibor editor. California Native Plant Society. Sacramento, CA. California Natural Diversity Database (CNDDB) Rare Find program. Information dated May 1, 2016.				

Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies and those that are protected under NEPA, CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. The project area was systematically surveyed to ensure total search coverage, with special attention given to identifying those portions of the study area with the potential for supporting special-status species and sensitive habitats. No sensitive habitat was found on or near the project site.

Determination of Waters of the United States

The intent of this determination is to identify wetlands and “other waters of the United States” that are present within the Study Area that could fall under the regulatory jurisdiction of the U. S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act. The 1987 *Corps of Engineers Wetlands Delineation Manual* identifies several methodologies and combinations of methodologies that can be utilized in making jurisdictional determinations. Marcus H. Bole & Associates has employed the Routine On-Site Determination methodology for this study (as supplemented by the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*, dated December 2006). The Routine On-Site Determination method uses a three-parameter approach (vegetation, soils and hydrology) to identify and delineate the boundaries of jurisdictional wetlands. To be considered a wetland, all three positive wetland parameters must be present. These parameters include (1) a dominance of wetland vegetation, (2) a presence of hydric soils, and (3) hydrologic conditions that result in periods of inundation or saturation on the surface from flooding or ponding. Further description of these parameters is provided below:

1) Vegetation. Wetland vegetation includes those plants that possess physiological traits that allow them to grow and persist in soils subject to inundation and anaerobic soil conditions. Plant

species are classified according to their probability of being associated with wetlands. Obligate (OBL) wetland plant species almost always occur in wetlands (more than 99 percent of the time), facultative wetland (FACW) plant species occur in wetlands most of the time (67 to 99 percent), and facultative (FAC) plant species have about an equal chance (33 to 66 percent) of occurring in wetlands as in uplands. For this study, vegetation was considered to meet the vegetation criteria if more than 50% of the vegetative cover was FAC or wetter. No wetland plant species were observed within the project site during our onsite evaluations. There was no sign of vernal pools or vernal swales on the property.

2) **Hydric Soils.** Hydric soils are saturated, flooded, or ponded in the upper stratum long enough during the growing season to develop anaerobic conditions and favor the growth of wetland plants. Hydric soils include gleyed soils (soils with gray colors), or usually display indicators such as low chroma values, redoximorphic features, iron, or manganese concretions, or a combination of these indicators. Low chroma values are generally defined as having a value of 2 or less using the Munsell Soil Notations (Munsell, 1994). For this study a soil was considered to meet the hydric soil criteria for color if it had a chroma value of one or a chroma of two with redoximorphic features, or if the soil exhibited iron or manganese concretions. Redoximorphic features (commonly referred to as mottles) are areas in the soils that have brighter (higher chroma) or grayer (lower chroma) colors than the soil matrix. Onsite soils as identified by the Natural Resources Conservation Service (NRCS) are Bale loam, Pleasanton loam, and Cortina loam. These alluvium soils are derived from sedimentary rock. These are well drained soils with a depth to the restrictive layer of over 80 inches. These soils do not support ponding or pooling, and show no sign of hydric soil development.

3) **Hydrology.** Wetlands by definition are seasonally inundated or saturated at or near the surface. In order for an area to have wetland hydrology, it has to be inundated or saturated for 5% of the growing season (approximately 12 days) (USDA, 1967). Indicators include visual soil saturation, flooding, watermarks, drainage patterns, encrusted sediment and plant deposits, cryptogammic lichens, and algal mats.

Wetland Determination Results

Using the methodologies described in the *1987 Wetland Delineation Manual* (as supplemented by the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*, dated December 2006), Marcus H. Bole & Associates found no federal jurisdictional wetland habitats within the boundaries of the subject property.

POTENTIAL PROJECT IMPACTS

Site development will not result in impacts to listed federal or state plant or wildlife species. Impacts to common vegetation and wildlife habitats are as follows:

Common Vegetation and Wildlife Habitats:

Project implementation will not result in alterations (removal) of natural plant or wildlife communities. The proposed development of this site will not interfere with the movement of any native resident or migratory fish or wildlife species, or result in impacts to established native

resident or migratory wildlife corridors. The project will not affect the use of native wildlife nursery sites.

Special-Status Species

Special-status species were considered for this analysis based on field survey results, a review of the California Natural Diversity Database (CNDDDB), and CNPS literature. Based on the specific habitat characteristics of subject property, no sensitive plant or wildlife species will be impacted by this project.

FINDINGS AND RECOMMENDATIONS

1) There are no trees within the project area; however, due to the presence of medium diameter, mature trees within the immediate area (within 300 feet) of the project area, there is a potential for tree nesting raptors, ground nesting raptors and passerines, and protected bat species to nest within 300 feet of the future construction activities on the subject property. If construction activities are anticipated during the normal nesting season (February to August), there is a potential to impact the nests or cause nest abandonment. The following recommended mitigation measures would ensure that impacts to special-status bird and bat species remain at a level considered less than significant pursuant to the CEQA.

Recommended Mitigation Measures

1) Tree Nesting Raptors and Passerines

A pre-construction survey for ground-nesting birds will be performed within thirty (30) days prior to the start of construction. A qualified avian biologist will conduct passerine nest surveys prior to ground disturbing activities, or construction activities at the Project site to locate any active nests on or adjacent to the Project site. If land-clearing activities can be performed outside of the nesting season, that is, between August 16 and January 31, no preconstruction surveys for nesting birds are warranted.

If an active raptor nest is identified during the surveys of the project site and within 300 feet of the project site, a 300-foot buffer around the nest site must be established. It can be established via installation of orange construction fencing or placement of bright orange lath on 10 foot centers along the arc of the protection buffer. If nesting passerines are identified nesting then a 75-foot protection buffer shall be established using the same buffer demarcation fence or lath as prescribed above.

If nests are located off the project site, then the buffer should be demarcated as per above but only where the buffer intersects the project site. The size of the nest protection buffer may be altered if a qualified ornithologist with extensive construction-related nest protection experience conducts behavioral observations and determines the nesting raptors or passerines are well acclimated to disturbance. If this occurs, the qualified ornithologist may prescribe a modified buffer that provides sufficient buffer to prevent undue disturbance/harassment that would otherwise result in construction related nest

failure. Physical harm to the nest or sufficient disturbance that results in adult inattentiveness to eggs or young will cause nest failure.

No construction or earth-moving activity should occur within the established buffer until it is determined by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. In the area of the project site, this typically occurs by July 15th. However, this date may be earlier or later, and would have to be determined by the qualified ornithologist. If a qualified ornithologist is not hired to watch the nesting raptors/passerines then the buffers should be maintained in place through the month of August and work within the buffer can commence September 1st.

Ground Nesting Raptors and Passerines

In order to determine if ground-nesting raptors or passerines are nesting onsite, a qualified ornithologist would have to conduct walking transects through the project site's grassland habitat searching for nests. If ground-nesting raptors (e.g. northern harrier) or passerines are identified during the surveys within 300 feet of the project site (or 75-feet in the case of passerines), a 300-foot buffer (or 75-feet in the case of passerines) around the nest site should be fenced with orange construction fencing or brightly painted orange lath. If the nest is located off the project site, then the buffer should be demarcated as per above where the buffer intersects the project site. The size of the buffer may be altered if a qualified ornithologist conducts behavioral observations and determines the nesting raptors or passerines are well acclimated to disturbance. If this occurs, the ornithologist should prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting raptors/passerines.

No construction or earth-moving activity should occur within the established buffer until it is determined by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by July 15th. This date may be earlier or later, and would have to be determined by a qualified ornithologist. If a qualified ornithologist is not hired to watch the nesting raptors/passerines then the buffers should be maintained in place through the month of August and work within the buffer can commence September 1st.

Special Status Bats

In order to avoid impacts to special-status bats, a biologist should conduct a preconstruction survey of structures and trees that would be impacted by the project 15 days prior to removal or commencement of ground work. All bat surveys should be conducted by a biologist with experience surveying for bats. If no special-status bats are found during the surveys, then there would be no further regard for special-status bat species.

If special-status bat species are found roosting on the project site, the biologist should determine if there are young present (i.e., the biologist should determine if there are maternal roosts). If young are found roosting in any tree or structure that will be impacted by the project, such impacts should be avoided until the young are flying and feeding on

their own. A non-disturbance buffer installed with orange construction fencing should also be established around the maternity site. The size of the buffer zone should be determined by a qualified bat biologist at the time of the surveys. If adults are found roosting in a tree or structure on the project site but no maternal sites are found, then the adult bats can be flushed or a one-way eviction door can be placed over the tree cavity (or structure access opening) for a 48 hour period prior to the time the tree or structure in question would be removed or disturbed. At that point, no other mitigation compensation would be required.

This concludes our biological evaluation of the property located at the northeast corner of Main Street and Mills Lane, St. Helena, Napa County APNs 009-070-049, -052, -053, and -054, a 10-acre parcel of land located on the U.S. Geological survey (USGS) Township 8 North, Range 5 West, St. Helena, Napa County, CA. If you have any questions concerning our findings please feel free to contact me directly at: Marcus H. Bole & Associates, Attn: Marcus Bole, 104 Brock Drive, Wheatland, CA 95692, phone 530-633-0117, fax 530-633-0119, email: mbole@aol.com. For a complete copy of the Statement of Qualifications of the staff members conducting this evaluation please visit our website at: mhbole.com.

Respectfully Submitted:



Marcus H. Bole
Senior Wildlife Biologist

LIST OF ATTACHMENTS:

ATTACHMENT A: SITE MAPS & SOIL DATA

ATTACHMENT B: FEDERAL AND STATE SPECIAL STATUS SPECIES LIST

ATTACHMENT A: SITE MAPS & SOIL DATA

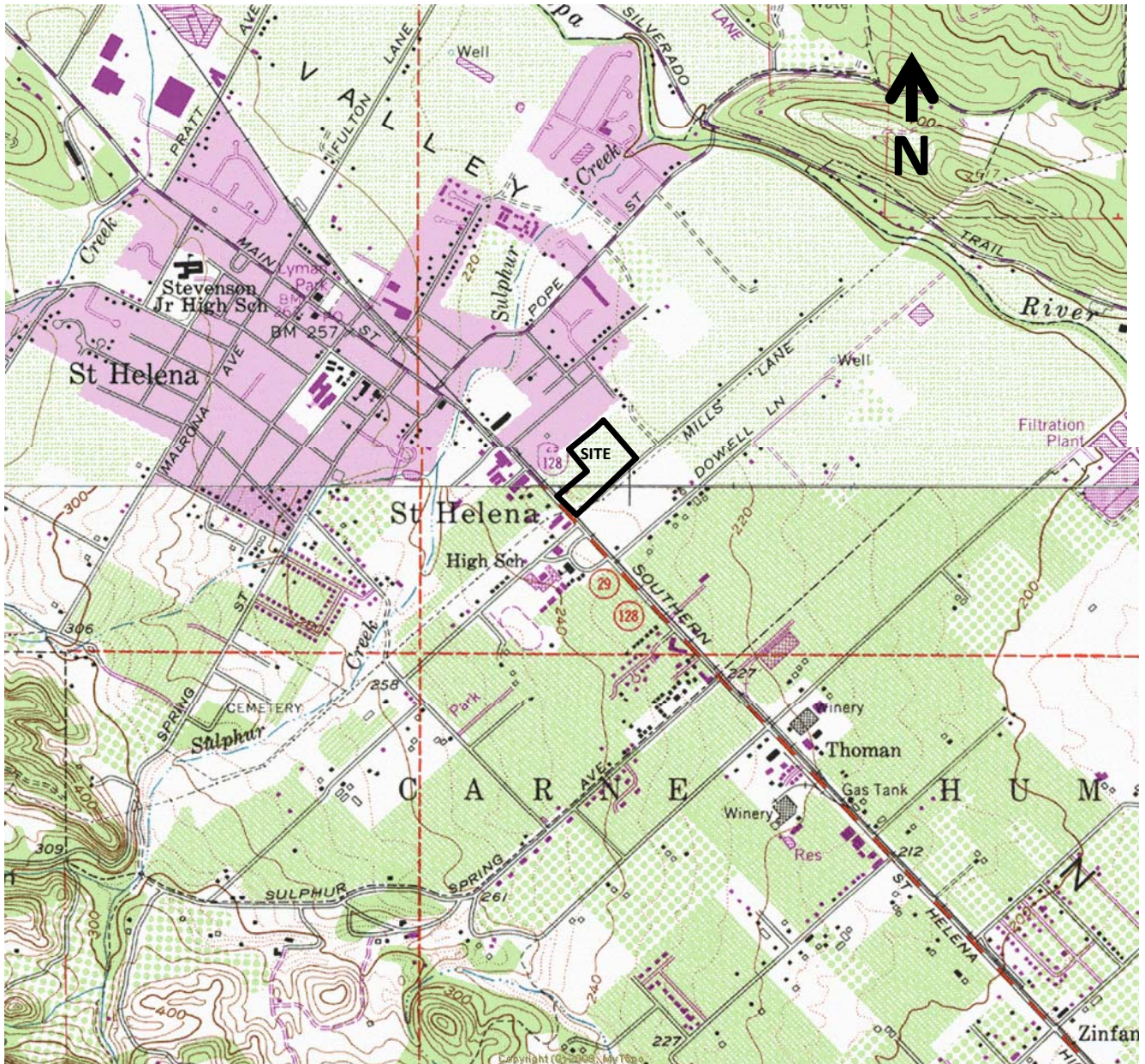


Figure 1: Vicinity Map, Proposed Long Meadow Ranch Project , a 10.0-acre site located northeast of the corner of Main Street and Mills Lane, St. Helena, Napa County, CA. APNs 009-070-049, -052, -053 and -054. Approximate center of site: 38.500653° North, -122.460901° West. Township 8 North, Range 5 West, St. Helena and Rutherford USGS Quadrangles.



Figure 2: Aerial Display, Proposed Long Meadow Ranch Project , a 10.0-acre site located northeast of the corner of Main Street and Mills Lane, St. Helena, Napa County, CA. APNs 009-070-049, -052, -053 and -054. Approximate center of site: 38.500653° North, -122.460901° West. Township 8 North, Range 5 West, St. Helena and Rutherford USGS Quadrangles.



MARCUS H. BOLE & ASSOCIATES
104 Brock Drive, Wheatland, CA 95692
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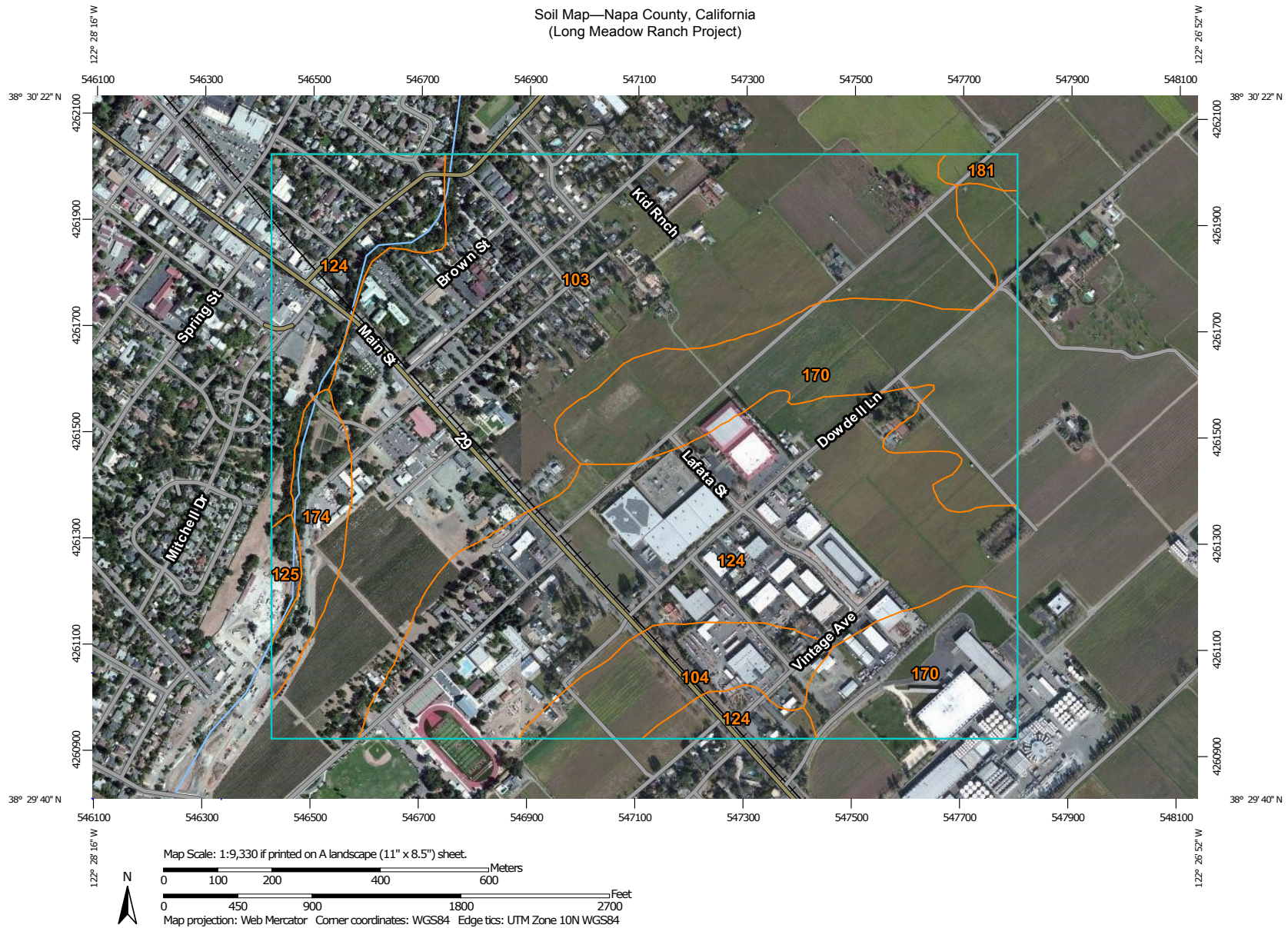
SITE: Long Meadow Ranch Project
ITEM: Onsite Vegetable Gardens
DATE: 6/7/2016 **PLATE:** 1



MARCUS H. BOLE & ASSOCIATES
104 Brock Drive, Wheatland, CA 95692
(530) 633-0117, email: mbole@aol.com

SITE: Long Meadow Ranch Project
ITEM: Onsite non-native grasslands
DATE: 6/7/2016 **PLATE:** 2

Soil Map—Napa County, California
(Long Meadow Ranch Project)



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

6/9/2016
Page 1 of 3

Soil Map—Napa County, California
(Long Meadow Ranch Project)

MAP LEGEND

Area of Interest (AOI)			Spoil Area
	Area of Interest (AOI)		Stony Spot
Soils			Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
Special Point Features			
	Blowout	Water Features	
	Borrow Pit		Streams and Canals
	Clay Spot	Transportation	
	Closed Depression		Rails
	Gravel Pit		Interstate Highways
	Gravelly Spot		US Routes
	Landfill		Major Roads
	Lava Flow		Local Roads
	Marsh or swamp	Background	
	Mine or Quarry		Aerial Photography
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.
Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Napa County, California
Survey Area Data: Version 8, Sep 23, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 14, 2011—Feb 17, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Napa County, California (CA055)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
103	Bale loam, 0 to 2 percent slopes	141.3	37.5%
104	Bale clay loam, 0 to 2 percent slopes	17.9	4.8%
124	Cortina very gravelly loam, 0 to 5 percent slopes	132.3	35.1%
125	Cortina very stony loam, 0 to 5 percent slopes	2.3	0.6%
170	Pleasanton loam, 0 to 2 percent slopes	70.0	18.6%
174	Riverwash	10.5	2.8%
181	Yolo loam, 0 to 10 percent slopes, moist, MLRA 14	2.1	0.6%
Totals for Area of Interest		376.5	100.0%

**ATTACHMENT B: FEDERAL AND STATE SPECIAL STATUS
SPECIES LIST**

California Department of Fish and Game
Natural Diversity Database
CNDDB Wide Tabular Report

Name (Scientific/Common)	CNDDB Ranks	Other Lists	Listing Status	Total EO's	Element Occ Ranks						Population Status		Presence		
					A	B	C	D	X	U	Historic >20 yr	Recent <=20 yr	Pres. Extant	Poss. Extirp.	Extirp.
<i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	G4T2 S2	CNPS: 1B.2	Fed: None Cal: None	69 S:8	0	3	3	0	0	2	1	7	8	0	0
<i>Antrozous pallidus</i> pallid bat	G5 S3	CDFG: SC	Fed: None Cal: None	403 S:4	0	0	0	0	1	3	4	0	3	0	1
<i>Astragalus claranus</i> Clara Hunt's milk-vetch	G1 S1	CNPS: 1B.1	Fed: Endangered Cal: Threatened	6 S:3	0	1	1	0	1	0	1	2	2	1	0
<i>Bombus caliginosus</i> obscure bumble bee	G4? S1S2	CDFG:	Fed: None Cal: None	181 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Brodiaea leptandra</i> narrow-anthered brodiaea	G3? S3?	CNPS: 1B.2	Fed: None Cal: None	39 S:5	1	1	0	0	0	3	1	4	5	0	0
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	G1 S1	CNPS: 1B.1	Fed: None Cal: None	33 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Ceanothus divergens</i> Calistoga ceanothus	G2 S2	CNPS: 1B.2	Fed: None Cal: None	23 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Ceanothus purpureus</i> holly-leaved ceanothus	G2 S2	CNPS: 1B.2	Fed: None Cal: None	43 S:2	0	1	0	0	0	1	1	1	2	0	0
<i>Ceanothus sonomensis</i> Sonoma ceanothus	G2 S2	CNPS: 1B.2	Fed: None Cal: None	30 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	G3G4 S2	CDFG: SC	Fed: None Cal: Candidate Threatened	622 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Dicamptodon ensatus</i> California giant salamander	G3 S2S3	CDFG:	Fed: None Cal: None	227 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Emys marmorata</i> western pond turtle	G3G4 S3	CDFG: SC	Fed: None Cal: None	1155 S:2	1	0	0	0	0	1	1	1	2	0	0
<i>Erigeron greenei</i> Greene's narrow-leaved daisy	G3 S3	CNPS: 1B.2	Fed: None Cal: None	20 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Haliaeetus leucocephalus</i> bald eagle	G5 S3	CDFG:	Fed: Delisted Cal: Endangered	321 S:1	1	0	0	0	0	0	1	0	1	0	0
<i>Hesperolinon sharsmithiae</i> Sharsmith's western flax	G2Q S2	CNPS: 1B.2	Fed: None Cal: None	32 S:3	0	1	0	0	0	2	2	1	3	0	0
<i>Layia septentrionalis</i> Colusa layia	G2 S2	CNPS: 1B.2	Fed: None Cal: None	46 S:1	0	0	0	0	0	1	1	0	1	0	0

California Department of Fish and Game
Natural Diversity Database
CNDDB Wide Tabular Report

Name (Scientific/Common)	CNDDB Ranks	Other Lists	Listing Status	Total EO's	Element Occ Ranks						Population Status		Presence		
					A	B	C	D	X	U	Historic >20 yr	Recent <=20 yr	Pres. Extant	Poss. Extirp.	Extirp.
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	G3 S3	CNPS: 1B.2	Fed: None Cal: None	39 S:6	1	0	0	1	0	4	1	5	6	0	0
<i>Lupinus sericatus</i> Cobb Mountain lupine	G2 S2	CNPS: 1B.2	Fed: None Cal: None	45 S:7	0	0	0	0	0	7	7	0	7	0	0
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	G4T2 S2	CNPS: 1B.1	Fed: None Cal: None	58 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Northern Vernal Pool</i>	G2 S2.1		Fed: None Cal: None	20 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Oncorhynchus mykiss irideus</i> steelhead - central California coast DPS	G5T2T3Q S2S3	CDFG:	Fed: Threatened Cal: None	39 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Penstemon newberryi var. sonomensis</i> Sonoma beardtongue	G4T2 S2	CNPS: 1B.3	Fed: None Cal: None	11 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Progne subis</i> purple martin	G5 S3	CDFG: SC	Fed: None Cal: None	68 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Rana draytonii</i> California red-legged frog	G2G3 S2S3	CDFG: SC	Fed: Threatened Cal: None	1381 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Sidalcea oregana ssp. hydrophila</i> marsh checkerbloom	G5T3 S3	CNPS: 1B.2	Fed: None Cal: None	23 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Streptanthus hesperidis</i> green jewelflower	G2 S2	CNPS: 1B.2	Fed: None Cal: None	19 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Trichostema ruygtii</i> Napa bluecurls	G1G2 S1S2	CNPS: 1B.2	Fed: None Cal: None	19 S:1	0	0	0	0	0	1	0	1	1	0	0

ATTACHMENT I-1

PRELIMINARY STORWATER CONTROL PLAN FOR A REGULATED PROJECT

Farmstead at Long Meadow Ranch Lodging

Sherwood Design Engineers
April 18, 2017

PRELIMINARY
Stormwater Control Plan
For a Regulated Project
Farmstead at Long Meadow Ranch Lodging

April 18, 2017

LMR Property Acquisition Partners LLC

Owner's Representative:

Elliott Faxstein
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(707) 337-1125

Prepared by:



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This Stormwater Control Plan was prepared using the template dated July 11, 2014.

I. Project Data

Table 1. Project Data Form

Project Name/Number	Farmstead at Long Meadow Ranch Lodging
Application Submittal Date	
Project Location	1000 Mills Lane, St. Helena, CA 94574
Project Phase No.	N/A
Project Type and Description	Construction of new lodging buildings, parking, and associated amenities
Total Project Site Area (acres)	9.5
Total New and Replaced Impervious Surface Area	122,104 square feet
Total Pre-Project Impervious Surface Area	0 square feet
Total Post-Project Impervious Surface Area	122,104 square feet

II. Setting

II.A. Project Location and Description

The proposed project is located in the City of St. Helena at the corner of Mills Lane and the northeast side of Main Street (see Figure 1). The project will transform the vacant parcel to include fruit and vegetable farming and lodging. The proposed project will include 65 guest rooms and suites, a multi-purpose building, including meeting, kitchen, reception, and housekeeping uses, and a fitness center with a pool and spa.

The proposed use of the project is consistent with the current Service Commercial and Urban Reserve/Residential zoning of the project site.

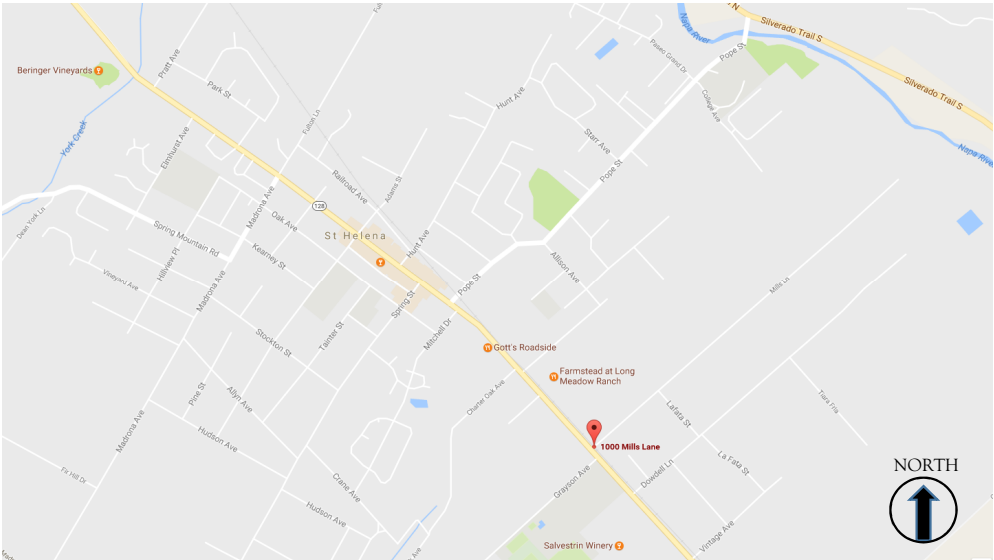


Figure 1: Vicinity Map

II.B. Existing Site Features and Conditions

The existing site (see Figure 2) is largely fallow agricultural land with no existing utilities. A dirt service road runs through the site from Mills Lane to the adjacent parcel at 738 Main Street. The site is fairly flat, with a slight mounding of previously leftover spoils at the center of the northern portion of the site.

The existing site has little storm drain infrastructure. Site drainage is characterized by slow surface flow towards the southern corner of the site. Some of the surface runoff is collected in an existing swale that runs above the southeast property line and discharges into an existing 36” culvert. Limited infiltration occurs due to the site soils, which are mainly sandy clay over clayey gravel, falling into Hydrologic Soil Group “D.”



Figure 2: Existing Site Conditions

II.C. Opportunities and Constraints for Stormwater Control

The project site and project intent lend themselves to opportunities for stormwater control. Restoring the agricultural function of a large portion of the site for the new farm area will help improve the hydrologic function of the soils and increase infiltration. Site design, focused on showcasing a connection to the land, will include extensive landscaped areas throughout the site that minimize site imperviousness and help promote infiltration on site.

The prime constraints for stormwater management on site include the impermeable nature of the clayey soils and minimal elevation differences across the site. Due to the poorly draining soils, bioretention facilities will need to be underdrained. The project site is largely flat, so conveyance of runoff to bioretention facilities will need to rely on methods other than simply sheet flow, and gravity storm drain conveyances will likely require bubble-ups to discharge into bioretention facilities.

III. Low Impact Development Design Strategies

III.A. Optimization of Site Layout

The northwest portion of the site will remain largely pervious, with the most of the land used for organic fruit and vegetable farming. The lodging portion of the site will include large landscaped areas throughout the site to minimize the imperviousness of the site.

III.B. Use of Permeable Pavements

Permeable pavements are used extensively throughout the site. The service roads in the farm area will be gravel roads. Plazas and walkways through the lodging area as well as the parking spots adjacent to the main roadways will also be permeable pavement. All permeable pavements will be constructed according to the appropriate specifications and in accordance with the *BASMAA Post-Construction Manual*.

The permeable pavement for the parking stalls will also function as a self-retaining area that receives runoff from the impervious drive aisle. This section of permeable pavement will have a deeper base coarse to allow for additional storage and retention of one inch of rainfall across the impervious area draining to it. Although permeable pavement is not pervious landscaped area, by increasing the storage in the base course, the permeable pavement is able to match the function of a pervious landscaped self-retaining area, and therefore meets the intent of the *BASMAA Manual*.

III.C. Dispersal of Runoff to Pervious Areas

Runoff is dispersed to pervious areas whenever feasible. Runoff from building roofs is directed to landscaped areas or bioretention facilities. Runoff from the main roadway is directed to the pervious parking stalls.

III.D. Stormwater Control Measures

With the exception of runoff that is directed to self-retaining areas, runoff from impervious surfaces will be routed to one of six bioretention facilities on site (see Figure 3). The bioretention facilities will be constructed in accordance with the guidelines provided in the *BASMAA Post-Construction Manual*, including the following:

- Each layer of the bioretention facility will be built flat and level. The following layers will have consistent elevations throughout the facility:
 - Bottom of Gravel Layer
 - Top of Gravel Storage Layer
 - Top of Soil Layer
 - Rim of Facility Reservoir
- 12 inches of Class 2 permeable, Caltrans specification 68-2.02F(3) used for the gravel layer
- 18 inches of a sand/compost mix per the BASMAA specifications provided for the planting medium
- 4" dia. PVC SDR 35 perforated pipe to be installed with holes facing down and connected to overflow structure no lower than the top of the gravel layer
- 6-inch-deep reservoir between top of soil elevation and overflow grate elevation
- Concrete drop inlet with frame for an overflow structure with grate set to specified elevation, connected to storm drain
- Plantings selected for water conservation
- Irrigation system on a separate zone, with drip emitters and "smart" irrigation controllers
- Sign identifying the facility as a separate stormwater treatment facility

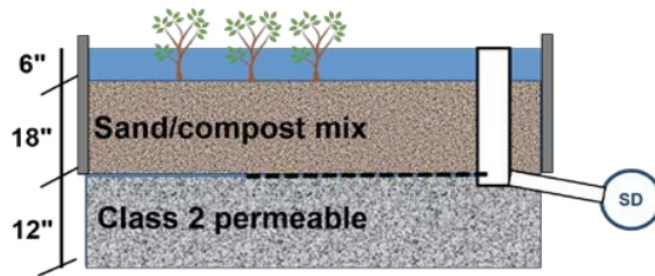


Figure 3: Bioretention Facility Schematic (source: BASMAA *Post-Construction Manual*)

Per the BASMAA Post-Construction Manual, self-retaining areas must be designed to retain an inch of rainfall across the entire drainage management area without flowing off-site. The maximum ratio of impervious to pervious area is 2 parts impervious area to 1 part pervious area.

IV. Documentation of Drainage Design

IV.A. Descriptions of Each Drainage Management Area

IV.A.1. Table of Drainage Management Areas

Table 2. Drainage Management Areas

DMA Name	Surface Type	Area (square feet)
DMA 1A	Landscaping	27,251
DMA 1B	Roof/Paving	4,374

DMA 2	Roof	7,949
DMA 3	Roof	15,478
DMA 4	Roof/Paving	18,377
DMA 5	Roof/Paving	19,577
DMA 6	Roof	11,650
DMA 7	Roof/Paving	12,336
DMA 8A	Pervious Paving	18,183
DMA 8B	Paving	32,363
DMA 9	Pervious Paving	65,633
DMA 10	Water feature	2,454
DMA 11	Landscaping	174,679

IV.A.2. Drainage Management Area Descriptions

DMA 1A, totaling 27,251 square feet, drains a portion of the farm area. DMA 1A is self-retaining area and does not drain to a retaining DMA or facility.

DMA 1B, totaling 4,374 square feet, drains the agricultural building roofs and surrounding paving adjacent to the farm area. DMA 1B drains to DMA 1A, a self-retaining area.

DMA 2, totaling 7,949 square feet, drains the Utility Barn roof and one of the Lodging building roofs. DMA 2 drains to DMA 2 Bioretention Facility.

DMA 3, totaling 15,478 square feet, drains three of the Lodging building roofs. DMA 3 drains to DMA 3 Bioretention Facility.

DMA 4, totaling 18,377 square feet, drains one of the Lodging building roofs, a portion of the Multipurpose Center building roof, and a portion of the northern driveway. DMA 4 drains to DMA 4 Bioretention Facility.

DMA 5, totaling 19,577 square feet, drains Fitness Center building roof, the Bicycle Barn building roof, the pool deck, and one of the Lodging building roofs. DMA 5 drains to DMA 5 Bioretention Facility.

DMA 6, totaling 11,650 square feet, drains three of the Lodging building roofs. DMA 6 drains to DMA 6 Bioretention Facility.

DMA 7, totaling 12,336 square feet, drains one of the Lodging building roofs, a portion of the Multipurpose Center building roof, and a portion of the northern driveway. DMA 7 drains to DMA 7 Bioretention Facility.

DMA 8A, totaling 18,183 square feet, drains the pervious paving of the parking stalls bordering the drive aisle. DMA 8A is a self-retaining area and does not drain to a retaining DMA or facility.

DMA 8B, totaling 32,363 square feet, drains the main driveway adjacent to Mills Lane. DMA 8B drains to DMA 8A, pervious pavement that will function as a self-retaining area by having sufficient storage within the base coarse to retain one inch of rainfall across the entire area draining to it.

DMA 9, totaling 65,633 square feet, drains the pervious paving of the project walkways and farm access roads. DMA 9 is a self-retaining area and does not drain to a retaining DMA or facility.

DMA 10, totaling 2,454 square feet, drains the pool and water features. DMA 10 is a self-retaining area and does not drain to a retaining DMA or facility.

DMA 11, totaling 174,679 square feet, drains the landscaped area of the project. DMA 11 is a self-treating area and does not drain to a retaining DMA or facility.

IV.B. Tabulation and Sizing Calculations

See the Attachment B, the Provision E.12 Sizing Calculator spreadsheet, for tabulation of DMAs and sizing calculations.

V. Source Control Measures

V.A. Site activities and potential sources of pollutants

On-site activities and sources that could potentially produce stormwater pollutants include:

- Plazas, sidewalks, and parking lots
- Pools, spas, and other water features
- Solid waste management
- Landscape maintenance
- Food service

V.B. Source Control Table

Table 3. Source Control Table

Potential source of runoff pollutants	Permanent source control BMPs	Operational source control BMPs
On-site storm drain inlets	All inlets will be marked with “No Dumping! Flows to Bay” or similar.	Markings will be regularly inspected and repainted or replaced as need. New site owners, lessees, or operators will receive stormwater pollution prevention information. Lease agreements will include the following statement: “Tenant shall not allow anyone to discharge

		anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.
Landscape maintenance	Existing native trees, shrubs, and ground cover will be preserved to the maximum extent possible. Landscaping will be designed to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. Landscaped areas used to retain or detain stormwater will have plants that are tolerant of saturated soil conditions. Pest-resistant plants will be used where appropriate, especially when adjacent to hardscape. Plants appropriate to site soils, slope, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions will be selected.	Landscaping will be maintained using minimum or no pesticides. Integrated Pest Management (IPM) information will be provided to new owners, lessees, and operators.
Plazas, sidewalks, and parking lots		Plazas, sidewalks, and parking lots will be swept regularly to prevent accumulation of litter and debris. Debris from pressure washing will be collected to prevent entry into the storm drain system. Washwater containing any cleaning agent or degreaser will be collected and discharged to the sanitary sewer and not to a storm drain.
Pool, spas, and other water features	Water from the pool, spa, and other water features will not be discharged to the storm drain system.	
Food service	Food service areas will have designated cleaning areas that are sized to insure that the largest items can be accommodated.	Regularly inspect and clean all grease removal devices to keep them functioning properly and efficiently.
Condensation line drainage and fire sprinkler test water	Condensation line drainage and fire sprinkler test water will be disposed of into the sanitary sewer. Discharge to	

	storm drain or infiltration will not be allowed.	
Refuse area	Refuse and recycled materials will be handled in the designated trash enclosure area. This area is to be roofed and equipped with a drain to a sand filter and then to the sanitary sewer.	All dumpsters will be posted with signs stating "Do not dump hazardous materials here" or similar.

VI. Stormwater Facility Maintenance

VI.A. Ownership and Responsibility for Maintenance in Perpetuity

Maintenance of stormwater facilities will be the responsibility of the property owner and will be performed by the owner's employees as part of routine maintenance of buildings, grounds, and landscaping. The applicant commits to execute any necessary agreements regarding the maintenance of stormwater facilities prior to completion of construction. The applicant accepts responsibility for interim operation and maintenance of stormwater treatment and flow-control facilities until such time as this responsibility is formally transferred to a subsequent owner.

VI.B. Summary of Maintenance Requirements for Each Stormwater Facility

The six bioretention facilities will be maintained as follows. Details of maintenance responsibilities and procedures will be included in a Stormwater Facility Operation and Maintenance Plan to be submitted for approval prior to the completion of construction.

- Annual Landscape Maintenance: Remove any soil or debris blocking planter inlets or overflows; remove the trash that collects near inlets or gets caught in vegetation; prune or cut back plants for health and to ensure flow into inlets and across the surface of the facility; remove and replant as necessary while maintaining the design surface elevation and minimizing the introduction of soil; control weeds by manual methods and soil amendment and only use natural herbicides if necessary; add mulch to control weeds and maintain the mulch layer thickness
- Check signage: remove graffiti and replace if necessary
- Check irrigation: confirm to be adequate but not excessive
- Do not add fertilizer to bioretention facilities
- Do not use synthetic pesticides on bioretention facilities

VII. Construction Checklist

Table 4. Construction Checklist to be incorporated in Construction Drawings

Stormwater Control Plan Page #	Source Control or Treatment Control Measure	See Plan Sheet #s
5 and Exhibit	DMA 1B impervious area drains to DMA 1A pervious self-retaining area	
5 and Exhibit	DMA 2 impervious area drains to DMA 2 Bioretention Facility; facility is designed as specified	
5 and Exhibit	DMA 3 impervious area drains to DMA 3 Bioretention Facility; facility is designed as specified	
5 and Exhibit	DMA 4 impervious area drains to DMA 4 Bioretention Facility; facility is designed as specified	
5 and Exhibit	DMA 5 impervious area drains to DMA 5 Bioretention Facility; facility is designed as specified	
5 and Exhibit	DMA 6 impervious area drains to DMA 6 Bioretention Facility; facility is designed as specified	
5 and Exhibit	DMA 7 impervious area drains to DMA 7 Bioretention Facility; facility is designed as specified	
6 and Exhibit	DMA 8A pervious pavement is designed as specified	
6 and Exhibit	DMA 8B drains to DMA 8A pervious pavement; pervious pavement is design as specified	
6 and Exhibit	DMA 9 pervious pavement is designed as specified	

VIII. Certifications

The preliminary design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the current edition of the BASMAA *Post-Construction Manual*.

Facility	Connections
DMA 1	10
DMA 2	10
DMA 3	10
DMA 4	10
DMA 5	10
DMA 6	10
DMA 7	10
DMA 8	10
DMA 9	10
DMA 10	10
DMA 11	10
BIORETENTION FACILITY	10



STORMWATER CONTROL PLAN EXHIBIT
FARMSTEAD AT LONG MEADOW RANCH LODGING
ST. HELENA, CA

Agenda Item #5.2.

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Agenda Item #5.2.

