City of St. Helena
Planning Commission
Regular Meeting
Tuesday, April 18, 2017 @ 6:00 PM
Vintage Hall Board Room - Second Floor
465 Main Street, St. Helena

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

Page

1. PLEDGE OF ALLEGIANCE

2. CALL TO ORDER AND ROLL CALL
Chairperson: Grace Kistner
Vice Chair: Sarah Parker
Commissioners: Bobbi Monnette, Tracy Sweeney, David Knudsen
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 t he 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 three 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 7 - 10
COMMISSION MINUTES 4-4-17

4.2. **FILE NUMBER:** PL17-011 11 - 27
LOCATION OF PROPERTY: 2140 Dean York Lane
PROJECT DESCRIPTION: Applicant is seeking design review approval in order to construct a 150-sf bathroom addition on their existing single-family home on Dean York Drive.

CEQA Determination: The project is exempt from the requirements of CEQA pursuant to Section 15301, which exempts the minor alteration of existing private structures and Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.
Prepared By: Aaron Hecock, Senior Planner
Recommendation:
Staff finds that the proposed bathroom addition raises no design issues and recommends that the Planning Commission:

1. Determine that the project is exempt from the requirements of

CEQA pursuant to Section 15301, which exempts the minor alteration of existing private structures and Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.; and

2. Accept the required findings and approve design review for the bathroom addition to the home at 2140 Dean York Lane.

Staff Report - 2140 Dean York Ln.
Attachment 1 - Resolution
Attachment 2 - Plan Set
Attachment 3 - Site Photos

5. PUBLIC HEARINGS

5.1. **FILE NUMBER:** PL17-017 29 - 52

LOCATION OF PROPERTY: 995 Vintage Avenue

PROJECT DESCRIPTION: Applicant, Matt Cia, is requesting a use permit to operate a CrossFit based fitness facility; it would serve as a community oriented program with a focus on fitness, nutrition and healthy lifestyle.

CEQA Determination: The project is categorically exempt in accordance with CEQA Section 15301 “existing facilities” as the operation of an existing private structure involving a negligible expansion of use beyond that existing at the time of the lead agency's determination.

Prepared By: Lilly Bianco, Contract Planner

Recommendation:

The Planning and Community Improvement Department recommends that the Planning Commission:

1. Determine that the project is categorically exempt from the requirements of CEQA pursuant to CEQA Section 15301 “existing facilities” as the operation of a business within an existing private structure involving a negligible expansion of use beyond that existing at the time of the lead agency's determination.
2. Accept the required findings enumerated in Municipal Code Section 17.168. 040 and adopt a resolution approving a Use Permit for the proposed Crush St.Helena -Fitness Facility.

Staff Report - 995 Vintage Ave.
Attachment 1 - Resolution
Attachment 2 - APN Map
Attachment 3 - Aerial View
Attachment 4 - Project Narrative
Attachment 5 - Project Plans

5.2. **FILE NUMBER:** PL17-014 53 - 132

LOCATION OF PROPERTY: 1000 Pratt Avenue

PROJECT DESCRIPTION: Applicant, Scott Bartley, on behalf of Treasury Wine Estates, America, is requesting Design Review approval to replace eight (8) large format wine fermentation tanks with 130 smaller format wine fermentation tanks to encourage a higher level of

quality.

CEQA Determination: The project is exempt from the requirements of CEQA pursuant to Section 15301, which exempts the minor alteration of existing private structures involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination.

Prepared By: Lilly Bianco, Contract Planner

Recommendation:

The Planning and Community Improvement Department recommends that the Planning Commission adopt a resolution finding that:

1. The project is exempt from the requirements of CEQA pursuant to CEQA Section 15301.
2. Accepts the required findings and approves the requested Design Review for the Beringer ICON III Project to replace eight (8) large format wine fermentation tanks with 130 smaller format wine fermentation tanks to encourage a higher level of quality, introduce of a new forklift path/ramp, relocate and redesign the existing receiving station and press pit, redesign the existing weigh station and central scale house in an effort to improve traffic flow and simplify operations, and supplement landscaping along the property street frontages, and reuse 10 existing 12,000 gallon tanks for rainwater capture.

Staff Report - 1000 Pratt Ave.
Attachment 1 - Resolution
Attachment 2 - APN Map
Attachment 3 - Aerial View
Attachment 4 - Project Narrative
Attachment 5 - Capacity Calculations
Attachment 6 - Project Plans
Attachment 7 - Site Photos
Attachment 8 - Biological Memorandum, March 17, 2017

5.3. **FILE NUMBER:** PL17-012 133 - 163

LOCATION OF PROPERTY:1230 Allyn Avenue

PROJECT DESCRIPTION: Tom and Gale Trainor request design review approval for a remodel and addition to their existing single-family home located at 1230 Allyn Avenue in the Medium Density Residential district (MR).

CEQA Determination: Staff has conducted the requisite analysis and concluded that the project is categorically exempt from the requirements of CEQA pursuant to CEQA Guidelines Section 15301 which exempts the minor alteration of existing private structures and Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.

Prepared By: Aaron Hecock, Senior Planner

Recommendation:

Staff finds that the proposed remodel and addition raises no adverse design issues and recommends that the Planning Commission:

1. Find that the project is exempt from the requirements of CEQA pursuant to Section 15301 which exempts the minor alteration

of existing private structures; and

2. Accept the required findings and approve design review for the proposed remodel and addition to the home at 1230 Allyn Avenue.

Staff Report - 1230 Allyn Ave.
Attachment 1 - Resolution
Attachment 2 - APN map
Attachment 3 - Plan Set
Attachment 4 - Applicant Statement

6. NEW BUSINESS

6.1. **SUBJECT:** Consideration and proposed approval of a resolution approving and recommending City Council adoption of the City of St. Helena Component of the Napa Countywide Pedestrian Plan. 165 - 709

CEQA Determination: Mitigated Negative Declaration, July 2016
Prepared By: Erica Ahmann Smithies, Acting Public Works Director/City Engineer
Recommendation:
Resolution Approving and Recommending City Council Adoption of the City of St. Helena Component of the Napa Countywide Pedestrian Plan.

Staff Report - Napa Countywide Pedestrian Plan
Attachment 1 - Resolution
Attachment 2 - Final Plan
Attachment 3 - Appendix SH-A
Attachment 4 - Napa Countywide Ped Plan_Final MND July 8

7. SCHEDULED MATTERS

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

8.1. Department Report 711
Department Report - Administrative Approvals Tracking List

8.2. CIA Denial Resolution 713 - 715
PC2017-013_2555 Main and 830 Pratt DENIAL Reso 03.21.17

9. AGENDA FORCAST
Attached is a summary document of pending projects and up coming and items of priority and interest that will be placed on future agendas. 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.

9.1. Agenda Forecast Updated April 2017 717 - 720
PC TENTATIVE AGENDA April 2017 Update

10. ADJOURNMENT
The next Regular Planning Commission meeting is scheduled for May 2, 2017 at 6:00 p.m. in the Vintage Hall Board Room located at 465 Main Street.

This agenda was posted at City Hall, 1480 Main Street, and at Vintage Hall, 465 Main Street, St. Helena, California on April 13, 2017.

Noah Housh, Planning 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://cityofsthelena.org and will be available for public review at the respective meeting.

Action Minutes
City of St. Helena
Planning Commission

Regular Meeting
Tuesday, April 4, 2017 @ 6:00 PM
Vintage Hall Board Room - Second Floor
465 Main Street, St. Helena

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1. PLEDGE OF ALLEGIANCE

2. CALL TO ORDER AND ROLL CALL
Chairperson: Grace Kistner
Vice Chair: Sarah Parker
Commissioners: Tracy Sweeney and David Knudsen
Absent: Commissioner Bobbi Monnette
Staff Present: Aaron Hecock, Senior Planner, Xinia Gamero, Administrative Assistant.

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 t he 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 three minutes.**

No Public Comment received.

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 regular meeting Minutes
COMMISSION MINUTES 3-21-17

4.2. **FILE NUMBER:** PL17-010
LOCATION OF PROPERTY: 609 McCorkle Avenue
PROJECT DESCRIPTION: Brian Anderson of Trainor Builders, on behalf of David Moody, is requesting a design review exemption in order to construct a new shed/pool equipment structure on the 1 ½ acre property at 609 McCorkle Avenue in the Medium Density Residential District (MR).

CEQA Determination: The project is exempt from the requirements of CEQA pursuant to Section 15303 which exempts the new construction of small structures including garages, carports, patios, swimming pools, etc.
Prepared By: Aaron Hecock, Senior Planner

Recommendation:
Staff finds that the proposed shed/pool equipment enclosure raises no substantial design problems and therefore recommends that the Planning Commission:

1. Determine that the project is exempt from the requirements of CEQA pursuant to Section 15303 which exempts the new construction of small structures including garages, carports, patios, swimming pools, etc.; and
2. Find that the project is exempt from design review and approve the new shed/pool equipment enclosure located at 609 McCorkle Avenue.

MOTION: Commissioner Sweeney moved to approve the Consent Calendar as presented. The motion was seconded by Vice-Chair Parker and roll call carried by the following vote:

AYES: Commissioner Sweeney, Parker, Knudsen and Kistner
NOES: None
ABSENT: Commissioner Monnette
ABSTAIN: None

5. PUBLIC HEARINGS

5.1. **FILE NUMBER:** PL17-017
LOCATION OF PROPERTY: 995 Vintage Avenue
PROJECT DESCRIPTION: Applicant, Matt Cia, is requesting a use permit to operate a CrossFit based fitness facility; it would serve as a community oriented program with a focus on fitness, nutrition and healthy lifestyle.

CEQA Determination: The project is categorically exempt in accordance with CEQA Section 15301 “existing facilities” as the operation of an existing private structure involving a negligible expansion of use beyond that existing at the time of the lead agency's determination.
Prepared By: Lilly Bianco, Contract Planner
Recommendation:
The Planning and Community Improvement Department recommends that the Planning Commission:

1. Determine that the project is categorically exempt from the requirements of CEQA pursuant to CEQA Section 15301 “existing facilities” as the operation of a business within an existing private structure involving a negligible expansion of use beyond that existing at the time of the lead agency's determination; and
2. Accept the required findings enumerated in Municipal Code Section 17.168 040 and adopt a resolution approving a Use Permit for the proposed Crush St.Helena -Fitness Facility.

Senior Planner Aaron Hecock announced item 5.1 will be continued until the following Planning Commission meeting of April 18, 2017.

Chair Kistner opened Public Comment.

Stephanie Yacobacci addressed the Commission.

Chair Kistner closed Public Comment.

6. NEW BUSINESS

6.1. **FILE NUMBER:** PL17-009
LOCATION OF PROPERTY: 1380 Main Street #101
PROJECT DESCRIPTION: Applicant is requesting sign permit approval for new signage associated with Sportago which is located in the new Menegon Building on the corner of Main Street and Adams Street.

CEQA Determination: This project is exempt from the requirements of CEQA pursuant to Section 15311, Class 11(a) of the CEQA Guidelines, which exempts on-premise business signs.
Prepared By: Aaron Hecock, Senior Planner
Recommendation: Staff feels the proposed signs are in general conformance with the requirements of the Municipal Code and is in support of the application. Therefore, staff recommends that the Planning Commission:

1. Determine that the signs are exempt from the requirements of CEQA pursuant to Section 15311, Class 11(a) of the CEQA Guidelines which exempts on-premise business signs; and
2. Approve the request for a Sign Permit in order to place new signage on the building located at 1380 Main Street.

Senior Planner Aaron Hecok reported on Item.

Chair Parker opened Public Comment.

Chair Parker closed Public Comment.

MOTION: Vice-Chair Parker moved to approve staff's recommendation. The motion was seconded by Commissioner Knudsen and roll call carried by the following vote:

AYES: Commissioner Parker, Knudsen, Sweeney and Kistner
NOES: None
ABSENT: Commissioner Monnette
ABSTAIN: None

7. SCHEDULED MATTERS

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

8.1. PC TENTATIVE AGENDA February 2 2017 Update

Senior Planner Aaron Hecok reported on Item.

9. AGENDA FORCAST
Attached is a summary document of pending projects and up coming and items of priority and interest that will be placed on future agendas. 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.

10. ADJOURNMENT: Chair Kistner adjourned the meeting at **6:12 p.m.**

APPROVED: The April 4, 2017 Minutes were approved at the Planning Commission meeting of _____.

ATTEST:

_____
Grace Kistner
Chair, Planning Commission

_____
Noah Housh
Planning and Community Improvement Director

CITY OF ST. HELENA
PLANNING DEPARTMENT 1480 MAIN STREET- ST. HELENA, CA 94574
PLANNING COMMISSION

APRIL 18, 2017

AGENDA SECTION: Consent

FILE NUMBER: PL17-011

SUBJECT: Request by Dorian Krausz for Design Review approval to construct a bathroom addition on the existing single-family home located at 2140 Dean York Lane in the Low Density Residential district (LR:1A).

PREPARED BY: Aaron Hecock, Senior Planner

REVIEWED BY: Noah Housh, Planning Director

APPLICATION FILED: 02/02/17 **ACCEPTED AS COMPLETE:** 03/24/17

LOCATION OF PROPERTY: 2140 Dean York Lane

APN: 009-460-006

GENERAL PLAN/ZONING: Low Density Residential / LR:1A

APPLICANT: Dorian Krausz **PHONE:** (707) 963-7516

PROJECT DESCRIPTION

The applicant is seeking design review approval in order to construct a 150-sf bathroom addition on their existing single-family home on Dean York Drive. The bathroom would be located off an existing bedroom on the south-side of the home. The addition would be constructed to match the existing home and would be finished with stucco siding and a flat roof with an adhesive roof membrane. The addition would be 12 feet in height matching the existing home.

ANALYSIS

CEQA

The project is exempt from the requirements of CEQA pursuant to Section 15301, which exempts the minor alteration of existing private structures and Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc. The proposed project is not subject to any of the exceptions to the use of a categorical exemption as outlined in CEQA Section 15300.2. The project site is not located on or near an environmentally sensitive area, is not visible from a scenic highway, is not included on a hazardous waste site, and will not impact historic resources or otherwise generate or contribute to any potentially significant impacts.

GENERAL PLAN
The property has a General Plan land use designation of Low Density Residential (LDR). This designation provides for single-family detached homes, secondary residential units, limited agricultural uses, and other similar and compatible uses. The LDR designation is applied to limited areas of the City where large, residentially-subdivided parcels already exist, particularly near the City's perimeter. The LDR designation is not intended for the more central areas of the community, where the lower densities would be inconsistent with historic development patterns. The St. Helena General Plan and Housing Element 2015-2023 Goals, Policies, and Eight-Year Action Plan include the following policies that are applicable to the proposed project:

- *2.6.5 – Encourage the continuation of agricultural and low-intensity uses adjacent to the Urban Limit Line.*
- *2.6.14 - Encourage a mix of housing types and price ranges to allow choice for current and future generations of St. Helenans.*
- *4.3.4 - Strengthen community identity by appropriate building design, size, and site landscaping.*
- *HE1.5 - Encourage innovative housing types and designs.*
- *HE2.6 - Promote a balance of types of housing throughout the whole community.*

Staff Response: Staff finds that the proposed project is consistent with the General Plan policies listed above.

ZONING
Consistent with the LDR land use designation in the General Plan, the project site exhibits a zoning designation of Low Density Residential One Acre Minimum (LR:1A). This district provides for single-family detached homes, accessory dwelling units, limited agricultural uses, and compatible uses. Residential densities in the LR:1A district shall not exceed 1.0 units per gross acre. Pursuant to Chapter 17.164, all subdivisions, signs, new structures or buildings, or exterior revisions (not including change in exterior color) of any existing structures or buildings for both permitted and conditional uses shall require design review.

As far as the Floor Area Ratio (F.A.R.) is concerned, a 29,620-sf parcel has a maximum F.A.R. of .18 for a maximum gross floor area of 5,332-sf (excluding any applicable F.A.R. exemptions). The applicant is proposing a 150-sf addition to the existing 1,636-sf home with 653-sf garage and 598-sf second unit. With the applicable F.A.R. exemptions for the second unit and covered parking, the project will consist of 2,437-sf, which is much less than the maximum square footage permitted for an F.A.R. of .08 (see below).

FLOOR AREA:

RESIDENCE	1,636 SF
GARAGE	653 SF
2nd UNIT	598 SF

BATHROOM ADDITION	150 SF
2nd UNIT EXEMPTION	-400 SF
COVERED PARKING EXEMPTION	-200 SF
	TOTAL 2,437 SF

FLOOR AREA RATIO:
2,437-sf / 29,620-sf = **.08**

Staff Response: The project as proposed meets all the requirements of the LR:1A zone including lot coverage, building size, height, setbacks, etc.

DESIGN REVIEW
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 following design criteria should be considered by the Planning Commission in review of this application (Zoning Ordinance Section 17.164.030):

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 sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept;
11. Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;
12. Whether natural features are appropriately preserved and integrated with the project;
13. 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 structure and functions;
14. In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character;
15. 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;

16. Whether plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena;
17. 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: Staff feels that the modest addition of a bathroom to the existing home is consistent with the criteria listed above.

CORRESPONDENCE

As of completion of this report, no comments on this application have been received by staff.

STAFF RECOMMENDATION

Staff finds that the proposed bathroom addition raises no design issues and recommends that the Planning Commission:

1. Determine that the project is exempt from the requirements of CEQA pursuant to Section 15301, which exempts the minor alteration of existing private structures and Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.; and

2. Accept the required findings and approve design review for the bathroom addition to the home at 2140 Dean York Lane.

ATTACHMENTS

1. Resolution / Conditions of Approval
2. Plan Set
3. Site Photos

CITY OF ST. HELENA PLANNING COMMISSION
RESOLUTION NO. PC17-
GRANTED TO 2140 DEAN YORK LANE

PROPERTY OWNER: Dorian Krausz **APN:** 009-460-006

Recitals

1. Request by Dorian Krausz for design review approval to construct a 150-sf bathroom addition on the existing single-family home located at 2140 Dean York Lane in the Low Density Residential district (LR:1A).

2. 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 April 18, 2017.

Resolution

A. The Planning Commission hereby finds that the project is exempt from the requirements of CEQA pursuant to Section 15301, which exempts the minor alteration of existing private structures and Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc.

B. The Planning Commission finds that the project is in compliance with the following Design Review criteria of Municipal Code Section 17.164.030:

1. *Consistent and compatible with applicable elements of the general plan in that it is a single-family home in a residentially designated area;*
2. *Compatibility of design with the immediate environment of the site in that it is a bathroom addition on an existing single-family home;*
3. *Relationship of the design to the site in that it is a small addition to an existing home;*
4. *Determination that the design is compatible in areas considered by the board as having a unified design or historical character in that the home is not historical nor in an area of with a unified design;*
5. *That the design promotes harmonious transition in scale and character in areas between different designated land uses in that it is a bathroom addition on an existing single-family home;*
6. *Compatibility with future construction both on and off the site in that it is a bathroom addition on an existing single-family home;*
7. *That the architectural design of structures and their materials and colors are appropriate to the function of the project in that the addition will match the existing single-family home;*
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 it is a bathroom addition on an existing single-family home;*

9. *That the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures in that it is a bathroom addition on an existing single-family home;*
10. *Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept in that it is a bathroom addition on an existing single-family home;*
11. *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 an easement on Dean York Lane;*
12. *That natural features are appropriately preserved and integrated with the project in that it is a bathroom addition on an existing single-family home;*
13. *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 addition will match the existing single-family home;*
14. *In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character in that the home is not historical nor in an area of with a unified design;*
15. *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 it is a bathroom addition on an existing single-family home;*
16. *That plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena in that it is a bathroom addition on an existing single-family home;*
17. *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 it is a bathroom addition on an existing single-family home.*

Planning Department Conditions of Approval

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. 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.

2. The design review shall be vested within one (1) year from the date of final action. A building permit for the use allowed under this approval shall have been obtained 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. 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.

3. 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.
4. 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.
5. 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.
6. Provided they are in general compliance with this approval, minor modifications may be approved by the Planning Director.
7. 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.
8. 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.
9. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on April 18, 2017, except as modified herein.
10. Exterior lighting shall be directed or shielded to prevent glare onto adjacent properties.
11. 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

12. 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.
13. 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.
14. No added drainage from the new hardscape, roofs, decks, pools or roof improvements shall be allowed to leave the site. The grading and/or site improvement plans shall provide a method to address how drainage will be treated, detained, diverted and infiltrated on site and at the property lines to prevent inundation of neighboring properties.
15. The applicant shall install an approved backflow device behind the existing water meter prior to 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.
16. The applicant shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards prior to Certificate of Occupancy.

Building Department Conditions of Approval

17. 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 2013 Title 24 codes.

18. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.

19. The applicant shall provide a construction waste management plan with the building permit application.

20. 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.

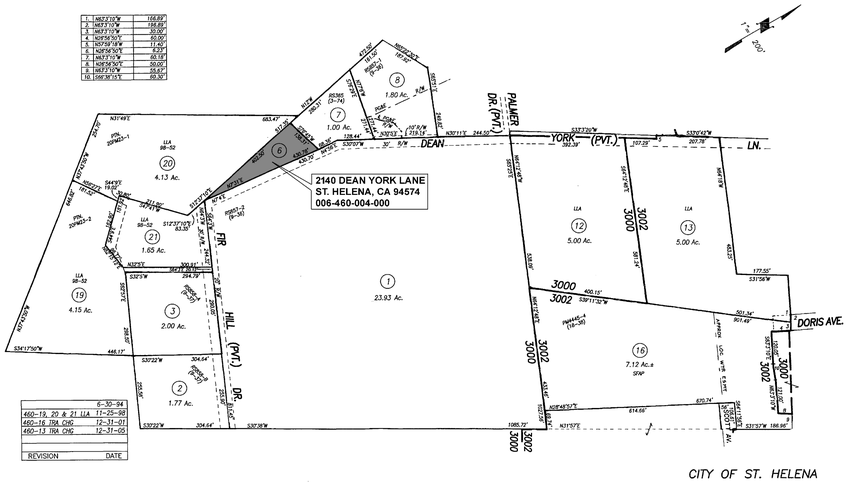
21. When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.

22. 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.

I HEREBY CERTIFY that the foregoing design review 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 April 18, 2017 by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

APPROVED:	ATTEST:
Grace Kistner Chair, Planning Commission	Noah Housh Planning Director



2 PARCEL MAP
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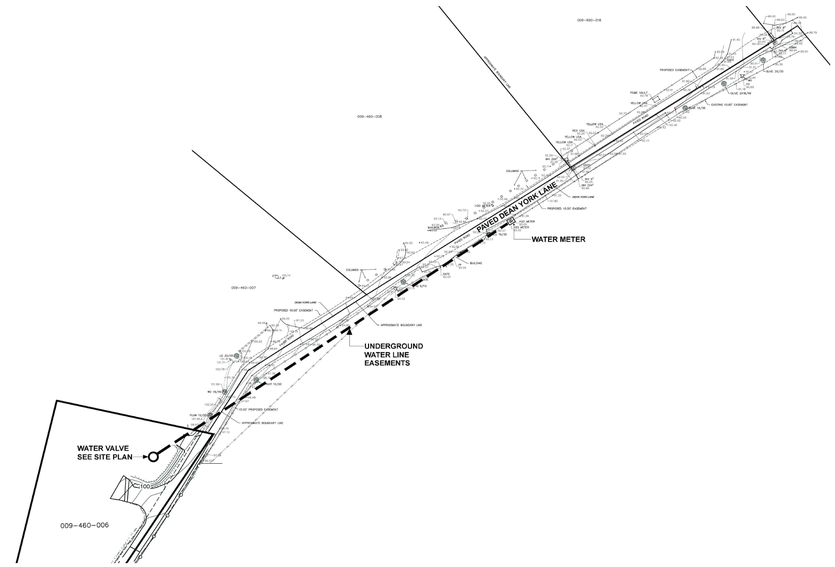

3 CITY WATER PLAN (REFERENCED BY ALBION SURVEYS)
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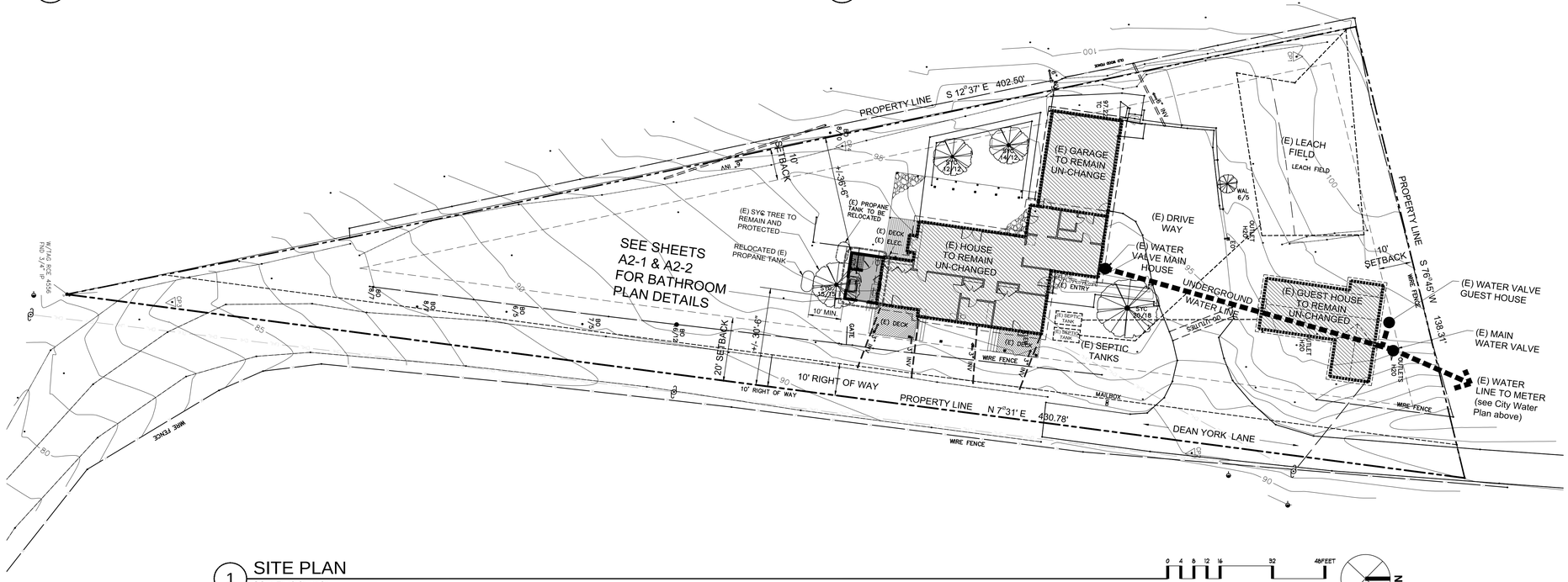

1 SITE PLAN
SCALE: 1/16"=1'-0"

LAIL DESIGN GROUP

1127 Pope Street, Suite 106
Saint Helena, CA 94574
TEL 707 963 1565 FAX 707 963 4509

JON LAIL
PROJECT DESIGNER

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KRAUSZ RESIDENCE

BATHROOM ADDITION

2140 DEAN YORK LANE
SAINT HELENA, CA 94574
APN: 009-460-006-000

PROJECT NUMBER	481
DATE	02.01.2017
CHECKED BY	JL
DRAWN BY	CV
SCALE	AS NOTED

REVISIONS

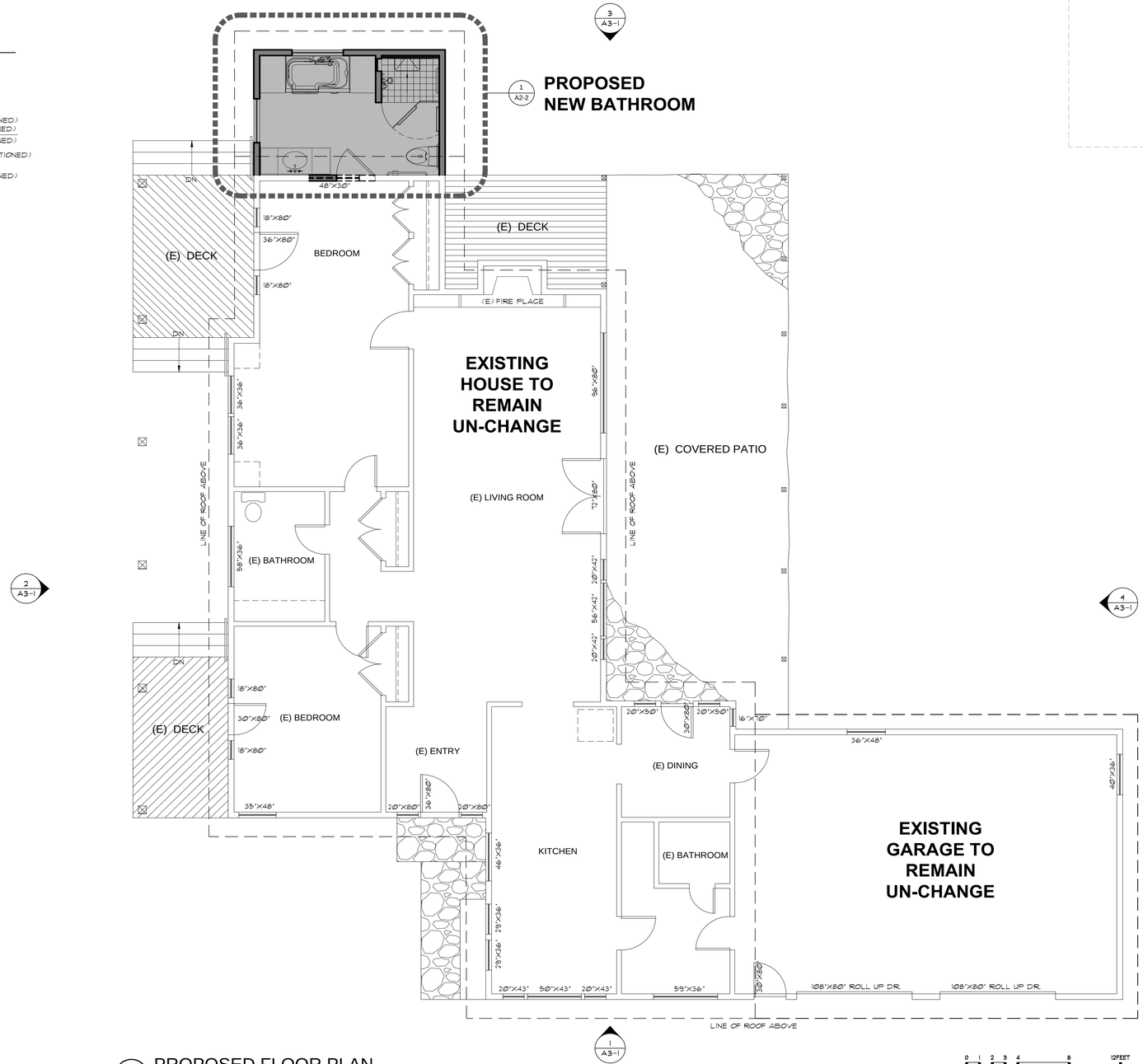
SITE PLAN

A1-1

DESIGN REVIEW SUBMITTAL

SQUARE FOOTAGE SUMMARIES:

LOT AREA:	= 29620 SQFT.
BUILDING AREA:	
EXISTING MAIN HOUSE:	
EXISTING FLOOR PLAN	= 1636 SQFT. (CONDITIONED)
NEW BATHROOM ADDITION	= 150 SQFT. (CONDITIONED)
TOTAL	= 1786 SQFT. (CONDITIONED)
EXISTING GARAGE	= 653 SQFT. (UN-CONDITIONED)
EXISTING GUEST HOUSE:	= 598 SQFT. (CONDITIONED)



1 PROPOSED FLOOR PLAN
SCALE: 1/4"=1'-0"

COUNTY APPROVAL STAMP

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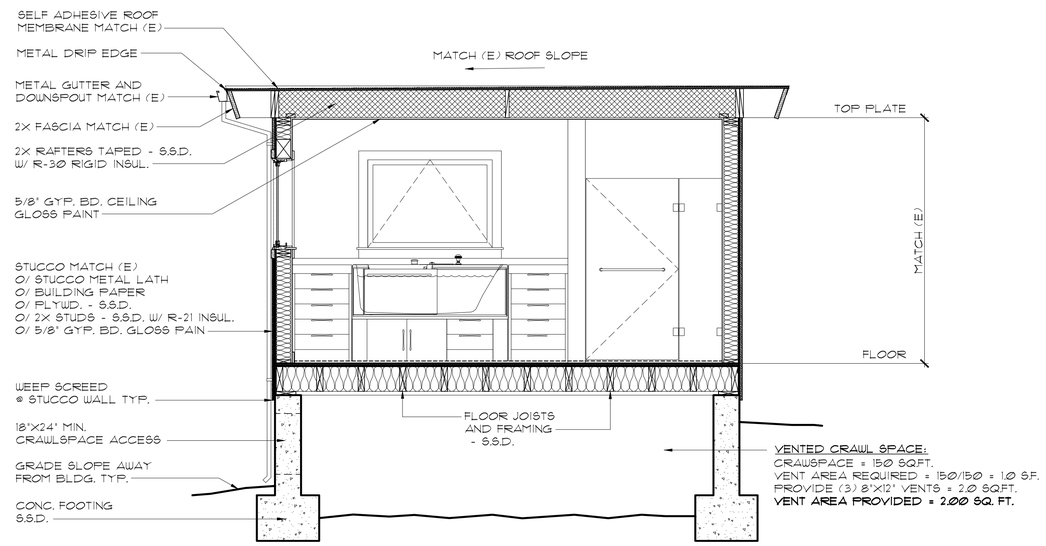
SCALE	AS NOTED

REVISIONS

PROPOSED FLOOR PLAN

A2-1

DESIGN REVIEW SUBMITTAL



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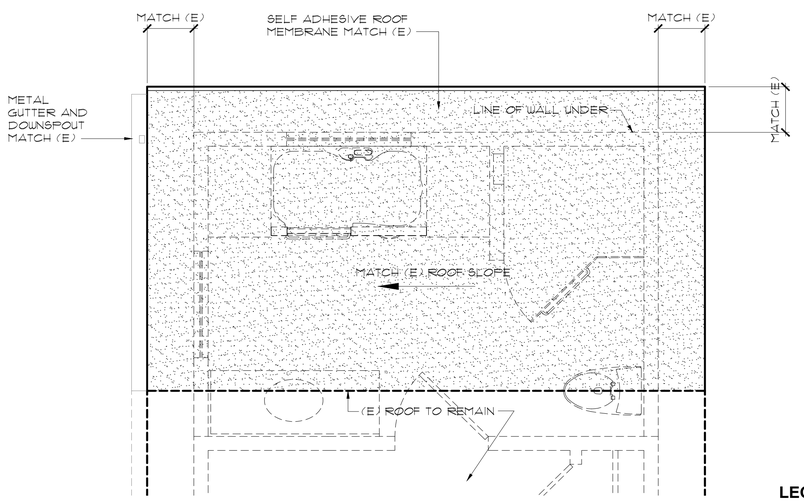

3 PARTIAL ROOF PLAN
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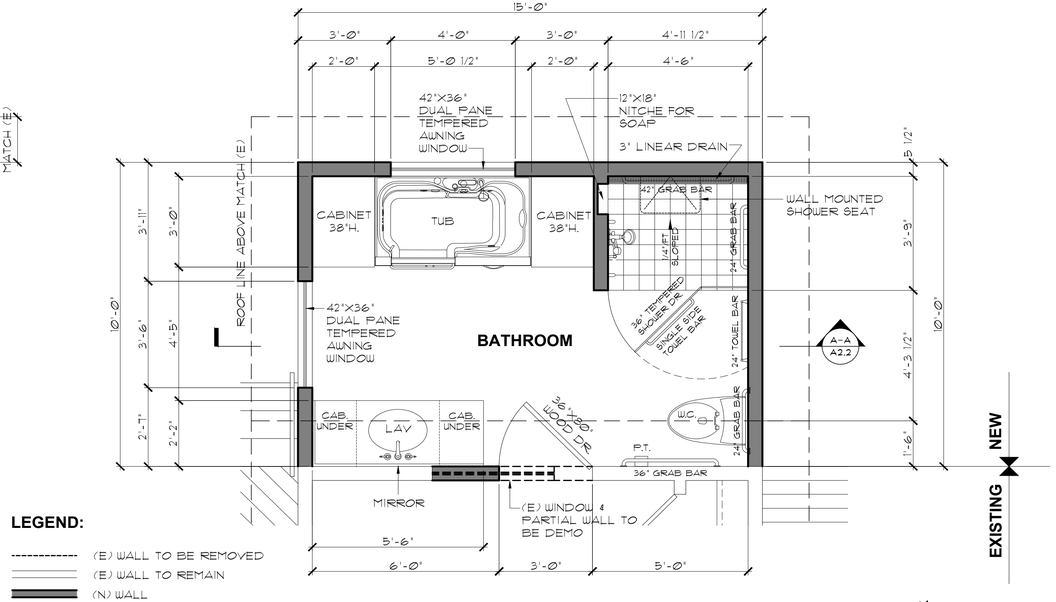

LEGEND:

- (E) WALL TO BE REMOVED
- (E) WALL TO REMAIN
- (N) WALL

1 PROPOSED BATHROOM FLOOR PLAN
SCALE: 1/2"=1'-0"

0 1 2 4 6FEET

PLAN NORTH TRUE NORTH

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BATHROOM ADDITION

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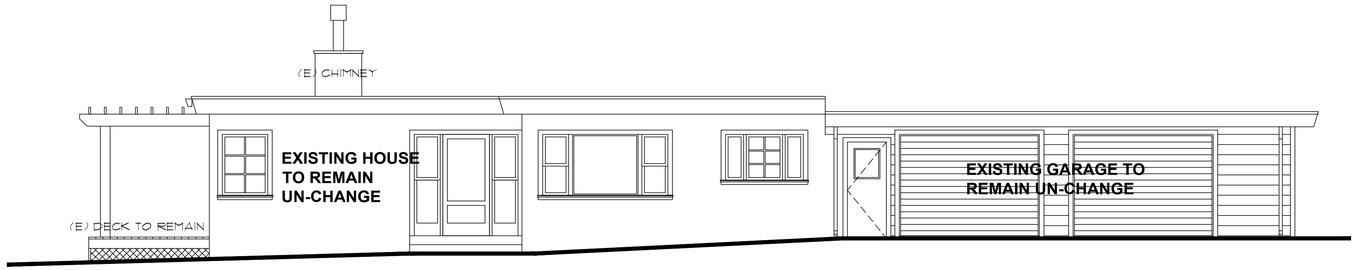
SCALE	AS NOTED

REVISIONS

PROPOSED BATHROOM FLOOR PLAN

A2-2

DESIGN REVIEW SUBMITTAL



1 NORTH ELEVATION
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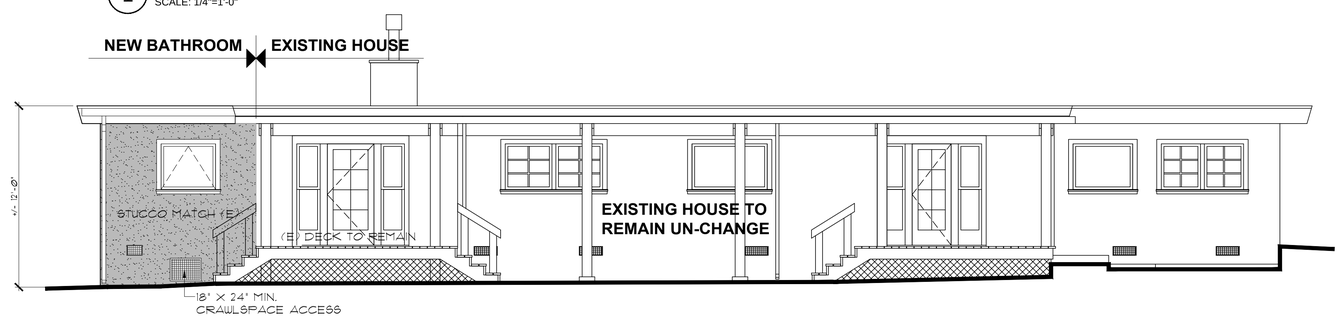

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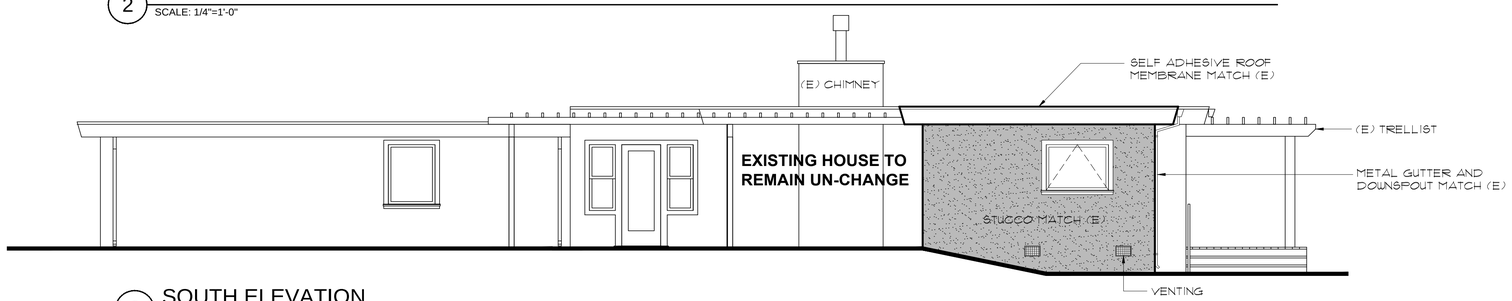

3 SOUTH ELEVATION
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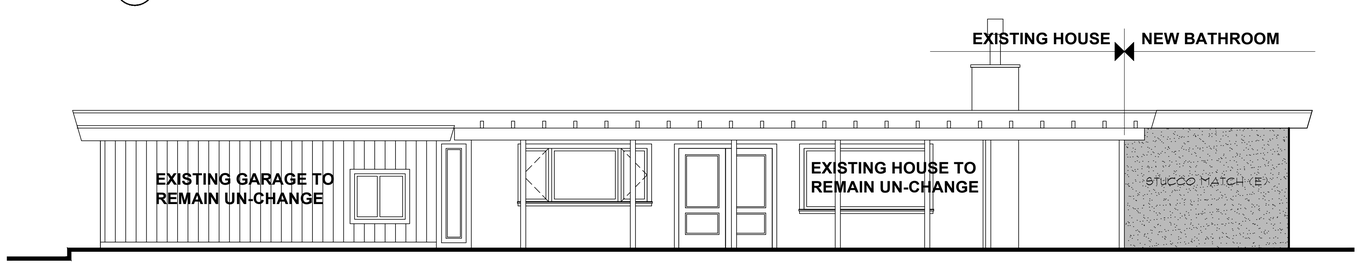

4 WEST ELEVATION
SCALE: 1/4"=1'-0"

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DRAWN BY	CV
SCALE	AS NOTED

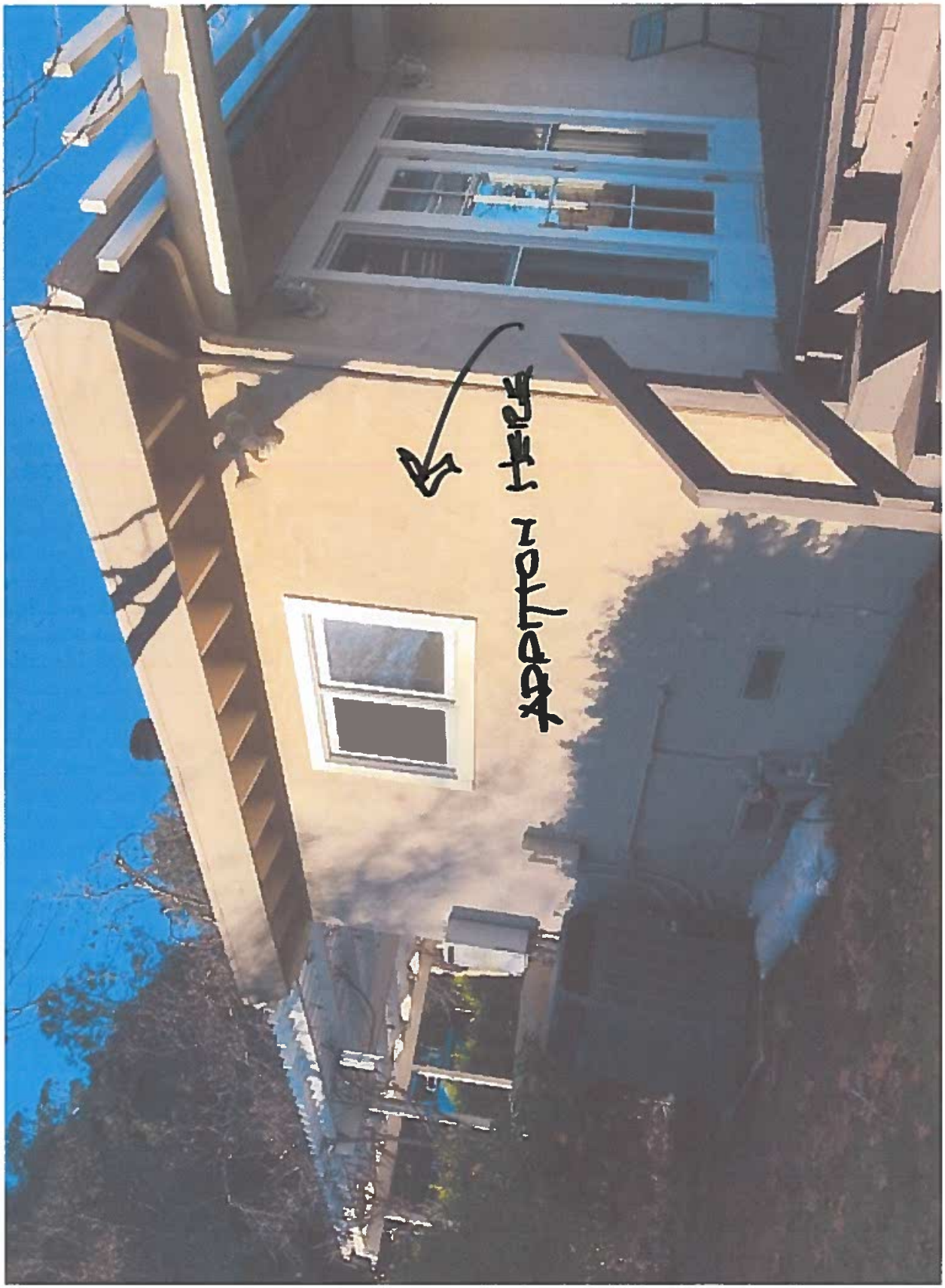
REVISIONS

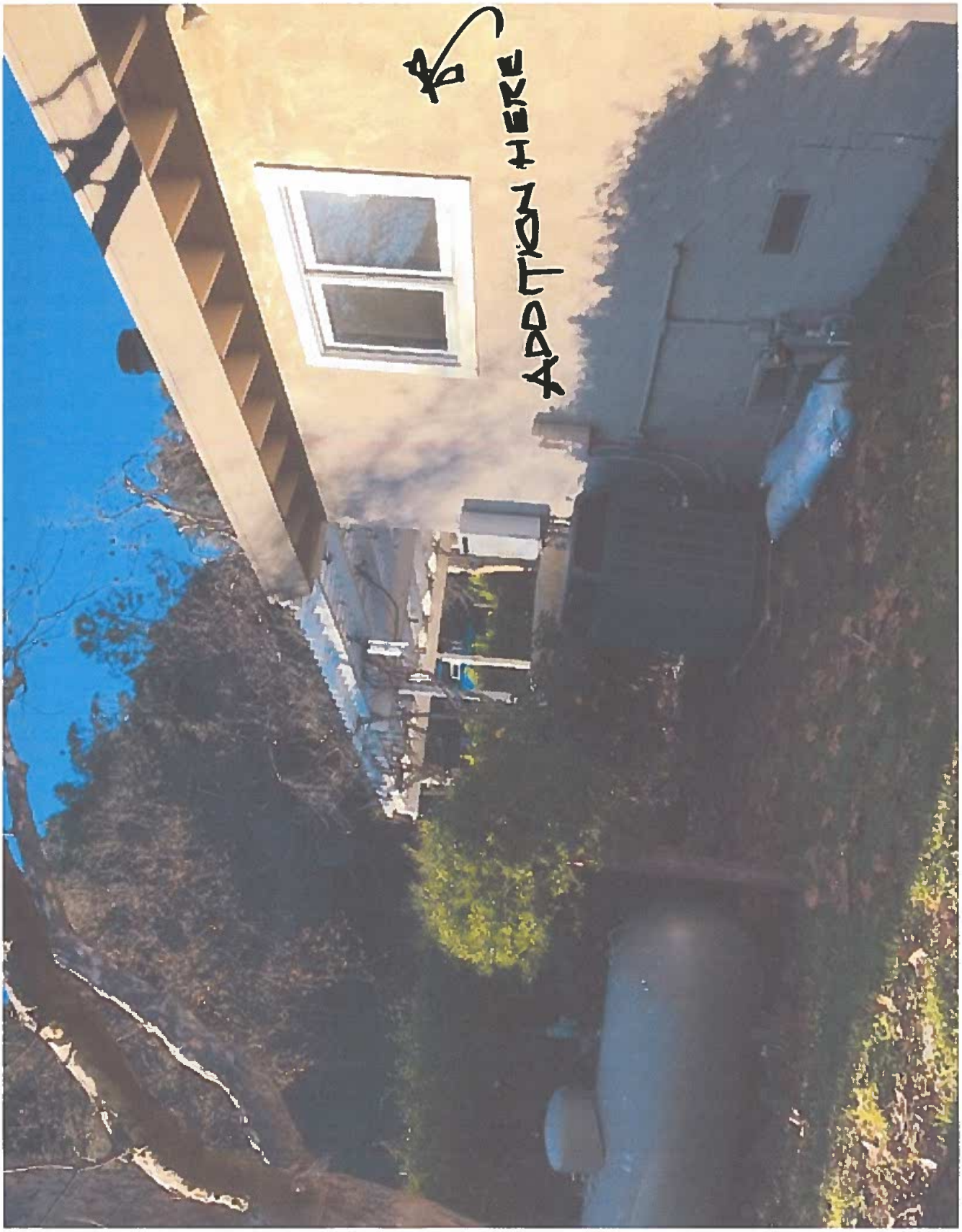
EXTERIOR ELEVATIONS

A3-1

DESIGN REVIEW SUBMITTAL

ADDITION HERE


FIRE ESCAPE


ADDITION HERE

CITY OF ST. HELENA
PLANNING DEPARTMENT 1480 MAIN STREET- ST. HELENA, CA 94574
PLANNING COMMISSION

April 18, 2017

AGENDA SECTION: Public Hearing

FILE NUMBER: PL17-017

SUBJECT: Crush Fitness- St.Helena Use Permit

PREPARED BY: Lilly Bianco, Contract Planner

REVIEWED BY: Noah Housh, Planning Director

APPLICATION FILED: March 2, 2017 **ACCEPTED AS COMPLETE:** March 21,2017

LOCATION OF PROPERTY: 995 Vintage Avenue

APPLICANT: Matt Cia

PHONE: (707) 312-1741

APN: 009-580-039

GENERAL PLAN: Industrial

ZONING: I: Industrial

PROPERTY DESCRIPTION: 995 Vintage Avenue is comprised of an existing 12,375 sq-ft warehouse building located in the Industrial Zoning District. At present, the front one-third of the building is devoted to administrative (office) uses and the rear two-thirds is devoted to warehouse/manufacturing space. The office space is occupied by multiple tenants; at present Wine Country Cases is the largest occupant and occupies all of the warehouse/manufacturing space and a portion of the office space. This tenant will be vacating the building at which time Crush Fitness is proposing to occupy approximately 3,080 sq-ft out of the newly available 9987.5 sq-ft (note that the 2,600 sq-ft referenced in the project narrative is not accurate). The site is supported by a total of 33 parking spaces, which exceeds the minimum number of parking spaces required under the zoning code (31).

PROJECT DESCRIPTION

Applicant, Matt Cia, is requesting a use permit to operate a CrossFit based fitness facility; it would serve as a community oriented program with a focus on fitness, nutrition and healthy lifestyle. The facility would be a CrossFit affiliate and offer CrossFit classes, bootcamp, and yoga classes to members as well as some “drop in” customers. The gym may also offer “open gym” hours to provide additional opportunity for members to

work on various skills, techniques, or to do their own work out. If offered, open gym hours would occur in between regular class times and would not overlap with regular classes. The space will be set up as a fitness center for functional training targeting the local community. Proposed modifications to the interior space include repainting the interior, adding one bathroom and rubber flooring and installing weight lifting equipment. No changes are proposed for the building exterior and parking would remain unchanged. The proposed operation of the fitness facility would be as follows:

Days/Hours of operation: The gym would operate from 5am until 8pm. Classes would be held M-F (1 hour in duration) and at 5am, 6am, 9am, 4pm, 5pm, and 6pm. One class will be held Saturday morning at 9am. Personal training sessions would occur during the same hours as classes are offered and would be limited to one client at a time. Open gym hours may occur in between regular classes and would be established based on level of interest. The applicant notes that the most popular class times are expected to be 6am, 5pm, and 6pm.

Class Size: 6 to 10 people

Personal Training Sessions: One personal training session at a time during the same hours as classes are offered.

Employees: Two to three part time trainers would teach classes and offer personal training sessions.

Noise: Amplified music will be played during class times and inside the facility, but limited to a level that it won't be heard outside of the building or that would otherwise disturb surrounding land uses.

Parking: Parking would be utilized on an as-needed basis and shared with other building tenants. The site features a total of 33 parking spaces. There is no specific parking number required for health and fitness facilities. However, the applicant did note that for the most part, operation of the proposed facility (and demand for parking) would be confined to times outside of normal working hours. For a more detailed discussion of parking, please see Analysis discussion, below.

ANALYSIS

GENERAL PLAN

995 Vintage Avenue exhibits a General Plan land use Designation of Industrial. The City of St. Helena General Plan (1993) states that the the Industrial LU Designation provides for industrial parks, warehouses, light manufacturing, auto and farm related equipment sales and repairs, viticulture services and similar and compatible uses. This designation is found in two areas of St.Helena: an area along Sulphur Springs Creek between Highway 29 and Valleyview Street, and an area east of Highway 29 and south of Mills Lane.

The General Plan emphasizes the desire to retain and encourage local-serving uses, namely those which derive a significant portion of their revenues from St. Helena

residents and which provide services and products to satisfy local residents' day-to-day needs. They are those businesses which serve a majority of regular repeat customers from the community.

General Plan policies applicable to the proposed Crush- Fitness Facility include:

2.6.27 Prohibit commercial uses that are primarily tourist-serving in nature, and that are inconsistent with the community image of St Helena.

3.4.4 Prohibit the developmentof any new retail uses that are oriented primarily towards tourists.

In accordance with the the General Plan and, in particular, those policies listed above, the subject project will operate as a fitness facility that would primarily serve local residents who would be members (repeat-customers). As a fitness facility, the proposed Crush-Fitness gym would provide a local-serving use that would add to St.Helena's amenities and available fitness options.

ZONING

Consistent with the Industrial Land Use Designation, the site exhibits a zoning designation of I: Industrial. The I Designation conditionally allows health club and fitness centers.

Parking

Chapter 17.124, Parking & Loading Requirements, does not prescribe specific parking requirements for "health and fitness" facilties. Rather, pursuant to Section 17.124.030 (H), it directs the Planning Commission to determine parking requirements for uses not specifically listed and use the requirements of Chapter 17.124 as a general rule and guide.

At present, the project site is supported by 33 shared parking spaces. Of the 33 spaces, 17 spaces are required to support the office use, meaning that the remaining 16 spaces support the manufacturing/industrial use and would become available once the existing Wine Country Cases business vacates. It is, however, reasonable to assume that a new use permitted under the I designation would come to fill in the remaning vacant area (5920 sq-ft) and demand a percentage of the 16 spaces.

Based on information provided by the applicant it is assumed that parking demand for Crush Fitness during less busy times (i.e. regular business hours) would be approximately 7- 8 spaces (assuming 6 students and 1 instructor plus a personal trainer and client) and during, busier times, (after hours), would be approximately 11-12 spaces (assuming 10 students, 1 instructor plus personal trainer and client). Parking demand during "open gym" hours would be expected to be equal or less than the demand shown for classes during less busy times.Therefore, during hours of highest parking demand, there could conceivably be 7-8 spaces available for the proposed gym and 8-9 remaining for a future use that would occupy the remaining square footage. However, it is unknown what future use type may occupy the remaining area and therefore not possible to calculate future parking demand for the site with certainty. For

example, industrial use (manufacturing) requires 1 space per 650 sq-ft and warehouse uses require 1 space per 1000 sq-ft.

Staff Analysis: The proposed gym would encourage a local-serving economy and would be of a size and scale appropriate for the area, and would not conflict with or inhibit other industrial uses. The average fitness class is expected to include 6-10 students and 1 instructor with the most popular class times confined to times outside of normal business hours. In addition, the parking demand in the industrial area does not appear to be particularly impacted given the types of uses present and under most circumstances is expected to be able to adequately serve parking needs for the proposed use and future building occupants. For those reasons, the project appears to be consistent with applicable policies and standards prescribed by the General Plan and Zoning Ordinance.

WATER NEUTRALITY

In August 2015 and pursuant to Ordinance 2015-5 the City of St. Helena established mandatory water efficiency measures for new construction, and adopted water demand offset requirements enumerated in Chapter 13.12.050 of the Municipal Code. Amongst 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 demand by an amount of water equal to the new demand placed on the city water system using the methodology defined in Code section 13.12.050. The offset must be clearly demonstrated to the satisfaction of the Director of Public Works.

The Crush-Fitness Facility does not propose any new development, as defined above, and therefore is not subject to the St. Helena Water neutrality provisions.

USE PERMIT

The purpose of a use permit is to allow the proper integration in the City of essential or desirable uses which may be suitable only in certain locations or zoning districts, 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. No use permit shall be granted unless all of the following general findings can be made (Zoning Code Section 17.168 040).

The Findings needed to approve a Use Permit are listed below and followed by staff’s analysis in *italic* typeface.

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.

   The proposed use would be CrossFit Fitness facility which would provide CrossFit, yoga, and boot camp classes. There would be no production,

manufacturing or any component of the business that would be expected to produce any element injurious to the surrounding 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 proposed fitness facility may play amplified music during classes; however, the applicant would be subject to the City's noise ordinance and would not have a need to play the music at a level that can be heard outside of the building envelope. In addition, the surrounding land uses are not considered "noise sensitive" that would be especially vulnerable to noise.

3. That the proposed use would not generate traffic noise in excess of the "normally acceptable" range identified in the General Plan..

   The applicant anticipates a class size of approximately 6-10 students, with the most popular class times confined to hours outside of regular business hours. Personal training sessions would occur simultaneously, but would be limited to one trainer and one client at a given time. If the applicant decides to establish "open gym" hours during the mid-day, the participation is expected to be similar to or less than that for classes. As such, the project is not expected to generate traffic or traffic noise in excess of what is normally acceptable.

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 fitness facility would be a small operation and would not place excessive demands on any city facilities or services.

5. That the proposed use would provide adequate ingress and egress to and from the proposed location.

   No changes to egress or ingress are proposed.

6. That allowing the proposed use would not conflict with the City's goal of maintaining the economic viability of a local serving economy.

   As a fitness facility that obtains a large portion of income from members (repeat-customers) the use is expected to encourage the viability of a local serving economy and add to the City of St.Helena's amenties focused on locals.

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 proposed health/fitness facility is a conditional use within the Industrial Zoning District. The use would be surrounded by light industrial and ancillary

office uses. Given the minimal intensity of the proposed use and the fact that the surrounding industrial areas are not devoted to heavy industry/manufacturing the proposed use is expected to be compatible with the esbablished district and would not conflict with or inihibit the continuation of any of the existing uses.

8. That the proposed use would not be in conflict with the City's General Plan.

   As detailed above, the proposed use would be primarily focused on local membership and would encourage a local-serving economy such that it would be consistent with General Plan goals and the overall intent of the General Plan.

9. That the proposed use would not be injurious to public health, safety, or welfare.

   No aspect of the proposed use would be injurious to 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.

    Use permits are considered on a case by case basis and based on the specific merits of a given project. Accordingly, the granting of this use permit would not influence future decisions or otherwise set a precedent.

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 on-site parking is expected to adequately serve the proposed use given the small class size and the fact that the most popular class times typically fall outside of normal business hours.

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

    Project-generated traffic would be limited and distributed throughout the day and streets would be able to accommodate any new traffic.

CEQA

The project is categorically exempt in accordance with CEQA Section 15301 “existing facilities” as the operation of an existing private structure involving a negligible expansion of use beyond that existing at the time of the lead agency's determination. The proposed project is not subject to any of the exceptions to the use of a categorical exemption as outlined in CEQA Section 15300.2. The project site is not located on or near an environmentally sensitive area, is not visible from a scenic highway, is not included on a hazardous waste site, and will not impact historic resources or otherwise generate or contribute to any potentially significant impacts.

NOTICING AND CORRESPONDENCE

No comments have been received at the drafting of this staff report.

STAFF RECOMMENDATION

The Planning and Community Improvement Department recommends that the Planning Commission:

1. Determine that the project is categorically exempt from the requirements of CEQA pursuant to CEQA Section 15301 “existing facilities” as the operation of a business within an existing private structure involving a negligible expansion of use beyond that existing at the time of the lead agency's determination.

2. Accept the required findings enumerated in Municipal Code Section 17.168. 040 and adopt a resolution approving a Use Permit for the proposed Crush St.Helena - Fitness Facility.

ATTACHMENTS

1.Resolution + Conditions
2.APN Map
3.Aerial View
4.Project Narrative
5.Project Plans

USE PERMIT
NO. PL17-017
CITY OF ST. HELENA, STATE OF CALIFORNIA
GRANTED TO CRUSH FITNESS-ST.HELENA
995 VINTAGE AVENUE

PROPERTY OWNER: DAN PINA; PD PROPERTIES LLC **APN:** 009-580-039

Recitals

1. **Whereas,** The Applicant, Matt Cia, Submitted an application for a Use Permit to operate a CrossFit based fitness facility in an existing industrial space located at 995 Vintage Avenue and in the Industrial Zoning District.
2. **Whereas,** Health and fitness facilities are conditionally allowed in the Industrial Zoning District pursuant to Municipal Code Section 17.60.030.
3. "**Whereas**, The Planning Commission of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on April 18, 2017.
4. **Whereas**, A public notice was published in the St. Helena Star and mailed to residents and occupants within 300 feet of the project site and in compliance with state and local law; and

Resolution

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

B. The Planning Commission hereby finds that this project is exempt from the California Environmental Quality Act pursuant to Section 15301, Class 1 of the Guidelines which exempts the operation of existing facilities.

C. Pursuant to Municipal Code Section 17.168.050, the Planning Commission finds that the proposed Crush Fitness Facility meets the intent of the General Plan and Zoning Code and makes the following Use Permit findings to support the motion to approve the use permit:

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.

   The proposed use would be CrossFit Fitness facility which would provide CrossFit, yoga, and boot camp classes. There would be no production, manufacturing or any component of the business that would be expected to produce any element injurious to the surrounding 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 proposed fitness facility may play amplified music during classes; however, the applicant would be subject to the City's noise ordinance and would not have a need to play the music at a level that can be heard outside of the building envelope. In addition, the surrounding land uses are not considered "noise sensitive" that would be especially vulnerable to noise.

3. That the proposed use would not generate traffic noise in excess of the "normally acceptable" range identified in the General Plan.

   The applicant anticipates a class size of approximately 6-10 students, with the most popular class times confined to hours outside of regular business hours. Personal training sessions would occur simultaneously, but would be limited to one trainer and one client at a given time. As such, the project is not expected to generate traffic or traffic noise in excess of what is normally acceptable.

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 fitness facility would be a small operation and would not place excessive demands on any city facilities or services.

5. That the proposed use would provide adequate ingress and egress to and from the proposed location.

   No changes to egress or ingress are proposed.

6. That allowing the proposed use would not conflict with the City's goal of maintaining the economic viability of a local serving economy.

   As a fitness facility that obtains a large portion of income from members (repeat-customers) the use is expected to encourage the viability of a local serving economy and add to the City of St. Helena's amenities focused on locals.

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 proposed health/fitness facility is a conditional use within the Industrial Zoning District. The use would be surrounded by light industrial and ancillary office uses. Given the minimal intensity of the proposed use and the fact that the surrounding industrial areas are not devoted to heavy industry/manufacturing the proposed use is expected to be compatible with the established district and would not conflict with or inhibit the continuation of any of the existing uses.

8. That the proposed use would not be in conflict with the City's General Plan.

   As detailed above, the proposed use would be primarily focused on local membership and would encourage a local-serving economy such that it would be consistent with General Plan goals and the overall intent of the General Plan.

9. That the proposed use would not be injurious to public health, safety, or welfare.

   No aspect of the proposed use would be injurious to 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.

    Use permits are considered on a case by case basis and based on the specific merits of a given project. Accordingly, the granting of this use permit would not influence future decisions or otherwise set a precedent.

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 on-site parking is expected to adequately serve the proposed use given the small class size and the fact that the most popular class times typically fall outside of normal business hours.

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

    Project-generated traffic would be limited and distributed throughout the day and streets would be able to accommodate any new traffic.

D. The Planning Commission approves the use permit for the above-described project with the following conditions of approval. 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. 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.

Conditions of Approval

1. Project approvals shall be vested within one (1) year from the date of final action. A building permit for tenant improvements authorized under this approval shall have been obtained 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. 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.

2. 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.
3. 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.
4. Minor modifications to the approved project may be approved by the Planning Director insofar as they are in substantial conformance with this approval.
5. 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.
6. 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.
7. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on April 18, 2017, except as modified herein.
8. The site shall be kept clear at all times of garbage and debris. No outdoor storage is permitted.
9. Trash bins shall not be visible from public right-of-way.
10. All landscape plantings shall be maintained in good growing condition. Such maintenance shall include, where appropriate, pruning, weeding, and cleaning of debris and trash, fertilizing and regular watering. Where necessary, plantings shall be replaced with other plant materials to insure continued compliance with applicable landscaping requirements. If irrigation is employed, the irrigation system shall be maintained in sound operating condition with heads periodically cleaned and replaced when missing to ensure efficient watering and to maintain good health and vitality of landscape materials.
11. No signage is approved by this permit. A separate sign permit in compliance with the Municipal Code shall be obtained prior to installation of signage.
12. 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.

Planning Department Conditions of Approval

13. This permit authorizes a 3,080 square foot fitness facility to operate at 995 Vintage Avenue.

14. Hours of operation shall be limited to the hours between 5 a.m. and 8 p.m.

15. "Open gym" hours may not be offered simultaneously during regular class times, but may occur during those hours in between regular classes and within the authorized hours of operation specified under condition no.14.

16. No amplified or acoustic music is permitted outdoors.

17. Fire equipment shall be inspected annually by the Fire Department.

18. Any substantial increase in intensity relative to what was approved under this resolution shall require a use permit amendment.

Building Department Conditions of Approval

19. A building permit is required for all onsite demolition, construction and/or change of occupancy.

20. The applicant will be required to comply with the codes in effect at the time of building permit issuance.

21. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.

22. The applicant shall provide a construction waste management plan with the building permit application.

23. 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.

24. When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.

25. 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.