Step 1: Enter Total Site Area	Step 2: List names of all DMAs and square footage of each	Step 3: If DMA is "Self-Treating" or "Self-Retaining," copy square footage to appropriate column	Step 4: If the DMA is "Drains to Self-Retaining" or "Drains to Bioretention" enter runoff factor from Table 4-1		Step 6: For "Drains to Self-Retaining" DMAs, enter the name of receiving DMA	Step 5: Slide (move) number from this column to correct column (F or H-Q)	Version 0.3. 2015-12-02									
Total Site Area:		414,255					BIORETENTION FACILITIES									
					Drains to Self-Retaining	Name of Receiving DMA	DMA 2 Bioretention Facility	DMA 3 Bioretention Facility	DMA 4 Bioretention Facility	DMA 5 Bioretention Facility	DMA 6 Bioretention Facility	DMA 7 Bioretention Facility				
DMA Names	Square Feet	Self-Treating	Self-Retaining	Runoff Factor												
DMA 1A	27,251		27251													
DMA 1B	4,374			1	4374	DMA 1A										
DMA 2	7,949			1				7949								
DMA 3	15,478			1					15478							
DMA 4	18,377			1						18377						
DMA 5	19,577			1						19577						
DMA 6	11,650			1							11650					
DMA 7	12,336			1								12336				
DMA 8A	18183		18183													
DMA 8B	32363			1	32363	DMA 8A										
DMA 9	65633		65633													
DMA 10	2454		2454													
DMA 11	174679	174679														
Total DMAs	410304	174679	113521		36737		0	7949	15478	18377	19577	11650	12336	0	0	0
Sizing Factor							0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Minimum Size							0	318	619	735.08	783.08	466	493.44	0	0	0
Total Facilities	3951	Step 7: Enter Facility Footprints				Footprint on Exhibit		627	627	783	813	599	502			
DMAs + Facilities	414255						OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
OK		Step 8: Iterate sizes of facility footprints and DMAs until all footprints are at least the minimum AND DMAs + Facilities equals Total Site Area														
		Step 9: Check to make sure Areas Draining to each Receiving Self-Retaining Area do not exceed maximum 2:1 ratio.														
		Step 10: Check results on this spreadsheet are consistent with what is shown on the SCP Exhibit.														



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Water Use Analysis Report

FOR

Farmstead at Long Meadow Ranch Lodging

1000 Mills Lane

St. Helena, CA 94574

PREPARED FOR:

CITY OF ST. HELENA DEPARTMENT OF PUBLIC WORKS

1480 MAIN STREET

ST. HELENA, CA 94574

PREPARED BY:

SHERWOOD DESIGN ENGINEERS

58 MAIDEN LANE, 3RD FLOOR

SAN FRANCISCO, CA 94108

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May 2, 2017



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I. Background & Introduction

The Farmstead at Long Meadow Ranch Lodging project is the proposed construction of lodging and related amenities on a 10-acre parcel fronting on Mills Lane. LMR Property Acquisition Partners LLC is applying for a use permit to allow for the proposed uses of the project.

The property slated for improvements, formerly known as the Doumani parcel, is currently vacant land. The proposed project will include 65 guest rooms and suites, a multi-purpose building, including meeting, kitchen, reception, and housekeeping uses, and a fitness center with a pool and spa.

Guests will have access to a daily breakfast as well as room and pool food service. A demonstration kitchen that will double as a service kitchen for room service and events will be housed in the multi-purpose building. A portion of the parcel is zoned for agricultural use and will be operated as a production vegetable farm. Two small barns will be constructed to serve as the farming facility.

Per the City of St. Helena Water Neutral Policy for Development, all new development must be water-neutral from the City-delivered water system. Water neutrality may be achieved through on-site water conservation measures, well water, and/or off-site retrofitting. The following water use analysis includes identification of the baseline existing demand and the proposed water demand.

II. Water Use Analysis

A. Baseline Water Use

The existing parcel to be developed is vacant and does not have a water connection to the City of St. Helena municipal system, so the baseline water use from the City-delivered system is **0 gallons per day**.



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B. Proposed Water Demand

The following tables summarize the water use for proposed project by category. Sources for data used include EPA's WaterSense program, LEED standards, and published research of water use in the hotel sector. Calculations use the assumption of 80% average occupancy.

Landscape irrigation water will be provided by an existing on-site water well, so it will not be included in the following analysis. Preliminary water use estimates prepared by the project landscape architect indicate approximately 3.6 acre-feet will be required. See Landscape Water Use Statement included with this submittal.

Guest Rooms Water Usage							
Fixture	Number of Rooms	Number of People/Room	Flow ¹	Unit	Duration (min) ²	Daily Uses/Person ²	Total Water Use (gal/day)
Toilet	65	2	1.28	gal	N/A	5	832
Lavatory							
Faucet	65	2	0.8	gpm	1	5	520
Showerhead	65	2	1.5	gpm	8	1	1,560
SUBTOTAL							2,912
SUBTOTAL 80% occupancy							2,330

Employee Water Usage						
Fixture	Number of Employees (FTE)	Flow ¹	Unit	Duration (min) ²	Daily Uses/Person ²	Total Water Use (gal/day)
Toilet	38	1.28	gal	N/A	3	146
Lavatory						
Faucet	38	0.8	gpm	0.5	3	45.6
SUBTOTAL						192

Multi-purpose Building Water Usage			
Meal	Avg Number of Covers/Day ⁸	Water Use/Cover (gal) ^{6,7}	Total Water Use (gal/day)
Buffet Breakfast	49	13	637
Chef's Table	40	15	600
Room/Pool Service	33	13	429
Culinary Classes	8	13	104
SUBTOTAL			1,770



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Laundry Water Usage				
Number of Rooms	Lbs of Laundry /Room /Day ³	Percent Laundry Done On Site ⁹	Water Use (gal) /Lb Laundry ³	Total Water Use (gal/day)
65	8	5%	2.5	65
SUBTOTAL	80%	80%	occupancy	52

Cooling Water Usage				
Number of Rooms	Number of Cooling Degree Days/year ⁴	CCD/day	Water Use/ CDD/Room ³ (gal)	Total Water Use (gal/day)
65	683	1.87	5.6	681
SUBTOTAL	80%	occupancy		545

Fitness Center Water Usage		
Users/Day ⁵	Water Use/Person ⁷ (gal)	Total Water Use (gal/day)
26	10	260
SUBTOTAL		260

Summary			
Category	Water Use (gal/day)	Water Use (gal/year)	Water Use (acre-ft/year)
Guest Rooms	2,330	850,304	2.609
Employees	192	69,905	0.215
Multi-Purpose Bldg	1,770	646,050	1.983
Laundry	52	18,980	0.058
Cooling	545	198,890	0.610
Fitness Center	260	94,900	0.291
TOTAL	5,148	1,879,028	5.767

Sources:

¹Flow taken to be min allowable per Water Sense specifications for each product category under assumption that the most efficient fixtures available will be used. See Appendix B for excerpts from Water Sense specifications.

²Duration and Daily Uses taken from LEED Indoor Water Use Reduction Calculator for residential use, see Appendix C.

³Source (see Appendix D): Pacific Institute. *Waste Not, Want Not: The Potential for Urban Water Conservation in California, Appendix E: Details of Commercial Water Use and Potential Savings, by Sector*. November 2003.

⁴Based on St. Helena data with 65 degrees as the base temperature, see Appendix E. Source: Western Regional Climate Center.



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⁵Assumes a quarter of guests use the pool/spa each day.

⁶Assumes Breakfast, room/pool service, and culinary classes treated are short orders. Chef's Table meals treated as conventional sit down. All meals assumed to use multi-use utensils.

⁷Source (see Appendix A): Napa County Alternative Sewer Treatment System Standards, Table 4.

⁸The number of uses per day for the multi-purpose building is based on anticipated sales forecasts prepared by the owner. The following information was used to estimate the number of uses per day for each of the different meals provided in the multi-purpose building:

- The Chef's Table is planned to provide food and wine pairings at lunch and dinner for up to 20 people per sitting.
- The Buffet Breakfast will serve 17,900 guests annually. Averaged over 365 days per year, this results in the use of 49 covers per day.
- Room & Pool Service will serve 12,200 guests annually. Averaged over 365 days per year, this results in the use of 33 covers per day.
- Culinary Classes are planned to be held for 25 people up to 10 times a month, which equals 250 covers per month. Averaged over 30 days per month, the results in the use of 8 covers/day.

⁹ Only 5% of laundry will be done on-site, with the remaining 95% of laundry being done off-site, outside of St. Helena, by a professional laundry service.

III. In-Lieu Retrofit Fees

The proposed project will result in the use of approximately 5,148 gallons of water per day. The project is already planning to use water efficient fixtures and water conservation practices to the maximum extent possible, but given that the existing parcel is vacant and thus has no existing water use, no amount of on-site water conservation measures would be sufficient to achieve neutrality. Therefore, the project proposes to pay an in-lieu retrofit fee equivalent to the cost of retrofitting the showerheads, sink faucets, kitchen faucets, and toilets in enough residences to achieve water savings of 5,148 gallons per day.

The theoretical residential water use for residences with old fixtures and with new retrofitted low flow fixtures is summarized in the following tables:

Theoretical Water Use with Old Fixtures					
Fixture	Flow rate (gal/min or gal/flush)	Flow duration (min, flush, load, etc)	Daily Uses per Occupant	Number of Occupants	Gallons per day
Showerheads	2.5	8	1	6	120
Sink Faucets	2.2	0.25	3	6	9.9
Kitchen Faucet	2.2	4	1	6	52.8
Toilet	2.2	1	3	6	39.6
TOTAL					222



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Theoretical Water Use with Retrofitted Low Flow Fixtures					
Fixture	Flow rate (gal/min or gal/flush)	Flow duration (min, flush, load, etc)	Daily Uses per Occupant	Number of Occupants	Gallons per day
Showerheads	2	8	1	6	96
Sink Faucets	1.5	0.25	3	6	6.75
Kitchen Faucet	1.8	4	1	6	43.2
Toilet	1.28	1	3	6	23.04
TOTAL					169

A residence with old fixtures uses 222 gallons per day, while a residence with retrofitted low flow fixtures uses 169 gallons per day, resulting in a savings of 53 gallons per day. To offset 5,148 gallons per day, 97 residences will need to be retrofitted.

The material and installation costs to retrofit a residence are summarized in the following tables:

Material Cost per Retrofitted Residence				
Fixture	Qty	Cost per Unit ¹		Total Cost
Toilet	2	\$	229.00	\$ 458.00
Lavatory Faucet	2	\$	113.91	\$ 227.82
Kitchen Faucet	1	\$	133.19	\$ 133.19
Shower Head	1	\$	175.00	\$ 175.00
Clothes Washer	0	\$	547.20	\$ -
Dish Washer	0	\$	278.00	\$ -
TOTAL				\$ 994.01

Installation Cost per Retrofitted Residence					
Fixture	Hour	Qty	Cost per Hour ²		Total Cost
Toilet	1.5	2	\$	60.00	\$ 180.00
Lavatory Faucet	1.5	2	\$	60.00	\$ 180.00
Kitchen Faucet	1.5	1	\$	60.00	\$ 90.00
Shower Head	0.5	1	\$	60.00	\$ 30.00
Clothes Washer	0	1	\$	60.00	\$ -
Dish Washer	0	1	\$	60.00	\$ -
TOTAL					\$ 480.00



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Sources:

¹Materials costs taken be cost of the following appliances as shown on 5/2/17

- Energy Star Certified Clothes Washer - Home Depot Samsung 4.2 front loader Model #WF42H5000AW = \$547.20
- Energy Star Certified Dish Washer - Home Depot Amana Front Control Dishwasher Model #ADB1400AGS = \$278.00
- Water Sense Certified Toilet - Home Depot Kohler Cimmaron Comfort Height two-piece 1.28gpf with Aqua Piston Tech Model #K-3887-0 = \$229.00
- Water Sense Certified Lavatory Faucet - Home Depot American Standard Copeland 4 in. 2-Handle Bathroom Faucet in Polished Chrome with Metal Speed Connect Pop-Up Drain Model #7005.201.002 = \$113.91
- Water Sense Certified Kitchen Faucet - American Standard Monterrey Model #6409170 = \$133.19
- Water Sense Certified Shower Head - American Standard Estate Pressure Balance Bath and Shower Fitting with Water-Saving Shower Head Model #T722.508 = \$175.00

²Cost per hour for installation based on <http://www.angieslist.com/articles/how-much-does-it-cost-hire-handyman.htm>

The cost of materials for a retrofit is equal to \$994.01 and the installation cost for a retrofit is equal to \$480.00, resulting in the total cost of \$1,474.01 to retrofit a residence with low flow fixtures.

The total in-lieu retrofit fee will then be \$1,474.01 per residence multiplied by 97 residences, equaling \$142,341.73.

IV. Conclusion

The proposed project will result in the use of approximately 5,148 gallons of water per day. The proposed project will use water efficient fixtures and water conservation practices to the maximum extent possible. In addition, the project will pay an in-lieu retrofit fee of \$142,341.73, equal to the cost of retrofitting enough residences with low flow fixtures to result in a water savings equal to the proposed project water use.

V. Appendix

Appendix A – Napa County Alternative Sewer Treatment Standards, Table 4

Appendix B – Water Sense Fixture Specifications

Appendix C – LEED Indoor Water Use Reduction Calculator

Appendix D – Pacific Institute. *Waste Not, Want Not: The Potential for Urban Water Conservation in California*, Appendix E: Details of Commercial Water Use and Potential Savings, by Sector. November 2003.

Appendix E – St. Helena Cooling Degree Days Data



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Appendix A

Napa County Alternative Sewer Treatment System Standards, Table 4

TABLE 4

TYPE OF OCCUPANCY	GALLONS PER DAY
Airports	5 per passenger
Campgrounds:	
Campground with central comfort station	35 per person
Campground with flush toilet, no showers	25 per person
Day Camps (no meals)	15 per person
Luxury Camp, private bath	100 per person
Summer and seasonal	50 per person
Churches (sanctuary)	5 per seat
With kitchen wastes	7 per seat
Country Club	125 per person
Factories	35 per person per shift
Hospitals	250 per bed space
Kitchen waste only	25 per bed
Laundry waste only	40 per bed
Hotels/Motels with private bathroom (no kitchen waste)	60 per two person room
Hotels/Motels without private bathroom (no kitchen waste)	50 per two person room
Hotel/Motel with private bath and kitchen	75 gallons per person
Institutions other than hospitals	125 per bed space
Movie Theaters	5 per seat
Offices	20 per employee
Picnic parks with toilets and showers	10 per person
Picnic parks with toilet waste only	5 per person
Resort camps with limited plumbing	50 gallons per person
Restaurants:	
Kitchen waste (multi-use utensils)	5 per meal served
Kitchen waste (disposable utensils)	3 per meal served
And add the following for type of facility present:	
Conventional sit down	10 per person
Short Order	8 per person
Bar and Cocktail	3 per person
School (non-boarding)	20 per student
With gym and showers add	5 per student
With cafeteria using disposable utensils	3 per meal served
Self service laundries	50 gallons per wash
Service station	10 gallons per vehicle served
Retail stores	20 per employee
For public restrooms add	1 per 10 square feet
Swimming pools and bathhouses	10 per person
Tourist camps or mobile home parks with individual bath units	100 per person
Tourist camps or trailer parks with central bathhouse	75 per person
Work or construction camps (semi-permanent)	50 per person
Wine tasting facility (no meals served)	3 per person
Employee	15 per employee



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Appendix B

Water Sense Fixture Specifications



WaterSense® Specification for Tank-Type Toilets

1.0 Scope and Objective

This specification establishes the criteria for a tank-type high-efficiency toilet under the U.S. Environmental Protection Agency's (EPA's) WaterSense program. It is applicable to:

- Single-flush, tank-type gravity toilets
- Dual-flush, tank-type gravity toilets
- Dual-flush, tank-type flushometer tank (pressure-assist) toilets
- Tank-type, flushometer tank (pressure-assist) toilets
- Tank-type electrohydraulic toilets
- Any other tank-type technologies that meet these performance specifications

The specification is designed to ensure both sustainable, efficient water use and a high level of user satisfaction with flushing performance.

2.0 General Requirements

- 2.1 The toilet shall conform to applicable water closet requirements in ASME A112.19.2/CSA B45.1,¹ except as otherwise indicated in this specification.
- 2.2 If the toilet has dual-flush capabilities, it shall conform to requirements in ASME A112.19.14.

3.0 Water Efficiency Criteria

- 3.1 **Single-flush toilets: The effective flush volume shall not exceed 1.28 gallons** (4.8 liters) when evaluated in accordance with the sampling plan contained in 10 CFR 429.30. For single-flush toilets, the effective flush volume is the average flush volume when tested in accordance with ASME A112.19.2/CSA B45.1.
- 3.2 Dual-flush toilets: The effective flush volume shall not exceed 1.28 gallons (4.8 liters) when evaluated in accordance with the sampling plan contained in 10 CFR 429.30. For dual-flush toilets, the effective flush volume is the average flush volume of two reduced flushes and one full flush. Flush volumes shall be tested in accordance with ASME A112.19.2/CSA B45.1 and ASME A112.19.14.
- 3.3 Samples with average flush volume in excess of 0.10 gallon (0.4 liter) greater than their rated flush volume shall be deemed to fail testing requirements due to excessive flush volume.²

¹ References to this and other standards apply to the most current version of that standard.

² For example, fixtures rated at 1.28 gallons per flush (the maximum flush volume) but flushing at greater than 1.38 gallons (5.2 liter) when adjusted in accordance with the water consumption test procedure in ASME A112.19.2/CSA B45.1 shall be deemed to have "failed" the requirements of this specification.



High-Efficiency Lavatory Faucet Specification

1.0 Scope and Objective

This specification establishes the criteria for high-efficiency lavatory faucets and faucet accessories¹ under the U.S. Environmental Protection Agency's (EPA's) WaterSense[®] program. It is applicable to lavatory faucets, lavatory faucet accessories specifically designed to control the flow of water, and any other lavatory faucet technologies that meet these performance specifications.

This specification applies to lavatory faucets in private use, such as in residences, and private restrooms in hotels and hospitals. Metering faucets, lavatory faucets in public use, and residential kitchen faucets are not covered by this specification.

The specification is designed to ensure both sustainable, efficient water use and a high level of user satisfaction with lavatory faucet and lavatory faucet accessory performance.

2.0 Water Efficiency and Performance Criteria

- 2.1 Lavatory faucets and lavatory faucet accessories must conform to applicable requirements in ASME A112.18.1/CSA B125.1 and NSF/ANSI Standard 61, Section 9.²
- 2.2 The flow rate of the lavatory faucet or the lavatory faucet accessory shall be tested in accordance with the procedures in ASME A112.18.1/CSA B125.1 and shall meet the following criteria:
 - The maximum flow rate shall not exceed 1.5 gallons per minute (gpm)³ (5.7 liters per minute [L/min]) at a pressure of 60 pounds per square inch (psi) at the inlet, when water is flowing; and
 - The minimum flow rate shall not be less than 0.8 gpm (3.0 L/min) at a pressure of 20 psi at the inlet, when water is flowing.

A lavatory faucet is also considered to meet this flow rate requirement if equipped with a lavatory faucet accessory that meets this requirement.
- 2.3 The flow rate, tested in accordance with the procedures in ASME A112.18.1/CSA B125.1, shall meet the testing verification protocol as described in 10 *CFR* 430 Subpart F, Appendix B.

¹ Accessory, as defined in ASME 112.18.1/CSA B125.1, means a component that can, at the discretion of the user, be readily added, removed, or replaced, and that, when removed, will not prevent the fitting from fulfilling its primary function. For the purpose of this specification, an accessory can include, but is not limited to lavatory faucet flow restrictors, flow regulators, aerator devices, and laminar devices.

² References to ASME/CSA and NSF/ANSI standards apply to the most current version.

³ The maximum flow rate has been established as 1.5 gpm, which is a 32 percent reduction from the 2.2 gpm standard codified under 10 *CFR* Part 430 (63 FR 13307; March 18, 1998).



WaterSense® Specification for Showerheads

1.0 Scope and Objective

This specification establishes the criteria for showerheads labeled under the U.S. Environmental Protection Agency's (EPA's) WaterSense® program. It is applicable to showerhead fixture fittings, inclusive of:

- Fixed showerheads that direct water onto a user (excluding body sprays) for bathing purposes; and
- Hand-held showers, a subset of showerheads that are moveable devices for directing water onto a user. Hand-held showers can be installed on a support to function as a fixed showerhead.

When used in this document the term "showerhead" shall also include hand-held showers.

This specification is designed to ensure sustainable, efficient water use and a high level of user satisfaction with showerhead performance.

2.0 General Requirements

- 2.1 The showerhead shall conform to applicable requirements in ASME A112.18.1/CSA B125.1.¹
- 2.2 If the showerhead has more than one mode, all modes must meet the maximum flow rate requirement outlined in Section 3.1.1 and at least one of the modes, as specified by the manufacturer, must meet all of the requirements outlined in this specification.
- 2.3 The showerhead shall not be packaged, marked, or provided with instructions directing the user to an alternative water-use setting that would override the maximum flow rate, as established by this specification. Any instruction related to the maintenance of the product, including changing or cleaning showerhead components, shall direct the user on how to return the product to its intended maximum flow rate.

3.0 Water-Efficiency Criteria

- 3.1 The flow rate of the showerhead shall be tested in accordance with the procedures in ASME A112.18.1/CSA B125.1 and shall meet the following criteria:
 - 3.1.1 The manufacturer shall specify a maximum flow rate value (rated flow) of the showerhead. This specified value must be equal to or less than 2.0 gallons per minute (gpm) (7.6 liters per minute [L/min]).

¹ References to this and other standards apply to the most current version of those standards.



- 3.1.2 The maximum flow rate shall be the highest value obtained through testing at flowing pressures of 20, 45, and 80 ± 1 pounds per square inch (psi) ($140, 310, \text{ and } 550 \pm 7$ kilopascal [kPa]), when evaluated in accordance with 10 CFR 430 Subpart F, Appendix B, Step 6(b). This maximum flow rate shall not exceed the maximum flow rate value specified in Section 3.1.1.
- 3.1.3 The minimum flow rate, determined through testing at a flowing pressure of 20 ± 1 psi (140 ± 7 kPa) and when evaluated in accordance with 10 CFR 430 Subpart F, Appendix B, Step 6(a), shall not be less than 60 percent of the maximum flow rate value specified in Section 3.1.1.
- 3.1.4 The minimum flow rate shall be the lowest value obtained through testing at flowing pressures of 45 and 80 ± 1 psi ($310 \text{ and } 550 \pm 7$ kPa), when evaluated in accordance with 10 CFR 430 Subpart F, Appendix B, Step 6(a). This minimum flow rate shall not be less than 75 percent of the maximum flow rate value specified in Section 3.1.1.

4.0 Spray Force Criteria

- 4.1 The spray force of the showerhead shall be tested in accordance with the procedures outlined in Appendix A and shall meet the following criteria:
 - 4.1.1 The minimum spray force shall not be less than 2.0 ounces (0.56 newtons [N]) at a pressure of 20 ± 1 psi (140 ± 7 kPa) at the inlet when water is flowing.

5.0 Spray Coverage Criteria

- 5.1 The spray coverage of the showerhead shall be tested in accordance with the procedures outlined in Appendix B and shall meet the following criteria:
 - 5.1.1 The total combined maximum volume of water collected in the 2- and 4-inch [in.] (50-, 101-millimeter [mm]) annular rings shall not exceed 75 percent of the total volume of water collected, and;
 - 5.1.2 The total combined minimum volume of water collected in the 2-, 4-, and 6-in. (50-, 101-, 152-mm) annular rings shall not be less than 25 percent of the total volume of water collected.

6.0 Marking

In addition to the marking requirements in ASME A112.18.1/CSA B125.1, the following markings shall apply:



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Appendix C

LEED Indoor Water Use Reduction Calculator



Indoor Water Use Reduction Calculator

LEED v4 for D+C and O+M - WE Prerequisite/Credit Indoor Water Use Reduction
LEED v4 for ND - GIB Prerequisite/Credit Indoor Water Use Reduction and GIB Credit Wastewater Management

Step 1.

Enable macros.

Note: This calculator is for use with Excel for Mac 2011 and Excel 2007 or later.

Step 2.

Unit of measurement

IP units

Note: This selection must match the unit of measurement chosen during project registration.

Step 3.

The project is LEED for Neighborhood Development

Yes

Note: This selection must match the rating system chosen during project registration.

Step 4.

Complete the Flush and/or Flow tables on the Group tab.

Note: Projects with extremely complex occupancy and/or fixture usage patterns (such as where different types of occupants have different annual days of operation and use fixtures with differing flush and flow rates within the building) may complete a separate calculator tab to represent the usage for complex scenarios.

Step 6.

Upload the completed spreadsheet to LEED Online. Complete any related summary fields in the LEED credit form with the results of the calculator.

Assumptions

Fixture Type	Maximum Installed Flush/Flow Rate		Duration (sec)
	IP	SI	
Toilet (male)	1.60 gpf	6.00 lpf	n/a
Toilet (female)	1.60 gpf	6.00 lpf	n/a
Urinal	1.00 gpf	3.80 lpf	n/a
Public lavatory (restroom) faucet	0.50 gpm	1.90 lpm	30
Private (residential) lavatory faucet	2.20 gpm	8.30 lpm	60
Kitchen faucet	2.20 gpm	8.30 lpm	15
Residential kitchen faucet	2.20 gpm	8.30 lpm	60
Showerhead	2.50 gpm	9.50 lpm	300
Residential showerhead	2.50 gpm	9.50 lpm	480

Default Uses per Day				
Employees (FTE)	Visitors	Retail Customers	Students (K-12)	Residential
1	0.1	0.1	1	5
3	0.5	0.2	3	5
2	0.4	0.1	2	0
3	0.5	0.2	3	0
0	0	0	0	5
1	0	0	0	0
0	0	0	0	4
0.1	0	0	0	0
0	0	0	0	1



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Appendix D

Pacific Institute. *Waste Not, Want Not: The Potential for Urban Water Conservation in California, Appendix E: Details of Commercial Water Use and Potential Savings, by Sector.* November 2003.

Go to

http://www.pacinst.org/app/uploads/2013/02/waste_not_want_not_full_report3.pdf

for full report on average water use in the hotel industry and other sectors and information on data sources used in analysis.

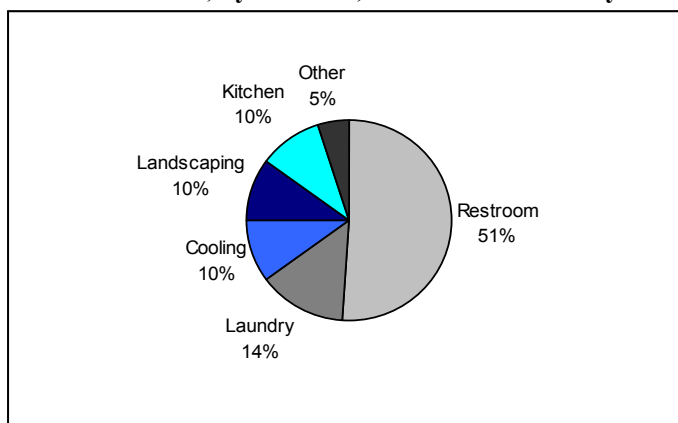
Hotels (SIC codes 701 and 704)

Sub-industries under SIC code 70 include hotels, motels, rooming and boarding houses, recreational vehicle parks, camp sites, and a variety of other types of lodging establishments. Because the literature focuses primarily on water use in hotels, motels, and bed and breakfasts (SIC codes 701 and 704), we limited our focus to these three types of lodging establishments, which we refer to collectively as hotels.

Table E-4
Employment and Water Use in the Hotel Industry (2000)

Industry	SIC codes	GED	Employees	Annual Use (TAF)
Hotels	701,704	240	182,640	30.3

Figure E-2
Water Use, by End Use, in the Hotel Industry



Source: Calculated from MWD audit data of 93 hotels (MWD 2002).

Comparison of GED-derived Estimate to Modeled Water Use

We modeled the water use in hotels, using published estimates of restroom visits, showers, faucet use by guests and employees, irrigated turf area, cooling requirements etc. We converted our GED-derived estimate of water use per employee into water use per occupied room per day and then compared it to that predicted by the water use model. The end use calculations in the GED-derived estimate are from Figure E-2 and the model's assumptions are based on the end use data in Appendix D and a study of water use in the hotel industry (Redlin and deRoos 1990).

Table E-5
Modeled Water Use in Hotels (2000)

	Measurement Unit	Typical Use/Occupied Room/Day			GED-derived Use (gal/day)
		Rate/Unit	Number of Units	Water Use (gal/day)	
Showers ¹	gal/minute	2.2	16.0	35.2	
Faucets ¹	gal/minute	1.3	0.4	0.6	
Toilets ¹	gal/flush	3.0	4.0	12.0	
Laundry ²	gal/lb.	2.5	8.0 ³	20.0	
Kitchen	gal/meal	7.6 ⁴	2.2 ⁵	17.0	
Icemakers	gal/meal	0.5 ⁶	2.2 ⁵	1.1	
Misc.	gal			25.0	

INDOOR				111.0	
Cooling ⁷	gal/CDD	5.6	1.4	8.0	
COOLING				8.0	
Irrigation ⁸	gal/sq. ft.	0.2	50.0	10.0	
Pool				0.5	
OUTDOOR				10.5	
TOTAL				130	117⁹

¹ See Appendix D.

² See Appendix D.

³ Pounds/occupied room/day of laundry is obtained from the average of the 12 hotels in Redlin and de Roos (1990).

Eighty-nine percent of hotels have in-house laundries (Redlin and de Roos 1990).

⁴ Average gal/meal is obtained from the restaurant sector. Seventy-six percent of hotels have restaurants (Redlin and de Roos 1990).

⁵ Meals/occupied room (Redlin and de Roos 1990)

⁶ 0.5 lbs/meal * 1 gal/lb : lbs/meal taken from 1994 ASHRAE Refrigeration Handbook, 1 gal/lb estimated from Pike 1995.

⁷ Nearly 50 percent of the hotels surveyed in Redlin and de Roos (1990) had central cooling. Average annual Cooling Degree Days (CDD) in California was 1035. Therefore Cooling Degrees per day = $1035 * 50\% / 365 = 1.4$ gal/CDD obtained from Redlin and de Roos (1990).

⁸ See Appendix D.

⁹ We used information on the total number of occupied hotel rooms and total water used by the hotel sector in 2000. When we divided 2000 water use (30.3 TAF) by 350,000 rooms times the average occupancy rate for the year (66%), the water use/occupied room/day was about 117 gallons.

Estimate of Potential Savings

By applying the conservation potential calculated in the end use studies (see Appendix D) to our GED-derived estimates of water use, we estimated potential water savings (shown in Table E-6).

Table E-6
Potential Water Savings in the Hotel Industry (2000)

End Use	Water Use (TAF)	Conservation Potential (percent)			Conservation Potential (TAF)		
		Low	High	Best	Low	High	Best
Restrooms	16.7	31%	31%	31%	5.3	5.3	5.3
Laundry	4.2	42%	66%	54%	1.8	2.8	2.3
Cooling	3.0	9%	41%	26%	0.3	1.3	0.8
Landscaping	3.0	47%	53%	50%	1.1	1.6	1.5
Kitchen	2.4	20%	20%	20%	0.5	0.5	0.5
Other	0.9	0%	0%	0%	0.0	0.0	0.0
Total Savings	30.3	30%	38%	34%	9.0	11.4	10.3



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Appendix E

Saint Helena, California Cooling Degree Days Data

SAINT HELENA, CALIFORNIA

Period of Record General Climate Summary - Cooling Degree Days

Station:(047643) SAINT HELENA													
From Year=1931 To Year=2006													
Cooling Degree Days for Selected Base Temperature (F)													
Base	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
55	4	13	43	106	244	381	501	483	390	215	45	5	2430
57	2	6	25	72	190	322	439	421	330	163	26	2	1998
60	1	1	9	36	121	235	346	328	243	96	10	0	1427
65	0	0	1	9	45	111	194	177	115	29	2	0	683
70	0	0	0	1	12	39	72	61	38	6	0	0	230

Cooling Degree Day units are computed as the difference between the daily average temperature and the base temperature. (Daily Ave. Temp. - Base Temp.) One unit is accumulated for each degree Fahrenheit the average temperature is above the base temperature. Negative numbers are discarded. Example: If the days high temperature was 95 and the low temperature was 51, the base 60 heating degree day units is $((95 + 51) / 2) - 60 = 13$. This is done for each day of the month and summed.

Table updated on Jul 28, 2006

Months with 5 or more missing days are not considered

Years with 1 or more missing months are not considered

Western Regional Climate Center; wrcc@dri.edu



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Appendix E

Saint Helena, California Cooling Degree Days Data

ATTACHMENT I-3

HYDROLOGY ANALYSIS

Farmstead at Long Meadow Ranch Lodging

Sherwood Design Engineers
April 18, 2017

Hydrology Analysis

FOR

Farmstead at Long Meadow Ranch Lodging

1000 Mills Lane

St. Helena, CA 94574

PREPARED FOR:

CITY OF ST. HELENA DEPARTMENT OF PUBLIC WORKS

1480 MAIN STREET

ST. HELENA, CA 94574

PREPARED BY:

SHERWOOD DESIGN ENGINEERS

58 MAIDEN LANE, 3RD FLOOR

SAN FRANCISCO, CA 94108

(415) 677-7300



April 18, 2017

Contents

A. Background 2

B. Calculation Methodology..... 2

C. Results..... 4

D. Conclusion..... 4

E. Attachments..... 4

A. Background

In the City of St. Helena letter titled “Notification of Incomplete Project and Identification of Outstanding Issues – 1000 Mills Lane, File #PL17-006” and dated March 22, 2017, the project applicant was asked to demonstrate that the proposed project improvements at 1000 Mills Lane will not increase the 10-year runoff volume above the pre-development 10-year runoff volume.

B. Calculation Methodology

The pre-development and post-development runoff rates and volumes were calculated using HydroCAD, a stormwater modeling software program. The runoff method chosen for use within the program was the SCS TR-20 method. The following inputs were used in the analysis:

Rainfall

Rainfall data was taken from the National Oceanic and Atmospheric Administration (NOAA) Point Precipitation Frequency Estimates for the St. Helena station located at 38.5067°,-122.4714° and imported into HydroCAD as an IDF file. The 10-year rainfall event was chosen for the runoff analysis.

Time of Concentration

For the pre-development condition, the time of concentration was calculated using TR-55 methodology within the HydroCAD program. The maximum flow length was assumed to be 900 feet, stretching from the northeast side to the southwest side with an average land slope of one percent. The length of sheet flow was taken to be the maximum allowable, 300 feet, and the remainder of the flow path, 600 feet, was taken to be shallow concentrated flow. The resulting time of concentration was 21.7 minutes.

For the post-development condition, the time of concentration was conservatively assumed to be 6 minutes or 0.1 hours, which is the minimum time of concentration allowable per TR-55. The actual project time of concentration is likely higher due to routing of runoff through raingardens and pervious paving, as well as the large contiguous areas of landscaping and farm area that will primarily drain through sheet flow.

Site Cover and Curve Number

The total project site area is 414,255 square feet. For the pre-development condition, all 414,255 square feet are fallow vineyard, and a Curve Number (CN) of 90 is assigned based on the most closely matching category in the TR-55 reference table of Cultivated Agricultural Land, Fallow, Crop Residue, Good Condition, Hydrologic Soil Group D. For the post-development condition, the weighted CN was calculated to be 91. The post-development site cover breakdown is summarized in the following table:

Table 1: Post-Development Site Cover Summary

Area Description	Area (sf)	CN	TR-55 Reference Table Description
Impervious Paving & Building Roofs	122,104	98	Impervious Areas, Paved parking lots, driveways, Hydrologic Soil Group D Impervious Areas, Roofs, Hydrologic Soil Group D
Pervious Paving	83,816	98	Impervious Areas, Paved parking lots, driveways, Hydrologic Soil Group D ¹
Water Features	2,454	98	Ponds and Lake Surfaces, Classified as Impervious, Hydrologic Soil Group D
Farm	27,251	86	Farmsteads, Hydrologic Soil Group D
Raingardens	3,951	80	Open Space (Lawns, parks, etc.), grass cover > 75%, Good Condition, Hydrologic Soil Group D
Landscaping	174,679	84	Open Space (Lawns, parks, etc.), grass cover 50% to 75%, Fair Condition, Hydrologic Soil Group D
¹ A CN of 98 for pervious paving is based on the conservative assumption that the pervious paving subbase storage layer is full.			

C. Results

The pre-development runoff volume is 156,540 cubic feet and the post-development runoff volume is 160,328 cubic feet. See Attachment 1, HydroCAD Report, for a complete summary of calculations and hydrograph outputs. The increase in runoff volume is 3,788 cubic feet, so the project must capture and retain at least 3,788 cubic feet of runoff.

The proposed project includes six raingardens, totaling 3,951 square feet. Per BASMAA requirements, the raingardens will have 6 inches of ponding, 18 inches of bioretention soil, and 12 inches of gravel. The storage volume provided in the raingardens is:

$$\begin{aligned}
 &3,951 \text{ sf raingarden} \\
 &\quad \times [(6 \text{ inches ponding} + 18 \text{ inches bioretention soil} \times 10\% \text{ porosity} \\
 &\quad + 12 \text{ inches gravel} \times 40\% \text{ porosity}) \times \left(\frac{1 \text{ ft}}{12 \text{ inches}}\right)] = 4,149 \text{ cf}
 \end{aligned}$$

Therefore, storage volume provided in the raingardens is sufficient to decrease the post-development runoff volume below the pre-development volume.

D. Conclusion

The proposed project will not increase runoff volumes for the 10-year storm above the pre-development condition runoff volume. This result was found using conservative assumptions for time of concentration and curve number, and does not account for storage provided in the pervious paving subbase, which would further improve post-development capture of runoff.