I HEREBY CERTIFY that the foregoing use permit 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 April 18, 2017 by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

APPROVED:	ATTEST:
Grace Kistner Chair, Planning Commission	Noah Housh Planning Director

COUNTY ASSESSOR'S PARCEL MAP

PTN. CARNE HUMANA RANCHO

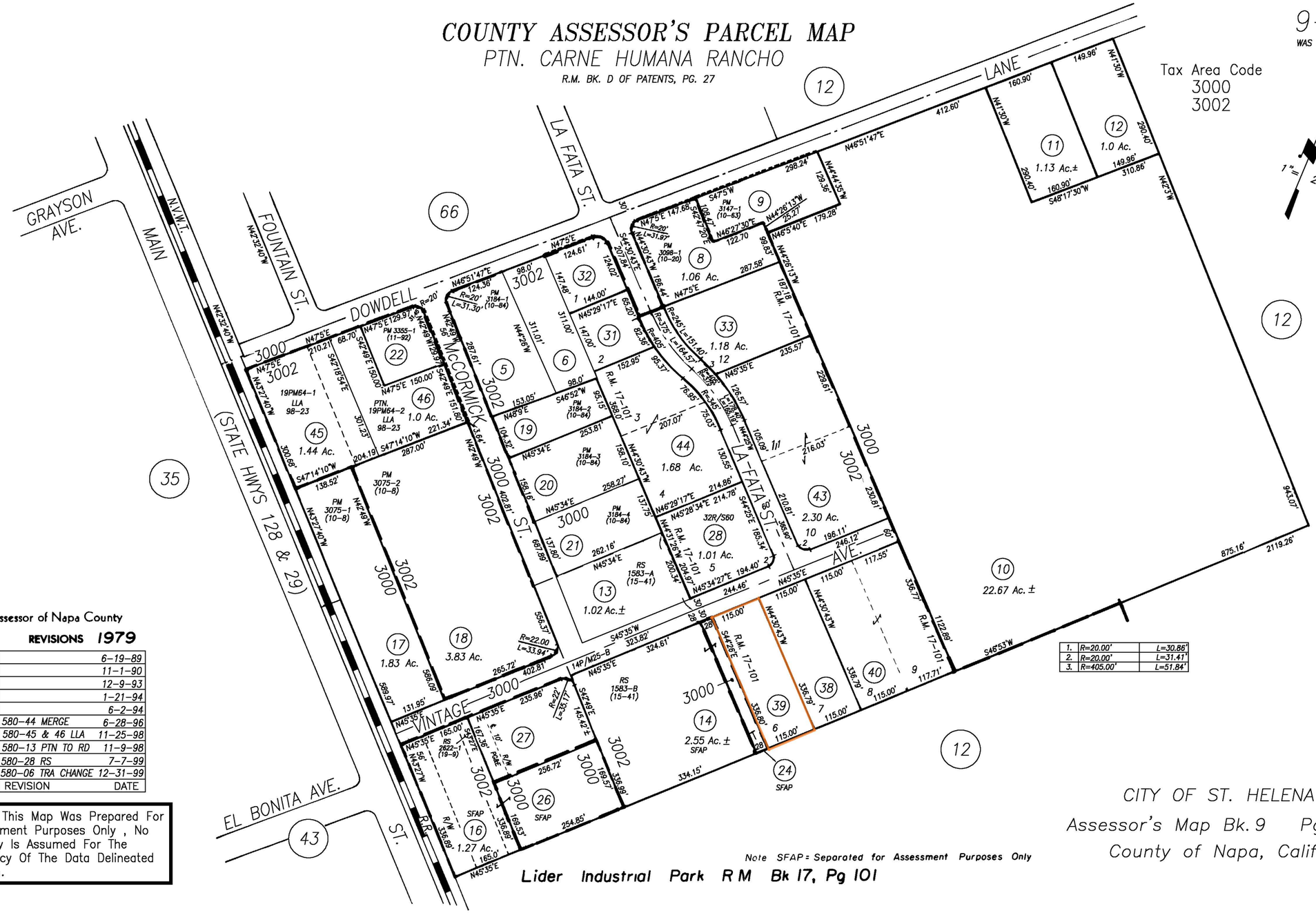
R.M. BK. D OF PATENTS, PG. 27

9–58

WAS PTN. 9–12

Tax Area Code
3000
3002

1" = 200'



Assessor of Napa County

REVISIONS 1979

REVISION	DATE
	6–19–89
	11–1–90
	12–9–93
	1–21–94
	6–2–94
580–44 MERGE	6–28–96
580–45 & 46 LLA	11–25–98
580–13 PTN TO RD	11–9–98
580–28 RS	7–7–99
580–06 TRA CHANGE	12–31–99

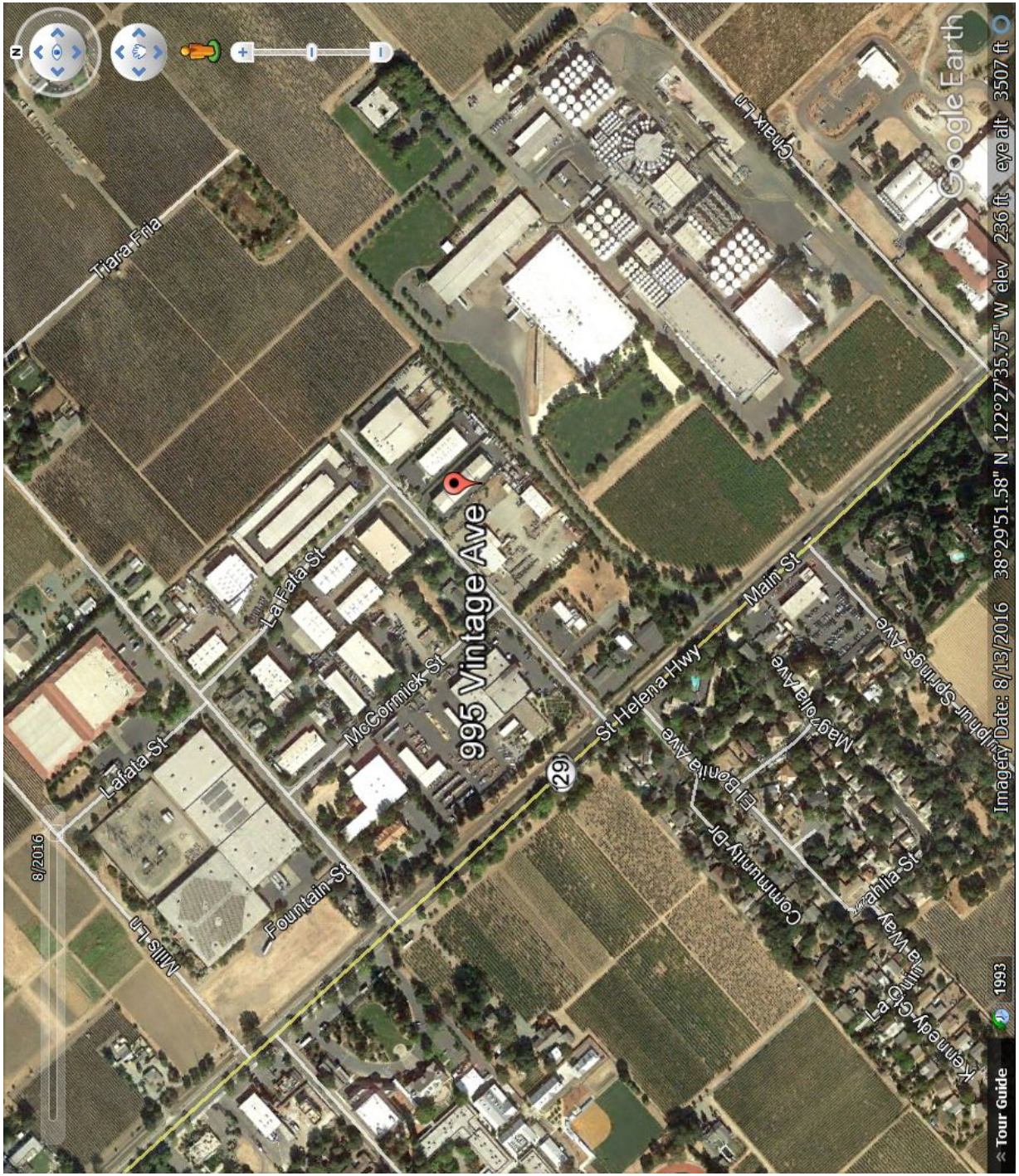
NOTE: This Map Was Prepared For Assessment Purposes Only , No Liability Is Assumed For The Accuracy Of The Data Delineated Hereon.

1.	R=20.00'	L=30.86'
2.	R=20.00'	L=31.41'
3.	R=405.00'	L=51.84'

CITY OF ST. HELENA

Assessor's Map Bk. 9 Pg. 58

County of Napa, Calif.


Tiara Fria
Snak Ln
Google Earth
Tour Guide
1993
Imagery Date: 8/13/2016 38°29'51.58" N 122°27'35.75" W elev 236 ft eye alt 3507 ft
Kennedy Club Way
Napa Valley Wine Train
Dahlia St
Napoleon Springs Ave
Main St
Maggie Ave
El Bonita Ave
Community Dr
St Helena Hwy
29
995 Vintage Ave
McCormick St
La Fata St
Fountain St
Mills Ln
8/2016

April 3, 2017

City of St. Helena Planning Department
1480 Min Street
St. Helena, CA

RE: Written Statement - Crush Fitness Use Permit (file No. PL17-017)

Dr. Ms. Bianco,

I am submitting a use permit for the purpose of opening a fitness facility at 995 Vintage Avenue in St. Helena. This business will offer CrossFit based fitness classes, bootcamp and yoga classes to members as well as some "drop-in" customers and one on one personal training. The space will be set up as a fitness center for functional training targeting the local community. CrossFit is a community oriented program with a focus on fitness, nutrition and healthy lifestyle. The hours of operation will be 5:30AM to 8PM. We will generally be closed mid day for about 3 to 4 hours. We will have two to three part time trainers running the classes. Reference the floor plan for the layout of the space. The space is existing. We will repaint the interior and add rubber flooring and install weight lifting equipment. The building exterior and parking will remain. Below is additional information that may help clarify the use of the space.

1. **Intensity of use**:
    a. Days of operation: Monday through Saturday
    b. Class times Monday through Friday (Classes are 1hr): 5AM, 6AM, 9AM, 4PM, 5PM, 6PM
    c. One class will be held on Saturday at 9AM
    d. Typical Class Size: 6 to 10 people. Most popular class times are 6AM and 5PM & 6PM.
    e. Individual personal training sessions are planned to occur at the same business hours as the classes. This is the reason we decided to move into a larger space so a class can still be held at the same time as a one on one personal training session.
2. **Will there be amplified music?**: Although we will have music inside the facility, it will be played at a low level so it can be heard only inside the facility.
3. **Other Uses In The Warehouse Building at 995 Vintage:** Please refer to page 1 of the plans submitted with the application. All square footage and plan information is shown on that sheet. 995 Vintage is a combination of office use at the front 1/3 of the building and warehouse space for the back 2/3 of the building. Total warehouse space is approximately 9,000 sq ft. The front office space is currently being occupied by multiple

businesses with the main tenant being Wine Country Cases. Wine Country Cases currently occupies all of the warehouse space as well. Wine Country Cases will be vacating all of it's space and moving to Napa. Crush Fitness will be occupying two bays (2,600 sq ft of floor space) out of 5 of the warehouse space once Wine Country Cases moves out. It is unknown at this time who will be occupying the other vacant warehouse spaces.

4. **Parking**: Please refer to page 1 of the plans submitted with the permit application. Another copy of this plan is shown below. This plan shows the current configuration of available parking spaces. Currently, the back part of the lot is not being utilized for parking, however once Wine Country Cases moves out, that parking would be utilized.

995 Vintage Avenue, St. Helena Ca, 94574

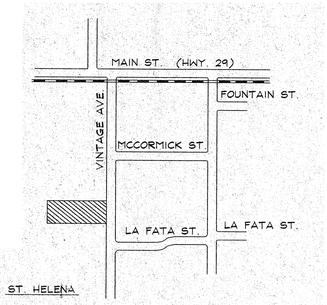
5. **Parking Spaces**: The parking spaces will be shared and utilized on an as needed basis. Please note that most of the parking requirements needed for our business are outside of normal business hours (i.e before 7am and after 4PM)
6. **Bike Parking**: At this time there is no space marked as bike parking.
7. **Fire Department**: I talked with Jim Capponi and his only concern was to verify that the space will not be occupied by more than 49 people in order to stay in the same Occupancy classification. We will be well below that number.

Feel free to contact me with any questions.
Regards,
Matt Cia
Crush Fitness – St. Helena

LOCATION
995 VINTAGE AVE.
SAINT HELENA CA, 94574

LOCATION
(PLAN VIEW)

CRUSH FITNESS
995 VINTAGE AVENUE
ST. HELENA, CA 94574



SITE DATA

TOTAL SITE:	38,732.0 SQ.FT.	=	100%
BUILDING COVERAGE:			
PHASE I	8,250 SQ.FT.	=	21.3%
PHASE II	4,125 SQ.FT.	=	10.7%
TOTAL BUILDING COVERAGE	12,375 SQ.FT.	=	32%
PAVED AREAS	22,157 SQ.FT.	=	57.2%
LANDSCAPE AREAS:	4,200 SQ.FT.	=	10.8%

PARKING DATA

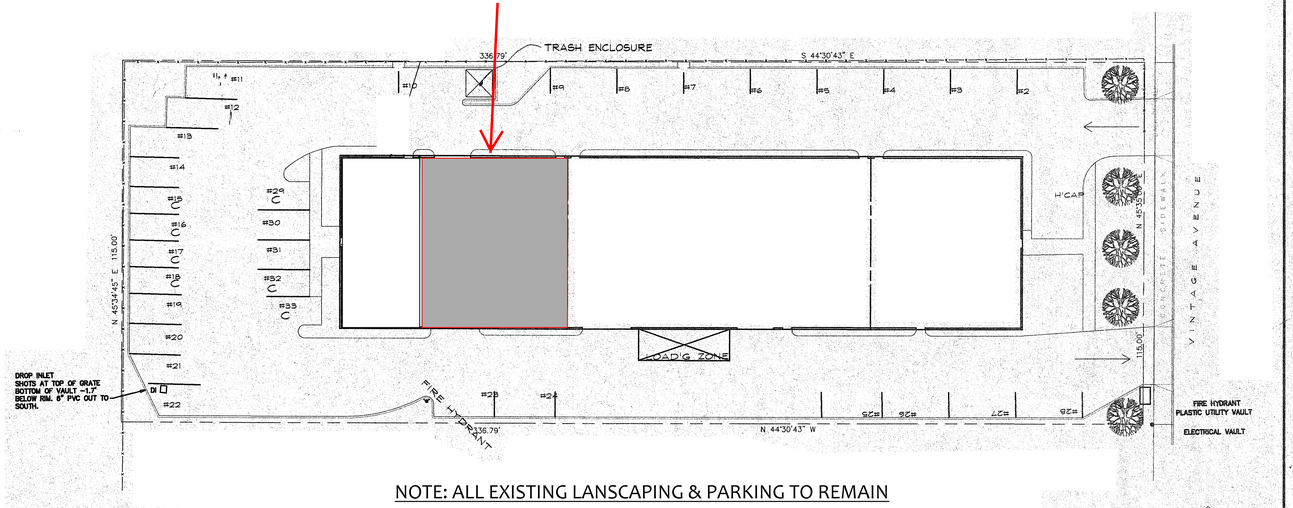
PHASE I PARKING:

MANUFACTURING	- 5000 SQ.FT.	650 SQ.FT.	= 7.7	SPACES
WAREHOUSE	- 862.5 SQ.FT.	1000 SQ.FT.	= .8	SPACES
OFFICES	- 5137.5 SQ.FT.	300 SQ.FT.	= 17.0	SPACES
TOTAL PHASE I PARKING SPACES			25.5	SPACES

PHASE II PARKING:

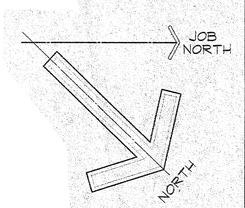
MANUFACTURING	- 3625 SQ.FT.	650 SQ.FT.	= 5.5	SPACES
WAREHOUSE	- 500 SQ.FT.	1000 SQ.FT.	= .5	SPACES
TOTAL PHASE II PARKING SPACES			6.0	SPACES
TOTAL PARKING SPACES REQ'D			31.5	SPACES

LOCATION OF NEW BUISINESS



SITE PLAN
1" = 20'-0"

NOTE: ALL EXISTING LANSCAPING & PARKING TO REMAIN



995 Vintage Avenue, St. Helena Ca, 94574

DESIGNER: MARY SIKES & ASSOC. 1245 SPRING ST. ST. HELENA, CA. 963-8063

CONSULTANTS: VAL PIZZINI, ENG. 1025 DUTTON AVE. SANTA ROSA, CA. 527-9802

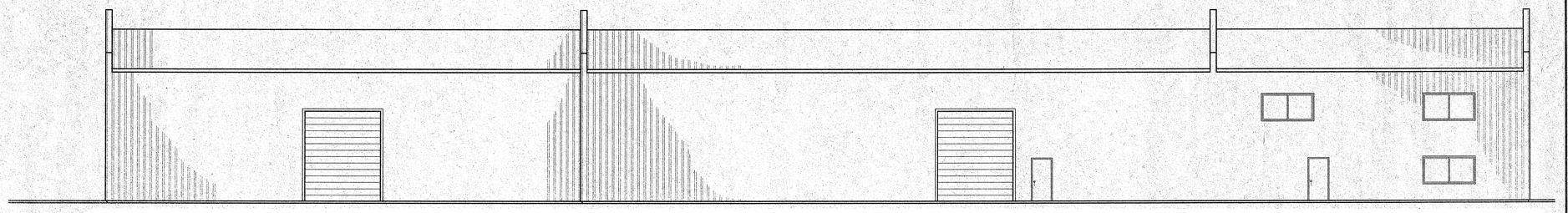
DATE: 5-12-96

SHEET DESCRIPTION: SITE PLAN SITE DATA

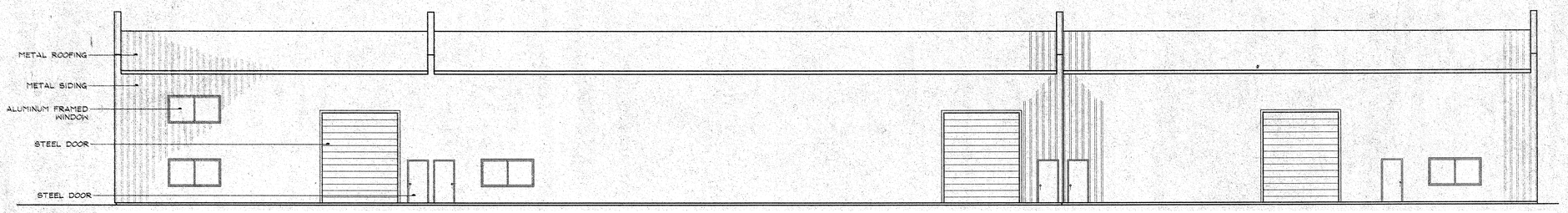
SITE LOCATION: 995 Vintage Avenue, St. Helena Ca, 94574

PROJECT: CRUSH FITNESS

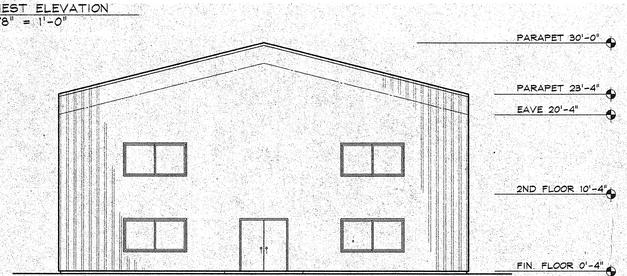
SHEET NUMBER: 1 OF 3



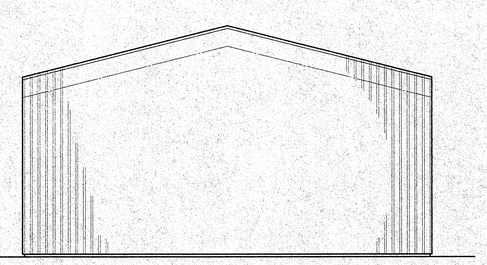
EAST ELEVATION
1/8" = 1'-0"



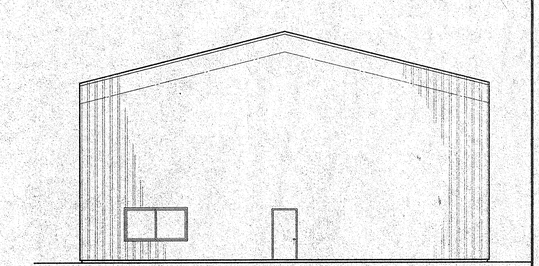
WEST ELEVATION
1/8" = 1'-0"



NORTH ELEVATION
1/8" = 1'-0"



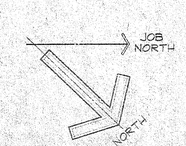
SOUTH ELEVATION - PHASE I
1/8" = 1'-0"



SOUTH ELEVATION - PHASE II
1/8" = 1'-0"

0 5' 10' 20' 40'

NOTE: ALL EXISTING ELEVATIONS TO REMAIN



DESIGNER:
MARY SIKES & ASSOC.
1245 SPRING ST.
ST. HELENA, CA. 963-8063

CONSULTANTS:
VAL PIZZINI, ENG.
1025 DUTTON AVE.
SANTA ROSA, CA. 527-9802

DATE:
5-12-95

SHEET DESCRIPTION:
EXTERIOR ELEVATION

SITE LOCATION:
995 Vintage Avenue, St. Helena Ca, 94574

PROJECT:
CRUSH FITNESS

SHEET NUMBER:
3
OF 3

FRONT ELEVATION
(NORTH WEST)

REAR ELEVATION
(SOUTH EAST)

SIDE ELEVATION
(NORTHEAST)

REAR ELEVATION
(SOUTH)

CRUSH FITNESS
995 VINTAGE AVENUE ST. HELENA, CA
94574

CITY OF ST. HELENA
PLANNING DEPARTMENT 1480 MAIN STREET- ST. HELENA, CA 94574
PLANNING COMMISSION

April 18, 2017

AGENDA SECTION: Public Hearing

FILE NUMBER: PL17-014

SUBJECT: Beringer Vineyards ICON III Design Review

PREPARED BY: Lilly Bianco, Contract Planner

REVIEWED BY: Noah Housh, Planning Director

APPLICATION FILED: 02/21/17 **ACCEPTED AS COMPLETE:** 03/22/17

LOCATION OF PROPERTY: 1000 Pratt Avenue

APN: 009-010-026; 009-010-026

GENERAL PLAN/ZONING: Agriculture; A-20

APPLICANT: Scott Bartley, Hall and Bartley **PHONE:** (707) 544-1642

PROPERTY DESCRIPTION

The subject property is located in northern St. Helena at 1000 Pratt Avenue and comprised of approximately 63 acres. The site has operated as the Beringer production facility since the 1970s and is separate from the Beringer hospitality operations located across Highway 29 at 2000 Main Street. The subject property is comprised of four buildings, appurtenant parking areas, and a wine tank farm and grape processing area. Areas not devoted to the production operation are planted in vineyards and primarily located around the site periphery. A portion of York Creek traverses the property and is located southeast of the grape processing area/tank farm. Along with the vineyards, a series of trees and shrubs provide screening along the property's Highway 29 and Pratt Avenue frontage.

The Beringer production facility has been in operation at this site since 1974. When originally approved, the facility was issued a conditional use permit; however, that use permit has since been lost. Available records indicate that the 1974 Environmental Impact Report (EIR), assumed an annual production capacity of 18,000 tons (equating to a fermentation capacity of approximately 4.3 million gallons or approximately 2.7 million gallons of finished wine)[1]— this is also the amount the capacity exhibited by the production facility. Therefore, in the absence of the original use permit, the production

[1] As detailed by the applicant, 1 ton of grapes produces an average of 220 gallons of must to be fermented. Adding 10% to account for head space in the tank (required to keep the tank from overflowing during fermentation) results in a fermenting capacity requirement of 242 gallons per ton. Therefore 18,000 tons of production requires approximately 4,356,000 gallons of tank capacity.

amount specified in the EIR is understood to be the authorized amount and will be memorialized as part of this Design Review permit (See Attachment 1, Condition No.14)

PROJECT DESCRIPTION

Applicant, Scott Bartley, on behalf of Treasury Wine Estates, America, is requesting Design Review approval to replace eight (8) large format wine fermentation tanks with 130 smaller format wine fermentation tanks to encourage a higher level of quality. The decommissioning of eight large format tanks would effectively remove 796,800 gallons of production capacity and the introduction of 130 smaller format tanks would re-introduce capacity for 757,000 gallons. Therefore, while the replacement of larger format tanks with smaller tanks will necessitate the expansion of the tank farm *area*, it will not result in an increase of production capacity. Rather, the project would generate a net reduction in available production capacity of 39,800 (See Attachment 5).

The project would expand the existing tank farm area to the east and west. The larger of the two areas would be located to the west of the existing tank farm and would consist of approximately 42,000 square feet of new concrete slab that would support stainless steel fermentation and storage tanks on stands. The proposed fermentation and storage tanks would exhibit a maximum height of 17' and consistent with other small format tanks on site. The hoist at the grape receiving hopper would be approximately 25 feet tall, which is similar to the existing hoist at the site.

Similar to the western expansion, the eastern area would consist of approximately 16,700 square feet of concrete slab supporting small format stainless steel tanks on stands and with a maximum height of approximately 18'. The applicant has requested permission to reuse ten previously decommissioned 12,000 gallon fermentation tanks for rainwater capture to be located to the east of the existing barrel chais (storage) building located in the northeastern portion of the site.

In addition to the reconstitution of the tank farm, the applicant has also proposed the introduction of a new forklift path/ramp, the relocation and redesign of an existing receiving station and press pit, and a redesign of an existing weigh station and central scale house in an effort to improve traffic flow and simplify operations (**Attachment 6**).

Last, the applicant proposes landscaping along Highway 29 frontage and Pratt Avenue to supplement the existing landscaping and provide a greater level of screening for the proposed tank farm expansion. Specifically, the new landscaping is intended to fill in existing gaps in the landscape and provide a greater level of screening when the vineyards are dormant and unable to provide the same level of screening as during the growing season. Proposed landscaping would consist of trees, including red maple, incense cedar, London plane tree and coast live oak with shrubs such as pacific wax myrtle and CA Coffee berry along Highway 29 with incense cedar and coast live oak proposed for portions along Pratt Avenue property frontage.

ANALYSIS

GENERAL PLAN

The subject property exhibits a General Plan Land Use designation of Agriculture. The AG designation provides for agricultural uses, wineries, single-family residences, and

public and quasi-public uses. The AG designation is applied to extensive areas of the valley floor that surround the urban core area. Policies applicable to the proposed project include the following:

2.6.1 New development should be required to occur in a logical and orderly manner within well-defined boundaries, and be consistent with the ability to provide urban services.

2.6.5 Encourage the continuation of agricultural and low-intensity uses adjacent to the Urban Limit Line.

2.6.58 Promote the continuity of agricultural activities within and adjacent to the City

6.3.1 Maintain agriculture as the mainstay of the local economy by preserving agriculturally designated lands as an invaluable and irreplaceable open space resource.

Staff Analysis
The proposed project activities would be confined to previously disturbed areas of the site and serve to improve site circulation and functionality and thereby enhance the viability of the agricultural use. As such, the project appears consistent with General Plan policies, and in particular, those named above.

ZONING
Consistent with the GP land use designation, 1000 Pratt Avenue exhibits a zoning designation of W: Winery. The W Zoning District provides for winery and winery-related uses within the Agriculture General Plan Land use designation. Lands devoted to the production of wine and vineyards which are owned by the winery are classified as W.Design Review is required for any new structures or exterior modifications to existing structures within the Winery Zoning District, discussed in more detail below under “Design Review.)

Parking
Pursuant to Zoning Code Section 17.124.030 and based on calculations provided by the applicant, the production facility requires 159 parking spaces. Following project implementation, 163 spaces would be available and therefore, available parking would exceed the amount required under the Zoning Code. Note that the calculations provided by the applicant categorize square footage devoted to administrative office *and* production both under “office” whereas storage space is categorized as “warehouse. The categorization of production under the “office” category may generate a more conservative assessment of necessary parking. Even so, based on the calculations provided, the site is able to accommodate the required parking. Please see Calculations, below:

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USE	AREA	STANDARD	PARKING SPACES REQ.
Office (Admin/Product.)	43,000sq-ft	1 per 300 sq-ft	144
Warehouse	258,000sq-ft	Five parking spaces plus one parking space for each 10,000 sq-ft of warehouse floor area, in excess of 25,000 sq-ft not to exceed 15 spaces	15
Total Required			*159*
Spaces to remain			**163**

Staff Analysis
Consistent with Zoning Code Section 17.24.060 "Development Standards," the tanks and other components will exhibit a height less than 45 feet and would not result in lot coverage of greater than 50 percent. In addition, all new structures will be located within the requisite setbacks. In addition, to respond to "other uses, standards and requirements" and prescribed for uses authorized in the Winery Zoning District, enumerated under Code Section 17.24.070, the project would not inhibit the site's ability to respond to public safety needs, would not increase the ambient noise environment currently exhibited by the site or cause new odors beyond those typical of a normal fermentation and wine storage. Last, as stated above, the available parking would be sufficient to meet the standards prescribed by Section 17.124.030(F) and 17.124.030(G). As such, the proposed project appears to be consistent with all applicable development standards and the goals and overall intent of the St. Helena General Plan.

WATER

In August 2015 and pursuant to Ordinance 2015-5 the City of St. Helena established mandatory water efficiency measures for new construction, and adopted water demand offset requirements enumerated in Chapter 13.12.050 of the Municipal Code. Amongst 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 demand by an amount of water equal to the new demand on the city water system using the methodology defined in Section 13.12.050. The offset must be clearly demonstrated, to the satisfaction of the Director of Public Works.

Water use for the project is primarily sourced from on-site wells. No "new development" as defined above is proposed and no increase in the water use for the property is anticipated as a component of the project. Presently, the Beringer production facility relies primarily on well water, although the site is connected to the municipal water system to provide water for fire protection purposes and back up for domestic water.

Given that the proposed project does not propose to increase water use as a component of the Design Review, that the project does not qualify as "new development" for the purposes of water neutrality, and that the a component of the project would introduce rainwater capture elements, no analysis or off-sets are required as a condition of project approval.

DESIGN REVIEW

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 is consistent with the design criteria prescribed by Section 17.164.030 (detailed below) and exhibit a quality of design that is compatible with adjacent development, features a siting, scale, massing and architectural style that is generally consistent with the predominant development patterns, and that does not otherwise detract or negatively affect the established character of the surrounding neighborhood. Consistency findings related to the Design Review Criteria are enumerated, below.

Design Review Criteria.

1. Consistency and compatibility with applicable elements of the general plan.

   The proposed project includes activities intended to improve wine quality and improve efficiency of operations which would encourage continued viability of the Beringer winery and continuity of their agricultural uses in St. Helena. Given that the project would help maintain the active agricultural use in St. Helena it is expected to be consistent with applicable General Plan policies. No aspect of the project would conflict with or otherwise prevent the attainment of any General Plan policies, goals, or objectives.

2. Compatibility of design with the immediate environment of the site;
   *As detailed on project plans (**Attachment 6**), the proposed new tanks would be of a size and height less than that exhibited by the large format tanks proposed for decommissioning. The proposed tanks would appear substantially similar in design and materials to the smaller format tanks currently on site. All proposed machinery and tanks would be consistent with wine production components already on site and therefore would be compatible with the immediate environment on the site.*

3. Relationship of the design to the site;

   The proposed tanks and machinery would be situated in what are currently underutilized areas or would simply consist of a reconfiguration needed to facilitate more efficient and safe circulation. The proposed features would be clustered in the same area as existing winery equipment and therefore generally maintain the existing configuration and spatial arrangement of the site. Likewise, the re-use of previously decommissioned tanks for rainwater capture will be oriented along the eastern elevation of a barrel storage building and largely screened from view.

4. Determination that the design is compatible in areas considered by the board as having a unified design or historical character;

   The Beringer production facility at 1000 Pratt is not considered to be an area with a unified design or historical character.

5. Whether the design promotes harmonious transition in scale and character in areas between different designated land uses;

   As detailed above, the replacement tanks and production equipment will be clustered towards the center of the facility and with existing equipment and tanks. Further, to improve upon existing screening, the applicant will introduce a greater level of landscaping to the Highway 29 and Pratt Avenue frontage which will largely shield the view of the facility and encourage a harmonious transition between land uses located along each of the street frontages. As such, the project would appropriately promote a harmonious transition in scale and character between different land uses.

6. Compatibility with future construction both on and off the site;

   The proposed tanks and equipment will be substantially similar to that existing and are typical components of wine production facility which are consistent with the established agricultural/industrial character of the site. As such, the proposed site modifications would not be expected to be incompatible with future construction on or off site

7. Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;

   The proposed features are key components of a typical winery production facility and they are designed and configured with functionality in mind. Therefore, the design of the tanks and associated equipment would be 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;

   The impetus for the project is to promote a higher level of wine quality, but also facilitate improved site circulation and functionality. The proposed configuration will improve circulation of grape trucks during harvest and other vehicles and streamline the various operations involved in grape delivery, pressing, fermentation, and processing which will provide an internal sense of order. The proposed landscaping along the front and side property lines will provide for a more desirable environment for visitors and passerby by softening and screening the agricultural production facility.

   The applicant has confirmed that no noise generating equipment will be moved any closer to adjacent residential land uses and further, all proposed lighting will

be downcast and shielded to prevent light trespass onto adjacent properties. As such, the planning and siting of various functions and site components is appropriate.

9. Whether the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures;

   Landscaping is proposed along portions of the property with frontage on Highway 29 and Pratt Avenue to supplement existing landscaping and provide a greater level of screening during periods when vines are dormant. Landscaping will be introduced into areas as feasible. No landscaping will be introduced into leach field areas to avoid inhibiting the functionality of the fields.

10. Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept;

    The proposed replacement tanks and new equipment will support the functionality and viability of the Beringer production facility and would support the main functions of the winery in a manner that is both functional and aesthetically compatible.

11. Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;

    No changes to the main site egress and ingress are proposed. Internally, the functions and equipment associated with grape receiving and processing will be improved to facilitate one way circulation that is more efficient and responsive to the winery operations.

12. Whether natural features are appropriately preserved and integrated with the project;

    As detailed in the biological memo (Attachment 5), York Creek flows through the Beringer Winery and is tributary to the Napa River. The portion of the creek within the winery property has a natural cobble bed, but is channelized and bordered by hardscape. Various species of trees including coast live oak (Quercus agrifolia) provide a broken, patchy riparian canopy along the creek. The entire proposed project is located within a currently hardscaped area where water is diverted away from the creek into the winery's stormwater management system. Given that the project is confined to existing hardscaped areas the introduction of the proposed winery equipment would not affect significant natural features.

    The applicant proposes the removal of four poplars which are ornamental trees and not considered important natural features necessitating preservation. Given the above, all important natural features would be appropriately preserved.

13. 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 structure and functions;

The proposed features are key components of a typical winery production facility and they are designed and configured with functionality in mind. Therefore, the design of the tanks and associated equipment would be appropriate to the function and established character of the project site.

14. In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character;

    The Beringer production facility at 1000 Pratt is not considered to be an area with a unified design or historical character.

15. 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;

    The proposed landscape plan includes the addition of trees and shrubs to provide a greater level of screening along Highway 29 and Pratt Avenue. Proposed trees include Red Maple, incense cedar, London plane tree and coast live oak with shrubs such as pacific wax myrtle and CA Coffee berry along Highway 29 property frontage. To fill in gaps in landscaping along Pratt Avenue, the applicant proposes incense cedar and coast live oak. All proposed vegetation would blend in well with existing landscaping and would be effective at providing greater screening of the production facility. As such, the landscaping design concept appears appropriate for the site and would provide for a unified and compatible appearance.

16. Whether plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena;

    A number of proposed plants and trees are native and would be appropriate for the climate. Further, as mostly native trees and shrubs, the proposed vegetation would be relatively low maintenance and appear suitable for the purpose.

17. 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.

    The project will continue to divert and treat wastewater on site meeting the intent of BASMAA. Further, the landscaping is of a type that is appropriate for the climate and requires either low or medium water use. As such, the proposed project promotes sustainability goals and climate protection.

CEQA

The project is exempt from the requirements of CEQA pursuant to Section 15301, which exempts the minor alteration of existing private structures involving negligible or

no expansion of use beyond that existing at the time of the lead agency's determination. The proposed project is not subject to any of the exceptions to the use of a categorical exemption as outlined in CEQA Section 15300.2. Specifically, the project site is not located on or near an environmentally sensitive area, is not visible from a scenic highway, is not included on a hazardous waste site, and will not impact historic resources or otherwise generate or contribute to any potentially significant impacts.

CORRESPONDENCE

No comments have been received as of the writing of this staff report.

STAFF RECOMMENDATION

The Planning and Community Improvement Department recommends that the Planning Commission adopt a resolution finding that:

1. The project is exempt from the requirements of CEQA pursuant to CEQA Section 15301.

2. Accepts the required findings and approves the requested Design Review for the Beringer ICON III Project to replace eight (8) large format wine fermentation tanks with 130 smaller format wine fermentation tanks to encourage a higher level of quality, introduce of a new forklift path/ramp, relocate and redesign the existing receiving station and press pit, redesign the existing weigh station and central scale house in an effort to improve traffic flow and simplify operations, and supplement landscaping along the property street frontages, and reuse 10 existing 12,000 gallon tanks for rainwater capture.

ATTACHMENTS

1. Resolution / Conditions of Approval
2. APN Map
3. Aerial View
4. Project Narrative
5. Capacity Calculations
6. Project Plans
7. Site Photos
8. Biological Memorandum, March 17, 2017

CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION NO.

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ST. HELENA GRANTING APPROVAL OF DESIGN REVIEW FOR THE BERINGER ICON III PROJECT LOCATED AT 1000 PRATT AVE

PROPERTY OWNER: Treasury Wine Estates, America **APN:** 009-010-026

Recitals

A. **Whereas,** Scott Bartley, on behalf of, Treasury Wine Estates, America, submitted an application for a Design Review permit to replace 8 large format wine fermentation tanks with 130 smaller format wine fermentation tanks, introduce a new forklift path/ramp relocate and redesign receiving station and press pit, redesign the weigh station, and central scale house in an effort to improve traffic flow and simplify operations, as well as introduce enhanced landscaping to improve screening, and re-use 10 previously decommissioned 12,000 gallon tanks for rainwater capture, and

B. **Whereas**, A staff report dated April 18, 2017 and incorporated herein by reference analyzed the projects consistency with the Design Criteria enumerated in Section 17.164.030 of the Municipal Code, and

C. **Whereas**, the Planning Commission of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on April 18, 2017, and

D. **Now, therefore** let it be found that, the Planning Commission approves the Design Review permit and authorizes the modifications contained in said plans based on the findings below and subject to the conditions of approval enumerated herein.

Resolution

1. The project is exempt from the requirements of CEQA pursuant to Section 15301, which exempts the minor alteration of existing private structures resulting in a negligible expansion of use. The proposed project is not subject to any of the exceptions to the use of a categorical exemption as outlined in CEQA Section 15300.2. The project site is not located on or near an environmentally sensitive area, is not visible from a scenic highway, is not included on a hazardous waste site, and will not impact historic resources or otherwise generate or contribute to any potentially significant impacts.
2. DESIGN REVIEW:

   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 project therefore must be consistent with the design criteria prescribed by Section 17.164.030 (detailed below) and

exhibit a quality of design that is compatible with adjacent development, features a siting, scale, massing and architectural style that is generally consistent with the predominant development patterns, and that does not otherwise detract or negatively affect the established character of the surrounding neighborhood.

Design Review Criteria.

1. Consistency and compatibility with applicable elements of the general plan.

   The proposed project includes activities intended to improve wine quality and improve efficiency of operations which would encourage continued viability of the Beringer winery and continuity of their agricultural uses in St. Helena. Given that the project would help maintain the active agricultural use in St. Helena it is expected to be consistent with applicable General Plan policies. No aspect of the project would conflict with or otherwise prevent the attainment of any General Plan policies, goals, or objectives.

2. Compatibility of design with the immediate environment of the site;
   As detailed on project plans the proposed new tanks would be of a size and height less than that exhibited by the large format tanks proposed for decommissioning. The proposed tanks would appear substantially similar in design and materials to the smaller format tanks currently on site. All proposed machinery and tanks would be consistent with wine production components already on site and therefore would be compatible with the immediate environment on the site.

3. Relationship of the design to the site;

   The proposed tanks and machinery would be situated in what are currently underutilized areas or would simply consist of a reconfiguration needed to facilitate more efficient and safe circulation. The proposed features would be clustered in the same area as existing winery equipment and machinery and therefore maintain the existing configuration.

4. Determination that the design is compatible in areas considered by the board as having a unified design or historical character;

   The Beringer production facility at 1000 Pratt is not considered to be an area with a unified design or historical character.

5. Whether the design promotes harmonious transition in scale and character in areas between different designated land uses;

   As detailed above, the replacement tanks and production equipment will be clustered towards the center of the facility and with existing equipment and tanks. Further, to improve upon existing screening, the applicant will introduce a greater level of landscaping to the Highway 29 and Pratt Avenue frontage which will largely shield the view of the facility and encourage a harmonious transition between land uses located along each of the street frontages. As such, the

project would appropriately promote a harmonious transition in scale and character between different land uses.

6. Compatibility with future construction both on and off the site;

   The proposed tanks and equipment will be substantially similar to that existing and are typical components of wine production facility which are consistent with the established agricultural/industrial character of the site. As such, the proposed site modifications would not be expected to be incompatible with future construction on or off site

7. Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;

   The proposed features are key components of a typical winery production facility and they are designed and configured with functionality in mind. Therefore, the design of the tanks and associated equipment would be 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;

   The impetus for the project is to promote a higher level of wine quality, but also facilitate improved site circulation and functionality. The proposed configuration will improve circulation of grape trucks during harvest and other vehicles and streamline the various operations involved in grape delivery, pressing, fermentation, and processing which will provide an internal sense of order. The proposed landscaping along the front and side property lines will provide for a more desirable environment for visitors and passerby by softening and screening the agricultural production facility.

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10. Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept;

The proposed replacement tanks and new equipment will support the functionality and viability of the Beringer production facility and would support the main functions of the winery in a manner that is both functional and aesthetically compatible.

11. Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;

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12. Whether natural features are appropriately preserved and integrated with the project;

    As detailed in the biological memo (Attachment 5), York Creek flows through the Beringer Winery and is tributary to the Napa River. The portion of the creek within the winery property has a natural cobble bed, but is channelized and bordered by hardscape. Various species of trees including coast live oak (Quercus agrifolia) provide a broken, patchy riparian canopy along the creek. The entire proposed project is located within a currently hardscaped area where water is diverted away from the creek into the winery's stormwater management system. Given that the project is confined to existing hardscaped areas the introduction of the proposed winery equipment would not affect significant natural features.

    The applicant proposes the removal of four poplars which are ornamental trees and not considered important natural features necessitating preservation. Given the above, all important natural features would be appropriately preserved.

13. 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 structure and functions;

    The proposed features are key components of a typical winery production facility and they are designed and configured with functionality in mind. Therefore, the design of the tanks and associated equipment would be appropriate to the function and established character of the project site.

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    The Beringer production facility at 1000 Pratt is not considered to be an area with a unified design or historical character.

15. 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;

The proposed landscape plan includes the addition of trees and shrubs to provide a greater level of screening along Highway 29 and Pratt Avenue. Proposed trees include Red Maple, incense cedar, London plane tree and coast live oak with shrubs such as pacific wax myrtle and CA Coffee berry along Highway 29 property frontage. To fill in gaps in Landscaping along Pratt Avenue, the applicant proposes incense cedar and coast live oak. All proposed vegetation would blend in well with existing landscaping and would be effective at providing greater screening of the production facility. As such, the landscaping design concept appears appropriate for the site and would provide for a unified and compatible appearance.

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    A number of proposed plants and trees are native and would be appropriate for the climate. Further, as mostly native trees and shrubs, the proposed vegetation would be relatively low maintenance and appear suitable for the purpose.

17. 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.

    The project will continue to divert and treat wastewater on site meeting the intent of BASMAA. Further, the landscaping is of a type that is appropriate for the climate and requires either low or medium water use. As such, the proposed project promotes sustainability goals and climate protection.

F. Now therefore be it further resolved that, the Design Review for the above described project is granted subject to compliance with all applicable provisions of the Zoning Code subject to each of the following conditions. Permit shall be in conformance with all City ordinances, rules, regulations and policies in effect at the time of issuance of a building permit. 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.

Conditions of Approval

1. The Permit shall be in conformance with all City ordinances, rules, regulations and policies in effect at the time of issuance of a building permit. 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.

2. The plans submitted for building permit review shall be in substantial conformance with the plans approved by the Planning Commission on April 18, 2017 expect as modified by the following conditions.

3. The Design Review permit shall be vested within one (1) year from the date of approval. A building permit for the use allowed under this approval shall have been obtained within one (1) year from the effective date of the Use Permit and Design Review decision or these approvals shall expire; provided however that the approved Use Permit and Design Review may be extended for up to two (2) one-year periods pursuant to the St. Helena Municipal Code, Section 17.08.030, Extension of Permits and Approvals.

4. The Design Review permit shall become effective fourteen (14) calendar days after approval, provided that the action is not appealed by the City Council or any other interested party within that 14 day period.

5. Any request for an extension of the Design Review permit must be justified in writing and received by the Planning Department at least thirty (30) days prior to expiration.

6. All required fees, including planning fees, development impact fees, building fees, retrofit fees, and St. Helena Unified School District fees shall be paid prior to issuance of building permit.

7. Prior to issuance of construction permits, compliance with conditions of approval shall be clearly identified on all plans. A copy of approved plans with the conditions listed *on* said plans shall be maintained on-site during construction activities.

8. Conditions shall be achieved at such a time as determined by the City and shall be achieved at the requisite stage and before issuance of certificate of occupancy or initiation of use unless another time is set by law or by this approval. Occupancy or final inspection of a project may be withheld if all conditions, including payment of fees for services rendered by the City, are not met.

9. The applicant shall defend and indemnify and hold the City, its agents, officers, and employees harmless of 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.

10. This Design Review approval 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 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.

12. A building permit is required for any onsite demolition, construction or change of occupancy.

13. A periodic site inspection shall be performed at least bi-annually to ensure that decommissioned tanks remain unused and shall be performed until such a time as the de-commissioned tanks are removed from tank farm area. The inspection will require a fee of up to one-hour of staff time per visit to cover the cost for each visit.

14. This action memorializes the tank capacity permitted on site as 4.3 million gallons for the Beringer production facility.

Public Works Department Conditions of Approval

15. The project will create and/or replace 5,000 square feet or more of impervious area and thus the project is considered a "Regulated Project" under the Bay Area Stormwater Management Agencies Association (BASMAA), which is the low impact development approach for implementing Provision E.12 of the State's Phase II Small Municipal Separate Storm Water System (MS4) General Permit (Order 2013-0001 DWQ). Prior to issuance of any building permit or grading permit, provide a Stormwater Control Plan in accordance with the requirements of the BASMAA Post-Construction Manual available from the Public Work Department website at: http://www.ci.st-helena.ca.us/sites/default/files/BASMAA%20Post-Construction%20Manual.pdf.

16. Alternatively, if the existing onsite Storm Water Pollution Prevention Plan (SWPPP) and associated infrastructure is proposed to satisfy BASMAA requirements, please provide an analysis that demonstrates the existing onsite treatment procedures and facilities meet and/or exceed the level of treatment and retention (e.g. sizing calculations) required by the Bay Area Stormwater Management Agencies Association and Provision E.12 of the Phase II Small MS4 General Permit. A copy of the General Permit requirements is available on the web at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

17. 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.

18. 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.

19. Improvement plans shall incorporate all grading, drainage, and utilities shown on the approved Design Review 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.

20. Erosion and sediment control plans shall conform to the latest State and City codes at a minimum.

21. Site plans submitted for the building permit review shall identify the location of any trees within the project area. Additionally, please identify all existing vegetation including location, species, and sizes and indicate what vegetation is to be protected or removed.

22. 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.

23. The Applicant shall keep adjoining public streets free and clean of project dirt, mud, materials, and debris during the construction period, as is found necessary by the City Engineer.

24. Remodels or new construction which requires 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.

25. No construction may commence until adequate access to fire water supply is available to building sites as approved by the Fire Chief.

26. 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.

27. The applicant shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards prior to Certificate of Occupancy.

Fire Department Conditions of Approval

28. If the tanks are to be foam coated for insulation, provide specifications on the material and method of fire protection/flame spread for the insulation for review and approval by the Fire Chief prior to issuance of building permit approval.

Building Department Conditions of Approval

29. A building permit is required for all onsite demolition, construction and/or change of occupancy.

30. 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 2016 Title 24 codes.

31. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.

32. The applicant shall provide a construction waste management plan with the building permit application.

33. 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.

34. When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.

I HEREBY CERTIFY that the foregoing Design Review permit 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 April 18, 2017 by the following roll call vote:

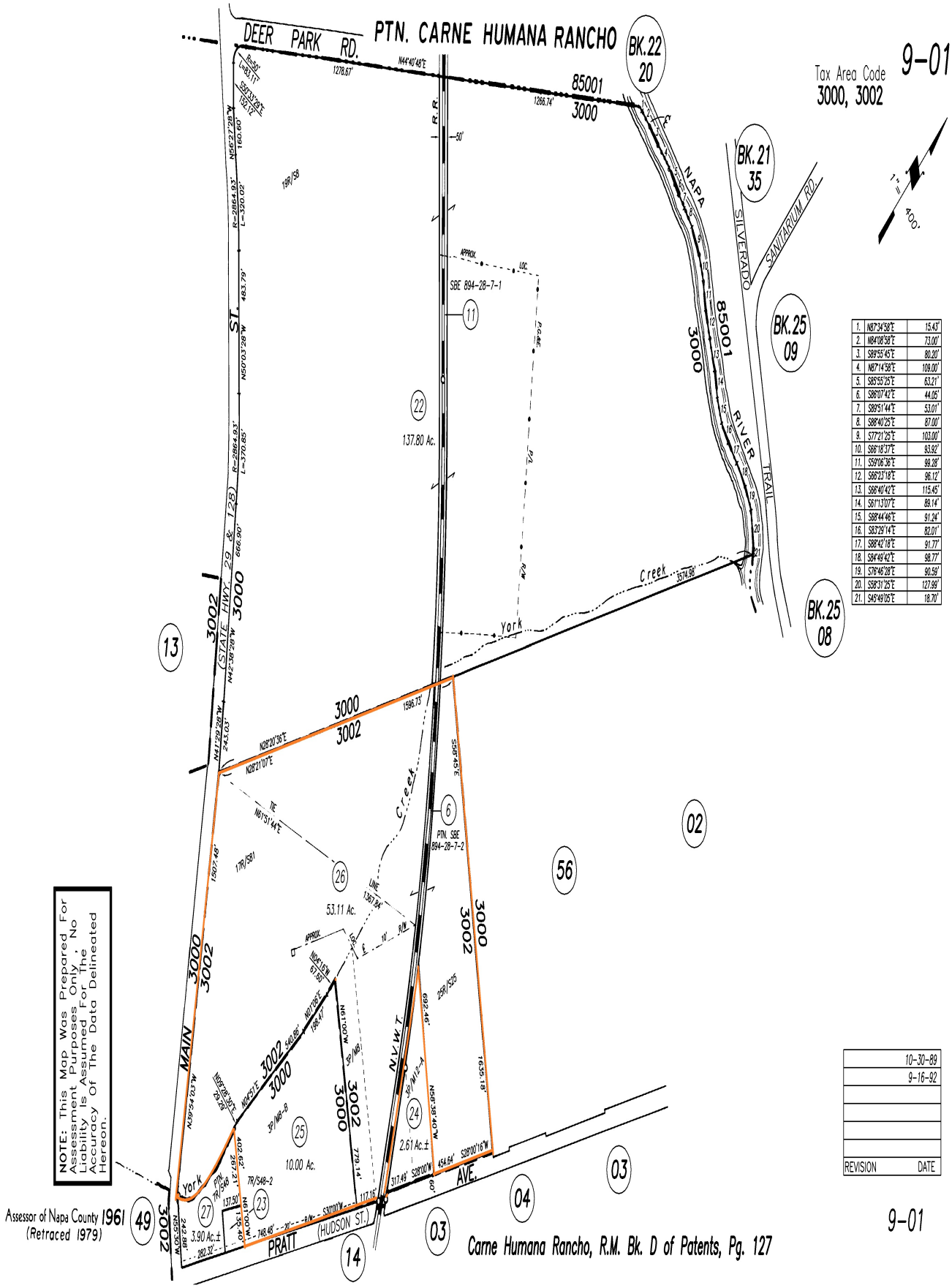
AYES:
NOES:
ABSENT:
ABSTAIN:

APPROVED:

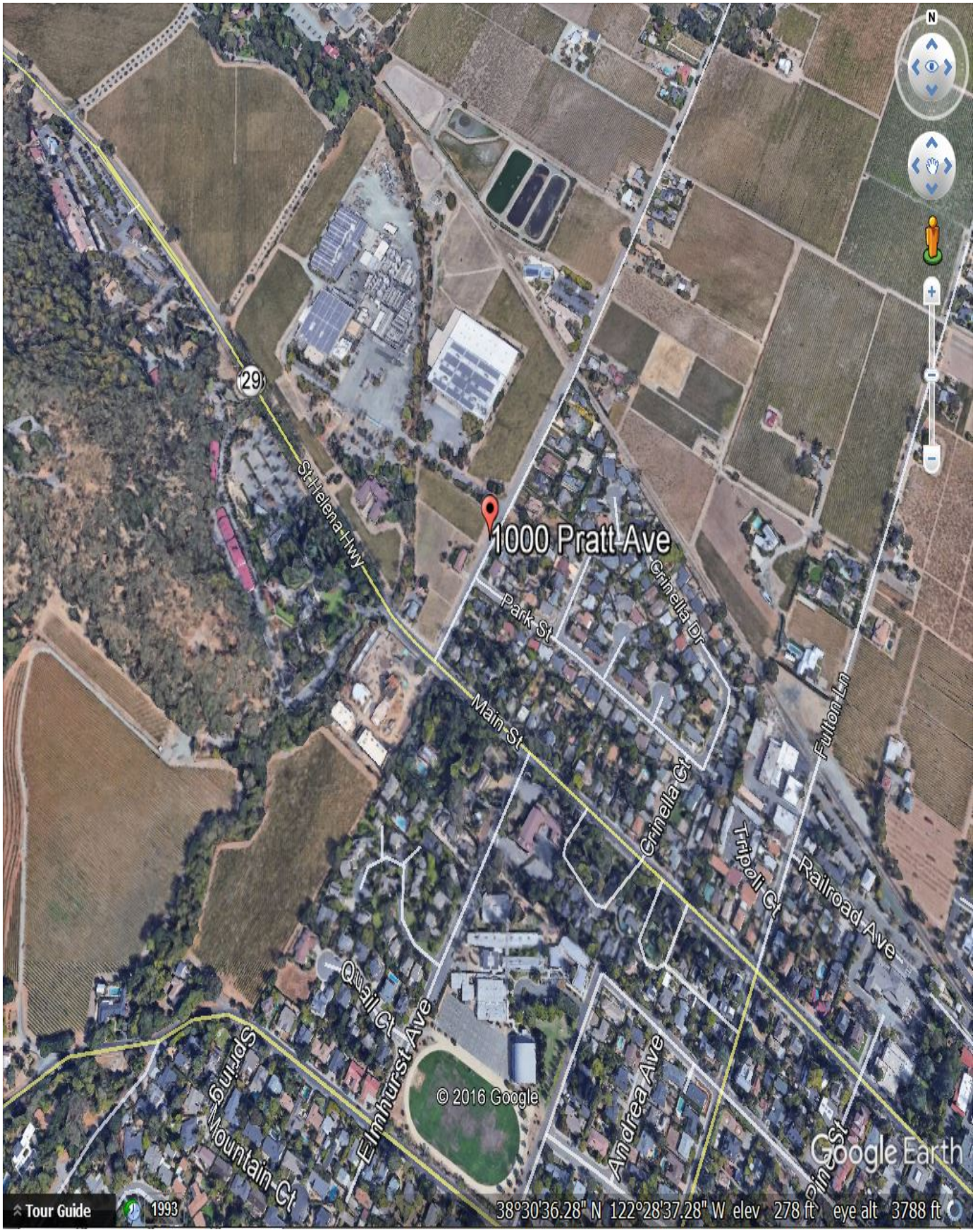
Grace Kistner
Chair, Planning Commission

ATTEST:

Noah Housh,
Planning and Community Improvement Director



1.	N87°34'58"E	15.43'
2.	N84°08'58"E	73.00'
3.	S89°55'45"E	80.20'
4.	N87°14'58"E	109.00'
5.	S85°55'25"E	63.21'
6.	S86°07'42"E	44.05'
7.	S89°51'44"E	53.01'
8.	S88°40'25"E	87.00'
9.	S77°21'25"E	103.00'
10.	S66°16'37"E	93.92'
11.	S59°06'36"E	99.28'
12.	S66°23'18"E	96.12'
13.	S68°40'42"E	115.45'
14.	S61°13'07"E	89.14'
15.	S68°44'46"E	91.24'
16.	S83°29'14"E	82.01'
17.	S88°42'18"E	91.77'
18.	S84°48'42"E	98.77'
19.	S76°46'28"E	90.59'
20.	S58°31'25"E	127.99'
21.	S45°49'05"E	18.70'


1000 Pratt Ave
St Helena Hwy
29
Park St
Grinella Dr
Main St
Grinella Ct
Tripoli Ct
Fulton Ln
Railroad Ave
Quail Ct
Elmhurst Ave
Spring Mountain Ct
Andrea Ave
Pine St
© 2016 Google
Google Earth
Tour Guide
1993
38°30'36.28" N 122°28'37.28" W elev 278 ft eye alt 3788 ft

BERINGER VINEYARDS

DESIGN REVIEW PROJECT STATEMENT
Revised 4/7/17

Owner/Applicant: Treasury Wine Estates Americas Company
555 Gateway Drive
Napa, CA 94558

Representatives: Rob Anglin
Holman Teague Roche Anglin, LLP
1455 First Street, Suite 217
Napa, California 94559
707-927-4280

Scott Bartley, AIA
Hall & Bartley, Architecture/Planning
4701 Old Redwood Hwy, Suite 2B
Santa Rosa, CA 95403
707-544-1642

Debra Dommen
Vice President, Government & Industry Affairs
707-259-4673

Project Location: 1000 Pratt Avenue
St. Helena, CA 94574

APN: 090-010-026

Zoning: W

BACKGROUND

In 1876, brothers Jacob and Frederick Beringer established Beringer Vineyards with a dream of making wines that would rival the finest in Europe. Beringer Vineyards is now California's longest continually operating winery and one of Napa's finest producers. The winery consists of a number of parcels straddling both sides of Main Street (Highway 29) at the northern end of St. Helena. The visitor facilities are to the west of Main Street on a separate parcel from the winery, which is located on the eastern side of Main Street. This Design Review Application is for the winery facility.

The proposed fermenting small tank capacity is needed to address the demand for the production of higher quality wines at the site. This new small format tank capacity will be replacing existing large format tanks that are being decommissioned and removed from production. The tanks being decommissioned consist of 4 – 153,200 gallon tanks and 4 – 46,000 gallon tanks. Attached to this project statement is a drawing showing the proposed small format tanks along with the existing large format tanks being removed from production and their respective capacities. The 153,200 gallon tanks are still in their original locations on site.

The 46,000 gallon tanks were moved from their original location along the east wall of the existing main cellar building several years ago with the intention of being relocated elsewhere on site and therefore, this capacity was never removed from the total site capacity. This capacity is included in the total capacity of 3,098,884 gallons in the existing tank farm as shown on Sheet T1.3. These tanks are currently stored at the eastern end of the site.

The proposed project adds two areas of new small format fermenting tanks to the east and west of the existing tank farm as shown on project plans. Additionally, the proposal relocated the white grape receiving area and pomace discharge areas to improve traffic flow on the site. One existing truck scale also will be relocated adjacent to the existing scale to the West of the new tank farm extension to simplify traffic flow. Traffic flows on site are shown on a separate traffic plan included in the application package.

The larger area is to the west of the existing tank area and consists of approximately 42,000 square feet of new fermenting slab with stainless steel fermenting tanks on stands. The top of the fermenting tanks is approximately 17' above existing grade and is consistent with the recent tank expansion at the winery. This also are includes the relocated white pressing area, where the presses are recessed below grade. The hoist at the grape receiving hopper is approximately 25 feet tall, similar to the existing hoist at the site.

The second area of tank expansion is to the east of the existing tank area and consists of approximately 16,700 square feet of exterior concrete slab and again containing small format stainless steel fermenters on stands. The height of the tanks is similar to those in the west expansion area and both are significantly lower in height than the existing fermenting tanks.

The winery is proposing to enhance the existing landscaping between the project site and Main Street, as shown in the attached landscape plan, to assist in screening the expansion.

This project will not relocate any of the noise generating operations closer to residential uses. The existing noise generation from refrigeration equipment remains located towards the northern and eastern sides of the project site, away from nearby residences.

As is shown on the elevations, the new small format fermenting tanks are significantly lower in profile than the existing large format tanks. The site is well screened from Main Street, and the winery is proposing an enhanced landscape plan to add additional screening of the facility. Please see the site photographs and proposed Landscape Plans. Lighting for the facility will be as required for safe operation of the facility. A photometric analysis of the proposed lighting is incorporated into this project application. Lighting will be downward focused and shielded to minimize potential glare.

The preliminary title report lists a number of easements on the site. The A.L.T.A. survey for the site is attached as a part of this design review package. Review of the easements on the maps shows that only one PG&E easement has any proximity to the proposed project area and that is shown on the proposed site plan.

All waste and stormwater on site is directed to the winery's industrial waste disposal ponds for treatment and reuse, including the small area of newly developed impermeable surface. It should be noted that all industrial waste and a majority of site runoff water generated on site is

treated and then used for irrigation or groundwater recharge. The only time stormwater is allowed to run off the site is in extreme rain events. Attached is a letter from Kennedy-Jenks Engineers showing that the system conforms to the intent of BAASMA requirements. As a part of this application, a letter from LSA is attached regarding its analysis concluding that the project will have no potential effect on York Creek.

The winery is also requesting permission to reuse 10 existing 12,000 gallon fermenting tanks (to be located to the east of the existing barrel chais) for rainwater capture off of building roofs.

Domestic water for the facility comes from wells on site. The site is connected to City water for it's fire protection system and back-up for domestic water.

As part of this Design Review application, the applicant understands that the City must consider whether these changes increase Beringer's production capacity. By removing large format tanks to replace with small format tanks, Beringer is maintaining its current level of capacity.

The applicant wishes to provide additional information regarding Beringer's existing facilities and historic operations. The City's 1974 EIR for Beringer referenced planned production capacity of 18,000 tons. This production number documented in the City's EIR matches the historic production recorded by Beringer staff, which is provided with this application. (See enclosed letter from Eric Gilliland.) 1 ton of grapes produces an average of 220 gallons of must to be fermented. Adding 10% to this number for head space in the tank (required to keep the tank from overflowing during fermentation) gives a fermenting capacity requirement of 242 gallons/ton. Therefore 18,000 tons of production requires approximately 4,356,000 gallons of tank capacity. Current cooperage onsite is 4.3 million gallons, which closely matches the 4.3 million gallons that would result from production of 18,000 tons.

Beringer Vineyards has worked diligently to develop a project that respects and enhances both the quality of the wine they produce and projects and enhances the premium image of the winery; maintaining it's leadership as one of the premium wine producers in St. Helena.

TREASURY WINE ESTATES AMERICAS COMPANY

_____

By: Eric Gilliland

Beringer Vineyards	Tank Gallonage Analysis				
			total gals		
Existing Total Tank Capacity (gal)			**4316473**		
				Placement	
New tanks	New tanks	Tank gal	total gals	East TF	West TF
	36	3900	140400		36
	18	4900	88200		18
	4	5500	22000	4	
	32	6000	192000		32
	6	6500	39000	6	
	24	8100	194400	10	14
	10	8100	81000	10	
Total New Gallons	130		**757000**		

	Decomissioned Tanks	Tank gal	total gals	East TF	West TF
	4	46000	184000		
	4	153200	612800		
Total Decomissioned Gallons	8		**796800**		
Total Gallons on Site (Existing + New - Decommissioned)			**4276673**		
Net Gallons Remaining			**39800**		

BERINGER VINEYARDS

ICON III

DESIGN REVIEW

RECEIVED
PLANNING DEPARTMENT
APR 12 2017
City of St. Helena

HALL&BARTLEY
ARCHITECTURE AND PLANNING

LIST OF CONSULTANTS

CIVIL ENGINEER
Coffman Engineers
1939 Harrison Street, Suite 320
Oakland, CA 94612
(510) 251-9578
Fax:
Contact: Roy Worthen

LANDSCAPE ARCHITECT
Quadriga Landscape Architecture & Planning
1212 4th Street
Santa Rosa, Ca 95404
(707) 546-3561
Fax:
Contact: Bill Mastick

ELECTRICAL ENGINEER
Knight's Electric
11410 Old Redwood Hwy
Windsor, CA 95492
(707) 433-6931
Fax: (707) 431-2342
Contact: Art Knight

ABBREVIATIONS

A.B.	ANCHOR BOLT	I.D	INSIDE DIAMETER
A.C.	ASPHALT CONCRETE	I.E.	INVERT ELEVATION
ACCESS	ACCESSORIES	INT.	INTERIOR
A.D.	AREA DRAIN	INV.	INVERT
A.F.F.	ABOVE FINISH FLOOR	I.W.	INDUSTRIAL WASTE
AGG.	AGGREGATE	JST.	JOIST
AL.	ALUMINUM	LAV.	LAVATORY
A.P.	ACCESS PANEL	LB.	POUNDS
APPROX.	APPROXIMATELY	L.F.	LINEAR FEET
ARCHT	ARCHITECT	MAX.	MAXIMUM
BD.	BOARD	M.B.	MACHINE BOLT
BLDG.	BUILDING	MECH.	MECHANICAL
BLKG.	BLOCKING	MEMB.	MEMBRANE
BM	BEAM	MFG.	MANUFACTURER
B.N.	BOUNDARY NAILING	M.H.	MANHOLE
B.O.	BOTTOM OF	MIN.	MINIMUM
B.B.	BOTH SIDES	MISC.	MISCELLANEOUS
BTU.	BRITISH THERMAL UNIT	M.I.W.	MALLEABLE IRON WASHER
CAB.	CABINET	MTL.	METAL
CARP	CARPET	(N)	NEW
C.B.	CARRIAGE BOLT	N.G.	NATURAL GRADE
C.I.	CAST IRON	N.I.C.	NOT IN CONTRACT
C.J.	CONTROL JOINT	NO.	NUMBER
C.L.	CENTER LINE	N.T.S.	NOT TO SCALE
CLG.	CEILING	O/	OVER
CLOS.	CLOSET	O.C.	ON CENTER
CLR.	CLEAR	O.D.	OUTSIDE DIAMETER
C.M.P.	CORRUGATED METAL PIPE	O.F.R.D.	OVER FLOW ROOF DRAIN
C.M.U.	CONCRETE MASONRY UNIT	P.E.N.	PLYWOOD EDGE NAILING
COL.	COLUMN	P.L.	PROPERTY LINE
CONC.	CONCRETE	P.LAM.	PLASTIC LAMINATE
CONT.	CONTINUOUS	PLMB.	PLUMBING
DBL.	DOUBLE	PLY.	PLYWOOD
D.F.	DOUGLAS FIR	P.S.F.	POUNDS PER SQUARE FOOT
DEPT.	DEPARTMENT	P.S.I.	POUNDS PER SQUARE INCH
D.I.	DROP INLET	P.T.D.F.	PRESSURE TREATED DOUGLAS FIR
DIA.	DIAMETER	PVC	POLYVINYL CHLORIDE
DIM.	DIMENSION	Q.T.	QUARRY TILE
D.J.	DOWEL JOINT	R.	RADIUS OR RISER
DN.	DOWN	R.A.	RETURN AIR
D.S.	DOWN SPOUT	R.C.P.	REINFORCED CONCRETE PIPE
DWG.	DRAWINGS	R.D.	ROOF DRAIN
(E)	EXISTING	REFRIG.	REFRIGERATOR
EA.	EACH	REINF.	REINFORCED, REINFORCING
E.J.	EXPANSION JOINT	REQD	REQUIRED
EL.	ELEVATION, VERTICAL	R/W	RIGHT OF WAY
ELEC.	ELECTRICAL	RWD.	REDWOOD
ELEV.	ELEVATION	R.W.L.	RAIN WATER LEADER
EQ.	EQUAL	S.A.	SUPPLY AIR
E.S.	EACH SIDE	SCHED.	SCHEDULE
E.W.	EACH WAY	SHT	SHEET
EXIST.	EXISTING	SIM.	SIMILAR
EXT.	EXTERIOR	S.N.	SEE NOTE
F.C.	FINISH CEILING	SPEC.	SPECIFICATION
F.D.	FLOOR DRAIN	SQ.	SQUARE
F.F.	FINISH FLOOR	S/S	STAINLESS STEEL
FIN.	FINISH	S.S.	SANITARY SEWER
F.O.	FACE OF	STA.	STATION
F.O.M.	FACE OF MASONRY	STD.	STANDARD
F.O.S.	FACE OF STUD	STOR.	STORAGE
FT.	FEET OR FOOT	STRUCT.	STRUCTURAL
FTG.	FOOTING	T & B	TOP AND BOTTOM
GA.	GAUGE	T & G	TONGUE AND GROOVE
GAL.	GALLON	TEMP.	TEMPORARY OR TEMPERED
GALV.	GALVANIZED	T.O.	TOP OF
G.B.	GRAB BAR	T.S.	TUBE STEEL
G.L.B.	GLUED-LAMINATED BEAM	TYP.	TYPICAL
G.B.M.	GRAVEL STOP	U.B.C.	UNIFORM BUILDING CODE
	GALVANIZED SHEET METAL	U.L.	UNDERWRITERS LABORATORY
GYP.	GYPSUM	U.N.O.	UNLESS NOTED OTHERWISE
H.B.	HOSE BIBB	VERT.	VERTICAL
H.C.	HANDICAP	V.G.	VERTICAL GRAIN
HDR.	HEADER	V.I.F.	VERIFY IN FIELD
HDWR.	HARDWARE	W/	WITH
HORIZ.	HORIZONTAL	W.C.	WATER CLOSET
H.P.	HORSE POWER	WD.	WOOD
HR.	HOUR	W.H.	WATER HEATER
HT.	HEIGHT	W.R.	WATER RESISTANT
		W/O	WITHOUT
		W.W.F.	WELDED WIRE FABRIC

SYMBOLS

- 100 ENTRY — ROOM NAME & NUMBER
- SECTION — SECTION IDENTIFICATION; SHEET WHERE SECTION IS SHOWN
- DETAIL — DETAIL NUMBER; SHEET WHERE DETAIL IS SHOWN
- GRID LINE
- WINDOW SYMBOL & NUMBER
- DOOR SYMBOL & NUMBER
- APPLIANCE SYMBOL & NUMBER
- PLUMBING FIXTURE SYMBOL & NUMBER
- WOOD, FINISH
- WOOD, FRAMING, THROUGH MEMBER
- WOOD, FRAMING, BLOCKING
- PLYWOOD
- GYPSUM BOARD
- CONCRETE
- CONCRETE MASONRY UNITS
- METAL
- TILE
- RIGID INSULATION
- BATT INSULATION
- EXISTING WALL
- EXISTING WALL TO BE REMOVED
- NEW WALL

DRAWING INDEX

SHEET	DESCRIPTION	DATE
COVER SHEET		
T0.1	Title Sheet, Abbreviations, Symbols, Vicinity Map, Project Data, Drawing Index	4/12/17
T1.0	Overall Site Plan	4/12/17
T1.1	Existing/ demo Site Plan	4/12/17
T1.2	Circulation Site Plan	4/12/17
T1.3	Site Plan: Tank Capacity	4/12/17
CIVIL		
C1.0	General Notes	4/12/17
C2.0	Erosion and Sediment Control Plan	4/12/17
C2.1	Erosion and Sediment Control Details and Notes	4/12/17
C3.0	Civil Site Plan and Utilities for South Tank Farm Expansion	4/12/17
C3.1	Civil Site Plan for North Tank Farm Expansion	4/12/17
C4.0	Grading & Drainage Plan for South Tank Farm Expansion	4/12/17
C4.1	Grading & Drainage Plan for North Tank Farm Expansion	4/12/17
C5.0	Details and Site Sections	4/12/17
ARCHITECTURAL		
A1.0	Floor Plan: West Tank Farm	4/12/17
A1.1	Floor Plan: East Tank Farm	4/12/17
A2.0	Overall Exterior Elevations	4/12/17
A2.1	Key Site Plan & Photos	4/12/17
LANDSCAPE		
L1.0	Planting Concept Plan	11/03/16
L1.1	Schematic Planting Plan	3/16/17
ELECTRCIAL		
1 of 1	Plan View, Luminaire Schedule & Statistics	09/26/16

SHEET	DESCRIPTION	DATE
A.L.T.A./ A.C.S.M. SUBURBAN LAND TITLE SURVEY		
1 of 11	Legal Description, Vicinity Map	1/05/96
2 of 11	General Notes	1/05/96
3 of 11	Boundary Dimension Sheet	1/05/96
4 of 11	Boundary Dimension Sheet	1/05/96
5 of 11	Legend	1/05/96
6 of 11	Survey Map	1/05/96
7 of 11	Survey Map	1/05/96
8 of 11	Survey Map	1/05/96
9 of 11	Missing Page	1/05/96
10 of 11	Survey Map	1/05/96
11 of 11	Survey Map	1/05/96

PROJECT DESCRIPTION

EXPANSION OF THE EXISTING TANK FARM ON THE WEST SIDE AND EAST SIDE OF THE EXISTING FACILITY

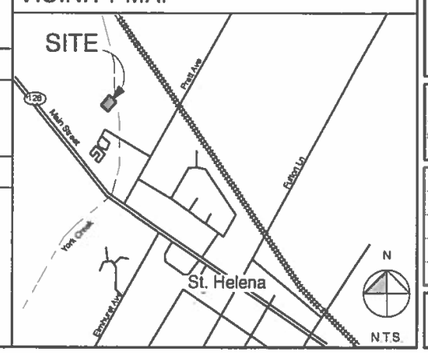
NOTE

All work shall comply with the requirements of the 2016 California Building Code (CBC), 2016 California Plumbing Code (CPC), 2016 California Mechanical Code (CMC), 2016 California Electrical Code (CEC), 2016 California Energy Code, 2016 California Fire Code (CFC), 2016 California Green Building Standards Code.

PROJECT DATA

Owner:	Treasury Wine Estates 610 Airpark Road Napa, Ca 94558
Address:	1000 Pratt Ave St. Helena, CA 94574
Assessor's Parcel Number:	09-010-026
Lot Size:	53.11 Acres
Floor Area: New Concrete Slab	58,651 Sq. Ft.

VICINITY MAP



BERINGER VINEYARDS
ICON III
1000 PRATT AVE
NAPA COUNTY
ST HELENA CALIFORNIA

Title Sheet
LIST OF CONSULTANTS, ABBREVIATIONS, SYMBOLS, PROJECT DATA, VICINITY MAP, DRAWING INDEX

PROJECT	1614
DRAWN	AM
CHECK	SPB
SCALE	
DATE	4/12/17

T0.1

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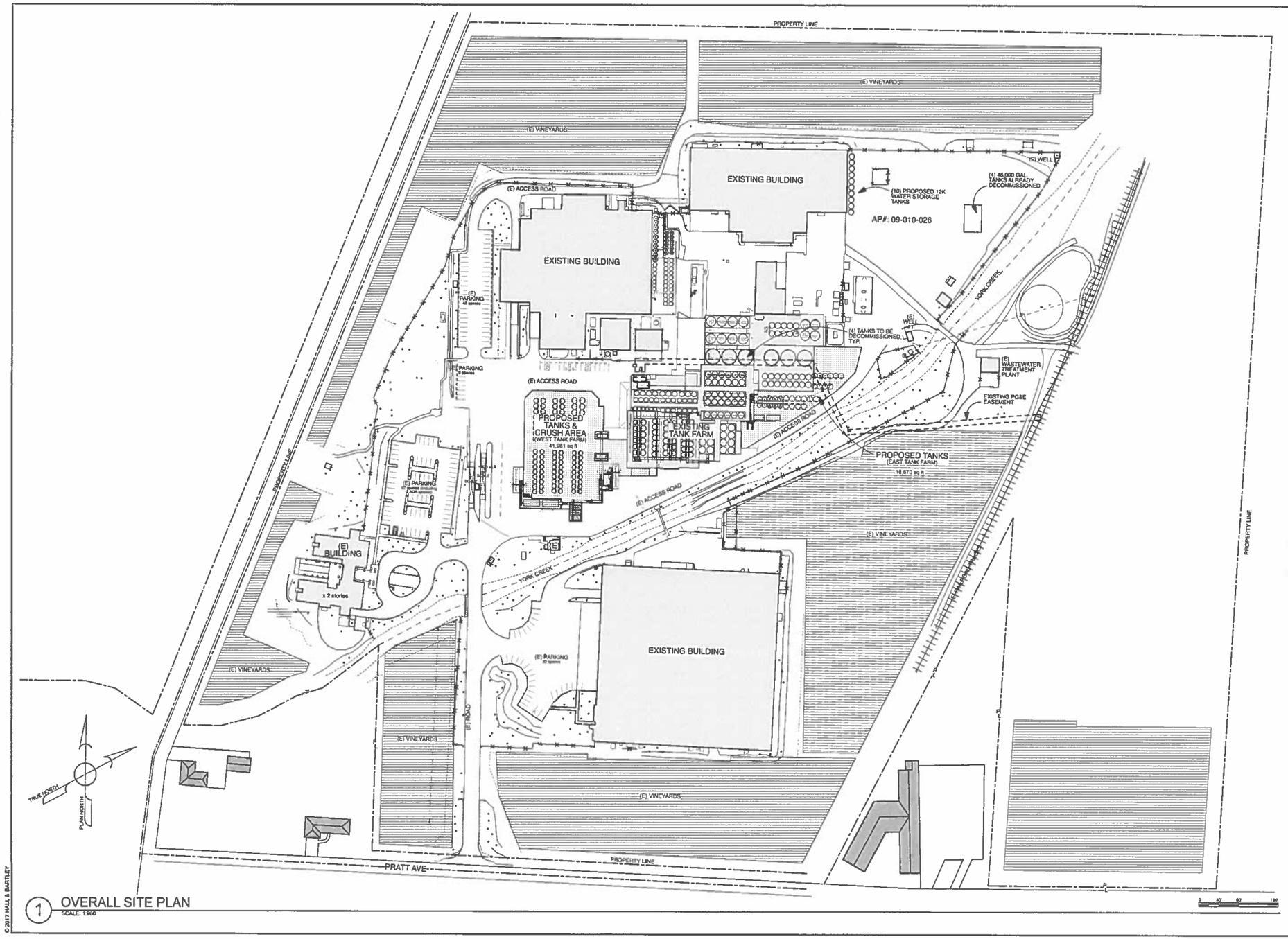
/Volumes/Andy's Public Folder/Active Jobs/2016 Projects/1614 Beringer Icon 3/1614 Project Files/1614 BERINGER ICON 3-DESIGN REVIEW-Rev-4-11-17.pln4/12/17



1 OVERALL SITE PLAN
SCALE: 1:960

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HALL&BARTLEY
ARCHITECTURE AND PLANNING
LOS GATOS, SAN FRANCISCO, SAN RAFAEL, CALIFORNIA

BERINGER VINEYARDS
ICON III
1000 PRATT AVE
ST HELENA NAPA COUNTY CALIFORNIA

OVERALL SITE PLAN

PROJECT	1614
DRAWN	AM
CHECK	SPB
SCALE	AS NOTED
DATE	2/15/17

T1.0

1 EXISTING/ DEMO SITE PLAN
SCALE: 1:960

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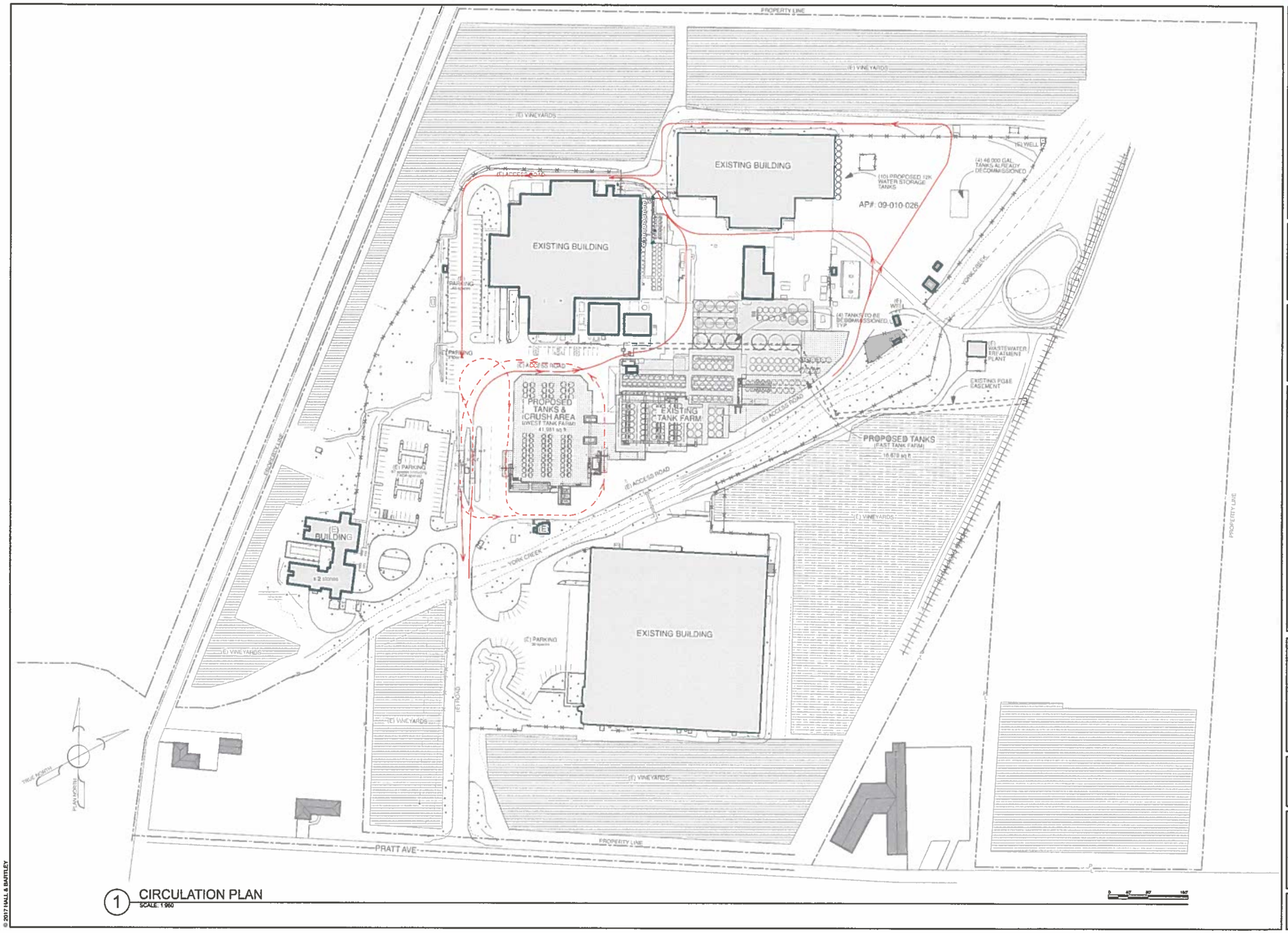
ARCHITECTURE AND PLANNING

BERINGER VINEYARDS
ICON III
1000 PRATT AVE
ST HELENA NAPA COUNTY CALIFORNIA

EXISTING/ DEMO SITE PLAN

PROJECT	1614
DRAWN	AM
CHECK	SPB
SCALE	AS NOTED
DATE	2/16/17

T1.1



1 CIRCULATION PLAN
SCALE: 1:960

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REVIEW-2.15.17.pln2/16/17

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ARCHITECTURE AND PLANNING

BERINGER VINEYARDS
ICON III
1000 PRATT AVE
ST HELENA NAPA COUNTY CALIFORNIA

CIRCULATION PLAN

PROJECT	1614
DRAWN	AM
CHECK	SRB
SCALE	AS NOTED
DATE	2/16/17

T1.2

Beringer Vineyards	Tank Gallonage Analysis				
	Total gals				
Existing Total Tank Capacity (gal)	4316473				
				Placement	
New Tanks	New Tanks	Tank gal	Total gals	East Tf	West Tf
	36	3900	140400		36
	18	4900	88200		18
	4	5500	22000	4	
	32	6000	192000		32
	6	6500	39000	6	
	24	8100	194400	10	14
	10	8100	81000	10	
Total New Gallons	130		757000		

	Decommissioned Tanks	Tank gal	Total gals	East Tf	West Tf
	4	46000	184000		
	4	153200	612800		
Total Decommissioned Gallons	8		796800		
Total Gallons on Site (Existing + New - Decommissioned)			4276473		
Total Gallons Remaining			39800		

1 SITE PLAN: TANK CAPACITY
SCALE: 1:960

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/Volumes/Andy's Public Folder/Active Jobs/2016 Projects/1614 Beringer Icon 3/1614 Project Files/1614 BERINGER ICON 3-DESIGN REVIEW-2:15:17.pln4/11/17

HALL&BARTLEY
ARCHITECTURE AND PLANNING

BERINGER VINEYARDS
ICON III
1000 PRATT AVE
ST HELENA NAPA COUNTY CALIFORNIA

SITE PLAN - TANK CAPACITY

PROJECT	1614
DRAWN	AM
CHECK	SPB
SCALE	AS NOTED
DATE	2/16/17

T1.3

DESIGN REVIEW
ICON III
BERINGER VINEYARDS
1000 PRATT AVE., ST. HELENA, CA 94574

GENERAL NOTES

1. WORK AND MATERIALS SHALL COMPLY WITH THE CONSTRUCTION DOCUMENTS AND THE REQUIREMENTS AND STANDARDS OF THE AUTHORITIES HAVING JURISDICTION. IF STANDARDS ARE NOT PROVIDED BY THE AUTHORITIES HAVING JURISDICTION, WORK AND MATERIALS SHALL COMPLY WITH THE MOST CURRENT EDITION OF THE CALTRANS STANDARD SPECIFICATIONS.
2. THE CONTRACTOR SHALL CALL THE UNDERGROUND SERVICE ALERT ONE-CALL NUMBER 811 TWO BUSINESS DAYS PRIOR TO EXCAVATION.
3. INFORMATION ON EXISTING CONDITIONS AND BOUNDARIES / RIGHT OF WAY SHOWN ON THESE PLANS WAS OBTAINED FROM A SURVEY NOT PERFORMED BY COFFMAN ENGINEERS. NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND REQUIRED ELEVATIONS AT THE SUBJECT SITE. VERIFY THE LOCATION AND SIZE OF EXISTING UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION ACTIVITIES, INCLUDING UNDERGROUND AND OVERHEAD UTILITIES, UTILITY STRUCTURES, POINTS OF CONNECTION, AND UTILITY CROSSINGS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR EXCEPTIONS ENCOUNTERED PRIOR TO PROCEEDING. ANY COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL HAVE A COMPLETE SET OF APPROVED CONSTRUCTION DOCUMENTS (INCLUDING ADDENDA) ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
5. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO MEET THE REQUIREMENTS AND STANDARDS OF THE AUTHORITIES HAVING JURISDICTION.
6. ALL MATERIALS, REQUIRED FOR THE COMPLETE EXECUTION OF THE PROJECT, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
7. THE DRAWINGS INDICATE LOCATIONS, DIMENSIONS, REFERENCES, AND TYPICAL DETAILS OF CONSTRUCTION. THE DRAWINGS DO NOT INDICATE EVERY CONDITION. WORK NOT FULLY DETAILED SHALL BE OF CONSTRUCTION SIMILAR TO PARTS THAT ARE FULLY DETAILED.
8. THE CONTRACTOR SHALL OBTAIN THE APPROPRIATE APPROVALS AND PERMITS FROM THE AUTHORITIES HAVING JURISDICTION PRIOR TO PROCEEDING WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL COORDINATE WITH THE AUTHORITIES HAVING JURISDICTION TO CONFIRM INSPECTION, TESTING, AND CERTIFICATION REQUIREMENTS.
9. CONSTRUCTION SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).
10. EXISTING PROPERTY CORNERS AND SURVEY MONUMENTS SHALL BE PROTECTED DURING CONSTRUCTION. ANY DAMAGED OR OBLITERATED CORNERS OR MONUMENTS SHALL BE RE-ESTABLISHED BY A PROFESSIONAL SURVEYOR AT THE CONTRACTOR'S EXPENSE.
11. THE CONTRACTOR SHALL HAVE A SUPERINTENDENT OR REPRESENTATIVE ON SITE AT ALL TIMES DURING CONSTRUCTION.
12. SAFETY STANDARDS AND REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COMPLIED WITH AS SET FORTH BY OSHA.
13. THE CONTRACTOR SHALL HAVE THE APPROPRIATE LICENSES TO PERFORM THE SPECIFIED WORK IN CONFORMANCE WITH THE AUTHORITIES HAVING JURISDICTION.
14. CONSTRUCTION EQUIPMENT SHALL BE PROPERLY MUFFLED. UNNECESSARY IDLING OF GRADING CONSTRUCTION EQUIPMENT IS PROHIBITED.
15. MAINTAIN EXISTING UTILITIES AND PROTECT THEM AGAINST DAMAGE DURING CONSTRUCTION. DO NOT INTERRUPT EXISTING UTILITIES SERVING ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO OWNER AND AUTHORITIES HAVING JURISDICTION.
16. IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER AND OWNER.
17. AREAS DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE CONSTRUCTED OR RESTORED TO ORIGINAL CONDITIONS OR BETTER, TO THE SATISFACTION OF THE OWNER, AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING CONDITIONS PRIOR TO CONSTRUCTION ACTIVITIES AND ANY DAMAGE THAT MAY OCCUR.
18. REMOVE WASTE MATERIALS AND DEBRIS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN AN EPA-APPROVED LANDFILL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
19. REFER TO ARCHITECTURAL AND STRUCTURAL DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING CONSTRUCTION OF STRUCTURES, ENCLOSURES, STAIRS, SIDEWALKS/PATHS, TANK FARMS, AND WINERY FACILITIES.
20. RECORD DRAWINGS IDENTIFYING AND ACCURATELY LOCATING SUBSURFACE UTILITIES AND IMPROVEMENTS AND NOTING AS-CONSTRUCTED CONDITIONS SHALL BE PROVIDED BY THE CONTRACTOR AT THE END OF CONSTRUCTION.

DEMOLITION NOTES

1. MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO OWNER AND AUTHORITIES HAVING JURISDICTION.
2. COORDINATE DEMOLITION OPERATIONS AND ANY REQUIRED UTILITY RELOCATIONS WITH THE OWNER AND APPROPRIATE UTILITY PURVEYOR, INCLUDING REQUIREMENTS AND SCHEDULING.
3. COORDINATE EXTENT OF DEMOLITION WITH PROPOSED IMPROVEMENTS. CONTRACTOR SHALL REVIEW THE PROJECT LIMITS TO DETERMINE THE QUANTITY AND TYPE OF DEMOLITION WASTE MATERIAL AND DEBRIS TO BE INCLUDED IN THEIR BID. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING, AND RELOCATING IF NECESSARY, ANY ITEMS NOT OTHERWISE NOTED THAT CONFLICT WITH THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTING ITEMS NOT SHOWN ON THE PLANS THAT MUST BE REMOVED OR RELOCATED. FAILURE TO NOTIFY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF COST RESPONSIBILITY FOR REMOVING REQUIRED ITEMS.
4. COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE BEGINNING DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
5. CONDUCT DEMOLITION ACTIVITIES AND DEBRIS REMOVAL OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, WALKWAYS, AND OTHER ADJACENT FACILITIES.
6. REMOVE OBSTRUCTIONS, TREES, SHRUBS, GRASS, AND OTHER VEGETATION TO PERMIT INSTALLATION OF NEW CONSTRUCTION. REMOVAL OF TREES AND SHRUBS WITHIN AREA OF NEW CONSTRUCTION SHALL INCLUDE DIGGING OUT STUMPS AND OBSTRUCTIONS AND GRUBBING ROOTS. REMOVAL OF TREES IN AREAS ADJACENT TO TREES THAT ARE TO REMAIN AND BE PROTECTED SHALL INCLUDE TREE REMOVAL AND GRINDING OF STUMP TO 3" BELOW FINISHED GRADE. STUMP AND ROOT REMOVAL IS NOT ALLOWED IN THESE AREAS TO PRESERVE HEALTH OF ADJACENT TREES.
7. ALL CONCRETE AND ASPHALT SURFACES INDICATED TO BE REMOVED, SHALL BE SAWCUT.

EARTHWORK & GRADING NOTES

1. SITE PREPARATION, GRADING, EXCAVATION AND FILL REQUIREMENTS BELOW THE PROPOSED IMPROVEMENTS, EMBANKMENTS, AND UTILITY TRENCHING SHALL BE COMPLETED IN CONFORMANCE WITH CITY OF ST. HELENA STANDARD SPECIFICATIONS AND THE GEOTECHNICAL ENGINEERING EVALUATION FOR THE SUBJECT SITE.
2. EXAMINE EXPOSED SUBGRADES AND BASE SURFACES FOR COMPLIANCE WITH REQUIREMENTS FOR DIMENSIONAL, GRADING, AND ELEVATION TOLERANCES. PREVENT SURFACE WATER AND GROUNDWATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES AND BASE SURFACES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES AND BASE SURFACES FROM SOFTENING, UNDERMINING, WASHOUT, DAMAGE BY RAIN OR WATER ACCUMULATION, AND AGAINST FREEZING TEMPERATURES AND FROST.
3. REFER TO LANDSCAPE DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING LANDSCAPE GRADING, LANDSCAPE DRAINS, PLACEMENT OF TOPSOIL, AND COORDINATION BETWEEN LANDSCAPING AND STORM WATER MANAGEMENT IMPROVEMENTS.
4. SPOT ELEVATIONS ARE FOR FINISH GRADE UNLESS OTHERWISE NOTED.
5. UNLESS ELEVATIONS AND/OR CONTOURS ARE OTHERWISE SHOWN, NEW FINISH GRADE SURFACES SHALL BE PLACED TO ALLOW FOR POSITIVE DRAINAGE TO RUNOFF COLLECTION DEVICES OR FACILITIES. MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
6. GROUNDWATER OR UNANTICIPATED SUBSURFACE CONDITIONS SHALL BE REPORTED TO THE GEOTECHNICAL ENGINEER FOR ASSESSMENT AND RECOMMENDATIONS.
7. ALL GRADING SHALL CONFORM TO APPROVED SPECIFICATIONS PRESENTED HERON OR ATTACHED HERETO. ALL GRADING WORK SHALL BE OBSERVED AND APPROVED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS BEFORE BEGINNING ANY GRADING. UNOBSERVED AND UNAPPROVED GRADING WORK SHALL BE REMOVED AND REDONE AT THE CONTRACTORS EXPENSE.
8. COMPACTION EFFORTS AND MASS GRADING SHALL BE MONITORED AND TESTED BY AN EXPERIENCED SOILS TECHNICIAN, UNDER THE SUPERVISION OF A LICENSED GEOTECHNICAL ENGINEER REPRESENTING THE OWNER.
9. A CAL-OSHA PERMIT IS REQUIRED FOR EXCAVATIONS OR TRENCHING GREATER THAN 5 FEET IN DEPTH.
10. NO CUT OR FILL SLOPES SHALL BE CONSTRUCTED STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).

PAVING NOTES

1. DO NOT APPLY PAVEMENT MATERIALS IF SUBGRADE IS WET OR EXCESSIVELY DAMP, OR IF RAIN IS IMMINENT OR EXPECTED BEFORE TIME REQUIRED FOR ADEQUATE CURE. SURFACE AND AIR TEMPERATURES SHALL CONFORM TO REQUIREMENTS OF CALTRANS STANDARD SPECIFICATIONS.
2. COMPLY WITH CITY OF ST. HELENA STANDARD SPECIFICATION FOR HOT MIX ASPHALT PAVEMENT.
3. WHERE NEW ASPHALT PAVEMENT JOINS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAWCUT TO A NEAT, VERTICAL EDGE AND TACKED WITH ASPHALT EMULSION IN ACCORDANCE WITH CITY OF ST. HELENA SPECIFICATIONS.
4. COMPLY WITH CITY OF ST. HELENA STANDARD SPECIFICATION REQUIREMENTS FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CEMENT CONCRETE PAVEMENT.
5. APPLY PAVEMENT MARKING MATERIALS TO CLEAN, DRY PAVEMENT SURFACES ACCORDING TO CITY OF ST. HELENA STANDARD SPECIFICATION. PAVEMENT MARKINGS SHALL COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
6. CONSTRUCTION STAKING FOR CURB AND GUTTER, PAVEMENT GRADES, SIDEWALK GRADES, AND ANY OTHER VERTICAL AND/OR HORIZONTAL ALIGNMENT SHALL BE PROVIDED BY A SURVEYING OR ENGINEERING FIRM CAPABLE OF PERFORMING SUCH WORK.
7. STRIPING AND SIGNAGE PER ARCHITECT PLANS.

UTILITY & DRAINAGE NOTES

1. DRAWING PLANS AND DETAILS INDICATE GENERAL LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITY AND STORM DRAIN PIPING. LOCATION AND ARRANGEMENT OF PIPING LAYOUT TAKE DESIGN CONSIDERATIONS INTO ACCOUNT. INSTALL PIPING AS INDICATED, TO EXTENT PRACTICAL. WHERE SPECIFIC INSTALLATION IS NOT INDICATED, FOLLOW PIPING MANUFACTURER'S WRITTEN INSTRUCTIONS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
2. STORM DRAIN SHALL BE STUBBED FIVE (5) FEET OUTSIDE OF THE NEW TANK FARM AREA. THE SITE CONTRACTOR SHALL COORDINATE CONTINUATION OF STORM DRAIN AND CONNECTIONS WITH THE CONTRACTOR AND ARCHITECTURAL PLANS. A PLUG/CAP SHALL BE INSTALLED AT THE END OF SERVICE LINES UNTIL SUCH TIME THAT STORM DRAIN IS EXTENDED FOR CONNECTION.
3. REFER TO ARCHITECTURAL AND MECHANICAL DOCUMENTS FOR ADDITIONAL INFORMATION REGARDING TANK FARM STORM DRAINS AND TRENCH DRAINS.
4. REFER TO ELECTRICAL PLANS FOR INFORMATION REGARDING SITE LIGHTING, POWER, AND COMMUNICATIONS. COORDINATE REQUIREMENTS AND SCHEDULING FOR POWER AND UTILITY INSTALLATIONS WITH UTILITY PURVEYOR, INCLUDING TRENCH EXCAVATION, BEDDING, AND BACKFILL REQUIREMENTS.
5. FOR EACH TYPE OF PIPE, USE JOINING MATERIALS RECOMMENDED BY PIPING SYSTEM MANUFACTURER, UNLESS OTHERWISE INDICATED.
6. CONNECT UTILITY PIPING TO EXISTING SYSTEM ACCORDING TO REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION. ARRANGE WITH THE GOVERNING REGULATORY AGENCY OR UTILITY COMPANY FOR TAP OF SIZE AND IN LOCATION INDICATED. COORDINATE REQUIREMENTS AND SCHEDULING WITH AUTHORITIES HAVING JURISDICTION.
7. COMPLY WITH NFPA 24 FOR FIRE SUPPRESSION SYSTEM PIPING MATERIALS AND INSTALLATION.
8. BURY PIPING WITH DEPTH OF COVER IN COMPLIANCE WITH REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION AND MANUFACTURER'S REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE WITH THE AUTHORITIES HAVING JURISDICTION FOR ALL REQUIREMENTS AND TO CONFIRM THAT AN ADEQUATE DEPTH OF COVER IS MAINTAINED OVER THE UTILITIES, INCLUDING CLEARANCES BETWEEN THE VARIOUS UTILITIES.
9. INSTALL PRESSURIZED UNDERGROUND PIPING WITH RESTRAINED JOINTS AT HORIZONTAL AND VERTICAL CHANGES IN DIRECTION. RESTRAINMENT SHALL COMPLY WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
10. CONTRACTOR SHALL MAINTAIN A MINIMUM TEN (10) FEET OF HORIZONTAL SEPARATION BETWEEN WATER PIPE AND PIPE CARRYING NON-POTABLE WATER AT CROSSINGS. PROVIDE A MINIMUM VERTICAL CLEARANCE OF 18-INCHES BETWEEN WATER PIPE (ABOVE) AND PIPE CARRYING NON-POTABLE WATER (BELOW). INSTALLATIONS FOR PIPE CARRYING NON-POTABLE WATER MAY BE INSTALLED AT A CLEARANCE LESS THAN THOSE STATED ABOVE IF THE NON-POTABLE LINE IS SLEEVED. THE SLEEVE PIPE SHALL BE ONE (1) SIZE LARGER THAN THE CONSTRUCTION PIPE. THE SLEEVE SHALL BE AT LEAST TWENTY (20) FEET IN LENGTH AND CENTERED ON THE CROSSING TO PROVIDE FOR A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET EACH SIDE OF THE CROSSING, MEASURED PERPENDICULAR TO THE CROSSED LINE. EACH END OF THE SLEEVE SHALL BE SEALED WITH A FERNCO RUBBER COUPLER.
11. UTILITY PIPE AND CONDUITS SHALL BE INSTALLED WITH CONTINUOUS WARNING TAPE DIRECTLY OVER PIPING AT DEPTHS IN COMPLIANCE WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION AND AT OUTSIDE EDGE OF UNDERGROUND STRUCTURES. USE DETECTABLE WARNING TAPE OVER NONFERROUS PIPING.
12. CONTRACTOR SHALL COORDINATE WITH THE UTILITY PURVEYOR REGARDING NATURAL GAS IMPROVEMENTS, INCLUDING TRENCH EXCAVATION, BEDDING, AND BACKFILL REQUIREMENTS. INSTALLATION OF THE NATURAL GAS LINE FROM THE POINT OF CONNECTION UP TO AND INCLUDING THE METER SHALL BE BY THE UTILITY PURVEYOR. COORDINATE REQUIREMENTS AND SCHEDULING WITH THE UTILITY PURVEYOR.
13. FIELD QUALITY CONTROL SHALL COMPLY WITH THE AUTHORITIES HAVING JURISDICTION. INSPECT, TEST, DISINFECT, AND CLEAN UTILITY LINES IN ACCORDANCE WITH REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

BASIS OF BEARINGS

THE STATE PLANE COORDINATE SYSTEM OF 1983 (NAD 83), CALIFORNIA ZONE 2.

BENCHMARK

ELEVATIONS SHOWN HEREON ARE BASED SURVEYOR'S TEMPORARY BENCHMARK. 90D NAIL LOCATED 6-FEET SOUTHWESTERLY OF DIESEL FUEL TANK AND 8.5-FEET NORTHWESTERLY OF CHAIN LINK FENCE AT NORTH END OF SITE. ELEVATION 253.49 FEET (NAVD 88)

*ADD 200 FEET TO ALL DESIGN ELEVATIONS

ESTIMATED EARTHWORK QUANTITIES AND AREA OF DISTURBANCE

CUT = 1,800 C.Y.+/- (DOES NOT INCLUDES OVEREXACAVATION) AREA OF DISTURBANCE = 83,000 S.F.+/- (1.9 ACRES+/-)
FILL = 900 C.Y.+/-

EARTHWORK QUANTITIES ARE ESTIMATES ONLY AND ARE NOT ADJUSTED FOR SHRINKAGE, CONSOLIDATION, AND CLEARING LOSS FACTORS. THESE QUANTITIES ARE TO BE USED FOR BONDING AND PERMIT PURPOSES ONLY. CONTRACTOR SHALL MAKE THEIR OWN SITE VISIT AND QUANTITY TAKE-OFF AND SHALL BID ACCORDINGLY.

GEOTECHNICAL INVESTIGATION

THE GEOTECHNICAL INVESTIGATION FOR THIS PROJECT, PREPARED BY BAUER ASSOCIATES INC., PROJECT No. 3017.2, DATED APRIL 15, 2015, SHALL BE APART OF THESE PLANS AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING THE RECOMMENDATION THEREIN.

BAUER ASSOCIATES INC.
6470 MIRABEL ROAD (MAILING: P.O. BOX 480)
FORESTVILLE, CA 95436
707.887.2505

GEOTECHNICAL INVESTIGATION IS CURRENTLY BEING UPDATED FOR 2017 IMPROVEMENTS

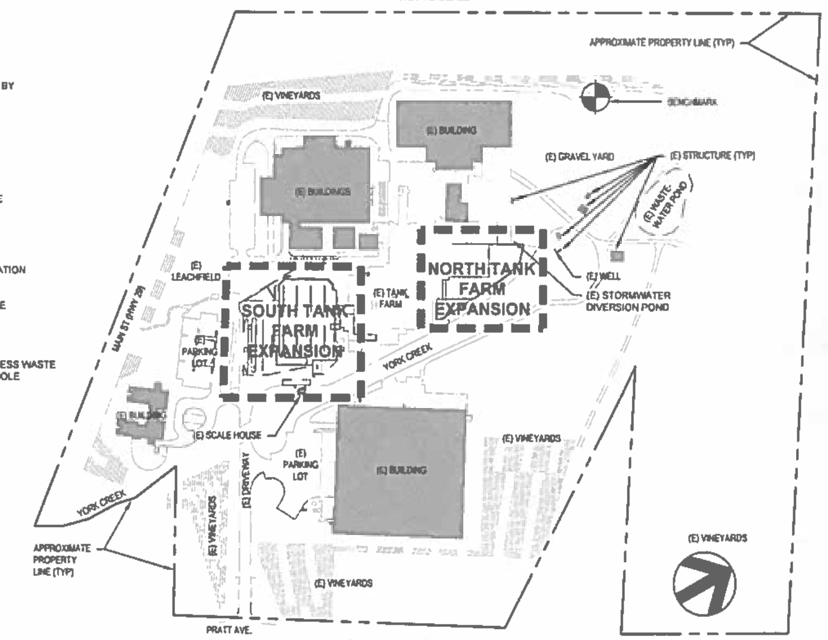
DISCREPANCIES

IF THERE ARE ANY DISCREPANCIES BETWEEN DIMENSIONS IN DRAWING AND EXISTING CONDITIONS WHICH WILL AFFECT THE WORK, THE CONTRACTOR SHALL BRING SUCH DISCREPANCIES TO THE ATTENTION OF THE ENGINEER FOR ADJUSTMENT BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FITTING OF ALL WORK AND FOR THE COORDINATION OF ALL TRADES, SUBCONTRACTORS, AND PERSONS ENGAGED UPON THIS CONTRACT.

ABBREVIATIONS

AC	ASPHALT CONCRETE
BLDG	BUILDING
CO	CLEANOUT
DI	DROP INLET
E	ELECTRICAL
(E)	EXISTING
FF	FINISH FLOOR ELEVATION
FG	FINISHED GRADE
FS	FINISHED SURFACE
FW	FIRE WATER SERVICE
GB	GRADE BREAK
INV	INVERT
(N)	NEW
S	SLOPE
SD	STORM DRAIN/PROCESS WASTE
SDMH	STORM DRAIN MANHOLE
T	TELEPHONE
TG	TOP OF GRATE
TYP	TYPICAL
W	WATER

VICINITY MAP
NOT TO SCALE



OVERALL SITE PLAN
SCALE: 1" = 200'

SHEET INDEX

C1.0 GENERAL NOTES
C2.0 EROSION AND SEDIMENT CONTROL PLAN
C2.1 EROSION AND SEDIMENT CONTROL DETAILS AND NOTES
C3.0 CIVIL SITE PLAN AND UTILITIES FOR SOUTH TANK FARM EXPANSION
C3.1 CIVIL SITE PLAN FOR NORTH TANK FARM EXPANSION
C4.0 GRADING & DRAINAGE PLAN FOR SOUTH TANK FARM EXPANSION
C4.1 GRADING & DRAINAGE PLAN FOR NORTH TANK FARM EXPANSION
C5.0 DETAILS AND SITE SECTIONS

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY ALBION SURVEYS, INC. 1113 HUNT AVENUE ST. HELENA, CA 94574 707.963.1217 DATED: 08.28.17. THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED.

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER ROY DONAHUE NORTHERN No. C 73733 STATE OF CALIFORNIA

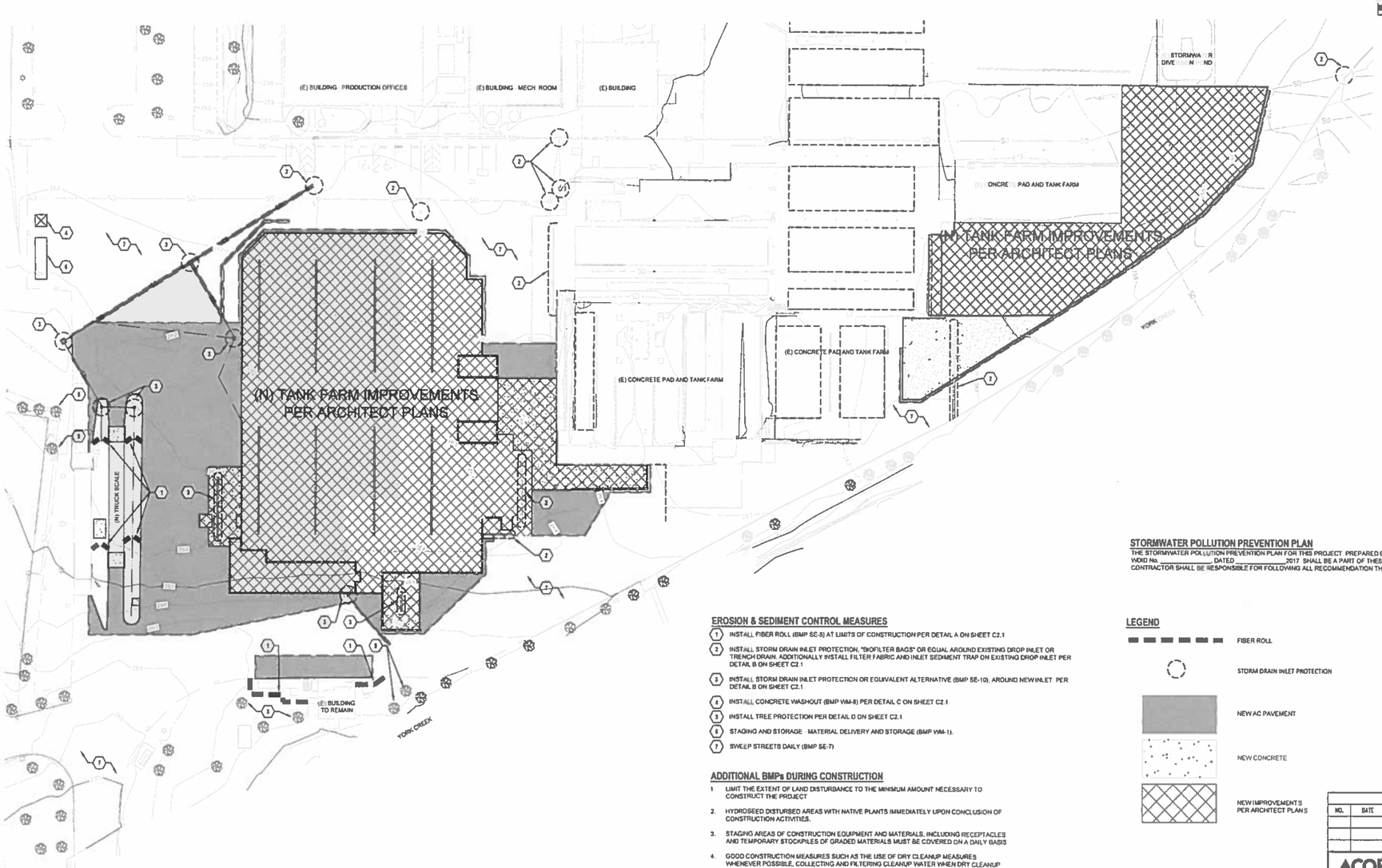
REVISIONS			
NO.	DATE	DESCRIPTION	BY

COFFMAN ENGINEERS
1939 Harrison Street Suite 320 Oakland, California 94612 510.251.9578

ICON III
BERINGER VINEYARDS
1000 PRATT AVENUE, ST. HELENA, CA

DRAWING TITLE: GENERAL NOTES

PROJECT NO.	SCALE:	DATE:	REVISION NO.
170154	AS SHOWN	02.15.17	
DESIGNED BY: RW	CHECKED BY:		DRAWING NO.
DRAWN BY: RW	REVIEWED BY:		C1.0



STORMWATER POLLUTION PREVENTION PLAN

THE STORMWATER POLLUTION PREVENTION PLAN FOR THIS PROJECT PREPARED BY WGR SOUTHWEST WDID No. _____ DATED _____2017 SHALL BE A PART OF THESE PLANS AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL RECOMMENDATION THEREIN.

EROSION & SEDIMENT CONTROL MEASURES

1. INSTALL FIBER ROLL (BMP SE-5) AT LIMITS OF CONSTRUCTION PER DETAIL A ON SHEET C2.1
2. INSTALL STORM DRAIN INLET PROTECTION, "BOFILTER BAGS" OR EQUAL AROUND EXISTING DROP INLET OR TRENCH DRAIN. ADDITIONALLY INSTALL FILTER FABRIC AND INLET SEDIMENT TRAP ON EXISTING DROP INLET PER DETAIL B ON SHEET C2.1
3. INSTALL STORM DRAIN INLET PROTECTION OR EQUIVALENT ALTERNATIVE (BMP SE-10), AROUND NEW INLET PER DETAIL B ON SHEET C2.1
4. INSTALL CONCRETE WASHOUT (BMP WM-8) PER DETAIL C ON SHEET C2.1
5. INSTALL TREE PROTECTION PER DETAIL D ON SHEET C2.1
6. STAGING AND STORAGE MATERIAL DELIVERY AND STORAGE (BMP WM-1).
7. SWEEP STREETS DAILY (BMP SE-7)

ADDITIONAL BMPs DURING CONSTRUCTION

1. LIMIT THE EXTENT OF LAND DISTURBANCE TO THE MINIMUM AMOUNT NECESSARY TO CONSTRUCT THE PROJECT
2. HYDROSEED DISTURBED AREAS WITH NATIVE PLANTS IMMEDIATELY UPON CONCLUSION OF CONSTRUCTION ACTIVITIES.
3. STAGING AREAS OF CONSTRUCTION EQUIPMENT AND MATERIALS, INCLUDING RECEPTACLES AND TEMPORARY STOCKPILES OF GRADED MATERIALS MUST BE COVERED ON A DAILY BASIS
4. GOOD CONSTRUCTION MEASURES SUCH AS THE USE OF DRY CLEANUP MEASURES WHENEVER POSSIBLE, COLLECTING AND FILTERING CLEANUP WATER WHEN DRY CLEANUP METHODS ARE NOT FEASIBLE, CLEANING AND REFUELING CONSTRUCTION EQUIPMENT AT DESIGNATED OFF SITE MAINTENANCE AREAS, AND IMMEDIATE CLEANUP OF ANY LEAKS OR SPILLS.

LEGEND

- FIBER ROLL
- STORM DRAIN INLET PROTECTION
- NEW AC PAVEMENT
- NEW CONCRETE
- NEW IMPROVEMENTS PER ARCHITECT PLANS

REVISIONS			
NO.	DATE	DESCRIPTION	BY

COFFMAN ENGINEERS
1639 Harrison Street, Suite 320
Oakland, California 94612
510.251.8578

ICON III
BERINGER VINEYARDS
1000 PRATT AVENUE, ST. HELENA, CA

DRAWING TITLE
EROSION & SEDIMENT CONTROL PLAN

PROJECT NO.	SCALE:	DATE:	REVISION NO.
170154	AS SHOWN	02.15.17	
DESIGNED BY: RW	CHECKED BY:		DRAWING NO. C2.0
DRAWN BY: RW	REVIEWED BY:		

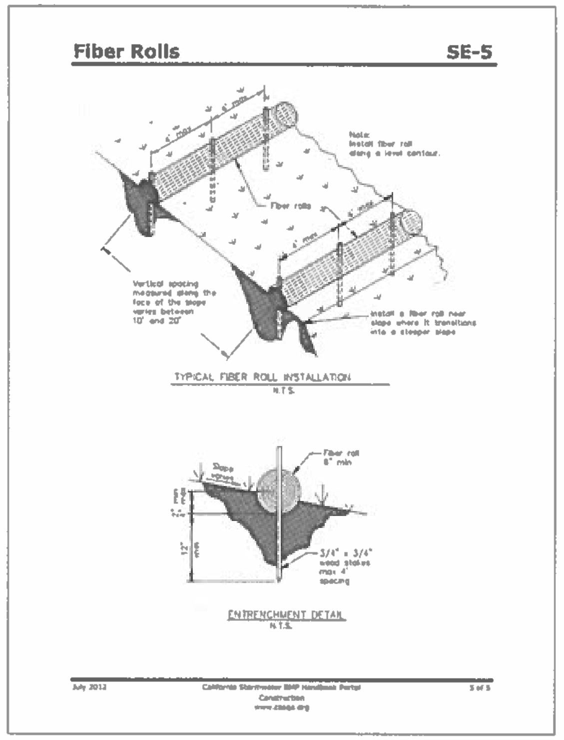
THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY:
ALBION SURVEYS, INC.
1113 HUNT AVENUE
ST. HELENA, CA 94574
707.963.1917
DATED: 08.26.17
THE CONTRACTOR SHALL VERIFY ISSUE (Initial) SITE CONDITIONS AND CONTACT (Initial) ENGINEER IF DISCREPANCIES ARE NOTED

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER
RICHARD WOHLMUTH
No. C 73783
Date of Expiration

*IF THERE IS A DISCREPANCY BETWEEN THIS PLAN AND THE SWPPP, THE SWPPP TAKES PRECEDENCE



A FIBER ROLLS

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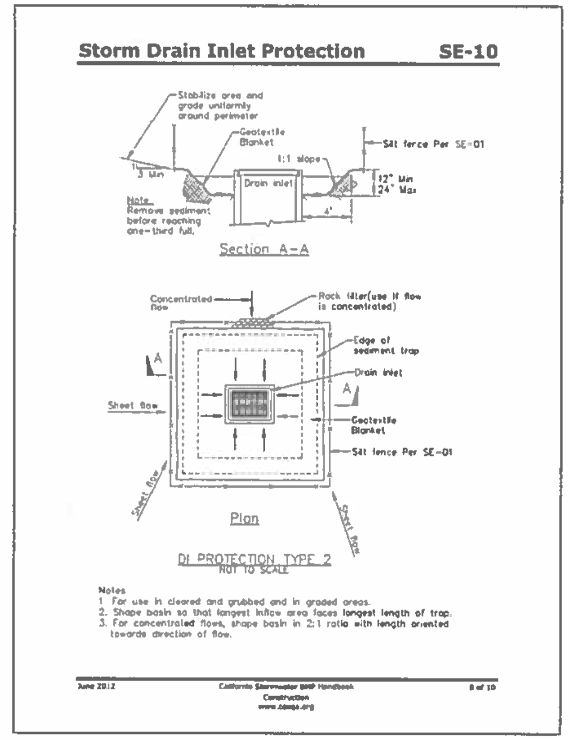

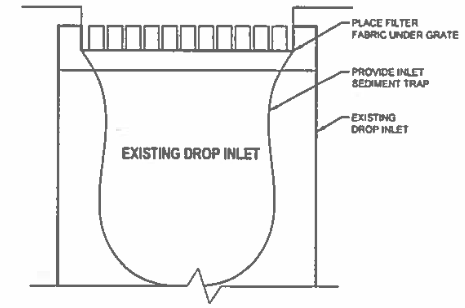

NOTES

1. PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH DROP INLET GRAVEL BAG PROTECTION AND CURB INLET GRAVEL BAG PROTECTION DETAILS SHOWN ON THIS SHEET. ROLLS ARE TUBES MADE FROM STRAW BOUND WITH PLASTIC NETTING, APPROX. 8" DIAMETER AND 20 TO 30 FEET LONG.
2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" - 4" DEEP, DUG ON CONTOUR. MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIXIE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY
4. TEMPORARY REMOVABLE TRASH RACK: IF SITE CONDITIONS WARRANT, PROVIDE, AND INSTALL TRASH RACK MADE FROM GALVANIZED WELDED WIRE FABRIC WITH OPENING SIZE 2" BY 2" FORMED AND ATTACHED TO THE INLET TOP GRATE WITH STEEL WIRE TIES AND BURRY WELDED WIRE FABRIC 4" MINIMUM BELOW TEMPORARY ROUGH GRADE GROUND ELEVATION.

B STORM DRAIN INLET PROTECTION

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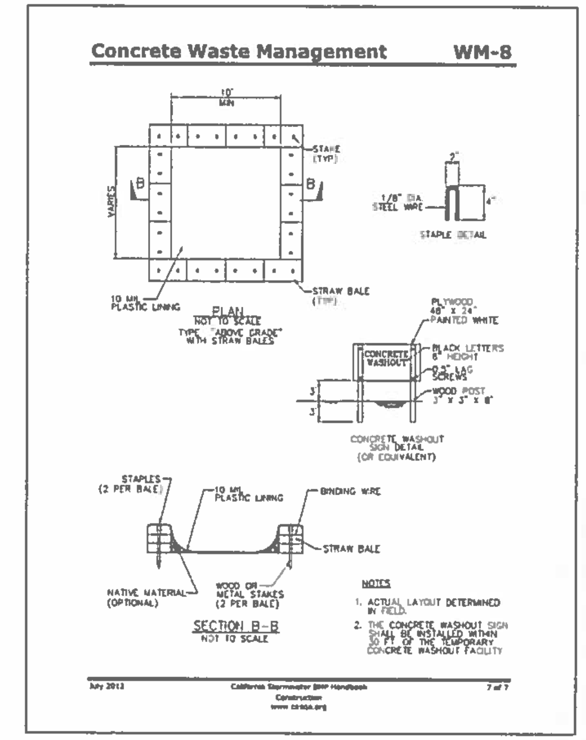
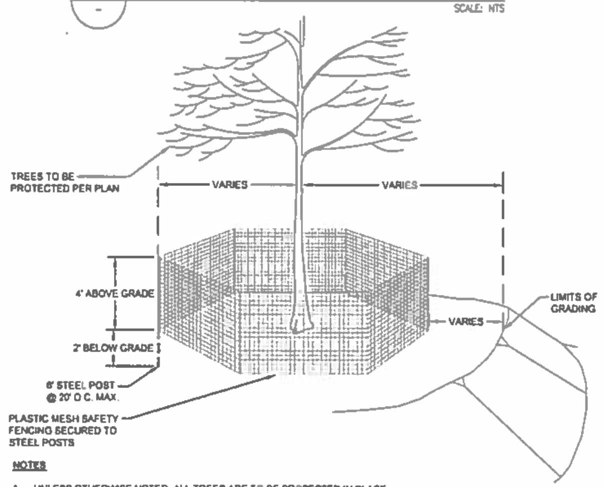


C CONCRETE WASTE MANAGEMENT

SCALE: NTS



NOTES

1. UNLESS OTHERWISE NOTED, ALL TREES ARE TO BE PROTECTED IN PLACE.
2. TREE PROTECTION MEASURES MUST BE IMPLEMENTED BEFORE THE BEGINNING OF ANY WORK AND SHALL REMAIN UNTIL ALL WORK IS COMPLETED.
3. ALL TREES OR GROUPS OF TREES TO REMAIN ON-SITE THAT ARE WITHIN 25 FEET OF CONSTRUCTION OR GRADING ACTIVITIES SHALL BE MARKED FOR PROTECTION WITH FLAGGING AND WHEREVER POSSIBLE THEIR ROOT ZONE FENCED.
4. FENCING SHALL BE PLACED AT THE EDGE OF THE ROOT ZONE AT A DIAMETER THAT IS ONE AND A HALF TIMES THE DRIPLINE DIAMETER.
5. PROTECTION MEASURES SHALL BE VERIFIED BY THE AGENCY/MONITOR PRIOR TO ANY GRUBBING OR TREE REMOVAL.
6. GRADING, TRENCHING, COMPACTION OF SOIL AND PLACEMENT OF FILL SHALL BE AVOIDED WITHIN THE FENCED AREAS.
7. IF GRADING IN ROOT ZONE CANNOT BE AVOIDED THE FOLLOWING SHALL BE IMPLEMENTED:
   - 7.A. LANDSCAPE WALLS SHALL BE CONSTRUCTED WHEREVER POSSIBLE TO MINIMIZE CUT/FILL IMPACTS.
   - 7.B. ROOTS THAT MUST BE REMOVED OR EXPOSED SHALL BE CLEANLY CUT AND NOT LEFT EXPOSED ABOVE GROUND SURFACE. ALL EFFORTS SHALL BE MADE TO IMMEDIATELY COVER ANY TEMPORARY EXPOSED ROOTS.
8. IF EXCAVATION AND TRENCHING SHOULD TAKE PLACE WITHIN TREE SITE, CONTRACTOR SHOULD CUT AS FEW ROOTS AS POSSIBLE AND CUT CLEANLY. CONTRACTOR TO PAINT CUT ROOTS WITH APPROVED DRESSING AND BACKFILL AS SOON AS POSSIBLE TO PREVENT DRYING. WATERING AND MAINTENANCE SHALL TAKE PLACE TO ENSURE TREE SURVIVAL.
9. REQUIRED TREE TRIMMING, FOR CONSTRUCTION ACTIVITIES, SHALL BE PERFORMED BY A CERTIFIED ARBORIST IN CONFORMANCE WITH THE AGENCY CONDITIONS FOR THIS PROJECT.
10. STORAGE OF MATERIALS, EQUIPMENT, VEHICLES AND TOP SOIL IS NOT PERMITTED WITHIN TREE PROTECTION ZONE.

D TREE PROTECTION

SCALE: NTS

*IF THERE IS A DISCREPANCY BETWEEN THIS PLAN AND THE SWPPP, THE SWPPP TAKES PRECEDENCE

EROSION AND SEDIMENT CONTROL NOTES

1. THIS PLAN MAY NOT COVER ALL THE SITUATIONS OR PHASES THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING SEDIMENT STORM RUNOFF FROM LEAVING THE SITE. SEDIMENT ROLLS AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. TEMPORARY EROSION CONTROL DEVICES SHOWN ON GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
2. EROSION CONTROL FACILITIES SHALL BE MAINTAINED DAILY. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT FREE STORM WATER INTO EXISTING AND PROPOSED STORM DRAIN FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED AND UPDATED EACH YEAR BY THE ENGINEER (OCTOBER 1 TO APRIL 15).
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF CASQA BMP HANDBOOK.
4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SUB-CONTRACTOR AND SUPPLIERS ARE AWARE OF ALL STORM WATER QUALITY MEASURES AND IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY WITH THE APPROVED CONSTRUCTION WILL RESULT IN THE ISSUANCE OF CORRECTION NOTICES, CITATIONS, AND / OR A PROJECT STOP ORDER.
5. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
6. DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT RUNOFF TO ANY STORM DRAIN SYSTEM.
7. DURING PERIODS WHEN STORMS ARE FORECAST:
   - A. EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
   - B. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF DAY
   - C. WHERE STOCKPILING IS NECESSARY, USE A TARPAULIN OR SURROUND THE STOCKPILE WITH FIBER ROLLS, GRAVEL SEDIMENT BARRIER, SILT FENCE, OR OTHER RUNOFF CONTROLS.
   - D. USE INLET CONTROLS AS NEEDED (E.G. BLOCK AND GRAVEL SEDIMENT BARRIER) FOR STORM DRAIN ADJACENT TO THE PROJECT SITE OR STOCKPILED SOIL.
8. THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT.
9. STAND-BY CREWS SHALL BE ALERTED BY THE OWNER OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS
10. AFTER OCTOBER 1ST TO APRIL15TH, ALL EROSION CONTROL MEASURES WILL BE INSPECTED DAILY AND AFTER EACH STORM.
11. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE ENGINEER.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING SAFETY OF VEHICLES OPERATING IN ROADWAY ADJACENT TO EROSION CONTROL FACILITY
13. DUST CONTROL SHOULD BE PRACTICED ON ALL CONSTRUCTION SITES WITH EXPOSED SOILS AS NEEDED. IT IS IMPORTANT IN WINDY OR WIND-PRONE AREAS. DUST CONTROL IS CONSIDERED A TEMPORARY MEASURE AND AS INTERMEDIATE TREATMENT BETWEEN SITE DISTURBANCE AND CONSTRUCTION, PAVING, OR REVEGETATION. REFER TO CASQA BMP HANDBOOK.

EROSION AND SEDIMENT CONTROL BMP MAINTENANCE NOTES

1. USE STRAW WATTLES ALONG CONTOURS OF SHORT SLOPES OR SLOPES 3:1 OR FLATTER, KEYED INTO GROUND AT LEAST 3" DEEP (TYPICALLY 25' APART)
2. INSTALL SILT FENCE ALONG CONTOURS AS SECONDARY MEASURE TO KEEP SEDIMENT ONSITE AND TO MINIMIZE VEHICLE AND FOOT TRAFFIC BEYOND LIMITS OF SITE DISTURBANCE. SILT FENCING MUST BE KEYED IN.
3. CONSTRUCT A CONCRETE WASHOUT SITE ADJACENT TO STABILIZED ENTRANCE. CLEAN AS NEEDED AND REMOVE AT END OF PROJECT.
4. COVER ALL STOCKPILES AND LANDSCAPE MATERIAL AND BERM PROPERLY WITH STRAW WATTLES OR SAND BAGS. KEEP BEHIND SILT FENCE, AWAY FROM WATER BODIES. HAZARDOUS MATERIALS AND REFUSE MUST BE KEPT IN CLOSED CONTAINERS THAT ARE COVERED AND UTILIZE SECONDARY CONTAINMENT, NOT DIRECTLY ON SOIL.
5. USE PEA-GRAVEL BAGS, (OR SIMILAR PRODUCT) AROUND DRAIN INLETS LOCATED BOTH ONSITE AND IN GUTTER AS A LAST LINE OF DEFENSE.
6. PLACE PORT-A-POTTY WITH SECONDARY CONTAINMENT NEAR STABILIZED SITE ENTRANCE BEHIND THE CURB AND AWAY FROM GUTTERS, STORM DRAIN INLETS, AND WATER BODIES.
7. COVER ALL EXPOSED SOIL WITH STRAW MULCH AND TACKIFIER (OR EQUIVALENT).
8. EXISTING VEGETATION SHOULD BE PRESERVED AS MUCH AS POSSIBLE. AREAS OF DISTURBED SOIL/VEGETATION SHOULD BE REVEGETATED AS SOON AS PRACTICAL.
9. PREVENT EQUIPMENT FLUID LEAKS ONTO GROUND BY PLACING DRIP PANS OR PLASTIC TARPS UNDER EQUIPMENT. REPAIR EQUIPMENT AS NECESSARY.