E. Attachments

Attachment 1 – HydroCAD Report



Farmstead HydroCAD

Prepared by Microsoft

Printed 4/18/2017

HydroCAD® 10.00 s/n 04616 © 2013 HydroCAD Software Solutions LLC

Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
174,679	84	50-75% Grass cover, Fair, HSG D (2S)
3,951	80	Bioretention area (2S)
414,255	90	Fallow, crop residue, Good, HSG D (1S)
27,251	86	Farmsteads, HSG D (2S)
122,104	98	Impervious surfaces (roofs + paving) (2S)
83,816	98	Pervious paving (2S)
2,454	98	Water features (2S)
828,510	91	TOTAL AREA

Farmstead HydroCAD

Prepared by Microsoft

Printed 4/18/2017

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Page 3

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
0	HSG C	
616,185	HSG D	1S, 2S
212,325	Other	2S
828,510		TOTAL AREA

Farmstead HydroCAD

Prepared by Microsoft

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Page 4

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
0	0	0	174,679	0	174,679	50-75% Grass cover, Fair
0	0	0	0	3,951	3,951	Bioretention area
0	0	0	414,255	0	414,255	Fallow, crop residue, Good
0	0	0	27,251	0	27,251	Farmsteads
0	0	0	0	122,104	122,104	Impervious surfaces (roofs + paving)
0	0	0	0	83,816	83,816	Pervious paving
0	0	0	0	2,454	2,454	Water features
0	0	0	616,185	212,325	828,510	TOTAL AREA

Farmstead HydroCAD

Type IA 24-hr Rainfall=5.68"

Prepared by Microsoft

Printed 4/18/2017

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Page 5

Time span=0.00-28.00 hrs, dt=0.05 hrs, 561 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Pre-Development

Runoff Area=414,255 sf 0.00% Impervious Runoff Depth=4.53"

Flow Length=900' Slope=0.0100 '/' Tc=21.7 min CN=90 Runoff=10.47 cfs 156,540 cf

Subcatchment2S: Post-Development

Runoff Area=414,255 sf 50.30% Impervious Runoff Depth=4.64"

Tc=6.0 min CN=91 Runoff=11.59 cfs 160,328 cf

Total Runoff Area = 828,510 sf Runoff Volume = 316,869 cf Average Runoff Depth = 4.59"
74.85% Pervious = 620,136 sf 25.15% Impervious = 208,374 sf

Farmstead HydroCAD

Prepared by Microsoft

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Type IA 24-hr Rainfall=5.68"

Printed 4/18/2017

Page 6

Summary for Subcatchment 1S: Pre-Development

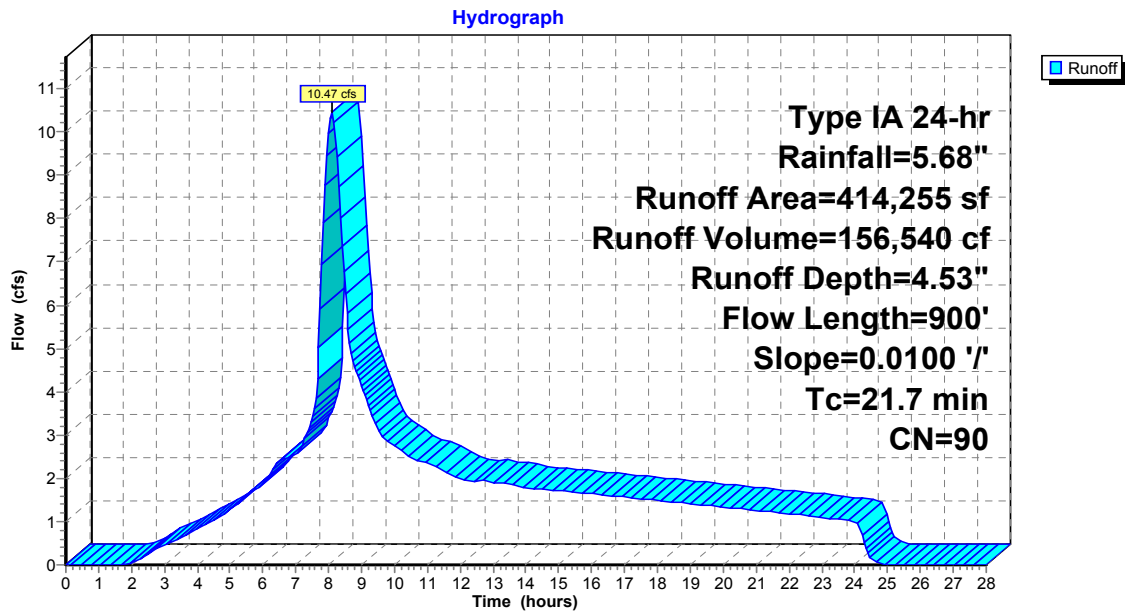
Runoff = 10.47 cfs @ 8.11 hrs, Volume= 156,540 cf, Depth= 4.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.05 hrs
Type IA 24-hr Rainfall=5.68"

Area (sf)	CN	Description
414,255	90	Fallow, crop residue, Good, HSG D
414,255		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	300	0.0100	0.43		Sheet Flow, Fallow n= 0.050 P2= 3.90"
10.0	600	0.0100	1.00		Shallow Concentrated Flow, Nearly Bare & Untilled Kv= 10.0 fps
21.7	900	Total			

Subcatchment 1S: Pre-Development



Farmstead HydroCAD

Prepared by Microsoft

HydroCAD® 10.00 s/n 04616 © 2013 HydroCAD Software Solutions LLC

Type IA 24-hr Rainfall=5.68"

Printed 4/18/2017

Page 7

Summary for Subcatchment 2S: Post-Development

Runoff = 11.59 cfs @ 7.89 hrs, Volume= 160,328 cf, Depth= 4.64"

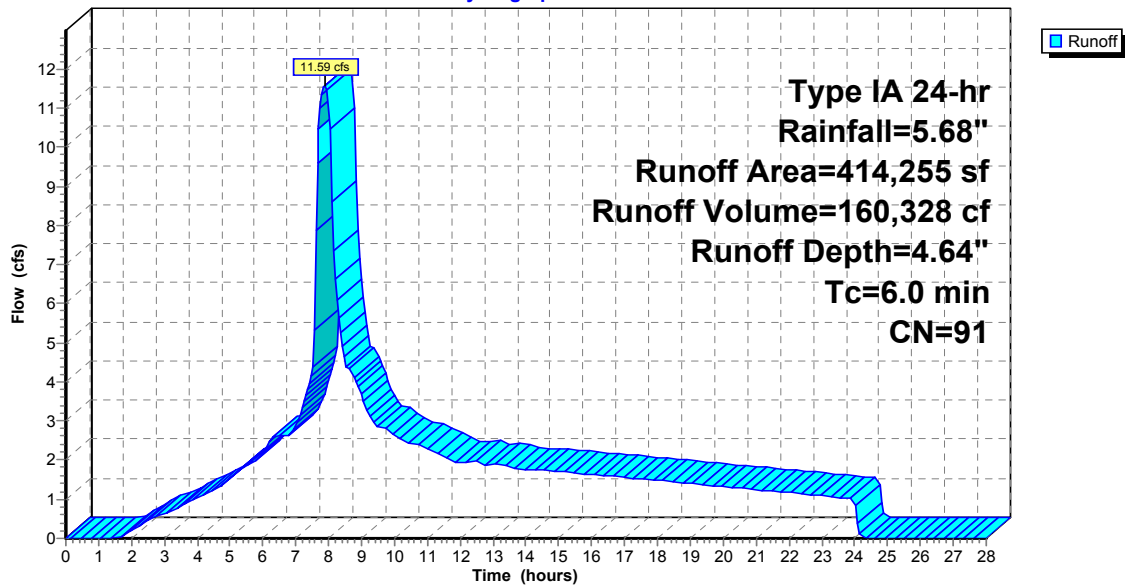
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.05 hrs
Type IA 24-hr Rainfall=5.68"

	Area (sf)	CN	Description
*	122,104	98	Impervious surfaces (roofs + paving)
*	83,816	98	Pervious paving
*	2,454	98	Water features
	27,251	86	Farmsteads, HSG D
*	3,951	80	Bioretention area
	174,679	84	50-75% Grass cover, Fair, HSG D
	414,255	91	Weighted Average
	205,881		49.70% Pervious Area
	208,374		50.30% Impervious Area

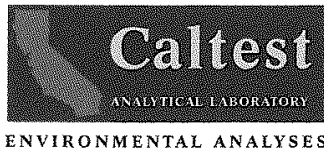
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 2S: Post-Development

Hydrograph



NELAP Accreditation 01103CA



ELAP Certification 1664

Monday, February 25, 2013

Jeff Feeney

1094 Valley View
Saint Helena, CA 94574

*TOM
HERE IS THE
TEST ON THE
WELL WATER
Paul
760 934-5619*

RE: Lab Order: N020444
Project ID: HOME OWNER'S 2

Collected By: CLIENT
PO/Contract #:

Dear Jeff Feeney:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, February 11, 2013. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Project Manager: Sara Elizabeth Fraley

2/25/2013 13:13

REPORT OF LABORATORY ANALYSIS

Page 1 of 4



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NELAP Accreditation 01103CA



ENVIRONMENTAL ANALYSES

ELAP Certification 1664

SAMPLE SUMMARY

Lab Order: N020444

Project ID: HOME OWNER'S 2

Lab ID	Sample ID	Matrix	Date Collected	Date Received
N020444001	1000 MILLS LANE	Water	2/11/2013 12:30	2/11/2013 13:50

2/25/2013 13:13

REPORT OF LABORATORY ANALYSIS

Page 2 of 4

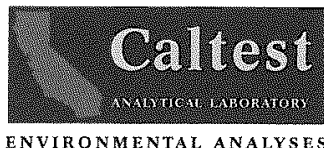


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ELAP Certification 1664

NARRATIVE

Lab Order: N020444

Project ID: HOME OWNER'S 2

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods (SM) 20th Edition except where noted (SMOL=online edition).

Caltest collects samples in compliance with 40 CFR, EPA Methods, Cal. Title 22, and Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Filtrations performed at Caltest for dissolved metals (excluding mercury) and/or pH analysis were not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

2/25/2013 13:13

REPORT OF LABORATORY ANALYSIS

Page 3 of 4

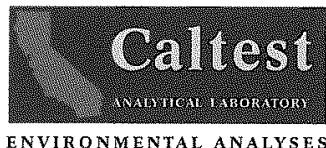


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NELAP Accreditation 01103CA



ELAP Certification 1664

ANALYTICAL RESULTS

Lab Order: N020444

Project ID HOME OWNER'S 2

Lab ID:	N020444001	Date Collected:	2/11/2013 12:30	Matrix:	Water			
Sample ID:	1000 MILLS LANE	Date Received:	2/11/2013 13:50					
Parameters	Result Units	R. L.	DF	Prepared	Batch	Analyzed	Batch	Qual
pH, Electrometric Analysis	Analytical Method:	SM20-4500-H B				Analyzed by:	CFG	
pH	7.6 pH Units		1			02/11/13 16:02	BIO 12128	
Calculation, Hardness	Analytical Method:	Calculation				Analyzed by:	LM	
Hardness Calculation	150 mg/L	0.5	1			02/14/13 00:00	CALC	
Calculation, Total Anions	Analytical Method:	Calculation				Analyzed by:	MYS	
Total Anions	4.5 meq/L		1			02/11/13 21:25	CALC	
Calculation, Total Cations	Analytical Method:	Calculation				Analyzed by:	LM	
Total Cations	4.5 meq/L		1			02/19/13 00:00	CALC	
Metals Analysis by ICP	Prep Method:	EPA 200.2			Prep by: UK			
	Analytical Method:	EPA 200.7				Analyzed by:	LM	
Boron	0.29 mg/L	0.1	1	02/13/13 00:00	MPR 11636	02/14/13 00:00	MIC 4037	
Calcium	33 mg/L	0.50	1	02/13/13 00:00	MPR 11636	02/14/13 00:00	MIC 4037	
Iron	ND mg/L	0.05	1	02/13/13 00:00	MPR 11636	02/14/13 00:00	MIC 4037	
Magnesium	16 mg/L	0.50	1	02/13/13 00:00	MPR 11636	02/14/13 00:00	MIC 4037	
Manganese	0.49 mg/L	0.0050	1	02/13/13 00:00	MPR 11636	02/14/13 00:00	MIC 4037	
Potassium	2.6 mg/L	1.0	1	02/13/13 00:00	MPR 11636	02/14/13 00:00	MIC 4037	
Silica (as SiO2)	25 mg/L	1.0	1	02/13/13 00:00	MPR 11636	02/14/13 00:00	MIC 4037	
Sodium	37 mg/L	1.0	1	02/13/13 00:00	MPR 11636	02/19/13 00:00	MIC 4037	
Zinc	0.33 mg/L	0.020	1	02/13/13 00:00	MPR 11636	02/14/13 00:00	MIC 4037	
Metals Analysis by ICPMS	Prep Method:	EPA 200.8			Prep by: UK			
	Analytical Method:	EPA 200.8				Analyzed by:	SMD	
Arsenic	0.55 ug/L	0.50	1	02/12/13 00:00	MPR 11630	02/13/13 10:13	MMS 6689	
Electrical Conductance Analysis	Analytical Method:	EPA 120.1 / SM2510B				Analyzed by:	AS	
Conductivity	390 umhos/cm	10	1			02/19/13 11:00	WET 6944	
Anions by Ion Chromatography	Analytical Method:	EPA 300.0				Analyzed by:	MYS	
Chloride	9.5 mg/L	1	1			02/11/13 21:25	WIC 3948	
Fluoride	0.26 mg/L	0.1	1			02/11/13 21:25	WIC 3948	
Sulfate (as SO4)	13 mg/L	0.5	1			02/11/13 21:25	WIC 3948	
Nitrate, as NO3	ND mg/L	0.5	1			02/11/13 21:25	WIC 3948	
Alkalinity, Total by Standard Methods	Analytical Method:	SM20-2320 B				Analyzed by:	AS	
Alkalinity, Total (as CaCO3)	197 mg/L	10	1			02/12/13 14:58	WTI 2336	
Bicarbonate (as HCO3)	240 mg/L	12	1			02/12/13 14:58	WTI 2336	
Carbonate (as CO3)	ND mg/L	6.0	1			02/12/13 14:58	WTI 2336	
Hydroxide (as OH)	ND mg/L	1.7	1			02/12/13 14:58	WTI 2336	

2/25/2013 13:13

REPORT OF LABORATORY ANALYSIS

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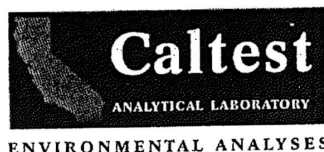
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LAB ORDER No.:

E060695
Page 1 of 3REPORT of ANALYTICAL RESULTSReport Date:
Received Date:02 JUL 2004
18 JUN 2004Client: Roger Rawlings
Quixote Winery
6126 Silverado Trail
Napa, CA 94558

Sampled by:

MEL ROYAL

Project: 584 MILLS LN.

<u>Lab Number</u>	<u>Sample Identification</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>
E060695-1	584 MILLS LN. (NEW WELL)	DRINKING WATER	18 JUN 04 13:00

Sonya L. Babcock
Project Manager

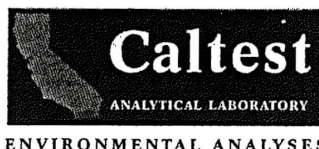
Christine Horn
Laboratory Director

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Results are specific to the sample as submitted and only to the parameters reported.
All analyses performed by EPA Methods or Standard Methods (SM) 18th Ed. except where noted.
Caltest certifies that test results meet all applicable NELAC requirements unless stated otherwise.
Results of 'ND' mean not detected at or above the listed Reporting Limit (R.L.).
'D.F.' means Dilution Factor and has been used to adjust the listed Reporting Limit (R.L.).
Acceptance Criteria for all Surrogate recoveries are defined in the QC Spike Data Reports.
Caltest collects samples in compliance with CFR 40, EPA Methods, Cal. Title 22, and Standard Methods.

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INORGANIC ANALYTICAL RESULTS

LAB ORDER No.:

E060695

Page 2 of 3

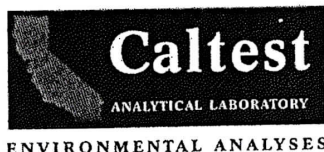
ANALYTE	RESULT	R.L.	UNITS	D.F.	METHOD	ANALYZED	QC BATCH	NOTES
LAB NUMBER: E060695-1								
SAMPLE ID: 584 MILLS LN. (NEW WELL)								
SAMPLED: 18 JUN 04 13:00								
Boron	0.2	0.1	mg/L	1	6010B	06.28.04	A040703UND	1.2
Calcium	31.	0.5	mg/L	1	200.7	06.28.04	A040703UND	1.3
Copper	ND	0.05	mg/L	1	200.7	06.28.04	A040703UND	1.4
Iron	1.2	0.1	mg/L	1	200.7	06.28.04	A040703UND	1.5
Magnesium	14.	0.5	mg/L	1	200.7	06.28.04	A040703UND	1.6
Manganese	0.41	0.03	mg/L	1	200.7	06.28.04	A040703UND	1.7
Silica, total	43.	1.	mg/L	1	6010B	06.28.04	A040703UND	1.8
Sodium	61.	1.	mg/L	1	200.7	06.28.04	A040703UND	1.9
Total Cations	5.4		meq/L	1	CALC	06.30.04		
Zinc	ND	0.05	mg/L	1	200.7	06.29.04	A040703UND	1.10
pH	8.4		Units	1	150.1	06.21.04	B040171PH	1.11
Adjusted SAR	2.6		Units	1	CALC	07.01.04		
ALKALINITY				2	SM2320B	06.28.04	I040033ALK	1.12
Bicarbonate as CaCO ₃	210.	20.	mg/L					
Hydroxide as CaCO ₃	ND	20.	mg/L					
Carbonate as CaCO ₃	ND	20.	mg/L					
Total Alkalinity as CaCO ₃	230.	20.	mg/L					
Chloride	12.	1.	mg/L	1	300.0	06.21.04	I040090IC	1.13

- 1) The following information is from California Code of Regulations Title 22; Napa County Env. Health "Interpreting Drinking Water Test Results"; UC Davis Department of Land, Air, and Water Resources - Cooperative Extension. This information is provided for your convenience. Caltest does not provide consultation regarding the suitability of water for a given purpose.
- 2) Boron has an agricultural recommended limit and a state drinking water Action (Advisory) Limit of 1.0 mg/L. Boron effects the health and production of boron sensitive plants. Drinking water with greater than 10 times the Action Limit Level are recommended for removal from service.
- 3) Calcium and Magnesium are related to water hardness. See Hardness remarks.
- 4) Copper has a drinking water Maximum Contaminant Level (MCL) of 1.0 mg/L.
- 5) Iron has a drinking water Maximum Contaminant Level (MCL) of 0.3 mg/L.
- 6) Magnesium and Calcium are related to water hardness. See Hardness remarks.
- 7) Manganese has a drinking water Maximum Contaminant Level (MCL) of 0.05 mg/L.
- 8) Silica has a recommended limit of 70 mg/L. Silica in water may etch various household materials such as leaded crystal, marble, tile, windows, and porcelain.
- 9) Sodium has a recommended limit of 100 mg/L. According to the American Heart Association, water containing more than 270 mg/L should not be consumed by those on a moderately restricted sodium diet.
- 10) Zinc has a drinking water Maximum Contaminant Level (MCL) of 5.0 mg/L.
- 11) Suggested pH is 6.5 - 8.5.
- 12) Alkalinity has no regulatory, or recommended level. However, higher alkalinity waters may have a distinctly unpleasant taste. Alkalinities of natural waters rarely exceed 400 to 500 mg/L (as CaCO₃).
- 13) Chloride has a drinking water Maximum Contaminant Level (MCL) of 500 mg/L, with a recommended level of 250 mg/L and a short term limit of 600 mg/L.

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LAB ORDER No.:

E060695

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INORGANIC ANALYTICAL RESULTS

ANALYTE	RESULT	R.L.	UNITS	D.F.	METHOD	ANALYZED	QC BATCH	NOTES
LAB NUMBER: E060695-1 (continued)								
Electrical Conductance	420.	10.	umhos/cm	1	SM2510B	07.01.04	I040034CON	1.2
Fluoride	0.5	0.1	mg/L	1	300.0	06.21.04	I040090IC	1.3
Hardness	140.	3.	mg/L	1	SM2340B	06.30.04		1.4
Nitrate as N	ND	0.1	mg/L	1	300.0	06.21.04	I040090IC	1.5
Solids, Dissolved	380.	10.	mg/L	1	SM2540C	06.21.04	I040044TDS	
Sulfate	9.9	0.5	mg/L	1	300.0	06.30.04	I040098IC	1.6
TDS to EC ratio	0.90			1	CALC	07.01.04		
Total Anions	5.2		meq/L	1	CALC	06.30.04		

- 1) The following information is from California Code of Regulations Title 22: Napa County Env. Health "Interpreting Drinking Water Test Results": UC Davis Department of Land, Air, and Water Resources - Cooperative Extension. This information is provided for your convenience. Caltest does not provide consultation regarding the suitability of water for a given purpose.
- 2) Electrical Conductance has a drinking water Maximum Contaminant Level (MCL) of 1,600 umhos/cm, with a recommended level of 900 umhos/cm and a short term limit of 2,200 umhos/cm. Electrical Conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25 degrees C.
- 3) Fluoride has a recommended level of 1.0 mg/L in temperate climates. Fluoride in concentrations greater than 3 mg/L can cause dental fluorosis (a brownish discoloration of the teeth).
- 4) Hardness is due primarily to calcium and magnesium carbonates and bi-carbonates. Up to 60 mg/L is SOFT. Between 60 to 120 mg/L is MODERATE (typically most desirable). Between 120 to 180 mg/L is HARD. Over 180 mg/L is VERY HARD.
- 5) NO3-N.HOME2 The sample was analyzed out of regulatory holdtime.
- 6) Sulfate has a drinking water Maximum Contaminant Level (MCL) of 500 mg/L, with a recommended level of 250 mg/L and a short term limit of 600 mg/L.

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Mar 23 2012 4:11PM Huckfeldt Well Drilling 707-252-4651

page 2



**HUCKFELDT
WELL DRILLING**

**CITY OF
ST. HELENA**

JUN 11 4 7004

**Department of
Public Works**

CARL DOUMANI
584 MILLS LANE
ST. HELENA, CA 94574
AP # 09-070-33

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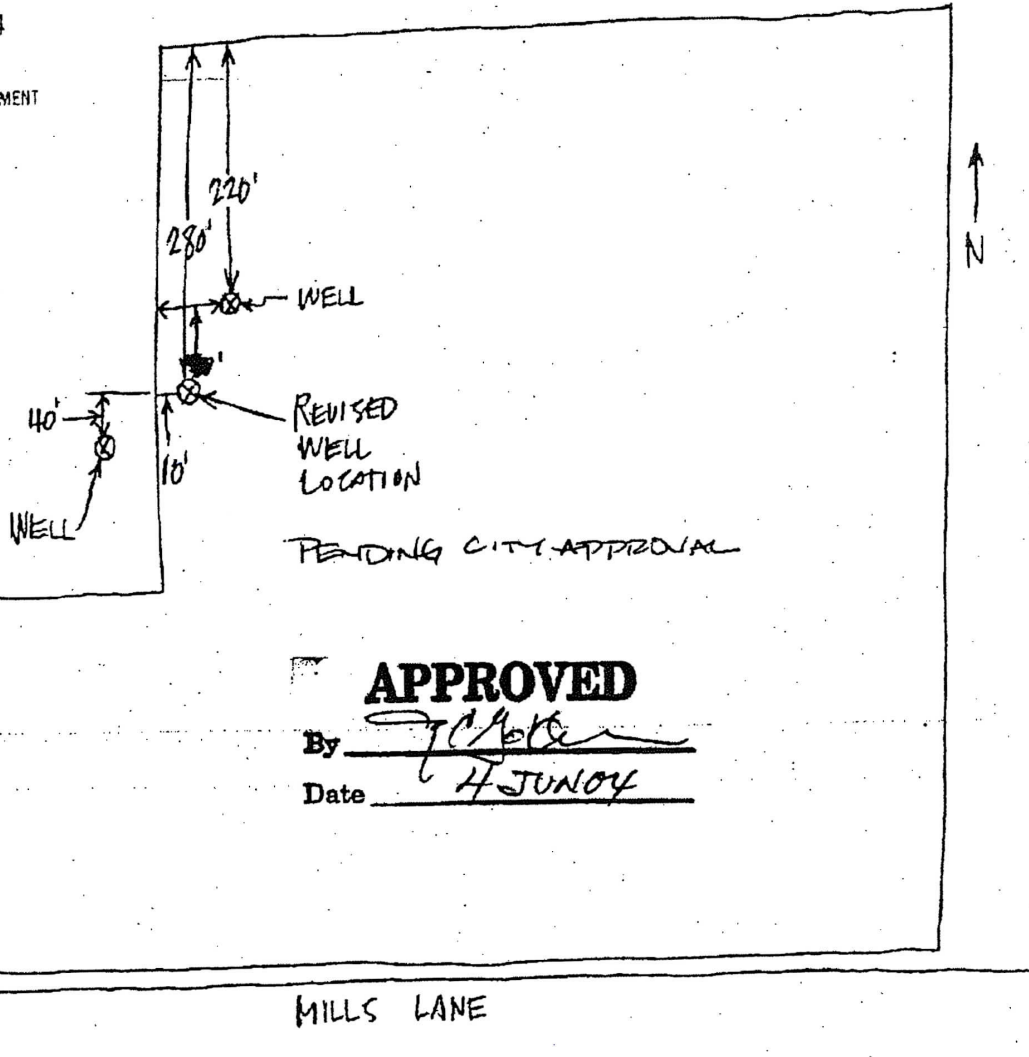
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DEPT. OF
ENVIRONMENTAL MANAGEMENT

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JAN 23 2004

DEPT. OF
ENVIRONMENTAL MANAGEMENT



APPROVED

By [Signature]

Date 4 JUN 04

Aug 16 04 09:35a HUCKFELDT WELL DRILLING

ORIGINAL
File with DWRSTATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction PamphletNo. **e013584**

Page 1 of 1

Owner's Well No. Well #1-'04

Date Work Began 6/9/2004 Ended 6/18/2004

Local Permit Agency Napa County Environmental Mgmt

Permit No. 96-12592

Permit Date 2/13/2004

DWR USE ONLY — DO NOT FILL IN	
STATE WELL NO / STATION NO.	
LATITUDE	LONGITUDE
APN/RS/OTHER	

GEOLOGIC LOG			WELL OWNER	
ORIENTATION (✓) ☒ VERTICAL ☐ HORIZONTAL ☐ ANGLE _____ (SPECIFY) DRILLING METHOD ☒ ROTARY ☐ FLUID BENTONITE Describe material, grain, size, color, etc.			Name <u>Quixote Winery</u> Mailing Address <u>6126 Silverado Trail</u> CA <u>94558</u> Napa CITY STATE ZIP	
DEPTH FROM SURFACE FL TO FL			WELL LOCATION Address <u>584 Mills Lane</u> City <u>St. Helena</u> CA County <u>Napa</u> APN Book <u>09</u> Page <u>070</u> Parcel <u>33</u> Township _____ Range _____ Section _____ Latitude _____ DEG. MIN. SEC.	
0: 3: BROWN CLAY 3: 40: SAND & GRAVEL 40: 55: BROWN CLAY 55: 60: SAND & GRAVEL 60: 120: BROWN CLAY 120: 140: SAND & GRAVEL 140: 160: BROWN CLAY 160: 220: SAND & GRAVEL 220: 235: BROWN CLAY 235: 300: SAND & GRAVEL 300: 320: BROWN CLAY 320: 350: SAND & GRAVEL 350: 360: BROWN CLAY 360: 380: SAND & GRAVEL 380: 420: GREEN CLAY 420: 440: GREEN SANDY CLAY 440: 460: GREEN CLAY 460: 520: GREEN SANDY CLAY CONTINUED CASING LAYOUT 300: 320: BLANK PVC 6" 320: 380: SCREEN PVC 6" .032 SLOT 380: 400: BLANK PVC 6"			LOCATION SKETCH NORTH MILLS LANE SOUTH Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.	
TOTAL DEPTH OF BORING <u>520</u> (Feet) TOTAL DEPTH OF COMPLETED WELL <u>400</u> (Feet)			WATER LEVEL & YIELD OF COMPLETED WELL DEPTH TO FIRST WATER <u>N/A</u> (FL) BELOW SURFACE DEPTH OF STATIC WATER LEVEL <u>26</u> (FL) & DATE MEASURED <u>6/18/2004</u> ESTIMATED YIELD <u>75</u> (GPM) & TEST TYPE <u>AIR LIFT</u> TEST LENGTH <u>3</u> (Min.) TOTAL DRAWDOWN <u>N/A</u> (FL) May not be representative of a well's long-term yield.	

TOTAL DEPTH OF COMPLETED WELL 400
(Feet)
May not be representative of well casing

DEPTH FROM SURFACE	BORE - HOLE DIA. (Inches)	CASING (S)						DEPTH FROM SURFACE	ANNULAR MATERIAL TYPE				
		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	CE- MENT (✓)		BEN- TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)		
FL to FL	FL to FL	BLANK					SCREEN	CON- DUCTOR	FILL PIPE	FL to FL	FL to FL		
0: 420	12							0: 65	✓			✓	CONCRETE
420: 520	9							65: 400				✓	#5 SAND
0: 120		✓				PVC F480	6 SDR-21	400: 520					CUTTINGS
120: 220			✓			PVC F480	6 SDR-21						
220: 240		✓				PVC F480	6 SDR-21						
240: 300			✓			PVC F480	6 SDR-21						

CORROSION STATEMENT

ATTACHMENTS (✓) ☐ Geologic Log ☐ Well Construction Diagram ☐ Geophysical Log(s) ☐ Soil/Water Chemical Analysis ☐ Other _____ ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.	CERTIFICATION STATEMENT I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief. NAME <u>HUCKFELDT WELL DRILLING</u> (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED) ADDRESS <u>2110 Penny Lane</u> Napa CITY CA 94559 DATE SIGNED <u>06/25/04</u> 439-746 C-57 LICENSE NUMBER Signed <u>[Signature]</u> WELL DRILLER/AUTHORIZED REPRESENTATIVE
--	---

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ATTACHMENT J

MEMO REGARDING: SCHEMATIC DESIGN CIVIL DESIGN NARRATIVE

Farmstead at Long Meadow Ranch Lodging

Sherwood Design Engineers
May 1, 2017



58 MAIDEN LANE, 3RD FLOOR, SAN FRANCISCO, CA 94108
(415) 677-7300 WWW.SHERWOODENGINEERS.COM

MEMORANDUM

Date	5/01/17
To:	Ted Hall
Cc:	Chris Hall
From:	Cody Anderson
Project Name:	Farmstead at Long Meadow Ranch Lodging
Project No:	16-163
Re:	Schematic Design Civil Design Narrative

The following summary describes proposed site improvements for the Farmstead at Long Meadow Ranch Lodging project. Narratives reflect the level of detail associated with schematic design level analyses, which will evolve as the project progresses through the design process.

1.0 Site Demolition

Demolition will involve clearing and grubbing of the existing site, which is currently fallow farmland with relatively little existing vegetation. Existing topsoil will be removed and stockpiled for amendment and reuse. If the site is to remain inactive between demolition and construction it will be properly stabilized against soil loss due to wind or stormwater.

2.0 Grading and Earthwork

Grading activities will be executed to accommodate new building pads and associated adjacent hardscaping and landscaping. Building elevations will be raised above existing grade, but will generally follow the existing gradual west-to-east slope, with grades conforming to existing elevations at the site perimeter. In order to raise grades to the desired elevations, imported fill will be required. Preliminary estimates yield approximately 8,000 cubic yards of fill to be placed on site, including base material and other fill. It is assumed that any cut material generated on-site will be reused in landscape berms. Existing top soil will be stockpiled and stored for reuse in landscaping.

3.0 Stormwater Management

Onsite stormwater management will include conveyances to protect buildings and structures from inundation mitigation measures to meet the current MS4 Permit per the regulations in the BASMAA Post-Construction Manual and limit post-construction runoff to pre-construction rates for the 10-yr storm. Management measures will include collection of building roof runoff and conveyance in storm drain pipes to localized raingardens. Permeable pavements are used instead of conventional pavement where feasible, including for parking stalls along the new driveway and for site courtyards and walks. Overflow volumes will be conveyed to existing City drainage infrastructure in La Fata Street, or will be discharged to infiltrate in the farm area in the northern portion of the site. Reports included in this submittal demonstrate the feasibility of proposed measures to meet City requirements. Building permit and construction documents may vary slightly from this planning level submittal but will demonstrate full compliance with City regulations and include final details for construction.



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(415) 677-7300 WWW.SHERWOODENGINEERS.COM

The project disturbs over one acre and will require a Stormwater Pollution Prevention Plan during the construction phase.

4.0 Utilities

Domestic Water:

The potable water demand associated with the proposed site improvements will be met by connecting to the existing City water service in La Fata Street, south of the project entrance. Potable water will be distributed throughout the site to supply the multi-purpose building, guest rooms, and fitness center. It is anticipated that approximately 5.4 acre-feet will be required annually. The 8" water line extended from La Fata Street will branch at the property line into the metered domestic supply system for the property and a separate fire protection loop that will feed hydrants and building sprinkler systems. Additionally, a new 8" line will be extended down Mill Street to connect to the existing water line in Hwy 29, creating a looped system.

Final sizes of site utilities will be determined during the future design phases and documented in the building permit submittal documents.

Irrigation Water:

Landscape and farm irrigation water will be supplied by two existing on-site wells. Preliminary estimates indicate approximately 3.5 acre-feet will be required annually. Existing wells have more than adequate capacity to meet projected irrigation demands and do not require any modification. This submittal includes well reports documenting well production.

Fire Protection:

A new fire protection loop will connect to the existing 8" line at La Fata Street, south of the project entrance. The fire line will supply four new fire hydrants and fire suppression sprinkler systems at the new buildings. Fire department connections will be provided in two locations with direct connections to the individual buildings.

As requested by the City of St. Helena, a new 8" water line will be installed to connect to the existing lines at La Fata Street and Hwy 29, creating a looped system.

Sanitary Sewer

A new gravity collection system will be installed to serve the proposed site improvements. Given the flatness of the site and distance to the nearest adjacent SS manhole (420' +/- south in La Fata), it is anticipated that one or more pump sumps will be required within the project boundary. The design intent is to return pumped effluent to gravity flow at the property line where it will then flow through a new SS line installed down La Fata Street. The report included in this submittal indicates that the existing system has adequate capacity to handle flows from this project.



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Electric and Telecom

New electric and telecom service will be established for the proposed site improvements. The new electric and telecom services will connect to existing vaults on Mills Lane and a new underground site distribution system will be constructed. Routing to be determined by Civil Engineer once the equipment location is set, but conduit, line and trench content details shall be determined by the Electrical Engineer.

Natural Gas

A new gas connection will be established along Mills Lane and will route to the proposed buildings, including new micro-turbines located in the fitness center building. Location and size of new connection are to be determined.

**CULTURAL RESOURCE RECONNAISSANCE OF 10.21+/- ACRES
CITY OF ST HELENA, NAPA COUNTY, CALIFORNIA
(Long Meadow Ranch APN's 009-070-049, 052, 053, &054)**

This report presents the results of a cultural resources survey conducted on May 31, 2016 by Jay M. Flaherty, Flaherty Cultural Resource Services (FCRS). Mr. Flaherty, the principal investigator, has a Master of Arts degree in Cultural Resources Management and more than 40 years of relevant experience in California, 34 years in Napa County; he is listed on the Registry of Professional Archaeologists (ID# 10330) and he meets the Secretary of the Interior's standard (48 FR 44716) for principal investigator. **No cultural resources were discovered within the project boundaries.** The survey area consisted of approximately 10+/- acres situated within the City of St Helena, Napa County, California. The investigation was mandated by the California Environmental Quality Act (CEQA) and was required by the City of St Helena after a determination that the project was situated in a cultural sensitive zone. The City of St Helena as the designated CEQA lead agency for approval of this project is responsible for compliance with requirements regarding the identification and treatment of historic and prehistoric cultural resources.

CEQA requires public or private projects financed or approved by public agencies to assess the effects of the project on cultural resources (Public Resources Code Section 21082, 21083.2, and 21084.1 and California Code of Regulations 15064.5). Cultural resources are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. CEQA states that if a project results in significant impacts on important cultural resources, then alternative plans or mitigation measures must be considered.

The CEQA Guidelines define significant historical resources as "resources listed or eligible for listing on the California Register of Historical Resources (CHR)" (Public Resources Code Section 5024.1). A historical resource may be eligible for inclusion in the CHR if it:

- A) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B) is associated with the lives of persons important in our past;
- C) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- D) has yielded, or may be likely to yield, information important in prehistory or history.

In addition, Section 15064.5(c)(3) of the CEQA Guidelines also requires consideration of an archaeological site that does not meet the criteria defined in subsection (a), but does meet the definition of "a unique archaeological resource" described in Section 21083.2 of the Public Resource Code.

Public Resources Code Section 5097 specifies procedures to be followed in the event that human remains are discovered. The disposition of Native American burials falls within the jurisdiction of the California Native American Heritage Commission (NAHC). California Code of Regulations Section 15064.5 (f) identifies the need to establish procedures to be followed in the event of the discovery during construction of buried cultural resources other than human bone on nonfederal land.

ENVIRONMENTAL SETTING

The geology in the survey area consisted of Alluvium (Keoing 1976). Soils consisted of Bale loam, Pleasanton loam, and Cortina very gravelly loam (Lambert and Kashiwagi 1978). Native vegetation would have been a Mixed Hardwood Forest (Kuchler 1973). CalVeg describes the vegetation as agriculture. Nearest water was Sulphur Creek 1,300 feet northwest of the project boundaries. The climate around the study area can be characterized as Mediterranean, dry in the summer and only moderately wet in the winter. Local climates present a complex mosaic in the North Coast Ranges and figure prominently in the vegetation patterning. Within the survey area, winter temperature can fall below 20 degrees F. but can reach highs of 70 degrees F. and in the summer, to 100+ degrees F.

PREHISTORIC/ETHNOGRAPHIC CONTEXT

Prehistoric human use of the survey vicinity extends over several thousand years. Fredrickson's discussion of the prehistory of the Russian River Subregion within Mendocino, Lake, and Napa Counties offers a time depth covering the entire Holocene to 12,000 B.P. (Fredrickson 1984). The current project area is located along the southern boundary of the Russian River Subregion, adjacent to the San Francisco Bay Region. The earliest widespread culture appears related to the Western Pluvial Lakes Tradition and known locally as the Borax Lake Pattern. This largely indigenous culture was dominant until groups of people from the North Bay encroached into the southern areas of the North Coast Ranges; the Berkeley Pattern represents these people. An innovation brought in by the southerners was the bowl mortar. The most recent prehistoric culture was very widespread throughout Central California. The so-called Augustine Pattern is notable for the move from dart to arrow points. Fredrickson's chronological scheme consists of five periods and associated patterns and Aspects. The periods and patterns are: the Emergent Periods (1850 to 500 AD) (Clearlake Aspect of the Augustine Pattern), the Upper Archaic Period (500 AD to 1,000 BC)(Houx Aspect of the Berkeley Pattern), Middle Archaic Period (1,000 BC to 3,000 BC) (Mendocino Aspect of the Borax Lake Pattern), Lower Archaic Period (3,000 BC to 6,000 BC) (Borax Lake Aspect of the Borax Lake Pattern), and the Paleo Indian

Period (6,000 BC to 10,000 plus BC) (Post Pattern).

Sawyer (1978:256-263) provides a modern summary of what is positively known about pre-contact Wappo culture and language. The Southern Wappo language group appears to have occupied the project area before the arrival of European settlers.

The history of the Wappo people is rather unique for California inasmuch they represent one-half of the parties involved in the Wappo-Pomo War. According to Sawyer (1978:258), the brief war began when some Alexander Valley Pomo took some of the Wappo winter supply of acorns. Two attacks occurred, several Pomo died, and the latter sought peace, which was granted by the Wappo. However, the Pomo seem to have ceded Alexander Valley to the Wappo inasmuch as they never reoccupied their villages. Another interesting aspect of Wappo language is that it represents what linguists call a relict language but how it became relict was disputed; at least in 1978. Sawyer (1978:258) argued that the fact that the Wappo language seems to confuse vocabulary items that differed from their Yukian parent language in tone only suggests that the Wappo language movement was from Yukian source to the Wappo and not the reverse; however, the matter is not settled.

The Wappo were a tribe that appears to have fought hard but unsuccessfully against Spanish incursions. Mission Sonoma held surviving Central and Southern Wappo people between 1823 and 1834 (Sawyer 1978:258) but it is likely that all Wappo language speakers ended up at this mission. Those that escaped missionization however were greatly influenced by the mission as determined by the number of Spanish loan words found in surviving Wappo dialects (Sawyer 1978:258).

Expectations: Prehistoric Archaeological Sites

The types of prehistoric sites likely to be found in the project area are typical for the North Coast Ranges of California. The predominant artifact will be stone; chipped items will be manufactured largely from local obsidian. Other local and exotic stone materials could include petrified wood, Monterey chert, quartz crystals, basalt, and quartzite. Bedrock features such as mortars, grinding slicks, and petroglyphs could occur but they are not expected and have not been reported from surrounding locations. Neither have pictographs. Both mortars and petroglyphs occur in Napa County. Open middens or deposits of locally darkened anthrosols are likely anywhere native inhabitants lived for an extended period. Anthrosols are locally darkened sediments often with a loamy texture, greasy feel, and very rich organic content; they are often acid reactive exhibiting broken pieces of shell and bone. Anthrosols may or may not occur in a mound. Human graves are typical occurrences in anthrosols and should be presumed whenever such deposits are encountered.

HISTORIC-PERIOD CONTEXT

Cultural context in California is generally broken into the historical, ethnographic, and prehistoric periods. Sometimes a protohistoric period is added between the ethnographic and historical periods. The dating of each period varies with location. In Napa County, it may be argued that the historical period began with the founding of Mission San Francisco Solana or Sonoma Mission in July 1823. However, European or more specifically Spanish influence affected Napa County's indigenous inhabitants before the turn of the nineteenth century; largely indirectly.

The Indian culture of Napa County and the North Bay Area more generally continued to exist with minimal effects from the occupation of the South Bay and San Francisco Peninsula by 1773 (Grossinger, et al. 2003:15). Milliken (1975) argued that for various reasons lands north of San Francisco Bay were not occupied by the Spanish while Spanish exploration and settlement immediately south of San Pablo Bay had a disastrous impact on native Californians before 1810 (Milliken 1995:10). Milliken established that indigenous people immediately north of San Pablo Bay moved south to the missions at San Francisco de Assis or Mission Dolores and San Jose between 1811 and 1816, while native people in Upper Napa Valley moved to Mission San Francisco between 1810 and 1822. With the founding of Mission San Rafael Arcangel in 1817 and Mission Sonoma, missionization of native Californians from further north occurred (Milliken 1995:10).

In September 1821, Mexico won its independence from Spain and soon thereafter Father Jose Altamira recently arrived at Mission Dolores disliked the climate conditions there and requested approval for founding a new mission further north of San Rafael. While the head of Roman Catholic Alta California missions was unresponsive to Altamira's request to establish a new mission, he by passed his superior and contacted California Governor Luis Arguello thought it wise to increase Mexican authority further north to offset any Russian explorations from the trading post at Fort Ross, established in 1812, on Bodega Bay. Arguello provided Altamira a few mounted soldiers and Indian workers for expedition beginning in June 1823 to determine a site for a new mission. While Mission San Rafael is thought to represent the first permanent Spanish settlement in the North Bay Area, Smilie (1975) and Milliken (1978) provide evidence for earlier poorly documented Spanish excursions into the North Bay before 1817. Grossinger, et al. (2003:15) stated that priests at Mission Dolores recorded entries for new baptisms of Napa County native people before 1817 in their "Libro de Bautismos;" however, some of these could represent voluntary relocation south by North Bay Area natives. Smith and Elliott (1878: 2) reported that the Spanish established a fort in 1776 "a short distance northwest of Napa;" however, this facility is not mentioned by Menefee (1873), Wallace (1901), the internet generally, or any verifiable source. During the brief period of Mexican control the government established fourteen land grants in Napa County (<http://www.lib.berkeley.edu/EART/ranchos>, accessed 20 May 2016).

In 1845, The United States and the Republic of Mexico fought a brief war after which the latter ceded almost all of its land north of the modern boundary separating the two countries to the former. On 5 July 1846, the military force of the briefly existing California Republic's was incorporated into the California Battalion commanded by U.S. Army Brevet Captain John C. Frémont and whatever remained of the California Republic ceased to exist on 9 July when U.S. Navy Lieutenant Joseph Revere raised the United States flag in front of Sonoma Barracks (Bancroft V:185-186). Thus began the period of American control of California. California became a state in 1850.

The project area is within the boundaries of Rancho Carne Humana. Rancho Carne Humana was a 17,962 Acre Mexican land grant given in 1841 by Governor Juan Alvarado to Edward Turner Bale. Land use in the general project area would have included many types of farming, ranching (including livestock grazing), dry crop farming, and today's irrigated crops.