REGISTERED PROFESSIONAL ENGINEER ROY DONAHUE WORTHEN NO. C 73733 CIVIL STATE OF CALIFORNIA

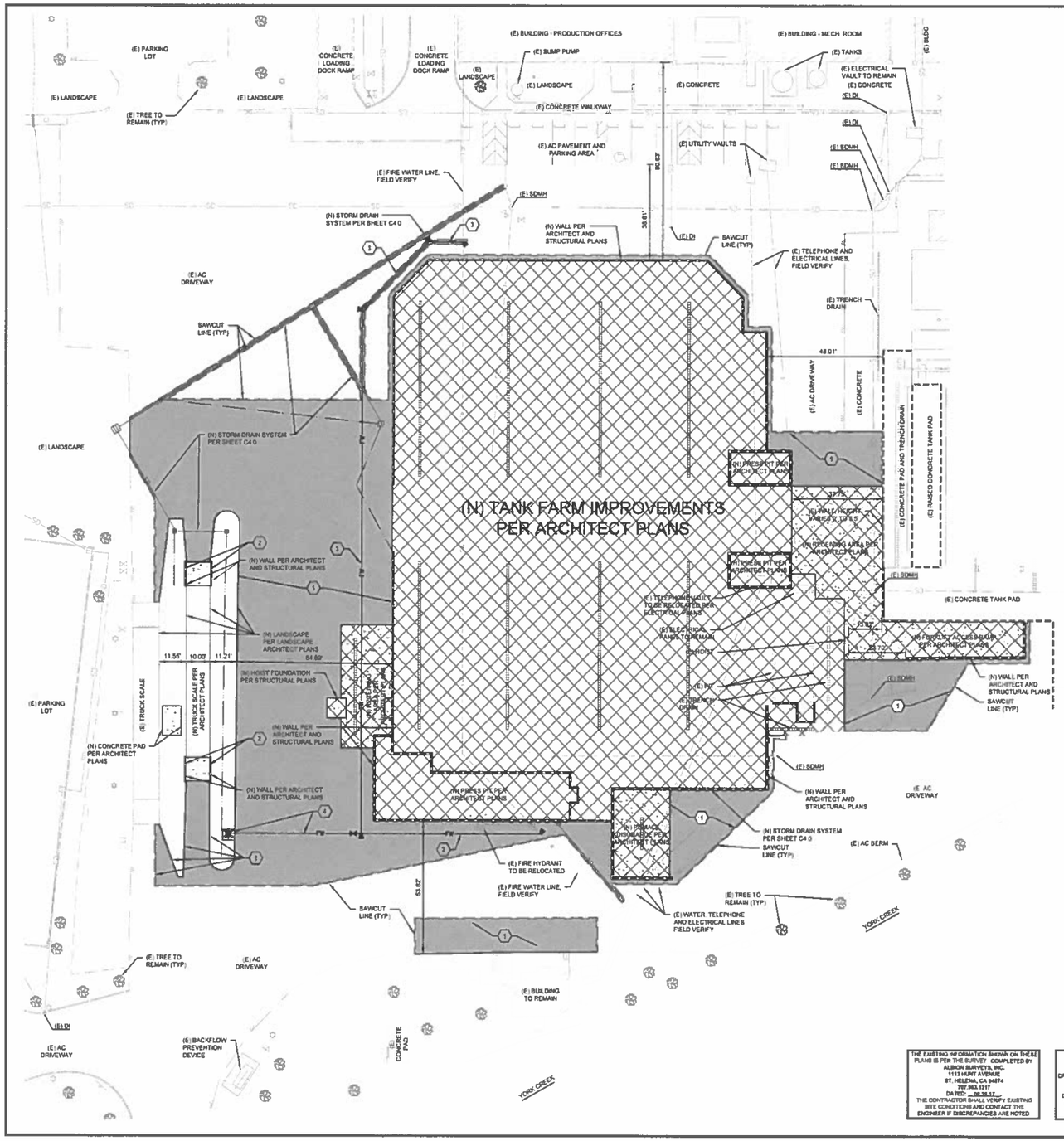
REVISIONS			
NO.	DATE	DESCRIPTION	BY

COFFMAN ENGINEERS
1939 Harrison Street Suite 320
Oakland, California 94612
510.251.9578

ICON III
BERINGER VINEYARDS
1000 PRATT AVENUE, ST. HELENA, CA

DRAWING TITLE
EROSION & SEDIMENT CONTROL DETAILS & NOTES

PROJECT NO.	SCALE:	DATE:	REVISION NO.
170154		02.15.17	
DESIGNED BY: RW	CHECKED BY:		DRAWING NO.
DRAWN BY: RW	REVIEWED BY:		C2.1



20 10 0 20 40

SCALE: 1 INCH = 20 FEET

CONSTRUCTION NOTES

1. SAWCUT AND REMOVE EX. AC PAVEMENT AND/OR CONCRETE FLATWORK AS NECESSARY AND CONSTRUCT AC DRIVEWAY, 3.5" AC ON 13.5" CL. II AB, PER GEOTECHNICAL INVESTIGATION AND DETAIL 1 ON SHEET C5.0. STRIPING AND SIGNAGE PER ARCHITECT PLANS.
2. CONSTRUCT 6" THICK CONCRETE FLATWORK ON 6" A.B. WITH #5'S @ 12" O.C. AND THICKENED EDGES PER DETAIL 4 ON SHEET C5.0. CONFIRM RECOMMENDATIONS WITH STRUCTURAL PLANS.
3. INSTALL 10" CEMENT-LINED DUCTILE IRON PIPE FIRE WATER SERVICE WITH CEMENT-LINED DUCTILE IRON FLANGE FITTINGS AND USE OF MEGA-LUG FLANGES OR THRUST BLOCKING, IN TRENCH PER DETAILS 7 AND 8 ON SHEET C5.0 AND CITY STANDARDS AND SPECIFICATIONS AND NFPA 24 REQUIREMENTS.
4. RELOCATE (E) FIRE HYDRANT AND INSTALL PER DETAIL 8 ON SHEET C5.0

LEGEND

- NEW AC PAVEMENT
- NEW CONCRETE
- NEW IMPROVEMENTS PER ARCHITECT PLANS
- TREE
- LIGHT POLE
- VALVE
- FIRE HYDRANT
- TRENCH DRAIN
- EDGE OF PAVEMENT
- RETAINING WALL
- WALL BELOW GRADE
- ELECTRICAL
- FIRE WATER SERVICE
- STORM DRAIN/PROCESS WASTE
- TELEPHONE
- WATER

ABBREVIATIONS

AC	ASPHALT CONCRETE
BLDG	BUILDING
CO	CLEANOUT
DI	DROP INLET
E	ELECTRICAL
(E)	EXISTING
FF	FINISH FLOOR ELEVATION
FG	FINISHED GRADE
FS	FINISHED SURFACE
FW	FIRE WATER SERVICE
GB	GRADE BREAK
INV	INVERT
(N)	NEW
S	SLOPE
SD	STORM DRAIN/PROCESS WASTE
SDMH	STORM DRAIN MANHOLE
T	TELEPHONE
TG	TOP OF GRATE
TYP	TYPICAL
W	WATER

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY ALBION SURVEYS, INC. 1113 HUNT AVENUE ST. HELENA, CA 94574 707.963.1217 DATED: 08.26.17 THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER RICHARD WINKLE BRANCH REG. NO. C 73753 STATE OF CALIFORNIA

REVISIONS			
NO.	DATE	DESCRIPTION	BY

COFFMAN ENGINEERS
1539 Harrison Street Suite 220
Oakland, California 94612
510.251.9578

ICON III
BERINGER VINEYARDS
1000 PRATT AVENUE, ST. HELENA, CA

DRAWING TITLE
SITE PLAN AND UTILITIES FOR SOUTH TANK FARM EXPANSION

PROJECT NO.	SCALE:	DATE:	REVISION NO.
170154	AS SHOWN	02.15.17	
DESIGNED BY: RW	CHECKED BY:		DRAWING NO. C3.0
DRAWN BY: RW	REVIEWED BY:		

CONSTRUCTION NOTES

1. CONSTRUCT 6" THICK CONCRETE FLATWORK ON 6" A.B. WITH #5'S @ 12" O.C. AND THICKENED EDGES PER DETAIL 4 ON SHEET C5.0. CONFIRM RECOMMENDATIONS WITH STRUCTURAL PLANS.

LEGEND

- NEW AC PAVEMENT
- NEW CONCRETE
- NEW IMPROVEMENTS PER ARCHITECT PLANS
- TREE
- LIGHT POLE
- VALVE
- FIRE HYDRANT
- TRENCH DRAIN
- EDGE OF PAVEMENT
- RETAINING WALL
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ABBREVIATIONS

AC	ASPHALT CONCRETE
BLDG	BUILDING
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SD	STORM DRAIN/PROCESS WASTE
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TG	TOP OF GRATE
TYP	TYPICAL
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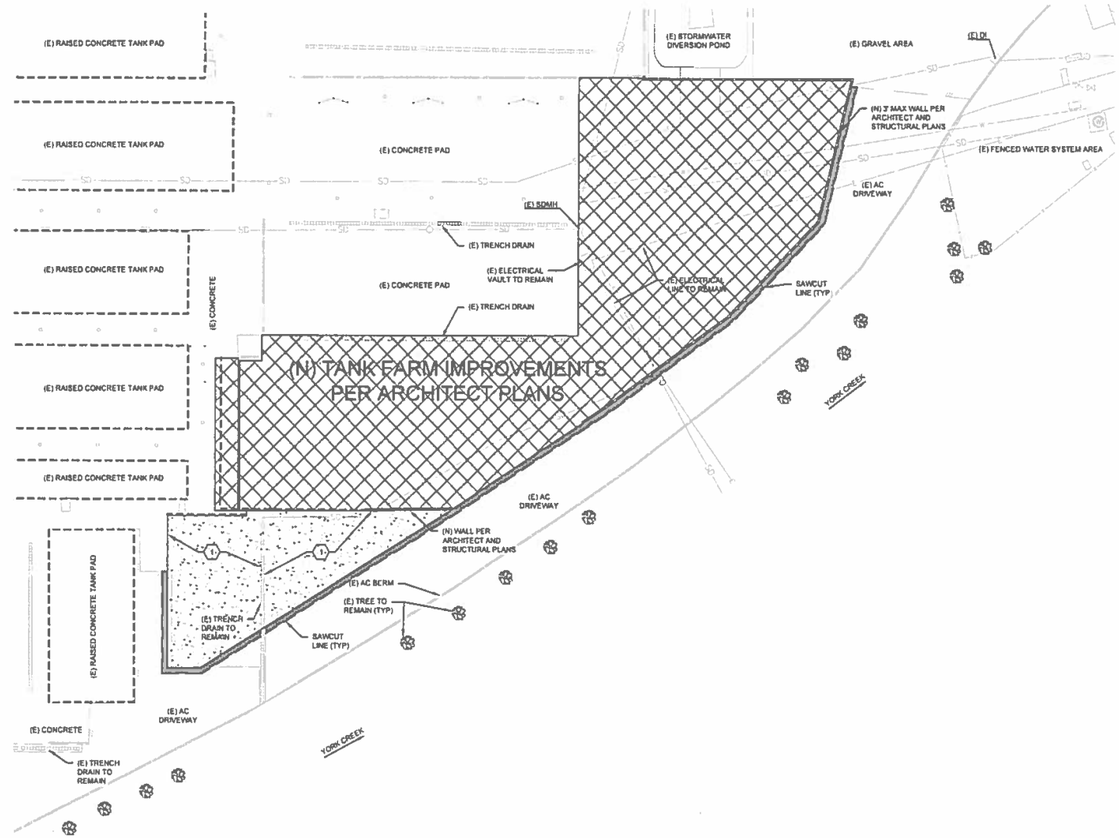


SCALE: 1 INCH = 20 FEET

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY ALBION SURVEYS, INC. 1113 HUNT AVENUE ST. HELENA, CA 94574 707.963.1237 DATED: 08.29.17 THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY.

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER RICHARD DOMINIC MONTEMAGNI NO. C 73733 CIVIL STATE OF CALIFORNIA

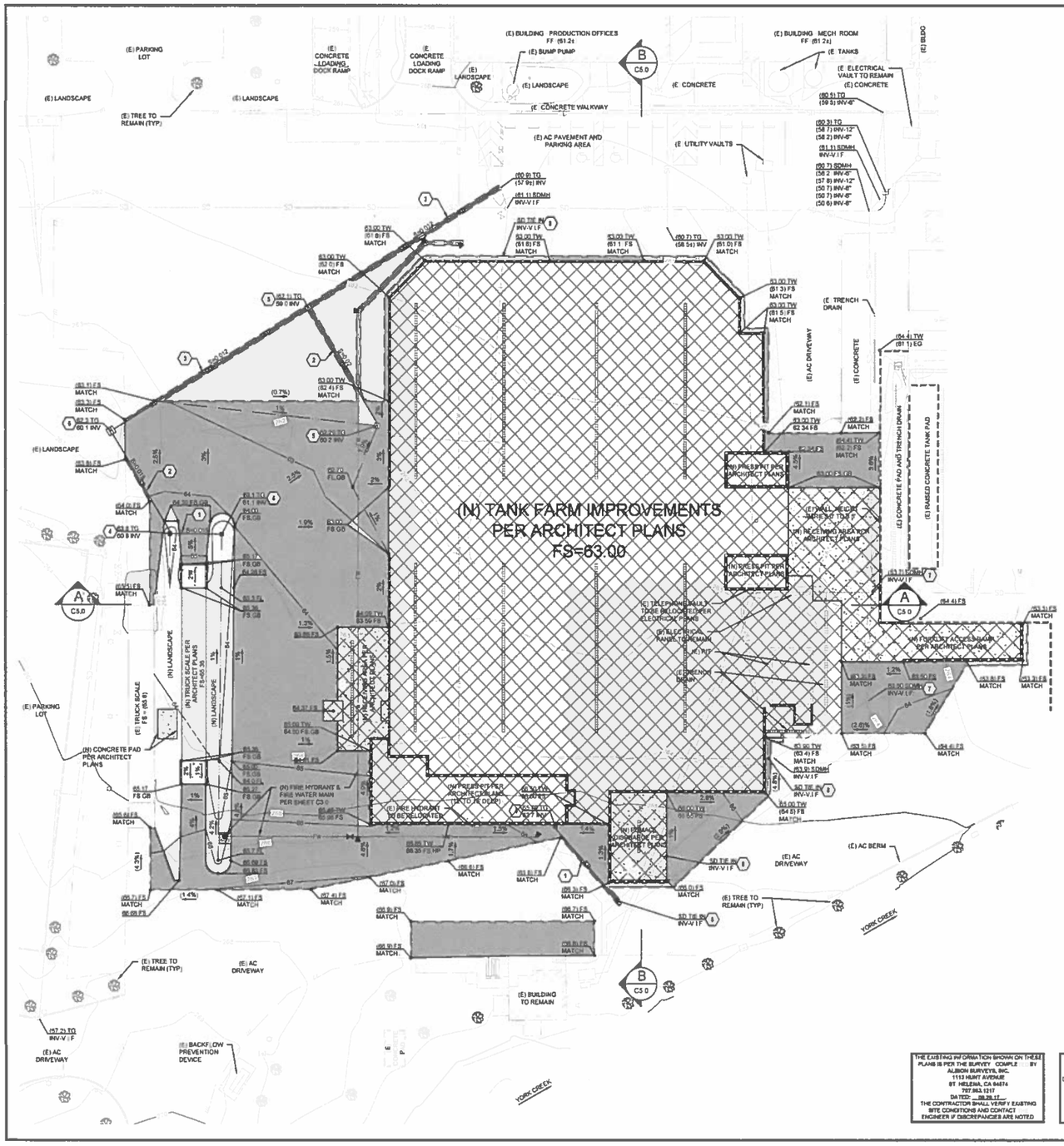
REVISIONS			
NO.	DATE	DESCRIPTION	BY

COFFMAN ENGINEERS
1939 Harrison Street, Suite 320
Oakland, California 94612
510.251.9578

ICON III
BERINGER VINEYARDS
1000 PRATT AVENUE, ST. HELENA, CA

DRAWING TITLE
SITE PLAN FOR NORTH TANK FARM EXPANSION

PROJECT NO.	SCALE:	DATE:	REVISION NO.
170154	AS SHOWN	02.15.17	
DESIGNED BY: RW	CHECKED BY:		DRAWING NO. C3.1
DRAWN BY: RW	REVIEWED BY:		



CONSTRUCTION NOTES

1. INSTALL 8" HDPE STORM DRAIN PIPE, "ADS, N-12" OR EQUAL, 2% MIN. OR AT SLOPE SHOWN IN TRENCH PER DETAIL 5 ON SHEET C5.0.
2. INSTALL 8" HDPE STORM DRAIN PIPE, "ADS, N-12" OR EQUAL, 2% MIN. OR AT SLOPE SHOWN IN TRENCH PER DETAIL 5 ON SHEET C5.0.
3. INSTALL 12" HDPE STORM DRAIN PIPE, "ADS, N-12" OR EQUAL, 2% MIN. OR AT SLOPE SHOWN IN TRENCH PER DETAIL 5 ON SHEET C5.0
4. INSTALL 18"x18" DROP INLET "JENSEN PRECAST" OR EQUAL WITH H-20 TRAFFIC RATED GRATE. MODIFY BASIN FOR DEPTH PER PLAN.
5. INSTALL 24"X24" DROP INLET "JENSEN PRECAST" OR EQUAL WITH H-20 TRAFFIC RATED GRATE. MODIFY BASIN FOR DEPTH PER PLAN.
6. INSTALL 36"X36" DROP INLET "JENSEN PRECAST" OR EQUAL WITH H-20 TRAFFIC RATED GRATE. MODIFY BASIN FOR DEPTH PER PLAN.
7. ADJUST MANHOLE TO FINISHED GRADE.
8. INSTALL STORM DRAIN POINT OF CONNECTION PER ARCHITECT AND PLUMBING PLANS. TIE INTO EXISTING STORM DRAIN WITH TEE, WYE OR COUPLING. MATCH EXISTING PIPE MATERIAL AND SIZE. INSTALL STORM DRAIN CLEANOUT ON UPSTREAM SIDE OF EXISTING STORM DRAIN OR WITHIN 5' OF NEW TANK FARM PER DETAIL 6 ON SHEET C5.0. FIELD VERIFY LOCATION, SIZE, MATERIAL AND DEPTH OF EXISTING STORM DRAIN. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

LEGEND

- NEW AC PAVEMENT
- NEW CONCRETE
- NEW IMPROVEMENTS PER ARCHITECT PLANS
- TREE
- LIGHT POLE
- VALVE
- FIRE HYDRANT
- TRENCH DRAIN
- EDGE OF PAVEMENT
- RETAINING WALL
- WALL BELOW GRADE
- ELECTRICAL
- FIRE WATER SERVICE
- STORM DRAIN/PROCESS WASTE
- TELEPHONE
- WATER

ABBREVIATIONS

AC	ASPHALT CONCRETE
BLDG	BUILDING
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TG	TOP OF GRATE
TYP	TYPICAL
W	WATER

SCALE: 1 INCH = 20 FEET

BENCH MARK

80D NAIL LOCATED 6-FEET SOUTHWESTERLY OF DIESEL FUEL TANK AND 8.5-FEET NORTHWESTERLY OF CHAIN LINK FENCE AT NORTH END OF SITE. ELEVATION 255.49 FEET (NAVD 88)

*ADD 200 FEET TO ALL DESIGN ELEVATIONS

BASMAA C.3 REQUIREMENTS FOR NEW IMPROVEMENTS

NEW IMPERVIOUS AREA 80,320± SF
REPLACED IMPERVIOUS AREA = 74,580± SF

REQUIRED STORMWATER VOLUME TO BE TREATED* = 1.3 MILLION GALLONS
ADDITIONAL CAPACITY OF EXISTING WASTEWATER POND 5 MILLION GALLONS

*BASMAA C.3 REQUIREMENTS ARE MET SINCE ALL STORMWATER INVEYED TO THE EXISTING WASTEWATER POND. SEE LETTER PREPARED BY KENNEDY JENKS.

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLE BY ALBION SURVEYS, INC. 1153 HUNT AVENUE ST. HELENA, CA 94574 707.963.1917 DATED 08.29.17 THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT ENGINEER IF DISCREPANCIES ARE NOTED

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR BEGINNING ANY CONSTRUCTION, THE SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER RICHARD WAYNE ROBERTSON NO. C 73783

REVISIONS			
NO.	DATE	DESCRIPTION	BY

COFFMAN ENGINEERS
1939 Harrison Street, Suite 320
Oakland, California 94612
510.251.9578

ICON III
BERINGER VINEYARDS
1000 PRATT AVENUE, ST. HELENA, CA

DRAWING TITLE
GRADING & DRAINAGE PLAN FOR SOUTH TANK FARM EXPANSION

PROJECT NO.	SCALE:	DATE:	REVISION NO.
170154	AS SHOWN	02.15.17	
DESIGNED BY: RW	CHECKED BY:		DRAWING NO. C4.0
DRAWN BY: RW	REVIEWED BY:		

CONSTRUCTION NOTES

1. INSTALL STORM DRAIN POINT OF CONNECTION PER ARCHITECT AND PLUMBING PLANS. TIE INTO EXISTING STORM DRAIN WITH TEE, WYE OR COUPLING. MATCH EXISTING PIPE MATERIAL AND SIZE. INSTALL STORM DRAIN CLEANOUT ON UPSTREAM SIDE OF EXISTING STORM DRAIN OR WITHIN 5' OF NEW TANK FARM PER DETAIL 6 ON SHEET C3.0. FIELD VERIFY LOCATION, SIZE, MATERIAL AND DEPTH OF EXISTING STORM DRAIN. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

LEGEND

- NEW AC PAVEMENT
- NEW CONCRETE
- NEW IMPROVEMENTS PER ARCHITECT PLANS
- TREE
- LIGHT POLE
- VALVE
- FIRE HYDRANT
- TRENCH DRAIN
- EDGE OF PAVEMENT
- RETAINING WALL
- WALL BELOW GRADE
- ELECTRICAL
- FIRE WATER SERVICE
- STORM DRAIN/PROCESS WASTE
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ABBREVIATIONS

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BASMAA C.3 REQUIREMENTS FOR NEW IMPROVEMENTS

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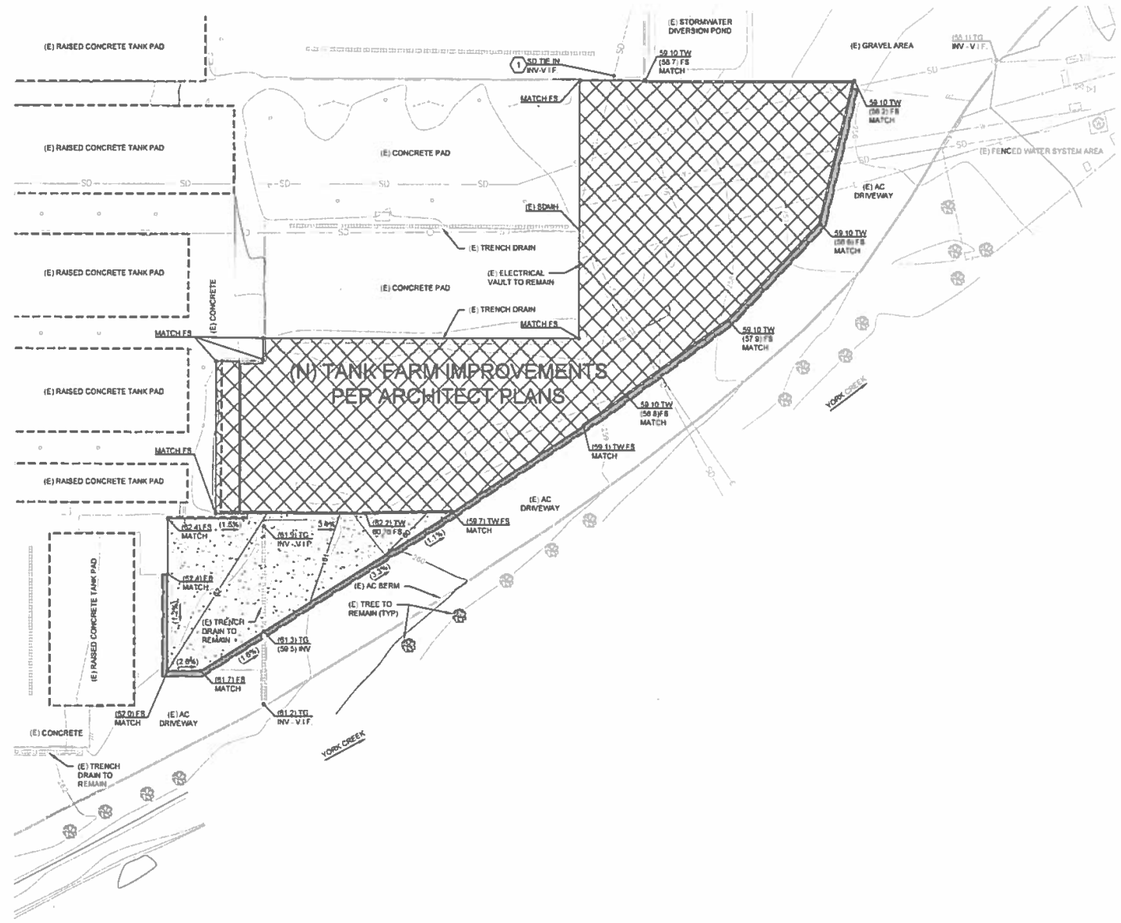
REPLACED IMPERVIOUS AREA = 74,590± SF

REQUIRED STORMWATER VOLUME TO BE TREATED* = 1.3 MILLION GALLONS
ADDITIONAL CAPACITY OF EXISTING WASTEWATER POND = 5 MILLION GALLONS

*BASMAA C.3 REQUIREMENTS ARE MET SINCE ALL STORMWATER IS CONVEYED TO THE EXISTING WASTEWATER POND. SEE LETTER PREPARED BY KENNEDY JENKS.



SCALE: 1 INCH = 20 FEET

BENCH MARK

80D NAIL LOCATED 6-FEET SOUTHWESTERLY OF DIESEL FUEL TANK AND 8.5-FEET NORTHWESTERLY OF CHAIN LINK FENCE AT NORTH END OF SITE. ELEVATION 255.49 FEET (NAVD 88)

*ADD 200 FEET TO ALL DESIGN ELEVATIONS

THE EXISTING INFORMATION SHOWN ON THESE PLANS IS PER THE SURVEY COMPLETED BY ALBION SURVEYS, INC. 1113 HUNT AVENUE ST. HELENA, CA 94574 707.963.1217 DATED 08.28.17. THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND CONTACT THE ENGINEER IF DISCREPANCIES ARE NOTED

UTILITY STATEMENT
LOCATION OF EXISTING UNDERGROUND UTILITIES HAVE BEEN TAKEN FROM DRAWINGS AND FIELD LOCATES SUPPLIED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EACH UTILITY

811 Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER RICHARD COMMUNE BOATWRIGHT No. C 73783 CIVIL STATE OF CALIFORNIA

REVISIONS

NO.	DATE	DESCRIPTION	BY

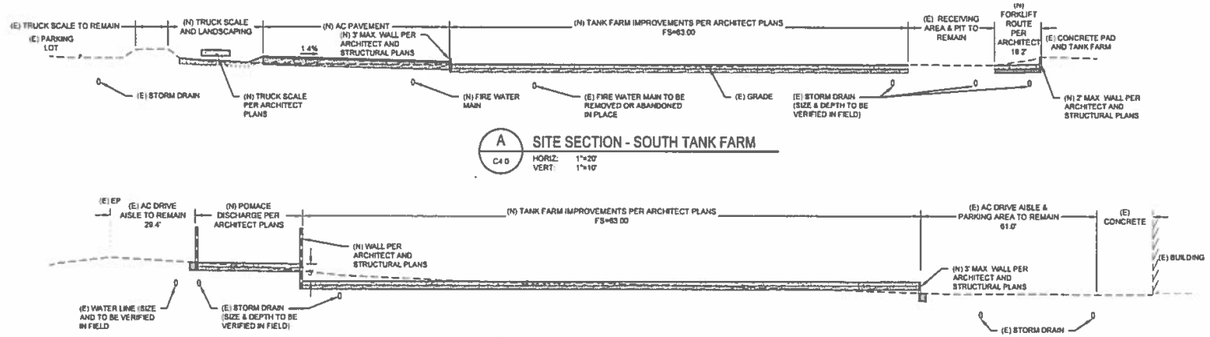
COFFMAN ENGINEERS
1936 Harrison Street, Suite 320
Oakland, California 94612
510.251.8578

ICON III
BERINGER VINEYARDS
1000 PRATT AVENUE, ST. HELENA, CA

DRAWING TITLE
GRADING & DRAINAGE PLAN FOR NORTH TANK FARM EXPANSION

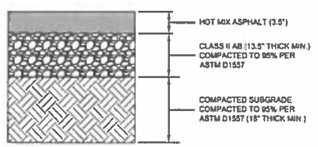
PROJECT NO.	SCALE:	DATE:	REVISION NO.
170154	AS SHOWN	02.15.17	

DESIGNED BY:	CHECKED BY:	DRAWING NO.
RW		C4.1
DRAWN BY: RW	REVIEWED BY:	



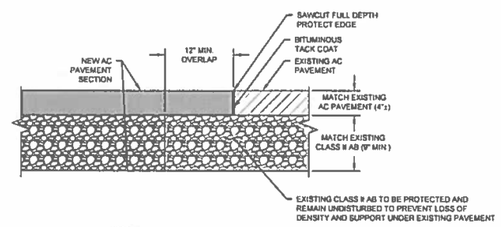
A C4.0 SITE SECTION - SOUTH TANK FARM
HORIZ: 1"=20'
VERT: 1"=10'

B C4.0 SITE SECTION - SOUTH TANK FARM
HORIZ: 1"=20'
VERT: 1"=10'



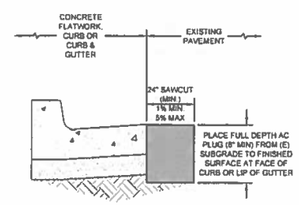
NOTES:
1. PER GEOTECHNICAL INVESTIGATION FOR A TRAFFIC INDEX (T.I.) OF 8.5.
2. REFER TO AC CONFORM DETAIL 3, THIS SHEET, FOR PAVING RECOMMENDATIONS FOR MINIMAL WIDTHS.

1 C3.0/C3.1 AC PAVEMENT SECTION
SCALE: NTS

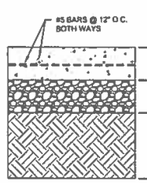


NOTE:
REFER TO AC PAVEMENT SECTION DETAIL 1, THIS SHEET, FOR DIMENSIONS, SUBGRADE PREPARATION AND OTHER REQUIREMENTS.

2 C3.0/C3.1 AC PAVEMENT SAWCUT/CONFORM
SCALE: NTS

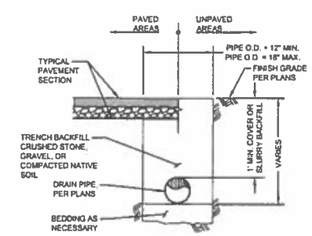


3 C3.0/C3.1 AC CONFORM
SCALE: NTS



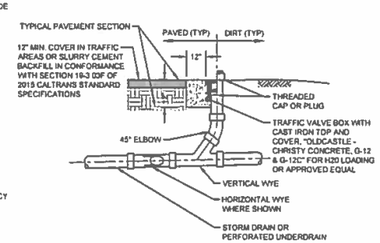
NOTES:
1. PROVIDE EXPANSION JOINTS AND DOWELS (INTO CONCRETE CURB, SIDEWALK OR PAVEMENT) PER CITY STANDARDS AND SPECIFICATIONS.
2. CONFIRM RECOMMENDATIONS WITH STRUCTURAL PLANS.

4 C3.0/C3.1 CONCRETE FLATWORK SECTION
SCALE: NTS

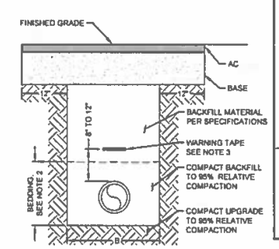


NOTES:
1. ALL WORK WITHIN PUBLIC RIGHT-OF-WAY TO COMPLY WITH LOCAL AGENCY STANDARDS.
2. EXCAVATION, BACKFILL AND PIPE BEDDING IN CONFORMANCE WITH SECTIONS 19 & 64 OF THE 2015 CALTRANS STANDARD SPECIFICATIONS.
3. THE PIPE SHALL BE LAID IN A TRENCH EXCAVATED TO THE LINES AND GRADES ESTABLISHED BY THE ENGINEER. THE BOTTOM OF THE TRENCH SHALL BE GRADED AND PREPARED TO PROVIDE A FIRM AND UNIFORM BEARING THROUGHOUT THE ENTIRE LENGTH OF THE PIPE.
4. BACKFILL WITH 5-SACK SLURRY CEMENT IN PAVEMENT AREAS WHERE THERE IS LESS THAN 1 FOOT COVER TO SUBGRADE.

5 C4.0/C4.1 STORM DRAIN TRENCH
SCALE: NTS



6 C4.0/C4.1 STORM DRAIN CLEANOUT
SCALE: NTS



NOTES:
1. MINIMUM TRENCH DEPTHS AND TRENCH WIDTH MUST BE ADHERED TO UNLESS APPROVED BY THE CITY
2. OVER-EXCAVATING FOR BEDDING IS NOT REQUIRED UNLESS:
   A) BOTTOM OF TRENCH EXCAVATION IS IN BEDROCK, WHERE BEDDING SHALL BE 6" THICK SAND OR PEA GRAVEL AND 6" ABOVE TOP OF PIPE.
   B) REQUIRED BY THE CITY REPRESENTATIVE. BEDDING SHALL BE THE SAME AS BACKFILL MATERIAL PER SPECIFICATIONS AND SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.
3. WARNING TAPE SHALL BE 6" WIDE, BLUE COLORED FOR LPW, NON-DETECTABLE TYPE. INSCRIPTION MESSAGE, USING 1.5" MINIMUM HEIGHT BLACK TEXT, SPACED AT 3-FT MAXIMUM INTERVALS, SHALL READ "CAUTION: WATER LINE BELOW" FOR LPW WARNING TAPE SHALL OVERLAP 12" MINIMUM AT SPLICES.
4. TRENCH CONSTRUCTION SHALL CONFORM TO OSHA AND CAL OSHA.

NOMINAL PIPE DIAMETER	MINIMUM TRENCH DEPTH (A)	MINIMUM TRENCH WIDTH (B)
1", 2"	24"	12"
4", 6", 8", 10"	40"	16"
12"	44"	24"

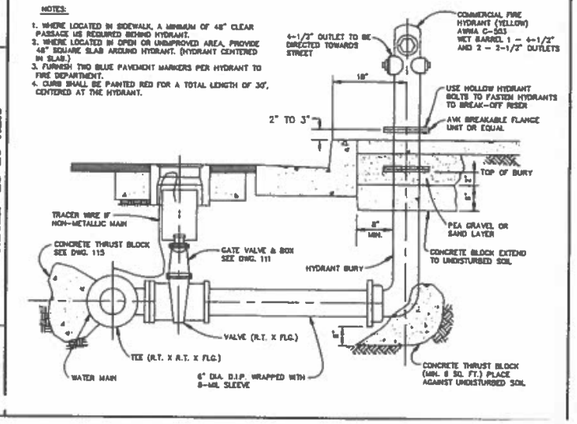
7 C3.0 UTILITY TRENCH
SCALE: NTS

SCALE: NONE
DRAWN: DRH
CHK:
APPVD:

CITY OF ST. HELENA
FIRE HYDRANT

DATE: JUNE 1993
STD. NO. 101

NOTES:
1. WHERE LOCATED IN SIDEWALK, A MINIMUM OF 48" CLEAR PASSAGE IS REQUIRED BEHIND HYDRANT.
2. WHERE LOCATED IN OPEN OR UNIMPROVED AREA, PROVIDE 48" SQUARE SLAB AROUND HYDRANT. (HYDRANT CENTERED IN SLAB.)
3. FURNISH TWO BLUE PAVEMENT MARKERS PER HYDRANT TO FIRE DEPARTMENT.
4. CURB SHALL BE PAINTED RED FOR A TOTAL LENGTH OF 30', CENTERED AT THE HYDRANT.

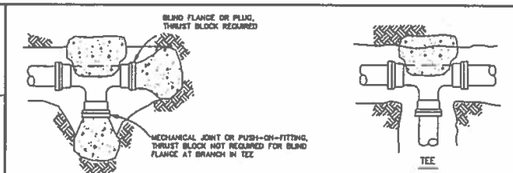


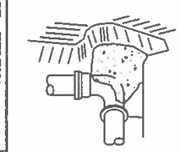
8 C3.0 FIRE HYDRANT
SCALE: NTS

SCALE: NONE
DRAWN: CKM
CHK: TMS
APPVD: MSD

CITY OF ST. HELENA
CONCRETE THRUST BLOCKING

DATE: JUNE 1993
STD. NO. 115





BEND

TYPICAL CONCRETE BLOCKING SHOWN IN PERSPECTIVE

NOTES:
1. SAFE BEARING LOAD OF SOIL FOR HORIZONTAL THRUST SHALL NOT BE EXCEEDED.
2. CONCRETE BLOCKING, CAST IN PLACE, TO EXTEND FROM BELLS OF FITTINGS TO UNDISTURBED SOIL AND ENTIRE BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
3. IN USING THE THRUST BLOCKING TABLE BELOW, ASSUME 2000 P.S.F. BEARING CAPACITY UNLESS OTHERWISE SHOWN ON THE PLANS. THE DESIGN ENGINEER SHALL SPECIFY THRUST BLOCKING REQUIREMENTS FOR ALL OTHER SOIL BEARING CONDITIONS.
4. FOR PLUGGED LEG(S) OF TEE OR CROSS, USE HARNESS TYPE BLOCKING AS SHOWN ON STD. DWG. 112 AND CONCRETE BLOCKING INDICATED IN TABLE BELOW.
5. 6-SACK CONCRETE REQUIRED.

MIN. REQ'D. BEARING AREA IN SQ. FT. PER 100 P.S.I. TEST PRESSURE *

PIPE SIZE	SOIL BEARING CAPACITY	HARNESS BLOCKS	TEE'S & DEAD ENDS	90° BENDS	45° BENDS	22-1/2° BENDS
6"	1000 2000	4 2	4 2	8 3	3 2	2 1
8"	1000 2000	7 4	7 4	10 5	5 3	3 2
12"	1000 2000	16 8	16 8	22 11	12 6	6 3
14"	1000 2000	22 11	22 11	30 15	16 8	18 4
16"	1000 2000	28 14	28 14	42 21	21 14	14 7

9 C3.0 THRUST BLOCKING
SCALE: NTS

REVISIONS

NO.	DATE	DESCRIPTION	BY

COFFMAN ENGINEERS
1939 Harrison Street Suite 320
Oakland, California 94612
510.251.8578

ICON III
BERINGER VINEYARDS
1000 PRATT AVENUE, ST. HELENA, CA

DRAWING TITLE
DETAILS AND SITE SECTIONS

REGISTERED PROFESSIONAL ENGINEER
RICHARD MOONEY WOOTEN
NO. C 73743
CIVIL
STATE OF CALIFORNIA

PROJECT NO.	SCALE:	DATE:	REVISION NO.
170154		02.15.17	
DESIGNED BY: RW		CHECKED BY:	DRAWING NO.
DRAWN BY: RW		REVIEWED BY:	C5.0

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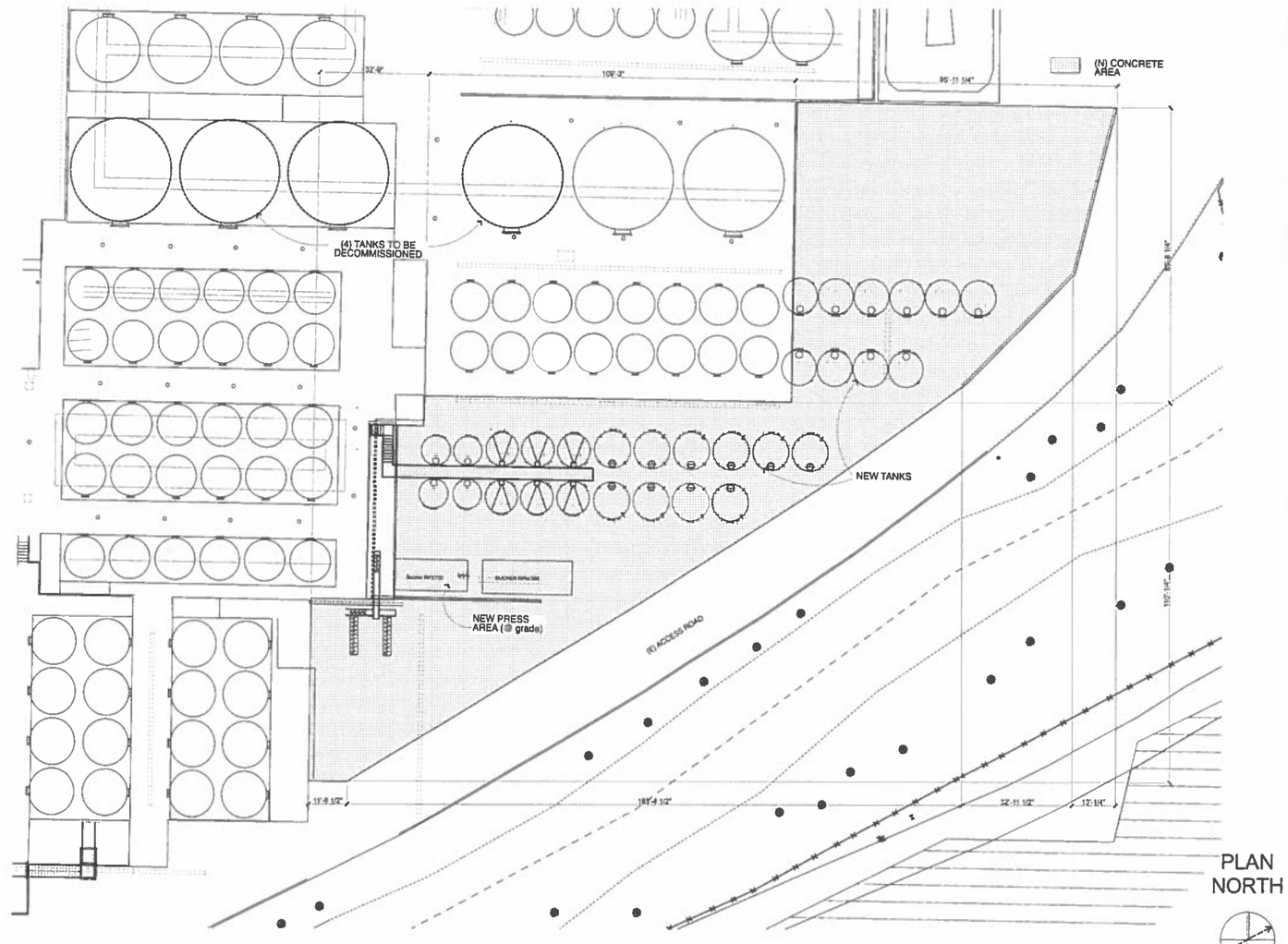

1 FLOOR PLAN @ EAST TANK FARM
SCALE: 1/16" = 1'-0"

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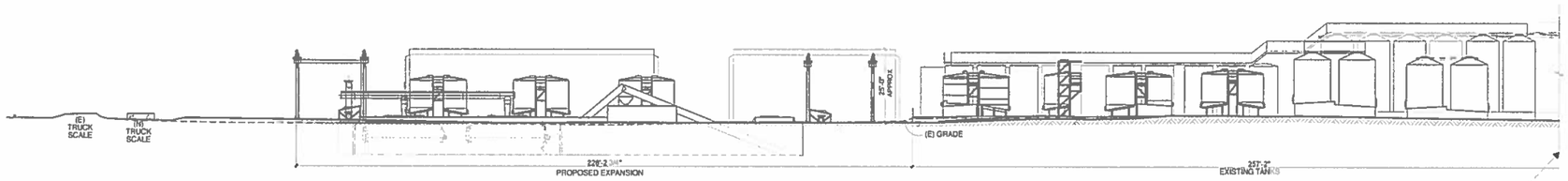
HALL&BARTLEY
ARCHITECTURE AND PLANNING

BERINGER VINEYARDS
ICON III
1000 PRATT AVE
ST HELENA NAPA COUNTY CALIFORNIA

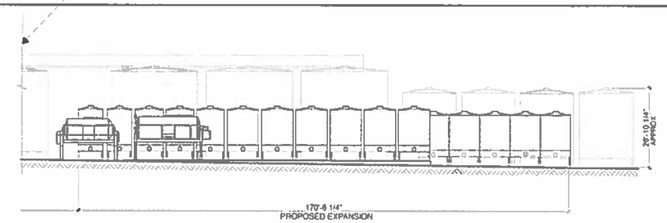
FLOOR PLAN @ EAST TANK FARM

PROJECT	1614
DRAWN	AM
CHECK	SPB
SCALE	AS NOTED
DATE	2/16/17

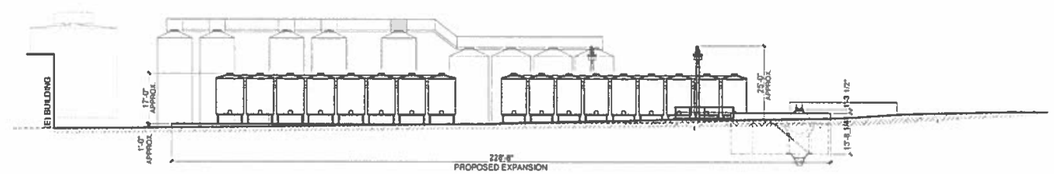
A1.1



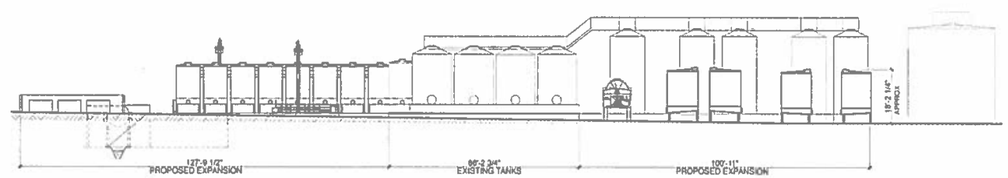
1 SOUTH ELEVATION @ WEST TANK FARM
SCALE: 1" = 20'



2 SOUTH ELEVATION @ EAST TANK FARM
SCALE: 1" = 20'



3 WEST ELEVATION
SCALE: 1" = 20'



4 EAST ELEVATION
SCALE: 1" = 20'

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ARCHITECTURE AND PLANNING

BERINGER VINEYARDS
ICON III
1000 PRATT AVE
ST HELENA NAPA COUNTY CALIFORNIA

OVERALL EXTERIOR ELEVATIONS

PROJECT	1614
DRAWN	AM
CHECK	SPB
SCALE	AS NOTED
DATE	3/28/17

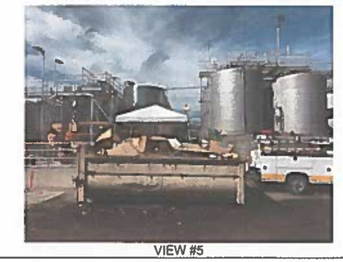
A2.0

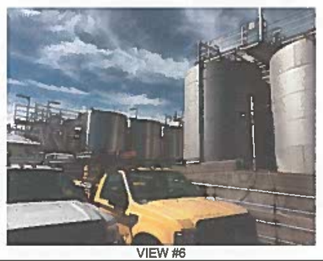
VIEW #1

VIEW #2

VIEW #3

VIEW #4


VIEW #5


VIEW #6

VIEW #7

VIEW #8

VIEW #9

VIEW #10

VIEW #11

VIEW #12

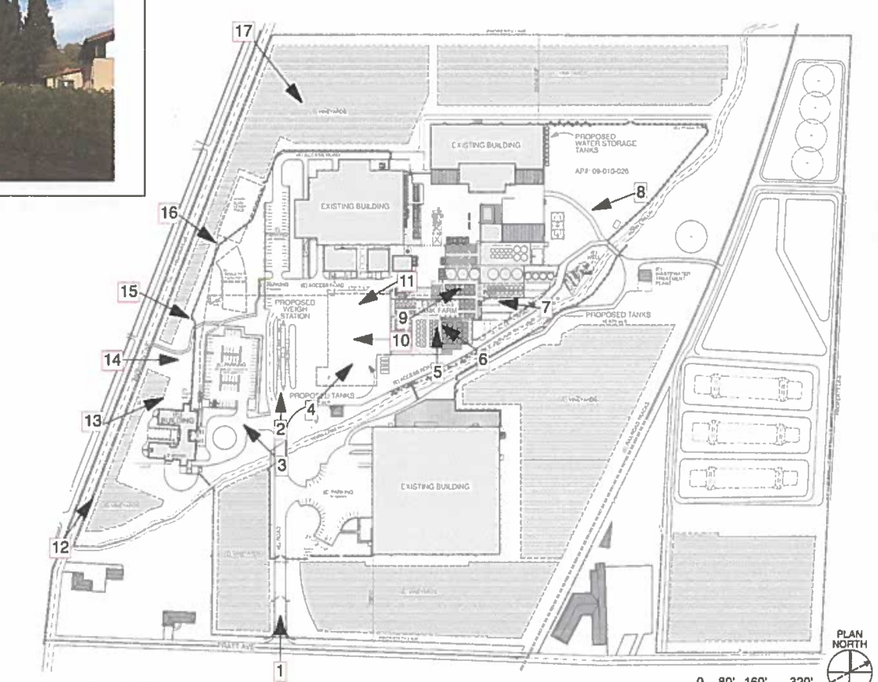
VIEW #13

VIEW #14

VIEW #15

VIEW #16

VIEW #17



1 KEY SITE PLAN
SCALE: 1:1920

HALL&BARTLEY
ARCHITECTURE AND PLANNING

BERINGER VINEYARDS
ICON III
1000 PRATT AVE
ST HELENA NAPA COUNTY CALIFORNIA

KEY SITE PLAN & PHOTOS

PROJECT	1614
DRAWN	AM
CHECK	SPB
SCALE	AS NOTED
DATE	2/16/17

A2.1

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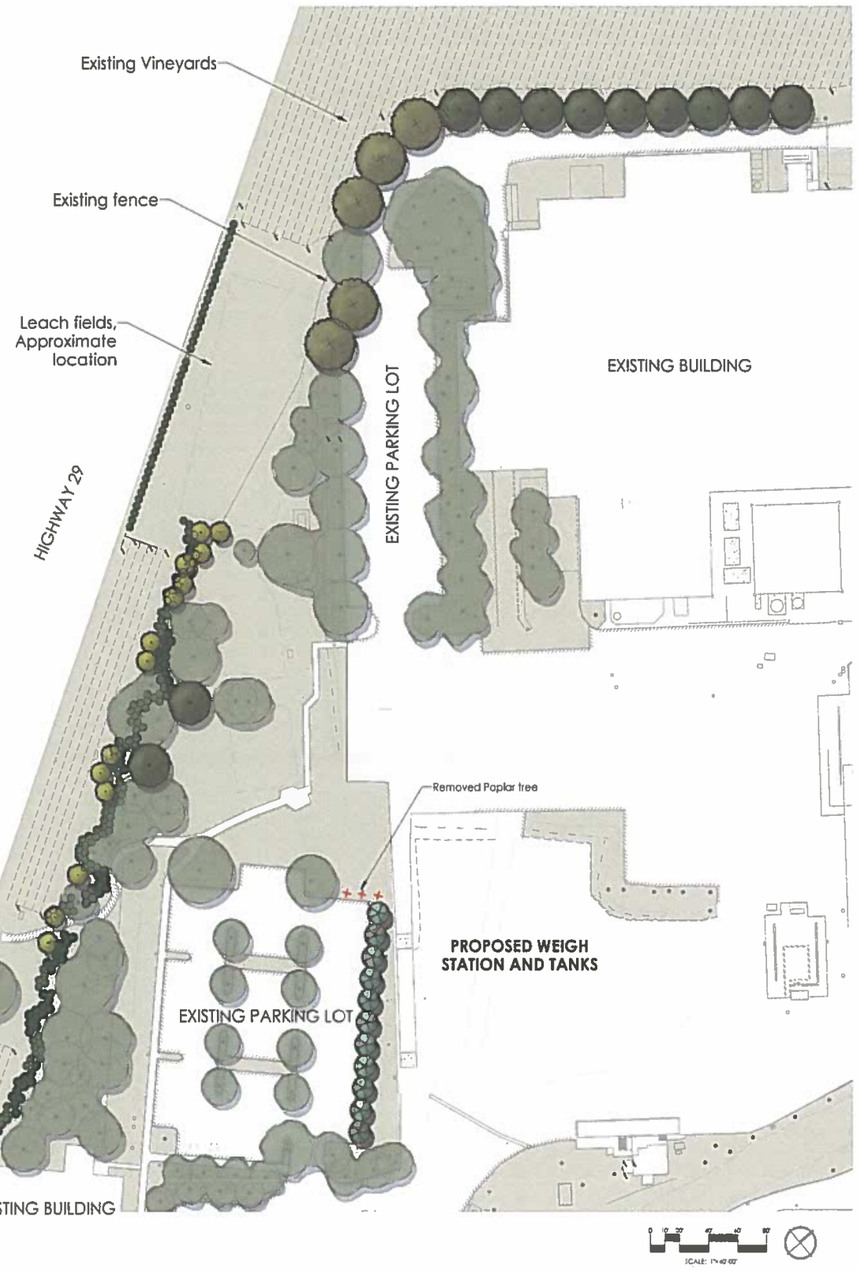


PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	SIZE	WATER USE	QTY
	ACE ARM	ACER RUBRUM 'ARMSTRONG' Armstrong Red Maple	24"BOX	MEDIUM	11
	CAL DEC	CALOCEDRUS DECURRENS Incense Cedar	15 GAL	MEDIUM	14
	PLA COL	PLATANUS X ACERIFOLIA 'COLUMBIA' London Plane Tree	24"BOX	MEDIUM	5
	QUE AGR	QUERCUS AGRIFOLIA Coast Live Oak	24"BOX	LOW	11
SHRUBS	CODE	BOTANICAL NAME	SIZE	WATER USE	QTY
	MYR CAL	MYRICA CALIFORNICA Pacific Wax Myrtle	5 GAL	MEDIUM	81
	RHA CAL	RHAMNUS CALIFORNICA California Coffee Berry	5 GAL	LOW	137
EXISTING PLANTING		Existing Trees (Variety of Species)			

PLANT PALLET

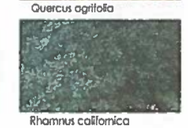
Acer rubrum 'Armstrong'

Calocedrus decurrens

Platanus x acer. 'Columbia'

Quercus agrifolia

Myrica californica


Rhamnus californica

MWELO

ETWU (Estimated Total Water Use)

Valve #	Plant Type	Plant Factor	Irrigation Method	Irrigation Efficiency	ETAF (PF/IE)	Area (ft²)	ETAF x Area	ETWU (Eto)(0.62)(ETAF)(Area)
A-1	Tree-M	0.5	RWS	0.81	0.62	9,200	5,679	155,276
A-2	Tree-L	0.2	RWS	0.81	0.25	7,766	1,918	52,429
A-3	Low	0.2	Drip	0.81	0.25	2,603	643	17,573
A-4	Med	0.5	Drip	0.81	0.62	2,268	1,400	38,279
					0.38	**21,837**	**8,239**	**225,278**

MAWA (Maximum Applied Water Allowance)

	Eto	0.62	ETAF	Area (ft²)	MAWA (Eto)(0.62)(ETAF)(Area)
	44.1	0.62	0.45	21,837	**268,680**

The ETWU (225,278) is less than the MAWA (268,680), therefore this design complies with the California Code of Regulations Title 23, Waters - Model Water Efficient Landscape Ordinance.

Meets MWELO Requirements? **YES**

ETWU Check

Eto	0.62	Average ETAF	Area	TOTAL	Correct?
44.1	0.62	0.38	21,837	225,278	YES

MAWA Check

Eto	0.62	ETAF	Area	TOTAL	Correct?
44.1	0.62	0.45	21,837	268,680	YES

IRRIGATION STATEMENT

All irrigation will be designed to meet Napa County Water Efficient Landscape Ordinance and will contain the following components:

- The irrigation system will be designed and installed to meet irrigation efficiency described in the maximum applied water allowance.
- Weather based, self-adjusting irrigation controller with a rain sensor.
- Emitters to include-subsurface drip irrigation and Root zone bubblers for trees.
- Trees to be placed on separate valves.
- Isolation valves to be installed at point of connection and before each valve or manifold.
- Pressure regulation to be installed.
- Separate valves to be installed to irrigate zones of med and low water use plantings.
- Check valves will be installed to prevent low point drainage.
- No spray irrigation is to be installed.

HALL & BARTLEY
ARCHITECTURE AND PLANNING

BERINGER VINEYARDS
1000 PRATT AVENUE
ST HELENA NAPA COUNTY CALIFORNIA

PLANTING CONCEPT PLAN

PROJECT	1614
DRAWN	JB
CHECK	WM
SCALE	AS NOTED
DATE	11/03/16

L1.0

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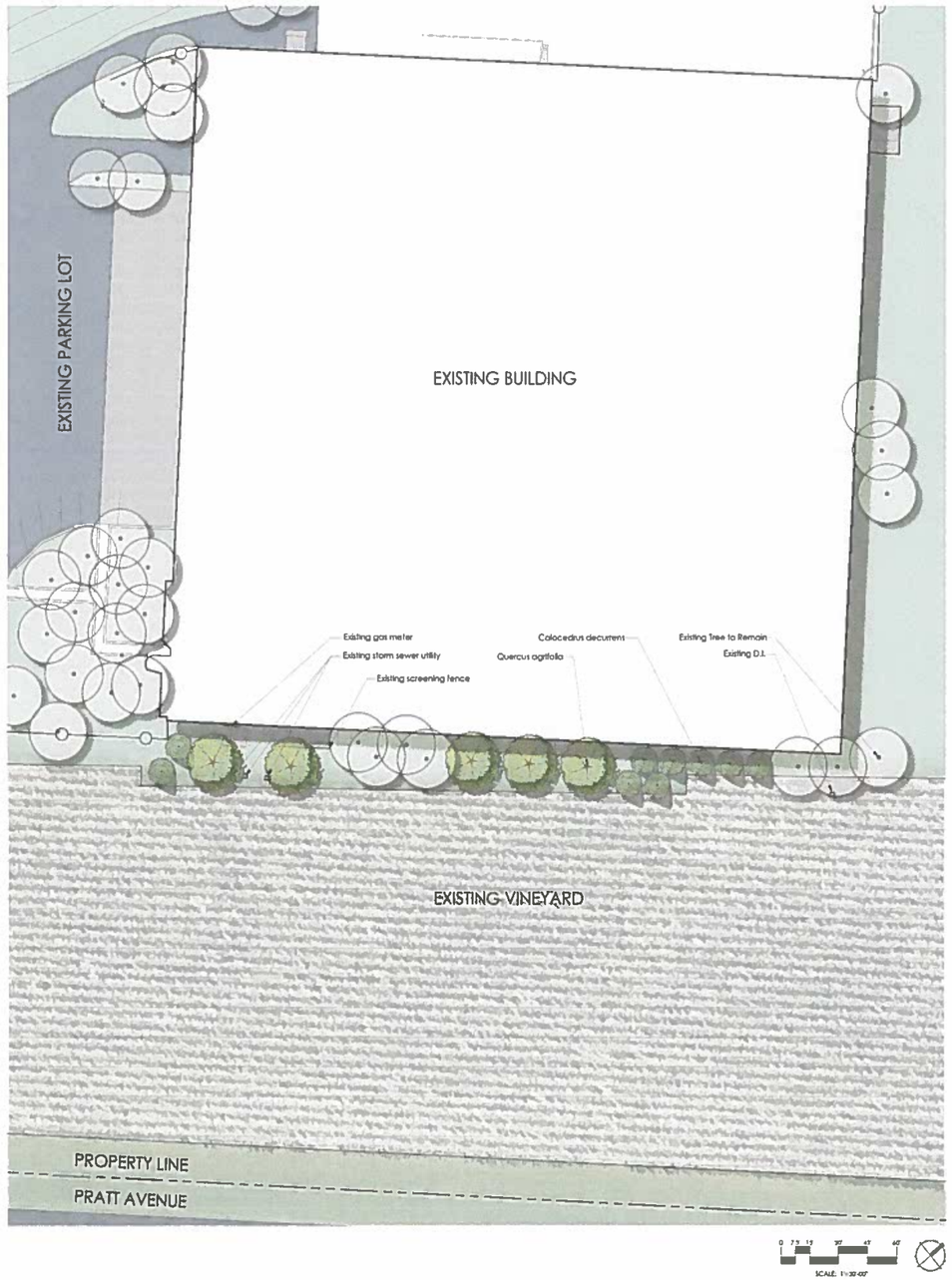

PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	SIZE	WATER USE	QTY
	CAL DEC	Calocedrus decurrens Incense Cedar	15 gal	Medium	9
	(E)	Existing Tree to Remain Species Varies	Existing	N/A	61
	QUE AGR	Quercus agrifolia Coast Live Oak	24"box	Very Low	5

PLANT PALETTE

Calocedrus decurrens

Quercus agrifolia

MWELO

ETWU (Estimated Total Water Use)

Valve #	Plant Type	Plant Factor	Irrigation Method	Irrigation Efficiency	ETAF (PF/IE)	Area (ft²)	ETAF x Area	ETWU (Eto)(0.62)(ETAF)(Area)
A-1	Tree-M	0.5	RWS	0.8	0.62	162	100	2,734
A-2	Tree-VL	0.1	RWS	0.8	0.12	90	11	304
					0.44	252	111	3,038

MAWA (Maximum Applied Water Allowance)

	Eto	0.62	ETAF	Area (ft²)	MAWA (Eto)(0.62)(ETAF)(Area)
	44.1	0.62	0.45	252	3,101

The ETWU (3,038) is less than the MAWA (3,101), therefore this design complies with the California Code of Regulations Title 23, Waters - Model Water Efficient Landscape Ordinance.

IRRIGATION STATEMENT

All irrigation will be designed to meet Napa County Water Efficient Landscape Ordinance and will contain the following components:

- The irrigation system will be designed and installed to meet irrigation efficiency described in the maximum applied water allowance.
- Weather based, self-adjusting irrigation controller with a rain sensor.
- Emitters to include root zone bubblers for trees.
- Trees to be placed on separate valves per water use requirements.
- Isolation valves to be installed at point of connection and before each valve or manifold.
- Pressure regulation to be installed.
- Separate valves to be installed to irrigate zones of med and low water use plantings.
- No spray irrigation is to be installed.

HALL&BARTLEY
ARCHITECTURE AND PLANNING

BERINGER VINEYARDS
ICON III
1000 PRATT AVE
NAPA COUNTY
ST HELENA CALIFORNIA

SCHEMATIC PLANTING PLAN

PROJECT	1614
DRAWN	CL
CHECK	WM
SCALE	AS NOTED
DATE	3/16/17

L1.1

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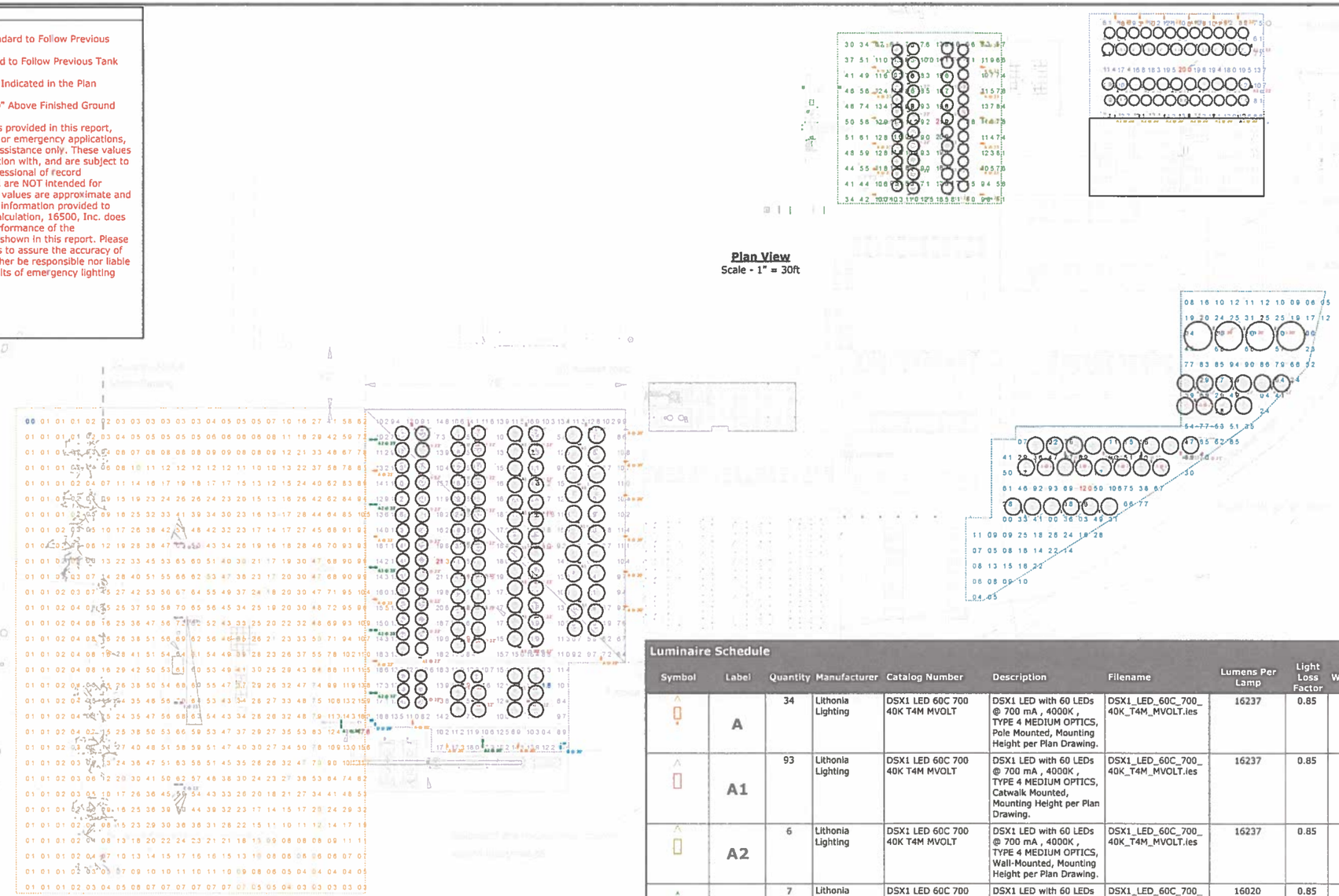
Note

Notes:
Reflectances: 50/50/33 Standard to Follow Previous Tank Calculations
Tank Height: 10'-0" Standard to Follow Previous Tank Calculations
Luminaire Mounting Height: Indicated in the Plan Drawing
Calculation Grid Height: 0'-0" Above Finished Ground

Luminaire illuminance values provided in this report, whether for normal, critical, or emergency applications, are for product application assistance only. These values were developed in collaboration with, and are subject to approval by, the design professional of record (architect/engineer/LC), and are NOT intended for construction. Because these values are approximate and based on limited application information provided to 16500, Inc. at the time of calculation, 16500, Inc. does not warrant the installed performance of the luminaire(s) will match that shown in this report. Please verify all data and conditions to assure the accuracy of the report. 16500 shall neither be responsible nor liable for design, approval, or results of emergency lighting under any circumstances.



Plan View
Scale - 1" = 30ft

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
(E) Equip Area	+	9.3 fc	21.9 fc	1.7 fc	12.9:1	5.5:1
Future Wine Storage Area 0'-0" AFG	+	10.8 fc	20.0 fc	2.1 fc	9.5:1	5.1:1
Ground	+	2.9 fc	17.6 fc	0.0 fc	N/A	N/A
Icon III 25 Ton Tankfarm 0'-0" AFG	+	3.7 fc	12.0 fc	0.0 fc	N/A	N/A
Tank Area Ground 0'-0" AFG	+	11.4 fc	21.3 fc	1.8 fc	11.8:1	6.3:1

Luminaire Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	34	Lithonia Lighting	DSX1 LED 60C 700 40K T4M MVOLT	DSX1 LED with 60 LEDs @ 700 mA , 4000K , TYPE 4 MEDIUM OPTICS, Pole Mounted, Mounting Height per Plan Drawing.	DSX1_LED_60C_700_40K_T4M_MVOLT.ies	16237	0.85	131
	A1	93	Lithonia Lighting	DSX1 LED 60C 700 40K T4M MVOLT	DSX1 LED with 60 LEDs @ 700 mA , 4000K , TYPE 4 MEDIUM OPTICS, Catwalk Mounted, Mounting Height per Plan Drawing.	DSX1_LED_60C_700_40K_T4M_MVOLT.ies	16237	0.85	131
	A2	6	Lithonia Lighting	DSX1 LED 60C 700 40K T4M MVOLT	DSX1 LED with 60 LEDs @ 700 mA , 4000K , TYPE 4 MEDIUM OPTICS, Wall-Mounted, Mounting Height per Plan Drawing.	DSX1_LED_60C_700_40K_T4M_MVOLT.ies	16237	0.85	131
	A2	7	Lithonia Lighting	DSX1 LED 60C 700 40K T3M MVOLT	DSX1 LED with 60 LEDs @ 700 mA , 4000K , TYPE 3 MEDIUM OPTICS	DSX1_LED_60C_700_40K_T3M_MVOLT.ies	16020	0.85	262
	D	2	Lithonia Lighting	DSX1 LED 60C 700 40K T3M MVOLT	DSX1 LED with 60 LEDs @ 700 mA , 4000K , TYPE 3 MEDIUM OPTICS	DSX1_LED_60C_700_40K_T3M_MVOLT.ies	16020	0.85	262
	E	4	Lithonia Lighting	DSX1 LED 60C 700 40K T3M MVOLT	DSX1 LED with 60 LEDs @ 700 mA , 4000K , TYPE 3 MEDIUM OPTICS	DSX1_LED_60C_700_40K_T3M_MVOLT.ies	16020	0.85	262

5

Project: Beringer Icon III
Client: Art Knight | Knights' Electric Inc | V.707-696-2571 | C.707-433-6931 | www.knightselectric.com

Designer
Taka Tarra Kaplan
Date
9/26/2016
Scale
As Indicated
Rv No.
Rv 01
Summary

1 of 1

Order No.: 602369-TO

LEGAL DESCRIPTION

EXHIBIT "A"

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

TRACT ONE

Parcel B, as shown on that certain Parcel Map of a portion of property of Doreen R. Quaglia, et al filed June 7, 1971 in Book 3 of Parcel Maps, #2054 at page 8 in the office of the Recorder of Napa County.
APN: 009-010-025

TRACT TWO

PARCEL ONE:
Commencing at the point formed by the intersection of the Northeastern line of the State Highway running from St. Helena to Calistoga with the Southeastern line of the lands of Moffit, formerly Krug; thence along the Northeasterly line of said right of way South 39° 30' East 1385 feet more or less to the center of York Creek; thence northerly down the center line of York Creek, following all its meanderings to the most northern corner of the 15.27 acre tract heretofore conveyed by David Hudson to Margaret S. Potts by deed of record in Volume "N" of Deeds at page 218, said Napa County Records; thence leaving said creek and running along the Northeasterly line of the land so conveyed to Potts above referred to, South 61° east 700.92 feet, more or less, to the Northwesterly line of Hudson Street; thence along said line of Hudson Street, North 28° East to the point of intersection thereof with the Northeasterly line of the right of way of the Southern Pacific Railroad Company; thence along said Northeasterly line of said railroad right of way North 34 1/2° West 465 feet; thence leaving said right of way South 58° 35' East 413 feet to a point on the Northwesterly line of Hudson Street; thence along said line of Hudson Street North 28° East 590.6 feet to the most Southern corner of the 16.02 acre tract conveyed to Emil Zange by deed of record in Volume "Z" of Deeds, at page 4 said Napa County Records; thence along said Zange's Southwestern line and the prolongation thereof North 58° 45' West 1653.26 feet to the Southwestern corner of that certain 7.25 acre parcel conveyed to Joseph A. Varozza by deed of record in Volume 64 of Official Records, at page 467, said Napa County Records; said point being on the Southeasterly line of the lands formerly of Krug now of Moffitt; thence along said Southeasterly line of said Moffitt South 28° West 1596.70 feet to the point of commencement.