Expectations: Historic Archaeological Sites

The types of historic archaeological sites associated with historic activities and that might be within the project area might include remains of rural residence and smaller structures associated with ranching and agricultural residential compounds. These structures may no longer be standing but might have been built of stone footings, dry-laid stone foundations, or directly on the ground. The ruins of a residence might include a group of stones exhibiting some organizational patterning, fragmented pieces of milled wood, square cut nails, and 19th-century trash; associated features might include stone fences, stone-lined wells, shallow stone-line root cellars, privy pits, and trash deposits. Other small features could exist with or independently from residential compounds.

PROJECT LOCATION AND DESCRIPTION

The survey area was situated within T. 8 N., R. 5 W., Rancho Carne Humana as depicted on the ST. Helena, California 1960, (PR 1993) 7.5' USGS topographic quadrangle (see Project Location Map). Boundaries were determined by the use of USGS topographic maps, project map, GPS, prominent natural and manmade features. The subject property's terrain was flat. Vegetation at the time of the survey consisted of several types of vegetable gardens. The proposed project consisted of a commercial development.

METHODS

The method employed in the cultural resources investigation consisted of two steps. Initially, the ethnographic literature, archaeological base maps, site records, and prior survey reports on file at the Historical Resources Information System Northwest Information Center, housed at Sonoma State University, were reviewed to determine whether recorded archaeological or ethnographic sites were situated within the project area. As a result of the records search (15-1676) it was determined that no archaeological or ethnographic sites had been recorded within the boundaries of the project. Several cultural resources

studies conducted in the recent past in the general project area resulted in the discovery of both prehistoric and historic sites in similar environmental settings to that of the study area. On the basis of the records search and past surveys in the area, the author formed the opinion that the probability of cultural resources being situated within the boundaries of the current study area was moderate to high.

It should be noted as part of the record search for this project The Directory of Properties in the Historic Property File for Napa County maintained by the Office of Historic Preservation (OHP) was reviewed to determine if any historic structures had been listed in the 10.21 project area. No historic structures have been listed in the 10.21 acre project area. Also reviewed at the Information Center were historic maps including General Land Office maps, United States Geological Survey maps, and United States Army Corps of Engineers maps.

The Native American Heritage Commission has been contacted and responded that they know of no cultural resources located within the 10.21 acre project. We have also contacted the Native American groups recommended by the Native American Heritage Commission, one group did respond with no concerns, the other groups have not responded to date (see attached).

The second part of the investigation consisted of a complete on-foot survey of the project area. Greater attention was paid to areas within the project area where the ground could be observed. North south transects were used to cover the project area. Transect width varied from a few meters to 30 m depending on ground cover. Ground visibility was fair in most areas.

RESULTS AND RECOMMENDATIONS

No cultural resources were discovered as a result of the survey; however, the possibility of buried or obscured cultural resources does exist. Should archaeological materials be discovered during future development, we recommend that all activity be temporarily halted in the vicinity of the find(s), and that a qualified archaeologist be retained to evaluate the find(s) and to recommend mitigation procedures, if necessary.

Prehistoric archaeological materials include, but are not limited to, obsidian, chert, and basalt flakes and artifacts, groundstone (such as mortars and pestles) and human graves. Historic archaeological materials include, but are not limited to, glass bottles, privys, and ceramics.

It is unlikely that human remains will be discovered during future development. If, however, human remains of any type are encountered it is recommended that the project sponsor contact a qualified archaeologist to assess the situation. We also suggest that Section 15064.5 of the CEQA Guidelines be reviewed, as it details the legal procedure to follow in case of the accidental discovery of human remains during excavation or construction.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

This report is issued with the understanding that it is the responsibility of the client to transmit the information and recommendations to appropriate parties including the lead agency so that the necessary steps may be taken by the various parties to appropriately implement them. The conclusions and recommendations presented in this report are s

The professional staff of Flaherty Cultural Resource Services (FCRS) makes every effort to perform contracted services in a professional manner with reasonable care and completeness: The report's conclusions however are not infallible. Further, the report is based upon field considerations extant at the time of the investigation and there is the potential for discovery of buried cultural resources or those obscured by dense surface vegetation and brush, or, other natural or human-induced factors, or, new classes of cultural resources. FCRS staff is therefore unable to eliminate all risks, provide guarantees, or warrant our conclusion(s) against unforeseen or hidden discoveries.

FCRS's report must not be subject to unauthorized reuse; that is, reuse on other projects without written authorization of FCRS; this report is subject to United States and International copyright protection. Authorization for reuse is essential because FCRS must evaluate the document's applicability given new circumstances; for example, over time, news laws are passed and or regulations change that affect cultural resource protection, or, the report's applicability to new projects and circumstances. Field and other conditions will often necessitate clarifications, adjustments, and modifications to FCRS's report. Therefore, FCRS should be engaged to prepare the necessary clarifications, adjustments, modifications, or other changes before the report is reused for any project or purpose not specifically reported. Further, the content of this report may not be changed or altered.

If FCRS is not retained to prepare adjustments, clarification, or modifications to the report, FCRS shall not be held responsible for any claims, including but not limited to claims arising or resulting from the performance of any such services prepared by other persons or entities, and any or all claims arising or resulting from the clarifications, adjustments, modifications, or any changes necessary to reflect changed field or other conditions.

Jay M. Flaherty, RPA-10330
Flaherty Cultural Resource Services (FCRS)



June 11, 2020

Dear Neighbor:

We hope you and your family are well. We have worked hard during the past weeks to serve our community, as well as to provide continued opportunities for our employees. The shelter-in-place requirements created by the Covid-19 virus have challenged us all and we are cautiously optimistic as our community begins to reopen. We are very grateful for your support.

The City of St. Helena recently announced the release of the Mitigated Negative Declaration in response to our request for a use permit modification for Farmstead at Long Meadow Ranch (restaurant, general store and farmer's market) and for a use permit for Farmstead at Long Meadow Ranch Lodging. We would like to share our plans with you and to offer you the opportunity to learn more through this website and a virtual open house.

Since the public meeting to discuss our project several years ago, there have been no material changes to our plans. The intervening time has been used to complete the many environmental studies required by California law (CEQA). We are pleased to report that our plans do not result in significant environmental issues as noted in the Mitigated Negative Declaration released by the City of St. Helena. You can view the documents on the [City of St. Helena website](#).

There are two parts to our project: 1) modifications to the existing Farmstead property, and 2) an expansion of the campus to include lodging.

Existing Farmstead Property

For the past 10 years Farmstead at Long Meadow Ranch has been providing local residents and visitors lunches, dinners, beverages and snacks at our location at the corner of Charter Oak and Main Street. We also host private parties, operate a certified farmer's market and have a café and general store at the site. Our application updates the description of our business to be consistent with our activities over these past 10 years. **We are not requesting any expansion of use beyond our current activities.**

In the same application we have also requested some changes that will improve our internal operations and improve our offerings to customers. We plan to modify the existing farmer's market building to allow the butchery to move out of the back of the restaurant, which will allow us to offer fresh meats and charcuterie as part of our continuing farmer's market. Similarly, we are moving our baking operation from the restaurant to an existing kitchen in the Logan-Ives House which will improve our bread and breakfast pastry offerings.

In addition, we are creating additional dry storage to support the restaurant and adding a sound wall at the outdoor bar. In total, the building expansions add a very modest 1,273 square feet to the site. We have also added 11 parking spaces since the original use permit was approved.

738 Main Street, St. Helena, CA 94574



Lodging

We are planning an expansion of the Farmstead campus with the addition of 10 acres situated to the east of the St. Helena Veterinary Hospital. This lodging site will be connected to the restaurant and general store site by way of an exchange of a portion of property with the veterinary clinic and will create a 15-acre agriculturally oriented campus. Approximately 4 acres of the property is zoned agricultural. In keeping with our commitment to farm-to-table production and organic farming, we will raise fruits and vegetables for the restaurant and farmer's market on the site.

The planned 65 units of lodging are housed in 10 sustainably designed buildings on the portion of the property that is already zoned for commercial use. In addition, there is a multi-purpose building for lodging guests' breakfast and other activities; a spa for lodging guests only; a bike shop for guests; and other amenities. There will also be adult and children's pools. Landscaping will reflect the agricultural nature of the property.

All of the buildings are single-story with a farmhouse design consistent with the veterinary clinic and current Farmstead buildings. The property will be shielded from Mills Lane and Main street by two to three rows of commercially producing fruit trees. **We are requesting no variances from zoning requirements and the project is consistent with all of the City's physical development standards.**

One of the attractions of our lodging location is the opportunity for guests to visit downtown St. Helena. All of the rooms will have two bicycles parked at the door. Guests will be encouraged to use the bikes or to walk to downtown St. Helena and to visit local wineries and tasting rooms. Lodging guests will access the property from Mills Lane.

We will provide 80 parking spaces (15 more than required by city code) and will have an off-site, off-street employee parking lot. Mills Lane will be re-aligned with Grayson Street and widened to provide two lanes of traffic with parking on both sides of the street and a combination sidewalk and bike path leading to Main Street, including a pedestrian crosswalk.

Because our existing operations include many of the functions required to support the lodging expansion (e.g., foodservice, maintenance, marketing, guest services, administration, etc.), we will not require a significant increase in employees to staff the larger operation (especially when compared to a new stand-alone hotel). We are negotiating a development agreement with the City and are committed to making a large contribution to help fund affordable workforce housing in the City.

738 Main Street, St. Helena, CA 94574



As long-term residents and farmers, our desire has been to create a guest experience that is consistent with the local, agricultural values of the St. Helena community. We do not seek to build just another hotel in the Napa Valley, but instead, to create a property that is unique and educational – one that is an authentic representation our community's agrarian roots. We are proud that our business is local-serving and we are especially pleased that the lodging operation is projected to contribute over two million dollars (\$2M) annually in tax revenue to the City.

This project represents a significant opportunity to keep visitors in St. Helena, spending money in our restaurants and Main Street shops, while having minimal impact compared to a new stand-alone hotel.

With approval by the St. Helena Planning Commission and St. Helena City Council in the third quarter of this year, we project opening the lodging site in 2022.

We will invite you soon to an “open house” meeting via Zoom where we will discuss our plans and invite your questions.

Regards,

Ted, Laddie and Chris Hall

738 Main Street, St. Helena, CA 94574



July 24, 2020

Dear Neighbor:

We hope you and your family are well and wanted to confirm that you had a chance to read our letter from June 11th describing our family's plans for Farmstead.

We are writing again to encourage you to share comments and ask questions about the plans. Enclosed, you will find a postcard that you can return to us with your thoughts, or you can request that we give you a call to discuss the project in person.

As a reminder, there are two parts to our project: 1) modifications to the existing Farmstead property, and 2) an expansion of the campus to include lodging.

- We have requested some modest (less than 1,300 square feet) changes that will aid our internal operations and improve our offerings to customers at the existing Farmstead restaurant. Our application also updates the description of our business to be consistent with our activities over these past 10 years, including private parties and meetings. **We are not requesting any expansion of use beyond our current activities.** (Exhibit I, attached)
- The Farmstead campus will be expanded with the addition of 10 acres to the south where 65 units of lodging will be added in 10 sustainably designed buildings. In keeping with our farm-to-table and organic farming commitment, we will raise fruits and vegetables for the restaurant and farmer's market on almost 40% of the site. **We are requesting no variances from zoning requirements. The project is consistent with all of the City's physical development standards.** (Exhibit II, attached)

We invite you to learn more by visiting longmeadowranch.com/project. Also, we recently gave an informational presentation to the City Council, which can be found online (including the video) at the City's website.

This project represents a significant opportunity to keep visitors in St. Helena, spending money in our Main Street shops and restaurants, while providing \$2M in new tax revenues to the City. With timely approval by the St. Helena Planning Commission and St. Helena City Council, the lodging will open in late 2022.

Please send us your comments on the attached postcard or feel to reach out directly via email at tedhall@longmeadowranch.com.

We look forward to hearing from you.

Regards,

A handwritten signature in blue ink, appearing to read "Ted Laddie & Chris".

Ted, Laddie and Chris Hall

738 Main Street, St. Helena, CA 94574

Exhibit I: Existing Site Changes

We are planning some minor changes to existing operations

- Enclose the Farmer's Market building to incorporate a butcher shop with fresh meats and charcuterie (Farmer's market will continue)
- Relocate our bakery activity to the Logan-Ives House existing commercial kitchen
- Relocate the Chef's Table experience to the new multi-purpose building (see Lodging Project)
- Add expanded dry storage for the restaurant
- Provide dry storage to support the private party spaces
- Construct a sound wall at the outdoor bar and adding sound protection to HVAC
- Total additions are modest (approximately 1300 square feet)



To view a complete project overview, please visit longmeadowranch.com/project



Exhibit II: Lodging Project

We are planning the expansion of the Farmstead campus

- Expand overall footprint onto 10+ acre parcel to the south
- Construct and operate 65 rooms of lodging
- Design an integrated campus compatible with existing Farmstead structures and "farmscape"
- Provide primary food & beverage service from existing Farmstead
- Maintain 4 acres zoned for agriculture
- Employ state-of-the-art sustainable building and operating practices, including solar electricity and ice production, energy storage systems and water conservation technology



To view a complete project overview, please visit longmeadowranch.com/project



**FARMSTEAD AT LONG MEADOW RANCH
738 Main Street
Saint Helena, CA. 94574**

August 10,2020

Ms. Dianne Fraser
2612 Colombard Court
St. Helena, CA. 94574
dedefraser59@gmail.com

Dear Ms. Fraser:

Thank you for your comments on our proposed lodging project at Farmstead and your concerns about parking and workforce housing.

We appreciate your concern about parking along Charter Oak. We hope we have been, and continue to be, good neighbors.

We thought you might like to know about our parking capacity and our policies. We have expanded the number of spaces to 59 from an initial 48, one more than required by city code for all of the approved uses. Our employees are prohibited from parking in our parking lot or on the public street. They must use our employee parking lot (currently located across Main Street off Charter Oak) and we have zero tolerance for non-compliance.

When we have parties or events that require additional parking, we implement valet parking to increase the number of parking spaces available onsite and we employ an offsite lot for the overflow. For private parties with 40 or more persons attending, we require the host to have all attendees arrive by a van or bus shuttle. We also require that shuttles and vans not park on nearby city streets (except for loading and unloading).

We agree that workforce housing is a critical need for our community. We have been working with Our Town St. Helena for several years to facilitate new development in St. Helena. Our development agreement with the City provides for an unprecedented total contribution of \$3.2M to the City's Housing Impact Fund, \$1M of which has been earmarked for Our Town St. Helena to use for site acquisition. We have agreed to the highest level of financial support for workforce housing in Napa County history.

OTSH has several potential projects specifically identified which could result in 30-50 units of workforce housing being constructed over the next couple of years. Our contribution will enable OTSH to proceed and, ultimately, to lever our contribution with funding from other sources for significant impact for our community. We are committed to seeing housing actually constructed.

Thank you for your interest in our project. Please feel free to reach out to us at tedhall@longmeadowranch.com or 707-963-5268 if you would like to discuss any aspect of our project.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Ted W. Hall', with a stylized 'A' and 'H'.

Ted W. Hall

**FARMSTEAD AT LONG MEADOW RANCH
738 Main Street
Saint Helena, CA. 94574**

August 10,2020

Mike and Jessica Dodson
905 Charter Oak Avenue
St. Helena, CA. 94574
(415) 265-4165
mike@mosnow4.com

Dear Mr. & Ms. Dodson:

Thank you for your comments on our proposed lodging project at Farmstead. We very much appreciate your support for our project.

Thank you for your question about our plans for the north boundary of property that lies along the rear gardens of the houses along the south side of Charter Oak Avenue. We plan to construct an appropriate fence to restrict casual access and domestic pets from entering our organic farming operations. We would be pleased to consult with you regarding the choice of fencing materials and design.

Since a walkway will parallel the fence line, we are planning a buffer planting between the walkway and the fence. We have not yet selected the plant material, but our plan is to grow an edible crop that will provide some screening for the benefit of our neighbors.

Thank you for your interest in our project. Please feel free to reach out to us at tedhall@longmeadowranch.com or 707-963-5268 if you would like to discuss any aspect of our project.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Ted W. Hall', with a stylized 'A' and 'H'.

Ted W. Hall

**FARMSTEAD AT LONG MEADOW RANCH
738 Main Street
Saint Helena, CA. 94574**

August 10,2020

Mr. Doug Stanton
862 Mills Lane
St. Helena, CA. 94574
(707) 967-0482
doug@stantonvineyards.com

Dear Mr. Stanton:

Thank you for your comments on our proposed lodging project at Farmstead. We are responding to your concerns with this letter and we invite you to engage us in further dialogue if you so desire.

We would like to raise seven points regarding our project:

1. Fence. Based on our discussions with you during the early design process four year ago, we believe that we have addressed your concerns that guests or employees might wander onto your vineyard property to the east of the project. We have added an aesthetically attractive fence to delineate our property from yours. We have chosen a split rail fence that will run the length of the property line except immediately behind the multi-purpose building. Should you wish to have a different type of fence, we would be pleased to accommodate you.
2. Building sound and lighting. With regard to concerns about lighting and sound, we plan a 6-foot fence immediately behind the multi-purpose building along our shared property line. This fence will attenuate sound from the back-of-the-house activity. The building design also includes the enclosure of all mechanical systems both on the roof and at grade, which will significantly reduce sound from the building. All lighting will be shielded and/or provided by down-light fixtures. All lighting and sound shielding will comply with City code. With your residence located 400 feet from the multi-purpose building, and with an intervening vineyard, there should be no issues.
3. Ground Water. With regard to ground water concerns, we have two existing wells servicing the property and we do not anticipate drilling any additional wells. We are currently using the wells for irrigation of crops on the property with ample supply. The project will use city water, not ground water, as its potable water source. The wells have been tested and the analysis by our civil engineer (as documented in the CEQA analysis) shows that the wells only need to be pumped 5% of the time (about 8 hours a week) to fully meet the irrigation needs of our project, conservatively based on just 50% of the wells' rated production,.

We are installing a recycled water main (a “purple pipe”) along the length of Mills Lane, which will bring water from the City’s water treatment plant following its upgrade. When completed, we expect the recycled water to reduce our use of ground (subject to meeting quality standards) for irrigation. Importantly, recycled water will also be available to you and to our neighbors along Mills Lane. (Note: The cumulative savings from the recycled water system will more than offset the project’s incremental use of potable water.)

4. Stormwater Drainage. The city’s storm water drainage system is deficient in the Mills Lane area and is missing a key link to deliver stormwater to the Napa River. The stormwater inlet at the corner of Mills and La Fata is not connected to any pipe and simply goes into the ground. Further, the Mills Lane side ditch does not have the capacity to drain the large area from which storm water flows from the south and from the west starting at Main Street and beyond. The city has identified Mills Lane as a major issue for potential flood events and, as you know, the road has been flooded during recent high rainfall events. As a part of our project, the stormwater system will be completed along the length of Mills Lane and an outfall will be constructed at the Napa River. This project will materially improve the drainage of your property and will benefit all of the neighbors along the road.
5. Relocation of Intersection. The current intersection of Mills Lane with Main Street is in an awkward, challenging location in relation to the intersection of Grayson and Main Street – especially with traffic accelerating towards town from a green signal at Grayson. The project will realign Mills Lane with Grayson and will improve the railroad crossing as well. The intersection will be protected by a synchronized signal, which will materially improve safety. A protected bike and pedestrian crossing will also be installed. These significant safety improvements will benefit our lodging project, but also all of the neighbors on Mills Lane.
6. Appropriate use of property. We are not requesting any change in zoning for our project. As you are aware, our property includes both agriculture and service commercial zoning, which was recently reaffirmed by the City’s General Plan. We will farm the portion of the property that is zoned for agriculture (with enthusiasm). The lodging project is located in the service commercial zoning area and is an appropriate use for this zoning. The service commercial zoning permits development of the property for commercial purposes, including a commercial office building, by right (i.e., without a use permit). We believe our distinctive farming-oriented lodging project is an attractive and appropriate use – especially when compared to permitted alternative commercial uses.
7. Workforce Housing. We agree that workforce housing is a critical need for our community. We have been working with Our Town St. Helena for several years to facilitate new development in St. Helena. Our development agreement with the City provides for an unprecedented total contribution of \$3.2M to the City’s Housing Impact

Fund, \$1M of which has been earmarked for Our Town St. Helena to use for site acquisition. OTSH has several potential projects identified which could result in 30-50 units of workforce housing being constructed. Our contribution will enable OTSH to proceed and, ultimately, to lever our contribution with funding from other sources for significant impact for our community. We are committed to seeing housing actually constructed.

Overall, our project provides significant benefits for the City and to the Mills Lane neighborhood. We believe that our agriculture-oriented project is right for St. Helena and its historical values. Further, without our project, the funds will not be available for stormwater drainage, intersection relocation, “purple pipe” and workforce housing. These initiatives would be substantially delayed or not occur at all. In addition, revenues to the General Fund through TOT and sales taxes will increase by more than \$2M annually.

Thank you for your interest in our project. Please feel free to reach out to us at tedhall@longmeadowranch.com or 707-963-5268 if you would like to discuss any aspect of our project.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Ted W. Hall', with a stylized 'A' at the top and a long horizontal stroke at the bottom.

Ted W. Hall

**FARMSTEAD AT LONG MEADOW RANCH
738 Main Street
Saint Helena, CA. 94574**

August 10,2020

Ms. Leslie Stanton
St. Helena, CA. 94574

Dear Ms. Stanton:

Thank you for your comments on our proposed lodging project at Farmstead in your letter to the City on June 26th. We are responding to your concerns with this letter and we invite you to engage us in further dialogue if you so desire. Please know that we have been farming in the valley for more than 30 years and we believe that we understand the farming issues impacting our neighbors on Mills Lane as well as for our own property.

With regard to the number of employees, because we currently employ many of the people we need to run the business, the lodging project will add just 28 hourly and 9 management positions to handle the lodging activities. On a 7-day-a-week basis, we will be adding a total of 51 employees, but only 37 (28+9) additional employees will be on the property at any one time. Our employees will park in an employee parking lot (73 spaces) at the corner of McCormick and Dowdell and will either walk or take a shuttle to the Farmstead campus. We will add sidewalks to La Fata as part of the project. There will be no employee traffic on Mills Lane.

With regard to ground water concerns, we have two existing wells servicing the property and we do not anticipate drilling any additional wells. We are currently using the wells for irrigation of crops on the property with ample supply. The project will use city water, not ground water, as its potable water source. The wells have been tested and the analysis by our civil engineer (as documented in the CEQA analysis) shows that the wells only need to be pumped 5% of the time (about 8 hours a week) to fully meet the irrigation needs of our project, conservatively based on just 50% of the wells' rated production.

As part of our project, we are installing a recycled water main (a "purple pipe") along the length of Mills Lane, which will bring water from the City's water treatment plant, following its upgrade. When completed, we expect the recycled water to reduce our use of ground (subject to meeting quality standards) for irrigation. Importantly, recycled water will also be available to our neighbors along Mills Lane. (Note: The cumulative savings from the recycled water system will more than offset the project's incremental use of potable water.)

With regard to required fencing, based on our discussions with Doug Stanton during the early design process four year ago, we believe that we have addressed his concerns that guests or employees might wander onto the vineyard property to the east of the project. We have added an aesthetically attractive fence to delineate our property from the Stanton vineyard. We have chosen a split rail fence that will run the length of the east property line, except immediately behind the multi-purpose building. To clarify, the parking lot is not adjacent to the Stanton

property. Should the Stanton family wish to have a different type of fence, we would be pleased to accommodate.

With regard to the use of agricultural land for the project, we are not requesting any change in zoning for our project. Our property includes both agriculture and service commercial zoning, which was recently reaffirmed by the City's General Plan. We will farm the portion of the property that is zoned for agriculture (with enthusiasm). The lodging project is located in the service commercial zoning area and is an appropriate use for this zoning. The service commercial zoning permits development of the property for commercial purposes, including a commercial office building, by right (i.e., without a use permit). We believe our distinctive farming-oriented lodging project is an attractive and appropriate use – especially when compared to permitted alternative commercial uses.

Overall, our project provides significant benefits for the City and to the Mills Lane neighborhood. We believe that our agriculture-oriented project is right for St. Helena and its historical values. Further, without our project, funds will not be available for stormwater drainage, intersection relocation, "purple pipe" and workforce housing. These important initiatives would be substantially delayed or not occur at all. In addition, revenues to the General Fund through TOT and sales taxes will increase by more than \$2M annually when the lodging is occupied.

Thank you for your interest in our project. Please feel free to reach out to us at tedhall@longmeadowranch.com or 707-963-5268 if you would like to discuss any aspect of our project.

Sincerely yours,



Ted W. Hall

**FARMSTEAD AT LONG MEADOW RANCH
738 Main Street
Saint Helena, CA. 94574**

August 10,2020

Ms. Maya DeRosa
Planning & Building Director
City of St. Helena
mderosa@cityofsthelena.org

Re: Napa Housing Coalition letter concerning "Housing Impacts: Farmstead Hotel"

Dear Maya:

Thank you for forwarding the Napa Housing Coalition's letter with concerns about the housing impacts of the "Farmstead Hotel." We appreciate the Coalition's concerns. However, we also need to point out that the letter made several incorrect assumptions about the number of employees for the Farmstead lodging project.

We plan to have 27 wage employees and 9 managers on a daily basis. For a 7-day week operation this translates to a total of 51 employees. The 65 employees identified in the CEQA document was a conservative (i.e., high) number chosen by the City of St. Helena to make sure that the traffic and air quality studies were conservative in their analyses.

Farmstead and its services affiliate already employ many of the people needed to operate the aggregate business, including culinary staff, food & beverage management, marketing, finance & accounting, administration, human resources (including recruiting and training), guest services, reservations, landscaping, building & equipment maintenance and farming. As a result, the lodging project results in substantially fewer incremental employees than would be required to open an equivalently sized full-service hotel.

Sincerely yours,



Ted W. Hall

cc: Napa Housing Coalition

CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION NO.

**RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ST. HELENA
RECOMMENDING THAT THE CITY COUNCIL OF THE CITY OF ST. HELENA ADOPT
A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND
REPORTING PROGRAM, AND RECOMMENDING THAT THE CITY COUNCIL ADOPT
A RESOLUTION APPROVING DESIGN REVIEW AND A USE PERMIT AMENDMENT
FOR THE FARMSTEAD AT LONG MEADOW RANCH PROJECT AT 738 MAIN
STREET IN THE CITY OF ST. HELENA, CALIFORNIA**

PROPERTY OWNER: Dixie & Martin Vanderkamp

APN: 009-112-017

Recitals

1. On May 23, 2017, LMR Main Street Partners LLC submitted applications for a Use Permit Amendment and Design Review approval to memorialize all uses currently occurring on-site and to make several small additions to existing buildings at 738 Main Street in the Service Commercial district as described below:
 - A 160-seat restaurant; and
 - A wine tasting room, retail sales and offices in the historic Logan-Ives house; and
 - A covered open-air produce market; and
 - A café serving breakfast items and coffee (open from 7 a.m. to 12 p.m. with 40 outdoor seats); and
 - Various business and private social events occurring throughout the year. Events would occur between 9 am and 10 pm. Events up to 75 persons would occur daily while events of 76 to 200 persons are limited to four (4) per week. Outdoor live and recorded amplified music is included with these events; and
 - Local community events up to 6 times per year with up to 300 attendees;
 - Fitness classes including yoga and Pilates beginning at 9 a.m. (offered 2-3 times per week with up to 12 attendees); and
 - Film screenings. Films are screened four times per year, with four showings each day. Twenty to 40 attendees at each screening; and
 - A 408 sf addition to the farmer's market building for the addition of a butcher shop; and
 - A 355 sf expansion of dry storage space off the restaurant kitchen; and
 - A 510 sf expansion of storage space on the back side of the south wing events building on the southeast corner; and
 - A sound barrier approximately 4 ft. in height to an existing air-conditioning unit on the restaurant building; a sound attenuator to the exhaust outlet on the primary air conditioning unit on the restaurant building; and a sound barrier to the kitchen exhaust fan on the events building.
 - Approximately 255 ft of 8 ft fence will be installed on the east side of the property to buffer the adjacent property from noise and light.

2. Pursuant to CEQA Guidelines Sections 15072 and 15073, a Draft Mitigated Negative Declaration and included Initial Study was circulated for public review and comment from May 29, 2020 until June 29, 2020; and
3. The Initial Study/Mitigated Negative Declaration concluded that implementation of the Project could result in a number of potentially significant effects on the environment and identified mitigation measures that would reduce the significant effects to a less-than-significant level; and
4. Whenever a lead agency approves a project requiring the implementation of measures to mitigate or avoid significant effects on the environment, CEQA also requires a lead agency to adopt a Mitigation Monitoring and Reporting Program to ensure compliance with the mitigation measures during project implementation; and
5. 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
6. 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 August 18, 2020; and
7. Now, therefore let it be found that, the Planning Commission recommends that the City Council of the City of St. Helena adopt the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program and approve a Use Permit Amendment and Design Review thereby authorizing the modifications described in the staff report and the reviewed plans based on the findings below and subject to the conditions of approval enumerated herein.

Resolution

- A. In reviewing 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.
- B. CEQA Findings:
 1. The Planning Commission has independently reviewed and analyzed the Initial Study/Mitigated Negative Declaration and other information in the record and has considered the information contained therein, prior to acting upon or approving the Project; and
 2. The Initial Study/Mitigated Negative Declaration prepared for the Project has been completed in compliance with CEQA and consistent with state and local guidelines implementing CEQA; and
 3. On the basis of the whole record, there is no substantial evidence that the Project as designed, conditioned, and mitigated, will have a significant effect on the environment; and
 4. The Initial Study/Mitigated Negative Declaration represents the independent judgment and analysis of the City as lead agency for the Project; and

5. Based on the foregoing, the Planning Commission recommends that the City Council approve the Initial Study/Mitigated Negative Declaration and adopt the Mitigation Monitoring and Reporting Program for the Project.
- C. In accordance with the design review criteria identified in SHMC Section 17.164.030, in making their recommendation the Planning Commission finds that the project demonstrates the following:
1. *Consistency and compatibility with applicable elements of the general plan in that the proposed structures are consistent with the intent of applicable General Plan policies pertaining to development in the Service Commercial District.*
 2. *Compatibility of design with the immediate environment of the site in that the project has been designed to be compatible with the surrounding environment.*
 3. *Relationship of the design to the site is found to be consistent in that the project has been designed to be compatible with the site and the surrounding area.*
 4. *That the design is compatible in areas considered by the board as having a unified design or historical character in that the project has been designed to be compatible with the site and the surrounding area.*
 5. *That the design promotes harmonious transition in scale and character in areas between different designated land uses in that the project would not alter the scale or transition between different land uses inasmuch as it is surrounded by commercial and residential structures of a similar style.*
 6. *Compatibility with future construction both on and off the site in that the proposed minor additions will blend in with existing and future construction in the immediate vicinity.*
 7. *That the architectural design of structures and their materials and colors are appropriate to the function of the project in that the project has been professionally designed to suit the site and its surroundings.*
 8. *That the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community in that the improvements have been designed to be compatible with the site and its surroundings.*
 9. *That the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures in that landscaping and open space will enhance the overall appearance of the property and general vicinity.*
 10. *That access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles in that access to the site will remain via Charter Oak Avenue. No changes are proposed that would impact access to the site.*
 11. *That natural features are appropriately preserved and integrated with the project in that the project has been designed to be compatible with the site and its surroundings.*
 12. *That the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structure and functions in that the proposed*

siding, colors, and roofing materials are consistent with the site context and compatible with surrounding design.

- 13. That the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site in that project landscaping and open space will enhance the project site and its surroundings.*
 - 14. That sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials in that project related construction is required to meet all California Building Codes and City of St. Helena development standards.*
- D. In accordance with SHMC Section 17.168.050, the Planning Commission recommends the following use permit findings to support the motion to recommend approval of the use permit amendment:
- 1. That the proposed uses would not generate odors, fumes, dust, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community in that proposed uses are related to the existing restaurant, would largely occur indoors within existing buildings, and are subject to review and approval by the Napa County Environmental Health Department.*
 - 2. That the proposed uses would not generate levels of noise that adversely affect the health, safety, or welfare of neighboring properties in that the proposed project is subject to City noise regulations and is not anticipated to produce frequent noise audible beyond the property line.*
 - 3. That the proposed use would not generate traffic noise in excess of the "normally acceptable" range identified in the General Plan as traffic related impacts have been identified in the Mitigated Negative Declaration and been determined to be less than significant.*
 - 4. That the proposed use would not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection, and fire protection in that impacts to these services have been identified in the Mitigated Negative Declaration and been determined to be less than significant.*
 - 5. That the proposed uses would provide adequate ingress and egress to and from the proposed location in that ingress and egress to the project site would not change as a result of the proposed project.*
 - 6. That allowing the proposed uses would not conflict with the City's goal of maintaining the economic viability of a local serving economy in that the proposed project would be consistent with General Plan Update 2040 policies.*
 - 7. That the proposed uses would be compatible with surrounding land uses and would not conflict with the purpose established for the district within which it would be located as the proposed project is consistent with the intent of the Service Commercial zoning district.*

8. *That the proposed uses would not be in conflict with the City's General Plan in that the project would support both a local and visitor serving component to the City's economy by providing jobs, tax revenue, and additional amenities.*
9. *That the proposed uses would not be injurious to public health, safety, or welfare in that the proposed uses are related to the existing restaurant, would largely occur indoors within existing buildings, and are subject to review and approval by the Napa County Environmental Health Department.*
10. *That granting the use permit would not set a precedent for the approval of similar uses whose incremental effect would be detrimental to the City or would be in conflict with the General Plan in that this use permit amendment only applies to this property and to these specific uses.*
11. *That, as demonstrated on a detailed plan submitted by the applicant, adequate off-street parking to accommodate the long term parking needs of employees and business owners and customers is available in that the proposed project has provided required off-street parking.*
12. *That the capacity of surrounding streets is adequate to serve the automobile and delivery truck traffic generated by the proposed uses in that the project site can adequately be served by existing streets (Highway 29 and Charter Oak Avenue).*

Planning Department Conditions of Approval

- E. The Planning Commission recommends approval of design review and a use permit amendment 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.
 1. 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.
 2. This approval shall be vested within one (1) year from the date of final action. A building permit application for the use allowed under this approval shall have been submitted within one (1) year from the effective date of this action or the approval shall expire, provided however that the approval may be extended for up to two (2) one-year periods pursuant to the St. Helena Municipal Code, Section 17.08.130, Extension of Permits and Approvals.
 3. Any request for an extension of this approval shall be justified in writing and received by the Planning Department at least thirty (30) days prior to expiration.
 4. The approvals shall not become effective until fourteen (14) calendar days after approval, providing that the action is not appealed by the City Council or any other interested party within that 14-day period.
 5. All required fees, including planning fees, development impact fees, residential in-lieu housing fees, building fees, toilet retrofit fees, and St. Helena Unified School District fees shall be paid prior to issuance of a building permit. Fees shall be those in effect at the time of the issuance of the building permit.
 6. Pursuant to City Council Resolution 2003-65, the owner and applicant are informed of the following:

In recognition of the need for additional affordable housing, and to mitigate the effects of this development on the supply and demand of affordable housing, the permittee shall be subject to a Housing Impact Fee, an inclusionary requirement, an in-lieu fee, and/or similar fair and appropriate mechanisms, to provide funds for or to develop additional affordable housing. This fee must be paid prior to a certificate of occupancy being issued.

7. 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.
8. 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.
9. Provided they are in general compliance with this approval, minor modifications may be approved by the Planning Director.
10. Pursuant to St. Helena Municipal Code Section 17.08.110, this permit shall run with the land and 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. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The property owners or their designee shall be responsible for meeting with the Building Official, Fire Inspector and or Public Works Department to review compliance with Building Codes, Fire Codes and specific Public Works Standards including fire protection systems and any applicable accessibility standards of Title 24.
12. All conditions and requirements contained in Resolution #2009-30 remain in effect unless otherwise superseded by this approval.
13. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on August 18, 2020, except as modified herein.
14. Planters and tree wells must be bordered by a six-inch high concrete curb or equivalent barrier approved by the City.
15. A minimum of 20% of the subject property must remain maintained landscaping and shall be kept in a weed-free condition.
16. If the lease option for the off-site parking lot to be used for employee parking at Dowdell/McCormick is lost or the lease is otherwise terminated or expires, the applicant shall provide evidence that a parking lot with a similar number of parking spaces has been secured (and is approximately the same distance from the project site or applicant provides appropriate transportation from parking to project site).

17. During construction, the areas under construction on project site shall be adequately fenced and secured to prevent trespassing.
18. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
19. 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.
20. Any seating used for the café is considered part of the 160 seat maximum not in addition to it. Café hours of operation are limited to 7:00 am to 12 pm.
21. The Farmers Market hours of operation shall be limited to daily from 10 am to 6 pm.
22. The events on the site may not exceed:
 - a. Daily events up to 75 persons;
 - b. Four (4) events per week, up to 200 persons with amplified outdoor live and recorded music;
 - c. Six (6) community events per year with up to 300 guests; and
 - d. Four (4) film screenings per year with 4 showings per day with a maximum of 40 attendees at each screening.
23. All onsite events shall be limited to the hours of 9 am to 10 pm. Fitness classes shall end by 11 am.
24. There shall be no events or community events scheduled concurrently on dates when film screenings occur.
25. All live and amplified music must comply with applicable City noise regulations.
26. The property shall maintain complimentary on or offsite valet parking service or a parking attendant when one or more private parties under 40 persons require parking above available onsite parking (consistent with past and existing parking operations).
27. For events with 40-200 persons, client hosts are required to use buses, vans or shuttles for transporting their guests to and from the site and the buses, vans and shuttles are required to park offsite after drop off.
28. An annual compliance review shall evaluate applicant's operations to determine compliance with all conditions of approval. City Planning and Building Director shall direct such review annually for five (5) years after approval. Any compliance issues shall be resolved either through applicant's voluntary action or, if necessary, City enforcement action consistent with St. Helena Municipal Code.

29. All noise attenuating features approved as part of the project must be installed within 120 days of building permit approval of such features.

Public Works Department Conditions of Approval

30. Approval of this project shall be subject to the requirements of, and all improvements shall be designed and constructed in accordance with, the most current version at the time of improvement plan submittal, Caltrans Standards and Specifications, the City of St. Helena Municipal Code, the St. Helena Water and Sewer Standards, the St. Helena Street, Storm Drain and Sidewalk Standards, and all current federal, state and county codes governing such improvements.
31. Prior to the issuance of a building permit, for any improvements outside the existing building envelope, a grading and drainage plan showing topographic data, all easements, infrastructure onsite and directly adjoining, and an erosion control plan shall be submitted for review and approval by the City Engineer.. If the project entails more than 50 cubic yards of soil disturbance, 10,000 square feet of disturbance area, a cut or fill of 3 feet or more, or alteration of any drainage pattern, a grading permit shall be required.
32. Improvement plans shall incorporate all grading, drainage, and utilities shown on the approved Use Permit package, those improvements agreed to in public hearings, the requirements of these conditions of approval, and those improvements required by any codes in effect at the time of plan submittal.
33. Drainage needs to be routed to prevent inundation of neighboring properties. Grading and/or site improvement plans shall show how 2-year and 10-year storm flows shall be infiltrated on site and/or diverted at the property lines to prevent inundation of neighboring properties.
34. Erosion and sediment control plans shall conform to the latest State and City codes at a minimum
35. Site plans submitted for the building permit review shall identify the location of any trees within the project area. Additionally, all existing vegetation including location, species, and sizes shall be identified and indicate what vegetation is to be protected or removed. If proposed/new landscaping involves an area greater than 500 square feet or rehabilitation of more than 2,500 square feet, the proposed landscaping shall comply with the State's Model Water Efficient Landscape Ordinance (MWELO). MWELO compliance shall be demonstrated as part of the building permit submittal.
36. Prior to issuance of a Certificate of Occupancy, any new and modified existing water laterals, meters and backflow prevention devices shall be required and constructed

in accordance with the current requirements of the City of St. Helena's Water Standards and the California Department of Health Standards. Existing meter boxes located within a driveway shall be retrofitted with a traffic-rated box. New laterals shall be located perpendicular to the water main and outside any driveway/drive aisle.

37. Prior to issuance of a Certificate of Occupancy, remodels or new construction which require fire sprinklers shall install an appropriately-sized water service with appropriate backflow and meter devices. Fire system calculations shall be submitted with the Building Permits to verify fire service lateral and meter sizing. Deferred submittals are not accepted.
38. Proposed separations between public water facilities and other utilities shall meet the minimum separations as specified by the Department of Health and the City of St. Helena Public Works Standards.
39. No construction may commence until adequate access to fire water supply is available to building sites as approved by the Fire Chief.
40. Wastewater discharged is subject to all of the requirements and limitations set forth in Chapter 13.24, Wastewater Discharge, of the St. Helena Municipal Code.

41. The developer's existing onsite force main system shall provide protection from accidental discharge of prohibited materials or other wastes regulated as defined in Chapter 13.24, Wastewater Discharge, of St. Helena Municipal Code. Such facilities shall be provided and maintained at the Owner's expense.

- a. Owner shall continuously maintain records of all daily flows for a rolling three year period. Said records shall be made available to the City for review upon request.
- b. The City shall have the right to inspect all parts of the onsite force main system at anytime during normal business hours. Failure to take immediate corrective actions on any deficiencies found may result in enforcement actions as provided under the St. Helena Municipal Code or other applicable law. ~~Prior to the issuance of the Certificate of Occupancy, the Developer shall replace the existing 4" sewer lateral serving the facility to a 6" sewer lateral to accommodate additional wastewater flows during larger events to the City's sewer main on Charter Oak Avenue.~~ [Reserved]

- ~~41.42.~~ Prior to the issuance of a Certificate of Occupancy, the Developer is required to install a wastewater flow meter measuring the total volume of wastewater leaving the project site, into the City's sewage collection infrastructure, and after installation, have the wastewater flow meter calibrated yearly. Annual wastewater flow meter calibration records are to be maintained by the project ownership and made available to City staff upon request. The style, design, manufacturer, and location of this meter must be of a form found to be acceptable by the City. The costs associated with the installation and calibration of this meter are required to be fully borne by the Developers, and the results of the flow measurement are to be utilized to determine the amount of the wastewater bills for the uses on site.
- ~~42.43.~~ Prior to the issuance of a certificate of occupancy, trash areas, dumpsters and recycling containers shall be enclosed and roofed per State and County standards to prevent water run-on to the trash area and water runoff from the area, to contain litter and trash so that it is not dispersed by the wind or run-off during waste removal. In the event that wine or food is disposed in these areas, the enclosed trash area shall drain to the sanitary sewer system. An area drain connected to the sanitary sewer shall be installed in the enclosure area and a structural control such as an oil/water separator or sand filter shall be included. No other area shall drain into the trash enclosure. A sign shall be posted prohibiting the dumping of hazardous materials into the sanitary sewer.
- ~~43.44.~~ Where applicable, the applicant shall be required to submit to the requirements for annual inspections of food/beverage service establishments and businesses that handle hazardous wastes for illicit stormwater discharges as required by the State National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges. The annual stormwater illicit discharge inspections are performed and invoiced by Napa County Department of Environmental Management.
- ~~44.45.~~ Provide details of all proposed fencing, walls, and gates on all plans submitted for building permit review.
- ~~45.46.~~ Prior to issuance of a Certificate of Occupancy, the Developer shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards.
- ~~46.47.~~ Existing streets being cut by new utility services will require edge grinding and an A.C. overlay per City standards, extent to be determined by the Public Works Department.
- ~~47.48.~~ Prior to issuance of a grading or building permit, the Developer shall be required to obtain a City encroachment permit for improvements on public right-of-way authorizing site work or construction activities on the site.
- ~~48.49.~~ The Developer shall be required to obtain a Caltrans encroachment permit for improvements on and immediately adjacent to Highway 29 as necessary to complete any required offsite improvements.

- ~~49-50.~~ The Developer shall be required to obtain permits necessary to complete work on the railroad right-of-way as necessary in conjunction with any required offsite improvements.

Building Department Conditions of Approval

- ~~50-51.~~ A building permit is required for all onsite demolition, construction and/or change of occupancy.
- ~~51-52.~~ The applicant will be required to comply with the codes adopted at the time the applicant applies for a building permit. At this time the City of St. Helena utilizes the 2019 Title 24 codes.
- ~~52-53.~~ When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.
- ~~53-54.~~ The applicant shall provide a construction waste management plan with the building permit application.
- ~~54-55.~~ The plans for construction shall include a checklist for compliance with the California Green Buildings Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.
- ~~55-56.~~ When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.
- ~~56-57.~~ 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. Any deferral of the required submittal items shall have prior approval of the Building Official however deferral of fire sprinkler design is not allowed.
- ~~57-58.~~ Properties which are on septic systems and proposing substantial renovations may require approval from the Napa County Environmental Health Department. Applicants are encouraged to engage with the County early in the building permit review process to reduce the potential for delay.

Fire Department Conditions of Approval

- ~~58-59.~~ Plans submitted for building permit shall exhibit compliance with the current St. Helena Fire Code, as adopted and codified in St. Helena Municipal Code Chapter 15.36.
- ~~59-60.~~ Fire sprinklers and fire hydrants shall be installed as required by Fire Code and the Fire Department.
- ~~60-61.~~ 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.
- ~~61-62.~~ 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.

I HEREBY CERTIFY that the City of St. Helena Planning Commission recommends that the City of St. Helena City Council approve the foregoing design review and use permit amendment applications at a regular meeting of said Planning Commission held on August 18, 2020 by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

ATTEST:

Lester Hardy
Chair, Planning Commission

Maya DeRosa, AICP
Planning and Building Director

CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION NO.

**RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ST. HELENA
RECOMMENDING THAT THE CITY COUNCIL OF THE CITY OF ST. HELENA ADOPT
A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND
REPORTING PROGRAM, AND RECOMMENDING THAT THE CITY COUNCIL ADOPT
A RESOLUTION APPROVING DESIGN REVIEW, A USE PERMIT, A LOT LINE
ADJUTMENT, A LOT MERGER, A VARIANCE, AND A WATER AGREEMENT FOR
THE FARMSTEAD AT LONG MEADOW RANCH PROJECT AT 1000 MILLS LANE IN
THE CITY OF ST.HELENA, CALIFORNIA**

PROPERTY OWNER: LMR Property Acquisition Partners LLC **APN:** 009-070-
49,52,53,54

Recitals

1. LMR Main Street Partners LLC has submitted applications to the City of St. Helena for a Use Permit, Design Review, Lot Line Adjustment, Lot Merger, Variance, Water Agreement and Development Agreement approval in order to construct an new 65 room hotel and associated facilities at 1000 Mills Lane in the Service Commercial and Twenty-acre Agriculture districts as described below:
 - A 9,882 sf multi-purpose building; and
 - A 3,452 sf utility and service building; and
 - A 3,114 sf spa building; and
 - A 2,652 sf pool and fitness building; and
 - Two outdoor pools, including one children's pool; and
 - Two (2) 1,000 sf agricultural barns.
2. Pursuant to CEQA Guidelines Sections 15072 and 15073, a Draft Mitigated Negative Declaration and included Initial Study was circulated for public review and comment from May 29, 2020 until June 29, 2020; and
3. The Initial Study/Mitigated Negative Declaration concluded that implementation of the Project could result in a number of potentially significant effects on the environment and identified mitigation measures that would reduce the significant effects to a less-than-significant level; and
4. Whenever a lead agency approves a project requiring the implementation of measures to mitigate or avoid significant effects on the environment, CEQA also requires a lead agency to adopt a Mitigation Monitoring and Reporting Program to ensure compliance with the mitigation measures during project implementation; and
5. 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

6. 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 August 18, 2020; and
7. Now, therefore let it be found that, the Planning Commission recommends that the City Council of the City of St. Helena adopt the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program and approve a Use Permit, Design Review, Lot Line Adjustment, Lot Merger, Variance, and Water Agreement approving a Development Agreement thereby authorizing the modifications described in the staff report and the reviewed plans based on the findings below and subject to the conditions of approval enumerated herein.

Resolution

- A. In reviewing 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.
- B. CEQA Findings:
 1. The Planning Commission has independently reviewed and analyzed the Initial Study/Mitigated Negative Declaration and other information in the record and has considered the information contained therein, prior to acting upon or approving the Project; and
 2. The Initial Study/Mitigated Negative Declaration prepared for the Project has been completed in compliance with CEQA and consistent with state and local guidelines implementing CEQA; and
 3. On the basis of the whole record, there is no substantial evidence that the Project as designed, conditioned, and mitigated, will have a significant effect on the environment; and
 4. The Initial Study/Mitigated Negative Declaration represents the independent judgment and analysis of the City as lead agency for the Project.
 5. Based on the foregoing, the Planning Commission recommends that the City Council approve the Initial Study/Mitigated Negative Declaration and adopt the Mitigation Monitoring and Reporting Program for the Project.
- C. In accordance with the design review criteria identified in SHMC Section 17.164.030, in making their recommendation the Planning Commission finds that the project demonstrates the following:
 1. *Consistency and compatibility with applicable elements of the general plan in that the proposed structures are consistent with the intent of applicable General Plan policies pertaining to development in the Service Commercial and Agricultural Districts.*
 2. *Compatibility of design with the immediate environment of the site in that the project has been designed to be compatible with the surrounding environment.*

3. *Relationship of the design to the site is found to be consistent in that the project has been designed to be compatible with the site and the surrounding area.*
4. *That the design is compatible in areas considered by the board as having a unified design or historical character in that the project has been designed to be compatible with the site and the surrounding area.*
5. *That the design promotes harmonious transition in scale and character in areas between different designated land uses in that the project is of a similar scale and character to other development in the immediate area.*
6. *Compatibility with future construction both on and off the site in that the proposed project will blend in with existing and future construction in the immediate vicinity.*
7. *That the architectural design of structures and their materials and colors are appropriate to the function of the project in that the project has been professionally designed to suit the site and its surroundings.*
8. *That the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community in that the improvements have been designed to be compatible with the site and its surroundings.*
9. *That the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures in that landscaping and open space will enhance the overall appearance of the property and the immediate vicinity.*
10. *That access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles in that access to the site will be provided via a realigned Mills Lane. Additional pedestrian connectivity will be provided by new sidewalks on LaFata Street and a pedestrian path connecting the property to 738 Main Street.*
11. *That natural features are appropriately preserved and integrated with the project in that the project has been designed to be compatible with the site and its surroundings.*
12. *That the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structure and functions in that the proposed siding, colors, and roofing materials are consistent with the site context and compatible with surrounding design.*
13. *That the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site in that project landscaping and open space will enhance the project site and its surroundings.*
14. *That sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape*

materials in that project related construction is required to meet all California Building Codes and City of St. Helena development standards.

D. In accordance with SHMC Section 17.168.050, the Planning Commission recommends the following use permit findings to support the motion to recommend approval of the use permit:

1. *That the proposed uses would not generate odors, fumes, dust, light, glare, radiation or refuse that would be injurious to surrounding uses or to the community in that proposed uses are related to a new hotel and would largely occur indoors within new buildings.*
2. *That the proposed uses would not generate levels of noise that adversely affect the health, safety, or welfare of neighboring properties in that the proposed project is subject to City noise regulations and is not anticipated to produce frequent noise audible beyond the property line.*
3. *That the proposed use would not generate traffic noise in excess of the "normally acceptable" range identified in the General Plan as traffic related impacts have been identified in the Mitigated Negative Declaration and been determined to be less than significant.*
4. *That the proposed use would not make excessive demands on the provision of public services including water supply, sewer capacity, energy supply, communication facilities, police protection, and fire protection in that impacts to these services have been identified in the Mitigated Negative Declaration and been determined to be less than significant.*
5. *That the proposed uses would provide adequate ingress and egress to and from the proposed location in that ingress and egress to the project site would be provided via a realigned Mills Lane.*
6. *That allowing the proposed uses would not conflict with the City's goal of maintaining the economic viability of a local serving economy in that the proposed project would be consistent with General Plan Update 2040 policies.*
7. *That the proposed uses would be compatible with surrounding land uses and would not conflict with the purpose established for the district within which it would be located as the proposed project is consistent with the intent of the Service Commercial and A-20 zoning districts.*
8. *That the proposed uses would not be in conflict with the City's General Plan in that the project would support both a local and visitor serving component to the City's economy by providing jobs, tax revenue, and additional amenities.*
9. *That the proposed uses would not be injurious to public health, safety, or welfare in that the proposed uses consist of a new hotel and ancillary facilities and would largely occur indoors within new buildings.*
10. *That granting the use permit would not set a precedent for the approval of similar uses whose incremental effect would be detrimental to the City or would be in conflict with the General Plan in that this use permit only applies to this property and to this specific use.*

11. *That, as demonstrated on a detailed plan submitted by the applicant, adequate off-street parking to accommodate the long term parking needs of employees and business owners and customers is available in that the proposed project has provided required off-street parking.*
 12. *That the capacity of surrounding streets is adequate to serve the automobile and delivery truck traffic generated by the proposed use in that the project site can adequately be served by existing streets and a realigned Mills Lane.*
- E. In accordance with SHMC Section 17.172.050, the Planning Commission recommends the following findings to support the motion to recommend approval of the variance:
1. *A hardship peculiar to the property, not created by the owner, exists as this requirement doesn't follow modern operational models and creates operational inefficiencies and therefore constitutes a peculiar hardship that is appropriately addressed and may be resolved through consideration of a Variance.*
 2. *Other hotels in the SC district are not burdened by this requirement, therefore, the variance is necessary for the preservation and enjoyment of substantial property rights available to other properties in the same district and vicinity; and that a variance, if granted, would not constitute a special privilege of the recipient not enjoyed by his or her neighbors.*
 3. *The authorization of the variance will not be a substantial detriment to adjacent properties and will not materially impair the purpose and intent of this title or the public interest, or adversely affect the general plan.*
 4. *Inasmuch as there are not a significant number of similar properties in the vicinity or zoning district, it is not reasonably practicable to formulate a general regulation for such condition or situation. In other words, there are not enough hotels to make it necessary or practical to amend the zoning code to address this peculiar situation.*
 5. *An approval of this Variance to allow for a 24/7 365 day/year on-site manager opposed to requiring that a manager physically live on-site will enhance the public health, safety and welfare of the community.*
- F. In accordance with the requirements of SHMC Chapter 16.08, the Planning Commission recommends that the City Council approve the lot line adjustment and lot merger as described in the staff report.

Planning Department Conditions of Approval

- G. The Planning Commission recommends that the City Council approve a design review, a use permit, a variance, a lot line adjustment, a lot merger, and a water agreement, for the above-described project located at 1000 Mills Lane 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.
1. 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.

2. This approval shall be vested pursuant to the development agreement, provided however that the approval may be extended under the terms of the development agreement or for up to two (2) one-year periods pursuant to the St. Helena Municipal Code, Section 17.08.130, Extension of Permits and Approvals.
3. Any request for an extension of this approval shall be justified in writing and received by the Planning Department at least thirty (30) days prior to expiration.
4. All required fees, unless otherwise specified in the development agreement, including planning fees, development impact fees, building fees, and St. Helena Unified School District fees shall be paid prior to issuance of a building permit except as expressly provided herein. Fees shall be those in effect at the time of the issuance of the building permit.
5. Developer shall make a payment for the purpose of furthering the City's affordable housing goals in accordance with the requirements of Section 5.1.6 entered into by and between Developer and the City for this project. The Development Agreement requires \$1,000,000 to be paid to the City prior to issuance of the building permit, and the remaining \$2,200,000 to be paid at the earlier of (i) Transfer of the Property by Developer, other than a Permitted Transfer ("Transfer" and "Permitted Transfer" are defined in the Development Agreement); (ii) conversion of Developer's construction financing for the Project to permanent financing, or (iii) sixty (60) months after issuance of a final certificate of occupancy for the Project.
6. 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.
7. 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.
8. Provided they are in general compliance with this approval and the development agreement, minor modifications may be approved by the Planning and Building Director.
9. Pursuant to St. Helena Municipal Code Section 17.08.110, this permit shall run with the land and 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.
10. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The property owners or their designee shall be responsible for meeting with the Building Official, Fire Inspector and or Public Works Department to review compliance with Building Codes, Fire Codes and specific Public Works Standards including fire protection systems and any applicable accessibility standards of Title 24.

11. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on August 18, 2020, except as modified herein.
12. All live and amplified music must comply with applicable City noise regulations.
13. All guests and visitors must park on-site or at applicant provided off-site parking.
14. Planters and tree wells must be bordered by a six-inch high concrete curb or equivalent barrier approved by the City.
15. A minimum of 20% of the subject property must remain maintained landscaping and shall be kept in a weed-free condition.
16. If the lease option for the off-site parking lot to be used for employee parking at Dowdell/McCormick is lost or the lease is otherwise terminated or expires, the applicant shall provide evidence that a parking lot with a similar number of parking spaces has been secured (and is approximately the same distance from the project site or applicant provides appropriate transportation from parking to project site).
17. Prior to issuance of a Certificate of Occupancy, the applicant shall designate a Transportation Demand Management (TDM) coordinator to establish programs to ensure VMT by guests and employees are reduced.
18. Prior to issuance of a Certificate of Occupancy, the developer shall provide verification that an on-call shuttle service is available during all hours as long as there is an off-site employee parking lot.
19. Prior to issuance of a Certificate of Occupancy, the developer shall install a shelter at the off-site Dowdell Lane parking lot.
20. Prior to issuance of a grading permit, the project site shall be adequately fenced and secured to prevent trespassing.
21. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
22. Prior to issuance of a Certificate of Occupancy, the applicant shall provide two (2) courtesy bicycles per guest room.
23. 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 Department Conditions of Approval

24. Approval of this project shall be subject to the requirements of, and all improvements shall be designed and constructed in accordance with, the most

current version at the time of improvement plan submittal, Caltrans Standards and Specifications, the City of St. Helena Municipal Code, the St. Helena Water and Sewer Standards, the St. Helena Street, Storm Drain and Sidewalk Standards, and all current federal, state and county codes governing such improvements.

25. For any improvements outside the existing building envelope, a grading and drainage plan showing topographic data, all easements, infrastructure onsite and directly adjoining, and an erosion control plan shall be submitted for review and approval by the City Engineer prior to the issuance of a building permit. If the project entails more than 50 cubic yards of soil disturbance, 10,000 square feet of disturbance area, a cut or fill of 3 feet or more, or alteration of any drainage pattern, a grading permit shall be required.
26. Improvement plans shall incorporate all grading, drainage, and utilities shown on the approved Use Permit package, those improvements agreed to in public hearings, the requirements of these conditions of approval, and those improvements required by any codes in effect at the time of plan submittal.
27. Drainage needs to be routed to prevent inundation of neighboring properties. Grading and/or site improvement plans shall show how 2-year and 10-year storm flows shall be infiltrated on site and/or diverted at the property lines to prevent inundation of neighboring properties. The Developer shall submit a storm drain system design calculations for the project in accordance with City of St. Helena, Napa County and State of California codes in effect at the time of improvement plan submittal. The calculations shall include a hydrology map, hydrology and hydraulic calculations, pipe size calculations, inlet capacity calculations, and other information necessary to support the proposed design.
28. Prior to the issuance of a Certificate of Occupancy, the Developer shall install storm drain Detention system improvements as required to maintain post development 10-year ~~and 25-year~~ runoff from the pre-development levels. The Developer shall submit storm drain detention system supporting calculations for review and approval prior to improvement plan approval.
29. Prior to the issuance of a Certificate of Occupancy, the Developer shall install detention system inlets sized to pass at minimum the 25-year flows.
30. A grading and drainage plan shall be prepared for the project that includes a design that allows for a 100-year overland release. All graded building pads shall be above the 100-year overland release elevation.
31. The grading plans provided by the Developer for review shall include the existing topography shown with contour lines labeled at one-foot intervals and extending a minimum of 100-feet beyond the limits of the site, or sufficient distance to indicate impacts on adjacent properties.
32. Erosion and sediment control plans shall conform to the latest State and City codes at a minimum
33. Prior to the issuance of a grading permit or building permit (whichever occurs first), the project property owner shall file a Notice of Intent (NOI) with the State Water Resources Control Board and prepare a Construction Storm Water Pollution Prevention Plan (SWPPP). This is required because the overall project grading involves an area of disturbed surface soil that is greater than or equal to one acre, .

34. The Developer shall execute a City of St. Helena Water Agreement with an annual water use cap of 1,953,9281,879,029 gallons per year prior to issuance of a Building Permit.
35. Due to the new water demand on the City system in the amount of 1,953,9281,879,029 gallons per year, the Developer shall implement an alternative innovative method of mitigating water use as allowed under Section 13.12.030(B) of the SHMC, and approved by City Council in the Development Agreement prior to certificate of occupancy. The required offsite improvements to offset water demand as required pursuant to the Development Agreement is for the Developer to construct water recycling infrastructure (i.e., 12" purple pipe) in Mills Lane extending from Highway 29 easterly to the end of Mills Lane in a portion of the trench constructed for the storm drain improvements referenced above. Such improvements shall be constructed and approved by the City Engineer in accordance with the terms of the Development Agreement prior to the issuance of a final certificate of occupancy for the Project. Developer may be eligible for partial reimbursement of the costs of construction of the improvements required under this condition in accordance with the terms of the Development Agreement.
36. The Developer shall adhere to the executed Water Agreement with the City and shall incorporate water conservation practices into the proposed project per the Water Availability Analysis prepared by Sherwood Design Engineers, dated May 2, 2017 and the correction dated August 13, 2020. The water conservation requirements shall be replicated in full on the architectural plans.
37. Prior to issuance of a Certificate of Occupancy, all parcels shall be connected to the City of St. Helena municipal water system and installed per City of St. Helena standards.
38. Prior to issuance of a grading or building permit (whichever occurs first) a detailed Post-Construction Stormwater Control Plan (SWCP) that identifies and sizes all permanent post-construction stormwater treatment BMPs shall be prepared by the applicant's engineer and submitted for review approval. The Plan shall be prepared in accordance with the latest edition of the *Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual* and the requirements of the State Water Resources Control Board Phase II Municipal Separate Storm Water System (MS4) General Permit (Order 2013-0001 DWQ).
39. Prior to the issuance of a Certificate of Occupancy, a Post Construction Stormwater Operations and Maintenance Plan that provides a color-coded plan sheet showing all storm drain and water quality infrastructure that is to be maintained, along with detailed instructions and schedules for the ongoing maintenance and operation of all post-construction stormwater BMPs shall be submitted by the applicant's engineer for review and approval by the City Engineer. Once approved, the property owner shall enter into an agreement with the City that provides the terms, conditions, and security associated with the ongoing requirements of the Post Construction Stormwater Best Management Practices.
40. If proposed/new landscaping involves an area greater than 500 square feet or rehabilitation of more than 2,500 square feet, the proposed landscaping shall comply with the State's Model Water Efficient Landscape Ordinance (MWELO). MWELO compliance shall be demonstrated as part of the building permit submittal.

41. Prior to issuance of a grading permit, a detailed Soils Investigation/Geotechnical Report shall be prepared by the developer and submitted for review. The report shall address, at a minimum, potential for liquefaction, R-values, expansive soils and seismic risk. The improvement plans shall incorporate all design and construction criteria recommended in the Geotechnical Report.
42. Prior to issuance of a grading permit, unless otherwise explicitly permitted, all existing abandoned wells, septic tanks/systems and/or underground fuel storage tanks shall be abandoned under permit and inspection of Napa County Department of Environmental Services or other designated agency. If there are none, the Developers project engineer shall provide a letter describing the scope of the search done to make this determination.
43. Prior to the issuance of a grading permit, the site plan shall show the location of any trees within the project area. Provide a tree protection plan for approval by the Public Works Director prior to approval of the building permit. The plan shall be coordinated with any civil grading/drainage/improvement plans.
44. 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.
45. Prior to the issuance of a Certificate of Occupancy, the Developer shall underground all on-site utility lines per St. Helena Municipal Code. The cost of undergrounding shall be the responsibility of the Developer.
46. Due to the economic and engineering infeasibility of undergrounding regional serving overhead power lines, such existing lines may remain on overhead power poles.
47. Any new and modified existing water laterals, meters and backflow prevention devices shall be required and constructed in accordance with the current requirements of the City of St. Helena's Water Standards and the California Department of Health Standards. Existing meter boxes located within a driveway shall be retrofitted with a traffic-rated box. New laterals shall be located perpendicular to the water main and outside any driveway/drive aisle.
48. Remodels or new construction which require fire sprinklers shall install an appropriately-sized water service with appropriate backflow and meter devices prior to Certificate of Occupancy. Fire system calculations shall be submitted with the Grading and Drainage Plan to verify fire service lateral and meter sizing. Deferred submittals are not accepted.
49. Proposed separations between public water facilities and other utilities shall meet the minimum separations as specified by the Department of Health and the City of St. Helena Public Works Standards.
50. No construction may commence until adequate access to fire water supply is available to building sites as approved by the Fire Chief.
51. Wastewater discharged is subject to all of the requirements and limitations set forth in Chapter 13.24, Wastewater Discharge, of the St. Helena Municipal Code.
52. Prior to the issuance of the first building permit for 1000 Mills Lane, the Developer shall apply for annexation to the St. Helena Municipal Sewer District No. 1. The

application shall be completed in accordance with the City of St. Helena's Sewer Annexation Procedures including all annexation, impact, connection, and sewer fees.

53. Prior to issuance of a building permit, in order to confirm the theoretical assumptions in the Theoretical Sewer Capacity provided by Sherwood Design Engineers dated May 2, 2017, the Developer is required to perform 7-day flow monitoring at the downstream sanitary sewer manholes (No. 1-89 and No. 1-94) to verify that the existing sewer pipe has adequate capacity to accommodate the proposed additional flows. Peak sewer flows will not be allowed to exceed 2/3 full pipe. If the proposed wastewater discharge regimen increases peak flows to greater than 2/3 full pipe at the monitored locations and with the current infrastructure, the owner may be subject to paying a ~~ust~~-share of the cost of sewer upgrades with a dollar amount proportional to the increase in wastewater flow as a result of the site development.

54. Concurrent with the building permit application, the Developer shall apply for and obtain a Wastewater Discharge Permit from the Department of Public Works as specified in St Helena Municipal Code Section 13.24.50. The permit conditions will require:

- a. Discharge flow rate shall not exceed 5,150 gallons per day.
- b. The onsite force main system shall provide protection from accidental discharge of prohibited materials or other wastes regulated as defined in Chapter 13.24, Wastewater Discharge, of St. Helena Municipal Code. Such facilities shall be provided and maintained at the Owner's expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the City for review and approval prior to building permit approval.
- c. Owner shall continuously maintain records of all daily flows for a rolling three year period. Said records shall be made available to the City for review upon request.
- d. The City shall have the right to inspect all parts of the onsite force main system at anytime during normal business hours. Failure to take immediate corrective actions on any deficiencies found may result in enforcement actions as provided under the St. Helena Municipal Code or other applicable law.

53-55. Prior to the issuance of a Certificate of Occupancy, the Developer is required to install a wastewater flow meter measuring the total volume of wastewater leaving the project site, into the City's sewage collection infrastructure, and after installation, have the wastewater flow meter calibrated yearly. Annual wastewater flow meter calibration records are to be maintained by the project ownership and made available to City staff upon request. The style, design, manufacturer, and location of this meter must be of a form found to be acceptable by the City. The costs associated with the installation and calibration of this meter are required to be fully borne by the Developers, and the results of the flow measurement are to be utilized

to determine the amount of the wastewater bills for the uses on site. Said meter is required to be installed and functional prior to occupancy of the project.

- ~~54-56.~~ Prior to issuance of a certificate of occupancy, trash areas, dumpsters and recycling containers shall be enclosed and roofed per State and County standards to prevent water run-on to the trash area and water runoff from the area, to contain litter and trash so that it is not dispersed by the wind or run-off during waste removal. In the event that wine or food is disposed in these areas, the enclosed trash area shall drain to the sanitary sewer system. An area drain connected to the sanitary sewer shall be installed in the enclosure area and a structural control such as an oil/water separator or sand filter shall be included. No other area shall drain into the trash enclosure. A sign shall be posted prohibiting the dumping of hazardous materials into the sanitary sewer.
- ~~55-57.~~ Where applicable, the applicant shall be required to submit to the requirements for annual inspections of food/beverage service establishments and businesses that handle hazardous wastes for illicit stormwater discharges as required by the State National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges. The annual stormwater illicit discharge inspections are performed and invoiced by Napa County Department of Environmental Management.
- ~~56-58.~~ Provide details of all proposed fencing, walls, and gates on all plans submitted for building permit review.
- ~~57-59.~~ Prior to Certificate of Occupancy, the Developer shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards.
- ~~58-60.~~ Existing streets being cut by new utility services will require edge grinding and an A.C. overlay per City standards, extent to be determined by the Public Works Department.
- ~~59-61.~~ Prior to issuance of building permits, the Developer shall be required to pay a fair share fee contribution in the amount of 28.8% to a "HAWK" pedestrian hybrid flashing beacon for the Highway 29 at Charter Oak Avenue crosswalk identified in the Traffic Study by the Crane Transportation Group dated November 21, 2019 proposed for the SR 29/Charter Oak Avenue.
- ~~60-62.~~ The Developer shall be required to pay a fair share fee contribution in the amount of 23.3% towards the Dowdell Lane and Highway 29 signalization at the time such improvement is constructed by the City.
- ~~61-63.~~ The Developer shall construct those certain storm drain improvements necessary to extend and improve the storm drain along Mills Lane. These storm drain improvements to will serve properties on Mills Lane, La Fata Street, Fountain Street, Grayson Avenue, Main Street (to Charter Oak Avenue), and Vidovich Avenue and to construct an outfall for said storm drain into the Napa River. The Storm Drain Improvements shall be designed by City in accordance with the City's long-standing plan for this separate project is contained in City's Storm Drain Master Plan dated September 2000 (see Table 4-1) and the Highway 29 Specific Plan (see pages 37-39, Exhibit 11). City shall further be responsible for permitting required for the Storm Drain Project, which shall likely include permits from the California Department of Fish and Wildlife, San Francisco Regional Water Quality Control

Board, and the United States Army Corp of Engineers. Developer shall commence construction of the Storm Drain Improvements after the City has secured the permits required for the Storm Drain Improvements, provided, however, that the Storm Drain Improvements shall be completed before the Developer receives final certificate of occupancy for the Project. Upon completion of the storm drain improvements described in this condition, Developer shall be eligible for reimbursement of costs in excess of its proportionate share of costs in accordance with the terms of the Development Agreement.

~~62-64.~~ Developer shall construct improvements to Mills Lane, which are consistent with City's Highway 29 Specific Plan, prior to or concurrently with the development of the Project and shall complete the Mills Lane Improvements prior to the issuance of the first certificate of occupancy for the Project by the City. Construction shall be completed in accordance with improvements plans as approved by the City Engineer, and before Developer receives a final certificate of occupancy for the Project.

~~63-65.~~ The Developer shall construct all on and offsite improvements in accordance with the improvement plans and supporting calculations that are prepared by a registered civil engineer and reviewed by the City of St. Helena Public Works Department. The improvement plans and supporting calculations shall include detailed designs for all utilities, water, grading, drainage, erosion control and paving.

~~64-66.~~ Prior to issuance of a grading or building permit, the Developer shall be required to obtain a City encroachment permit for improvements on public right-of-way.

~~65-67.~~ The following offsite improvements shall be installed by the Developer, completed prior to the issuance of a Certificate of Occupancy and will be provided on a separate offsite improvement plan set:

- In accordance with civil site plans prepared by Sherwood Design Engineers, dated May 6, 2019, all required public frontage and street improvements shall be designed and built in accordance with City of St. Helena ordinances, Public Works Department Standard Specifications, and Caltrans requirements.
- Specific offsite improvements include, in general, pavement widening, realignment of Mills Lane in accordance with the Highway 29 Specific Plan, signal upgrade at Highway 29/Main Street/Grayson Avenue/Mills Lane, signage, striping, street lighting, required accessible pedestrian curb ramps, and a new railroad crossing.
- The typical half cross section of Mills Lane shall consist of a landscape strip, 10' class I path, curb and gutter, 8' parking strip, and 12' travel lane.
- In accordance with civil site plans prepared by Sherwood Design Engineers, dated May 6, 2019, the Developer shall extend the City water main from La Fata to the City's 12" water main on Highway 29 and install adequately spaced fire hydrants per the approval of the City's Fire Chief.
- In accordance with civil site plans prepared by Sherwood Design Engineers, dated May 6, 2019, the Developer shall extend the sewer main on La Fata to the project site.

- As identified in the 2019 Traffic Study by Crane Transportation Group, the Developer shall extend the sidewalk from La Fata Street to Mills Lane with a crosswalk to the project site. The La Fata Sidewalk improvements shall further be completed in accordance with the terms of the Development Agreement.
- The improvement plans shall include a Construction Traffic Control Plan.
- The improvement plans shall include an Erosion and Sediment Control Plan.
- The improvement plans shall include a Joint Trench Plan (as necessary).

~~66-68.~~ The Developer shall be required to obtain a Caltrans encroachment permit for improvements on and immediately adjacent to Highway 29 as necessary to complete the offsite improvements as outlined above.

~~67-69.~~ The Developer shall be required to obtain permits necessary to complete work on the railroad right-of-way as necessary in conjunction with the offsite improvements as outlined above.

~~68-70.~~ The Developer shall construct all on and offsite improvements which are consistent with City's Highway 29 Specific Plan, prior to or concurrently with the development of the Project and shall complete the Mills Lane Improvements prior to the issuance of the final certificate of occupancy for the Project by the City. Construction shall be completed in accordance with improvements plans as approved by the City Engineer and before the Developer receives a final certificate of occupancy for the Project.

~~69-71.~~ Prior to issuance of a certificate of occupancy, the Developer shall pay traffic impact fees based on the Master Fee Schedule, and the fee will assume all square footage calculated at the lodging rate.

Building Department Conditions of Approval

~~70-72.~~ A building permit is required for all onsite demolition, construction and/or change of occupancy.

~~71-73.~~ The applicant will be required to comply with the codes adopted at the time the applicant applies for a building permit. At this time the City of St. Helena utilizes the 2019 Title 24 codes.

~~72-74.~~ When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.

~~73-75.~~ The applicant shall provide a construction waste management plan with the building permit application.

~~74-76.~~ The plans for construction shall include a checklist for compliance with the California Green Buildings Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.

~~75-77.~~ When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.

~~76-78.~~ 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. Any deferral of the required submittal items shall have prior approval of the Building Official however deferral of fire sprinkler design is not allowed.

~~77-79.~~ Properties which are on septic systems and proposing substantial renovations may require approval from the Napa County Environmental Health Department. Applicants are encouraged to engage with the County early in the building permit review process to reduce the potential for delay.

Fire Department Conditions of Approval

~~78-80.~~ Plans submitted for building permit shall exhibit compliance with the current St. Helena Fire Code, as adopted and codified in St. Helena Municipal Code Chapter 15.36.

~~79-81.~~ Fire sprinklers and fire hydrants shall be installed as required by Fire Code and the Fire Department.

~~80-82.~~ 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.

~~81-83.~~ 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.

I HEREBY CERTIFY that the City of St. Helena Planning Commission recommends that the City of St. Helena City Council approve the foregoing design review, use permit, lot line adjustment, lot merger, variance, water agreement applications and development agreement ordinance at a regular meeting of said Planning Commission held on August 18, 2020 by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

ATTEST:

Lester Hardy
Chair, Planning Commission

Maya DeRosa, AICP
Planning and Building Director

Xinia Gamero

From: Pat Kenealy <pkenealy1@yahoo.com>
Sent: Tuesday, August 11, 2020 2:27 PM
To: Public Comment
Subject: [External] Farmstead property at 738 Main Street

Dear members,

Thanks for your service, especially in these challenging times.

I urge the Planning Commission to approve Ted Hall's requests for a Use Permit Amendment, Design Review approval, Lot Merger, Lot Line Adjustment, Variance, Water Agreement, and Development Agreement to construct a new 65-room hotel at 738 Main Street.

The project seems attractive and well-thought out. It's both close enough to downtown to help local businesses and far enough from downtown to not completely change the feel of our small City. No project like this is perfect, but this is an attractive "bird-in-hand" that can come on-line soon and become context for further hotel development.

I've never met Mr. Hall nor had any business dealings with him, but I have patronized his restaurant, bought his products at our Farmers Market for many years. He and his family have earned my trust to build something our town will be proud of.

Finally, as someone who spent a good deal of time this Spring studying Saint Helena's finances, I know the City desperately needs additional tax revenue now and in the future. Hotels generate multiple streams of tax revenue and some hotel development is necessary for the City to maintain the diverse economic base that distinguishes Saint Helena from its neighbors in the Valley.

Given that imperative, I hope the Planning Commission -- and all levels of City government -- can HELP a trusted local business family get this done.

We will all be the better for it.

Patrick Kenealy

Xinia Gamero

From: Bill Dyer <bill@dyerwine.com>
Sent: Tuesday, August 11, 2020 5:38 PM
To: Public Comment
Subject: [External] Public comment on Farmstead proposals

We write in support of Farmstead's proposal to make improvements at its existing site, and in support of its proposed expansion. Farmstead's proposals will further enhance visitor experiences, while continuing and expanding efforts in highlighting and supporting the agricultural underpinnings of our community. We appreciate that this locally owned business has always been diverse and integrated, with the produce grown on-site available direct to the public as well as in the restaurant. Serving local needs has always been a core value of its business model. The proposals reflect continuity of this tradition, with attention given to improved infrastructure, and support of worker housing, while bringing much needed revenue to the community. The plans provided reflect the aesthetics and environmental sensitivity we can already observe on the current Farmstead grounds.

Bill and Dawnine Dyer
 1501 Diamond Mountain Rd
 Calistoga, CA 94515

Sent from my iPad

Xinia Gamero

From: Ted Hall <tedhall@longmeadowranch.com>
Sent: Wednesday, August 12, 2020 10:22 AM
To: Public Comment
Subject: Fwd: [External] Supporting the Farmstead proposal

----- Forwarded Message -----

Subject: Supporting the Farmstead proposal
Date: Wed, 12 Aug 2020 10:10:37 -0700
From: Stacey Bressler <Stacey@BresslerVineyards.com>
To: lhady@cityofsthelena.org, jponge@cityofsthelena.org, aanderson@cityofsthelena.org,
dhale@cityofsthelena.org, bmonnette@cityofsthelena.org

Dear Planning Commissioners,
As a 20+ year resident, I am writing to encourage your support for the proposal submitted by Ted and Laddie Hall to modify and expand their Farmstead property. I have been impressed with their careful planning and proposed enhancements and believe this project would bring much-needed revenue to St. Helena.

Thank you for your consideration.

Sincerely,

Stacey Bressler
1891 Vallejo St.
St. Helena

--
Stacey Bressler
Bressler Vineyards
(707) 963-2903

Planning Commission Meeting
August 18, 2020

Dear Planning Commissioners:

I offer this Public Comment on your Agenda Item 5.2 (Farmstead projects):

I have reviewed the Staff's Report, and fully support its recommendations. They are plainly in the public interest.

As to existing Farmstead operations, the applicant is not proposing any expansion of use beyond its current activities. The applicant is to be applauded for bringing its current use permit up to date. This should present no planning approval difficulty.

My main focus is the lodging project. It is critical to the financial future of our City. In and of itself the tax revenues (largely TOT tax but also an incremental increase in the City's share of property tax) will not solve our very large topline revenue needs, as recently brought home once again in the report of Carollo Engineers, Inc. (presented at the City Council workshop on July 30), but it is an important step in the right direction.

Over the last decade I have devoted much attention to the City's potable water issues. I read the Staff's water analysis with special interest, and also the proposed water agreement. The innovative water plan more than conforms to the City's "water neutrality" policy.

Again, I strongly urge full approval of Staff's recommendations.

Thank you for your service and consideration.

Alan Galbraith
St. Helena Mayor, 2014-18

Xinia Gamero

From: Ted Hall <tedhall@longmeadowranch.com>
Sent: Tuesday, August 11, 2020 8:40 PM
To: Public Comment
Subject: Fwd: [External] Presentation

----- Forwarded message -----

From: **John Brenkle** <jjbrenkle@comcast.net>
Date: Tue, Aug 11, 2020 at 8:37 PM
Subject: Presentation
To: tedhall@longmeadowranch.com <tedhall@longmeadowranch.com>

Ted, please use the following statement in support of your projects.

I am more than pleased to support the efforts of the Hall family to expand their business and provide a 64 room hotel. With so many out of county developers moving into our valley it is refreshing to have a local family having a positive impact. I have known the Halls for years. They have personally supported my efforts to develop affordable housing as well as our three farm worker centers. Being on the board of Our Town St. Helena makes me very appreciative of their promise of one million dollars in support of our future projects. I ask for your support and approval of their plans

Sincerely,

Fr. John Brenkle

--

Ted W. Hall
President & CEO
Long Meadow Ranch
PO Box 477, Rutherford, CA 94573
tedhall@longmeadowranch.com
Office: 707.963.5268
Mobile: 707.732.6393
longmeadowranch.com
"Excellence through Responsible Farming"

Bill Hart
1779 Scott Street
St. Helena, CA 94574
Tel: (707) 967-9969
E-mail: hartvineyard@comcast.net

August 12, 2020

Planning Commission
City of St. Helena

Subject: Proposed Farmstead Project

Dear Commissioners:

I am writing in support of the proposed Farmstead project, but first a few words of introduction. Margie and I have been full time residents of St. Helena for 19 years, and part time residents for an additional 5. We have been involved actively in the local wine industry since the late 1980s, as growers, as a board member and advisor. Since we became full time residents, I have been active in the local non-profit arts community, most recently as founder and president of the Napa Valley Jazz Society, producing live concerts around the Valley including several here in town (Lyman Park, St. Helena Performing Arts Center and several wineries).

We have always been strong supporters of preserving the fundamental character of St. Helena for its residents. It is why we choose to live here. Around 11 or 12 years ago, I was asked to join a group of local citizens in a group called the St. Helena Economic Outlook Study Group that had been commissioned by Mayor Britton and the Chamber of Commerce to consider the issues of balancing City finances while meeting the expectations of our residents. When asked to join, I warned them that I was not likely to come out on the pro development side of these issues.

I quickly learned that something had to be done to increase the base of tax revenue that would be needed just to keep up with aging infrastructure and steadily rising costs of construction and maintenance. We could continue to balance budgets for a while by deferring maintenance and postponing critical capital projects, but our streets and utilities were deteriorating and we were paying fines for not meeting obligations funded long ago. So the question became: which alternatives for increasing tax revenues would be most compatible with preservation of the country lifestyles that brought us here in the first place.