Excepting therefrom, however, the right of way lands of the Southern Pacific Railroad Company.

Also excepting therefom the following:

Commencing at a point on the Northeasterly line of the 15.27 acre tract of land conveyed to David Hudson to Margaret S. Potts by deed of record in Volume "N" of Deeds at page 218, said Napa County Records, which said point is north 61° 00' West and 20.00 feet distant from the intersection of said line with the Northwesterly line of Pratt Avenue (formerly Hudson Street), and running thence South 61° 00' East 20.00 feet to a point in said line of Pratt Avenue, which said point is also the intersection of said Northwesterly line of Pratt Avenue with the Southwesterly right of way line of the Southern Pacific Railroad Company; thence North 34° 48' West and along said land mentioned line 22.10 feet, and thence North 30° 00' East 9.76 feet to the point of commencement as conveyed to the City of St. Helena, a politicial subdivision by Deed recorded October 5, 1960 in Book 619 of Official Records page 417, Napa County Records.

Also Excepting Therefrom:

Parcel A as shown on that certain Parcel Map of a portion of property of Premium Wines, Inc., filed June 22, 1971 in Book 3 of Parcel Maps, at Page 12 in the Office of the Recorder of Napa County, as conveyed by Deed to Doreen R. Quaglia, Lois Bettini and Rose Bettini Recorded June 22, 1971 in Book 853 of Official Records, page 318, Napa County Records.

PARCEL TWO:
Parcel A as shown on that certain Parcel Map of a portion of property of Doreen R. Quaglia, et al filed June 7, 1971 in Book 3 of Parcel Maps, #2054 at Page 8 in the office of the Recorder of Napa County.
APN: 009-010-026

TRACT THREE

Commencing on the southwesterly line of Main Street, in the City of St. Helena at the most easterly corner of the tract of land heretofore conveyed to Charles Carpy by deed dated June 14, 1894 and of record in Book 53 of Deeds, at page 167 records of said Napa County; thence South 39 1/2° East along the said southwesterly line of Main Street 357 feet to a point distant North 39 1/2° West 17 feet from the center of the northerly post of the northerly entrance gate of the Beringer Wine Cellar; thence South 44 3/4° West 266 feet; thence along an old picket fence North 41 3/4° West 270 feet to the southeastern line of the tract of land heretofore conveyed to Charles Carpy as aforesaid; North 28° East along last mentioned line, 295 feet to the point of commencement. Being a portion of the Carne Humana Rancho.

APN: 009-131-006

TRACT FOUR

PARCEL ONE:
Commencing on the Southwesterly side of Main Street in the Town of St. Helena, at a point which bearn N. 39 1/2° W. 6 feet distant from the most Northerly corner of the tract of land conveyed by J. L. Beringer to F. Beringer, by deed dated June 6, 1891 and of record in Liber 47 of Deeds, page 324, Napa County Records; thence from said point of beginning N. 39 1/2° W. along the said Southwesterly side of Main Street 459 feet to the Southerly side of the base stone of the Southerly post of the Northerly entrance gate to the Beringer Wine Cellar; thence S. 44 3/4° W. 137 1/2 feet; thence S. 28 3/4° W. 38 1/2 feet; thence S. 5 3/4° W. 147 feet; thence S. 39 1/2° E. 308 1/2 feet to a stake on the Northerly side of a small drainage ditch, and three feet from the center thereof; thence North 55 1/4° East along the Northerly side of said ditch and three feet from the center thereof 273 feet, to the place of beginning

PARCEL TWO:
Commencing at the most Southerly corner of the 2.11 acre tract of land conveyed by Bertha Beringer to Jacob L. Beringer by deed of record in Volume 86 of Deeds, page 525, Napa County Records; running thence along the Southwesterly line of said 2.11 acre tract North 39° 40' West 308.50 feet to an angle in said line; thence South 5° 45; West 15.50 feet; thence South 38° 14' East 296.20 feet to a point 3 feet Northwest of the center line of a drainage ditch; thence North 55° East 18.50 feet to the point of commencement.

APN: 009-131-007

TRACT FIVE

PARCEL ONE:
Commencing at a four inch redwood stake nine and one half feet from the base of the stone wall in front of the main cellar of Beringer Bros., in the Town of St. Helena, the north corner of which cellar distant 64 1/2 feet bears S. 76 1/2° W. and the Eastern corner, distant 101 feet bears S. 3° W; thence running N. 55° E. 318 1/2 feet to a stake on the Southerly line of Main Street; thence S. 39 1/4° E. along said line of Main Street, 190 feet to a stake; thence S. 55° W. across the lawn and orchard 377 1/2 feet to a stake seven feet from the base of the above mentioned wall, from which stake the North corner of the Distillery Tower distant 45 feet bears S. 71 1/2° W. and the East corner distant 54 feet bears S. 18 3/4° W.; thence N. 23° 193 1/2 feet to the place of beginning.

Being the same land conveyed by F. Beringer on the 6th day of January 1891, to Jacob L. Beringer, and recorded in Book 47 of Deeds, on page 324, Records of Napa County.

PARCEL TWO:

Also a strip of land extending about at right angles with Main Street between the residence of Mrs. Bertha Beringer and Mrs. Agnes Beringer, and more particularly described as follows: to-wit:

Beginning at a stake from which the North tower of the distillery is S. 71° 30' W. 45 feet, and the East corner is S. 18° 45' W. 54 feet, a stone wall extending along in front of the wine cellar is seven feet distant; thence N. 55° 00' E. 377.5 feet to a marked stone projecting from the stone fence along Main Street; thence following said fence along Main Street, S. 39° 15' E. 15 feet to a spike driven in the stone fence; thence S. 55° 00' W. 379.0 feet across the lawn, and through the orchard to a stake set in the ground; thence N. 23° W. 15 feet to the place of beginning.

PARCEL THREE:

Also a strip of land extending from Main Street, between the residences of Mrs. Bertha Beringer and Mrs. Agnes Beringer, and more particularly described as follows, to-wit:

Beginning at a spike driven in the stone wall S. 39° 15' E. 15 feet from a marked stone projecting from the said wall or fence, along Main Street in front of J. L. Beringer's residence; thence following this fence S. 39° 15' E. 22.40 feet to a gate post of stone; thence at about a right angle with Main Street S. 55° W. 389.80 feet to a stake set in the ground eight and one half feet from the foot of a stone wall; thence N. 22° 30' W. 23.30 feet to a stake, thence N. 55° E. 379.00 feet to the place of beginning.

EXCEPTING THEREFROM the following; commencing at the most Westerly corner of the 2.51 acre tract of land conveyed by Jacob L. Beringer to Agnes Beringer by deed of record in Volume 73 of Deeds, page 247, Napa County Records; running thence along the Westerly line of said 1.51 acre tract South 21° 55' East 193.50 feet to the most Southerly corner thereof; thence along the Westerly line of the 0.13 acre tract conveyed to Agnes Beringer by deed of record in Volume 81 of Deeds, page 258, Napa County Records, and the 0.1971 acre tract conveyed to Agnes Beringer by deed of record in Volume 96 of Deeds, page 127, South 23° 22' East 38.30 feet to the most Southerly corner of the said 0.1971 acre tract; thence along the Southeasterly line of said 0.1971 acre tract North 55° East 38.00 feet; thence North 31° 40' West 226.20 feet to the point of commencement as conveyed to Beringer Bros., Inc. by deed recorded October 4, 1934 in Book 88 of Official Records, page 493, Napa County Records.

APN: 009-131-008

TRACT SIX

PARCEL ONE:

All that certain real property situate, lying and being in the Town of St. Helena, County of Napa, State of California, bounded and described as follows, to-wit: commencing at the most Westerly corner of the 1.97 acre tract of land conveyed by Bertha Beringer to J. L. Beringer by deed of record in Volume 96 of Deeds, at page 128, said Napa County Records, said point of commencement being South 28° West 295 feet distant from the point formed by the intersection of the Southwestern line of the State Highway running from St. Helena to Calistoga with the Southeastern line of the 24.50 acre tract of land conveyed by the Graystone Company to Charles Carpy by deed of record in Volume 127 of Deeds, at page 47, said Napa County Records; thence along said Southeastern line of Carpy and the continuation thereof South 28° West 2059 feet, more or less, to the most Northerly corner of the lands of Louis E. Cavallini, thence along the Northeastern line of the lands of said Cavallini South 47° 7' East 373 feet to the most Westerly corner of the 1.90 acre tract conveyed to Otto Beringer by deed of record in Volume 31 of Official Records, at page 196, said Napa County Records; thence along the line of said 1.90 acre tract North 83° 15' East 402 feet, South 13° 50' East 146.10 feet and South 76° 5' East 155.10 feet, more or less, to the center of York Creek; thence Northeasterly down the center line of said creek, following all of its meanderings to the intersection thereof with the Southwestern line of the aforesaid State Highway; thence along the Southwestern line of said Highway North 39° 30' West 60 feet, more or less, to the most Easterly corner of the tract of land conveyed to Myron M. Booth be deed of record in Volume 27 of Official Records, at page 46, said Napa County Records; thence along the Southeastern line of said tract conveyed to Booth South 47° 6' West 496 feet to the most Southerly corner thereof; thence along the Southwesterly line of said tract conveyed to Booth North 23° 22' West 390.70 feet to the most Southerly corner of the 0.102 acre tract conveyed to Beringer Bros. Inc., by deed of record in Volume 88 of Official Records, at page 493, said Napa County Records; thence along the Southeasterly line of said 0.102 acre tract North 55° East 39 feet to the most Easterly corner thereof; thence along the Northeasterly line of said 0.102 acre tract North 31° 40' West 226.20 feet to the most Westerly corner of the 1.51 acre tract of land conveyed to Agnes Beringer by deed of record in Volume 73 of Deeds, at page 247, said Napa County Records; thence along the Northwestern line of said 1.51 acre tract North 55° East 318.50 feet to the most Northerly corner of said 1.51 acre tract on the Southwestern line of the aforesaid State Highway; thence along said Highway line North 39° 30' West 6 feet to the most Easterly corner of the 2.11 acre tract conveyed by Bertha Beringer to Jacob L. Beringer by deed of record in Volume 86 of Deeds, at page 525, said Napa County Records; thence along the Southeasterly line of said 2.11 acre tract South 55° West 291.50 feet to the most Southerly corner of the 0.102 acre tract of land conveyed by Beringer Bros., Inc. to Bertha Beringer et al by deed of record in Volume 88 of Official Records, at page 491, said Napa County Records; thence along the Southwestern line of said last mentioned 0.102 acre tract North 37° 24' West 296.80 feet to the most Westerly corner thereof; thence along the Westerly line of said 0.102 acre tract and the aforesaid 2.11 acre tract North 5° 45' East 147 feet; thence along the Northwestern line of said 2.11 acre tract North 28° 45' East 30.50 feet and North 44° 45' East 137.50 feet to the most Northerly corner thereof on the Southwestern line of the aforesaid State Highway;

thence along said Highway line North 39° 30' West 30 feet, more or less, to the most Easterly corner of the 1.90 acre tract conveyed to J. L. Beringer by deed of record in Volume 96 of Deeds, at page 128, said Napa County Records; thence along the line of said 1.90 acre tract South 44° 45' West 266 feet and North 41° 45' West 270 feet to the point of commencement.

Excepting therefrom that certain One (1) acre tract heretofore conveyed by Sarah H. Spurr to Mrs. L. York by deed of record in Volume 33 of Deeds, at page 477, said Napa County Records.

PARCEL TWO:

Commencing at a point formed by the intersection of the center line of York or Hudson Creek with the South Western line of Main Street, and running thence along said line of Main Street, South 55° 30' East 6.16 chains, more or less, to the most Northern corner of the 6.16 acre tract heretofore conveyed by Robert Hastie and wife to Galen M. Fisher by deed of record in Volume L of Deeds, at page 266, said Napa County Records; thence at right angles South Westerly, following the North Western line of the lands so conveyed to Fisher as aforesaid, to the most Western corner thereof, said point being on the North Eastern line of the Brewery or Spring Mountain Road; thence North 64° West, following the said North Eastern line of said Brewery or Spring Mountain Road and the continuation thereof, to the center of said Hudson or York Creek, and thence North Easterly, following the meanderings of the center line of said Hudson or York Creek, to the point of commencement.

Being a portion of the Carne Humana Rancho, Excepting therefrom, however, 3 acres heretofore conveyed by Beringer Bros., a corporation, to Constant Broniscoe and wife, by deed dated July 8, 1921 and recorded July 11th 1921 in Volume 132 of Deeds, at page 340, said Napa County Records.

PARCEL THREE:

Commencing at a four inch redwood stake 7 feet from the base of a stone wall in front of Beringer Bros., Distillery, from which the North corner of said Distillery distant 45 feet bears South 71 1/2° West and the East corner distant 54 feet bears South 18 3/4° West; thence running North 55° East 377 1/2 feet to a stake on the southerly line of Main Street; thence along Main Street south 39 1/4° East 352 feet to a stake near the edge of a roadway, from which stake a 20 inch white oak in the corner of the vineyard on the opposite side of the street, distant 68 1/2 feet bears North 65 1/2° East and the Westerly corner of the bridge across York Creek, distant 53 1/2 feet bears South 66 1/2° East; thence South 47 1/4° West along the margin of the roadway 496 feet to a stake from which a 20 inch black oak distant 67 feet bears North 22° East and the East corner of a small house distant 56 feet bears North 87 1/2° West; thence north 22 1/2° West 428 feet to the point of commencement.

EXCEPTING THEREFROM : A strip of land extending about at right angle with Main Street, between the residence of Mrs. Bertha Beringer and Mrs. Agnes Beringer, and more particularly described as follows, to-wit:

Beginning at a stake from which the North tower of the Distillerly is South 71° 30' West 45 feet, and the East corner is South 18° 45' West 54 feet, a stone wall extending along the front of the wine cellar is 7 feet distant; thence North 55° 00' East 377.5 feet to a marked stone projecting from the stone fence along Main Street; thence following said fence along Main Street South 39° 15' East 15 feet, to a spike driven in the stone fence; thence South 55° 00' West 379.0 feet across the lawn, and through the orchard to a stake set in the ground; thence North 23° West 15 feet to the place of beginning as conveyed to Agnes Beringer by Deed recorded May 27, 1907 in Book 81 of Deeds, page 258, Napa County Records.

Also Excepting therefrom: A strip of land extending from Main Street, between the residences of Mrs. Bertha Beringer and Mrs. Agnes Beringer, and more particularly described as follows, to-wit:

Beginning at a spike driven in the stone wall South 39° 15' East 15 feet from a marked stone projecting from the said wall or fence, along Main Street in front of J. L. Beringer's residence; thence following this fence South 39° 15' East 22.40 feet to a gate post of stone; thence at about a right angle with Main Street South 55° West 389.80 feet to a stake set in the ground 8-1/2 feet from the foot of a stone wall; thence North 22° 30' West 23.30 feet to a stake; thence North 55° East 379.00 feet to the place of begining as conveyed to Agnes Beringer by Deed recorded March 16, 1910 in Book 96 of Deeds, page 127, Napa County Records.

APN: 009-131-009

VICINITY MAP
N.T.S.

A.L.T.A. / A.C.S.M.

SUBURBAN LAND TITLE SURVEY

OF TRACTS ONE THROUGH SIX DESCRIBED IN THE PRELIMINARY REPORT NO. 602369-TO, AMENDMENT #2, ISSUED OCTOBER 23, 1995 BY

FIDELITY NATIONAL TITLE INSURANCE COMPANY

NAPA, CALIFORNIA

SAID TRACTS BEING A PORTION OF THE RANCHO CARNE HUMANA

COUNTY OF NAPA, STATE OF CALIFORNIA

N.C.A.P. NO. 9-010-025,026
N.C.A.P. NO. 9-031-005 THRU 009
JANUARY 5, 1996

ALBION SURVEYS, INC.
ST. HELENA, CALIFORNIA

SHEET 1 OF 11
1480-1UN.DWG

GENERAL NOTES

TITLE COMPANY:
Fidelity National Title Insurance Company
707 Randolph Street
PO Box 538
Napa, CA. 94559
Attn: Charlene Sergent
Ph. 707-255-5800 FAX 707-252-4440

PRELIMINARY REPORT: 602369-TO Amendment #1

NATURE OF TITLE: A Fee as to Tracts One through Five, inclusive. The Leasehold of Tract Seven as described in the Preliminary Report is not the subject of this Survey.

TITLE VESTED IN: Wine World, Inc., a Delaware Corporation, Successor by merger to Preferred Vineyards Properties, Inc., Successor by merger to Premium Wines, Inc.. A California Corporation as to Tract One, Tract Two, Tract Three, Tract Four-Parcel One, Tract Five, and Tract Six, and Martha Jane Raymond as to an undivided ½ interest and Otto Beringer, Jr. as to an undivided ½ interest as to Tract Four-Parcel Two.

Interior parcel lines were not surveyed, except for Tract Four-Parcel Two. Undimensioned features shown on the Survey were compiled, in part, by photogrammetric means, based upon ground control provided by Albion Surveys, Inc. and, in part, by field surveys in conformance with the accuracy standards referenced in the Surveyor's Certificate. All dimensioned features and features within five feet of the exterior boundary of the subject property were compiled by field surveys in conformance with the accuracy standards.

Designations for the parcels are given as "Tract One, Parcel One" or "Tract 1, Parcel 1" interchangeably

NOTES REGARDING EXCEPTIONS:

1-3: Supplemental taxes, general and special taxes, the lien of supplemental taxes, and taxes and assessments not shown as existing liens by public or taxing authority records: Not plottable.

4: Effect of riparian changes upon the boundaries of the site: York Creek is constrained by retaining walls, bridge culverts and other artificial embankments along much of its length along and through the subject property. Therefore the creek banks cannot be considered to lie in their "natural" locations. The "center"of the creek as shown as a boundary this Survey is either the existing thread of the stream or as derived from Maps #2113 and #2114 (Reference documents 10 and 11), and is not necessarily the line mid-way between the tops of existing creek banks.

5: Rights for commerce, navigation and fishery within York Creek. The location of York Creek is plotted on the Survey.

6: Rights of the public to use any portion of the subject property that lies within any public road or highway: The right of way lines of Pratt Avenue, State Highway 29/128, and a portion of Spring Mountain Road are shown in conformance with record documents. A portion of occupied Spring Mountain Road crosses the property adjacent to York Creek. This portion, noted on the Survey, does not conform to the location of the 40 foot wide road as described in County of Napa Road Petition No.59. This deviation appears to be long standing.

7: Easement for pipeline purposes ("Y" Deeds 325) The location contained in the document is not specific, calling for a pipeline "on the bank or Northerly side of York Creek..as now laid... on a line nearly parallel to York Creek" between Spring Mountain Road and Main Street (State Highway 29/128). According to the City Engineer of the City of St. Helena this route is not currently being used for an water main. No surface evidence of an active water main along this route was observed during the course of this Survey.

8: Easement for electrical and telephone lines (101 Deeds 4) The location of the easement is not specified and is not plotted, but appears to affect Tract One.

9: Water well and pipeline easement (11 O.R. 194) The location of the easement is not specified, and is not plotted, but appears to affect Tract Five, Parcel One for the benefit of adjoining lands. The easement should be considered to be extinguished due to common ownership of affected and benefitted parcels.

10: Drainage easement (11 O.R. 195): The location of the easement is not specified, and is not plotted, but appears to affect Tract Five, Parcel One for the benefit of adjoining lands. The easement should be considered to be extinguished due to common ownership of affected and benefitted parcels.

11: Public Street easement (620 O.R. 50): Does not affect the subject property, and is not plotted. The easement abuts Tract One and Tract Two Parcel Two and incorporates the street right of way of Pratt Avenue fronting these parcels.

12: Pacific Telephone and Telegraph Company easement (711 O.R. 582): Plotted along the Northeasterly side of State Highway 29/128

13: Public Road easement (852 O.R. 556): Plotted along the Northwesterly side of Pratt Avenue

14: Deed of Trust (884 O.R. 600): Not plottable.

15: Affects lands not surveyed (Tract Seven)

16: Agreement regarding use of a septic tank (966 O.R. 339): Compliance not ascertained.

17: Pacific Gas and Electric Company easement (1025 O.R. 465): Plotted within the central portion of Tract 2, Parcel 1.

18: Pacific Gas and Electric Company easement (1042 O.R. 288): Plotted along the Northeasterly side of State Highway 29/128.

19: Agreement regarding use of a septic tank (1056 O.R. 123): Compliance not ascertained

20: Affects lands not surveyed (Tract Seven)

21: Covenants, conditions and restrictions regarding effluent volumes (1524 O.R. 473): Compliance not ascertained

22-33: Affect lands not surveyed (Tract Seven)

34: Agreement regarding a Public Bicycle Path easement (1992-026994): Compliance not ascertained.

35: Public Bicycle Path easement (1992-026994): Plotted along the Northeasterly side of State Highway 29/128.

36: Terms, conditions and provisions contained in "Use Permit No 92-47" (1993-017299): Compliance not ascertained.

37: Pacific Gas and Electric Company easement (1995-023177): Plotted at the Northern corner of Tract 2, Parcel 1. No PG&E facilities were found in this area. The description contained in the referenced document is vague and subject to interpretation.

38: Pacific Gas and Electric Company easement (1995-023178): Plotted along the Northeasterly side of State Highway 29/128.

39-41: Requirements of Fidelity National Title Insurance Company: Not plottable

42: Community interest of spouse of vestee: Affects Tract Four, Parcel Four, which is plotted.

43: Matters disclosed by inspection: As shown on the Survey.

44: Water rights: Not plottable. Creeks and water courses are shown.

45: ALTA/ACSM Survey requirement.

Surveyor's Certificate:

To: Fidelity National Title Insurance Company
Pacific Coast Farm Credit Service, A.C.A.
The Texas Pacific Group

This is to certify that this map or plat and the survey on which it is based were made (I) in accordance with "Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys" jointly established and adopted by ALTA and ACSM in 1992 and includes items 2,4,8, and 10 of Table A thereof, and (ii) pursuant to the Accuracy Standards (as adopted by ALTA and ACSM and in effect on the date of this certification) of a "Suburban" Survey.

For Albion Surveys, Inc., a California Corporation:

J. Robert A. Bell
California Licensed Land Surveyor No. 5080
Renewal date: June 30, 1999

A.L.T.A. / A.C.S.M.

SUBURBAN LAND TITLE SURVEY

OF TRACTS ONE THROUGH SIX DESCRIBED IN THE PRELIMINARY REPORT NO. 602369-TO, AMENDMENT #2, ISSUED OCTOBER 23, 1995 BY

FIDELITY NATIONAL TITLE INSURANCE COMPANY

NAPA, CALIFORNIA

SAID TRACTS BEING A PORTION OF THE RANCHO CAYME NAPA

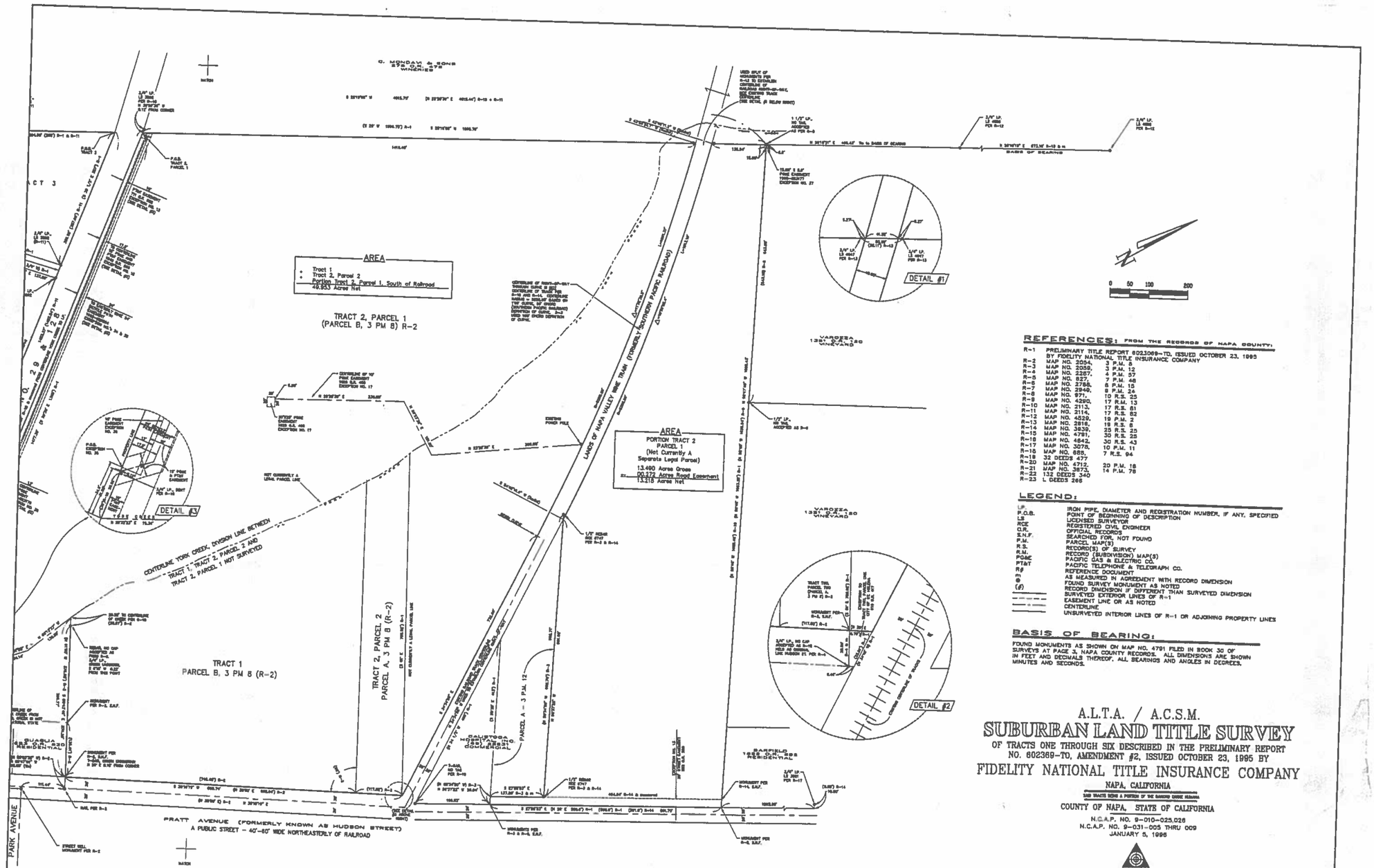
COUNTY OF NAPA, STATE OF CALIFORNIA

N.C.A.P. NO. 6-010-025,026
N.C.A.P. NO. 9-031-005 THRU 009
JANUARY 5, 1996

ALBION SURVEYS, INC.
ST. HELENA, CALIFORNIA

SHEET 2 OF 11

1480-1LH.DWG



REFERENCES: FROM THE RECORDS OF NAPA COUNTY:

R-1	PRELIMINARY TITLE REPORT 602369-TO, ISSUED OCTOBER 23, 1995 BY FIDELITY NATIONAL TITLE INSURANCE COMPANY	
R-2	MAP NO. 2054,	3 P.M. 5
R-3	MAP NO. 2059,	3 P.M. 12
R-4	MAP NO. 2287,	4 P.M. 57
R-5	MAP NO. 827,	7 P.M. 48
R-6	MAP NO. 2788,	8 P.M. 15
R-7	MAP NO. 2949,	8 P.M. 24
R-8	MAP NO. 971,	10 R.S. 25
R-9	MAP NO. 4290,	17 R.M. 13
R-10	MAP NO. 2113,	17 R.S. 81
R-11	MAP NO. 2114,	17 R.S. 82
R-12	MAP NO. 4529,	19 P.M. 2
R-13	MAP NO. 2816,	19 R.S. 8
R-14	MAP NO. 3839,	25 R.S. 25
R-15	MAP NO. 4791,	30 R.S. 25
R-16	MAP NO. 4842,	30 R.S. 43
R-17	MAP NO. 3076,	10 P.M. 11
R-18	MAP NO. 885,	7 R.S. 94
R-19	32 DEEDS 477	
R-20	MAP NO. 4712,	20 P.M. 16
R-21	MAP NO. 3873,	14 P.M. 78
R-22	132 DEEDS 340	
R-23	L DEEDS 266	

LEGEND:

I.P.	IRON PIPE, DIAMETER AND REGISTRATION NUMBER, IF ANY, SPECIFIED
P.O.B.	POINT OF BEGINNING OF DESCRIPTION
LS	LICENSED SURVEYOR
RCE	REGISTERED CIVIL ENGINEER
O.R.	OFFICIAL RECORDS
S.N.F.	SEARCHED FOR, NOT FOUND
P.M.	PARCEL MAP(S)
R.S.	RECORD(S) OF SURVEY
R.M.	RECORD (SUBDIVISION) MAP(S)
PG&E	PACIFIC GAS & ELECTRIC CO.
PT&T	PACIFIC TELEPHONE & TELEGRAPH CO.
R#	REFERENCE DOCUMENT
m	AS MEASURED IN AGREEMENT WITH RECORD DIMENSION
●	FOUND SURVEY MONUMENT AS NOTED
(#)	RECORD DIMENSION IF DIFFERENT THAN SURVEYED DIMENSION
	SURVEYED EXTERIOR LINES OF R-1
	EASEMENT LINE OR AS NOTED
	CENTERLINE
	UNSURVEYED INTERIOR LINES OF R-1 OR ADJOINING PROPERTY LINES

BASIS OF BEARING:

FOUND MONUMENTS AS SHOWN ON MAP NO. 4791 FILED IN BOOK 30 OF SURVEYS AT PAGE 3, NAPA COUNTY RECORDS. ALL DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF. ALL BEARINGS AND ANGLES IN DEGREES, MINUTES AND SECONDS.

A.L.T.A. / A.C.S.M.

SUBURBAN LAND TITLE SURVEY

OF TRACTS ONE THROUGH SIX DESCRIBED IN THE PRELIMINARY REPORT NO. 602369-TO, AMENDMENT #2, ISSUED OCTOBER 23, 1995 BY

FIDELITY NATIONAL TITLE INSURANCE COMPANY

NAPA, CALIFORNIA

SAID TRACTS BEING A PORTION OF THE DANIEL DUDE RANCHO

COUNTY OF NAPA, STATE OF CALIFORNIA

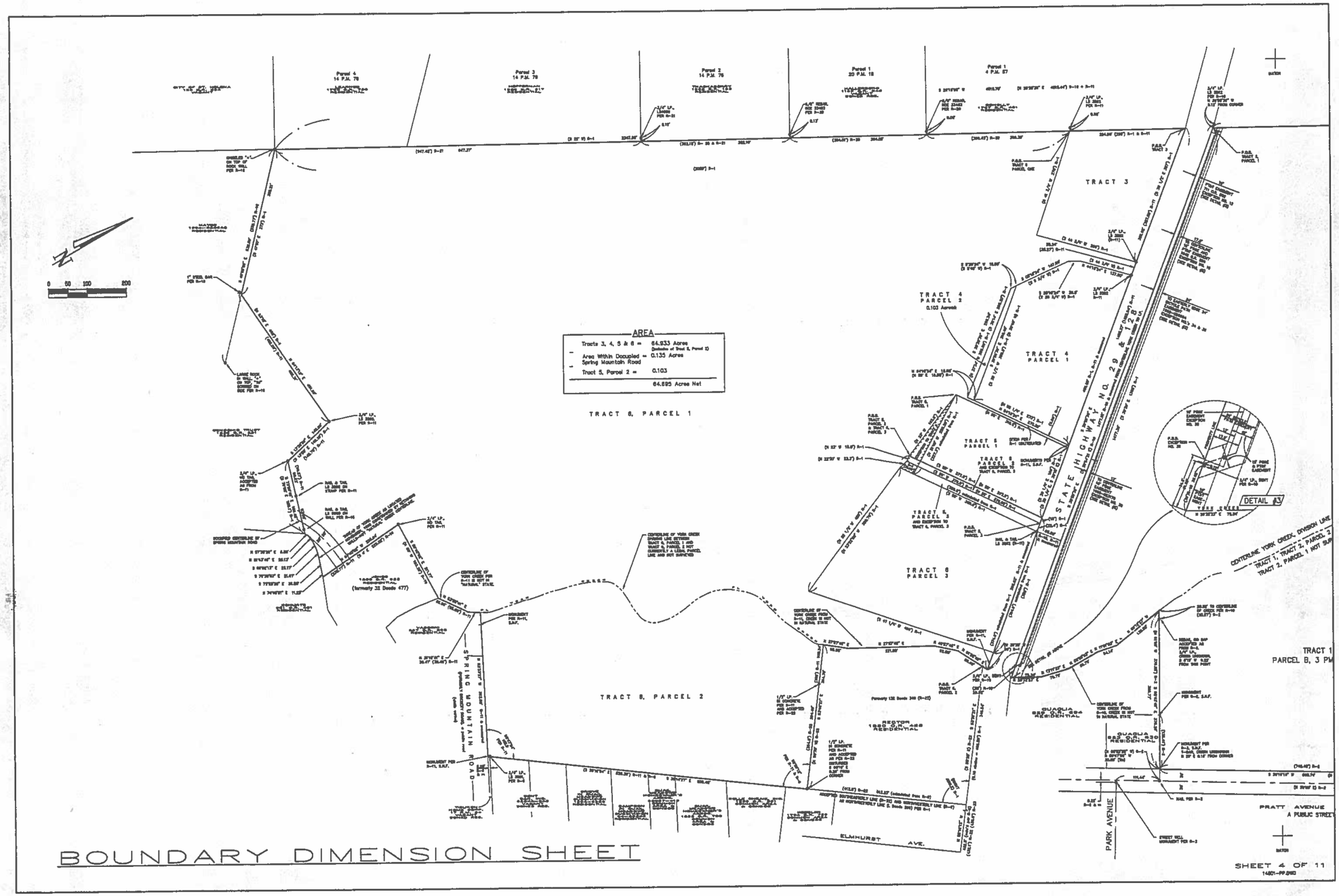
N.C.A.P. NO. 9-010-025,026
N.C.A.P. NO. 9-031-005 THRU 009
JANUARY 5, 1996

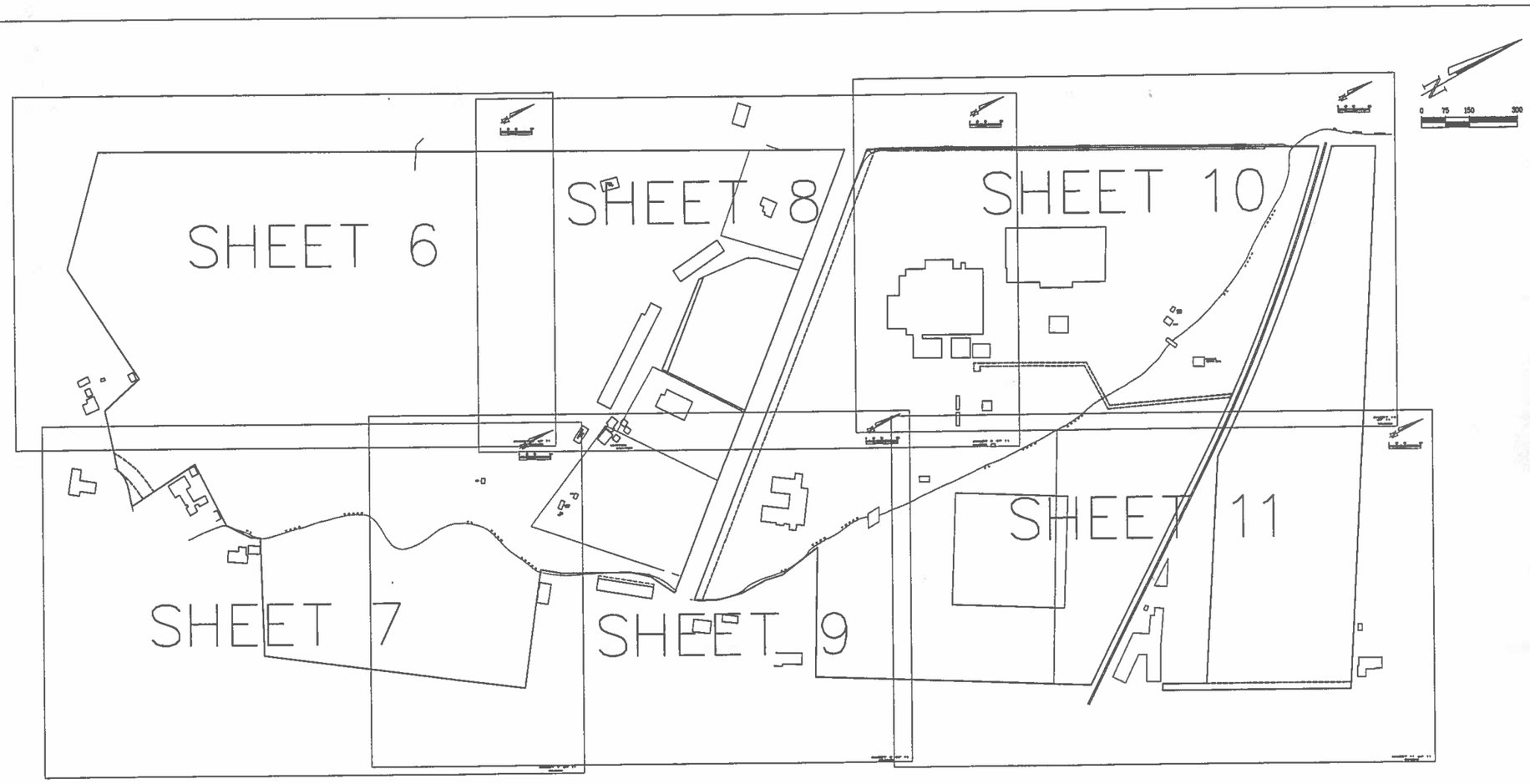
ALBION SURVEYS, INC.
ST. HELENA, CALIFORNIA

BOUNDARY DIMENSION SHEET

SHEET 3 OF 11

14801-PP.DWG


AREA
Tracts 3, 4, 5 & 6 = 64.933 Acres
(Exclusive of Tract 5, Parcel 2)
Area Within Dedicated Spring Mountain Road = 0.135 Acres
Tract 5, Parcel 2 = 0.103
64.895 Acres Net
TRACT 6, PARCEL 1
TRACT 6, PARCEL 2
TRACT 3
TRACT 4 PARCEL 2 0.103 Acres
TRACT 4 PARCEL 1
TRACT 5 PARCEL 1
TRACT 5 PARCEL 2
TRACT 6 PARCEL 3
STATE HIGHWAY NO. 29 & 128
SPRING MOUNTAIN ROAD
ELMHURST AVE.
PARK AVENUE
PRATT AVENUE
A PUBLIC STREET
DETAIL #3
TRACT 1
PARCEL B, 3 PM
BOUNDARY DIMENSION SHEET
SHEET 4 OF 11



LEGEND

AC	ASPHALT CONCRETE
B	BOLLARD
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CNTR	CENTER
DI	STORM DRAIN DROP INLET
EP	EDGE OF PAVEMENT
ESB	ELECTRICAL SERVICE BOX
ETS	ELECTRICAL TESTING STATION
FH	FIRE HYDRANT
FL	FLOW LINE
G	JP OR TP GUY ANCHOR
IN	INSIDE SUBJECT PROPERTY
JP	JOINT POWER AND TELEPHONE POLE
JPE	JOINT POLE WITH ELECTROLIER STREET LIGHT
JPT	JP WITH TRANSFORMER
JPTE	JP WITH TRANSFORMER AND ELECTROLIER
MP	MILE POST
MW	MONITORING WELL
NCAP	NAPA COUNTY ASSESSOR'S PARCEL NUMBER
NCR	NAPA COUNTY RECORDS
O.R.	OFFICIAL RECORDS
OUT	OUTSIDE SUBJECT PROPERTY
PL	PROPERTY LINE
PP	POWER POLE
RCP	REINFORCED CONCRETE PIPE
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
TP	TELEPHONE POLE
TV	PAC-BELL TELEPHONE VAULT
UG	INDICATES UNDERGROUND LINE LEAVES JP OR PP
VIN	VINEYARD
WM	WATER METER
WV	WATER VALVE

DENOTES FLOW LINE OF CREEK OR DRAINAGE DITCH
DENOTES EDGE OF DIRT ROAD
DENOTES EDGE OF GRAVEL ROAD
DENOTES EDGE OF ASPHALT PAVEMENT
DENOTES WIRE FENCE
DENOTES OVERHEAD POWER AND/OR TELEPHONE LINES
DENOTES PROPERTY LINE
DENOTES INTERIOR PROPERTY LINE NOT SURVEYED
DENOTES EASEMENT LINE
DENOTES EDGE OF VINEYARD BLOCK
DENOTES MORTARED STONE WALL
DENOTES LOOSE STACKED STONE WALL
DENOTES RETAINING WALL

NOTE:
THE FOLLOWING LINES DENOTE UNDERGROUND UTILITIES LOCATED USING "UNDERGROUND SERVICE ALERT" PAINT MARKS OR OTHER INDIRECT EVIDENCE, AND WERE NOT INDEPENDENTLY VERIFIED.

GAS LINE
POWER LINE
STORM DRAIN LINE
SANITARY SEWER LINE
TELEPHONE LINE
WATER LINE

A.L.T.A. / A.C.S.M.

SUBURBAN LAND TITLE SURVEY

OF TRACTS ONE THROUGH SIX DESCRIBED IN THE PRELIMINARY REPORT
NO. 602369-TO, AMENDMENT #2, ISSUED OCTOBER 23, 1995 BY

FIDELITY NATIONAL TITLE INSURANCE COMPANY

NAPA, CALIFORNIA

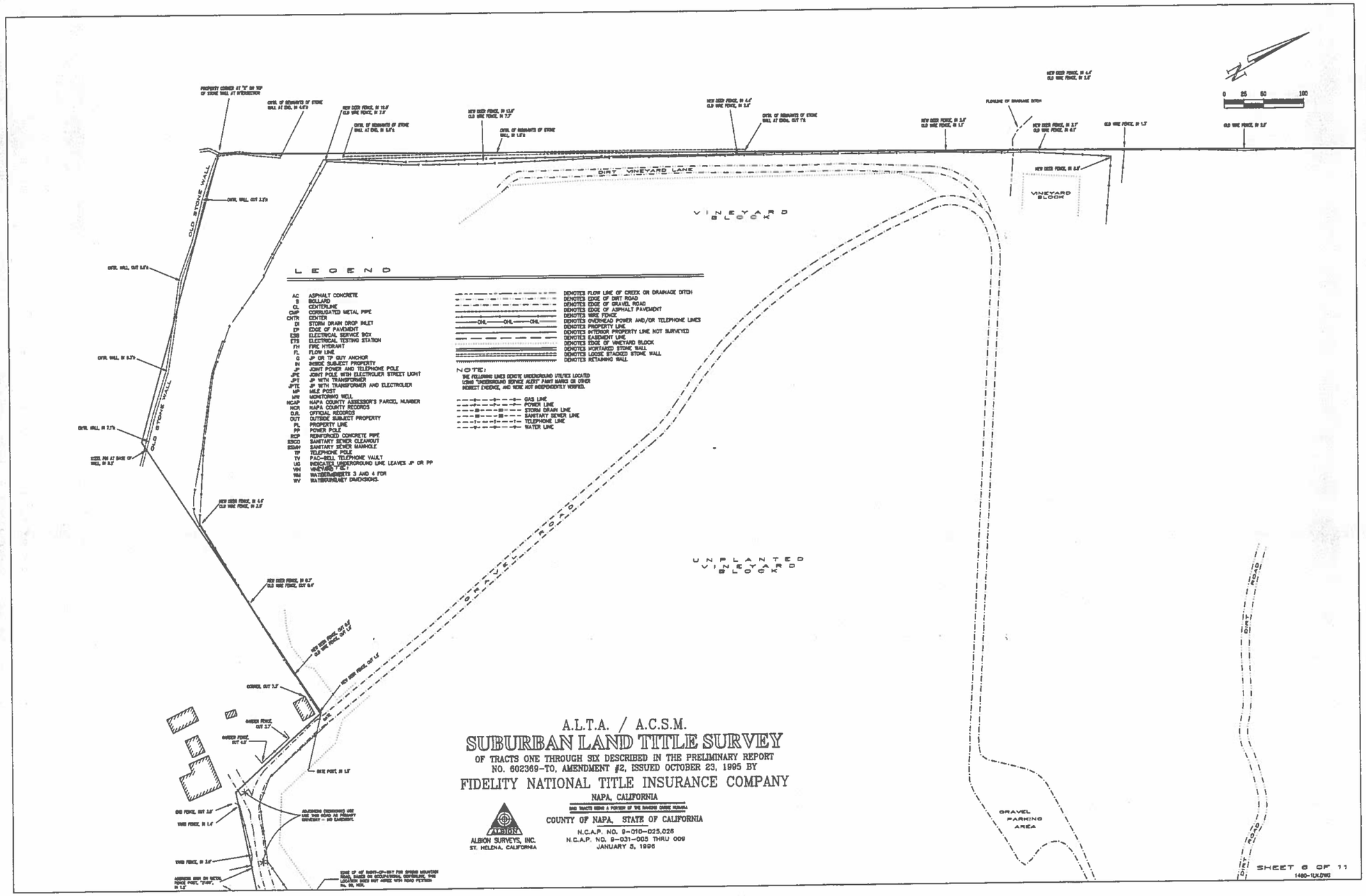
THIS TRACTS BEING A PORTION OF THE RANCHO CAYME PATENT

COUNTY OF NAPA, STATE OF CALIFORNIA

N.C.A.P. NO. 9-010-025,026
N.C.A.P. NO. 9-031-005 THRU 009
JANUARY 5, 1996

ALBION SURVEYS, INC.
ST. HELENA, CALIFORNIA

SHEET 5 OF 11
1480-11M.DWG


0 25 50 100
DIRT VINEYARD LANE
VINEYARD BLOCK
VINEYARD BLOCK
OLD STONE WALL
OLD STONE WALL
OLD STONE WALL
GRAVEL ROAD
UNPLANTED VINEYARD BLOCK
GRAVEL PARKING AREA
DIRT ROAD
LEGEND
AC ASPHALT CONCRETE
B BOLLARD
CL CENTERLINE
CMP CORRUGATED METAL PIPE
CNTR CENTER
DI STORM DRAIN DROP INLET
EP EDGE OF PAVEMENT
ESB ELECTRICAL SERVICE BOX
ETS ELECTRICAL TESTING STATION
FH FIRE HYDRANT
FL FLOW LINE
G JP OR TP GUY ANCHOR
IN INSIDE SUBJECT PROPERTY
JP JOINT POWER AND TELEPHONE POLE
JPE JOINT POLE WITH ELECTROLIER STREET LIGHT
JPT JP WITH TRANSFORMER
JPTE JP WITH TRANSFORMER AND ELECTROLIER
MP MILE POST
MW MONITORING WELL
NCAP NAPA COUNTY ASSESSOR'S PARCEL NUMBER
NCR NAPA COUNTY RECORDS
O.R. OFFICIAL RECORDS
OUT OUTSIDE SUBJECT PROPERTY
PL PROPERTY LINE
PP POWER POLE
RCP REINFORCED CONCRETE PIPE
SSCO SANITARY SEWER CLEANOUT
SSMH SANITARY SEWER MANHOLE
TP TELEPHONE POLE
TV PAC-BELL TELEPHONE VAULT
UG INDICATES UNDERGROUND LINE LEAVES JP OR PP
VN VINEYARD "N" SET
WM WATERMARKERS 3 AND 4 FOR
WV WATERMARKER DIMENSIONS.
DENOTES FLOW LINE OF CREEK OR DRAINAGE DITCH
DENOTES EDGE OF DIRT ROAD
DENOTES EDGE OF GRAVEL ROAD
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OHL OHL OHL DENOTES OVERHEAD POWER AND/OR TELEPHONE LINES
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POWER LINE
STORM DRAIN LINE
SANITARY SEWER LINE
TELEPHONE LINE
WATER LINE
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AND TRACTS BEING A PORTION OF THE RANCHO CAYMUS NUMERA
COUNTY OF NAPA, STATE OF CALIFORNIA
N.C.A.P. NO. 9-010-025,026
N.C.A.P. NO. 9-031-005 THRU 009
JANUARY 5, 1996
ALBION
ALBION SURVEYS, INC.
ST. HELENA, CALIFORNIA
SHEET 6 OF 11
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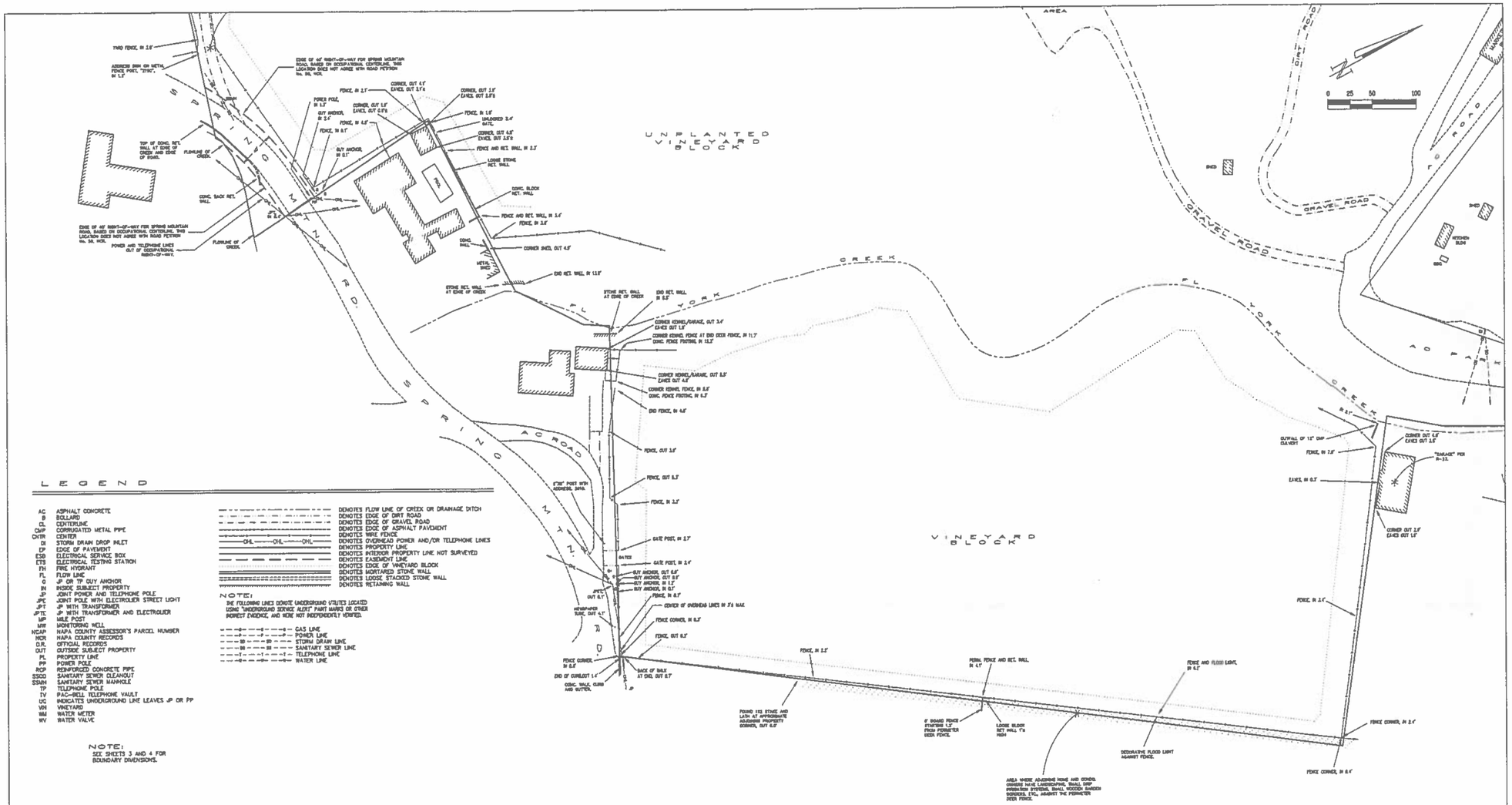

LEGEND

AC	ASPHALT CONCRETE
B	BOLLARD
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CNTR	CENTER
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—OHL—OHL—OHL—	DENOTES OVERHEAD POWER AND/OR TELEPHONE LINES
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—G— —G— —G—	GAS LINE
—P— —P— —P—	POWER LINE
—SD— —SD—	STORM DRAIN LINE
—SS— —SS—	SANITARY SEWER LINE
—T— —T— —T—	TELEPHONE LINE
—W— —W— —W—	WATER LINE

NOTE:
SEE SHEETS 3 AND 4 FOR BOUNDARY DIMENSIONS.

A.L.T.A. / A.C.S.M.

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COUNTY OF NAPA, STATE OF CALIFORNIA

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N.C.A.P. NO. 9-031-005 THRU 009
JANUARY 5, 1996

ALBION SURVEYS, INC.
ST. HELENA, CALIFORNIA

SHEET 7 OF 11

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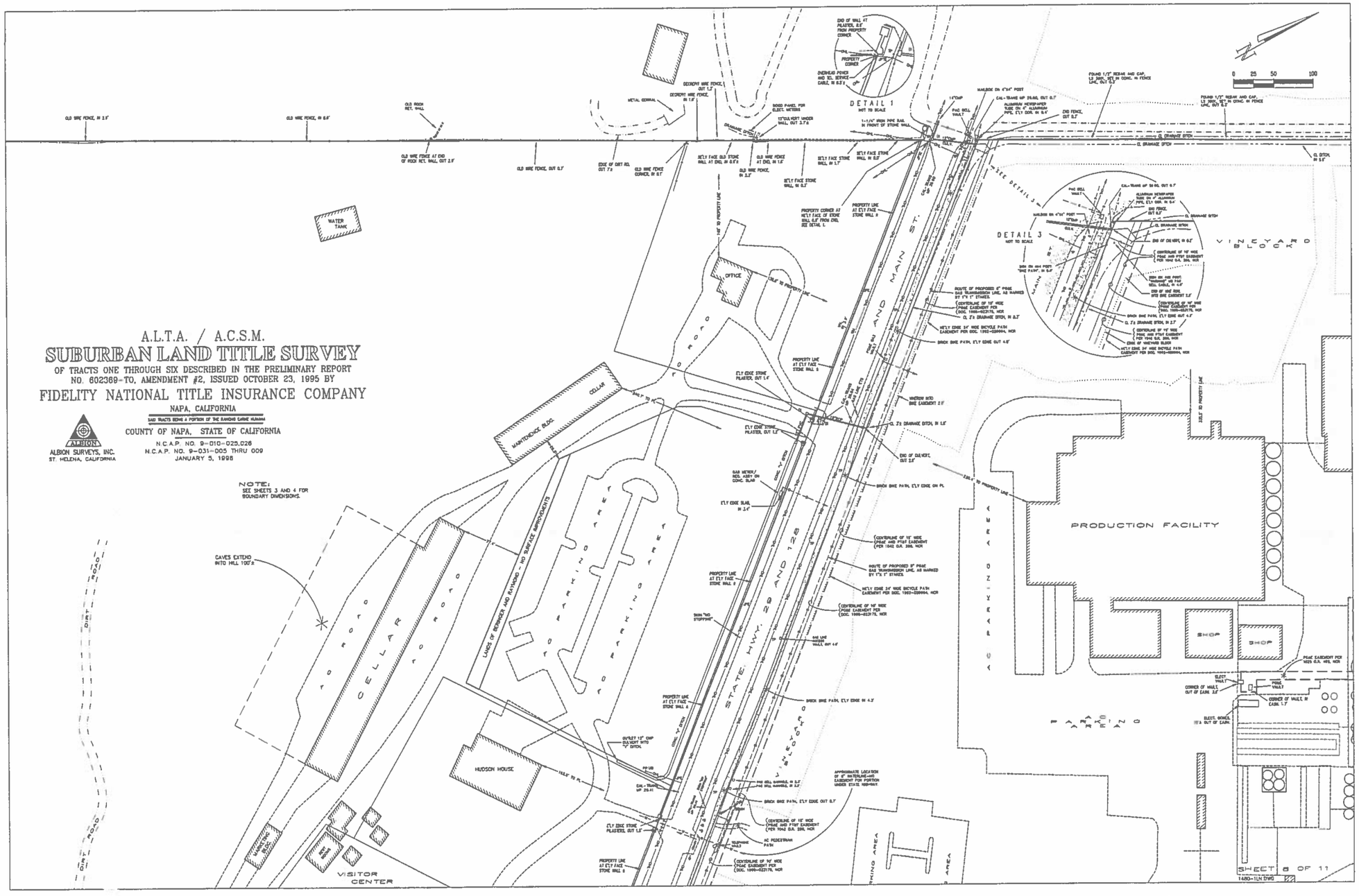
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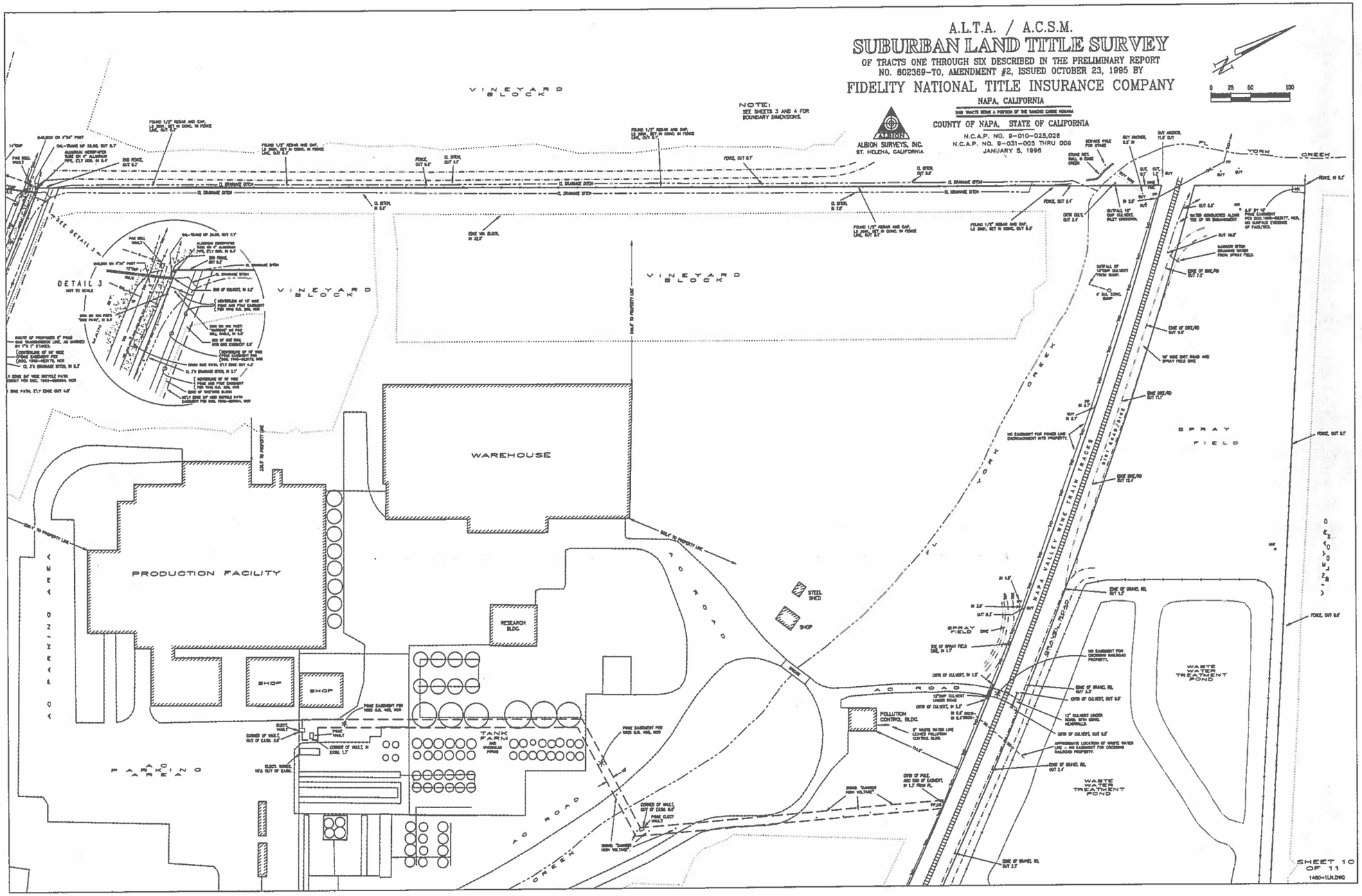
JANUARY 5, 1998
ALBION
ALBION SURVEYS, INC.
ST. HELENA, CALIFORNIA
NOTE:
SEE SHEETS 3 AND 4 FOR
BOUNDARY DIMENSIONS.
DETAIL 1
NOT TO SCALE
DETAIL 3
NOT TO SCALE
0 25 50 100
WATER TANK
OFFICE
MAINTENANCE BLDG.
CELLAR
HUDSON HOUSE
VISITOR CENTER
PARKING AREA
STATE HWY. 29 AND 128
VINEYARD BLOCK
PRODUCTION FACILITY
SHOP
SHOP
PARKING AREA
CAVES EXTEND INTO HILL 100'±
SHEET 8 OF 11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ST. HELENA, CALIFORNIA
NOTE:
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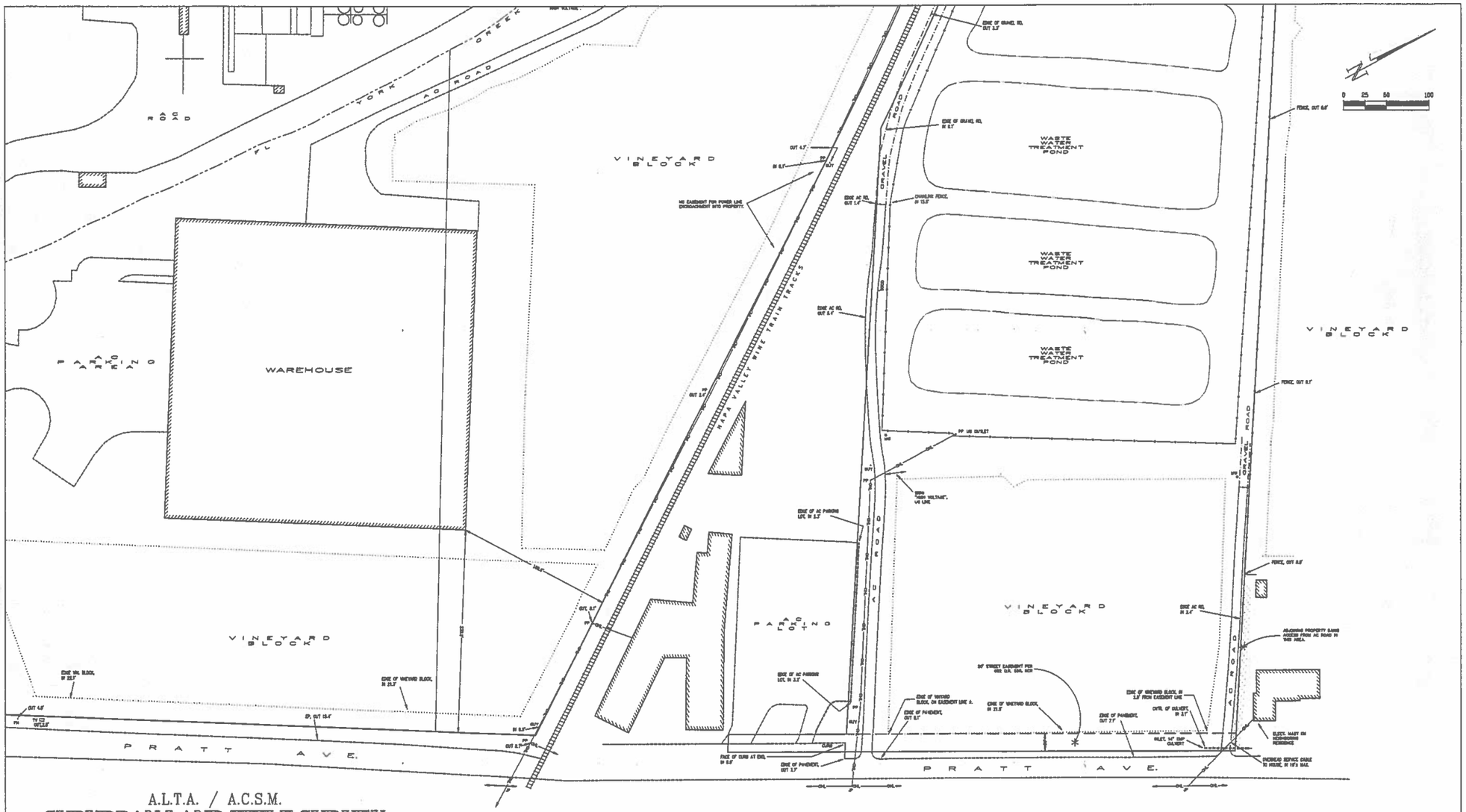
VINEYARD BLOCK
DETAIL 3
NOT TO SCALE
WAREHOUSE
PRODUCTION FACILITY
RESEARCH BLDG.
SHOP
STEEL SHED
TANK FARM
POLLUTION CONTROL BLDG.
SPRAY FIELD
WASTE WATER TREATMENT POND
NAPA VALLEY WINE TRAIN TRACKS
YORK CREEK
AC ROAD
PARKING AREA
SHEET 10 OF 11



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COUNTY OF NAPA, STATE OF CALIFORNIA

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ST. HELENA, CALIFORNIA

NOTE:
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SHEET 11 OF 11
1480-1UN.DWG

HALL&BARTLEY
ARCHITECTURE AND PLANNING
4701 OLD REDWOOD HIGHWAY, SANTA ROSA, CALIFORNIA • (707) 544-1642

PROJECT:	BERINGER VINEYARDS		UP.4
PROJECT NO.:	1614	DATE:	10/19/16
DRAWN:	AM	CHECK	SPB

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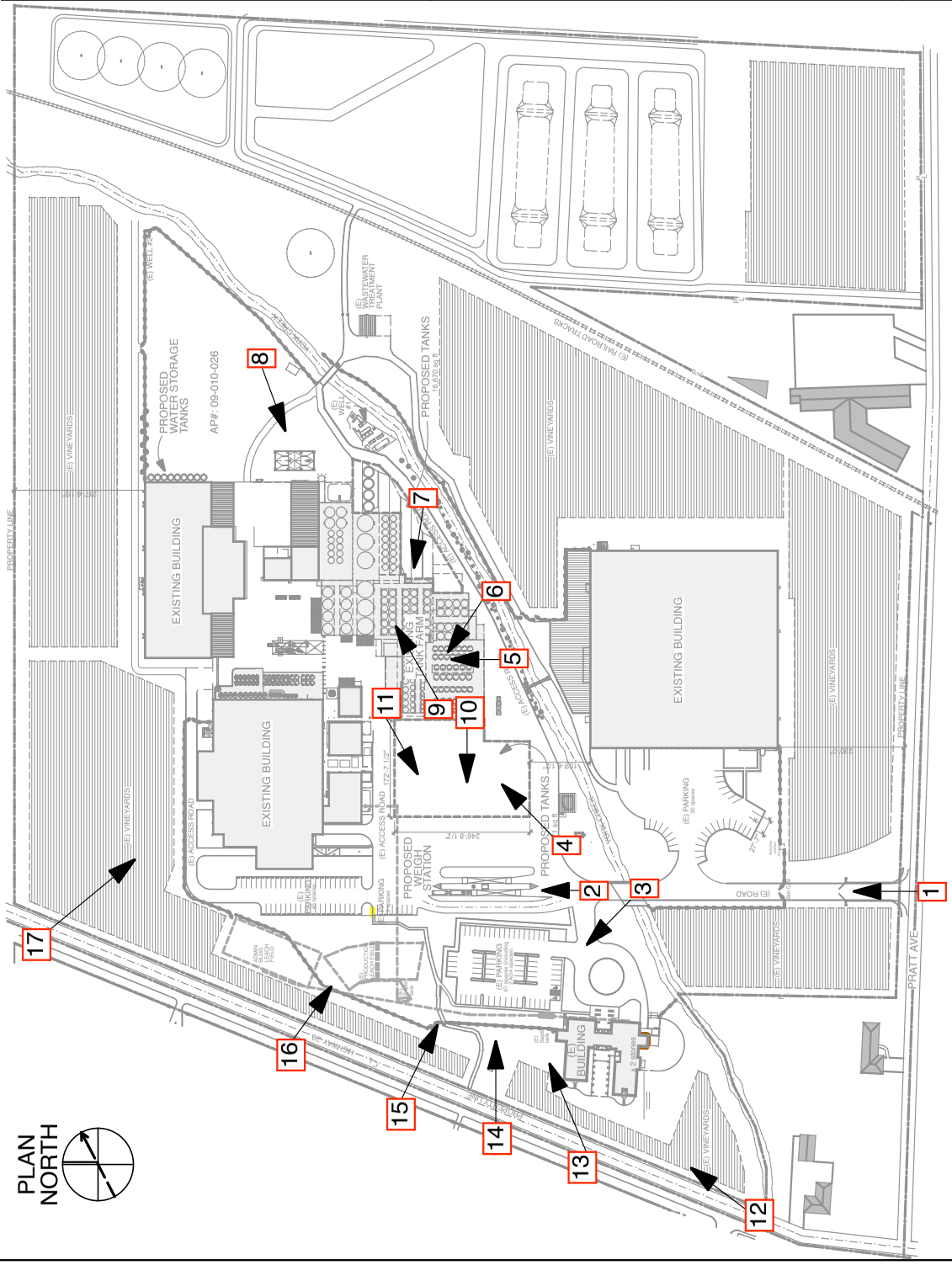


KEY SITE PLAN

ADMINISTRATION

KNAACK

SUPER DUTY
F-350
SUPER DUTY
Ford

T-608
T-608
COZ

HYSTER
HYSTER

ETUDE
90
ETUDE
66

BERKELEY
CARLSBAD
FRESNO
IRVINE
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROCKLIN
SAN LUIS OBISPO

March 17, 2017

Scott Weidemier
Engineering and Maintenance
Treasury Wine Estates
P.O. Box 111
St. Helena, CA 94574

Subject: Analysis of Potential Effects of Proposed Tank Project and Equipment Relocation to York Creek at Beringer Vineyard in St. Helena, Napa County, California

Dear Scott:

This letter addresses the potential effects to York Creek from the proposed Project and re-design of various facilities at the Beringer Winery at 1000 Pratt Avenue in the City of St. Helena (City), Napa County.

INTRODUCTION

The City requested that the winery retain a biologist to evaluate potential effects to the creek as part of the Design Review for the project. The proposed project (project) includes addition and relocation of wine fermentation tank farms, a new forklift path/ramp, relocated and redesigned receiving station and press pit, a redesigned weigh station and central scale house.

York Creek flows through the Beringer Winery and is tributary to the Napa River. The creek within the winery property has a natural cobble bed, but is channelized and bordered by hardscape. Various species of trees including coast live oak (*Quercus agrifolia*) provide a broken, patchy riparian canopy along the creek. Rain falling on hardscapes within the winery property is diverted into the winery's stormwater management system using curbs and sloped hardscape surfaces and does not directly enter the creek without pretreatment.

METHODS

Mr. Lichtwardt visited the winery and surveyed the proposed project area and the creek corridor with winery engineer Scott Weidemier on October 7, 2016. Prior to the field visit Mr. Lichtwardt reviewed the project plans provided by the winery. The field visit included surveying the proposed project area, the reach of the creek adjacent to the proposed project area, and the existing stormwater diversion facilities that protect the creek.

RESULTS AND CONCLUSIONS

The entire proposed project is located within a currently hardscaped area where water is diverted away from the creek into the winery's stormwater management system. The new, redesigned, and relocated facilities will not increase the amount of hardscape within the winery property and will

157 Park Place, Pt. Richmond, California 94801 510.236.6810 www.lsa.net

not affect the riparian canopy along the creek or other natural vegetation. Based on the review of the proposed project plans and the field survey, LSA concludes that the proposed project will not have any effects on York Creek. If you have any questions or comments please contact me by phone (510) 236-6810 or e-mail eric.lichtwardt@lsa.net.

Sincerely,

Eric Lichtwardt
Associate/Senior Biologist

CITY OF ST. HELENA
PLANNING DEPARTMENT 1480 MAIN STREET- ST. HELENA, CA 94574
PLANNING COMMISSION

APRIL 18, 2017

AGENDA SECTION: Public Hearing

FILE NUMBER: PL17-012

SUBJECT: Tom and Gale Trainor request design review approval for a remodel and addition to their existing single-family home located at 1230 Allyn Avenue in the Medium Density Residential district (MR).

PREPARED BY: Aaron Hecock, Senior Planner

REVIEWED BY: Noah Housh, Planning Director

APPLICATION FILED: 02/06/17 **ACCEPTED AS COMPLETE:** 03/21/17

LOCATION OF PROPERTY: 1230 Allyn Avenue

APN: 009-313-044

GENERAL PLAN/ZONING: MR: Medium Density Residential

APPLICANT: Tom Trainor **PHONE:** (707) 291-6540

PROJECT DESCRIPTION

The applicant wishes to remodel the interior of the existing home and also construct a new addition on the side of the home. In order to accommodate the remodel and addition, approximately 368-sf of the rear of the home would be demolished including the existing kitchen, family room, closet, laundry room and bath #2 as (shown on plan sheet EC1.1). The area being demolished would be reconstructed and 337-sf of new floor area would be added. These changes would facilitate a reconfigured interior space including an increase in the wall height of the family room, a larger kitchen space, and a new master suite with walk-in closet. In addition, an approximately 120-sf screened porch would be added to the rear of the home.

The height of the home at its highest point would be slightly reduced from 21’ 2” to 20” 7”. The structure would be finished with materials that match those on the existing home including horizontal wood siding and asphalt composition roof shingles.

ANALYSIS

CEQA

Staff has conducted the requisite analysis and concluded that the project is categorically exempt from the requirements of CEQA pursuant to CEQA Guidelines

Section 15301 which exempts the minor alteration of existing private structures and Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc. The proposed project is not subject to any of the exceptions to the use of a categorical exemption as outlined in CEQA Section 15300.2. The project site is not located on or near an environmentally sensitive area, is not visible from a scenic highway, is not included on a hazardous waste site, and will not impact historic resources or otherwise generate or contribute to any potentially significant impacts.

GENERAL PLAN

The property has a General Plan designation of Medium Density Residential (MDR). This designation allows for single-family detached homes, accessory dwelling units and other compatible uses. The MDR designation is the predominant residential designation, occurring throughout large areas of the City. The wide distribution of this designation is intended to maintain a development pattern in newly developing areas that is consistent with historic development patterns.

The project site is also located in the Adams Street Historic Resource District as identified in the 1993 General Plan. This is one of three geographical areas covering a majority of the City's existing housing stock in which the 1993 General Plan mapped historic and potentially historic resources identified in the City's historic resources inventory. The 1993 St. Helena General Plan and Housing Element Update 2015-2023 Goals, Policies, and Eight-Year Action Plan include the following policies that are relevant to the proposed project:

- *2.6.14 - Encourage a mix of housing types and price ranges to allow choice for current and future generations of St. Helenans.*
- *4.3.4 - Strengthen community identity by appropriate building design, size, and site landscaping.*
- *4.3.25 - Within the primary urban area of St. Helena, encourage variety in housing types and density consistent with those found in the older neighborhoods of town. Encourage varying lot widths and configuration, but limit the allowable building envelope by parcel size to avoid overbuilt conditions.*
- *4.3.26 – Encourage residential building siting and design that is similar to that found in the older neighborhoods in town. In these areas consistent setbacks, porches and generously landscaped front yards add to community enjoyment by all. Restrict location of driveways and garages to minimize their visual impact on the street.*
- *7.5.9 – Require new development in or adjacent to historic areas or buildings to be compatible in pattern and character with existing historic buildings.*
- *HE1.5 - Encourage innovative housing types and designs.*
- *HE2.6 - Promote a balance of types of housing throughout the whole community.*

<u>Staff Response</u>: Staff finds that the proposed project is consistent with the General Plan policies listed above.

ZONING
Consistent with the General Plan's MDR land use designation, the project site exhibits a zoning designation of Medium Density Residential (MR). The MR zoning designation allows for single-family detached homes, accessory dwelling units, limited agricultural use and other compatible uses. The remodeling of an existing single-family home is a permitted use in the MR district however it must conform to the development standards prescribed by Municipal Code Section 17.40.060.

As far as the Floor Area Ratio (F.A.R.) is concerned, an 8,427-sf parcel has a maximum F.A.R. of .326 which allows up to 2,747-sf of building floor area (excluding any applicable F.A.R. exemptions). For the purposes of F.A.R., the applicant is proposing 2,050-sf of floor area for a F.A.R. of .24, which is approximately 700-sf below the maximum square footage permitted (see below).

EXISTING FLOOR AREA:

RESIDENCE	1,263 SF
GARAGE	424 SF
EXISTING SHED	254 SF
COVERED PARKING EXEMPTION	-200 SF
	TOTAL 1,741 SF

PROPOSED FLOOR AREA:

RESIDENCE	1,263 SF
GARAGE	424 SF
EXISTING SHED	254 SF
ADDITION	337 SF
SF REMOVED	-28 SF
COVERED PARKING EXEMPTION	-200 SF
	TOTAL 2,050 SF

FLOOR AREA RATIO: 2,050 / 8,427 = .24

Staff Response: The addition on the home accommodating the new master suite has two (2) architectural projections into the side setback. These features are 2 feet in depth and one is 9' 9" long and the other is 7' 6" long. Municipal Code Section 17.112.060(A) allows for projections into required yards and setbacks and states the following: *"Architectural features (bay windows, eaves, fireplaces, chimneys, sills, etc.) less than fifteen (15) feet in length may extend into any required yard or setback for a distance of not more than two feet."*

The project as proposed meets all other development standards as required by Section 17.40.060 of the Municipal Code including lot width, lot coverage, floor area, setbacks, height, etc.

HISTORIC RESOURCES
The existing home was constructed in approximately 1912 and while it is old, it is not listed on the City's Historical Resources Master List. As noted above, the project site is

also located in the Adams Street Historic Resource District as identified in the 1993 General Plan, however proposed changes to the existing home will not detract from or be incompatible with existing historic buildings in the vicinity.

DESIGN REVIEW

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 following design criteria should be considered by the Planning Commission in review of this application (Zoning Ordinance Section 17.164.030):

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 sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept;
11. Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;
12. Whether natural features are appropriately preserved and integrated with the project;
13. 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 structure and functions;
14. In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character;
15. 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;
16. Whether plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena;
17. 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: Staff finds that the proposed project is consistent with both the General Plan and Zoning Ordinance and has been designed within the context of the project site and surrounding area. For these reasons, staff believes that the proposed project is consistent with the required design review criteria listed above.

CORRESPONDENCE

As of the completion of this report, no comments on this application have been received by staff.

STAFF RECOMMENDATION

Staff finds that the proposed remodel and addition raises no adverse design issues and recommends that the Planning Commission:

1. Find that the project is exempt from the requirements of CEQA pursuant to Section 15301 which exempts the minor alteration of existing private structures; and
2. Accept the required findings and approve design review for the proposed remodel and addition to the home at 1230 Allyn Avenue.

ATTACHMENTS

1. Resolution / Conditions of Approval
2. APN Map
3. Project Plans and Renderings
4. Applicant Statement

CITY OF ST. HELENA PLANNING COMMISSION
RESOLUTION NO. PC2017-
GRANTED TO 1230 ALLYN AVENUE

PROPERTY OWNER: Tom and Gale Trainor **APN:** 009-313-044

Recitals

1. Tom and Gale Trainor request design review approval for a remodel and addition to their existing single-family home located at 1230 Allyn Avenue in the Medium Density Residential district (MR).

2. 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 April 18, 2017.

Resolution

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

B. The Planning Commission hereby finds that the project is exempt from CEQA pursuant to Section 15301 which exempts the minor alteration of existing private structures and Section 15303, which exempts the construction or conversion of small structures including single-family residences, garages, pools, etc. The proposed project is not subject to any of the exceptions to the use of a categorical exemption as outlined in CEQA Section 15300.2. The project site is not located on or near an environmentally sensitive area, is not visible from a scenic highway, is not included on a hazardous waste site, and will not impact historic resources or otherwise generate or contribute to any potentially significant impacts.

C. In accordance with the design review criteria identified in Municipal Code Section 17.164.030, the Planning Commission finds that the project demonstrates the following:

1. *Consistency and compatibility with applicable elements of the general plan in that it is a single-family home in a residentially designated area;*
2. *Compatibility of design with the immediate environment of the site in that it is a remodel and addition of an existing single-family home;*
3. *Relationship of the design to the site in that it is a remodel and addition to an existing home;*
4. *That the design is compatible in areas considered by the board as having a unified design or historical character in that the home is not historical nor in an area of with a unified design;*
5. *That the design promotes harmonious transition in scale and character in areas between different designated land uses in that it is a remodel and addition to an existing single-family home;*

6. *Compatibility with future construction both on and off the site in that it is a remodel and addition to an existing single-family home;*
7. *That the architectural design of structures and their materials and colors are appropriate to the function of the project in that the addition will match the existing single-family home;*
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 it is a remodel and addition to an existing single-family home;*
9. *That the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures in that it is a remodel and addition to an existing single-family home;*
10. *Whether sufficient ancillary functions are provided to support the main functions of the project and whether they are compatible with the project's design concept in that it is a remodel and addition to an existing single-family home;*
11. *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 Allyn Avenue;*
12. *That natural features are appropriately preserved and integrated with the project in that it is a remodel and addition to an existing single-family home;*
13. *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 addition will match the existing single-family home;*
14. *In areas considered by the board as having a unified design character or historical character, whether the design is compatible with such character in that the home is not historical nor in an area of with a unified design;*
15. *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 it is a remodel and addition to an existing single-family home;*
16. *That plant material is suitable and adaptable to the site, capable of being properly maintained on the site, and is of a variety which is suitable to the climate of St. Helena in that it is a remodel and addition to an existing single-family home;*
17. *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 it is a remodel and addition to an existing single-family home that is required to meet current green building standards.*

Planning Department Conditions of Approval

D. The Planning Commission approves design review 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. The design review shall be vested within one (1) year from the date of final action. A building permit for the use allowed under this approval shall have been obtained 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. 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.
3. 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.
4. 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.
5. 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.
6. Provided they are in general compliance with this approval, minor modifications may be approved by the Planning Director.
7. 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.
8. 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.
9. Construction shall be in compliance with plans submitted and reviewed by the Planning Commission on April 18, 2017, except as modified herein.
10. During construction, the project site shall be adequately fenced and secured to prevent trespassing.

11. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.

12. 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

13. 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.

14. 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.

15. 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.

16. Erosion and sediment control plans shall conform to the latest State and City codes at a minimum.

17. Site plan shall show location of any trees within the project area.

18. Provide details of any and all proposed gates, fencing, and/or walls on all plans submitted for building permit review.

19. The applicant shall install an approved backflow device behind the existing water meter prior to 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.

20. 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.
21. The applicant shall conform to the City of St. Helena Water and Sewer Standards Section 6-2.10 which includes assessing the adequacy of the lateral, replacing if necessary and installing any needed cleanouts prior to Certificate of Occupancy.
22. Any missing or broken curb and gutter along the project frontage shall be constructed and/or replaced prior to Certificate of Occupancy, extent to be determined by the Public Works Department.
23. The applicant shall repair all public improvements that are damaged by the construction process in accordance with the City Water/Sewer/Street/Storm Drain/Sidewalk Standards prior to Certificate of Occupancy.
24. An encroachment permit shall be required for any work performed in the public right of way.

Building Department Conditions of Approval

25. 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 2013 Title 24 codes.
26. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist.
27. The applicant shall provide a construction waste management plan with the building permit application.
28. 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.
29. When submitting plans, the title page shall include all information referenced on the building permit application checklist Title Page requirements.
30. 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.

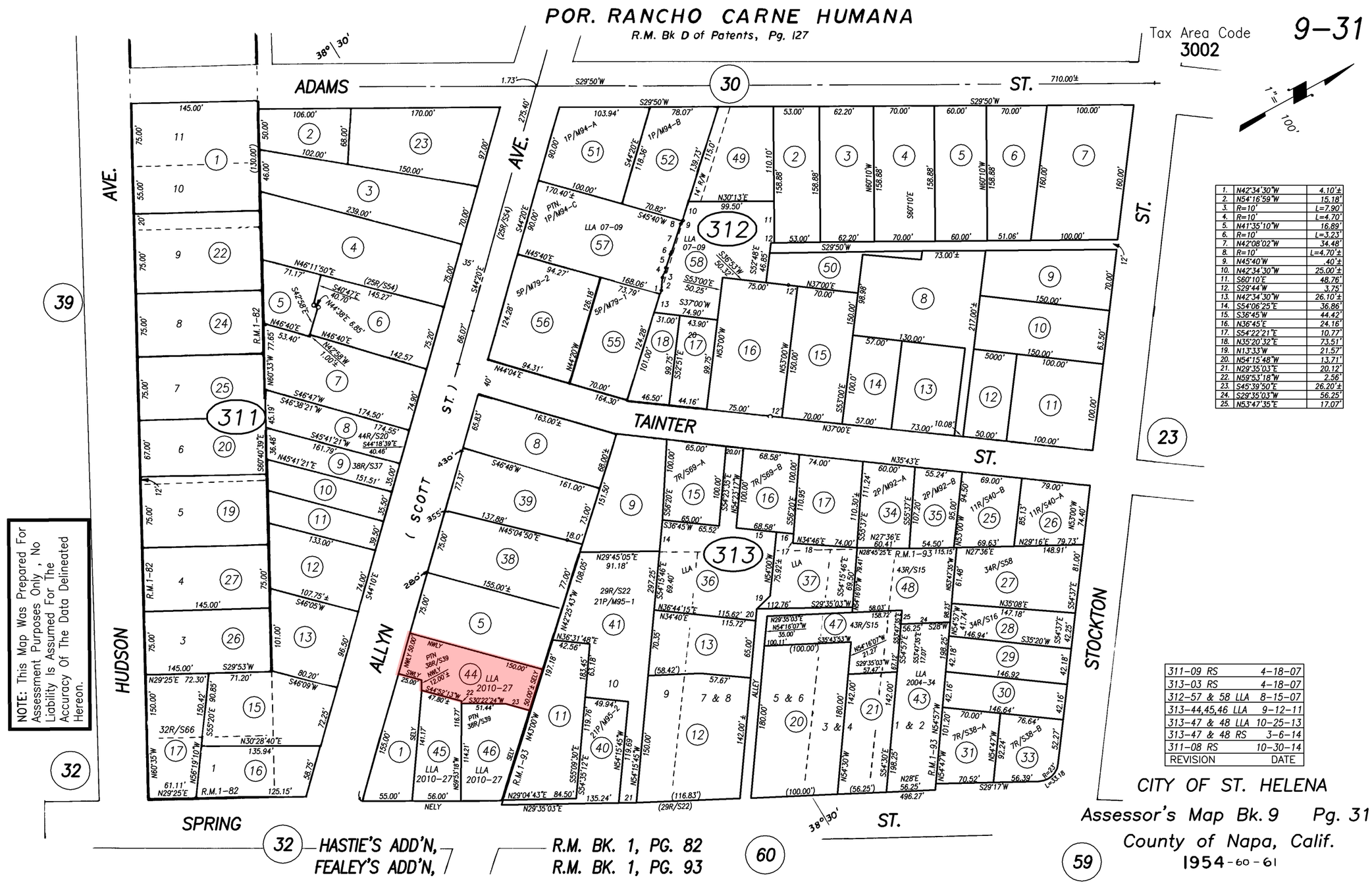
Fire Department Conditions of Approval

31. Fire sprinklers and fire hydrants shall be installed as required by Fire Code and the Fire Department.

I HEREBY CERTIFY that the foregoing design review 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 April 18, 2017 by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

APPROVED:	ATTEST:
Grace Kistner Chair, Planning Commission	Noah Housh Planning Director



1.	N42°34'30"W	4.10'±
2.	N54°16'59"W	15.18'
3.	R=10'	L=7.90'
4.	R=10'	L=4.70'
5.	N41°35'10"W	16.89'
6.	R=10'	L=3.23'
7.	N42°08'02"W	34.48'
8.	R=10'	L=4.70'±
9.	N45°40'W	40'±
10.	N42°34'30"W	25.00'±
11.	S60°10'E	48.76'
12.	S29°44'W	3.75'
13.	N42°34'30"W	26.10'±
14.	S54°06'25"E	36.86'
15.	S36°45'W	44.42'
16.	N36°45'E	24.16'
17.	S54°22'21"E	10.77'
18.	N35°20'32"E	73.51'
19.	N13°33'W	21.57'
20.	N54°15'48"W	13.71'
21.	N29°35'03"E	20.12'
22.	N59°53'18"W	2.56'
23.	S45°39'50"E	26.20'±
24.	S29°35'03"W	56.25'
25.	N53°47'35"E	17.07'

311-09 RS	4-18-07	
313-03 RS	4-18-07	
312-57 & 58 LLA	8-15-07	
313-44,45,46 LLA	9-12-11	
313-47 & 48 LLA	10-25-13	
313-47 & 48 RS	3-6-14	
311-08 RS	10-30-14	
REVISION	DATE	

Addition / Remodel

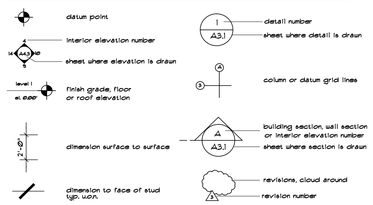
for

Tom & Gale Trainor
1230 Allyn Avenue
St. Helena, California

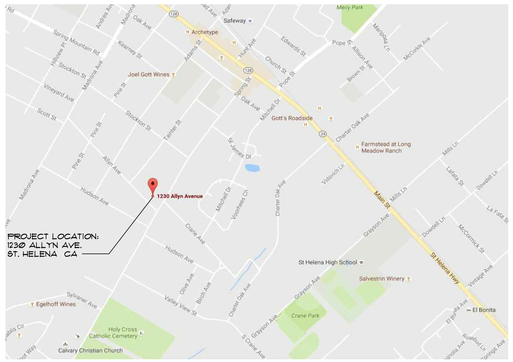
Typical Abbreviations:

@	At	L.B.	Lag Bolt
A.B.	Anchor Bolt	LLH	Long Leg Horizontal
ALUM	Aluminum	LLV	Long Leg Vertical
ALT	Alternate	LT	Light
ATR	All-Thread Rod	LVL	Laminated Veneer Lumber
B.F.F.	Below Finished Floor		
BLDG	Building	MAX	Maximum
BLKG	Blocking	M.B.	Machine Bolt
BM	Beam	MECH	Mechanical
℄	Centerline	MFR	Manufacturer
CALCS	Calculations	MIN	Minimum
CANT	Cantilever	MISC	Miscellaneous
C.B.	Carriage Bolt		
C.J.	Control Joint	(N)	New
CLR	CLR	N.A.	Not Applicable
C.M.U.	Concrete Masonry Unit	N.I.C.	Not In Contract
COL	Column	NO.	Number (#)
CONC	Concrete	N.T.S.	Not to Scale
CONN	Connector		
CSK	Countersink	O/	Over (On)
		O.C.	On Center
DBL	Double	O.D.	Outside Diameter
D.E.J.	Dowelled Expansion Joint	OSB	Oriented Strand Board
DET	Detail	PAR	Parallel (||)
D.F.	Douglas Fir	PERP	Perpendicular (_)
DIA	Diameter	P.D.F.	Power Driven Fastener
DIM	Dimension	P.G.	Paint Grade
DO	Ditto	PL	Plate
DWG	Drawing	PLWD	Plywood
		P.S.I.	Pounds per Square Inch
(E)	Existing	PSL	Parallel Strand Lumber
EA	Each	P.T.	Pressure Treated
E.B.	Expansion Bolt		
E.E.	Each End	R	Radius
E.F.	Each Face	REBAR	Reinforcing Steel Bar
ELEV	Elevation	REF	Reference
E.J.	Expansion Joint	REINF	Reinforcing
E.N.	Edge Nail	RET	Return
E.S.	Each Side	REQ'D	Required
E.W.	Each Way	R.O.	Rough Opening
EXP	Expansion	RDWD	Redwood
EQ	Equal		
EXT	Exterior	S.A.D.	See Architectural Drawings
		S.B.	Solid Block
FDN	Foundation	S.C.D.	See Civil Drawings
FF	Finish Floor	SHT	Sheet
FIN	Finish	SHTG	Sheathing
FLR	Floor	SIM	Similar
F.N.	Field Nail	S.M.D.	See Mechanical Drawings
F.O.C.	Face of Concrete	SPECS	Specifications
F.O.M.	Face of Masonry	SQ	Square
F.O.S.	Face of Stud	S.S.	Select Structural
FT	Feet	STL	Steel
FTG	Footing	S.W.	Shear Wall
		SYM	Symetrical
GA	Gauge	S4S	Surfaced all Four Sides
GALV	Galvanized		
GLB	Glu-Laminated Beam	T.C.	Top of Curb
GYP. BD.	Gypsum Board	T&B	Top & Bottom
		T&G	Tongue & Groove
HD	Shear Wall Holdown	T.N.	Toe Nail
HDR	Header	T.O.	Top of
HGR	Hanger	T.O.C.	Top of Concrete
HORZ	Horizontal	TS	Tube Steel
H.S.	High Strength	T-U	Tilt-Up
H.S.B.	High Strength Bolt	TYP	Typical
HT	Height		
		UBC	Uniform Building Code
I.D.	Inside Diameter	U.O.N.	Unless Otherwise Noted
INT.	Interior		
		VERT	Vertical
J.H.	Joist Hanger	V.B.	Vapor Barrier
JST	Joist	V.I.F.	Verify In Field
JT	Joint		
		W/	With
KD	Kiln Dried	W.P.	Waterproof
		WWF	Welded Wire Fabric

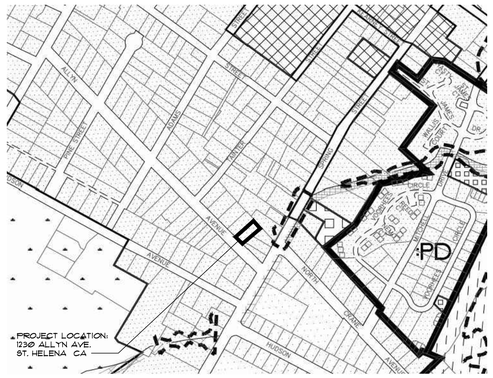
Symbols



Vicinity Map:



Plot Plan:



Index of Drawings:

TS	TITLE SHEET: INDEX OF DRAWINGS, PROJECT INFO, VICINITY MAP, RENDERINGS, PROJECT DIRECTORY
W.N.1	WATER NEUTRALITY CALCULATIONS AND SPECS.
CM.1	COLORS AND MATERIALS
EXISTING CONDITIONS:	
ESP	EXISTING SITE PHOTOS
EC@1	EXISTING SURVEY
EC1.1	EXISTING FLOOR PLAN
EC1.2	EXISTING EXTERIOR ELEVATIONS
EC1.3	EXISTING BUILDING SECTION
EC1.4	EXISTING ROOF PLAN
PROPOSED ARCHITECTURAL DRAWINGS:	
A0.1	PROPOSED SITE PLAN
A1.1	PROPOSED FLOOR PLAN
A2.1-A2.2	PROPOSED EXTERIOR ELEVATIONS
A3.1	SECTION
A4.1	ROOF PLAN
PROPOSED LANDSCAPE DRAWINGS:	
1	LANDSCAPE SITE PLAN
2	PLANTING PLAN
3	IRRIGATION PLAN
4	GRADING & DRAINAGE PLAN

Project Info

ADDRESS:	1230 ALLYN AVENUE, ST. HELENA, CA
APN:	009-313-044
LOT AREA:	8,421 SF.
ZONING:	MR-MEDIUM DENSITY RESIDENTIAL
OCCUPANCY GROUP:	R-3
CONSTRUCTION TYPE:	VB
FIRE HAZARD:	LOW
FLOOD ZONE:	N/A
BUILDING HEIGHT:	
STORIES:	1 STORY

DEVELOPMENT STANDARDS:	ALLOWED	EXISTING	PROPOSED
COVERAGE (45%)			
EXISTING HOUSE		1,263 S.F.	1,263 S.F.
EXISTING FRONT PORCH		127	127
EXISTING BACK DECK		283	218
EXISTING SIDE DECK		47	47
EXISTING GARAGE		424	424
EXISTING SHED		254	254
NEW KITCHEN/MASTER BR/BATH			337
NEW SCREENED PORCH			117
TOTAL	3,792 S.F.	2,388 S.F.	2,787 S.F.
COVERAGE %	45%	28%	33%
FLOOR AREA (32.4%)			
EXISTING RESIDENCE		1,263 S.F.	1,263 S.F.
EXISTING SHED		254	254
EXISTING GARAGE		424	424
NEW KITCHEN/MASTER BR/BATH			337
EXISTING BATH/LAUNDRY REMOVED			-28
GARAGE ALLOWANCE		-200	-200
TOTAL	2,775 S.F.	1,741 S.F.	2,050 S.F.
FAR	32.4%	21%	24%

SETBACKS (MAIN RESIDENCE):	ALLOWED	EXISTING	PROPOSED
FRONT	20'-0"	24'-0"	24'-0" (NO CHANGE)
SIDE-LEFT	10'-0"	11'-7"	11'-7" (NO CHANGE)
SIDE-RIGHT	10'-0"	10'-2½"	10'-0" (AT MBR ADD)
REAR	20'-0"	71'-8"	62'-5½" (AT SCREENED PORCH)

BUILDING HEIGHT:	ALLOWED	EXISTING	PROPOSED
	30'-0"	21'-3½"	20'-7" (AT KITCHEN)

Project Directory

Owner/Builder

TOM & GALE TRAINOR
1256 STOCKTON STREET
ST. HELENA, CA 94574

TRAINOR BUILDERS
1050 ADAMS STREET, SUITE B
ST. HELENA CA 94574
(707) 963-9020
TOM@TRAINORBUILDERS.COM

Architect

JOSEPH P. FARRELL, ARCHITECT
1 COMMERCIAL BLVD., SUITE 106
NOVATO, CA 94949
(415) 884-2860
jfarrell@farrellarc.com

Preliminary
Not for Construction

Design Review Submittal

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REVISIONS	DATE	BY

Joseph Farrell
ARCHITECT
1 Commercial Blvd. Suite 106
Novato, CA 94949
Voice (415) 884-2860

Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California AP#: 009-313-044

Title Sheet
Project Info

REVIEW THE DRAWINGS CAREFULLY. DO NOT SCALE THE DRAWINGS. ANY DISCREPANCIES IN DIMENSIONS AND DETAILS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF JOSEPH P. FARRELL, ARCHITECT

DATE:	9-7-16
SCALE:	N/A
DRAWN:	JF
JOB NO.	1608
SHEET NO:	TS

1230 Allyn Avenue
St. Helena, CA

Existing Left View

Existing Right View

Existing Back View

Backyard View

Preliminary
Not for Construction

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REVISIONS	DATE	BY

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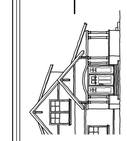


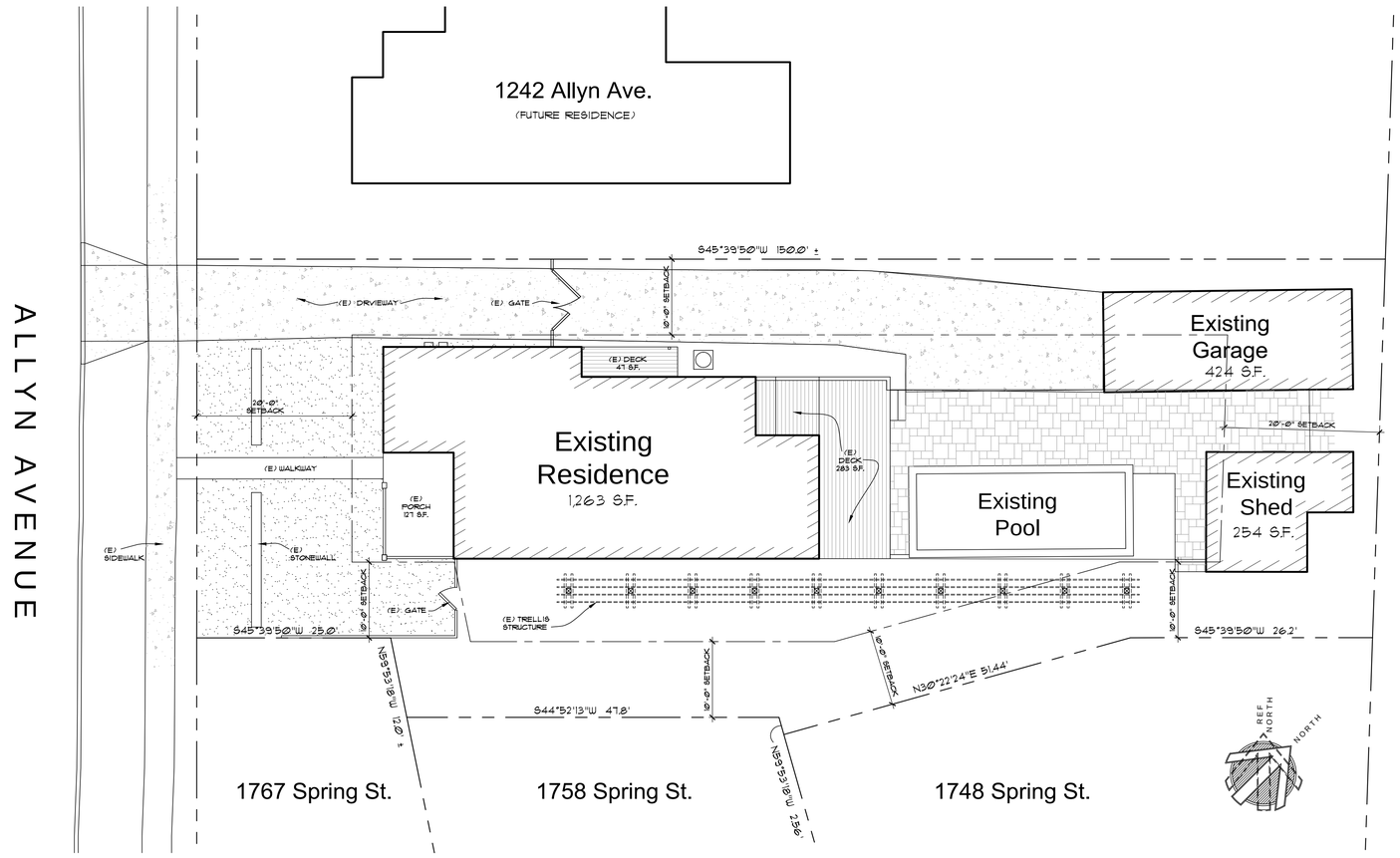
Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California AP#: 009-313-044

Existing
Site Photos

REVIEW THE DRAWINGS CAREFULLY. DO NOT SCALE THE DRAWINGS. ANY DISCREPANCIES IN DIMENSIONS AND DETAILS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF JOSEPH P. FARRELL, ARCHITECT

DATE: 12-9-15
SCALE: n/a
DRAWN: JF
JOB NO. 1608
SHEET NO:

ESP
1230 Allyn Avenue
St. Helena, CA



Existing Site Plan

SCALE: 1/8"= 1'-0"

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REVISIONS	DATE	BY

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Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California
AP#: 009-313-044

Existing
Site Plan

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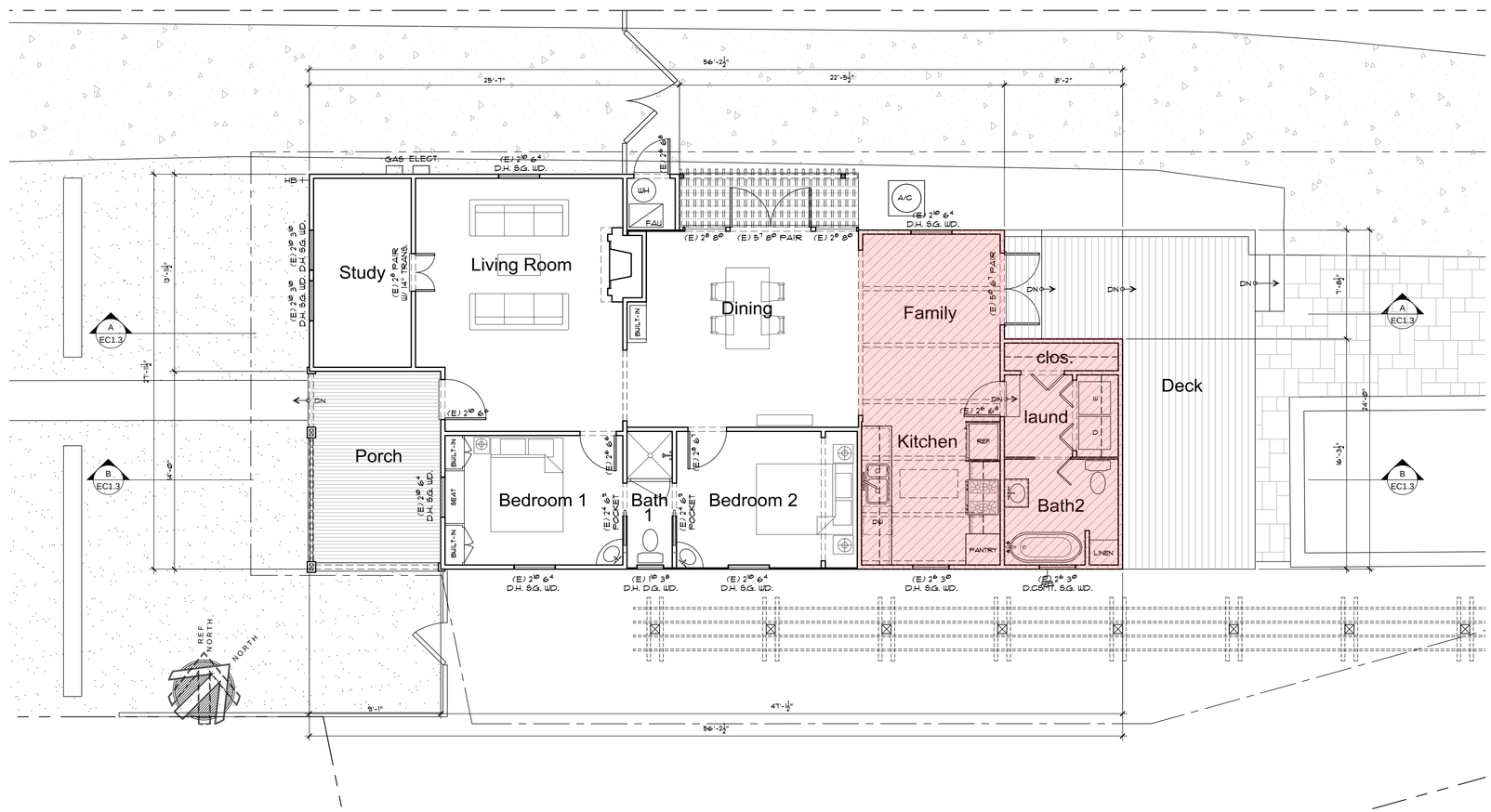
DATE: 9-13-16
SCALE: 1/8"= 1'-0"
DRAWN: JF
JOB NO. 1608
SHEET NO:

EC0.1

1230 Allyn Avenue
St. Helena, CA



Existing Floor Plan

SCALE: 1/4" = 1'-0"

Preliminary
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REVISIONS	DATE	BY

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Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California
AP#: 009-313-044

Existing
Floor Plan

REVIEW THE DRAWINGS CAREFULLY. DO NOT SCALE THE DRAWINGS. ANY DISCREPANCIES IN DIMENSIONS AND DETAILS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF JOSEPH F. FARRELL, ARCHITECT

DATE: 8-25-16
SCALE: 1/4"= 1'-0"
DRAWN: ck
JOB NO. 1608
SHEET NO:

EC1.1

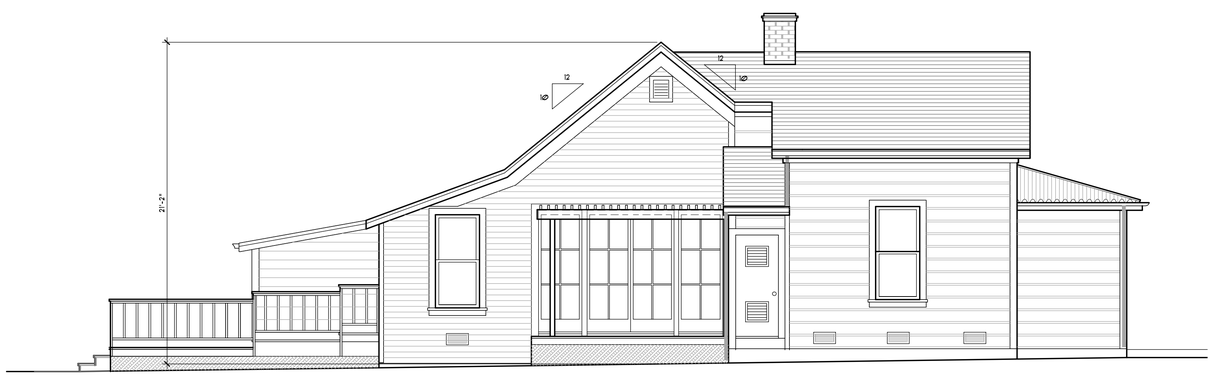
1230 Allyn Avenue
St. Helena, CA

Existing South Elevation

SCALE: 1/4"= 1'-0"

Existing East Elevation

SCALE: 1/4"= 1'-0"



Existing North Elevation

SCALE: 1/4"= 1'-0"

Existing West Elevation

SCALE: 1/4"= 1'-0"

Preliminary
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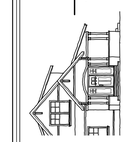


Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California AP#: 009-313-044

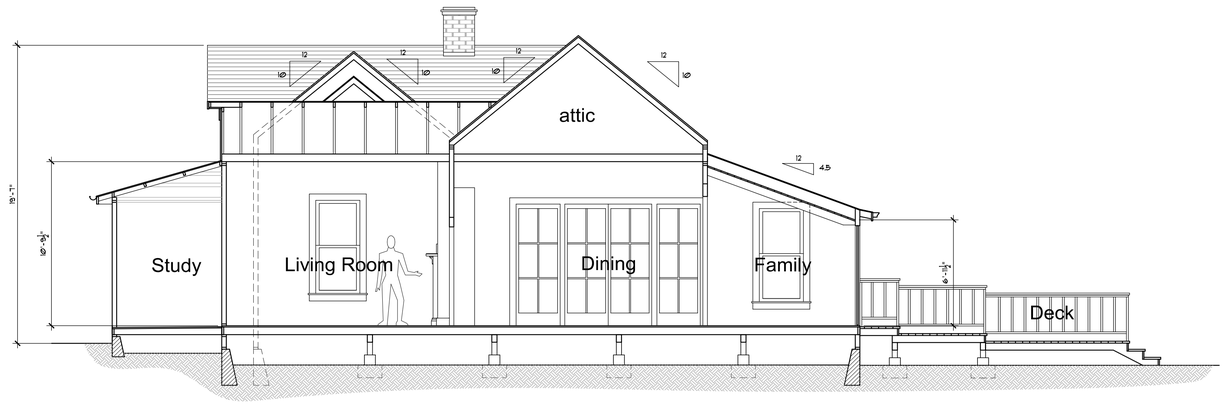
Existing
Exterior
Elevations

REVIEW THE DRAWINGS CAREFULLY. DO NOT SCALE THE DRAWINGS. ANY DISCREPANCIES IN DIMENSIONS AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF JOSEPH P. FARRELL, ARCHITECT

DATE:	9-9-16
SCALE:	1/4"= 1'-0"
DRAWN:	ck
JOB NO.	1608
SHEET NO:	

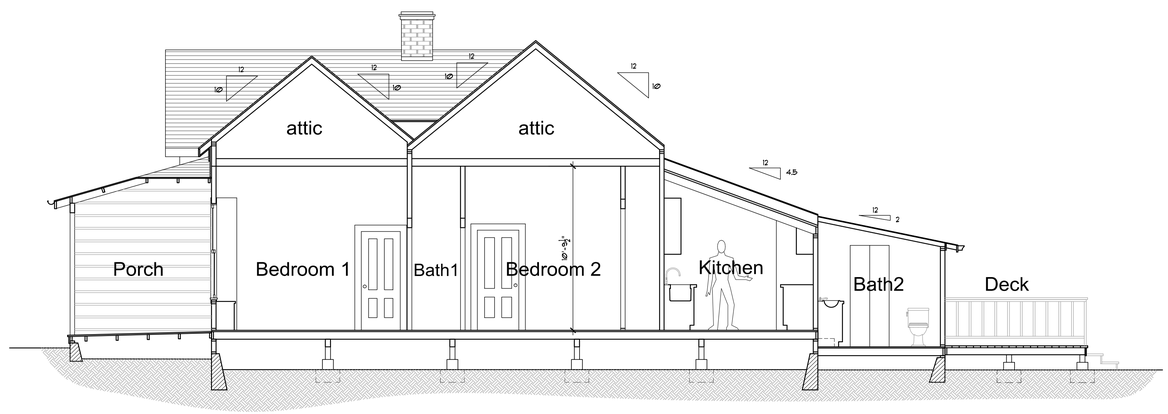
EC1.2

1230 Allyn Avenue
St. Helena, CA



Existing Building Section A

SCALE: 1/4"= 1'-0"



Existing Building Section B

SCALE: 1/4"= 1'-0"

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Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California
AP#: 009-313-044

Existing Sections

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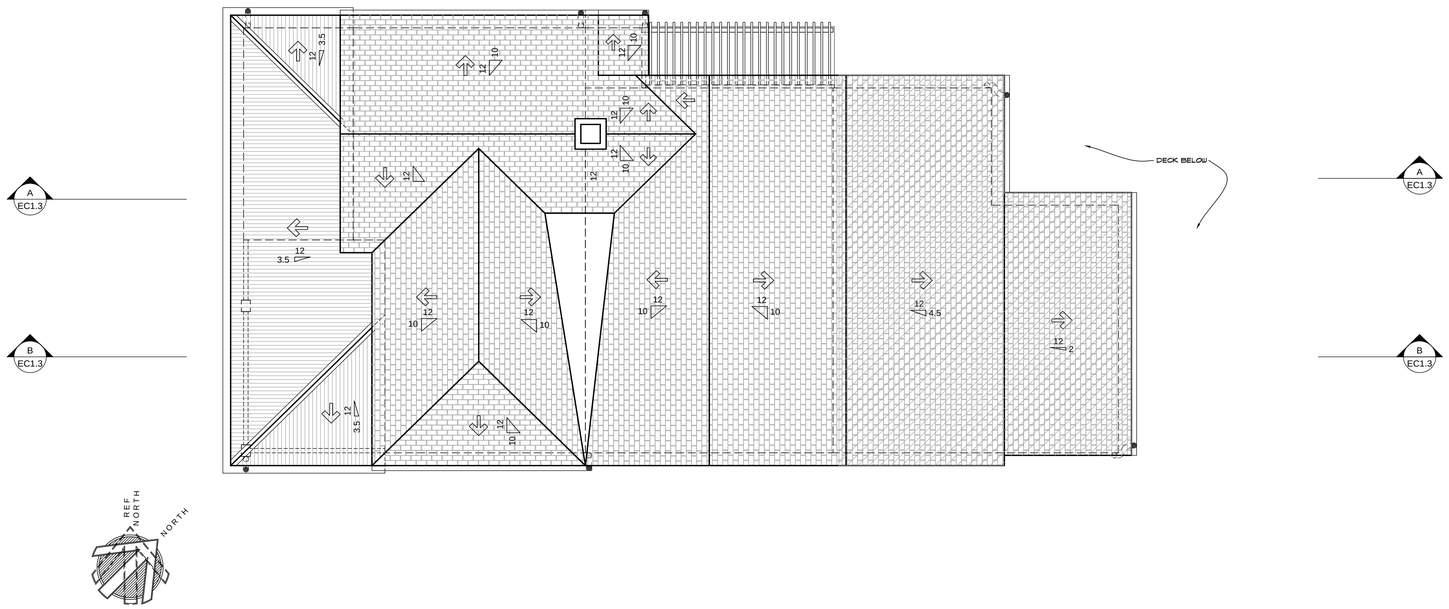
DATE: 9-9-16
SCALE: 1/4"= 1'-0"
DRAWN: ck
JOB NO. 1608
SHEET NO:

EC1.3

1230 Allyn Avenue
St. Helena, CA

Existing structure
to be demolished



Existing Roof Plan

SCALE: 1/4"= 1'-0"

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Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California AP#: 009-313-044

Existing
Roof Plan

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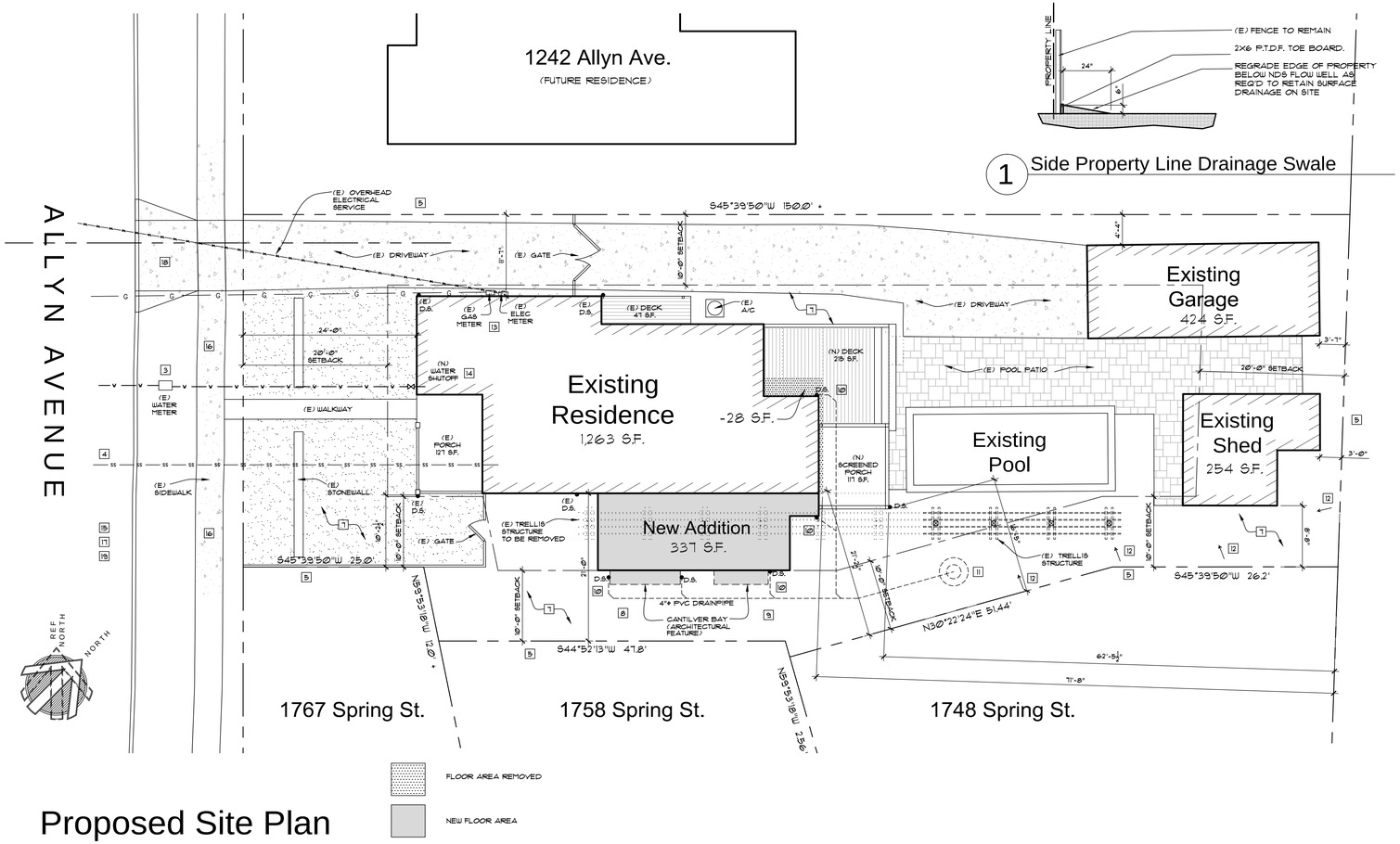
DATE: 9-7-16
SCALE: 1/4"= 1'-0"
DRAWN: ck
JOB NO. 1608
SHEET NO:

EC1.4

1230 Allyn Avenue
St. Helena, CA

Site Plan Notes

1. ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THESE PLANS, THE 2013 CALIFORNIA RESIDENTIAL CODE, 2013 CALIFORNIA PLUMBING CODE, 2013 CALIFORNIA MECHANICAL CODE, 2013 CALIFORNIA ELECTRICAL CODE, 2013 CALIFORNIA ENERGY CODE, 2013 CALIFORNIA BUILDING ENERGY STANDARDS, 2013 CALIFORNIA GREEN BUILDING STANDARDS (CalGreen), 2013 CALIFORNIA BUILDING CODE, AND ANY OTHER APPLICABLE CODES AND REGULATIONS OF THIS JURISDICTION.
2. CONTRACTOR TO FIELD VERIFY LOCATIONS OF ALL UTILITIES, UNDERGROUND OR OTHERWISE PRIOR TO COMMENCEMENT OF ANY EXCAVATION.
3. PROPERTY IS SERVED BY EXISTING CITY OF ST. HELENA MUNICIPAL WATER SERVICES. EXISTING MAIN RESIDENCE WATER SERVICE TO BE REPLACED AS REQUIRED FOR NEW FIRE SPRINKLER SYSTEM. REMOVE AND PROVIDE TRENCH/REPAIR PAVEMENT PER CITY STANDARD 401. PROVIDE NEW MAIN RESIDENCE WATER SERVICE AT SOUTHEAST CORNER. INSTALL SERVICE PER CITY STANDARD 103 IN TRENCH PER CITY STANDARD 401. SIZE SERVICE FOR NEW FIRE SPRINKLER SYSTEM. ANY NEW AND MODIFIED 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 WATER 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 OF ANY DRIVEWAY. FIRE SYSTEM CALCULATIONS SHALL BE SUBMITTED WITH GRADING AND DRAINAGE PLAN TO VERIFY FIRE SERVICE LATERAL AND METER SIZING.
4. PROPERTY SERVED BY EXISTING MUNICIPAL SEWER CONNECTION(S). PROVIDE SEWER LATERAL INSPECTION AND REPAIR AS REQUIRED. IF REPAIR IS REQUIRED, REMOVE AND PROVIDE TRENCH/REPAIR PAVEMENT PER CITY STANDARD 401. PROVIDE NEW SEWER LATERAL PER CITY OF ST. HELENA STANDARDS SECTION 6-210. INSTALL NEW LATERAL AND CLEANOUTS PER CITY STANDARD 211 AND 212.
5. CONTRACTOR TO FIELD VERIFY DIMENSIONS AND LOCATIONS OF ALL PROPERTY LINES, SETBACKS, EASEMENTS, AND BUILDING LOCATION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
6. ALL TRENCHES 5' OR GREATER IN DEPTH SHALL BE SHORED AND BRACED ACCORDING TO STATE LAW.
7. EXISTING LANDSCAPED AREAS TO REMAIN (PROJECT PROPOSES NO NEW LANDSCAPE MODIFICATIONS.)
8. GRADE PERIMETER OF BUILDING STRUCTURE TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS. THE GRADE SHALL FALL A MINIMUM OF 6 INCHES WITHIN THE FIRST 10 FEET. IMPERVIOUS SURFACES SHALL SLOPE A MINIMUM 2% AWAY FROM THE STRUCTURE FOR THE FIRST 10 FEET AT UNCOVERED PATIOS. IF IT IS NOT POSSIBLE TO SLOPE SWALE AT 2% MIN. CONTINUOUSLY AROUND STRUCTURE, PROVIDE AREA DRAIN (ADJ.) INLETS AT BASE OF SWALE(S) AS REQUIRED TO CAPTURE SURFACE DRAINAGE (NORTH PROPERTY LINE).
9. ALL NEW DRAINAGE CONFORM TO CITY OF ST. HELENA AND STATE CODES AT A MINIMUM.
10. ALL NEW ROOF DOWNSPOUTS TO BE CONNECTED TO 4"ø SCHEDULE 40 PVC UNDERGROUND DRAIN PIPES. INSTALL CLEANOUTS AT ALL ANGLE POINTS IN STORMDRAIN. SURFACE SCREW CAP SHALL BE METAL INSTALLED IN A NON-TRAFFIC BOX WITH COVER. SEE ROOF PLAN FOR LOCATIONS. PER CPC 1001.22 PROVIDE IN-LINE DOWNSPOUT CLEAN OUT AT EACH DOWNSPOUT PRIOR TO DOWNSPOUT ENTERING SUB-GRADE STORMDRAIN SYSTEM.
11. ALL NEW UNDERGROUND DRAINS SERVING ROOF AND AREA DRAINS TO BE CONNECTED TO A NEW NDS FLOW WELLS PER PLAN. MAINTAIN 10 FOOT MIN CLEARANCE FROM HOUSE STRUCTURES. NDS FLOW WELL TO OVERFLOW TO PANTING AREA(S).
12. GRADE PERIMETER OF PROPERTY 6" VERTICALLY ADJACENT TO OR BELOW FLOW WELL OVERFLOW TO DRAIN BACK INTO SUBJECT PROPERTY TO REDUCE OFF SITE SURFACE DRAINAGE FROM SHEET FLOWING ONTO NEIGHBORING PROPERTIES. SEE DETAIL "1/-" FOR ADDITIONAL INFO.
13. EXISTING GAS & ELECTRICAL SERVICE TO REMAIN. PROVIDE NEW METERS PER PG&E STANDARDS.
14. INSTALL APPROVED BACKFLOW DEVICES BEHIND WATER METERS PER CITY STANDARD 106 PRIOR TO THE CERTIFICATE OF OCCUPANCY.
15. CONTRACTOR TO REPAIR ALL PUBLIC IMPROVEMENTS THAT ARE DAMAGED BY THE CONSTRUCTION PROCESS IN ACCORDANCE WITH THE CITY WATER, SEWER, STREET, STORM DRAIN AND SIDEWALK STANDARDS PRIOR TO CERTIFICATE OF OCCUPANCY.
16. ALL FRONTAGES SHALL HAVE A CONCRETE SIDEWALK WITH CURB/GUTTER AS NEEDED. ANY MISSING OR BROKEN CURB, GUTTER AND/OR SIDEWALK ALONG THE PROJECT FRONTAGE SHALL BE INSTALLED AND/OR REPLACED PER CITY OF ST. HELENA STANDARDS PRIOR TO CERTIFICATE OF OCCUPANCY, EXTENT TO BE DETERMINED BY THE PUBLIC WORKS DEPARTMENT.
17. AT STREET MODIFICATIONS, CONTRACTOR TO PROVIDE EDGE GRINDING AND AN AC OVERLAY PER CITY OF ST. HELENA STANDARDS, EXTENT TO BE DETERMINED BY THE PUBLIC WORK DEPARTMENT. STREETS IN THE IN THE MORATORIUM AREAS SHALL BE REPAVED FULL WIDTH PER CITY CODE.
18. CONTRACTOR TO REPLACE NON-EXISTENT, DETERIORATING OR NON-STANDARD DRIVEWAY APPROACHES PER ST. HELENA PW STD. 4-108 & DRAWING STD. 314.A9 REQUIRED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO THE CERTIFICATE OF OCCUPANCY.
19. CONTRACTOR TO OBTAIN ENCROACHMENT PERMIT(S) FOR ANY WORK PERFORMED IN THE PUBLIC RIGHT OF WAY.



Proposed Site Plan

SCALE: 1/8"= 1'-0"

1 Side Property Line Drainage Swale

Site Permeability Calculation

Existing Lot Area 8427 sq. ft.

Existing Conditions:

	Permeable	Impermeable
House structure		1390
Garage Structure		424
Shed		254
Driveway		1283
Deck North		47
Rear Deck		283
Pool/Patio		1020
landscape	3726	0
Total	3726	4701

Proposed Design:

	Permeable	Impermeable
House structure		1390
Garage Structure		424
Shed		254
Driveway		1283
Deck North		47
Rear Deck		283
Pool/Patio		1020
New Addition		359
landscape	3367	0
Total	3367	5060

Net Increase in permeable surface= 359 sq. ft.

Note: increase of impervious areas < 2,500 sq. ft....not stormwater control plan required

Preliminary
Not for Construction

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REVISIONS	DATE	BY

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St. Helena, California
AP#: 009-313-044

Proposed Site Plan

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DATE: 9-29-16
SCALE: 1/8"= 1'-0"
DRAWN: JF
JOB NO. 1608
SHEET NO:
A0.1
1230 Allyn Avenue
St. Helena, CA

NDS Flo-Well Calculator

Step 1:
Enter the Square Feet of Drainage Area 1: (Ex. Roof)

479

Enter the Square Feet of Drainage Area 2: (Ex. Grass)

750

Step 2:
Choose the Coefficient of Runoff for Area 1: 0.45 (Loam)

Choose the Coefficient of Runoff for Area 2: 0.50 (Gravel

Step 3:
Choose the 25 Year Rainfall: (see rainfall map). 1 in/hr

Step 4:
Enter the depth of the gravel backfill beneath the Flo-Well:

(Dimension A) 2 ft

Step 5:
Enter the thickness of the gravel backfill around the Flo-Well:

(Dimension B) 1.5 ft

Step 6:
Press the Calculate button for results: Calculate Reset Print

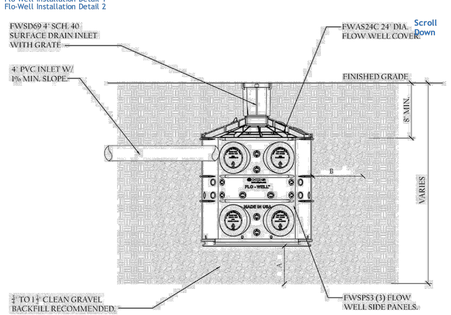
Step 7: View results:

Runoff	**6.14** GPM **0.02** CFS
Volume of water to be stored	**184.20** Gallons **24.63** Cubic feet

# of Flo-Wells Needed	1

Amount of Gravel Needed	**2.92** Cubic yards **78.84** Cubic feet

Download Installation Details
Flo-Well Installation Detail 1
Flo-Well Installation Detail 2



Flo-Well MANUFACTURED DRYWELL

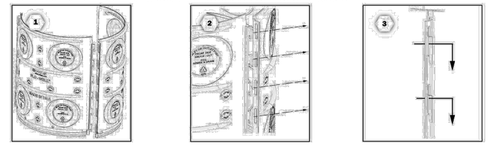
Flo-Well Assembly and Installation Sheet
Thank you for purchasing the Flo-Well system by NDS, the following information can help you maximize the benefits Flo-Well has to offer.
Form Name LFWAS24

WARNING: Call before you dig. Contact your local utilities to create utility mark-out and to avoid personal injury.
RECOMMENDED: For all Flo-Well configurations install at least an appropriate 10 feet from foundations or structures.

ASSEMBLY INSTRUCTIONS

BEFORE YOU DIG: Contact the local utilities to create utility markout.

1. Place two panels side by side and align male tabs with female flange.
2. Pinch tabs and flange flush until panels interlock.
3. For final lock, slide male tabs downward until panel edges are leveled at top.
4. Repeat steps 1-3 for the third panel assembly.
5. Set cover over panel assembly and rotate until all three panel flanges are aligned with cover screw locations.

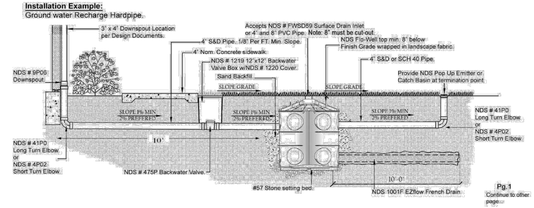


DRY WELL SETUP

Required items: Small hammer, tape, fabric pack, shovel, sand or recommended 3/4" stone gravel, 4" PVC pipe, jig saw, and catch basin or downspout adapter

1. Strategically plan Flo-Wells location at a minimum distance of 10' from foundations.
   a. Note: Take into consideration traffic and elevation conditions.
2. Once Flo-Well location is verified; dig a 4' wide by 4' deep hole.
3. Dig a trench from the end of the downspout at about 1' deep and 6" wide that slopes gradually towards the Flo-Well.
4. For pipe connection and leach direction, use small hammer to knock-out appropriate 1" and 4" panel ports.
5. Wrap fabric around Flo-Well and secure with tape to prevent soil from entering drain holes.
6. Place Flo-Well assembly into ground and insert preferred 4" pipe into knocked-out port. Connect other end of 4" pipe to downspout either by catch basin or downspout adapter.
7. Backfill evenly around the Flo-Well with sand or recommended 3/4" stone gravel.
8. Bury Flo-well assembly with top at least 8" below the surface grade.

Installation Example:
Ground water Recharge Hardpipe.



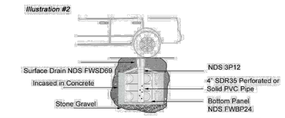
Pg.1
Continue to other page...

LFWAS24

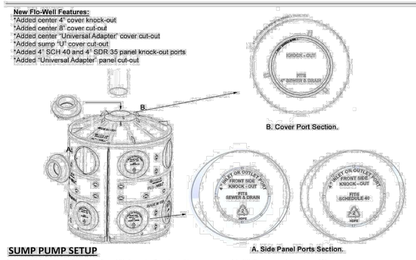
Continued...
Optional 1: *See illustration #2*
1. For light traffic applications:
Install perforated or slotted SDR35 Pipe to increase vertical loading strength as shown.

Optional 2: *See illustration #1*
2. For water back up prevention:
Vent downspout and use surface drain to allow overflow of excess water away from Flow-Well.
3. To capture collected surface water:
Place the Flow-Well at the lowest elevation point and install surface drain directly on top of cover.