You have all been through chapter and verse of alternatives, and their plusses, minuses and viability. Suffice it to say that encouragement of higher-end "country" tourism stood out above all others for its viability and its potential for significantly increasing tax revenues. The key would be diligent selectivity to allow only those projects least adverse to the character of the town and the lifestyles of its residents. The most important issues appeared to be: traffic & parking, water usage, density, tax efficiency (net of added costs to the City), benefits to other local businesses, compatibility of design, worker housing.

Ted & Laddie Hall are smart and proven businesspeople who clearly share the traditional values of this community. Their plan appears to me to have addressed the major issues, creatively and generously. I believe their current iteration of Farmstead has benefitted the City in many ways and that there is every reason to believe their proposed project would add to those benefits.

Margie joins me in urging you to approve the addition of this asset to our City.

Thank you,

Bill

O: (707) 967-9969

M: (707) 815-1151



August 12, 2020

To: City of Saint Helena Planning Commission

From: Chuck McMinn, Owner, Vineyard 29

Re: Proposed Farmstead Expansion

Dear Planning Commission,

I am writing in support of Farmsteads expansion plans that you will be reviewing on August 18, 2020. This is exactly the kind of project that Saint Helena needs to generate immediate infrastructure improvements and long-term TOT and sales tax revenue that the City so desperately needs. The project:

- Modifies their existing Farmstead property, to document its existing, very successful business evolution over these past 10 years at no additional intensity of use.
- Repurposes 10 acres next to their property into 4 acres of agriculture and 6 acres housing 65 units of badly needed hotel space in Saint Helena.
- Provided bicycles for all the rooms.
- Does not require any City variances.
- Realigns Mills Lane to Grayson and upgrades a dangerous intersection directly across from the high school.
- installs a recycled water facility that provides water to both the property and to Crane Park and the High School.
- Installs storm drains for the City that they should have installed long ago.
- Provides over \$3.2M in funding for workforce housing.
- Generates over \$2 Million in TOT and Sales taxes annually when completed.

Saint Helena has been fiddling while the City's business sector has degraded to the point of life support. You need to reverse this and allow well minded, successful, business people who already have invested in helping Saint Helena survive continue to expand and evolve. Please approve this project as is and quickly.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Chuck McMinn'.

Chuck McMinn

President, Vineyard 29

2929 Highway 29 North, Saint Helena, CA 94574 | 707-963-9292 | www.vineyard29.com

Xinia Gamero

From: Dan Lynch <dan@lynch.com>
Sent: Thursday, August 13, 2020 10:28 AM
To: Public Comment
Subject: [External] Farmstead

I'm writing to heartily support the Proposed Project at and near their property. The Hall family has proven to be excellent stewards of the land. Please approve their application.

Thanks,

Dan Lynch
1532 Oak Ave

Cell 650-776-7313

Xinia Gamero

From: Dana Johnson <danaelisejohnson@gmail.com>
Sent: Thursday, August 13, 2020 12:12 PM
To: Public Comment
Subject: [External] Letter in Support of the Farmstead Project on the August 18, 2020 agenda

We are writing this letter in strong support of the Farmstead Project being reviewed by the Planning Commission on August 18th, 2020.

The Farmstead Project presentation outlines the Hall's well-thought-out plans to enhance both their current business and also to add a much-needed agrarian-themed hotel to our community. The locally-centered hotel design is beautiful and inviting, and will bring visitors TO St Helena, not through St. Helena, providing significant benefits to our entire local business community as well as adding to our tax base. And their new environmental education component (within the hotel but also local-serving) is especially novel and exciting. Further, it is clear that they have done extensive research regarding the environmental, economic and sociological impacts of this project, and are offering a wide range of well-designed and environmentally-conscious mitigation measures that will benefit St. Helena citizens, businesses and institutions.

But we have all seen compelling hotel presentations and read plans that sound wonderful. The most important reason for our support of this project is the Halls themselves, with their long history in our community. To us they stand for hard work, dedication to providing hospitality, quality and value in everything they do, commitment to sustainability, support and concern for employees, and generosity to our community.

Because they have already created Farmstead -- such a beautifully-interwoven restaurant, café, tasting room, store, bar, garden haven, event space, and farmer's market – we *know* that they can gracefully and successfully expand Farmstead's offerings and integrate a small hotel. *Because* of their long history of running well-managed and sustainable businesses, their extensive planning process for this project, and their recently-demonstrated ability to pivot successfully even in the face of a pandemic, *we should let them*.

We encourage you to do everything you can as a Planning Commission to support this project that will profoundly benefit St. Helena's citizens and visitors alike.

Dana Johnson and Mark Nelson
 275 Long Ranch Road
 Saint Helena, CA 94574
 707-738-8942
danaelisejohnson@gmail.com

Lars kronmark C.W.P. Professor Culinary Art

Culinary institute of America

Greystone St Helena CA 94574

August 12 2020

To Planning commission in St Helena regarding they Longmeadowranch project

I like to voice my support for this magnificent plan of turning this land in to be part of St Helena's history

What a chance we have and how lucky we are to have this proposal this is the road to a better stronger and unique St Helena that we can be very proud forever forward

The chance to have guest walking and biking in town for the benefits of our towns shop can only be a one of the best proposal we can wish for not to forget the taxes we get to help our needed town project way over due and for all the workers who can build a safe future at farmstead with a great family

I'm so proud and feel very lucky to see this proposal and get a chance to support it 100% and I hope you all will also at the planning commission.

Best

Lars kronmark

Senior Faculty member Culinary institute of American St Helena

Xinia Gamero

From: Richard A Crus <rcrus@sbcglobal.net>
Sent: Thursday, August 13, 2020 4:17 PM
To: Public Comment
Cc: tedhall@longmeadowranch.com
Subject: [External] Support for Farmstead proposed project

We are writing to you in support of Farmstead's proposed project. The restaurant has been a welcome addition to St Helena. The proposed project is eco friendly and will help to provide workforce housing which is sorely needed in St Helena. The proposed water enhancement is another point in its favor. Calistoga and Yountville both receive more TOT revenues (5.11 million and 7.53 million respectively in 2018-2019) than St Helena (3.29 million). The additional revenue that will be generated by the project can certainly be used by St Helena. In addition, the people that stay there will bring additional income to the towns businesses.

Richard and Paula Crus
1276 Allyn Ave
St Helena, CA

-----Original Message-----

From: MARY STEPHENSON <stepcomm@aol.com>
Sent: Friday, August 14, 2020 9:40 AM
To: Cindy Tzaopoulos <ctzaopoulos@cityofsthelena.org>
Subject: [External] Communication to Planning Commision

Cindy - could you please distribute this to the Planning Commission members for me?
Thanks, Mary

To The Members of the St Helena Planning Commission:

I lend my support to the Farmstead Hotel project because I think it provides the right balance of tourism-generated revenue and responsible growth for our community. The project has been designed to be folded into and enhance the existing Farmstead operation, it will have the least possible impact on the environment and will provide significant funds to house existing and incremental workers in our town. This is a good project for St Helena and deserves all of our support.

Mary Stephenson
707 849 2583

Xinia Gamero

From: Beth Milliken <beth@spottswood.com>
Sent: Friday, August 14, 2020 11:52 AM
To: Geoff Ellsworth; Paul Dohring; achouteau@cityofstlhelena.org; Mary Koberstein; David Knudsen; Public Comment
Cc: Ted Hall; Laddie Hall; Chris Hall; Elliott Faxstein
Subject: [External] Farmstead Hotel Project

Dear Mayor Ellsworth and Councilmembers Dohring, Chouteau, Koberstein and Knudsen,

I write to express my support of the Farmstead Hotel project as proposed by the Ted Hall family. I have had the opportunity to read about and thus understand the scope of this project, and while I am skeptical of development in our town due to my concerns with water, traffic and open space, this project is unique in that each has been addressed and our community will benefit from it in many ways. This is in the form of road realignments, the bringing of recycled water from the City's water treatment plant to our town (specifically to Crane Park and, we hope, to the primary and high schools), the four acres that will be committed to agriculture, the fact that the guests will be provided with bikes to get into and out of town, and more.

This is a very thoughtful project, one that I feel is in keeping with the spirit and character of St. Helena, which I have been lucky enough to call home since 1972, when my parents determined to raise their family here.

Thank you in advance for your consideration. I do feel that this is a project that merits our support, and I welcome this opportunity for our community.

Very sincerely,

Beth

Beth Novak Milliken

President & CEO

SPOTTSWOOD

SPOTTSWOOD ESTATE VINEYARD & WINERY

1902 Madrona Avenue • St. Helena CA 94574

707/963-0134, x116 • spottswood.com



Please paws before printing. – Riley

Xinia Gamero

From: Schlatter, Rene <rschlatter@merryvale.com>
Sent: Friday, August 14, 2020 5:37 PM
To: Public Comment
Subject: [External] Farmstead project

To whom it may concern:

Merryvale has been a long standing business member in St. Helena since 1983. We would like to voice our support for the modifications to the existing Farmstead property and the expansion project. We feel that it will bring much needed tourism to St. Helena which in turn will support traffic to local businesses including wineries such as ours.

The Halls have been fervent supporters in the community and thus we feel that they are excellent custodians of this project.

If you need any further information, please feel free to reach out to me at the contact information below.

Have a great week-end!

Best regards,

René Schlatter
President
1000 Main Street
St. Helena, CA 94574
T: (707) 968-3417

MERRYVALE
FAMILY OF WINES

MERRYVALE VINEYARDS
STARMONT WINERY
PROFILE COLLECTION
FORWARD KIDD

Xinia Gamero

From: Mariam Hansen <wartuhi@comcast.net>
Sent: Saturday, August 15, 2020 11:55 AM
To: Public Comment
Subject: [External] Farmstead Hotel

Dear Planning Commissioners,
I have reviewed the plans for the Farmstead Hotel. Our city wants everyone to walk or Bike. When Mills Lane is aligned with Grayson there must be a pedestrian crossing installed across Hwy 29. At the moment there is no safe way to cross Hwy 29 south of Charter Oak Avenue until you get to Yountville!!! I often walk in that area and want to get over to Grayson but it is too dangerous. Shame on Caltrans for not including a crosswalk when they redid the intersection. Please be sure this is included in the plans.

Thank you,

Mariam Hansen

5 San Lucas Ct
St. Helena, CA 94574

St. Helena Planning Commission
August 15, 2020

Dear Planning Commission members,

I would like to say what an incredible job the Hall family has presented in the new Lodging at Farmstead. This is the type of project that the city needs. I believe the Hall's will supply St. Helena with a project of the same style and quality that they have maintained at the current restaurant and help with our need for more lodging.

I want to thank them for their willingness and patience to negotiate the "purple pipe" and the contribution to housing. Again, this is the quality of development we need in St. Helena. Please go forward and approve this project.

Thank you for your consideration,
Susan & Tor Kenward

Xinia Gamero

From: Henry Gundling <henry.gundling@gmail.com>
Sent: Saturday, August 15, 2020 2:44 PM
To: Public Comment
Subject: [External] Farmstead Project

Dear Planning Commissioners:

I write to you in wholehearted support of the Farmstead Project. It is hard to imagine a project more suitable for our community than the Hall family's proposed Farmstead Project. It is homegrown, ideally located, and gives careful consideration to worker housing, traffic congestion, water usage and environmental sustainability. Moreover, the Halls are an integral part of our community with a proven and exemplary track record of providing local jobs, generously supporting local causes, and creating an inviting and inspiring venue for locals and visitors alike, all the while generating sorely needed tax revenue for the city. Unlike outside developers with outside financing, the Halls have every incentive, being so deeply rooted in our community, to make this project be the best it can be. We can absolutely trust that this project will be a great success in every respect. It will be a win for all, and I urge your support.

Yours truly,

Henry Gundling

1185 Meadowcreek Circle
Saint Helena

Xinia Gamero

From: Jessica Mennella <jessmennella@gmail.com>
Sent: Saturday, August 15, 2020 3:56 PM
To: Public Comment
Cc: Jessica Mennella
Subject: [External] St. Helena, resident / citizen support for the approval of the proposed project at Farmstead at Long Meadow Ranch.

To the St. Helena Planning Commission,

This email is regarding **the proposed project at Farmstead at Long Meadow Ranch**, up for review next **Tuesday, August 18th at 6 PM**. As a resident and concerned citizen of St. Helena **I am writing to express my support for the approval of the project as proposed**, which will bring **significant benefit to our town** and community while requesting **no expansion of use beyond current activities**.

The proposed project includes 65 units of lodging that are contained in 10 sustainably designed buildings, along with 4 acres of farmed property. The proposed experience - sustainable lodging in an agrarian setting - is consistent with this town's farming roots and is the kind of agriculture-oriented, family-owned project that is ideal for St. Helena and its values. Most importantly, the project brings multiple benefits to our community:

- Infrastructure improvements including the realignment of Mills Lane to Grayson, the installation of a “purple pipe” to bring recycled water for irrigation use, and the construction of a missing link in the City’s stormwater drainage system along Mills Lane.
- \$3.2M in funding for workforce housing.
-
- Guests staying upvalley, in St. Helena, providing much needed support for our downtown merchants and restaurants.
- And, when completed, the potential for more than \$2M annually to the City’s General Fund through TOT and sales taxes.

For these reasons, I believe this is the right project for St. Helena and look forward to it's development and the benefits it will bring.

Thank you in advance for your consideration in this matter.

Sincerely,
 Jessica Mennella, Allyn Ave. resident and business owner, St. Helena, CA

--
 Jessica Mennella
jessmennella@gmail.com
 917-282-1309

Xinia Gamero

From: Jay Smith <sunshinefoods@comcast.net>
Sent: Saturday, August 15, 2020 4:17 PM
To: Public Comment
Cc: tedhall@longmeadowranch.com
Subject: [External] Long Meadow Ranch Project

Dear Mayor, City Council and City of St. Helena,

I am in full support of the Long Meadow Ranch project. I believe it to be a well thought out and beneficial addition to the long term health and welfare of the city of St. Helena. I urge you to approve the project in its entirety.

Respectfully,
Jay K Smith

Jay Smith,
Partner
Sunshine Foods
1115 Main Street
St. Helena, Ca 94574
Sent from my iPad

Xinia Gamero

From: Larry Heit <larry@reedsnapavalley.com>
Sent: Saturday, August 15, 2020 5:02 PM
To: Public Comment
Subject: [External] Long Meadow Ranch Project

Planning Commission,

We are writing to you in regards to the upcoming meeting that will be reviewing the THE LONG MEADOW RANCH PROJECT.

We have reviewed the projects details and are excited by the potential such a project will bring to St Helena. It also comes at a much needed time.

We have been St Helena Main Street retailers since 1989. Reeds for 31 years, Cricket for 26 years and we had Mirabelle for 13 years. When we had all 3 stores in operation, we made the top 25 Sales Tax contributors at least once.

We closed Mirabelle in 2017 due to declining sales caused by less downtown traffic and closings due to "natural disasters"

Since 2017, there seems to be even more decline in foot traffic. We unscientifically contribute some of the decline due to other towns and cities such as Yountville and Napa capturing visitors with their new hotels and restaurants.

From 2017 to the start of the Covid pandemic, several businesses have closed and left vacancies for long periods giving the appearance of a dying town. That appearance has been pointed out to us by many local and visiting customers.

Since the start of the pandemic, at least 6 other businesses have closed. Now we have the chance of a new and vibrant business wanting to invest in town. The fact that the owners have lived locally for a long time and run some of the favorite local businesses, it seem to us an easy decision to want to move forward with their proposed project.

We look forward to seeing the improvements this project will bring to town.

Fran and Larry Heit
Reeds 1302 Main St
Cricket 1234 Main St

Xinia Gamero

From: Rick Jones <rick@joneswine.com>
Sent: Sunday, August 16, 2020 3:15 PM
To: Public Comment
Subject: [External] Letter in Support of Farmstead Project

Dear Members of the Planning Commission and Board of Supervisors,

We write this email in support of the proposed expansion of the Farmstead property to include a hotel. This project is both essential for the financial future of St Helena and compatible with the small town nature of St Helena.

Of all the new hotel projects that have been discussed for St Helena, this is one that you should support now for a number of reasons:

1. It will be the most compatible with the small town and agriculturally driven nature of St Helena.
2. It will generate an unprecedented amount of funding (\$3.2 million) for workforce housing that is so desperately needed in St Helena.
3. The development is extraordinarily environmentally sensitive.
4. It is ready to go and can be completed more quickly than any other, so the City begins realizing the financial benefits as soon as possible.

While our mailing address says Calistoga because we are a few hundred feet beyond the St Helena postal limit, we view St Helena as our home town as much as if our mail came through the St Helena post office.

Please approve this project now.

Sincerely,

Elaine and Rick Jones
3884 Silverado Trail
Calistoga, CA 94515

Xinia Gamero

From: Daniel Petroski <dan@massican.com>
Sent: Sunday, August 16, 2020 3:39 PM
To: Public Comment
Subject: Re: [External] St. Helena, resident / citizen support for the approval of the proposed project at Farmstead at Long Meadow Ranch.

To the Planning Commission.

My wife sent the below e-mail in favor of the approval of the Long Meadow Ranch project at Farmstead. I want to echo the sentiments in support of this project as it is clear that St. Helena has lost a bit of its travel and tourism value to down valley development. What Long Meadow is proposing is elegant and in line with the values we need for business development in an agricultural community. St. Helena will not only benefit from their initiative, Napa Valley will, and for that, I am in favor of this project.

Dan

Daniel Petroski
 Massican Winery
 707-843-0268

On Sat, Aug 15, 2020 at 3:56 PM Jessica Mennella <jessmennella@gmail.com> wrote:
 To the St. Helena Planning Commission,

This email is regarding **the proposed project at Farmstead at Long Meadow Ranch**, up for review next **Tuesday, August 18th at 6 PM**. As a resident and concerned citizen of St. Helena **I am writing to express my support for the approval of the project as proposed**, which will bring **significant benefit to our town** and community while requesting **no expansion of use beyond current activities**.

The proposed project includes 65 units of lodging that are contained in 10 sustainably designed buildings, along with 4 acres of farmed property. The proposed experience - sustainable lodging in an agrarian setting - is consistent with this town's farming roots and is the kind of agriculture-oriented, family-owned project that is ideal for St. Helena and its values. Most importantly, the project brings multiple benefits to our community:

- Infrastructure improvements including the realignment of Mills Lane to Grayson, the installation of a “purple pipe” to bring recycled water for irrigation use, and the construction of a missing link in the City’s stormwater drainage system along Mills Lane.
- \$3.2M in funding for workforce housing.
-
- Guests staying upvalley, in St. Helena, providing much needed support for our downtown merchants and restaurants.
- And, when completed, the potential for more than \$2M annually to the City’s General Fund through TOT and sales taxes.

For these reasons, I believe this is the right project for St. Helena and look forward to it's development and the benefits it will bring.

Thank you in advance for your consideration in this matter.

Sincerely,
Jessica Mennella, Allyn Ave. resident and business owner, St. Helena, CA

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Jessica Mennella
jessmennella@gmail.com
917-282-1309



August 16, 2020

To: City of St. Helena, Planning Commission,
publiccomment@cityofsthenana.org

Re: Support for the Farmstead Expansion by Long Meadow Ranch

Dear Commissioners:

I have been a St. Helena resident and business owner for 24 years. For the last 12 years, my office has been in the historic Masons Building at 1335 Main Street.

I have watched with great concern as Main Street continues to lose the vitality that once made it a “must” destination in the Napa Valley as well as the lively center of our town. The number of vacant store fronts is alarming. The shops still open suffer from far too little business. Sidewalks are too quiet. All made worse by the pandemic, of course, but evident long before.

We need solutions that are environmentally sound, congruent with the Valley’s rural nature, in keeping with the character of our town, and financially robust. And we need those solutions before decline becomes irreversible.

I believe that the project to expand Farmstead’s campus would be of great benefit to the town. The project’s focus on agriculture is in keeping with the town’s values. The lodging is consistent with St. Helena’s “small town”

feel and will generate significant revenue for the town both directly and indirectly through support for local businesses. The project will also provide very much needed workforce housing, plus extraordinary and financially secure improvements to public infrastructure.

As long-time resident owners of a local farm, restaurant, and vineyard, the Hall family are members of our community who share a respect for the Napa Valley and its agricultural way of life.

I believe that an expanded Farmstead will be enormously beneficial to the social and financial health of St. Helena.

Sincerely,

Karen MacNeil

Karen MacNeil & Company

Xinia Gamero

From: Joshua Dempsey <jd@jdnapaValley.com>
Sent: Monday, August 17, 2020 7:12 AM
To: Public Comment
Subject: [External] Farmstead Expansion ~ Support Letter

To Whom it May Concern,

My wife and I moved to Napa Valley in 2007 and have been raising our family in St Helena for the past 10 years. We are very familiar with Farmstead and have enjoyed the restaurant, grounds and general atmosphere for many years. We've reviewed the project proposal and we are in full support. We very much appreciate the additional TOT to help create desperately needed funds for our town. The installation of the "purple pipe" is a huge win and the affordable housing component will significantly bolster our affordable housing stock. Lastly, we know the city needs more hotel rooms! The "heads in beds" concept is a real thing and more people spending the night in town will have a halo effect the other retail outlets in the area. Please approve this project.

Sincerely,

Josh and Erin Dempsey
2705 Spring Street
St Helena CA

Xinia Gamero

From: Heather Melvin <heather@joneswine.com>
Sent: Monday, August 17, 2020 7:23 AM
To: Public Comment
Subject: [External] Support for Farmstead Expansion

Dear Members of the Planning Commission and Board of Supervisors,

-
We are writing to share our support of the proposed expansion of the Farmstead property to include a hotel. This project is critical for the financial future of St Helena. It will contribute financially to the city and will provide additional charm to heart of St Helena.

-
Of all the hotel projects that have been discussed for St Helena, we feel this is one that you should support now.

It will be the most compatible with the small town and agriculturally driven nature of St Helena.

It will generate (\$3.2 million) for workforce housing which is very much needed.

The project is focused on being friendly to the environment.

The plans are very well thought out and work can begin immediately. As a result, St Helena begins realizing the financial benefits as soon as possible.

-
Please approve this project now.

-
Sincerely,

-
Heather and Greg Melvin
4 Bournemouth Road
St. Helena

Xinia Gamero

From: Stephanie Bailey <stephjonesbailey@gmail.com>
Sent: Monday, August 17, 2020 9:34 AM
To: Public Comment
Subject: [External] Approve Long Meadow Ranch: Farmstead Hotel

Dear Members of the Planning Commission and Board of Supervisors,

I am solidly in support of the proposed expansion of the Farmstead property to include a hotel. This project is the essence of the small town nature of St. Helena and will bring essential upgrades to our community, paid for by a business, in a time when city funds are needed for other pressing issues.

There are several new hotel projects up for debate, but the Long Meadow Ranch project is THE project you should approve now in our community.

- It reflects the small town and agriculturally driven nature of St Helena.
- It will generate an unprecedented amount of funding (\$3.2 million) for workforce housing that is so desperately needed in St Helena.
- The entire development is extraordinarily environmentally sensitive, and Long Meadow Ranch has a proven track record of delivering environmentally focused, responsible businesses.
- It is ready to go and can be completed more quickly than any other, offering the City financial benefits at a critical time for our community.

I choose to reside and raise my family in St. Helena because it is a town deeply rooted in the land, and residents care about the future of our town and Valley. This project will create virtuous circle of financial benefit for St. Helena while respecting the environmental impact of needed development and housing.

I sincerely hope you will see the wisdom in approving this project now.

Sincerely,

Stephanie Bailey
4 Bournemouth Road
St. Helena, CA 94574

Xinia Gamero

From: Chris Birdwell <cbirdwell@pacificunionco.com>
Sent: Monday, August 17, 2020 9:45 AM
To: Public Comment
Subject: [External] Long Meadow Ranch Project

I am writing you in support of the Farmstead expansion project that is being reviewed by the Planning Commission on August 18th. The city staff and applicant have been very thoughtful in their approach to making this project a reality and have taken the time to ensure the project accomplishes many of the city's short and long term goals for our community.

The new hotel expansion located near the main corridor on Highway 29 just south of the existing Farmstead property should seamlessly fit within the adjacent uses and the new tax revenue from the additional hotel room inventory are a much needed source of income which St. Helena will benefit from for years to come.

The new housing project which is being proposed will bring necessary housing to our community and should keep our workforce living in and working in St. Helena versus increasing the number of commuters coming into St. Helena from the surrounding areas.

I am also impressed that the project has a forward looking perspective on the use of treated wastewater for irrigation purposes. Installing the new purple-pipe infrastructure to bring treated water for irrigation purposes will be a huge benefit to St. Helena.

I wish the Hall's all the success with this new project.

We ask that the Planning Commission provide support for the Farmstead project as it will greatly benefit our community.

Chris Birdwell
 280 Pope Street
 St. Helena, CA



Hermosa Beach Office
Phone: (310) 798-2400

San Diego Office
Phone: (858) 999-0070
Phone: (619) 940-4522

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Email Address:
mnb@cbcearthlaw.com
Direct Dial:
310-798-2400 Ext. 5

August 17, 2020

By U.S. Mail

Via Email publiccomment@cityofsthelena.org; ahcock@cityofsthelena.org

St. Helena Planning Commission
Aaron Hecock, AICP Senior Planner
1572 Railroad Avenue
St. Helena, CA 94574

Re: August 18, 2020 Agenda, Item 5.2: Farmstead at Long Meadow Ranch
Restaurant and Lodging Projects, 738 Main Street (009-112-017); and 1000
Mills Lane (009-070-049, 009-070-052, 009-070-053, and 009-070-054)

Honorable Commissioners:

On behalf of Bell Canyon Watershed Alliance, we submit these comments on the mitigated negative declaration (MND) prepared for the Farmstead at Long Meadow Ranch Restaurant and Lodging Projects (Projects). The Projects will transform the Farmstead at Long Meadow Ranch into an event center that will cater to weddings, conventions, and large parties. Specifically, the Projects would permit expansion of the restaurant and modification of restaurant activities to allow hundreds of events per year, as well as the construction of a 65-room, single-story hotel in 14 buildings on what is currently vacant land. Hotel amenities would include a multi-purpose building, pool, spa and utility building. The new buildings, including the hotel rooms, would total 53,200 square feet. (MND p. 8.) Restaurant reconfiguration would move the restaurant's baking operation from the restaurant to the Logan-Ives house, enclose the existing farmers' market building and use it for butchery, add more dry storage at the restaurant, and build a sound wall at the outdoor bar. Of particular concern, the Projects would allow up to four events **per week** with up to 200 people and up to six events per year with up to 300 people. The Projects require numerous entitlements including a use permit, design review, variance, lot merger, lot line adjustment, and a development agreement.

The California Environmental Quality Act (CEQA) serves two basic, interrelated functions: ensuring environmental protection and encouraging governmental transparency. (*Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal. 3d 553, 564.) In connection with the Projects' review under CEQA, the City has prepared an

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initial study and mitigated negative declaration. A lead agency prepares an initial study in order to determine whether an EIR, a negative declaration, or an MND is the appropriate environmental review document. (14 CCR § 15365, herein “CEQA Guidelines”.) The initial study must consider whether any aspect of a project, either individually or cumulatively, may cause a significant adverse impact. (CEQA Guidelines § 15063(b)(1).) The purpose of the initial study is to provide the lead agency with adequate information regarding a project to determine the appropriate environmental review document and “documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment.” (*Ctr. for Sierra Nevada Conservation v. County of El Dorado* (2012) 202 Cal. App. 4th 1156, 1170, citations omitted.) There must be a basis within the record to support the conclusions reached by the initial study. (*Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170, 1201.) “Where an agency. . . fails to gather information and undertake an adequate environmental analysis in its initial study, a negative declaration is inappropriate.” (*El Dorado County Taxpayers for Quality Growth v. County of El Dorado* (2004) 122 Cal.App.4th 1591, 1597, citations omitted.) Failure to adequately analyze all of a project’s potentially significant impacts or provide evidence to support conclusions reached in the initial study is a failure to comply with the law.

When a fair argument exists that a Project will have a significant environmental impact, an environmental impact report (EIR) must be prepared.

With regard to the Farmstead Projects, the City has failed to prepare a legally adequate initial study, improperly omitting consideration of potentially significant Project impacts and lacking evidentiary support for claims that Project impacts would be insignificant. A fair argument also exists that the Project would have adverse impacts on the environment with regard to available water supplies and traffic, among other impacts. The preparation of an MND for a 53,200-square foot addition to enable operation of a year-round events center is laughable. An EIR is required.

I. The MND Uses an Improper Baseline for Analysis.

In his July 24, 2020 “Dear Neighbor” letter, the Applicant notes, “We are not requesting any expansion of use beyond our current activities.” (PC Staff Report, p. 1031.) However, the MND is clear that many of the Farmstead’s current activities are occurring outside of its permits. The MND provides:

Additional activities and uses have been established at this location ***outside of those explicitly approved*** by Resolution No. 2009-30, including the following (also refer to Table 1):

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- Retail sales, in addition to the approved tasting room and offices, inside the historic Logan-Ives house (open 10 a.m. to 6 p.m.);
- A café serving breakfast items and coffee (open from 7 a.m. to 4 p.m. with 40 outdoor seats);
- Various business and private social events occurring throughout the year. Events occur between 9 am and 10 pm. Almost all events include at least one meal served by the restaurant. These events occur daily with 15-200 persons in attendance. Outdoor live and recorded amplified music is often included with these events;
- Local community events up to 6 times per year with up to 300 attendees;
- Fitness classes including yoga and Pilates beginning at 9 a.m. (offered 2-3 times per week with up to 12 attendees); and
- Film screenings. Films are screened four times per year, with four showings each day. Twenty to 40 attendees at each screening.

(MND p. 5, emphasis added.) These events have been occurring in violation of Farmstead’s permits and are not properly part of the CEQA baseline.

Under CEQA, a project’s environmental impacts are determined by comparing the environmental baseline, the without-project conditions, to with-project conditions. (CEQA Guidelines § 15125, subd. (a).) The difference between those conditions are the project’s impacts. The MND must disclose, analyze, and mitigate, to the extent possible, the environmental impacts of that project.

Without an accurate baseline, the MND cannot accurately disclose a project’s likely environmental impacts or determine whether those impacts can be fully mitigated. (*Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 322.) Here, the MND accepts all of the unpermitted activities at the Farmstead, and their environmental impacts, as part of the baseline. For example, in assessing GHG impacts, the MND claims the Restaurant Project will not increase traffic above the assumption that two, 200-person events will occur each week. (MND p. 63.) Events of this size were never permitted, and their impacts should be part of the Project analysis, and not relegated to the baseline. The use of an improper baseline infects the entire MND.

An artificially high baseline such as this one fails to address a portion of the project’s impacts by relegating what are actually “new” impacts to existing conditions. This prevents the MND from disclosing to the public or formulating mitigation measures capturing the project’s full impacts. An accurate baseline is fundamental to an accurate CEQA analysis that fully informs the public and decisionmakers. (*Citizens for East Shore Parks v. California State Lands Com.* (2011) 202 Cal.App.4th 549, 557.)

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As currently formulated, the MND prejudices informed decisionmaking and violates CEQA.

II. The MND Improperly Separates the Analysis and Mitigation of Project Impacts.

The IS/MND improperly piecemeals analysis of the Restaurant and Lodging Projects, even though the Projects will be implemented by the same Applicant, at the same time, on contiguous parcels of land.

CEQA requires environmental review to evaluate the “whole of a project” and not simply its constituent parts when determining whether it will have a significant environmental effect. (CEQA Guidelines § 15003(h).) Further, “environmental considerations do not become submerged by chopping a large project into many little ones -- each with a minimal potential impact on the environment -- which cumulatively may have disastrous consequences.” (*Bozung v. Local Agency Formation Commission* (1975) 13 Cal. 3d 263, 283-284.) The court in *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214 set out three items to be used to determine what constitutes the whole of a project: (1) relationship in time, (2) physical location; and (3) the entity undertaking the action. (*Id.* at 1227.) The Restaurant and Lodging Projects satisfy all three items needed to be considered a single Project. Even so, the IS/MND fails to consider them together. For example, the air quality analysis sets out the impacts of the Restaurant Project (MND p. 33) independent from the impacts of the Lodging Project (MND pp. 33-35), even though they will be constructed and operated simultaneously, by the same Applicant, in the same location. This improper splitting of analysis occurs throughout the MND. Each component project was determined not to have significant impacts because they fall below screening criteria. However, the IS/MND never analyzes the impacts of the two projects together, in violation of CEQA.

III. The Project Will Adversely Impact the City’s Limited Water Supplies and Neighboring Wells.

The St. Helena has imposed water restrictions as recently as July 1 of this year. It is currently in a Stage One water emergency.

Due to longstanding water supply challenges, The City has implemented the St. Helena Water Neutral Policy for Development, which requires that all developments be “water neutral.” General Plan Policy PF1.1 requires “that the approval of new development be contingent upon the ability of the City to provide water without

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exceeding the safe annual yield of its water supply system.” This determination requires evidentiary support. However, the Project calls for the construction and operation of two swimming pools, 65 hotel rooms, many showers and toilets, and lush, orchard and vegetable landscaping. It is anything but water neutral. Further, the MND relies on an incorrect CEQA baseline and the segmentation of the Restaurant and Lodging Projects to conclude water supply impacts will not occur.

The MND provides, “The perimeter of the property will be lined two- and three-deep with fruit trees, creating a commercial fruit orchard.” (MND p. 8.) It later states, “Throughout the lodging portion of the property, farming will continue with an edible landscape of herbs, fruit, citrus trees, and vegetables planted along the pathways.” (MND p. 18.) Trees are said to dominate the landscape:

Evergreen screening trees will wrap the property along Mills Lane and the western border parallel with Highway 29. These California pepper trees, selected for the graceful form of their dense, low canopies, will reach up to 40’ in height at maturity, effectively screening the lodging buildings from the two roads. Adjacent rows of fruit trees will create a secondary layer of screening, providing glimpses of the seasonal farming cycle and historic Napa Valley landscape.

(MND p. 22.)

For such an important issue, the MND’s analysis of the Restaurant Project’s water supply is shockingly short. It reads: “The proposed uses for the Farmstead Project will not increase water demand, and no modifications to the Public Water System are proposed. As the existing well will not be used to supply more water, the project will have less than significant impact to groundwater supply.” (MND p. 75.) This fallacy is repeated at MND p. 135 with regard to the use of City water. These conclusions lack evidentiary support and cannot be sustained.

The conclusion that the Restaurant Project will not increase water demand relies on the flawed use of all existing, unpermitted activities, as part of the baseline. The existing Project does not allow 200-person and 300-person events. The Project would allow four 200-person events per week, in addition to periodic 300-person events, operation of a café, fitness classes, and other water-reliant uses. Thus, it is incorrect that the existing well will not be used to supply more water than it supplied under compliance with the existing permits. On the contrary, the MND’s water use table shows a marked increase in water use at the site after 2013. In 2013, site water use was 1,304,000 gallons. However, by 2015, this amount had increased over one million gallons per year to 2,447,418 gallons. Thus, it appears that increased hosting of events has already

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drastically increased the site's water use. This million-plus gallon increase in usage cannot be hidden in the baseline.

Even if all Project "landscaping" is watered by well, that does not prevent the potential for impacts nearby (particularly if well use has already increased by one million gallons per year). The wells of neighbors have already begun going dry, as demonstrated by letters from the Stantons and other concerned St. Helena residents. The Project cannot satisfy General Plan Policy PF1.E, "Permit no new development relying on groundwater unless and until it is determined that the incremental production of ground water to support the development will not adversely impact the water production capability of the aquifer supporting the City wells." There is a fair argument that the Project is already increasing well use beyond what is sustainable, and an EIR must be prepared.

The EIR must clearly and objectively compare the Farmstead's water use in compliance with its permits with its expected use under the Project permits. This use must be clearly disclosed to the St. Helena public and decisionmakers, and the projected water use must then be mitigated to a level of water neutrality.

With regard to the Lodging Project, the MND concludes that impacts to wells will not be significant because no new wells will need to be drilled. (MND p. 76.) However, this fails to account for the impacts on other well users in the vicinity, several of whom have already had their wells run dry. Neither orchard trees nor vegetable gardens are low water-use landscaping choices. If the model landscaping ordinance allows fruit trees, compliance with such an ordinance will not reduce water use. Mitigation Measure Hydro-2 will not reduce the Project's water use below a level of significance. Watering of orchard trees cannot be curtailed during times of drought. The MND's conclusions regarding the Lodging Project's impact on wells lack substantial evidence and cannot be sustained.

The MND accurately states that the Lodging Project's baseline for use of City water is zero, considering the site is currently undeveloped. (MND p. 136.) The MND estimates the Lodging Project will use 1,879,028 gallons or 5.767 acre feet per year. For a variety of reasons, this appears to be a massive underestimate. Among other uses, this estimate does not appear to include maintaining the pools, which will have daily evaporative losses. Workforce housing uses also appear to be omitted. The Revised MND fails to respond to comments noting these omissions. (Staff Report pp. 369-71.) The MND states that the pools will initially be filled with water originating outside of St. Helena (MND p. 9), but there is no explanation of where this water will originate, or how avoidance of the City's water system will be enforced. Moreover, the amount of water needed to initially fill the pools will quickly be surpassed by that needed to refill the pools due to evaporative losses, displacement, and splashing of guests. Napa County recently

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reached temperatures of 115 degrees. Evaporative losses will be substantial and must be accounted for in an EIR.

The Project concludes the Project will not have significant impacts on City water supplies with the incorporation of Revised Mitigation Measure UTL-2. The proposal to pay an in lieu fee has been eliminated. (See, MND pp. 9, 137.) This measure provides:

The Project shall connect to City water service and comply with all requirements related to water ***as detailed in the Development Agreement***. Namely, Developer shall construct and install recycled water infrastructure (i.e., purple pipe) in Mills Lane extending from Highway 29 easterly to the eastern end of Mills Lane. Developer shall fund these improvements at a cost of up to \$256,549.

The Revised MND does not indicate whether \$256,549 will fully cover the cost of installation of the proposed purple pipe. Even so, it assumes that this pipe will permit the use of tertiary treated water to landscape the fields at Crane Park and St. Helena Elementary School, which used 4,215,260 gallons of water per year. (Revised MND p. 7.) The Project attempts to take credit for saving 4,215,260 gallons of water each year in the future. Yet the MND does not state when the City's wastewater treatment plant will transition to tertiary treatment, if tertiary treatment upgrades are fully funded, or whether the wastewater treatment plant will be able to provide 4,215,260 gallons of water per year for the proposed offset uses. Without this information, the proposed mitigation is speculative, at best.

Additionally, without inclusion of these requirements in the MND itself, the public and decisionmakers cannot evaluate their efficacy. This precludes informed decisionmaking. Deferral to the Development Agreement, alone, violates CEQA. Moreover, installation of purple pipe will not necessarily offset the Project's full water use, needed to satisfy General Plan policies and the City's requirement for water neutrality. The Project's other water supply mitigation is too vague to be effective. The Project will have a significant impact on water use and requires preparation of an EIR.

IV. The Project May Have Significant Impacts on Traffic.

The Project would permit four, 200-person events per week, six 300-person events per year, construction and operation of a 65-room luxury hotel and spa, operation of a café, fitness classes, film screenings, and daily events at the Farmstead Restaurant and Lodging Complex. Visitors would access the hotel from Mills Lane, which would be realigned with the signal at Highway 29 and Grayson Avenue, creating a four-way intersection with a new railroad crossing. Obviously, the Project will impact traffic in St. Helena. Even so, the MND concludes that, with the realignment of the SR-29/Grayson

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Avenue-Mills Lane Intersection and contribution to other nearby traffic signals, the Project will not have significant traffic impacts. The MND lacks substantial evidence for these conclusions. On the contrary, the Project's increased traffic generation will result in the signalization of new intersections and the addition of traffic and delay on both local and regional arterials. The MND fails to analyze the Restaurant and Lodging Projects together, as required by CEQA. An EIR is required to fully disclose, analyze, and mitigate the Project's impacts.

The MND assumes that the Lodging Project would generate 544 daily two-way trips, or 1088 one-way trips per day. (MND p. 115.) The MND also concludes that, despite increases in delay and diminutions in levels of service at some intersections beyond level F, that impacts would not be significant. (MND pp. 116-119.) At one intersection, LOS would change "from an acceptable LOS D to an unacceptable LOS E," but the MND finds the change insignificant because the delay would not be long enough. (MND p. 123.) Incremental impacts must be analyzed and mitigated, even if thresholds of significance are already exceeded. It is these impacts, once conditions have already deteriorated, which may be most harmful. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 718; *Los Angeles Unified School Dist. v. City of Los Angeles* (1997) 58 Cal.App.4th 1019, 1026.)

The MND admits traffic impacts to only a handful of local intersections: (1) SR-29 at Charter Oak Avenue during the Friday and Saturday PM peak hours; (2) SR-29 at Dowdell Lane during the Friday and Saturday PM peak hours, and SR-29 at Grayson Avenue-Mills during the Friday AM peak hour. (MND pp. 123-124.)

To calculate the impacts of events, the MND appears to rely on the Applicant's stated practice that it requires guests to rent vans or buses to reach the site. The MND assumes that 14 vans or buses and 5 automobiles are used for 200-person events. (MND p. 121.) They are also assumed, without evidence, to park offsite. However, these shuttle requirements are not included as enforceable mitigation measures in the Project. The MND cannot rely on these trip reductions for its conclusion that the Project's events will have less than significant impacts on traffic.