Illustration #2



New Flo-Well Features:
*Added center 4" cover knock-out
*Added center 8" cover cut-out
*Added center "Universal Adapter" cover cut-out
*Added sump "U" cover cut-out
*Added 4" SCH 40 and 4" SDR 35 panel knock-out ports
*Added "Universal Adapter" panel cut-out



SUMP PUMP SETUP

Required items: Small hammer, tape, fabric pack, shovel, sand or recommended ¾" stone gravel, jig saw, and pump

1. Follow assembly instructions in section 1 then dig a 4' wide by 4' deep hole at a minimum distance of 10' from foundations.
2. For leach direction, use small hammer to knock-out appropriate 1" panel drain holes.
3. Wrap fabric around Flo-Well and secure with tape to prevent soil from entering drain holes.
4. Place Flo-Well assembly into ground and back fill around evenly up to cover with sand or recommended ¾" stone gravel.
5. For sump pumps there are (3) options:
6. a.) Knock-out the center 4" plug on the top cover if your pump has a center discharge.
   b.) Cut-out 8" circle template on cover with jigsaw for drop-in sump, cover with 8" S&D pipe, cap or install NDS 8" rnd. Grate part # 1040.
   c.) Cut out the "U" shaped section on the top of cover with a jig saw for pedestal pumps with cut-off floats.
7. Attach pump to cover to insure smooth operation of cut-off float.

For Installation details, please visit our website www.NDSPRO.com

Ndspro.com > Products and Solutions > Drainage Solutions > Flo-Well Drywell. The detail drawings will be under the 'Specify Flo-Well' category.

IMPORTANT NOTICE: It is your obligation to determine whether this product is suitable for your intended use and particular method of application. CONSULT YOUR LOCAL BUILDING OFFICIALS TO INSURE COMPLIANCE WITH ALL BUILDING CODES AND REQUIREMENTS.

CAUTION: The step-by-step installation instructions provided reflect mechanical assembly only. Additional information may be necessary to insure proper results for all applications. Consult with professionals to determine special soils conditions and structural requirements.

NDS WE PUT WATER IN ITS PLACE
Another Quality Product brought to you by NDS, Inc.
851 N. Harvard Avenue, Lindsay CA 93247
If you have any questions or comments about this product, please call us at (800) 726-1994

Pg. 2

Preliminary
Not for Construction

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REVISIONS	DATE	BY

Joseph Farrell
ARCHITECT
1 Commercial Blvd. Suite 106
Novato, CA 94949
Voice (415) 884-2860

Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California
AP#: 009-313-044

Site Drainage

REVIEW THE DRAWINGS CAREFULLY. REPORT ANY ERRORS, OMISSIONS OR DISCREPANCIES IN DIMENSIONS AND DETAILS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF JOSEPH P. FARRELL, ARCHITECT

DATE: 10-14-16
SCALE: nts
DRAWN: JF
JOB NO. 1608
SHEET NO:
A0.2
1230 Allyn Avenue
St. Helena, CA

SFD8409IB

Product technical report

QUOIZEL

General Product Information:

Item no.: SFD8409IB
Item class: Seaford Outdoor Fixture
Base material: Steel
Finish: Imperial Bronze
Finish description: Dark bronze with antique gold highlights and semi gloss finish
Item description: Take a stroll on the boardwalk with the Seaford outdoor collection. Available in Imperial Bronze and a Galvanized finish, its recessed bulb and broad shade focuses the light where you need it most. The Seaford collection illuminates the exterior of your home in style.
Item family: Seaford
Suggested room(s):
Energy Star rated: No

Dimensional Information:

Height(H): 9.00 "
Length(L):
Diameter(D):
Width(W): 9.00 "
Depth(Dp): 10.50 "
Extension(Ext):
Net weight: 2.00 lbs.
HCWO: 5.00
Please note that the HCWO dimension represents the distance from the wall outlet box center to highest point of mounted product.
Canopy/backplate: 5.75" DIAMETER
ADA compliant: No
Listed Mark: No
Listed Mark listed for:
Instruction sheet:

Electrical Information:

Bulb Type: A19 MED / alt. CFL SPIRAL, Wattage: 100, Bulb Qty: 1, Bulb Supplied:No, Switch Type: None, Wire Length: 6 Inches, Voltage: 120VAC

Shade Information:

Mounting Hardware:

(1) CROSSBAR, (1) GREEN GROUND SCREW, (2) LOCK WASHERS, (2) LOCK NUTS, (2) LOCK BALLS

Product Photo:

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SFD8409IB

Product technical report

QUOIZEL

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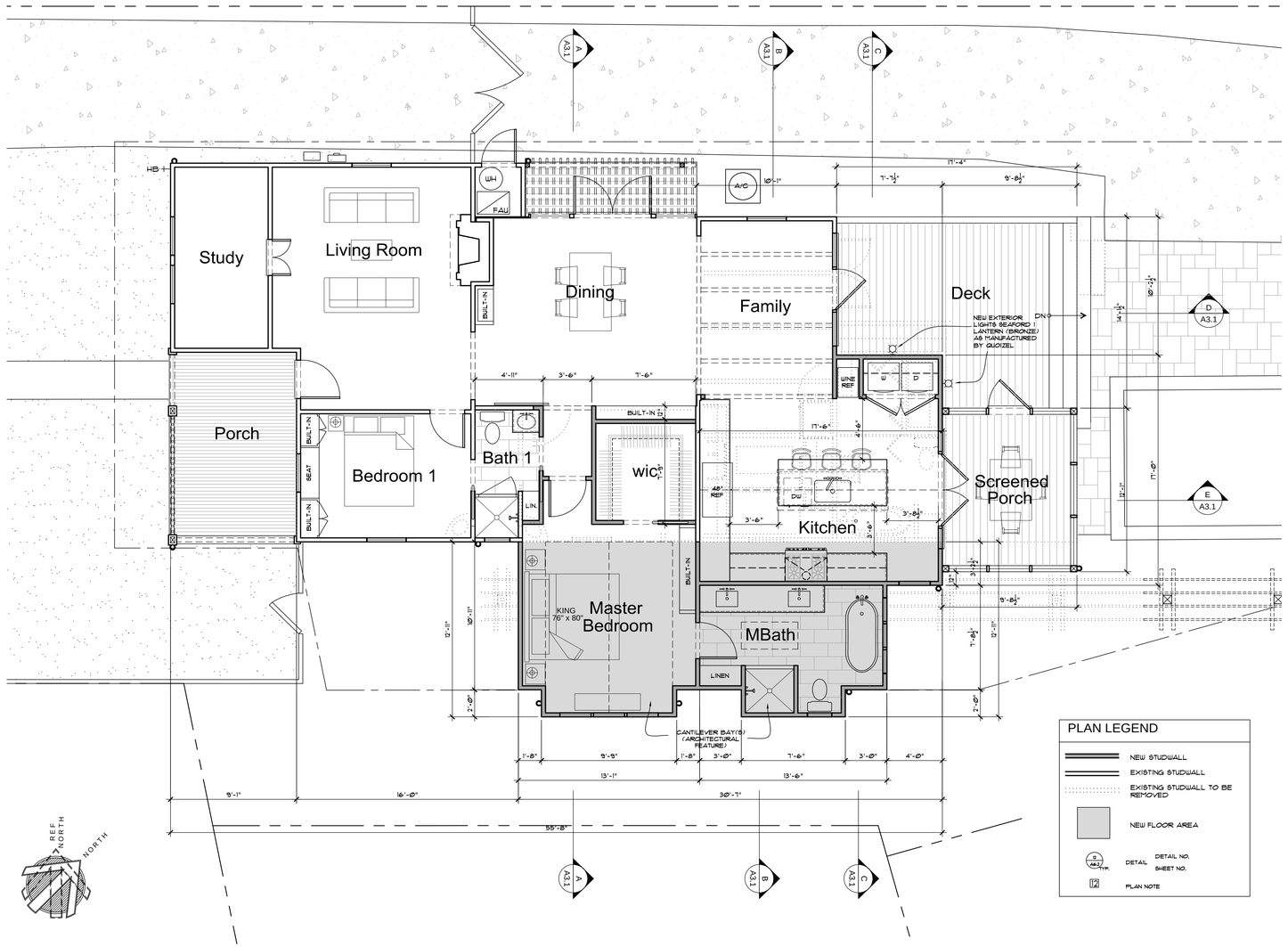

Proposed Floor Plan

Preliminary
Not for Construction

SCALE: 1/4"= 1'-0"

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Voice (415) 884-2860

Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California AP#: 009-313-044

Proposed Floor Plan

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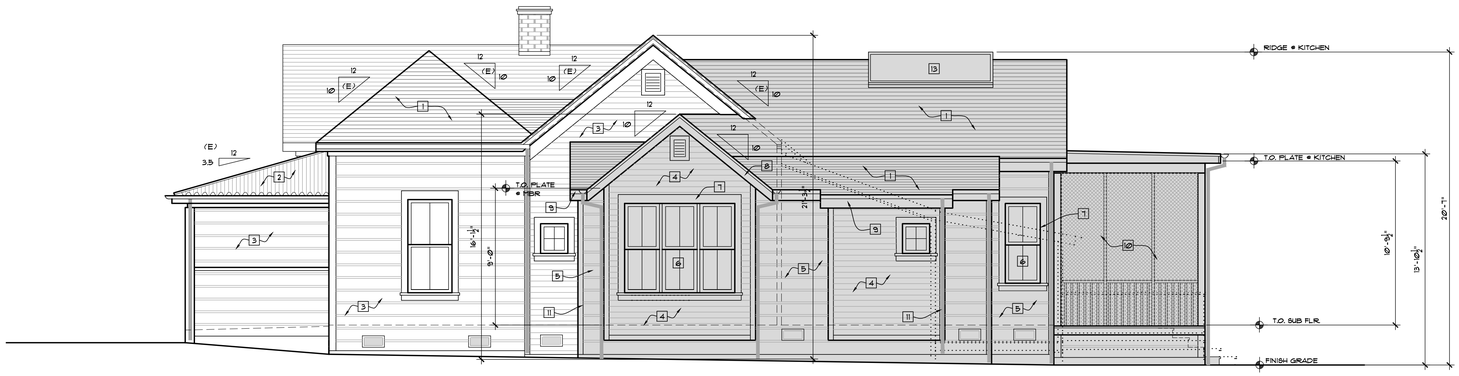
DATE: 9-12-16
SCALE: 1/4"= 1'-0"
DRAWN: ck
JOB NO. 1608
SHEET NO:

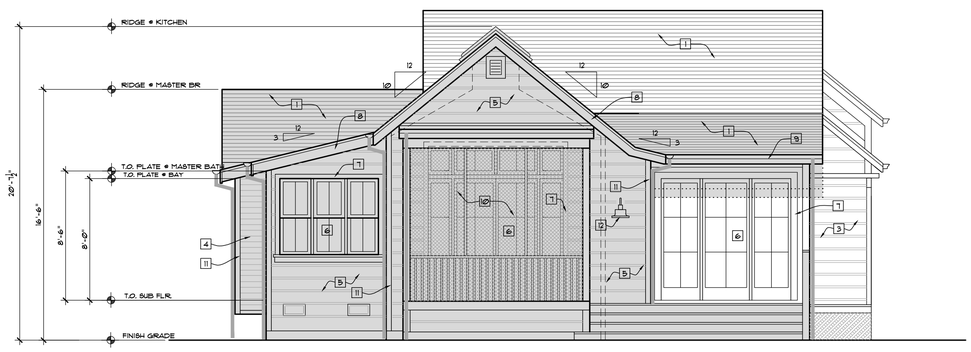
A1.1

1230 Allyn Avenue
St. Helena, CA



Proposed South Elevation

SCALE: 1/4"= 1'-0"



Proposed East Elevation

SCALE: 1/4"= 1'-0"

Elevation Notes:

1. NEW ASPHALT COMPOSITION ROOF (GAF TIMBERLINE "CHARCOAL") OVER APPROVED UNDERLAYMENT OVER PLYWOOD SHEATHING OVER ENGINEERED ROOF JOISTS/ROOF TRUSSES @ 24" O.C. PER ROOF FRAMING PLAN.
2. EXISTING GALVANIZED CORRUGATED METAL ROOFING AT ENTRY PORCH TO REMAIN.
3. EXISTING WOOD SIDING TO REMAIN.
4. NEW PAINTED SHIPLAP WOOD SIDING OVER APPROVED BUILDING PAPER OVER STRUCTURAL PLYWOOD SHEATHING. PAINT TO MATCH EXISTING COLOR(S).
5. NEW PAINTED COLONIAL WOOD SIDING OVER APPROVED BUILDING PAPER OVER STRUCTURAL PLYWOOD SHEATHING. PAINT TO MATCH EXISTING COLOR(S).
6. WINDOWS & PATIO DOORS: DOUBLE-GLAZED, METAL CLAD/WOOD UNITS. (MATCH EXISTING WINDOW COLOR)
7. 2X P.G. WINDOW/DOOR TRIM. (MATCH EXISTING COLOR(S).
8. 2X PAINTED BARGE BOARD/SOFFIT TO MATCH EXISTING. (MATCH EXISTING COLOR(S)
9. PAINTED G.S.M. 6" HALF-ROUND GUTTERS OVER 2X FASCIA BOARD/SOFFIT TO MATCH EXISTING. GUTTER WITH LEAF GUARDS AND PAINTED G.S.M. 2½"ø DOWNSPOUTS.
10. SCREENED PORCH: PAINTED 6X POSTS/BEAMS/RAILING.
11. 2X6 P.G. CORNER TRIM BOARDS AT OUTSIDE BUILDING CORNERS/MATCH EXISTING COLOR(S)
12. EXTERIOR LIGHT FIXTURE PER SHEET A1.1.
13. NON-REFLECTIVE RIDGE SKYLIGHT.

Preliminary
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REVISIONS	DATE	BY

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Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California
AP#: 009-313-044

Proposed Exterior Elevations

REVIEW THE DRAWINGS CAREFULLY. DO NOT SCALE THE DRAWINGS. ANY DISCREPANCIES IN DIMENSIONS AND DETAILS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF JOSEPH F. FARRELL, ARCHITECT

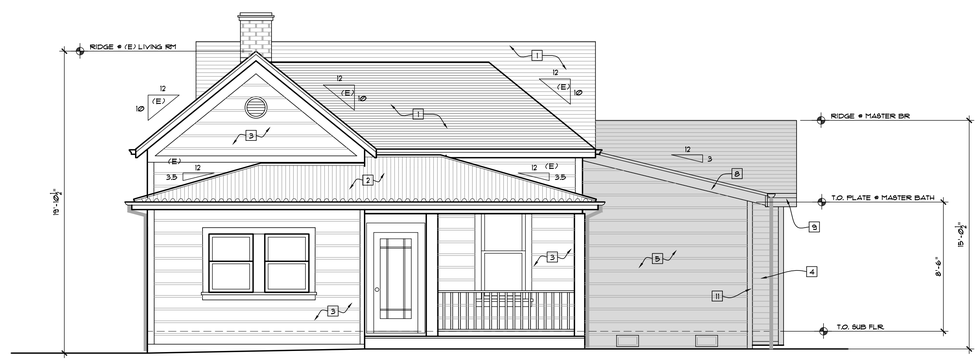
DATE: 9-19-16
SCALE: 1/4"= 1'-0"
DRAWN: CK
JOB NO. 1608
SHEET NO:

A2.1

1230 Allyn Avenue
St. Helena, CA

Proposed North Elevation

SCALE: 1/4" = 1'-0"



Elevation Notes:

1. NEW ASPHALT COMPOSITION ROOF (GAF TIMBERLINE "CHARCOAL") OVER APPROVED UNDERLAYMENT OVER PLYWOOD SHEATHING OVER ENGINEERED ROOF JOISTS/ROOF TRUSSES @ 24" O.C. PER ROOF FRAMING PLAN.
2. EXISTING GALVANIZED CORRUGATED METAL ROOFING AT ENTRY PORCH TO REMAIN.
3. EXISTING WOOD SIDING TO REMAIN.
4. NEW PAINTED SHIPLAP WOOD SIDING OVER APPROVED BUILDING PAPER OVER STRUCTURAL PLYWOOD SHEATHING. PAINT TO MATCH EXISTING COLOR(S).
5. NEW PAINTED COLONIAL WOOD SIDING OVER APPROVED BUILDING PAPER OVER STRUCTURAL PLYWOOD SHEATHING. PAINT TO MATCH EXISTING COLOR(S).
6. WINDOWS & PATIO DOORS: DOUBLE-GLAZED, METAL CLAD/WOOD UNITS. (MATCH EXISTING WINDOW COLOR)
7. 2X P.G. WINDOW/DOOR TRIM. (MATCH EXISTING COLOR(S).
8. 2X PAINTED BARGE BOARD/SOFFIT TO MATCH EXISTING. (MATCH EXISTING COLOR(S)
9. PAINTED G.S.M. 6" HALF-ROUND GUTTERS OVER 2X FASCIA BOARD/SOFFIT TO MATCH EXISTING. GUTTER WITH LEAF GUARDS AND PAINTED G.S.M. 2½"ø DOWNSPOUTS.
10. SCREENED PORCH: PAINTED 6X POSTS//BEAMS/RAILING.
11. 2X6 P.G. CORNER TRIM BOARDS AT OUTSIDE BUILDING CORNERS/(MATCH EXISTING COLOR(S)
12. EXTERIOR LIGHT FIXTURE PER SHEET A1.1.
13. NON-REFLECTIVE RIDGE SKYLIGHT.

Proposed West Elevation

SCALE: 1/4" = 1'-0"

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REVISIONS	DATE	BY

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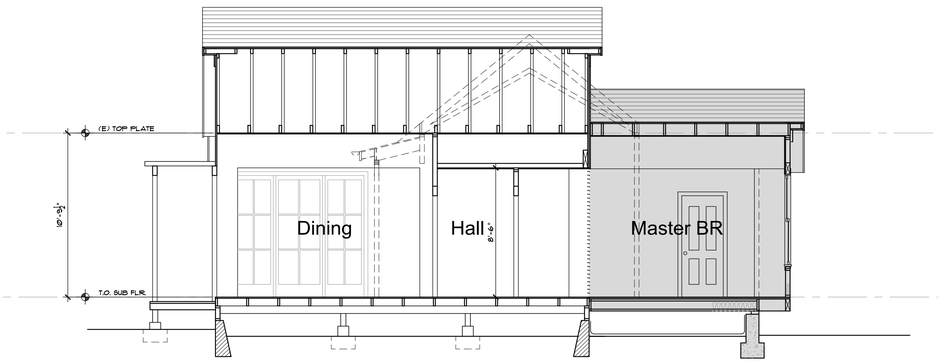
Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California
AP#: 009-313-044

Proposed Exterior Elevations

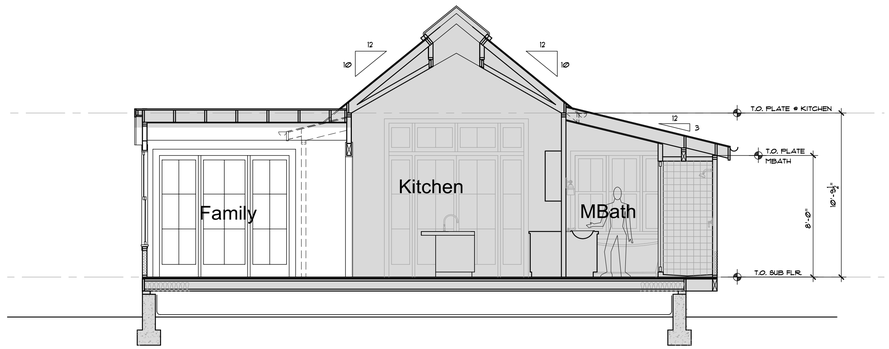
REVIEW THE DRAWINGS CAREFULLY. DO NOT SCALE THE DRAWINGS. ANY DISCREPANCIES IN DIMENSIONS AND DETAILS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF JOSEPH F. FARRELL, ARCHITECT

DATE: 9-20-16
SCALE: 1/4" = 1'-0"
DRAWN: CK
JOB NO. 1608
SHEET NO:
A2.2
1230 Allyn Avenue
St. Helena, CA



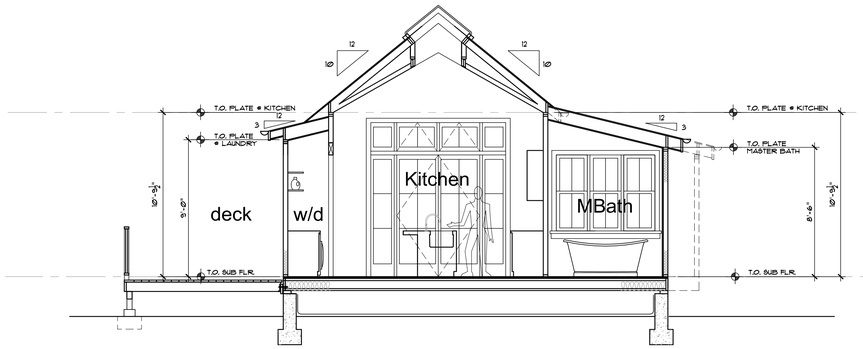
Building Section A

SCALE: 1/4"= 1'-0"



Building Section B

SCALE: 1/4"= 1'-0"



Building Section C

SCALE: 1/4"= 1'-0"

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REVISIONS	DATE	BY

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Novato, CA 94949
Voice (415) 884-2860

Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California AP#: 009-313-044

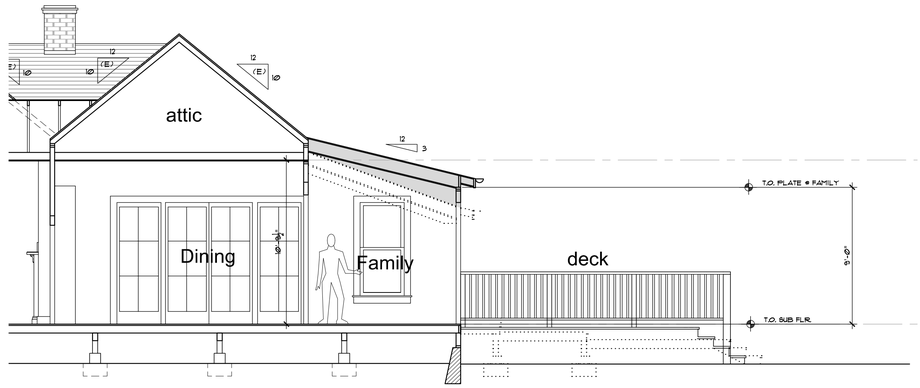
Proposed Building Section

REVIEW THE DRAWINGS CAREFULLY. DO NOT SCALE THE DRAWINGS. ANY DISCREPANCIES IN DIMENSIONS AND DETAILS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF JOSEPH P. FARRELL, ARCHITECT

DATE: 9-15-16
SCALE: 1/4"= 1'-0"
DRAWN: CK
JOB NO. 1608
SHEET NO:

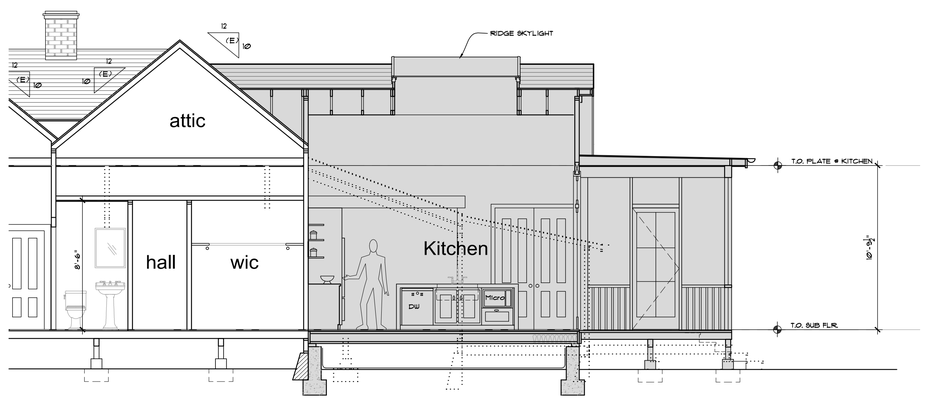
A3.1

1230 Allyn Avenue
St. Helena, CA



Building Section D

SCALE: 1/4"= 1'-0"



Building Section E

SCALE: 1/4"= 1'-0"

Preliminary
Not for Construction

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Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California
AP#: 009-313-044

Proposed Building Section

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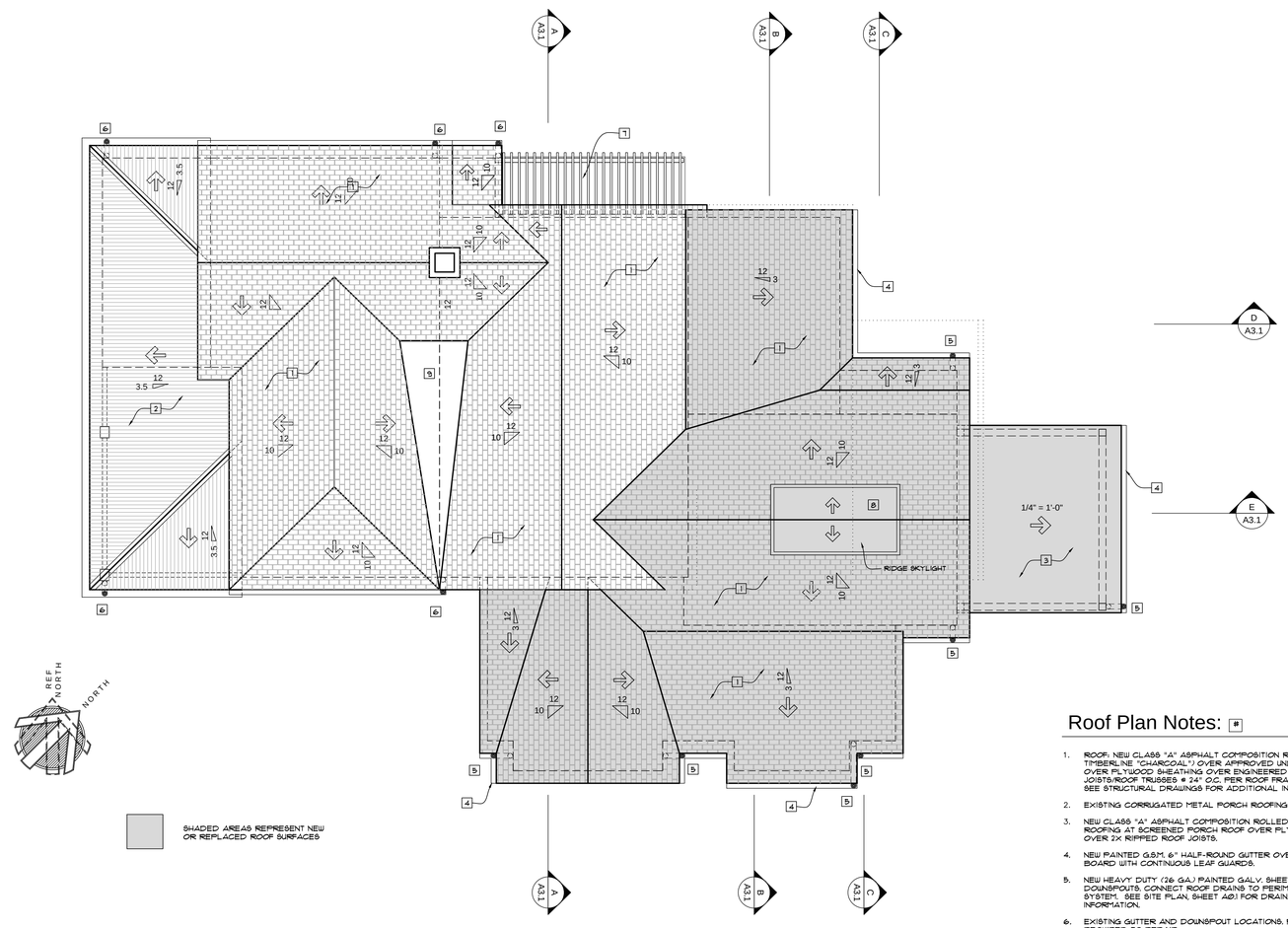
DATE:	9-20-16
SCALE:	1/4"= 1'-0"
DRAWN:	CK
JOB NO.	1608
SHEET NO:	A3.2

1230 Allyn Avenue
St. Helena, CA



Roof Plan Notes:

1. ROOF: NEW CLASS "A" ASPHALT COMPOSITION ROOF (GAF TIMBERLINE "CHARCOAL") OVER APPROVED UNDERLAYMENT OVER PLYWOOD SHEATHING OVER ENGINEERED ROOF JOISTS/ROOF TRUSSES @ 24" O.C. PER ROOF FRAMING PLAN. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. EXISTING CORRUGATED METAL PORCH ROOFING TO REMAIN.
3. NEW CLASS "A" ASPHALT COMPOSITION ROLLED CAP SHEET ROOFING AT SCREENED PORCH ROOF OVER PLYW. SHTG. OVER 2X RIPPED ROOF JOISTS.
4. NEW PAINTED G.S.M. 6" HALF-ROUND GUTTER OVER 2X FASCIA BOARD WITH CONTINUOUS LEAF GUARDS.
5. NEW HEAVY DUTY (26 GA.) PAINTED GALV. SHEET METAL DOWNSPOUTS. CONNECT ROOF DRAINS TO PERIMETER DRAIN SYSTEM. SEE SITE PLAN, SHEET A2.1 FOR DRAINAGE PLANS INFORMATION.
6. EXISTING GUTTER AND DOWNSPOUT LOCATIONS. REPLACE AS REQUIRED TO REPAIR.
7. CEDAR TRELLIS. SEE DETAIL "2/A6.3" FOR MORE INFO.
8. EXISTING WOOD TRELLIS TO REMAIN.
9. EXISTING CRICKET.

Proposed Roof Plan

SCALE: 1/4"= 1'-0"

Preliminary
Not for Construction

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REVISIONS	DATE	BY

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Novato, CA 94949
Voice (415) 884-2860

Proposed Addition/Remodel:
Trainor Residence
1230 Allyn Avenue
St. Helena, California AP#: 009-313-044

Proposed
Roof Plan

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DATE:	9/21/16
SCALE:	1/4"= 1'-0"
DRAWN:	CK
JOB NO.	1608
SHEET NO:	A4.1

1230 Allyn Avenue
St. Helena, CA

Design Review Statement for 1230 Allyn Avenue

I am requesting a design review for the remodeling and construction of an addition at 1230 Allyn Avenue.

The existing house consists of a home that is approximately 100 years old with a lean-to addition at the rear of the house. The house currently has two bedrooms and two bathrooms. We will modify one of the bedrooms into a master bedroom and demolish one of the bathrooms and build a new master bathroom. The house will remain with two bedrooms and two bathrooms when we are completed.

The existing floor area is 1263 sf. We intend to demolish the addition and reconstruct it to be more in character with the original house. New construction will add 337 sf in the master bedroom and kitchen areas, making a total conditioned area of 1,600 sf. We also intend to add a 117 sf screened porch off of the kitchen that would replace an existing uncovered wood deck.

The building will be one story throughout. The existing floor elevation is approximately the same level as the sidewalk on Allyn Avenue, as the front yard is lower than the sidewalk. The overall height to the existing and the new highest ridgeline of the roof will be 20' 1" above existing grade.

The addition will be constructed of complimentary materials and detailing, to match as closely as possible the original lines, materials and fenestrations of the original structure.

The roofing is old and will be replaced with a new asphalt shingle roof and the exterior will be painted.

We do not intend to modify the existing landscaping at this time as it consists primarily of gravel paving and drought resistant plantings

Tom Trainor	2-5-17 Date
Gale Trainor	2-5-17 Date

CITY OF ST. HELENA
PLANNING DEPARTMENT 1480 MAIN STREET- ST. HELENA, CA 94574
PLANNING COMMISSION

APRIL 18, 2017

AGENDA SECTION: New Business

SUBJECT: Consideration and proposed approval of a resolution approving and recommending City Council adoption of the City of St. Helena Component of the Napa Countywide Pedestrian Plan.

PREPARED BY: Erica Ahmann Smithies, Acting Public Works Director/City Engineer

LOCATION: Citywide

APPLICANT: City of St. Helena

BACKGROUND

On July 20, 2016, the Napa Valley Transportation Authority (NVTA) Board adopted Resolution 16-15 which approved the Mitigated Negative Declaration for the Napa Countywide Pedestrian Plan (Plan), adopted the Mitigation Monitoring and Reporting Program, and adopted the Plan itself. The Plan establishes a policy framework and implementation plan that will enhance pedestrian mobility and safety. The Plan will position Napa County jurisdictions, including St. Helena, to implement the plan's goals, policies, programs, and projects and to better compete for funding. NVTA Staff and its selected consultants, Fehr & Peers, began the process for the Plan in November of 2014. The process included a series of countywide public workshops with the workshop in St. Helena occurring on December 17, 2014. Fehr & Peers also completed a walking audit of St. Helena and the other Napa jurisdictions during the spring of 2015, which included City Staff. The initial draft of the Plan was circulated among the various jurisdictions' staff for review and comment during November and December of 2015. After several versions and review, the first public draft of the Plan was released in February of 2016 and was presented to the St. Helena City Council on February 23, 2016. On May 24, 2016, NVTA circulated the Initial Study/Mitigated Negative Declaration for public comment. The Comment period closed on June 23, and the Plan was officially adopted on July 20 by the NVTA board.

PROJECT DESCRIPTION

The St. Helena component of the Plan includes various policies to consider to improve the pedestrian network within the City. Some of the policies will require more discussion, and potentially public outreach, before any specific action will be taken. The advantage of approving the St. Helena portion of the plan is that if, in the future, the City seeks federal or state funding for pedestrian capital improvement projects, it can show

the Plan as one of the approved planning documents that supports the project. St. Helena specific projects are outlined in the attachment "St. Helena Appendix" with specific detail on the projects being displayed in "Appendix SH-C: Detailed Project List and Prioritization." While some already completed projects are included, proposed projects include improvements to RLS Middle School Sidewalk and Hunt Avenue as well as Downtown Pedestrian Improvements on Main Street. Improvements include sidewalk gap closures, sidewalk replacement, ADA curb ramp and crosswalk improvements, traffic calming, and reviewing business frontage areas for potential pedestrian enhancements.

STAFF RECOMMENDATION

Resolution Approving and Recommending City Council Adoption of the City of St. Helena Component of the Napa Countywide Pedestrian Plan.

ATTACHMENTS

Attachment 1 – Resolution
Attachment 2 – Final Countywide Plan
Attachment 3 – Appendix SH-A

CITY OF ST. HELENA PLANNING COMMISSION
RESOLUTION NO. PC17-

RESOLUTION APPROVING AND RECOMMENDING CITY COUNCIL ADOPTION OF THE CITY OF ST. HELENA COMPONENT OF THE NAPA COUNTYWIDE PEDESTRIAN PLAN

Recitals

1. The Napa Valley Transportation Authority (NVTA) has prepared a Napa Countywide Pedestrian Plan (Plan), which will guide development and enhancement of pedestrian facility infrastructure within the incorporated and unincorporated areas of Napa County; and
2. On July 20, 2016, the Board of Directors of the Napa Valley Transportation Authority approved and certified the Mitigated Negative Declaration for the Plan and Adopted the Mitigation Monitoring and Reporting Program; and
3. The Plan establishes a policy framework and implementation plan that will enhance pedestrian mobility and safety; and
4. The Plan will position Napa County jurisdictions, including St. Helena, to implement the plan's goals, policies, programs, and projects and to better compete for federal and state funding.

Resolution

A. The Planning Commission hereby approves and recommends the City Council adopt the City of St. Helena component to the Napa Countywide Pedestrian Plan.

I HEREBY CERTIFY that the foregoing design review 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 April 18, 2017 by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED: ATTEST:

Grace Kistner Chair, Planning Commission	Noah Housh Planning Director

Napa Countywide Pedestrian Plan

NVTA
NAPA VALLEY TRANSPORTATION AUTHORITY

FEHR & PEERS

August 2016

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ACKNOWLEDGEMENTS

NVTA Board	Peter White, City of St. Helena Mary Luros, City of Napa John F. Dunbar, Town of Yountville Keith Caldwell, County of Napa Mark Luce, County of Napa Jill Techel, City of Napa Leon Garcia, City of American Canyon Belia Ramos, City of American Canyon Chris Canning, City of Calistoga James Barnes, City of Calistoga Alan Galbraith, City of St. Helena Richard Hall, Town of Yountville Beth Kahiga, Paratransit Coordinating Council
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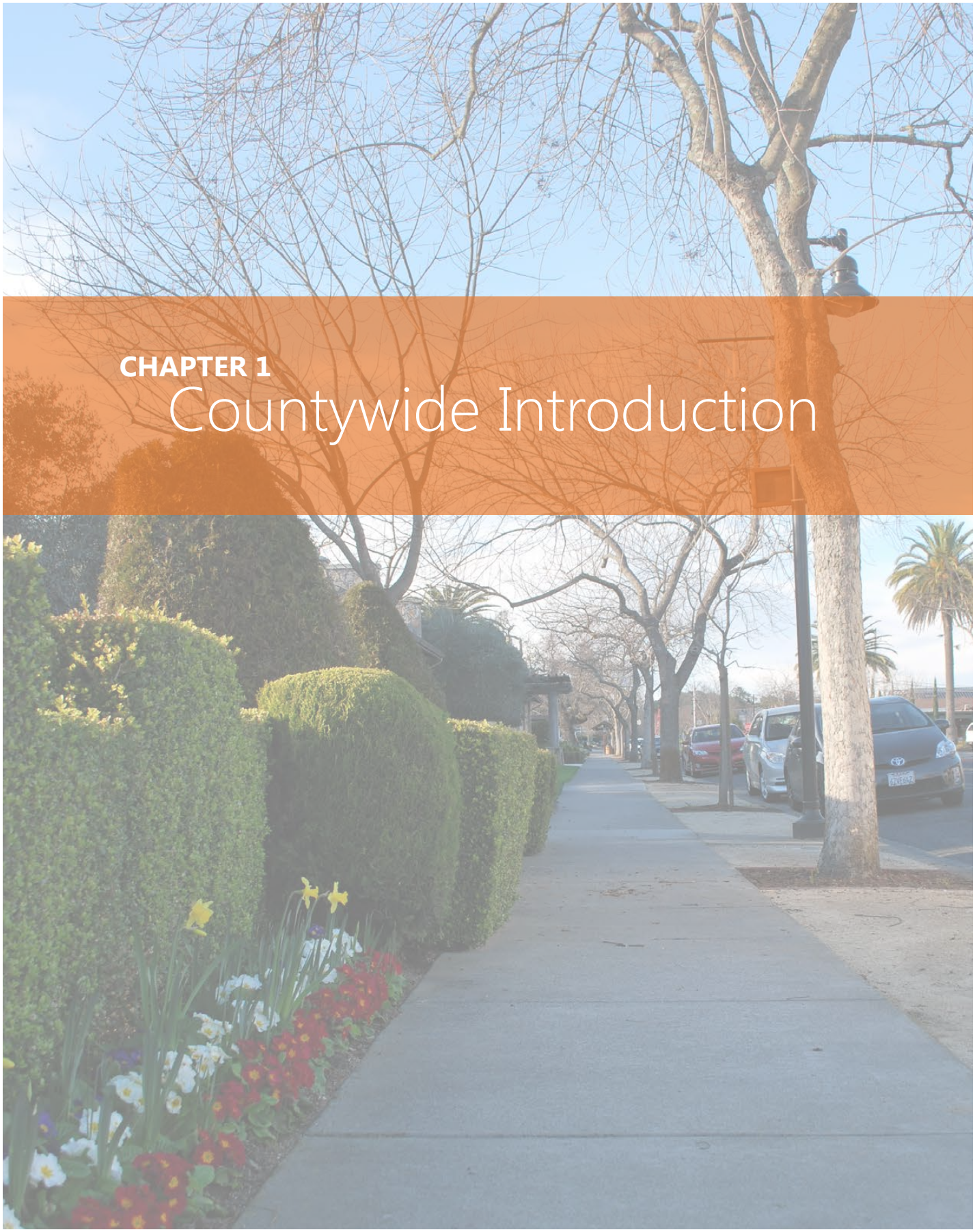

CHAPTER 1

Countywide Introduction

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Chapter 1.
Countywide Introduction

The *Napa Countywide Pedestrian Plan* is intended to guide and inform pedestrian infrastructure, policies, programs, and development standards to make walking in Napa County safe, comfortable, convenient and enjoyable for all pedestrians. It strives to improve accessibility for the disabled but does not intend to replace existing ADA Transition Plans.

The *Napa Countywide Pedestrian Plan* is being developed to complement existing planning documents for all Napa County jurisdictions, and ultimately be combined with the *Countywide Bicycle Plan* (NVTA, January 2012) to create a *Countywide Active Transportation Plan* that will allow and position the County to effectively compete for project funding. This plan follows the 2015 Caltrans Active Transportation Program (ATP) Guidelines, which outline statewide requirements for what should be included in active transportation plans. The specific requirements from the 2015 ATP Guidelines are listed below in **Table 1** along with the relevant location in this plan.

TABLE 1: 2015 CALTRANS ACTIVE TRANSPORTATION PROGRAM GUIDELINES - REQUIRED PLAN COMPONENTS

Active Transportation Plan Requirement	Location in this Plan
The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan	Chapter 1, *Countywide Walking Trends*
The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan	Chapter 1, *Countywide Walking Trends*
A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, and other destinations.	Chapters 2-7*, *Pedestrian Setting*
A map and description of existing and proposed pedestrian facilities, including those at major transit hubs and those that serve public and private schools and, if appropriate, a description of how the five E's (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of walking to school. Major transit hubs must include, but are not limited to, rail and transit terminals, and ferry docks and landings.	Chapters 2-7*, *Priority Projects and Implementation Plan* Chapter 8, *Support Programs*
A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations	Appendix D
A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, ADA level surfaces, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.	Chapters 2-7*, *Priority Projects and Implementation Plan*
A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on collisions involving bicyclists and pedestrians.	Chapters 2-7*, *Pedestrian Setting*
A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities	Chapters 2-7*, *Public and Stakeholder Input*
A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.	Chapter 8, *Plan Consistency*
A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.	Chapters 2-7*, *Priority Projects and Implementation Plan*
A description of past expenditures for bicycle and pedestrian facilities and programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.	Chapters 2-7*, *Next Steps*
A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.	Chapter 8, *Performance Goals*
A resolution showing adoption of the plan by the city, county or district. If the active transportation plan was prepared by a county transportation commission, regional transportation planning agency, MPO, school district or transit district, the plan should indicate the support via resolution of the city(s) or county(s) in which the proposed facilities would be located	Chapters 2-7*, *Appendix E*

*Chapters 2-7 are individual jurisdiction plans; this information can be found in each jurisdiction plan under the noted section.

Plan Oversight, Guidance, and Public Involvement

Several groups were involved in guiding the development of the Plan. Those groups and their role in the planning process are listed below:

- Napa Valley Transportation Authority (NVTA) – lead agency
- NVTA Active Transportation Advisory Committee (ATAC) / NVTA Technical Advisory Committee (TAC) - provide guidance and recommendations at key milestones to discuss project progress and topics of countywide significance such as plan vision, prioritization criteria and overall consistency
- Individual Jurisdiction Focus Groups – steering committees consisting of local staff and stakeholders to discuss existing conditions and practices; identify key issues and opportunities; provide input on priority study areas; develop improvement project concepts for focus areas; determine prioritization and implementation planning for project lists; and propose key program and policy recommendations
- Public/Stakeholders – provide input on the locations of key issues and opportunities in each jurisdiction, the vision and goals of the plan, at workshops and via online mapping; participate as key stakeholders in walking audits and the review of improvement concepts for focus areas

Countywide Vision and Goals

The countywide vision and goals for this plan are intended to guide pedestrian planning in the region. Input was received from the Jurisdiction Focus Groups and the community during the public workshops and incorporated into the following vision and goals.

Vision Statement

To provide a pedestrian network that is well connected, safe, and enjoyable for Napa County residents and visitors of all levels of mobility. This plan aims to increase the number of pedestrian trips countywide and to set the groundwork for a shift in travel mode choice such that non-motorized options are widely available, accessible, and convenient. Through implementation of this plan and future updates, all Napa County residents, regardless of age or income level, should have easy walking access to their community and the services and amenities that it offers.

Goals and Policies

The following goals and policies support the overall vision for the plan:

Goal 1: Provide a connected network of pedestrian sidewalks, trails, and pathways in the County and its jurisdictions that are safe and accessible to a variety of users and that foster community interactions

Policy 1A: Protect the character and context of the County and its jurisdictions

Policy 1B: Prioritize safe routes to schools, safe routes to transit, and safe routes for seniors within the County

Policy 1C: Acknowledge the central role that the Vine Trail plays in active transportation infrastructure and prioritize connections between the trail and key destinations

Policy 1D: Work to reduce the rate of pedestrian collisions

Policy 1E: Connect key pedestrian desire lines via accessible sidewalks and marked crosswalks, focusing on downtown areas, transit stops, schools, senior housing and destinations, and tourist destinations and lodging

Goal 2: Encourage a multimodal transportation system

Policy 2A: Adhere to the current design standards in this plan as well as local design standards and other national and state manuals when designing new or retrofitted streets and communities

Policy 2B: Investigate the use of performance measures such as multi-modal level of service or built environment factors to facilitate complete streets implementation

Policy 2C: Prioritize infrastructure projects that will increase the walk mode share, while also taking advantage of all available funding opportunities to construct pedestrian infrastructure, including private development with an appropriate nexus

Policy 2D: Investigate creative parking measures such as shared parking, parking maximums, and strategic parking locations to encourage a “park once” environment in commercial districts

Policy 2E: Review new development proposals to ensure pedestrian access and circulation is maintained or improved, including during construction phases

Goal 3: Obtain funding for pedestrian projects

Policy 3A: Continue to allocate Capital Improvement Plan (CIP) funding to pedestrian projects

Policy 3B: Pursue grant funding related to pedestrian projects

Policy 3C: Identify new funding sources and partnership opportunities, such as those focusing on public health and sustainability

Goal 4: Encourage and educate residents about walking and enforce safe interactions between pedestrians and motorists

Policy 4A: Increase public awareness of pedestrian facilities, amenities, and safety

Policy 4B: Pursue recognition such as Walk-Friendly Community status

Policy 4C: Implement ongoing pedestrian safety enforcement programs and campaigns

Policy 4D: Partner with local health agencies to encourage more activity among youth through the built environment to target childhood obesity

Policy 4E: Collaborate with local businesses to enhance wayfinding and streetscape amenities

Calistoga: Washington Street

Countywide Walking Trends

Napa County is a scenic and historic Bay Area destination that thrives on year-round visitors and its grape vineyards. Located in the North Bay region with the majority of development along SR 29, Napa County is a predominantly rural community with regional access provided by the surrounding highway network. The County is bordered by Sonoma County to the west, Solano and Yolo Counties to the east, and Lake County to the north, as shown in Exhibit 1. The County includes the cities of American Canyon, Calistoga, Napa, and St. Helena; the Town of Yountville; and unincorporated areas.

With historic commercial districts and vital community assets such as open space and trails, the five incorporated jurisdictions accommodate pedestrians in a variety of ways. The various downtown areas offer corridors of shopping and dining destinations that are contributors to the pedestrian environment in the County, and many provide a system of sidewalks and plazas that make the downtown districts pleasant and interesting places to

walk. Residential neighborhoods in the County are typically pleasant places to walk, with some roadways having sidewalks and others having a more rural character.

The unincorporated areas of the County have a predominantly rural character and development is sporadic consisting mostly of residential areas, a few village centers and some institutional uses. Neighborhoods in the unincorporated County include Angwin, Berryessa Estates, Berryessa Highlands, Big Ranch Road, Coombsville, Deer Park, Lake Berryessa (Moskowite Corners, Pope Creek, and Spanish Flat), Silverado, and the South County Industrial Areas. These communities have limited pedestrian infrastructure; neighborhood streets typically do not have sidewalks, and few intersections currently have marked crosswalks.

Angwin: Howell Mountain Road

LAKE COUNTY
YOLO COUNTY
29
128
Calistoga
Saint Helena
NAPA COUNTY
128
128
29
Yountville
SONOMA COUNTY
121
Napa
29
SOLANO COUNTY
12
American Canyon
MARIN COUNTY
County Boundary
Napa County
0
2
4
Miles

Exhibit 1

County Mode Split and Travel Patterns

A common term used in describing demand for bicycle and pedestrian facilities is "mode split". Mode split refers to the form of transportation a person chooses to take, such as walking, bicycling, public transit, or driving. **Table 2** presents the California Household Travel Survey (CHTS, 2012) data on the percentage mode split for all person-trips in Napa County.

TABLE 2: NAPA COUNTY DAILY MODE SPLIT

Mode	All Trips (2012)[1]
Auto	306,598 (88%)
Pedestrian	62,091 (9%)
Bicycle	1,234 (1%)
Transit	2,575 (1%)
Other[2]	2,394 (1%)

1. Percent mode share for all person-trips in Napa County from the California Household Travel Survey (2012).
2. Includes motorcycle and air travel.

Source: Fehr & Peers, 2015.

Walking is a common mode of transportation within the County's developed communities. The incorporated regions of Napa County have history dating back to the 1800s, and their compact downtown business districts reflect this historic character, creating an inviting pedestrian environment. Neighborhoods located close to the downtown areas allow residents to easily travel on foot between the commercial and residential districts in the county's incorporated regions. The unincorporated regions within Napa County, comprising the majority of its land area, are of a rural density and character. These regions offer fewer opportunities for pedestrian travel between destinations.

The Countywide Transportation Plan (CTP), Vision 2040, has a goal of shifting travel from single-occupancy vehicles to transit, walking, and bicycling, increasing mode share of all three by 10% by 2035. This plan proposes comfortable and accessible pedestrian improvements to attract new walking trips and increase the walking mode share to meet the goals of the CTP.

Understanding the mode of travel people choose and trip purpose can help jurisdictions develop effective and targeted programs to better serve residents and employees.

Trips of a distance less than one-half mile are typically considered viable for conversion to a walk trip, as it takes about 10 minutes to walk this distance. In Napa County, most commute trips are farther than this threshold, suggesting that a focus on non-commute trips (trips to school, for shopping, or for recreation, as well as visitor trips within commercial areas and hotel zones) will be important to support mode shift goals. Based on the 2010-2012 California Household Travel Survey, 17% of daily trips in the County were one-half mile or less in distance.

Employees

Based on the California Household Travel Survey, about 70,300 workers are employed within Napa County. This total is comprised of 55,500 Napa County residents, and 14,800 workers who commute from outside Napa County. The average commute distance for residents of Napa County is 9.6 miles, and the typical commute distance for employees in Napa County is 10.4 miles. As shown in **Table 3**, the Napa County residents' commute mode share for walking is 4%, as compared to 9% walk mode share for all person trips.

TABLE 3: NAPA COUNTY RESIDENTS' JOURNEY TO WORK

Mode	Employed Napa County Residents	
	Total Employees	Percent of Total
Drove Alone	49,355	76.0%
Carpool	7,591	11.7%
Public Transportation	630	1.0%
Walked	2,785	4.3%
Bicycle	551	0.8%
Taxicab, motorcycle, other	426	0.7%
Worked At Home	3,538	5.5%

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

Visitors

Visit Napa Valley conducted a year-long visitor profile study in 2012 to gather data on lodging guests, day-trip visitors, and visiting friends and relatives (VFRs) staying overnight in private homes. The research found that an estimated 2.9 million visitors came to Napa Valley in 2012 with the largest percentage (66%) being day-trip visitors. As shown in **Table 4**, about 21% of the visitors that responded to the 2012 survey reported traveling within the Napa Valley area on foot during their stay. This suggests pedestrian improvements focused on tourist destinations and safety education messages targeted for tourists are important considerations in the County.

TABLE 4: VISITOR TRANSPORTATION PRIMARY MODE USED WITHIN NAPA VALLEY	
Mode	**Percent of All Napa Valley Visitors**
Personal automobile	58.9%
Rental car	37.7%
Walk	20.9%
Limousine	4.8%
Bicycle	4.3%
Taxi	4.3%
Hotel Shuttle or courtesy vehicle	2.0%
Bus line	1.0%

Source: Visit Napa Valley, 2012 Napa Valley Visitor Profile

Forecasted Pedestrian Demand

Based on the Metropolitan Transportation Commission (MTC) *Plan Bay Area*, the region plans to increase its bicycle, pedestrian, and transit mode shares by a total of 10% by 2040. This growth in alternative modes will be the result of bicycle, pedestrian, and transit infrastructure improvements and programs in the coming decades. NVTA forecasts that alternative mode shares will grow by this same percent by 2040, and that this growth will be equally split among the three modes, as a result of implementation of project and program recommendations in this plan, the Napa County Bicycle Plan, and planned transit improvements.

To capture work, tourism, recreational, and shopping trips within Napa County, this estimate solely evaluates trips with an origin and destination point within Napa County. Using a baseline of 2012 (from the 2010-2012 California Household Travel Survey), there are 54,885 daily walking trips in Napa County, 12.2% of all intra-county trips. This mode share is expected to increase to 15.5% in 2040 (**Table 5**).

TABLE 5: DAILY TRIPS WITH ORIGINS AND DESTINATIONS IN NAPA COUNTY				
Year	**2012**		**2040**	
Population	136,644[1]		163,609[2]	
Mode	**Daily Trips[3]**	**Mode Share**	**Daily Trips**	**Mode Share[4]**
Drive Alone	216,713	48.0%	229,464	42.5%
Drive Shared	168,114	37.2%	178,005	32.9%
Transit	2,953	0.7%	21,551	4.0%
Walk	54,885	12.2%	83,731	15.5%
Bike	3,323	0.7%	21,993	4.1%
Other	5,376	1.2%	5,693	1.1%
Total	451,365	100%	540,437	100%

1. Source: 2008-2012 American Community Survey
2. Source: Vision 2040, Moving Napa Forward (2015)
3. Source: California Household Travel Survey (2010-2012)
4. Assumes a 3.3% increase in walk, bicycle, and transit mode shares. Drive alone, drive shared, and other trips are decreased by a total of 10%, each reduced proportional to 2012 mode share.

The population of Napa County is expected to increase by 27,000 people from 2012 to 2040. Based on an increase in both population and mode share, daily pedestrian trips in the County are forecast to grow to 83,731, a 53% increase.

Collision Trends

Collision data was accessed from the California Highway Patrol Statewide Integrate Traffic Records System (SWITRS). This data represents all reported pedestrian-vehicle collisions occurring in Napa County during the ten-year period from January 2003 to December 2012. **Table 6** summarizes the collision data by year and severity of collision. Fourteen fatalities were reported during the ten-year period. Nearly all of the reported collisions (96 percent) resulted in some form of injury.

TABLE 6: NAPA COUNTY PEDESTRIAN-VEHICLE COLLISION SUMMARY (2003 – 2012)						
Year	Pedestrian Injuries	Proportion of All County Injuries[1]	Pedestrian Fatalities	Proportion of All County Fatalities[1]	Total Pedestrian Collisions	Proportion of All County Collisions[2]
2003	37	2.6%	1	3.6%	1,466	2.6%
2004	32	2.3%	2	8.0%	1,398	2.4%
2005	25	1.9%	2	8.3%	1,312	2.1%
2006	34	2.6%	1	6.7%	1,340	2.6%
2007	24	2.2%	1	6.7%	1,100	2.3%
2008	34	3.1%	2	11.1%	1,118	3.2%
2009	40	4.2%	2	14.3%	948	4.4%
2010	28	3.2%	2	16.7%	894	3.4%
2011	25	2.8%	1	12.5%	893	2.9%
2012	23	2.4%	0	0.0%	949	2.4%
Total	302	2.7%	14	8.4%	11,418	2.8%

Source: SWITRS, TIMS

1 "All county injuries" and "all county fatalities" describe pedestrian injury and fatal collisions, respectively, as a percentage of all reported injury and fatal traffic collisions, respectively and regardless of mode, in Napa County during the study period.

2. Traffic collision total does not include collisions that did not result in injuries (e.g. "property damage only" collisions).

Minor collisions that involve pedestrians, whether with vehicles or bicycles, are generally underreported [1]. Additionally, collisions that occur on off-street paths and trails are not included in the SWITRS data.

Demographics

Children and seniors are two of the most vulnerable populations in the context of pedestrian-involved collisions. As shown in Figure 1 and Figure 2 below, pedestrian-involved collisions including children are the most common within the County and in American Canyon. Yountville has the highest percentage of collisions involving seniors. Targeting safe routes to school and for seniors, respectively, may be of particular importance in these jurisdictions.

[1] Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113

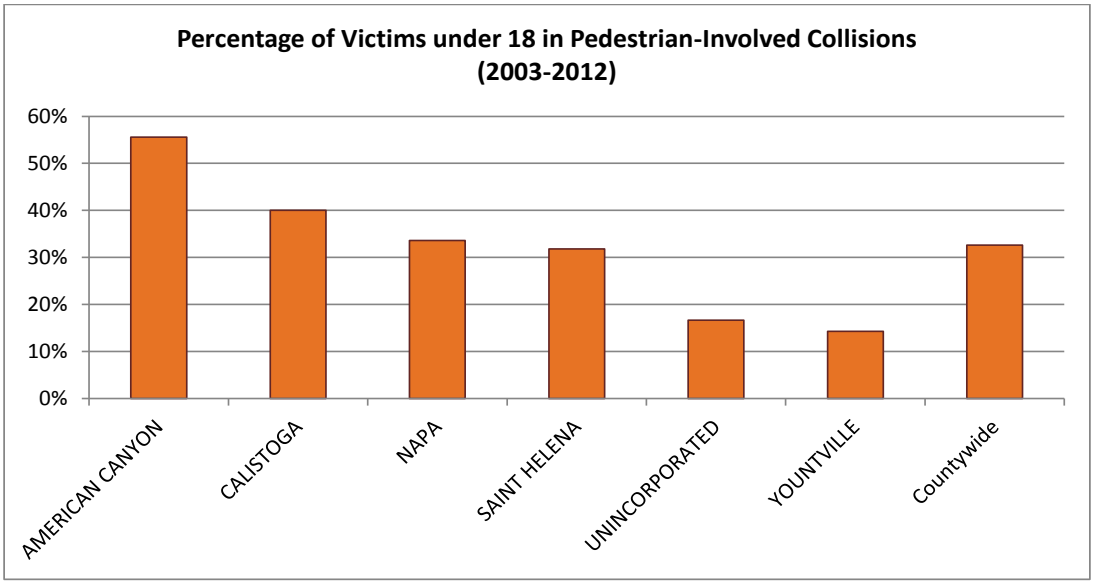


Figure 1 Countywide Child-Involved Pedestrian Collisions

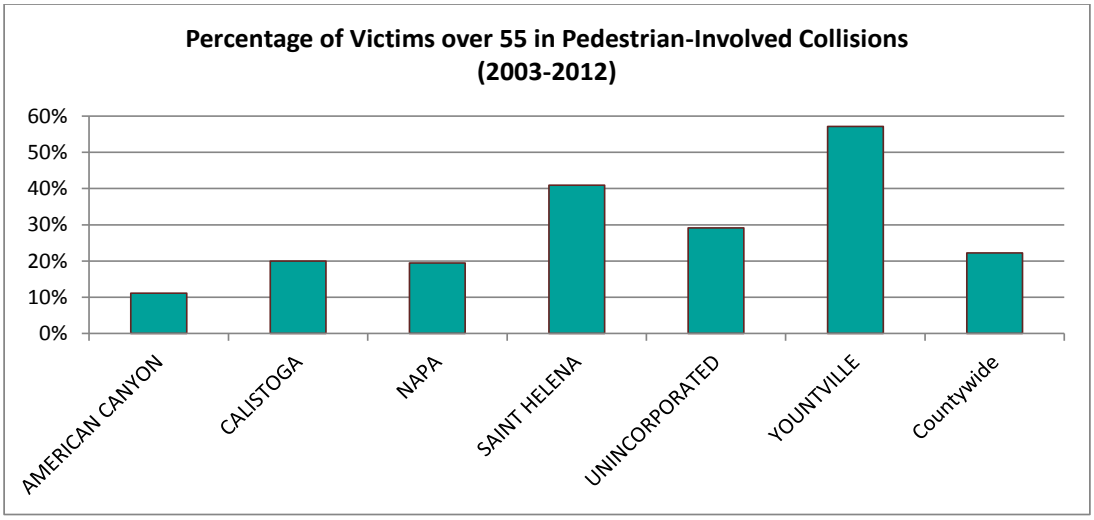


Figure 2 Countywide Senior-Involved Pedestrian Collisions

Daily and Seasonal Trends

Collisions in the County peak Thursday through Saturday, at the same time that tourism levels are high, as shown in Figure 3. Similarly, collisions are higher in the Fall, during Crush season. The holiday season and perhaps also rainier/darker days in December and January contribute to the trend, as shown in Figure 4.

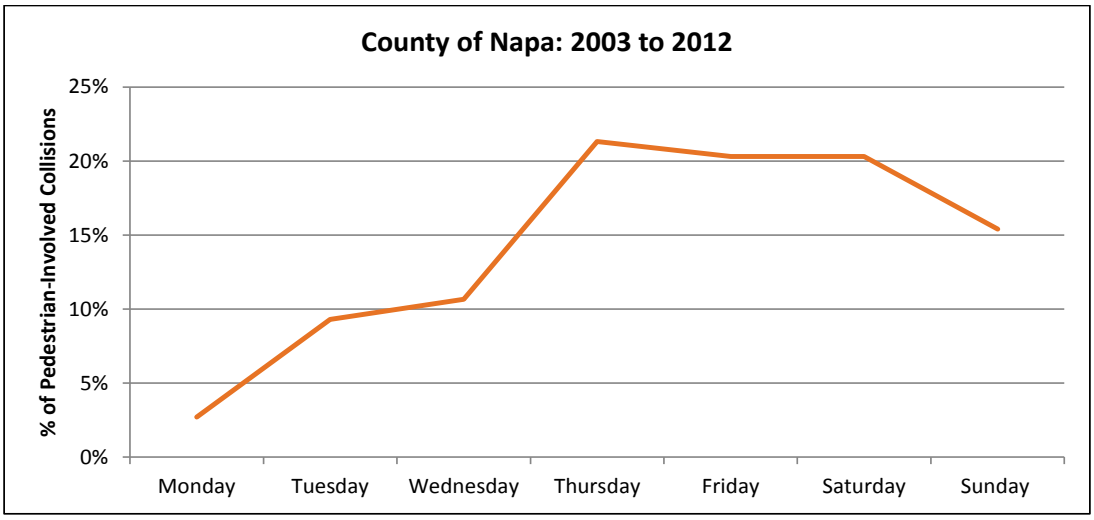


Figure 3 Daily Trends for Pedestrian-Involved Collisions

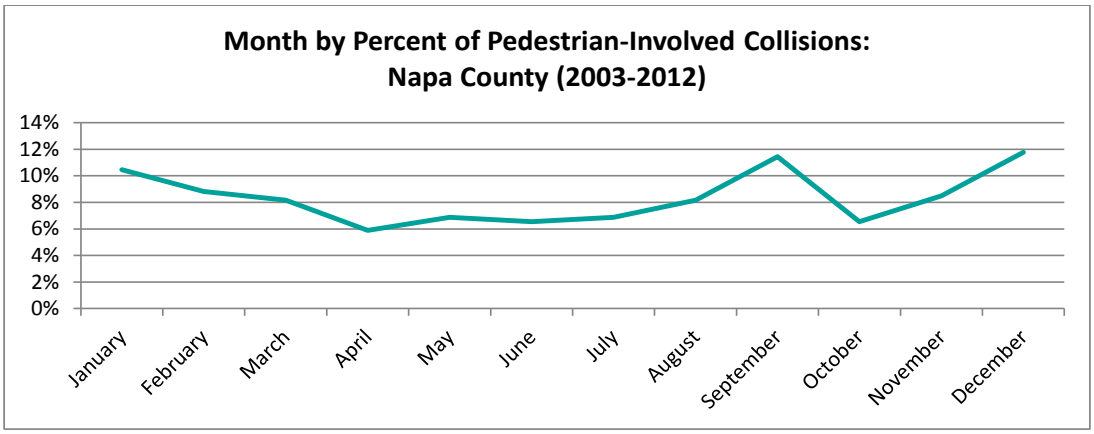


Figure 4 Seasonal Trends for Pedestrian-Involved Collisions

Primary Collision Factors

Table 7 shows the most common Primary Collision Factors (PCFs) for pedestrian-involved collisions in Napa County.

TABLE 7: NAPA COUNTY PEDESTRIAN-INVOLVED COLLISION SUMMARY PRIMARY COLLISION FACTORS (2003-2012)

Primary Collision Factor	Number of Collisions		
	Injury	Fatality	Total
Pedestrian Right of Way (Driver not yielding)	105	0	105
Pedestrian Violation	69	5	74
Other	68	3	71
Unknown	35	2	37
Unsafe Speed[1]	25	4	29

Source: SWITRS
1. Refers to unsafe speeds given roadway conditions. This could refer to traveling above the posted speed limit or traveling too fast given the weather conditions (but still at or below the posted speed limit).

As shown in Table 7, the most common Primary Collision Factor (PCF) was drivers not yielding the right-of-way to pedestrians followed by pedestrians crossing illegally (such as crossing against a signal or midblock between signals). Illegal crossings and unsafe vehicle speeds were the leading causes of pedestrian fatalities based on the collision reports over the ten-year period.

The Pedestrian Action variable in the SWITRS dataset describes what the pedestrian was doing immediately before the collision occurred. **Table 8** shows the most common Pedestrian Actions for pedestrian-involved collisions in Napa County.

TABLE 8: NAPA COUNTY PEDESTRIAN-INVOLVED COLLISION SUMMARY PEDESTRIAN ACTIONS (2003-2012)

Primary Actions	Number of Collisions		
	Injury	Fatality	Total
Crossing in Crosswalk at Intersection	133	3	136
Crossing Not in Crosswalk	82	5	87
Walking In Road, Including Shoulder	58	5	63
Walking, Not in Road	14	1	15
Crossing in Crosswalk, Not at Intersection	10	0	10
Not Stated	4	0	4

Source: SWITRS

As shown in Table 8, the most common pedestrian actions were “Crossing in Crosswalk at Intersection” and “Crossing Not in Crosswalk”. This data emphasizes the importance of enhancing existing marked crosswalks and

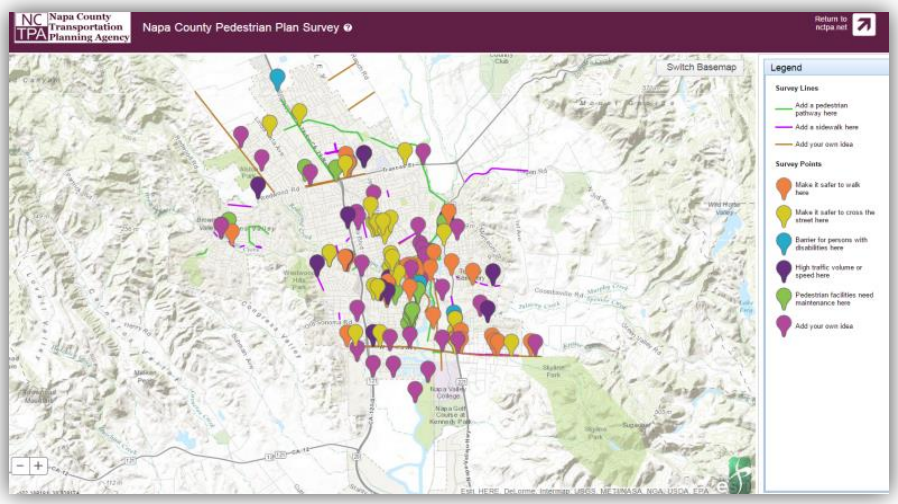
improving access and safety at key desire lines, or the shortest or most easily navigated path of travel between an origin and destination. Education and enforcement regarding pedestrian right-of-way may also be indicated.