The MND acknowledges that employee parking may be insufficient during midafternoon shift changes. (MND p. 126.) However, without support, the MND assumes a 15 to 20 percent drop in the number of parking spaces needed for these employees "due to TDM program car and vanpooling, employee drop off and pickup by a friend or family member and walking or biking by employees living nearby." (MND p. 126.) The MND provides no information about the TDM program or its requirements, and the program is not included in the MND's mitigation measures. It is not enforceable and cannot be relied upon for purposes of the MND's analysis of traffic and parking

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impacts. Furthermore, as the Staff Report notes that 75 percent of the Project's jobs will be low wage, it is highly unlikely that employees will be walking or biking short distances to work. Most employees will live far from the Project.

The MND assumes that VMT will be lowered by 15 percent due to provision of food onsite for guests and the availability of bicycles guests can use to traverse St. Helena. (MND p. 112.) While this may be true in the winter and spring, it is far less likely during summer and fall when temperatures exceed 100 degrees, or for families with small children, elderly members, or disabled members who may not be able to use traditional bicycles. Additionally, Napa is as much a culinary as a wine destination. Out of town visitors will not turn down opportunities to experience the valley's world renown restaurants, leading to higher VMT than purportedly disclosed in the analysis attached to, but not contained in, the MND.

The MND fails to analyze the impacts caused by the Project inducing traffic to St. Helena. On June 29, 2020, the County of Napa raised concerns that the MND fails to account for the potential to increase traffic "on the arterial roads located outside the City of St. Helena, and which most project patrons and employees will depend upon to access the subject property." The County requested that the MND consider the "project's potential to contribute to regional roadway traffic conditions" and mitigate these impacts. The Revised MND disregarded the County's comment, stating "As explained in the MND, all potentially significant roadway effects by the Project will be mitigated to a less than significant level." (Revised MND p. 29.) Where "comments from responsible experts or sister agencies disclose new or conflicting data or opinions that cause concern that the agency may not have fully evaluated the project and its alternatives, these comments may not simply be ignored. There must be good faith, reasoned analysis in response." (*Cleary v. County of Stanislaus* (1981) 118 Cal.App.3d 348, 357 [citations omitted].) This information must be included in an EIR prepared for the Project.

The Revised MND indicates that changes to CEQA prohibit consideration of vehicular delay in approval of the Project. (Revised MND p. 8.) However, as the MND was released prior to the July 1, 2020 implementation date of SB 743, this statement is not accurate.

Moreover, if the MND did intend to rely on vehicle miles travelled (VMT) as its metric for consideration of traffic impacts, its analysis is sorely lacking. Neither the MND nor the Revised MND contain any estimates of Project-induced VMT. Both documents claim VMT will be reduced by the provision of bicycles, EV charging stations, an electric vehicle network, and parking limitations, but no evidence of the efficacy of these measures is provided. Guests will still need to travel to the event center

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and hotel. Electric vehicle chargers, by their very nature, enable vehicle trips. An EIR is required.

V. The Project Has Not Demonstrated Carbon Neutrality.

Global temperatures are rising at unprecedented rates, which is expected to increase the frequency of heat waves, droughts, and devastating wildfires in the state. California has enacted legislation and executive orders requiring greenhouse gas reductions to 80 percent below 1990 levels by 2050 to avert the worst impacts of climate change. However, these state targets will be missed unless existing emissions are drastically reduced and future developments are emission-free. Rises in global temperature will especially affect St. Helena and other regions with economies based on temperature-dependent crops, such as wine grapes.

Recognizing this, the City Council of St. Helena recently signed a Proclamation/Resolution that all developments will be analyzed to ensure carbon neutrality. However, the MND does not establish that the Project will be carbon neutral.

CEQA requires agencies to “make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project.” (Guidelines § 15064.4(a).) The California Supreme Court recently ordered agencies to “ensure that CEQA analysis stays in step with evolving scientific knowledge and state regulatory schemes.” (*Cleveland National Forest Foundation v. San Diego Association of Governments* (2017) 3 Cal.5th 497, 519.)

Even so, the MND fails to disclose the Project’s full impacts on greenhouse gases. Many sources of GHGs are omitted, and the MND improperly segments the Restaurant and Lodging Projects for this analysis. Inexplicably, the MND begins its GHG discussion with an explanation of the Bay Area Air Quality Management District’s regulation of other pollutants and with the table showing the thresholds of significance for non-GHG air pollutants. (MND pp. 60-61.) This information is irrelevant to determination of whether the Project will be carbon neutral and, therefore, have no significant impacts on climate change.

In lieu of actual analysis, the MND’s analysis of Restaurant GHG emissions reiterates the incorrect claim that there will be no increases in traffic that could cause GHG emissions. First, this necessarily assumes that the Restaurant site’s laundry list of unpermitted activities is part of the CEQA baseline. It is not. Second, the MND’s traffic analysis assumes two 200-person events per week at the Restaurant. (MND p. 63.) Given that the Project’s permits would allow four of these events each week, the GHG impacts of any traffic are understated by half. When the additional six 300-person

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events, café, exercise classes, and other unpermitted activities are added, the MND drastically understates the Project's traffic generation, as well as its generation of traffic-derived GHGs. Ultimately, the MND concludes that the Restaurant Project would not have GHG impacts because it will not include wasteful energy uses and because the Project would implement a "Buy Local Program" that will allegedly reduce the distance that food products will travel. (MND p. 63.) However, the MND fails to provide any quantification or other form of substantiation that the solar and "Buy Local Program" will offset the Restaurant Project's undisclosed GHG emissions. The MND also explains:

Measuring the impact of a minor increase in space and the impact of two 200-person events per week resulted in no new significant air quality impacts. No new GHG generating uses are proposed that would exceed BAAQMD thresholds, a less than significant impact.

(MND p. 63.) Again, this is insufficient. The MND does not discuss these measurements, and the Project permits four, not two 200-person events per week. The MND also does not discuss the BAAQMD thresholds for the Restaurant Project. Its bare assertion that thresholds are not exceeded lacks substantial evidence.

With regard to the Lodging Project, the MND finds the Project will result in 649 metric tons of carbon dioxide equivalent emissions per year. (MND p. 65.) While 649 metric tons is below the Bay Area Air Quality Management District Threshold, it is far above the amount permitted by the City Council's "carbon neutral" proclamation. The Project fails to include any mitigation for GHG impacts. In order to meet City policies, the Project must mitigate at least 649 metric tons of carbon dioxide equivalent emissions per year.

VI. The Air Quality Analyses Fail to Capture the Projects' Full Impacts.

Although the Projects' permits would allow up to four 200-person events per week and several 300-person events per year, the Project's traffic analysis, relied upon for the air quality analysis, assumes the Projects will host only two, 200-person events per week. (MND p. 32.) Thus, the air quality analysis fails to account for the full environmental impacts of the Projects' permits. The operational air quality impact analysis for the Restaurant Project are also based on 2, 200-person events per week. (MND p. 33.) The Restaurant Project's air quality analysis further assumes that no new employees would be needed (MND p. 32), but other portions of the MND admit that at least 11 employees would be added for marketing and other purposes related to booking and hosting events. (MND p. 9.) The air quality analysis understates the Restaurant Project's permitted impacts and violates CEQA. An EIR is required.

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Regarding the Lodging Project, the MND states that the hotel will include design features to reduce vehicle trips (MND p. 32), but the air quality analysis does not describe or explain those features. Nor does the MND's air quality analysis provide information substantiating the effectiveness of these undefined features. Accordingly, the MND's conclusion that the Lodging Project's traffic will not result in air quality impacts lacks substantial evidence.

Mitigation Measure AQ-2, aimed at reducing the community risk of carcinogenic diesel particulate matter emissions, is impermissibly deferred. On its face, the measure provides:

The project evaluated is at a preliminary design phase and the actual measures to reduce diesel particulate matter emissions may change. A performance standard and feasible measure to achieve that standard are presented in below construction parameters. It is possible that a different set of measures could be developed, or the project could be reduced in scope following entitlement that would change the requirements to reduce DPM emissions.

(MND p. 35.) The MND is clear that the actual mitigation for reducing community risk has not yet been developed. CEQA requires the formulation and evaluation of mitigation measures during the administrative process unless specific performance criteria are adopted "at the time of project approval." (*Sacramento Old City Association v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1029.) AQ-2, by contrast, consists of a list of tasks that may or may not be implemented in the future. Further, some of AQ-2's tasks lack the specificity required to ensure efficacy. For example, task (1) is to "Select equipment during construction to minimize emissions," but no guidance is given as to what exactly this means. What type of equipment should be selected? What are the maximum emissions permitted? This information should be specified now, prior to Project approval. Task (2) provides greater specificity about the emissions limits of construction equipment but defers the creation of a plan to use this equipment until later. This type of equipment should be required as mitigation, now. Task (3) gives lip service to the applicable thresholds but does not explain how they will be met. Tier 3 equipment is provided as one possibility to "include", but use of Tier 3 equipment is not actually required. Unless rephrased, AQ-2 is vague, speculative, and deferred mitigation that violates CEQA. (CEQA Guidelines section 15126.4.)

Mitigation must be discussed in the environmental document so that the public and decisionmakers can assess its efficacy prior to Project approval. The MND's conclusions that air quality impacts will be reduced below a level of significance lack substantial evidence. Additionally, the MND's failure to provide sufficient information about air quality mitigation deprives decisionmakers of information about the efficacy of

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mitigation and prejudices informed decisionmaking. (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92.) An EIR is required to fully evaluate the Projects' full direct and cumulative air quality impacts.

VII. Historic Resources Impacts to the Logan-Ives House Are Not Properly Analyzed.

The MND acknowledges that “[t]he Logan-Ives House is a local historical resource...” (MND p. 44.) However, the MND’s analysis of the Restaurant Project’s impacts is limited to two sentences: “Proposed modifications to the Logan-Ives House will not require any exterior changes. Therefore, no impact to historical resources is anticipated, and impacts are deemed less than significant.” (MND p. 44.) Since this is a public building, visible from public streets, the environmental analysis was required to discuss the Project’s potential impacts to interior character defining features. The MND and the cultural resources report prepared in support of the MND fail to do so. The MND must be revised to analyze whether proposed interior alterations to the property meet the Secretary of Interior’s Standards for the Treatment of Historic Properties. The Standards are not limited to the exterior or historic properties, as is made clear by Guidelines prepared by the Secretary of the Interior to assist with implementation of the Standards. (See Attachment 1, pp. 54-55.) Accordingly, the MND’s conclusions that the Project will not impact cultural resources lack substantial evidence.

Mitigation measure Cul-1 states that if “architectural remains” are encountered during construction, management recommendations will be made that may include “resource avoidance” or “preparation of reports” for resources that may qualify for listing on California’s Register of Historic Places. (MND pp. 46-47.) This measure is vague and deferred in violation of CEQA. There is no reason that the Logan-Ives House has not yet been evaluated in a historic resource report to determine its eligibility for the California Register and to list its character defining features. Further, since the Logan-Ives House is available for evaluation, there is no reason to defer the formulation of mitigation for when architectural resources are encountered during Project construction. CEQA requires more.

VIII. Responses to Comments Fail to Respond to Comments.

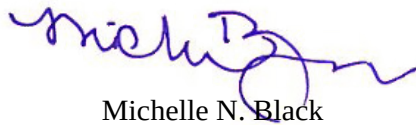
The response to almost every substantive comment is the same, “The comment does not provide any substantial evidence to support the contention...” While responses to comments are not required for an MND, if responses are provided, one would hope they would engage with the public and agency comments received. On that front, these responses are utterly useless. Instead, the document fails to provide good faith responses to sincere and substantial public and agency concerns.

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Conclusion

Thank you for considering our comments. We look forward to the City's preparation of an EIR for this Project that carefully considers the direct and cumulative environmental impacts of the Farmstead Projects and that contains a thorough analysis of alternatives and mitigation measures designed to reduce and avoid these adverse impacts on the City of St. Helena, its water system, and its residents.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michelle N. Black", with a stylized flourish at the end.

Michelle N. Black

cc: City Clerk ctzaopoulos@cityofsthenana.org

Attachment

Building Interior

Spaces, Features and Finishes

An interior floor plan, the arrangement and sequence of spaces, and built-in features and applied finishes are individually and collectively important in defining the historic character of the building. Their identification, retention, protection, and repair should be given prime consideration in every rehabilitation project. In evaluating historic interiors prior to rehabilitation, it should be kept in mind that interiors are comprised of a series of primary and secondary spaces. This is applicable to all buildings, from courthouses to cathedrals, to cottages and office buildings. Primary spaces, including entrance halls, parlors, or living rooms, assembly rooms and lobbies, are defined not only by their features and finishes, but by the size and proportion of the rooms themselves—purposely

created to be the visual attraction or functioning “core” of the building. Care should be taken to retain the essential proportions of primary interior spaces and not to damage, obscure, or destroy distinctive features and finishes.

Secondary spaces include areas and rooms that “service” the primary spaces and may include kitchens, bathrooms, mail rooms, utility spaces, hallways, firestairs and work spaces in a commercial or office building. Extensive changes can often be made in these less important areas without having a detrimental effect on the overall historic character.

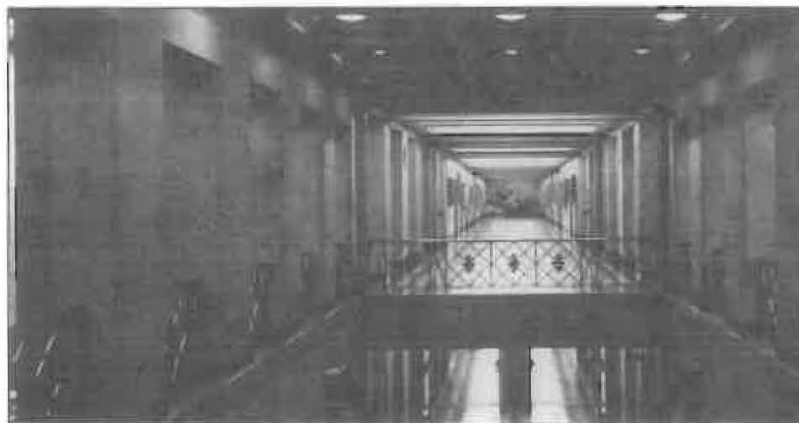




Photo: Jack L. Boushert, HABS.



Photo: Jack L. Boushert, HABS.

These photographs suggest the richness and diversity of public building spaces, features, and finishes.

Recommended

Interior Spaces

Identify, retain and preserve

Identifying, retaining, and preserving a floor plan or interior spaces that are important in defining the overall historic character of the building. This includes the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves such as lobbies, reception halls, entrance halls, double parlors, theaters, auditoriums, and important industrial or commercial use spaces.

Not Recommended

Radically changing a floor plan or interior spaces—including individual rooms—which are important in defining the overall historic character of the building so that, as a result, the character is diminished.

Altering the floor plan by demolishing principal walls and partitions to create a new appearance.

Altering or destroying interior spaces by inserting floors, cutting through floors, lowering ceilings, or adding or removing walls.

Relocating an interior feature such as a staircase so that the historic relationship between features and space is altered.

Interior Features and Finishes

Identify, retain and preserve

Identifying, retaining, and preserving interior features and finishes that are important in defining the overall historic character of the building, including columns, cornices, baseboards, fireplaces and mantels, panelling, light fixtures, hardware, and flooring; and wallpaper, plaster, paint, and finishes such as stenciling, marbling, and graining; and other decorative materials that accent interior features and provide color, texture, and patterning to walls, floors, and ceilings.

Removing or radically changing features and finishes which are important in defining the overall historic character of the building so that, as a result, the character is diminished.

Installing new decorative material that obscures or damages character-defining interior features or finishes.

Removing paint, plaster, or other finishes from historically finished surfaces to create a new appearance (e.g., removing plaster to expose masonry surfaces such as brick walls or a chimney piece).

Applying paint, plaster, or other finishes to surfaces that have been historically unfinished to create a new appearance.

Stripping paint to bare wood rather than repairing or reapplying grained or marbled finishes to features such as doors and panelling.

Radically changing the type of finish or its color, such as painting a previously varnished wood feature.

Jeff and Janie Green
2000 Howell Mountain Road
St Helena, CA 94574

Dear Planning Commission,

We are writing in support of the Hall family's proposed project at Farmstead. We fully support the project as presented to the planning commission. We believe that the modifications to the use at the existing property and the planned expansion on the additional 10 acres to the south will be of a major benefit to our city and community, culturally and financially.

The city's finances have already suffered as a result of this pandemic, and city employees have taken a pay cut as a result. The additional revenues that this project can create through the TOT revenues as well as potential sales tax revenues from our local merchants are vital to the financial health of the city and residents.

We strongly hope that the planning commission, and eventually the city council, approve the project as submitted.

Thank you,
Jeff and Janie Green

Xinia Gamero

From: A Cottrell <anne.l.cottrell@gmail.com>
Sent: Monday, August 17, 2020 2:06 PM
To: Public Comment
Subject: Fwd: [External] Farmstead Lodging Project

To the members of the St. Helena Planning Commission:

As a St. Helena resident, I am writing to express my support for the Farmstead Lodging project. It makes sense for a number of reasons, including:

- 1) Location: the project is just south of downtown, attached to an existing business, and walkable and bikeable to town. Visitors can leave their cars and experience downtown St. Helena on foot.
- 2) Recycled water: not only will the project ultimately use recycled water for its irrigation needs, it will create the infrastructure to bring tertiary recycled water to the center of St. Helena. This will allow agriculture and playing fields within the city limits to use tertiary recycled water as well.
- 3) Support for workforce housing: the Halls' \$1million donation to Our Town St. Helena and payment of \$2.2million to St. Helena's Housing Impact Fund will set a new standard in addressing a pressing need for housing in our town. And the Halls have committed to supporting and advocating for the proposed Phelps Village.

Finally, the project includes several energy-saving and greenhouse-gas reducing features, and also expands agricultural activity on the site. I hope the Planning Commission will support this application.

Sincerely,
Anne Cottrell

Xinia Gamero

From: Shannon Donati <shannondolly111@gmail.com>
Sent: Monday, August 17, 2020 3:31 PM
To: Public Comment
Subject: [External] In Support of Farmstead expansion

To Whom it may concern,

I am writing this letter in support of the expansion of the Farmstead campus, to the city of Saint Helena.

After visiting Napa Valley for over 20 years as a tourist, I decided to make a bold move and sell my very successful business on the east coast and open a clothing boutique on Main Street in St. Helena. From the time I signed my lease and actually opened my doors for business, 17 businesses shuttered. I was horrified and immediately began asking other merchants what was going on. The repeated answer was that the foot traffic had significantly decreased over the prior years and to make matters worse, City Council was making it difficult for new businesses to open. As I can attest, there was a lot of red tape even for a simple clothing store.

I made the decision to permanently close my store in May. There were several factors and yes, COVID was the nail in the coffin. But the lack of tourism and foot traffic was the driving factor for the store's lack of sales. St. Helena needs to be more proactive for business owners, and I do believe the town is starting to finally make some positive changes from the Chamber meetings that I have attended. The sidewalk renovation will upgrade the curb appeal of downtown, and the directionals will help guide tourists to places of interest. However, that doesn't solve the problem of actually getting people to stay within the city limits. St. Helena has not provided enough lodging to accommodate visitors to our valley thus forcing them to seek accommodations elsewhere. It pains my heart to drive through Yountville and see how vibrant that town has become in the past decade relative to St. Helena. The well heeled travelers staying in their hotels finance many of the recent improvements they have been able to make and also lend it vibrancy. If we had more visitors and thus revenue, my store, like so many others, would still be a part of St. Helena today.

Ted Hall is a proven successful businessman, and he is local. He is driven to improve everything he touches. He knows the town and the people and he cares about it. We are lucky to even have Farmstead wanting to take a risk and pursue this amazing venture that attracts more tourism and brings much needed capital to the town. And their generous offer to donate 3.2 Million Dollars for employee housing is exactly what we need. An ongoing conversation among merchants was that we couldn't find long term help due to lack of affordable housing. Employees cannot afford to drive 45 minutes one way to work in St. Helena and they definitely can't afford the rent. Employee housing and economic growth has got to happen for the city or there won't be a downtown left for anyone to enjoy.

I hope and pray that the Farmstead proposal gets approved and the project quickly comes to life. St. Helena is such a beautiful, unique town, it just needs a lot of love and growth right now. The expansion of Farmstead and adding a 65 room boutique hotel is exactly the type of revenue promoting business the town desperately needs. We want to captivate our audiences on every level from shopping to dining, from wine tasting to upscale and unique accommodations. The Hall family will build a world class campus, just as they have done with their existing restaurant, which is now a much sought after dining reservation by many who come to the valley.

Thank you for taking the time to read my letter. Please reach out to me if you need to do so.

Best,
 Shannon Donati

Xinia Gamero

From: Vicki <ameliatvl@aol.com>
Sent: Monday, August 17, 2020 8:53 PM
To: Public Comment
Subject: [External] The Farmstead Lodging Project

Dear City of St. Helena,

There are a plethora of reasons to support LMR and their lodging project request. They are professional, do their homework and present what is fair with the community's best interest at their core. On numerous occasions, they have shown their support for FFA at the HS, building fire trails on their land to protect downtown, gifting the corkage fee from the restaurant to local non profits and contributing land to the Napa Valley Land Trust.

They are stewards, in the truest sense of the word, for keeping agriculture alive, being green and in this particular instance, adding much needed lodging accommodations.

I heartily support their request and hope you will, too.

VJ Serianni

Xinia Gamero

From: Anne Offord <anneofford@hotmail.com>
Sent: Tuesday, August 18, 2020 6:30 AM
To: Public Comment
Subject: [External] Farmstead Expansion

Farmstead Campus on the corner of Main and Charter Oak is the anchor of our town. Great stewards of the land the Halls have the town and people of St Helena at the forefront of any expansion.

As a local resident I'm proud to bring my visitors and visiting friends and family from overseas to Farmstead.

Thank you Laddie and Ted and Chris for all you do for not only me but our whole community.

Kindly
Anne(ie) Offord

Sent from my iPhone

Xinia Gamero

From: Oliver Caldwell <oliver@caldwellsnyder.com>
Sent: Tuesday, August 18, 2020 9:13 AM
To: Public Comment
Subject: [External] Planning Commission Hearing - Aug 18, 2020 / Farmstead expansion

To the Members of the St. Helena Planning Department:

We support the expansion of the Farmstead campus with the Hall's proposed addition of farmhouse style lodging. The project brings significant benefits to our community . . . desperately needed support for our downtown merchants and restaurants, realignment of Mills Lane to Grayson, installation of a "purple pipe" and much needed TOT/sales tax and property tax. We hope construction commences soon.

Thank you for your consideration and service,

Oliver & Karen Caldwell
St. Helena

Xinia Gamero

From: Mario Sculatti <mario@sculatti.com>
Sent: Tuesday, August 18, 2020 9:15 AM
To: Public Comment
Subject: [External] Support for Farmstead project

Dear Planning Commission,

I am writing you today to give my 100% total support for the Farmstead accommodation project.

1. The location is perfectly situated south of town to mitigate traffic flowing directly into down town, yet close enough that guests will be able to walk into town and support businesses on Main Street.
2. The TOTax that will be generated is much needed by our City.
3. The scope, design and brand expansion for Farmstead is a natural lifestyle brand growth for this company who has done an amazing job as stewards of the Farmstead campus acreage on the corner of Main St and Charter Oak Ave. Their new project will be equally highly as manicured, managed and cared for to welcome visitors to our town, while also being a favorite for locals, just as Farmstead already is.

Thank you so much,

Mario

Mario Roam Sculatti
1026 Charter Oak Ave
Saint Helena, California 94574
M: 707.235.2555

Xinia Gamero

From: Norman Mitroff <norman@normanmitroff.com>
Sent: Tuesday, August 18, 2020 9:22 AM
To: Public Comment
Cc: tedhall@longmeadowranch.com
Subject: [External] Support for the Farmstead Project.

Dear Planning Commission Members,

I have reviewed, in detail, the proposed Farmstead project. I believe this project is well thought out, will be an asset to our Community, and generate much needed revenue for our City.

Therefore, I strongly support this project and encourage the Planning Commission to approve the project.

Sincerely,

Norm

Norman S. Mitroff
Mitroff Consulting & Associates
1100 Hudson Avenue
St. Helena, CA 94574-2314
Voice: (707) 963-8410
Mobile: (415) 307-7806
E-mail: norman@mitroffconsulting.com
Website: www.mitroffconsulting.com

Executive Search, Human Capital Management and Transition Coaching

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Xinia Gamero

From: Marcus Marquez cc <marcusrmarquez@gmail.com>
Sent: Tuesday, August 18, 2020 9:46 AM
To: Public Comment
Subject: [External] Support of The Ted Hall Farmstead project

Hello all,

I am writing this email as a resident of St. Helena to support the Farmstead project. Farmstead and the Halls have grown their business and supported St. Helena for many years now. Throughout this time they have thoughtfully created a sustainable business that gives back to the community in more ways than one.

I support this next venture to do what is in their plan to continue to be an asset to St. Helena and to be a sustainable business for them during these times. I support this project to also be a positive example for smart growth for years to come.

Thank you for your consideration and your support on this project.

Marcus Marquez and Family
St. Helena Resident

--

Marcus Marquez
707-200-1126

Xinia Gamero

From: Bruce Miroglio <bruce@bamlegal.com>
Sent: Tuesday, August 18, 2020 10:21 AM
To: Public Comment
Subject: [External] Hall Project

As a native born St. Helena resident, it is rare to find that a development project comes up that so completely fits the needs of this unique community. The Halls in their meticulously thought out plan address so many of the city needs. This project will be a glowing example of good stewardship and a landmark demonstration of how to do things going forward.

This is true, not only because of the detailed thoughts and planning but also because of the people behind it. Ted and Laddie and Chris Hall have demonstrated unflinching attention to detail in the implementation of their plans. Everything they do is a virtual example of caring thought for the land and the people of this community. Anyone can espouse the values of care and consideration for good stewardship: the Halls have demonstrated, time and time again, their undying commitment to those values with actions.

I urge the Planning Commission to enthusiastically support these good people with their plans which will benefit the community in these challenging times and into the future.

Respectfully submitted:

Bruce A. Miroglio



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Xinia Gamero

From: Cindy Pawlcyn <cindypawlcyn@gmail.com>
Sent: Tuesday, August 18, 2020 11:14 AM
To: Public Comment
Cc: Ted Hall
Subject: [External] Farmstead Project

Hi Everyone,

I'm writing in support of the project proposed by Ted Hall and family. The Hall family are Napa Valley residents and they care about our community.

As a former restaurant owner in St Helena I know the value of a vibrant local economy. This project will reflect the values of the type of business we want to have and support in our city. We must re-vitalize the town for its residents and tourists. I believe the project will be a positive economic impact for the city.

Additionally, there is a commitment in the proposal to provide for worker housing which I feel is key.

Many of the shops, restaurants and services available to us in town need support from both locals and tourists to survive and thrive. The Farmstead project would be a welcome addition to keep St. Helena alive and to prosper. After all, we fully support the wine industry which is the life blood of the Valley. Let's include a well thought out hotel that will help sustain our wineries and local business.

Thank you for your consideration.

Cindy Pawlcyn

3560 Silverado Trail N
St Helena,
Ca 94574
(707) 695-2760

Xinia Gamero

From: Christina Benz <christinabbenz@gmail.com>
Sent: Tuesday, August 18, 2020 11:29 AM
To: Public Comment
Cc: Geoff Ellsworth; Anna Chouteau; David Knudsen; Mary Koberstein; Paul Dohring; Lester Hardy
Subject: [External] Comment on Planning Commission Item 5.2 Ted Hall project, 8/18

City Clerk: Please distribute to the St. Helena Planning Commissioners

St. Helena Planning Commissioners and City Council members,

I am writing in support of the Long Meadow Ranch Lodging project. I commend the St. Helena City Council for working with the applicant to reach an agreement whereby the project provides additional community benefits and helps the city reach its goals.

In addition to the benefits of funding affordable housing, expanding recycled water infrastructure, and encouraging bicycle transportation around town, can the project be asked to contribute to improved community resilience by agreeing to provide shelter, power, refrigeration for food storage to the community in times of disaster?

Long Meadow Ranch and the Halls have long been environmentally conscious and engaged community members. I appreciate the example they are setting with this project in working with the City Council to use a hotel project to benefit the community. With the economic downturn, I think it's more important than ever to use public-private partnerships to meet climate goals.

In community,
Chris Benz
315 Greenbach St.
Napa, CA 94559

Xinia Gamero

From: Jennifer Lamb <jennifer@herblambvineyards.com>
Sent: Tuesday, August 18, 2020 11:56 AM
To: Public Comment
Subject: [External] Proposed Farmstead project

Planning Commission of St. Helena,

Having known the Hall family and their participation and commitment to the Napa Valley Community since the 1980's, I would like to speak up on behalf of supporting their proposal to modify the existing Farmstead property as well as expand the campus to include lodging.

The Hall family has proven to be a conscientious, active and giving member of the Napa Valley community for years, and their proposed hotel and restaurant expansion is leagues better than an outside corporation coming in to build a chain or exclusive spa and hotel.

Their agreement to provide an additional \$3.2 million to fund workforce housing and create 30 + units for our community is unprecedented. The long-term benefits of the hotel will be a great boon to the General Fund through TOT as well as sales taxes.

Please support the proposed growth of the Farmstead campus for the sake of the community and City of St. Helena. It is the right thing to do.

Jennifer Lamb



Herb Lamb Vineyards
P.O. Box 225
St. Helena, CA 94574
M: 707.815.8305 // O: 707.967.9752
herblambvineyards.com // [Facebook](#) // [Twitter](#) // [Instagram](#)



August 18th, 2020

To: City of St. Helena Planning Commission

From: St. Helena Chamber of Commerce

Dear Planning Commission,

The value set and mission of the St. Helena Chamber of Commerce is to *enhance the local economy and the St. Helena brand, for the direct and indirect benefits of its members and equally the benefit of the community.*

With that said, the Chamber continually supports and encourages our local businesses to grow and adapt to the needs of the Valley's ever-changing landscape. This includes proposals of new tourism and lodging initiatives that are developed in an ethical, sustainable and communal manner.

In particular, Long Meadow Ranch has brought forward a thoughtful plan with the environment and community at the forefront.

The future of St. Helena will always be built on the community's support of one another. The Chamber strives to build and encourage a business community that supports every aspect of the larger St. Helena community.

When business thrives, St. Helena thrives.

On behalf of the St. Helena Chamber of Commerce Board of Directors & Staff,

A handwritten signature in blue ink, appearing to read "J. E. Razo".

Joaquin E. Razo
Vice President & Chief Strategy Officer

St. Helena Chamber of Commerce Mission Statement

The St. Helena Chamber of Commerce is a membership-based association organized to enhance the local economy and the St. Helena brand, for the direct and indirect benefit of its members and the community



WATER AUDIT CALIFORNIA

A PUBLIC BENEFIT CORPORATION

952 School Street, Suite 316, Napa, CA 94559
WaterAuditCA.org

August 17, 2020

BY EMAIL:

publiccomment@cityofsthelena.org
ahcock@cityofsthelena.org
kgarcia@cityofsthelena.org
mderosa@cityofsthelena.org
lhardy@cityofsthelena.org
jponte@cityofsthelena.org
bmonnette@cityofsthelena.org
dhale@cityofsthelena.org
aanderson@cityofsthelena.org
environmentallysustainablesol@gmail.com

St. Helena Planning Commission
C/o Aaron Hecock
AICP Senior Planner
1572 Railroad Avenue
St. Helena, CA 94574

Re: August 18, 2020 Agenda, Item 5.2: Farmstead at Long Meadow Ranch
Restaurant and Lodging Projects, 738 Main Street (009-112-017); and 1000
Mills Lane (009-070-049, 009-070-052, 009-070-053, and 009-070-054)

Honorable Commissioners and Mr. Hecock:

I write on behalf of Water Audit California to raise alarm regarding the city of St. Helena's capacity to supply the water required by this project. We have reviewed the comments contained in the August 17, 2020 comment letter submitted by the Bell Canyon Watershed Alliance. We concur with their comments regarding the critical importance of proper baselines and reiterate their comment that illegal or unpermitted uses should not be allowed to set an inflated baseline.

Water Audit CA comment letter 08.19.2020

Additionally, we have serious reservations about the City's production of water from its Stonebridge wells. Our initial review of available data strongly suggests that the over 300-acre feet of groundwater extraction per annum has frequently reduced or eliminated the proximate flows in the Napa River required by the public trust.

The Napa River (and for the purposes of this letter, all of its tributaries) is a federal and state designated navigable waterway, occupied by federal and state designated threatened and endangered species, including fish. Conduct, including dewatering, which results in an unlawful kill of protected fish is an unlawful "take" under federal law, and can be enjoined.

Further, diminution of flows sufficient to sustain fish in good condition is a violation of the City's duties to the public trust as defined by *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419. Commenting on the significance of the *National Audubon* decision, a later court wrote: "Despite the historical significance of appropriative water rights in the state, the comprehensiveness of the water rights system, the threat to the water supply for the City of Los Angeles, and perhaps, most significantly, the fact that the tributaries from which the water was being diverted were not themselves navigable, the public trust prevailed. ... the [*National Audubon*] court rejected the notion that reasonable use or the appropriative rights system supplanted the public trust doctrine."

The later court stated its inquiry was "whether the public trust doctrine giveth the [Water] Board and the County a public trust duty to consider whether the extractions of groundwater adversely affect public trust uses of the Scott River and whether SGMA taketh those duties away." It concluded: "the public trust doctrine applies if extraction of groundwater adversely impacts a navigable waterway ... [T]he determinative fact is the impact of the activity on the public trust resource. ... The analysis begins and ends with whether the challenged activity harms a navigable waterway and thereby violates the public trust." See *Environmental Law Foundation et al. v. State Water Control Board* (3rd District Court of Appeal, Case No. C083239).

Whether the Stonebridge wells impact the surface flows in the Napa River need not be a matter for speculation. Well established techniques of geohydrology can calculate the "zone of depression" about the wells as seen in the following illustrations, with the left image showing an unimpacted stream, and the right showing a stream dried by over-production.

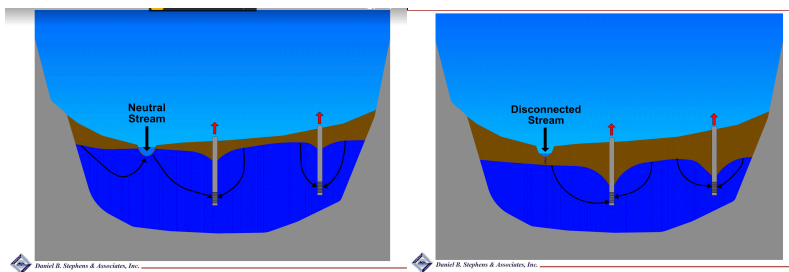


Image from the presentation of Dr. Douglas (Gus) Tolley, Napa Water Forum 02.07.2002

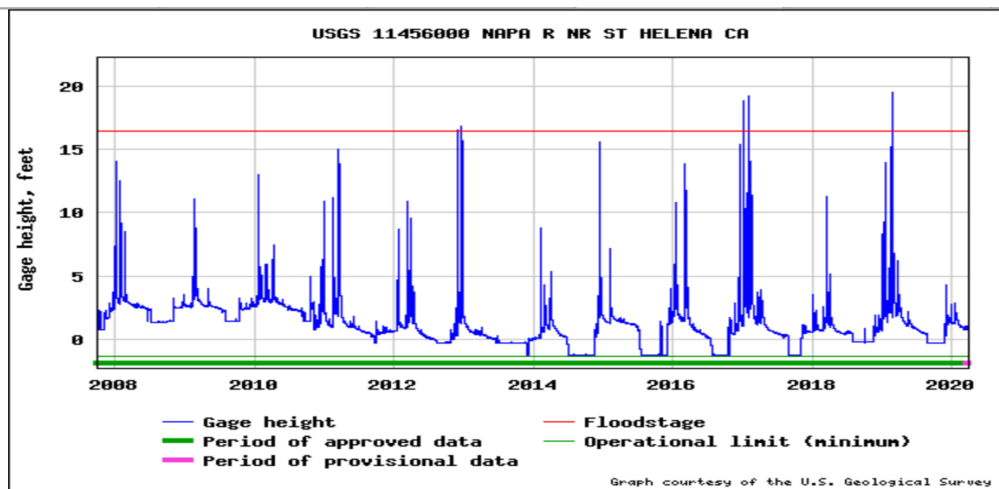
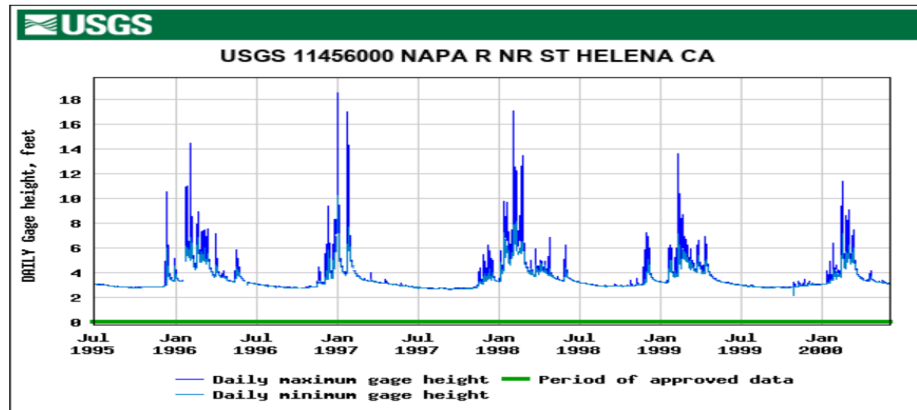
Water Audit CA comment letter 08.19.2020

USGS records from 1959 shows that on no occasion before 2001 did the Napa River run dry proximate to the Stonebridge wells. From 2001 to 2020 the River has run dry on twelve (12) occasions, or two-thirds of the time. A pertinent portion of the record is displayed below:

USGS 11458000 NAPA R NR NAPA CA												
Time-series: Monthly statistics GO Napa County, California Hydrologic Unit Code 18050002 Latitude 38°22'06", Longitude 122°18'08" NAD27 Drainage area 218 square miles Gage datum 24.74 feet above NGVD29 Output formats HTML table of all data Tab-separated data Reselect output format												
00060, Discharge, cubic feet per second,												
YEAR	Monthly mean in ft ³ /s (Calculation Period: 1959-10-01 -> 2020-02-29)											
	Period-of-record for statistical calculation restricted by user											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1955	3,083	347.9	2,530	227.2	165.9	40.1	13.5	2.84	2.05	1.92	2.61	229.2
1956	695.9	1,335	516.4	210.7	110.9	42.8	14	5.49	2.84	2.54	35.4	749.8
1957	2,481	336.3	97.8	41	20.8	5.96	1.02	0.244	0.201	0.552	43	143.8
1958	862.2	3,408	339.7	273.6	148.7	100.5	23.9	5.46	3.05	2.82	54.2	130.7
1959	122.4	1,276	517.6	354.1	72.2	26.3	5.78	2.73	0.831	1.23	6.68	7.77
1960	104.1	1,034	592.9	85.1	40.1	11	2.64	0.324	0.057	2.3	4.6	6.94
2001	71.5	442.4	305.3	38.9	18.4	4.29	0.719	0.04	0.	0.	65.6	964
2002	814.7	159.2	212	65.1	26.6	9.36	1.76	0.	0.	0.	4.72	1,613
2003	659.6	292.7	252.1	249.8	278.8	33.5	7.4	1.77	0.133	0.	3.59	576.7
2004	474.8	1,401	260.4	52.2	24.7	8.88	2.29	0.243	0.034	3.64	8.51	519.9
2005	721.3	398.6	697.4	278.4	265.8	62.4	16.2	4.18	1.15	0.019	3.17	1,407
2006	1,272	544.9	1,394	1,205	118.6	36	11.5	2.8	0.632	0.435	4.15	61
2007	27.4	311.2	101.7	29.6	18.7	10.1	1.49	0.186	0.022	0.014	0.012	19.1
2008	673.5	519.3	104	31.1	16.2	4.62	0.726	0.054	0.004	0.	0.825	10.7
2009	5.56	617.8	341.7	38.4	42.1	10.6	1.74	0.12	0.	3.51	0.75	9.96
2010	678.2	431.8	419.5	451.3	86.2	30.7	9.63	3.34	0.261	12.3	21.7	538.3
2011	278.4	641.6	1,733	236.1	69.2	60.9	16.2	5.35	2.15	3.9	5.33	5.17
2012	98.4	21.7	621	310.1	52.1	15	4.7	0.381	0.	0.	146.3	1,358
2013	248.3	61.4	37.7	27.4	10.3	4.42	0.234	0.	0.	0.	0.	0.
2014	0.	183.8	111.5	128.2	18.8	3.88	0.135	0.	0.032	0.	0.087	695.2
2015	52.5	299.9	49.2	25.6	12.2	11.5	1.69	0.	0.	0.	0.	26.8
2016	420.3	81.1	1,188	96.3	32.6	11	2.68	0.164	0.	6.08	50	353.5
2017	2,745	2,661	374.9	336	70	26.2	6.81	1.57	0.	0.281	4.52	5.15
2018	55.8	18.1	221.4	123.9	27.5	9.18	5.18	0.013	0.	0.	2.35	19.9
2019	501.6	2,166	963.7	279.5	106.4	39.8	13.3	3.48	0.	0.	0.	91.5
2020	97.4	41.3										

Water Audit CA comment letter 08.19.2020

The following graphs show how drying has now become commonplace in all but the most wet of years, and further, how the duration of the dry periods have become extended.



Water Audit CA comment letter 08.19.2020

While our current results are preliminary, (pending receipt of well operating records from the City) on present information it appears much more likely than not that substantial modification to the operation of the Stonebridge wells will be required to reconcile the City's public trust duties. Any estimate of the impact of re-operations on production would be premature and speculative.

Whether the proposed Farmstead project does or does not require additional water, (common sense indicates that it will, and there is inadequate showing that it will not) there is a high order of that *in any event* the City may well have inadequate water to guarantee existing deliveries, much less approve in good faith any new beneficial uses.

We urge you to take this situation into consideration in your deliberations, and to defer any decision until the issue of the Stonebridge wells can be investigated and reported with scientific certainty.

Respectfully,

A handwritten signature in blue ink, appearing to read "Grant Reynolds".

Grant Reynolds
Director

Xinia Gamero

From: William Martin <william@corison.com>
Sent: Tuesday, August 18, 2020 12:49 PM
To: Public Comment
Subject: [External] We support the Farmstead project!

Hello Saint Helena Planning Commission,

As long time residents of Saint Helena, we are writing to show strong support for the project at Farmstead. Ted, Laddie and Chris Hall have done an exemplary job planning and presenting their project. They have put so much thought and care into all aspects of it.

We support both the modifications at the existing Farmstead and also the lodging addition. We are very excited to see the integration of the two properties and all the other improvements. It will be such a welcome addition to Saint Helena.

In describing someone who is generous, kind and noble minded we bestow the title Good Egg. It's an honor we reserve for only exceptional people. Given the Halls long efforts in sustainability and their passion for farming, it seems even more appropriate. Ted, Laddie and Chris are by all measures, Good Eggs!

Warm regards,

William Martin and Cathy Corison
1427 Kearney Street
Saint Helena, CA 94574

707-963-0826

Xinia Gamero

From: Lydia Stehling <lydiastehling@gmail.com>
Sent: Tuesday, August 18, 2020 1:01 PM
To: Aaron Hecock; Public Comment
Cc: My Josh
Subject: [External] FARMSTEAD ADDITION

RE: APPLICATION by Hall Family for development of 10 acres adjacent to Farmstead Restaurant

Attn: Aaron Heycock

Dear Mr. Hecock,

We live on 917 Charter Oak Avenue within 300 feet of the proposed development.

We have reviewed the applications and studied the drawings in the proposal and believe this development will be an improvement to the existing area and its land use.

We note that no change of use is requested and that various improvements will be funded by the Hall's including the fixing of Mills lane and the creation of a parking lot that will reduce the load on residential streets. We also note that the hotel accommodations will be on the South of the property a significant distance away from existing homes. This is an area that could definitely do with sprucing up. We welcome the investment in affordable housing, the creation of jobs, the addition of amenities and the contributions to Saint Helena's tax base. Our town needs more thoughtful development like this.

Furthermore, we want to bring attention to the type of neighbor, and community pillar, Farmstead is. The Hall's have shown themselves to have the local community at the forefront. It is clear to us that their business operations are aligned with local interests. During the recent difficult fire seasons, they were one of the only businesses to scramble to keep their doors open for the locals. During the ongoing COVID-19 pandemic they have repeatedly done backflips to stay in business and cater to the local community. Unlike many of the other premier establishments in town who folded up when the tourists were gone, Farmstead sustained the local community and buoyed spirits. They have now established the gold standard of pandemic operations putting our community safety first.

In conclusion, we believe the Hall family can only do good for the community. They have shown it is possible to bring St. Helena forward in this new age of tourism while keeping it a local, family effort, that preserves our great town. We wish more local businesses would take their approach.

Please feel free to contact us in any regard,

Josh and Lydia Stehling
 917 Charter Oak Avenue
 St Helena
 713.702.4687
 707.501.0632

Begin forwarded message:

From: Thomas McBroom <tcmbroom@sbcglobal.net>
Subject: Public Comment to Planning Commission - Farmstead Hotel Project
Date: August 18, 2020 at 12:28:04 PM PDT
To: Cindy Tzaopoulos <ctzaopoulos@cityofsthenela.org>

Cindy,

I am sending additional public comment for the Planning Commission meeting regarding the review of the Farmstead Hotel project:

To Members of the St. Helena Planning Commission:

Please add my name to those who have voiced support for the Farmstead Hotel project proposed by Ted and Laddie Hall.

This is exactly the type of project recommended by the Financing Civic Infrastructure Task Force, on which I served, to provide tax revenue to fund the repair and replacement of the city's crumbling infrastructure.

The need for this type of revenue source was plain to see before the onset of the Corona Virus, and is even more evident now.

I know that there is some concern, as there should be, about the impact of this, and other, hotel projects on our limited water supply.

However, the Halls' plans for water conservation and recycling appear sound and may show a way forward for additional development within the city.

I urge the commission to grant the approvals necessary for the Halls to be able to proceed with the construction of the Farmstead Hotel project as proposed.

Tom McBroom

Hugh and Monique Davies
1400 Schramsberg Road
Calistoga, CA 94515

August 11, 2020

St. Helena Planning Commission
1572 Railroad Avenue
St. Helena, CA 94574

Dear Commissioners:

On behalf of our family, and the team and Schramsberg and Davies Vineyards, we reach out to encourage you to support the Hall Family, and the team at Farmstead, with their proposed project in St. Helena. They are seeking to carefully develop land in the city of St. Helena zoned for commercial use. This is exactly the type of infill development that our community should support, taking pressure off of surrounding rural lands not zoned for commercial development.

With the existing Farmstead operation, they have requested approval to relocate some operations within the site to improve their offerings to customers. Their application updates the description of their business to be consistent with their activities over these past 10 years. They are not requesting any expansion of use beyond their current activities.

They are also planning an expansion of the Farmstead campus with the addition of 10 acres situated to the east of the St. Helena Veterinary Hospital. Approximately 4 acres of the property is zoned agricultural, which they will farm. The planned 65 units of lodging are housed in 10 sustainably designed buildings on the portion of the property that is already zoned for commercial use. Their objective is to create a unique visitor experience in an agricultural environment consistent with St. Helena's agrarian roots. They are requesting no variances from zoning requirements and the project is consistent with all of the City's physical development standards.

We believe their agriculture-oriented, family-owned project is right for St. Helena. Their lodging guests, who will be a short walk or bicycle ride away, will provide support for downtown merchants and restaurants. Their project also brings significant infrastructure benefits to the City, including the realignment of Mills Lane to Grayson, the installation of a "purple pipe" to bring recycled water for irrigation use at Crane Park and the high school, and the construction of a missing link in the City's stormwater drainage system along Mills Lane.

Importantly, they have agreed to provide an unprecedented \$3.2M in funding for workforce housing and they are working with Our Town St. Helena to deploy \$1M of those funds on an exciting project that could create 30+ units of workforce housing. Finally, their project is estimated to provide more than \$2M annually to the City's General Fund through TOT and sales taxes. Thank you very much for your consideration of their exciting, thoughtful proposal.

Very Sincerely,

Hugh and Monique Davies

Xinia Gamero

From: Peter White <peter@pgwhite.com>
Sent: Tuesday, August 18, 2020 2:37 PM
To: Cindy Tzaopoulos
Cc: Xinia Gamero
Subject: [External] Planning Commission Public Hearing Item #5.2

Dear Planning Commissioners:

We are in full support of the Hall's, Farmstead, Long Meadow Ranch use permit amendment and Lodging project. This project has been a long time coming. The first time the City Council was introduced to Ted Hall's conceptual plans was August of 2015. We were excited and supportive of his project then and remain so today. The St. Helena Star reported then:

St. Helena council praises Farmstead hotel plan

August 15, 2015

"Councilmember Sharon Crull said she was "very, very much in favor" of Hall's conceptual plan, praising the project's limited impact and potential to generate substantial hotel taxes soon.

"I think it would be a perfect fit for the site and for our town," she said at last week's council meeting...

Councilmember Peter White said Hall's proposal "greatly improves" on Doumani's hotel plan, and does a better job addressing the concerns of neighboring property owners like Gold and Doug Stanton. The council has talked in the past about providing water for projects that generate revenue for the city, "and I think this (project) makes a lot of sense," White said.

Councilmember Paul Dohring called it "an exciting project,"

Mayor Alan Galbraith praised the project as "an exceptionally good fit for the city," with less impact than a traditional hotel.

The evolution over 5 years has produced a project that our residents can be proud of. It will enhance our southern entrance, provide necessary and long overdue infrastructure improvements that can only be done when a project of this type presents itself. With this project we begin to get closer to providing the water security we need through the extension of "purple pipe" into the City. This project also addresses our work force housing needs in a very robust way. The \$3.2 million contribution is the largest contribution from any development to date.

And one of the largest benefits to our City is the additional revenue that this project will provide. TOT tax of close to \$2,000,000 per year, additional sales tax generated by the guests in our City's shops and the incremental property tax increase.

It has taken the Hall's 5 years to get to this point and it is time for our City to embrace this project with enthusiasm and speed. We should be grateful for Ted and Laddie's fortitude, perseverance and their continued willingness to invest in our City.

Let's move this project forward!

Best regards,

Peter and Mary White

824 Chiles Ave

St. Helena, CA 94574

707-480-9958

peter@pgwhite.com

mary@whitehouseetiquette.com

August 18, 2020

RE: August 18, 2020 Agenda, Item 5.2: Farmstead at Long Meadow Ranch Restaurant and Lodging Projects, 738 Main Street (009-112-017); and 1000 Mills Lane (009-070-049, 009-070-052, 009-070-053, and 009-070-054)

Dear Chairperson Hardy and Commissioners Anderson, Hale, Monette & Ponte:

I write to offer my full support of the lodging addition to Farmstead at Long Meadow Ranch. The project team have put together a project that should be a case study in sustainable development. The addition will add much-needed additional property tax, sales tax and TOT revenue to the City in a year when the city is forecasting 30% depletion of cash reserves on an already anemic budget. Further, the light environmental footprint and thorough off-site improvement and mitigation measures support the findings needed to approve the project.

As a child, I often passed an aged stone pillar marking the entry to an old bucolic resort. Just before the smell of Sulphur knocks you back – you can make out the words “Established 1852”. I used to ask myself, what in the world people were doing visiting St. Helena back then?

Well, I believe the answer is much the same as it is today. St. Helena has been a place to get away from the city, since at least 1852, when travelers journeyed up from the Bay Area to our wonderful town on their way to White Sulphur Springs or Indian Springs or Aetna Springs seeking respite.

While White Sulphur Springs resort certainly isn’t the tourist destination it once was, nor does the road frequently have horse-drawn carriages, Long Meadow Ranch has built a similar country culinary mecca in Farmstead at Long Meadow Ranch that attracts urbanites from around the world and locals like myself from down the street to enjoy the fruits of a fully scaled, vertically integrated, authentic farm-to-table operation.

Farmstead gainfully employs dozens of locals, serves visitors and locals alike with excellent and friendly service – and gives back to the community through a myriad of avenues. No program caught my attention more than their “Corkage for the Community” whereby Farmstead charges a nominal fee for each bottle guests bring into the restaurant and donate those funds to local non-profit organizations. That program, of course, is entirely voluntary and very impactful.

The Hall family have proven that they are excellent stewards over decades of organic farming, ranching and as restaurateurs – and their lodging plans are no exception. The addition of purple pipe on Mills Lane to recycle water for the entire community is potentially one of the biggest wins the City has been able to work out in decades and could be a game-changer for the entire water system in town.

I completely agree with Mr. Hall in his letter to Ms. Kahn on August 17, 2020 as part of tonight's record when he says: "we are not aware of a comparable project in our community that has brought so much community benefit with so little impact".

Please approve this project with all speed.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthew P. Heil". The signature is fluid and cursive, with the first name "Matthew" being the most prominent part.

Matthew P. Heil
605 Pope Street
St. Helena, CA 94574

Xinia Gamero

From: John Skupny <JohnSkupny@langandreed.com>
Sent: Tuesday, August 18, 2020 3:28 PM
To: Public Comment
Subject: [External] Farmstead Lodge

To the St. Helena City Council,

RE: Farmstead Proposal

I am a 36 year resident and business owner in St. Helena and **strongly support** the well thought out proposal that is being presented by Ted & Laddie Hall for the property known as Farmstead. It seems to be the right project at just the right time for our city.

I have seen a lot of water flow under the bridge of good and bad decisions over my, almost, four decades living here. Some of those decisions made in good conscience to maintain the small town ethos of St. Helena have unfortunately relegated our town to a has-been town. One that cannot support it's basic infrastructure nor provide the targeted visitors to support our businesses.

The Farmstead project will help to repair that unintended result while also being a beautiful and sustainable addition to St. Helena.

One could not ask for a better family to bring this project to fruition. The Hall family has established itself in our community as a family who has always endeavored to 'Do the Right Thing'...

John Skupny

1961 Vineyard Avenue
St. Helena, CA 94574
707-695-2537 mobile

Lang & Reed – Napa Valley
1200 Oak Avenue
St. Helena, CA 94574

Xinia Gamero

From: Pat Dell <priscillajdell@gmail.com>
Sent: Tuesday, August 11, 2020 9:05 PM
To: lhardy@citofsthelena.org; John Ponte; Daniel Hale; Bobbi Monnette; Autumn Anderson
Subject: Farmstead Development project

Dear Chair Hardy, Vice-chair Ponte, Commissioners Hale, Monnette and Anderson,
I wrote a letter of comment regarding the Farmstead Hotel Project when Mr. Ted Hall presented it to the City Council a few weeks ago. I see that you are officially considering this at your August 18th meeting. My letter to the City Council may have caused some people to think I am opposed to this project. That is not the case at all. I am very much in favor of the project. I think it will ease the financial burden on the City, provide a start on a tertiary water treatment plant by starting to lay purple pipe and also it will bring business to our struggling down town business district. My concern as expressed in my previous letter was and is that since no environmental impact report was not required, some environmental considerations still had to be considered. This would include housing for employees, parking, water use and the traffic generated by the several events they have included in their request for approval.
All of that should be discussed but if those things are not significant or can be mitigated I am totally supportive of this project being approved and built.
Priscilla J. Dell – St. Helena

Xinia Gamero

From: Terry and Tom Faherty <terryanntom@gmail.com>
Sent: Tuesday, August 18, 2020 3:43 PM
To: Public Comment
Subject: [External] The farmstead hotel

We support the farmstead hotel development project as it will provide a sustainable income to the City and add a spark of new and diverse development in the downtown core which is where we believe such developments should occur. The applicants seem to have addressed many if not all the concerns which such projects raise vis a vis housing, traffic and energy conservation.

Tom and Terry Faherty

Xinia Gamero

From: Wendell Laidley <wlaidley3@gmail.com>
Sent: Tuesday, August 18, 2020 3:50 PM
To: Public Comment
Cc: Ted Hall
Subject: [External] Long Meadow Ranch Expansion

Dear Planning Commissioners,

We write in support of the Ted Hall Family effort to expand their popular and successful Farmstead property to add complementary lodging facilities.

Everything we know of what the Hall Family has developed since their consolidation of the original Farmstead site has been successful and a positive addition to our City for residents and visitors, and we expect this proposed expansion to similarly improve St. Helena's appeal.

Accordingly we encourage you to approve the current proposal and we wish the developers well in adding this appealing project to our landscape.

Thank you for your consideration.

Inger & Wendell Laidley
706 Hunt Avenue, St. Helena

Xinia Gamero

From: Christopher Morisoli <chris@morisolivineyard.com>
Sent: Tuesday, August 18, 2020 8:24 PM
To: Public Comment
Subject: [External] Support for Farmstead Project

Dear Planning Commission,

My name is Chris Morisoli and my family has been in St Helena for 4 generations on both my mother and fathers side.

I've recently heard of the Project that The Hall Family has proposed as an addition to Farmstead. I wholeheartedly support this project as it is currently planned. It is tasteful, in line with our Agrarian values and community.

I also strongly believe that St Helena desperately needs smart development that will allow people to actually stay in town and spend money here. Not only will this allow businesses to thrive but increase revenues into the city budget.

Our family owns a small piece of commercial property on Main Street and we are very concerned that if the current trend continues there will be no one to rent it. This could cause a local family to lose the property, further encouraging out of town development which may not be in line with our values.

I strongly encourage you to consider and approve the Farmstead addition as a positive change to an otherwise empty lot.

Thank you very much!

Very Respectfully,

Chris Morisoli
940 Hunt Ave
707-486-6514

**FARMSTEAD AT LONG MEADOW RANCH
738 Main Street
Saint Helena, CA. 94574**

August 15,2020

Mr. Christopher Cole
345 La Fata Street, Suite G
St. Helena, CA. 94574
ckcole@comcast.net

Dear Mr. Cole:

Thank you for your public comment on our project at Farmstead. We acknowledge your concerns about workforce housing, the number of new employees, fair compensation for our workforce and water. We want you to know what we have been doing to address these issues.

We agree that workforce housing is a critical need for our community. We have been working for more than three years with Our Town St. Helena to identify a viable site for workforce housing. In 2018 we reached a formal agreement with OTSH to provide \$1M for site acquisition. Our development agreement with the City provides for an unprecedented total contribution of \$3.2M to the City's Housing Impact Fund, \$1M of which has been earmarked for Our Town St. Helena to use for site acquisition. With OTSH we are actively pursuing a project known as Phelps Village (adjacent to our lodging project at Mills Lane and Main Street), which we will pursue vigorously if our project is approved.

You can see more about the project in the attached slides from our Planning Commission presentation. The project will include 30+ Units and could house as many as 150 people. If constructed, this new housing should also bring new students to our school district

With regard to the number of employees, because we currently employ many of the people we need to run the business, the lodging project will add just 28 hourly and 9 management positions to handle the lodging activities. On a 7-day-a-week basis, we will be adding 51 total employees, but only 37 (28+9) additional employees will be on the property at any one time. Our employees will park in an employee parking lot (73 spaces) at the corner of McCormick and Dowdell and will either walk or take a shuttle to the Farmstead campus. We will add sidewalks to La Fata as part of the project. There will be no employee traffic on Mills Lane.

With regard to workforce compensation, Farmstead pays at the top end of the wage scale in each job category, plus offers excellent benefits to all of our staff (including medical, dental and eye care, life insurance, vacation, and relief for student loans, among others). Our server staff, although paid the minimum wage, earns – with tips – relatively high incomes (high five figures), which means they can sustain a professional career in that role. In fact, several servers have been with us for our entire 10-year history. Our project will result in more good jobs at fair pay.

With regard to water, we identified the opportunity to install a "purple pipe" to bring recycled water from the City's water treatment plant (which is undergoing an upgrade) for distribution across the City. We are installing the main delivery line, at our expense, along the length of Mills Lane to Main Street. It will provide the primary delivery line of recycled water for further distribution. Its first use will be to replace potable water used for irrigation at Crane Park and (subject to negotiation with the school district) for the irrigation of the high school landscaping and athletic fields. This reduction in the use of potable water at Crane Park offsets the incremental water usage of our project by a very wide margin. Ultimately the savings for the City are even larger (dozens of acre-feet). Our project is better than "water neutral," it is creating a significant incremental supply of potable water for the City.

We believe our agriculture-oriented, family-owned project is right for St. Helena – and its values. And, the project brings significant benefit to our community. Our lodging guests, who will be a short walk or bicycle ride away, will provide desperately needed support for our downtown merchants and restaurants.

Our project also brings significant infrastructure benefits to the City, including the realignment of Mills Lane to Grayson (with protected pedestrian crossing) to resolve the dangerous current intersection on Main Street, the installation of the "purple pipe" to bring recycled water for irrigation use in Crane Park and the high school (and beyond), and the construction of a missing link in the City's stormwater drainage system along Mills Lane.

The project provides an unprecedented total contribution of \$3.2M to the City's Housing Impact Fund (the highest in Napa County history). In addition, revenues to the General Fund through TOT and sales taxes will increase by more than \$2M annually when the lodging is occupied.

If you would like more information, you can see our presentation to the Planning Commission scheduled for August 18th: longmeadowranch.com/project

Please feel free to reach out to us at tedhall@longmeadowranch.com or 707-963-5268 if you would like to discuss any aspect of our project.

Sincerely yours,



Ted W. Hall

Attachment: Housing Slides

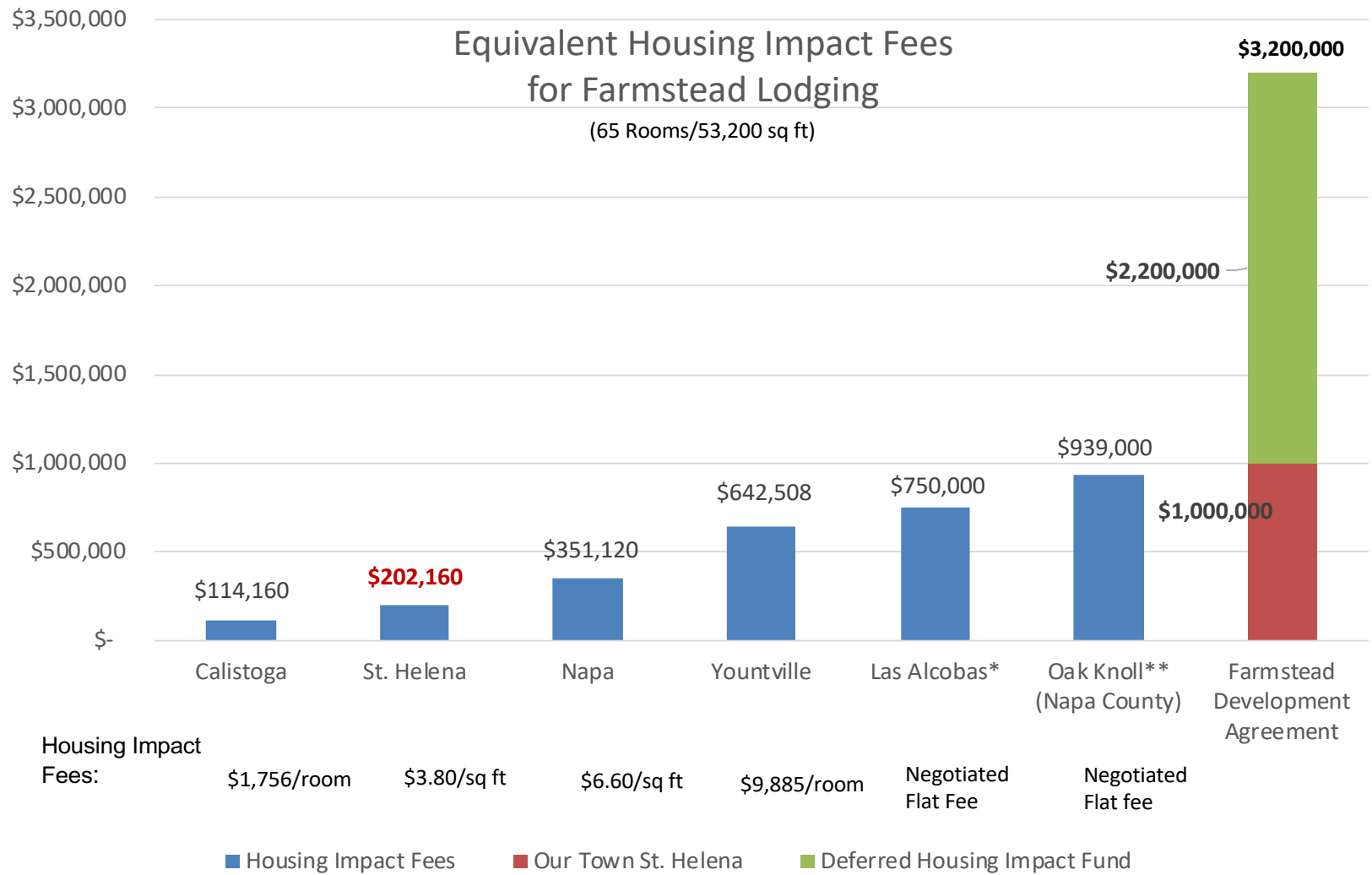
Workforce Transportation & Housing

We will continue our commitment to community-benefiting policies

- Workforce Transportation
 - Committed to reducing peak congestion on Highway 29 and Silverado Trail
 - *Napa Forward* founder and pilot participant
 - Multi-employer ridesharing
 - Van pools
 - Specialty bus schedules
 - Company incentives
- Workforce Housing
 - Providing \$1M funding for site acquisition in St. Helena by Our Town St. Helena
 - \$2.2M additional payment to the Housing Impact Fund
 - **\$3.2M total is highest impact fee for lodging in Napa County history**



Housing Impact Fee Comparison



*57 Rooms + Restaurant

**50 Rooms + Restaurant

Example Project: Proposed Phelps Village

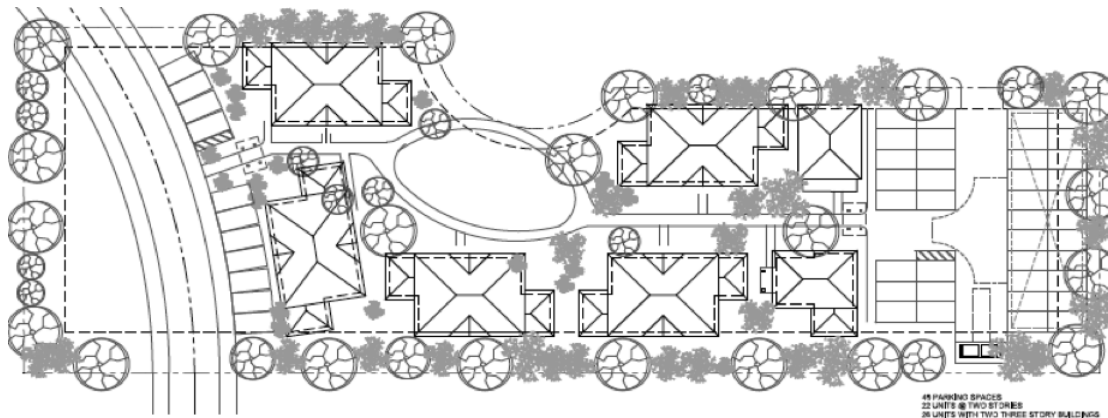
Goal

Create much needed workforce housing for employees involved in the wine and hospitality industries.

Concept

Develop a **30+ unit** rental complex to serve working families:

- 2- and 3-bedroom units spread across 6 to 7 buildings
- **150 –185 person** total occupancy, depending on bedroom mix
- Green-built and energy efficient; possibly off-site construction
- Plenty of parking,
- Communal outdoor area
- Club house with laundry facilities
- Entrances on Dowdell and Mills to balance traffic flow onto Highway 29



Proposed Site Plan & Phelps Village



W farmstead
LONG BEACH, CALIF.

Proposed Site Plan & Phelps Village



TURNBULL
GRIFFIN &
HAESLOOP
ARCHITECTS

August 15, 2020

Mr. Doug Stanton
862 Mills Lane
St. Helena, CA. 94574
(707) 967-0482
doug@stantonvineyards.com

Dear Mr. Stanton:

I am the project architect for the Farmstead at Long Meadow Ranch. The Hall family has asked me to address your concerns about the lodging project's potential impact on the viewshed to the western hills from your family's residence. We appreciate your interest in the beautiful view. TGH has designed the proposed buildings carefully to break up the massing and embrace the agriculture qualities of the site and protect views across the valley.

Of the 640' of shared property line, the 300' segment due west of your residence is the agriculturally-zoned land with garden space, two low-profile equipment sheds and a fire lane located on the Hall's property. Because of this open segment along the property line, you will continue to enjoy the full view across this dedicated farmland.

In addition, your view will not be blocked by the multipurpose building, which is located farther south on the property line. You will be able to see the gable roof of the multipurpose room with its peak at 29' and the housekeeping roof peak at 17', however these roofs will not block the mountain view, but rather screen your view of the backside of the Dowdell Lane Wine Service Cooperative warehouse.



For height comparisons, the Mayacamas Mountains reach El. 1200' to El. 1800'. The peak of the roof from the multipurpose building will be about the same height as the peak of Dr. Gold's barn, which you can see circled in the photo taken from Mills Lane by your driveway. The roof is barely visible. The proposed multipurpose building is 300' from your house, and the Mayacamas Mountain Peaks are about 3 miles away, so the top of the 29' gable will appear less than halfway up silhouetted against the mountains. Much of the multipurpose building is at 10'-6" which will barely be visible above the vines. Most importantly, you and your family will be able to continue to enjoy the full panorama of the ridgeline from your porch.



I hope that our analysis demonstrates that the viewshed from your residence will not be impaired by the project and that you will be able to continue enjoying your western view.

Please do not hesitate to reach out if you have any questions.

Sincerely yours,

Eric Haesloop, FAIA

cc:

Ted Hall, Farmstead at Long Meadow Ranch

Aaron Hecock, City of St. Helena

2725 Elmwood Ave.
Berkeley, CA 94705
Tel. 415.441.2300

**FARMSTEAD AT LONG MEADOW RANCH
738 Main Street
Saint Helena, CA. 94574**

August 17,2020

Ms. Eve Kahn, Chair
Get a Grip on Growth
707-363-1712
evekahn@yahoo.com

Dear Eve:

Thank you for your comments on our proposed lodging project at Farmstead in your email to the City of St. Helena on June 29th. Thank you also for engaging with Elliott Faxstein regarding our project.

We acknowledge your concerns about workforce housing, number of new employees, water, agricultural land use and climate. We believe that we have addressed each of these issues effectively and in a way that truly distinguishes our project from conventional development. We hope that you will consider supporting our project.

We agree that workforce housing is a critical need for our community. We have been working for more than three years with Our Town St. Helena to identify a viable site for workforce housing. In 2018 we reached a formal agreement with OTSH to provide \$1M for site acquisition. Our development agreement with the City provides for an unprecedented total contribution of \$3.2M to the City's Housing Impact Fund, \$1M of which has been earmarked for Our Town St. Helena to use for site acquisition. With OTSH we are actively pursuing a project known as Phelps Village (adjacent to our lodging project at Mills Lane and Main Street), which we will pursue vigorously if our project is approved.

You can see more about the project in the attached slides from our Planning Commission presentation. The project will include 30+ units and could house as many as 150 people.

With regard to the number of employees, because we currently employ many of the people we need to run the business, the lodging project will add just 28 hourly and 9 management positions to handle the lodging activities. Operating on three shifts, there will be only 20-25 additional employees on the property at any one time. On a 7-day-a-week basis, we will be adding 51 total employees.

Our employees will park in an employee parking lot (73 spaces) at the corner of McCormick and Dowdell and will either walk or take a shuttle to the Farmstead campus. We will add sidewalks to La Fata as part of the project. There will be no employee traffic on Mills Lane.

With regard to water, we identified the opportunity to install a "purple pipe" to bring recycled water from the City's water treatment plant (which is undergoing an upgrade) for distribution across the City. We are installing the main delivery line, at our expense, along the length of Mills Lane to Main Street. It will provide the primary delivery line of recycled water for further distribution. Its first use will be to replace potable water used for irrigation at Crane Park and (subject to negotiation with the school district) for the irrigation of the high school landscaping and athletic fields. This reduction in the use of potable water at Crane Park offsets the incremental water usage of our project by a very wide margin. Ultimately the savings for the City are even larger (dozens of acre-feet). Our project is better than "water neutral," it is creating a significant incremental supply of potable water for the City.

With regard to the use of agricultural land for the project, we are not requesting any change in zoning for our project. The site is flat and has no vineyards or trees. No vegetation is being removed. In addition to our vegetable (farm-to-table) farming on four acres, the lodging landscaping will be edible, and we are planting a commercial fruit orchard around the parking lot.

Our property includes both agriculture and service commercial zoning, which was recently reaffirmed by the City's General Plan. We will farm the portion of the property that is zoned for agriculture (with enthusiasm). The lodging project is located in the service commercial zoning area and is an appropriate use for this zoning. The service commercial zoning permits development of the property for commercial purposes, including a commercial office building, by right (i.e., without a use permit). We believe our distinctive farming-oriented lodging project is an attractive and appropriate use – especially when compared to permitted alternative commercial uses.

With regard to climate impact, we have a long track record of innovative approaches to sustainable design. Our sustainably designed buildings will employ thermally efficient materials. Significantly, we will cleanly generate all of the electrical and thermal energy used by the project on-site. We will employ solar production, with battery storage, supplemented by a natural gas micro-turbine for backup, which is highly efficient for providing co-generated heat for hot water to guest rooms and the pool and spa. We will use an innovative approach to cooling that will convert solar energy directly to ice, which we will use for cooling by circulating ice water from an ice reservoir. This use of a "thermal battery" will mean that we will not have conventional HVAC equipment and will not employ glycol (a hazardous material). We will use salt-based (as opposed to chlorine) systems to maintain the pools. Of course, we will apply low-flow water technology throughout. Finally, we will sequester carbon directly through our organic farming and composting operations.

We are providing bicycles for every room and are encouraging pedestrian use of our property as well as to gain access to downtown. We will construct a Class I bicycle and pedestrian trail along Mills Lane to the new intersection at Grayson which, ultimately, will connect to the Vine Trail when it comes to St. Helena.

With its significant benefits for the community, we believe our agriculture-oriented, family-owned project is right for St. Helena – and its values. Our lodging guests, who will be a short walk or bicycle ride away, will provide desperately needed support for our downtown merchants and restaurants.

Our project also brings significant traffic and infrastructure benefits to the City, including the realignment of Mills Lane to Grayson (with protected pedestrian crossing) to resolve the dangerous current intersection on Main Street, an improved signalized crosswalk at Charter Oak and Main Street, the installation of the “purple pipe” to bring recycled water for irrigation use in Crane Park and the high school (and beyond), and the construction of a missing link in the City’s stormwater drainage system along Mills Lane.

The project provides an unprecedented total contribution of \$3.2M to the City’s Housing Impact Fund (the highest in Napa County history). In addition, revenues to the General Fund through TOT and sales taxes will increase by more than \$2M annually when the lodging is occupied.

If you would like more information, you can see our presentation to the Planning Commission scheduled for August 18th: longmeadowranch.com/project

Eve, we are not aware of a comparable project in our community that has brought so much community benefit with so little impact. We would very much appreciate your support for our project.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Ted W. Hall', with a stylized 'A' at the top.

Ted W. Hall

cc:

Aaron Hecock, City of St. Helena

Attachments:

Housing Slides

Environmental Slides

**FARMSTEAD AT LONG MEADOW RANCH
738 Main Street
Saint Helena, CA. 94574**

August 17,2020

Mr. Mike Hackett
282 White Cottage Road South
Angwin, CA 94508
mhackett54@gmail.com

Dear Mike:

Thank you for your comments on our proposed lodging project at Farmstead in your public comment letter to the City of St. Helena on June 27. We genuinely appreciate your vigilant concern for our broader Napa Valley community.

We acknowledge your expressed (and implied) concerns about workforce housing, “lodging versus hotel,” traffic, water, ground water, land use and climate. We believe that we have addressed each of these issues effectively and in a way that truly distinguishes our project from conventional development. We hope that you will consider supporting our project.

We agree that workforce housing is a critical need for our community. We have been working for more than three years with Our Town St. Helena to identify a viable site for workforce housing. In 2018 we reached a formal agreement with OTSH to provide \$1M for site acquisition. Our development agreement with the City provides for an unprecedented total contribution of \$3.2M to the City’s Housing Impact Fund, \$1M of which has been earmarked for Our Town St. Helena to use for site acquisition. With OTSH we are actively pursuing a project known as Phelps Village (adjacent to our lodging project at Mills Lane and Main Street), which we will pursue vigorously if our project is approved.

You can see more about the project in the attached slides from our Planning Commission presentation. The project will include 30+ units and could house as many as 150 people.

With regard to “lodging versus hotel,” we have always used “lodging” instead of “hotel” to describe our project because we are adding overnight stays to our existing business, not building a new full-service hotel. We will only have 65 rooms and, because we currently employ many of the people we need to run the business, the lodging project will add just 28 hourly and 9 management positions to handle the lodging activities. On a 7-day-a-week basis, we will be adding 51 total employees. Operating on three shifts, there will be only 20-25 additional employees on the property at any one time.

Farmstead and its services affiliate already employ many of the people needed to operate the aggregate business, including culinary staff, food & beverage management, marketing, finance & accounting, administration, human resources (including recruiting and training), guest

services, reservations, landscaping, building & equipment maintenance and farming. As a result, the lodging project results in substantially fewer incremental employees than would be required to open an equivalently sized full-service hotel.

Our employees will park in an employee parking lot (73 spaces) at the corner of McCormick and Dowdell and will either walk or take a shuttle to the Farmstead campus. We will add sidewalks to La Fata as part of the project. There will be no employee traffic on Mills Lane.

With regard to visitor traffic, we are not adding a traffic-generating “event center” to our community. We are not asking for an increase over our existing private party and meeting activity. Significantly, private parties and meetings represent less than 10 percent of the total visitors to Farmstead.

We enjoy a substantial local clientele for private parties and meetings, including not-for-profit presentations and meetings, company holiday parties, book club meetings, and dinners and seminars for religious organizations. We also host family-oriented community events, including an annual Easter egg hunt, a pumpkin-carving party, a gingerbread cookie-decorating holiday experience and a 4th of July free concert. All of this guest traffic is locally originated.

Private parties will continue to be held on our private patio, in the indoor barn and on the lawn at the existing Farmstead. Our Chef’s Table offering, which is also already in place, is being moved to the multi-purpose building on the lodging part of the campus. As a result, any increase in traffic will occur because of the arrival and departure of overnight guests at the 65-rooms of lodging, not from new events.

With our project located south of town (and given the proximity for pedestrians and bicycles), the impact of our guests’ arrivals and departures for overnight stays is further mitigated. In addition, we expect that some of our lodging guests will displace day visitors dining at our restaurant or attending a private party who would otherwise have driven to and from our location via Highway 29. Our traffic engineer has determined (as documented by the CEQA analysis) that – even on a Saturday peak afternoon – Farmstead-related traffic will have negligible impact on the intersection of Main and Pope, which is the City’s most congested point.

We are also making significant improvements to the traffic infrastructure of the City. The project will realign Mills Lane with Grayson and provide an improved railroad crossing. The current intersection of Mills Lane with Main Street is in an awkward, challenging location in relation to the intersection of Grayson and Main Street – especially with traffic accelerating towards town from a green signal at Grayson. The intersection will be protected by a synchronized signal, which will materially improve safety. A protected bike and pedestrian crossing will also be installed.

We are improving the lighted pedestrian crossing at the corner of Charter Oak and Main and we have agreed to pay our fair share of a signal at Dowdell, if it ever becomes necessary. Taken

together, these improvements will smooth traffic flow and increase pedestrian safety on Main Street from the high school to downtown.

Finally, we are leaders in the *Napa Valley Forward* project which is an employer-based initiative in collaboration with the County and the Metropolitan Transportation Commission that is trying to reduce the peak-period congestion caused by workforce commuting on Highway 29 and Silverado Trail. We are committed to providing incentives to our employees to participate and are optimistic that we can make a meaningful reduction in peak-period congestion in a post-Covid-19 implementation.

With regard to water, we identified the opportunity to install a "purple pipe" to bring recycled water from the City's water treatment plant (which is undergoing an upgrade) for distribution across the City. We are installing the main delivery line, at our expense, along the length of Mills Lane to Main Street. It will provide the primary delivery line of recycled water for further distribution. Its first use will be to replace potable water used for irrigation at Crane Park and (subject to negotiation with the school district) for the irrigation of the high school landscaping and athletic fields. This reduction in the use of potable water at Crane Park offsets the incremental water usage of our project by a very wide margin. Ultimately the savings for the City are even larger (dozens of acre-feet).

We will also use the recycled water, when available, in the sanitary systems (i.e., toilets) throughout the Farmstead campus, which will reduce the project's potable water use.

Overall, our project is far better than "water neutral," it is creating a significant incremental supply of potable water for the City.

With regard to ground water, we have two existing wells servicing the property and we do not anticipate drilling any additional wells. We are currently using the wells for irrigation of crops on the property with ample supply. The project will use city water, not ground water, as its potable water source. The wells have been tested and the analysis by our civil engineer (as documented in the CEQA analysis) shows that the wells only need to be pumped 5% of the time (about 8 hours a week) to fully meet the irrigation needs of our project, conservatively based on just 50% of the wells' rated production.

When the recycled water line described above is connected to the city's water treatment plant, we expect the recycled water to reduce or eliminate our use of ground water (subject to meeting quality standards). Importantly, recycled water will also be available to our neighbors along Mills Lane which would allow them to reduce their use of ground water.

With regard to the use of agricultural land, our property includes both agriculture and service commercial zoning, which was recently reaffirmed by the City's General Plan Update. We are not requesting any change in zoning for the project. We will farm the portion of the property that is zoned for agriculture (with enthusiasm). In addition to our vegetable (farm-to-table)

farming, the lodging landscaping will be edible, and we are planting a commercial fruit orchard around the parking lot.

The lodging project is located in the service commercial zoning area and is an appropriate use for this zoning. The service commercial zoning permits development of the property for commercial purposes, including a commercial office building, by right (i.e., without a use permit). We believe our distinctive farming-oriented lodging project is an attractive and appropriate use that fits St. Helena's aesthetic – especially when compared to permitted alternative commercial uses.

With regard to climate impact, we have a long track record of innovative approaches to sustainable design. Our sustainably designed buildings will employ thermally efficient materials. Significantly, we will cleanly generate all of the electrical and thermal energy used by the project on-site. We will employ solar production, with battery storage, supplemented by a natural gas micro-turbine for backup, which is highly efficient for providing co-generated heat for hot water to guest rooms and the pool and spa. We will use an innovative approach to cooling that will convert solar energy directly to ice, which we will use for cooling by circulating ice water from an ice reservoir. This use of a "thermal battery" will mean that we will not have conventional HVAC equipment and will not employ glycol (a hazardous material).

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Ted W. Hall

cc:

Aaron Hecock, City of St. Helena

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