Community Input

Ongoing public outreach and participation was an integral element in developing the Countywide Pedestrian Plan. Public workshops were held throughout the County in Winter 2015 and were open to all members of the public countywide. For information on format of the public workshops and specific input received in each jurisdiction, refer to Chapters 2 through 7. Napa County residents, employees, and visitors who wanted to provide input but were unable or did not wish to attend the public workshops had the option of submitting their comments online through an interactive mapping tool.

Users placed pins on the maps to highlight desired improvements using pre-set comments or creating their own comment. Preset comments included:

- Make it safer to walk here
- Make it safer to cross the street here
- Barrier for persons with disabilities here
- High traffic volume or speed here
- Pedestrian facilities need maintenance here
- Add a sidewalk here
- Add a pedestrian pathway here



Results from the 70 comments submitted countywide are shown below in Exhibit 2.

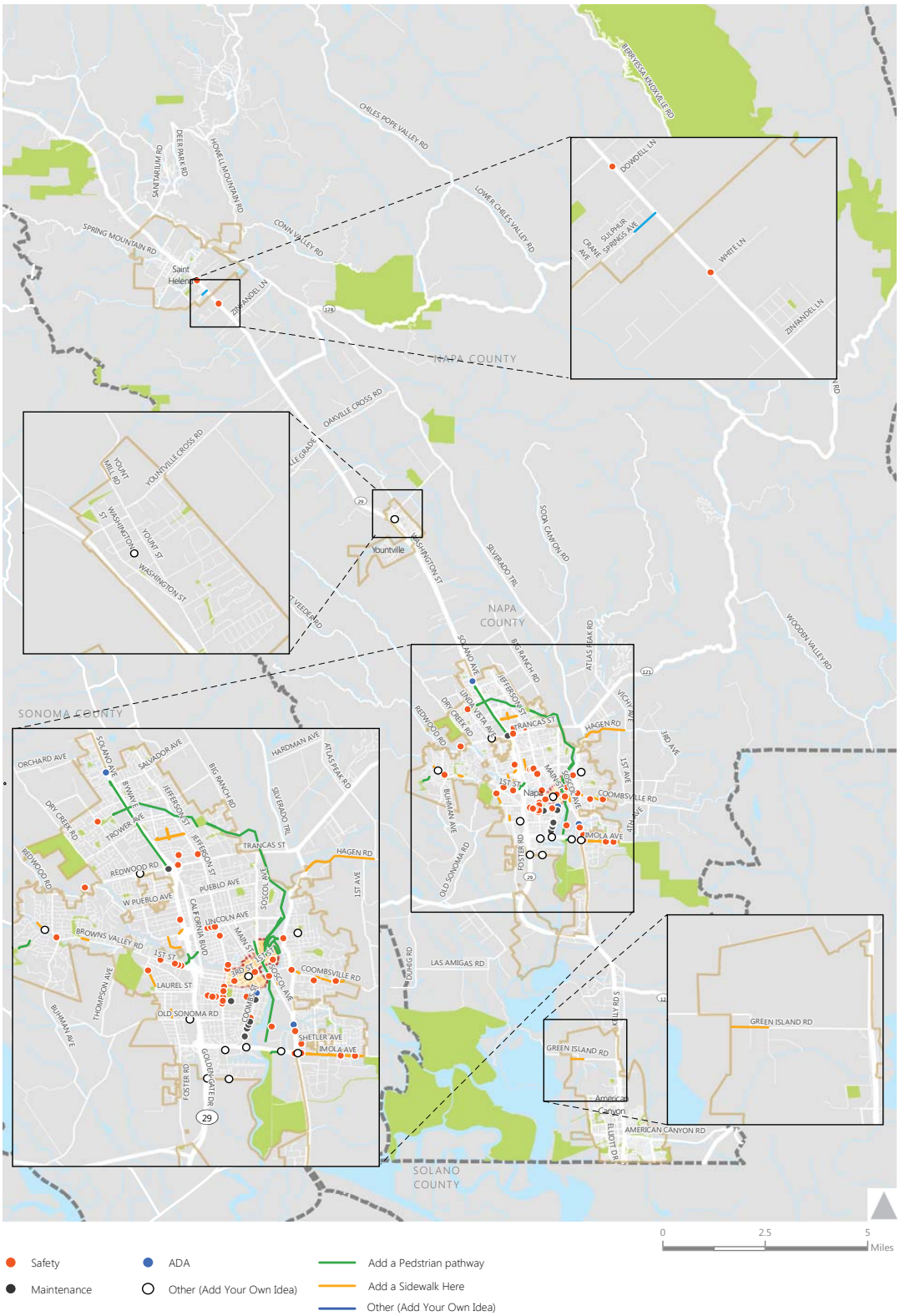


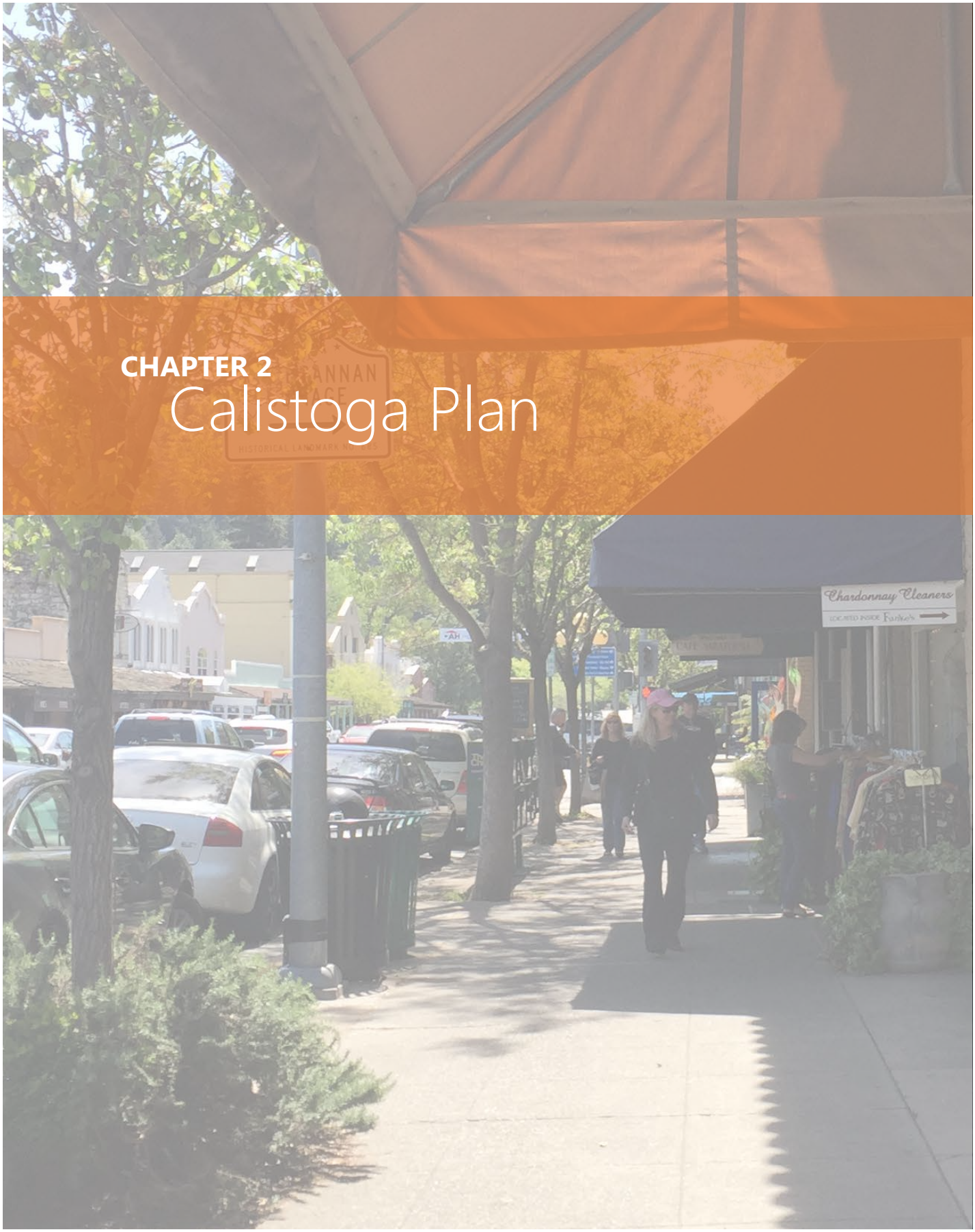
Exhibit 2
Countywide Online Mapping Comments

Individual Jurisdictions

The following chapters provide individual Pedestrian Plans by jurisdiction. Each chapter focuses on one geographic area within the County, moving from north to south. The location-based chapters are ordered as follows:

Chapter 2: Calistoga
Chapter 3: St. Helena
Chapter 4: Yountville
Chapter 5: Napa
Chapter 6: American Canyon
Chapter 7: Unincorporated

The chapters all contain the same format with information framed specifically for that jurisdiction. Content includes pedestrian setting, countywide public and stakeholder outreach, key opportunity areas within the jurisdiction, priority projects and implementation, and a discussion on funding needs and sources for the jurisdiction plan. These chapters are meant to act as standalone plans to be used in conjunction with key recommendations in the Countywide Implementation Chapter of the countywide plan (Chapter 8), which highlights key countywide support programs and performance goals.



CHAPTER 2

Calistoga Plan

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Chapter 2
Calistoga Plan

Calistoga is a rural small-town community with approximately 5,155 residents which, according to city staff, can double or triple on any weekend when accounting for visitors in town for the many local and regional tourism options. The city is located in northern Napa County, approximately 30 miles north of the City of Napa along SR 29. Projected land use patterns for the city are shown in Exhibit C-1 and a map of the downtown commercial district, including the locations of public buildings and tourist destinations, is shown in Exhibit C-2.

Existing Pedestrian Policies and Programs

To help guide the development of key programs and policies for this plan, Calistoga's existing approaches to facilitating and enhancing walking were reviewed with a benchmarking matrix that compares the existing programs, policies, and practices with national best practices. The benchmarking analysis categorizes each jurisdiction's programs, policies, and practices into three areas as follows:

CALISTOGA PLAN

- **Key Strengths** (areas where the jurisdiction is exceeding national best practices)
- **Enhancement Areas** (areas where the jurisdiction is meeting best practices)
- **Opportunity Areas** (areas where the jurisdiction should consider meeting best practices)

The City of Calistoga has made significant investments in creating a walkable community through the adoption of several pedestrian-oriented ordinances, collaboration with Safe Routes to School education programs as well as the recent collection of collision data and a pedestrian facility inventory. The city also adopted an Active Transportation Plan in 2014 which prioritizes facility improvements and includes pedestrian policies and programs. With this plan, the City of Calistoga will have a framework to strengthen areas of opportunity such as crosswalk design guidelines, pedestrian volumes and traffic calming programs. A summary of these benchmarking highlights is provided in **Table C-1**. The full benchmarking analysis for Calistoga, with associated recommendations, is presented in **Appendix C-A**.

TABLE C-1: CALISTOGA BENCHMARKING HIGHLIGHTS

Plans, Policies, & Programs	Calistoga Current Practice	Best Practice Examples
Key Strengths		
Newspaper Rack Ordinance Newspaper racks may obstruct walkways and reduce accessibility and pedestrian visibility when ordinances are not in place. A Newspaper Rack Ordinance improves the pedestrian realm by reducing clutter and organizing sidewalk zones and may detail size, location, and maintenance requirements.	Calistoga has a robust newspaper rack ordinance that addresses pedestrian safety and prohibits disruption of pedestrian flow. The policy also restricts the placement of newspaper racks anywhere that may obstruct a driver's line of sight.	
Street Tree Ordinance Street trees enhance the pedestrian environment by providing shade and a buffer from vehicles. Street trees may also enhance property values, especially in residential neighborhoods. However, street trees, when improperly selected, planted, or maintained, may cause damage to adjacent public utilities.	Calistoga's tree ordinance includes requirements for maintaining vertical pedestrian clearances and installing root barriers to avoid sidewalk damage. Calistoga has adopted the City of Santa Rosa's approved street tree list. In lieu of funding for sidewalk replacement and substantial repair, the city also grinds areas of the sidewalk to remove trip hazards as part of their trip and fall assessments, including locations that are lifted by tree roots.	

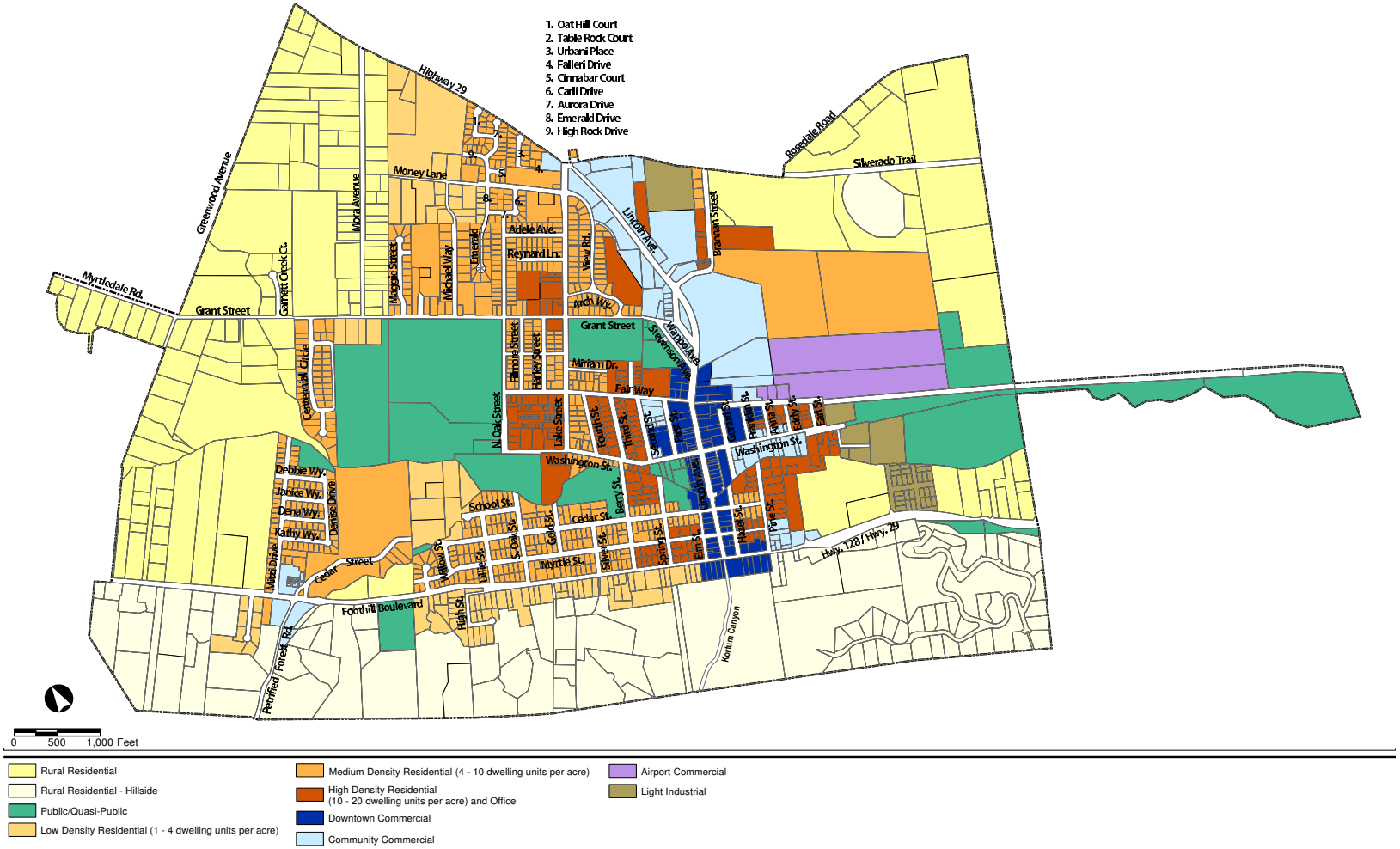
TABLE C-1: CALISTOGA BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**Calistoga Current Practice**	**Best Practice Examples**
Safe Routes to Schools Safe Routes to School (SRTS) programs encourage children to safely walk or bicycle to school. The programs are important both for increasing physical activity (and reducing childhood obesity) and for reducing morning traffic associated with school drop-off, as much as 30% of morning peak hour traffic. Educational components of SRTS programs are especially important for school children where safe walking habits may be instilled as lifelong lessons. Funding for programs and/or projects is available at the state and federal levels.	The Napa County Office of Education (NCOE) currently has a three year grant to administer a Safe Routes to School (SRTS) Program across the County through 2016. Program leaders have a goal of reaching every interested school by the end of the grant term, and plan to work with Calistoga Elementary School and Calistoga Jr/Sr High School in 2016. The program includes events such as Walk and Roll to School Day, Bike Rodeos, and Safe Walking education presentations for students in grades K-3. Brochures are handed out during this program as well as at community events and PTA/parent meetings. Parent presentations include a review of pedestrian laws and ordinances. In Calistoga, Safe Routes to School routes have been mapped in the ATP to identify potential locations for infrastructure improvements, and the city is currently working on applications for SRTS infrastructure funding. The city also includes schools in the development review process.	• Reference the public involvement, analysis, and prioritization efforts of the countywide ATP and the Calistoga PSA when applying for grants to fund the top projects. • Determine feasibility of rolling out Walking School Bus program for Calistoga Elementary School. • Coordinate with NVTA to seek additional funding for SRTS infrastructure and non-infrastructure projects and programs.
Collision Reporting Identifying and responding to collision patterns on a regular basis is an important reactive approach to pedestrian safety (which may be combined with proactive measures).	Collision data from the beginning of 2002 through the end of 2011 was mapped as part of Calistoga's Active Transportation Plan (ATP) and reviewed for trends related to pedestrian safety. The ATP also includes a policy to reduce pedestrian and bicycle collisions by 50 percent by the year 2020, based on 2011 collision data, as well as to review collision data annually to identify and prioritize applicable projects and programs.	• Comprehensive monitoring using Crossroads software would allow for more proactive pedestrian safety projects and best practices such as collision typing for countermeasure selection. GIS efforts may be funded through an Office of Traffic Safety grant. • Pedestrian volume data could be used to prioritize collision locations based on collision rates (collisions/daily pedestrian volume). This could lead to a proactive approach to identify treatments and program funding. Volunteers can collect pedestrian volumes and other data at collision locations.

CALISTOGA PLAN

TABLE C-1: CALISTOGA BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**Calistoga Current Practice**	**Best Practice Examples**
Inventory of Pedestrian Facilities A GIS-based sidewalk inventory enables project identification and prioritization, as well as project coordination with new development, roadway resurfacing, etc.	Calistoga has a Citywide inventory of existing and proposed sidewalks, existing and proposed pathways, and ADA-compliant curb ramps collected as part of the 2014 Active Transportation Plan (ATP) that is geo-referenced in GIS. The city offers design guidance to developers building fronting sidewalks as well as a 50/50 cost sharing program for those repurposing an existing use. For new developments, pedestrian connectivity is required and if needed, the developer is responsible for the full cost of sidewalk construction. Property owners are generally responsible for the maintenance of fronting sidewalks; however the city uses 50/50 cost sharing for maintenance and repair efforts at their discretion, especially for sidewalks downtown along Lincoln Avenue.	• This plan has created a GIS-based inventory to expand the city's existing inventory. Data collected includes crosswalks, existing and missing curb ramps, as well as additional features like sidewalk material and curb ramp direction. This facility inventory could be expanded to include proposed or planned pedestrian crossing improvements in the City. • Consider mapping public comments to ensure all necessary sidewalk repairs and other pedestrian improvements are included in the city's Capital Improvement Program (CIP).
Key Opportunities		
Crosswalk Design Guidelines A formal policy for crosswalk installation, removal, and enhancement provides transparency in decision-making and creates a consistent application of treatments citywide.	The City of Calistoga has a pedestrian crossing policy in their Active Transportation Plan (ATP) to provide safety features at uncontrolled pedestrian crossings, especially within pedestrian districts and at intersections of arterials with Class I trails[2]. The policy does not include criteria for appropriate enhancements. The City of Calistoga generally considers crosswalks at signals and high volume activity centers, especially near schools. The one existing signal is on Lincoln Avenue, a highway facility, and thus decisions regarding signalized crosswalk installation are made by Caltrans. Several uncontrolled crosswalks are installed on Lincoln Avenue at intersections with minor streets. The city does not install uncontrolled midblock crossings under current practice.	• Consider adopting crosswalk guidelines as part of this plan that reflect best practices and recent research to include criteria for appropriate locations to install crosswalk enhancements such as flashing beacons, advanced yield markings, or in-roadway pedestrian signs. • Coordinate with Caltrans to include criteria in the crosswalk guidelines for identifying, installing, and enhancing crossings where strong desire lines exist, especially across Lincoln Avenue. • Using the proposed crosswalk guidelines, conduct audits of the adequacy of current crosswalks.

[2] City of Calistoga Active Transportation Plan, 2014

TABLE C-1: CALISTOGA BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**Calistoga Current Practice**	**Best Practice Examples**
Pedestrian Volumes Pedestrian volume data is important for prioritizing projects, developing collision rates, and determining appropriate pedestrian infrastructure.	The City of Calistoga does not collect pedestrian volumes routinely.	• Use collected volumes in this plan to monitor volume levels. • Consider installing automated counters such as Eco-counter at key locations. • Geo-code existing and future pedestrian volume data with GIS software along with other data such as pedestrian control devices and collisions to analyze data for trends or hotspots related to pedestrian safety.
Traffic Calming Programs Traffic Calming Programs and policies set forth a systematic and consistent approach for addressing neighborhood requests and approvals, as well as standard treatments and criteria.	The City of Calistoga does not have a Traffic Calming Program; however, radar speed detection signs are in use near the high school and were funded through an insurance pool for safety improvements. The city municipal code prohibits the use of speed humps in Calistoga.	• Consider adopting a Traffic Calming program for pedestrian concerns that arise from residents in Calistoga and to address current concerns from the Police Department such as speeding and cut-through traffic near the elementary and high schools.



Source: City of Calistoga, 2015 Land Use

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Exhibit C-1

Calistoga - Land Use Map

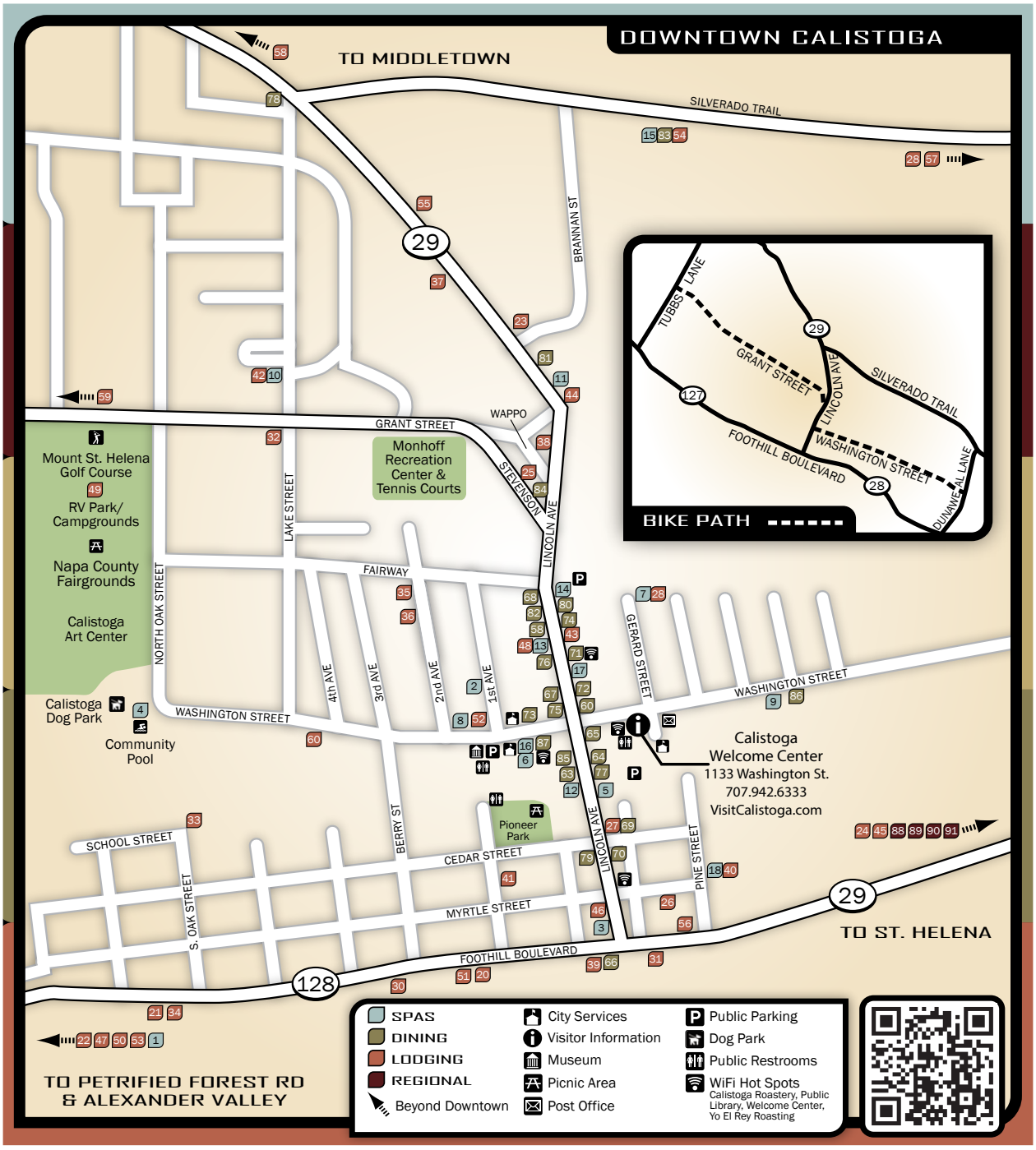


Exhibit C-2

Downtown Calistoga - Destination Map

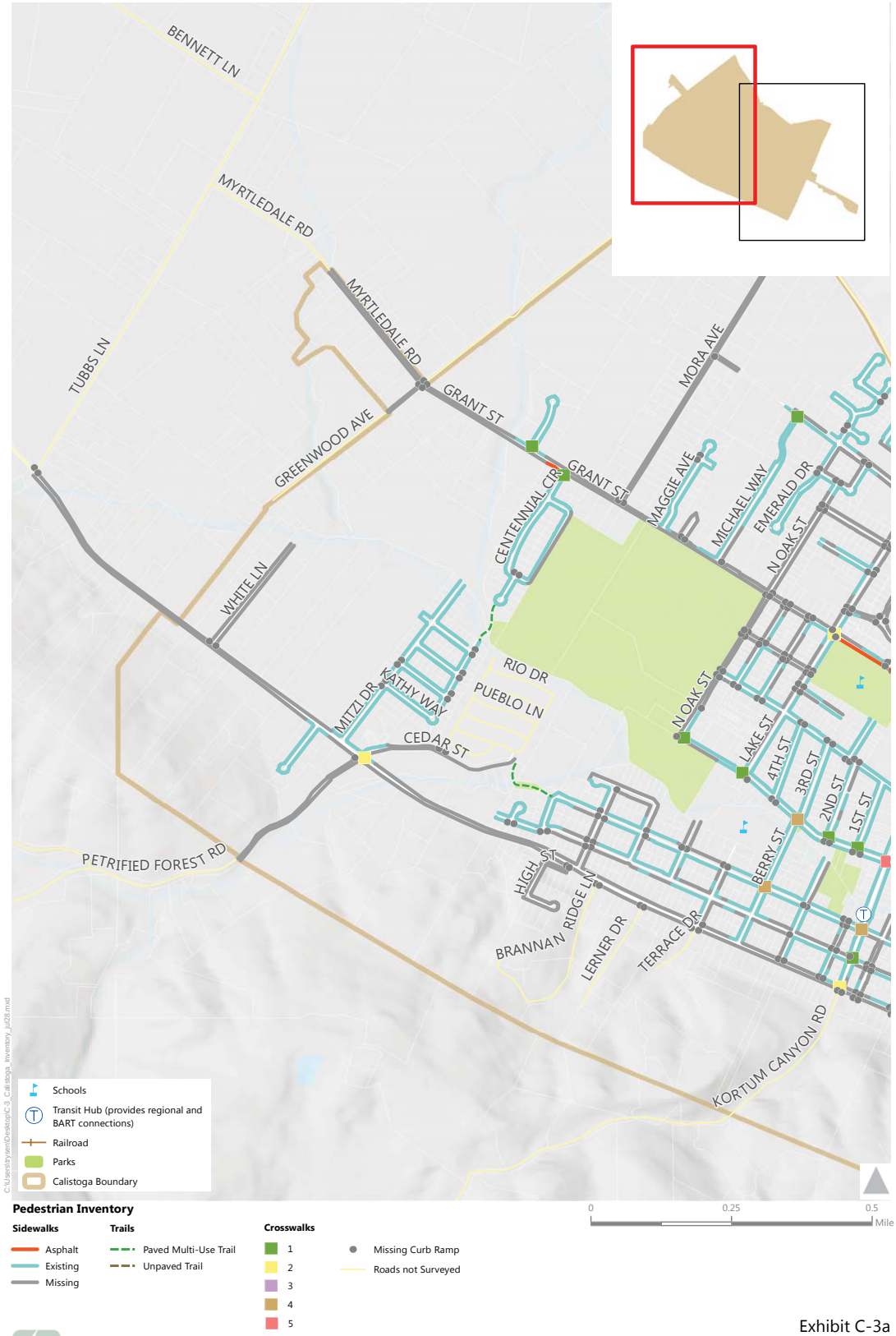
Existing Pedestrian Infrastructure

An inventory of existing sidewalks, marked crosswalks, curb ramps and trails was collected on key roadways throughout the city using a combination of aerial imagery and Google Street View imagery from the years 2011 – 2014 (imagery for a few small residential streets dated back to 2007).

A GIS database assembled for the inventory includes additional detail beyond what is illustrated in the inventory maps, including the style of crosswalk striping, the method of vehicle control at the crosswalk (i.e., traffic signal, flashing beacon, stop sign, or uncontrolled), whether the crosswalk was located in a school zone, and the curb ramp design (i.e., whether the ramp is directional or diagonal and if it has truncated domes). For more information and examples of these types of facilities, please see the Best Practices Toolkit, **Appendix D** of the Countywide Pedestrian Plan.

Calistoga Inventory

Inventory was collected on the entire roadway network in Calistoga, and supplements existing data from the city's 2014 *Active Transportation Plan* (ATP). As shown in Exhibit C-3, the city has several sidewalk gaps along Grant Street, which connects Calistoga Junior-Senior High School to the surrounding neighborhoods, as well as along Cedar Street, which was identified by staff as an east-west pedestrian corridor. Washington Street was also identified as a primary east-west pedestrian corridor and *Exhibit C-3* shows the potential for several additional curb ramps along the roadway. The primary north-south pedestrian corridor in Calistoga is Lincoln Avenue, which runs through the center of the downtown. The city's *General Plan Circulation Element* highlights the need to install marked crossings at pedestrian nodes on Lincoln Avenue and *Exhibit C-3* shows several intersections that were identified by city staff, including Lincoln at Brannan Street and at Stevenson Street, that are lacking marked crosswalks at important desire lines. The majority of missing sidewalks in Calistoga are presented as "proposed sidewalks" in the city's *ATP* and missing curb ramps are shown as "planned."



Pedestrian Inventory

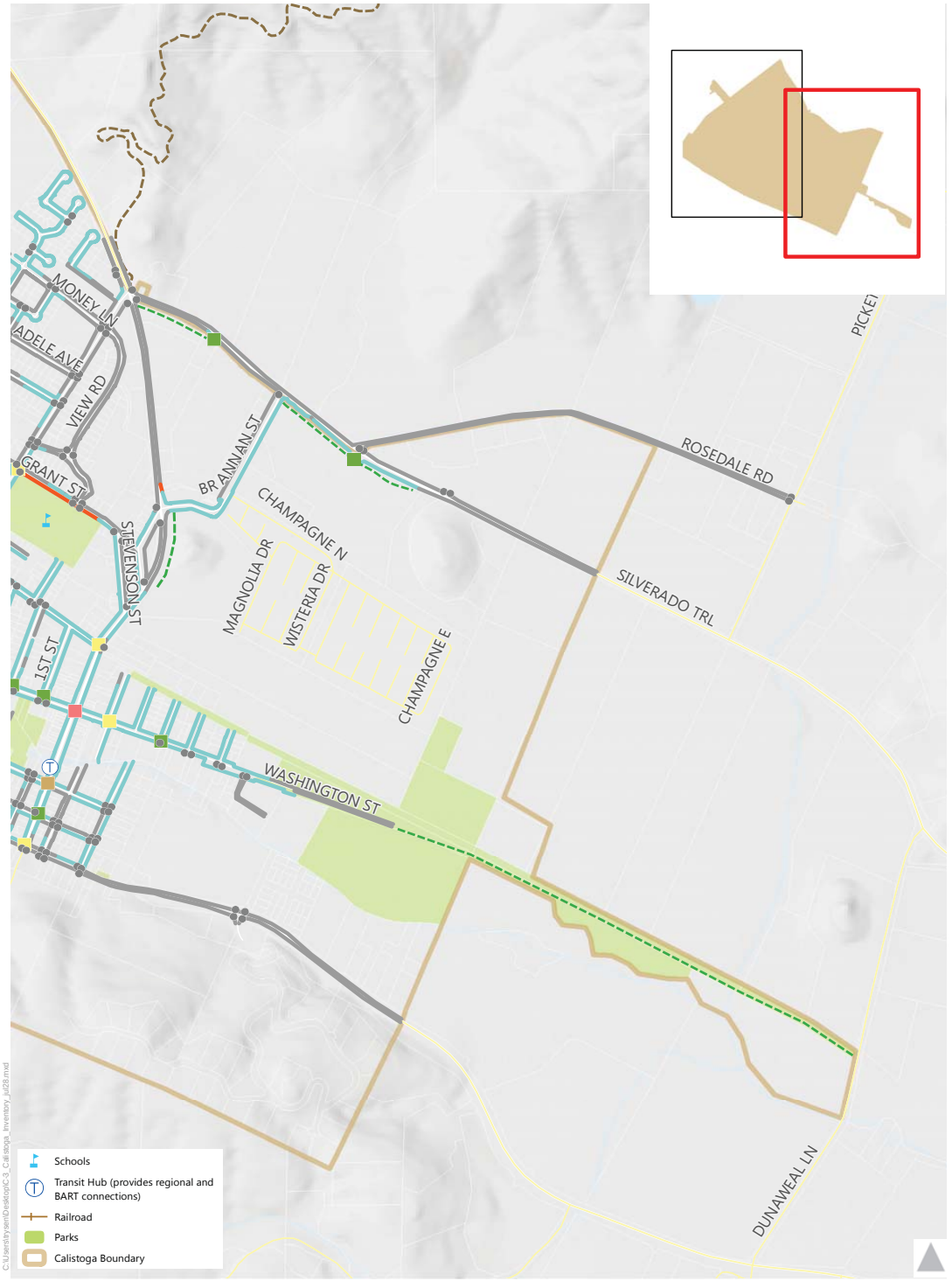
Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5

- Missing Curb Ramp
- Roads not Surveyed

Exhibit C-3a
Pedestrian Facility Inventory
City of Calistoga



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5

- Missing Curb Ramp
- Roads not Surveyed

Exhibit C-3b
Pedestrian Facility Inventory
City of Calistoga

Activity Levels

Pedestrian counts were conducted at eight locations throughout Calistoga in October and November 2015. These locations were selected based on locations of proposed pedestrian projects in this plan, potential localized safety concerns, expected high levels of walking, and proximity to key pedestrian destinations, including schools and downtown commercial areas. **Table C-2** provides a summary of the two-hour counts completed within the city. Count results varied significantly based on nearby neighborhood population density, as well as by the adjacent land use.

TABLE C-2: CALISTOGA COUNT PROGRAM LOCATIONS

ID	Jurisdiction	Location	Morning	Evening	School	Weekend
			7-9AM	4-6PM	2-4PM	12-2PM
CA1	Calistoga	SR 29 and Cedar Street	80	256		
CA2	Calistoga	Petrified Forest Road and Foothill Boulevard	2	5		20
CA3	Calistoga	Brannan and Lincoln	47	20		
CA4	Calistoga	Berry and Cedar	214		173	
CA5	Calistoga	Grant and Stevenson	22	22	10	
CA6	Calistoga	Grant Street and N. Oak Street	13	12		11
CA7	Calistoga	Lake County Hwy / Silverado Trail N / Lake Street		3		6
CA8	Calistoga	Lake Street and Grant Street	60		66	

Three of these counts were conducted in close proximity to local schools; CA5 and CA8 were collected at intersections adjacent to Calistoga Junior-Senior High School and CA4 was collected near Calistoga Elementary School. Pedestrian volumes near the elementary school were observed to be about two and half times as high in the morning as near the high school, and just over twice the amount during the school dismissal period (2-4PM). The highest number of pedestrians was observed during the evening weekday period at SR 29 and Cedar Street, a key southern connection to downtown. The lowest number of pedestrians was observed during the weekday morning period near the southwest edge of town at Petrified Forest Road and Foothill Boulevard.

Going forward, NVTA intends to conduct annual counts throughout the County on an annual basis. Counts will primarily be conducted in locations evaluated in the baseline year (2015) to monitor travel trends and the impact of project implementation on pedestrian volumes, as well as justify funding for projects in this plan. With the collected counts, NVTA may compare travel patterns across different locations, measure changes in pedestrian use at a single location over time, and evaluate the extent to which pedestrian travel peaks throughout the course of the day or week. By collecting counts at different times of day, NVTA may evaluate if a given pedestrian facility is typically used for recreational or utilitarian purposes.

In the future, count locations may be added or omitted based on agency priorities, and could include pedestrian-involved collision locations to prioritize improvements in locations based on collision rates (collision/daily pedestrian volume).

Collision Analysis

Collision data was accessed from the California Highway Patrol Statewide Integrate Traffic Records System (SWITRS). This data represents all reported pedestrian-vehicle collisions occurring during the ten-year period from January 2003 to December 2012.

Exhibit C-4 shows the locations of these pedestrian collisions in Calistoga.

Exhibit C-4 presents raw collision counts only. While this is illustrative of "hot spot" areas, another important consideration for identifying safety focus areas can be collisions per pedestrian (or the collision rate). Collision rates (not included in the current analysis because pedestrian volume data is not available citywide) can highlight locations where improvements can be added to ensure a focus on areas that may not have as many people walking (but have high collision rates) in addition to areas with high pedestrian volumes and a high number of collisions.

Hot Spots

The majority of reported collisions in Calistoga occurred along Lincoln Avenue, the main commercial corridor that runs through the city's downtown, as shown in Exhibit C-4. Of particular interest is the Washington Street and Lincoln Avenue intersection, where three injury collisions were reported. No fatalities were reported in Calistoga over the last ten years.

Countywide Demographic and Seasonal Trends

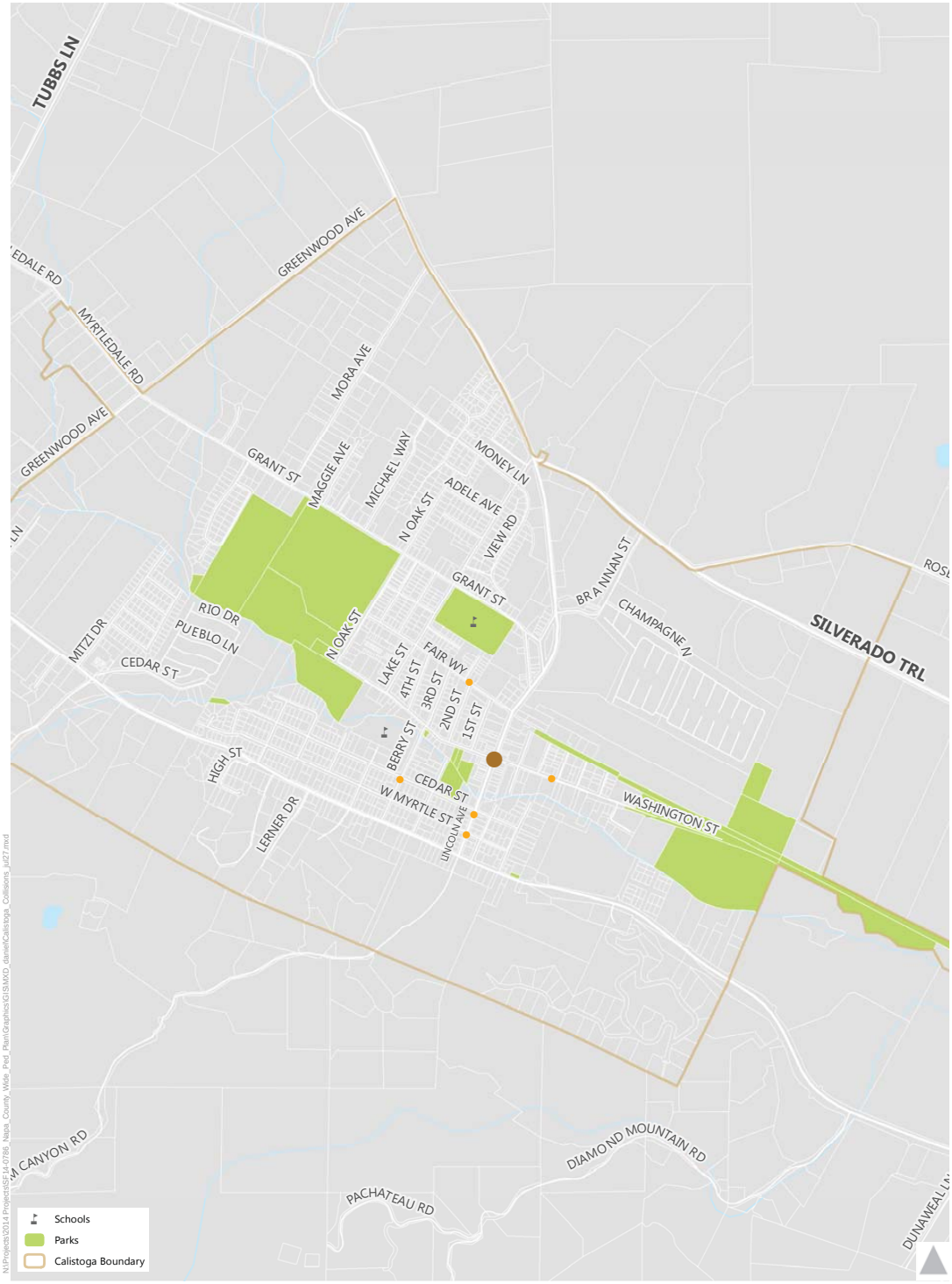
For this plan, a review of collisions countywide included organizing the data by age for children and seniors, and comparing the results across each jurisdiction. Daily and seasonal trends for collision occurrences and primary collision factors were also reviewed countywide. A summary of these results can be found in the *Countywide Walking Trends* chapter of the countywide plan.

Pedestrian Actions

Perhaps one of the more telling sources of information in the SWITRS data is the Pedestrian Action variable, which describes what the pedestrian was doing immediately before the collision occurred. The pedestrian actions in **Table C-3** show that safety issues surrounding collisions in Calistoga are typically focused on pedestrian crossing locations.

TABLE C-3: CALISTOGA COLLISION SUMMARY PEDESTRIAN ACTIONS (2003-2012)			
Primary Collision Factor	Number of Collisions		
	Injury	Fatality	Total
Crossing in Crosswalk at Intersection	6	0	6
Crossing Not in Crosswalk	2	0	2

Source: SWITRS



Pedestrian-Involved Collisions 2003-2012

- 1
- 2 - 3

Injury Collisions

Pedestrian Collision Locations

Density	Intersection	Total Collisions
●	Cedar St. and Berry St.	1
●	Lincoln Ave. and Myrtle St.	1
●	Lincoln Ave. and Cedar St.	1
●	Washington St. and Anna St.	1
●	Washington St. and Lincoln Ave.	3
●	2nd St and Fair Way	1

Exhibit C-4
Pedestrian-Involved Collisions
2003 - 2012 City of Calistoga

Public and Stakeholder Input

Countywide Outreach

Input on plan goals and objectives, current pedestrian issues, and desired locations for improvement was solicited through meetings with jurisdiction staff and key stakeholders, countywide public workshops, and an interactive mapping tool made available online. The goal was to develop a community-supported vision for pedestrian improvements. A summary of all input received during this process countywide is displayed in **Table C-4** Connectivity and safety were the key themes across the countywide comments.

TABLE C-4: PUBLIC INPUT RECEIVED COUNTYWIDE

Comment	Comment Type	Percent of Total Comments
Add a sidewalk here	Connectivity	16%
Make it safer to cross the street here	Safety	15%
Make it safer to walk here	Safety	14%
Add a pedestrian pathway	Connectivity	13%
High traffic volume or speed here	Safety / Walkability	8.5%
Pedestrian facilities need maintenance here	Walkability	4.5%
Barrier for persons with disabilities here	Accessibility	2%
Other (Add your own idea)		27%

Source: Fehr & Peers, 2015

Examples of the comments that were categorized as "other" throughout the County are included in the Station One narrative below.

Public Workshops

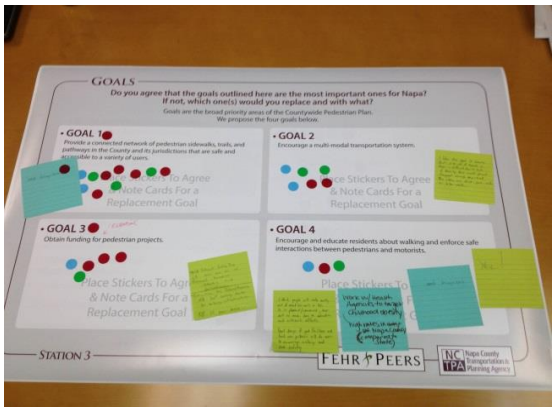
Ongoing public outreach and participation was an integral element in developing the Countywide Pedestrian Plan. Public workshops were advertised on NVTA's website, as well as via local media including the newspaper and radio. Invitations to the public workshops were also sent to local stakeholders, including senior centers, mobility impaired groups, advisory committees and local non-profit groups. The goal of the workshops was to identify public concerns and opportunity areas to inform focus areas, educate the stakeholders, and solicit feedback on the plan vision and goals.

Public workshops were held throughout the County in Winter 2015: in Napa on January 22 at NVTA; in Yountville on January 27; in St. Helena on January 28; and in American Canyon on February 4. Due to recent public workshops held in Calistoga through development of their Active Transportation Plan in 2014, a workshop was not held in this city. All workshops were open to all members of the public countywide. Photos of workshop posters are included in **Appendix A** of the countywide plan.

The format for each public workshop was the same and consisted of four stations:

- **Station One: Issues/Opportunities**
  At Station One, participants voted on a list of common barriers to walking to indicate which issues were most relevant to the walking environment in their jurisdiction and countywide. Participants also wrote comments on large-scale aerial maps placed on tables or on the floor to highlight existing barriers to pedestrian travel and locations where improvements were needed. Suggested comments included "Make it safer to cross the street here" or "High traffic volume or speed here". Comments were mapped in GIS after the workshops to visualize the areas of reported pedestrian needs and inform the decision for focus area locations. Comments were grouped into six categories, including a miscellaneous category "Add your own idea". This category was used for comments that did not fall into any of the major themes shown in Table C-4. Examples of these miscellaneous comments included documentation of routes used by hotel guests in St. Helena, suggestions for aesthetic treatments to downtown crosswalks in Yountville, and suggestions for bike lanes. All comments were considered in the process to choose focus areas for the Plan, discussed under *Opportunity Areas* in this Plan, and when identifying candidate pedestrian improvements.

- **Station Two: Best Practices Toolbox**
  Station Two was an informative station that displayed examples of best practices for pedestrian treatments frequently used in pedestrian planning efforts. Treatments included sidewalk buffers, intersection features, crosswalk enhancements, as well as signal and striping modifications.
- **Station Three: Goals Visioning**
  At Station Three, participants had the opportunity to weigh in on draft goals for the plan and write their own vision statement. Conflicting desires related to transportation were also presented on either end of the scale and participants were asked to place stickers where they thought the balance should be struck. Tradeoffs included ease of walking compared to ease of driving and creating a comprehensive pedestrian network compared to improved transit service. This information is valuable to determine where the public would like resources to be focused.

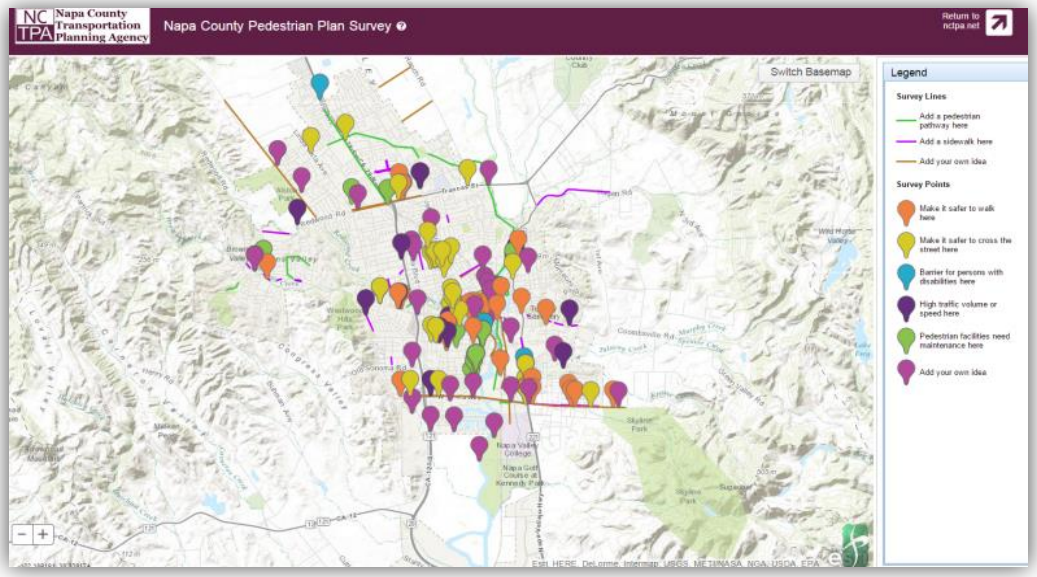


- **Station 4: Collision Maps**
  Station Four was an informative station that displayed the collision maps shown in this plan.

Online Survey Mapping Tool

Napa County residents, employees, and visitors who wanted to provide input but were unable or did not wish to attend the public workshops had the option of submitting their comments online through an interactive mapping tool. Users placed pins on the maps to highlight desired improvements using pre-set comments or creating their own comment. Preset comments included:

- Make it safer to walk here
- Make it safer to cross the street here
- Barrier for persons with disabilities here
- High traffic volume or speed here
- Pedestrian facilities need maintenance here
- Add a sidewalk here
- Add a pedestrian pathway here



Results from the 70 comments submitted countywide are shown in *Exhibit 2* of the countywide plan. No comments were received in the City of Calistoga.

Calistoga-Specific Focus Groups

At the outset of the plan development process, meetings were held with key staff from Calistoga to initiate the planning process on December 9, 2014.

This meeting included a discussion of existing programs, policies and practices. Recommendations for improvements are provided in the benchmarking summary table in **Appendix C-A**.

Jurisdiction staff also provided input during the initial benchmarking meeting and at the public workshops on key areas where pedestrian improvements are planned and in some cases, where connections and safety improvements are desired. This input was used to inform potential opportunities for walking audit routes, as well as discussed along with the facility inventory maps under the *Existing Pedestrian Infrastructure* section of this plan.

Key goals for the pedestrian planning process were also discussed with Calistoga staff, including traffic calming and preserving the rural character, and are incorporated into key programmatic and policy recommendations in this plan.

Additional focus group meetings were held for the Calistoga walking audit on April 14, 2015, and to review the list of suggested pedestrian projects on August 19, 2015.

Opportunity Areas

Calistoga's small-town feel, historic charm, numerous tourist destinations, and natural beauty create an enjoyable landscape for pedestrians. The city is also seeing growth and transition, and has recognized this moment as a key opportunity to enhance pedestrian safety and connectivity in concert with the development opportunities. The city has taken many recent steps in planning for a safer, more walkable community, focusing on the downtown core and safe routes to school in a Pedestrian Safety Assessment (PSA), completed in 2015 by UC Berkeley's Technology Transfer Program (Tech Transfer). This plan expands on those efforts by developing a list of proposed pedestrian facilities within key focus areas of the city and referencing those that have been developed by other plans. Initial focus areas for the plan were developed using a data-driven GIS process that evaluates several factors related to the built environment and demographics that affect the propensity to walk. This process, called the "Ped INDEX", was adapted by work done by the US Environmental Protection Agency (EPA) has been used in several plans in the Bay Area to map the qualitative likelihood of demand for pedestrian activity.

Ped INDEX

The main factors used in the Ped INDEX are population density, land use mix, presence of schools or parks, intersection density, location of downtown commercial areas, and age. These factors resulted in a "heat map" which displays an estimate for relative pedestrian demand on the streets throughout the City of Calistoga. More

detail on the Ped INDEX methodology and results as well potential applications can be found in **Appendix B** of the countywide plan**.**

To balance high pedestrian demand areas with key areas of need in Calistoga, additional data layers were used to display pedestrian deficiencies. These include gaps in sidewalk and reported pedestrian-involved collisions. In general, places with high pedestrian demand and a high infrastructure need are shown as target areas that could be prioritized for pedestrian improvements. The resulting heat map with overlaid demand and deficiencies is shown in Exhibit C-5.

As illustrated on *Exhibit C-5*, Ped INDEX focus locations include the downtown core, Lake Street, Grant Street and North Oak Street. After discussion with city staff regarding candidate locations, the focus area that was chosen for study during walking audits for the Countywide Pedestrian Plan (approximately one mile) included:

- Cedar Street from Lincoln Avenue to Berry Street
- Berry Street from Cedar Street to Washington Street
- Washington Street from Berry Street to Lake Street
- Lake Street from Washington Street to Grant Street
- Grant Street from Lake Street to Stevenson Street
- Stevenson Street from Grant Street to Lincoln Avenue

Lincoln Avenue and Foothill Boulevard are also high pedestrian priority areas for the city, and these corridors were studied during walking audits for a separate Pedestrian Safety Assessment, completed in 2015 through the University of California at Berkeley's Technology Transfer Program. Projects suggested during these walking audits are referenced in this plan.

Demand:

Pedestrian Index Score

High — Low

Deficiencies:

Pedestrian Collisions (Injuries)

1 2 3

Pedestrian Fatality

Missing Sidewalks

Legend:

Downtown

Parks

Trail/Path

School

Exhibit C-5

Calistoga - Pedestrian Index
Demand & Deficiencies

Priority Project and Implementation Plan

An important outcome of this plan is the designation of a priority project list and an implementation plan for these projects. The priority project list was assembled based on:

- Results of the Walking Audit conducted for the plan
- Projects recommended through related planning efforts, such as the Countywide Transportation Plan (CTP)
- Conversations with staff and stakeholders regarding other local priorities

Walking Audits

Walking audits for the Pedestrian Plan focus areas were conducted in April 2015 with key stakeholders to observe field conditions and brainstorm potential ideas for improvement. The following stakeholders attended walking audits in Calistoga:

- Erik Lundquist, Senior Planner City of Calistoga
- Mike Kirn, Public Works Director City of Calistoga
- Chris Canning, Mayor City of Calistoga
- Dieter Deiss, Member of Calistoga ATAC and NVTA ATAC
- Vicka Llamas, Principal Calistoga Elementary School
- Mitchell Celaya, Police Chief City of Calistoga
- Kaycee Wanless, Napa County Safe Routes to School

During the walking audits, visual surveys were conducted to observe physical characteristics and conditions of the pedestrian environment as well as the connectivity and continuity of the surrounding pedestrian network. A debrief was held afterwards with the group to discuss observations and determine suggestions for improvements.

Project List and Map

Suggested pedestrian projects developed during the Pedestrian Plan walking audits and similar, recent efforts are shown in Exhibit C-6. Descriptions of each project and additional program and policy recommendations are included below under Priority Projects.

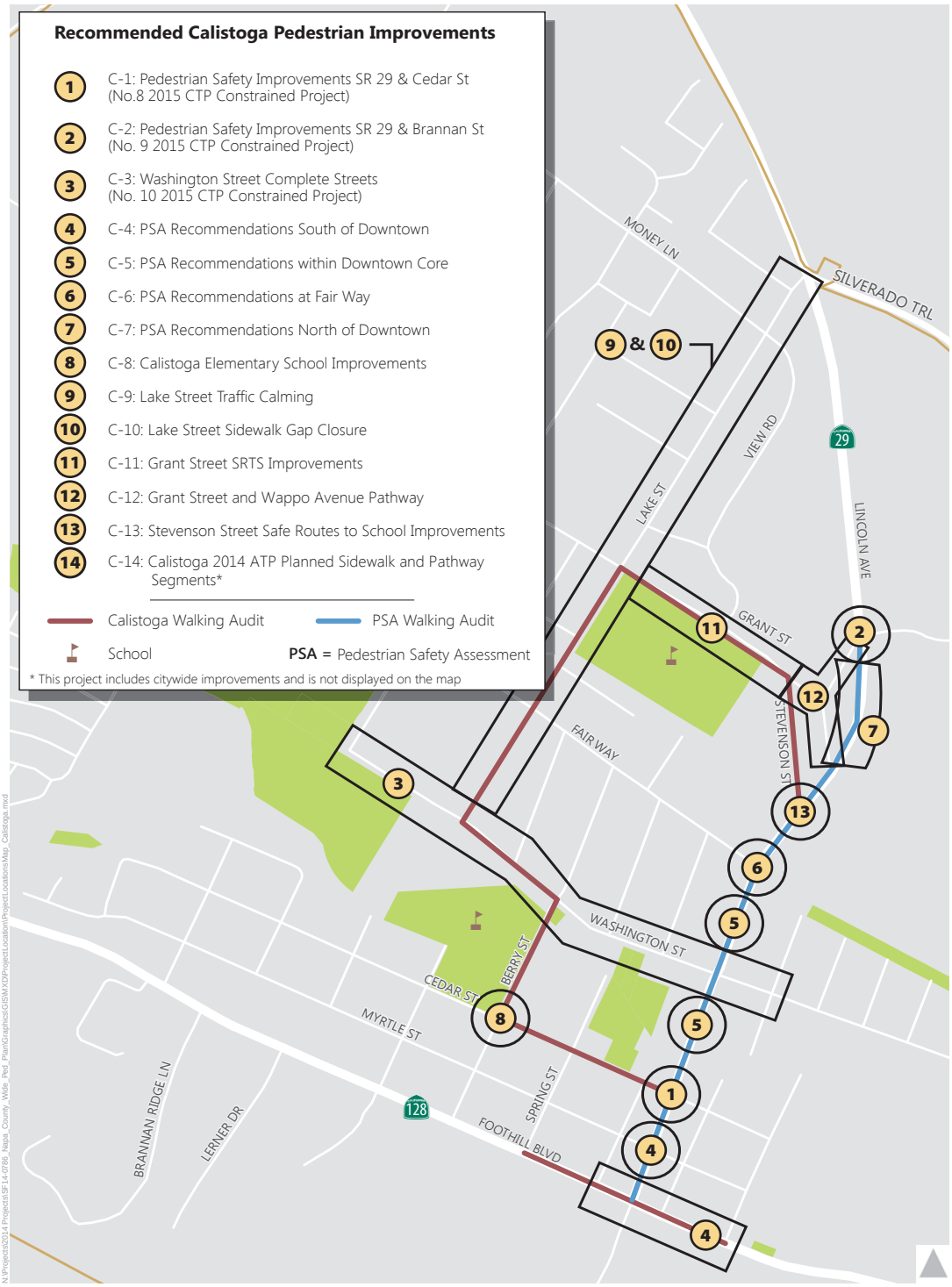


Exhibit C-6

Calistoga - Project Locations

Priority Projects

Existing funding for pedestrian facilities is limited and cannot successfully cover more than a fraction of the recommendations in this plan. Available regional, state and federal funding sources and grant cycles are highly competitive among worthy projects and other jurisdictions. Using consistent prioritization criteria countywide, this plan includes a tiered list of projects for Calistoga reflecting:

- Local importance
- Safety enhancements
- Proximity to schools
- Proximity to transit
- Sidewalk gap and trail connections
- Cost

These criteria and the metrics used to define them are described in more detail in **Appendix C-C**. Each pedestrian improvement project is shown in one of two tiers based on the number of evaluation criteria it meets. Detailed results and project descriptions can be found in **Appendix C-C.** A summary of the improvements is shown in **Table C-5**.

Funded or Constructed Projects

The City of Calistoga is planning a bridge replacement project on Berry Street at the intersection of Washington Street, near Calistoga Elementary School. The project is funded, and will include a realignment of the intersection to straighten crosswalks and shorten crossing distances, to the extent feasible. This funded project was assigned to "Tier Zero" in Table C-5 and was not evaluated for prioritization.

TABLE C-5: CALISTOGA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
ON-GOING SYSTEM MAINTENANCE				
Sidewalk Gap Closure and Maintenance (No. 10 2015 CTP Program)	Citywide	Sidewalk maintenance, rehabilitation and expansion	Sidewalks Maintenance	$$$
TIER ZERO (FUNDED OR CONSTRUCTED PROJECTS)				
T0-1 Berry Street Bridge Replacement	Berry Street at Washington Street	Intersection alignment and crosswalk enhancements	Crossing Treatments Traffic Calming	--
TIER ONE IMPROVEMENTS				
C-1[2] Pedestrian Safety Improvements SR 29 & Cedar Street (No. 8 2015 CTP Project)	SR 29 (Lincoln Avenue) at Cedar Street	**Suggested Modifications to CTP Project**		
		Crosswalk enhancements[1]	Crossing Treatments ADA Ramps PSA Recommendations	$129,600
		Rapid Rectangular Flashing Beacons (RRFBs)if roundabout at Lincoln/Foothill is not installed	Crossing Treatments	$45,400
C-2 Pedestrian Safety Improvements SR 29 & Brannan Street (No. 9 2015 CTP Project)	SR 29 (Lincoln Avenue) at Brannan Street	**Suggested Modifications to CTP Project**		
		Feasibility study for roundabout or RRFBs	Crossing treatments Traffic calming PSA recommendations	$55,400
		Curb ramp location modifications	ADA ramps? Crossing treatments PSA recommendations	
		RRFB if roundabout is not installed	Crossing treatments	$45,400

TABLE C-5: CALISTOGA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
C-3 Washington Street Complete Streets (No. 10 2015 CTP Project)	Washington Street: Lincoln Avenue to N. Oak Street	Complete Streets Enhancements[3]	Complete Streets[3]	$$$
	Washington Street at Gerard Street	**Suggested Modifications to CTP Project**		
		Crosswalk enhancements[1]	Crossing treatments ADA ramps	
	Washington Street at Lincoln Avenue	Signal modifications and crosswalk enhancements[1]	Crossing treatments ADA ramps PSA recommendations Signal timing/operations	
C-4 PSA Recommendations South of Downtown	Foothill Boulevard: Pine Street to Elm Street	Sidewalks	Sidewalks	$$
	Lincoln Avenue at Foothill Boulevard	Roundabout feasibility study	Traffic Calming	
	Lincoln Avenue at Myrtle Street	Crosswalk enhancements[1] and trail improvements	Crossing treatments ADA ramps Pathway	
C-8 PSA Recommendations South of Downtown	Berry Street at Cedar Street	Crosswalk enhancements[1]	Crossing Treatments ADA Ramps	$
C-11 Grant Street Safe Routes To School Improvements	Grant Street: Lake Street to Stevenson Street	Near Term: Traffic calming and safety enhancements	Traffic Calming	$257,000
	Grant Street at Arch Way	Crosswalk enhancements[1]	Crossing Treatments	
	Grant Street at Stevenson Street	Intersection alignment and crosswalk enhancements[1]	Crossing Treatments	
	Grant Street: Lake Street to Stevenson Street	Long Term: Sidewalk	Sidewalk	$368,500
C-12 Grant Street and Wappo Avenue Pathway	Grant Street and Wappo Avenue; East of Stevenson Street	Pathway feasibility study	Pathway	$35,000

TABLE C-5: CALISTOGA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
C-13[2] Stevenson Street Safe Routes to School Improvements	SR 29 (Lincoln Avenue) at Stevenson Street	Intersection alignment, crosswalk enhancements[1] and traffic calming improvements	Crossing Treatments ADA Ramps PSA Recommendations Traffic Calming	$74,600
		RRFB if roundabout at Lincoln/Brannan is not installed	Crossing Treatments	$45,400
TIER TWO IMPROVEMENTS				
C-5 PSA Recommendations within Downtown Core	Lincoln Avenue: Fair Way to Cedar Street	Mid-block crosswalk enhancements[1] and greenery or art for pedestrian paseo	PSA Recommendations Crossing Treatments Paseos Place making	$$
C-6 PSA Recommendations at Fair Way	Lincoln Avenue at Fair Way	Signal modifications, crosswalk enhancements[1], and vehicle circulation modifications	Crossing Treatments Signal timing/operations PSA Recommendations Transit	$$
C-7[2] PSA Recommendations North of Downtown	Lincoln Avenue at Wappo Avenue	Crosswalk enhancements[1]	Crossing Treatments ADA Ramps	$$
	Lincoln Avenue, Wappo Avenue to Brannan Street	Sidewalks and lighting	Sidewalks Lighting	
C-9 Lake Street Traffic Calming	Lake Street, Washington Street to Lake County Highway	Traffic calming study	Traffic Calming	$$
C-10 Lake Street Sidewalk Gap Closure	Lake Street: Washington Street to Lake County Highway	Sidewalks	Sidewalks	$$$

TABLE C-5: CALISTOGA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
PREVIOUSLY PLANNED IMPROVEMENTS[4]				
C-14 Calistoga 2014 ATP Planned Sidewalk and Pathway Segments	Citywide	Sidewalks and pathways	Sidewalks	$$$

1. An enhanced crosswalk includes additional safety treatments such as curb extensions, reduced curb radii, or pedestrian refuge islands. These enhancements are recommended to address safety concerns such as higher speed or volume roadways, wider roadways, and roadways where motorists are less likely to yield to pedestrians. Specific recommendations are included in Appendix C-C. For additional information on the application of these enhancements, refer to the Crosswalk Policy of this plan.
2. The downtown stretch of Lincoln Avenue serves as a frequent parade route for events in Calistoga. To accommodate these parades, the design of any infrastructure projects on Lincoln Avenue from Stevenson Street to Cedar Street should not preclude large vehicles driving down the center of the street. Any median refuges being considered between these limits, such as those recommended in Improvement C-1, C-7, and C-13 as crosswalk enhancements, will require a feasibility assessment.
3. Complete Streets enhancements are designed to accommodate all users, including pedestrian, bicyclists, transit riders, and motorists. For more information, refer to the Best Practices Toolkit, Appendix D of the Countywide Pedestrian Plan.
4. These projects are pedestrian projects that are referenced in other planning documents. These projects were not evaluated during the scope of this Plan; however, they may be pursued through separate and ongoing efforts.

PSA = Pedestrian Safety Assessment (PSA), completed for Calistoga in 2015 by UC Berkeley's Technology Transfer Program (Tech Transfer).

$$$ - high cost (>$1million); $$ - medium cost ($100k-$1million); $ - low cost (<$100k)

Source: Fehr & Peers, 2016

Preserving the rural character is of value to the community of Calistoga and is an important consideration in the design of pedestrian infrastructure. When feasible, physical improvements such as curb extensions and median refuges are preferred as crosswalk enhancements in lieu of flashing beacons. Rectangular rapid flashing beacons (RRFBs) should only be considered as a second phase, if additional traffic calming is desired, for Projects C-1, C-2, and C-13 to maintain this rural character.

Supporting Programs and Policies

Key program and policy recommendations that complement the engineering-related projects are shown below in **Table C-6**. Many of these recommendations draw from the benchmarking exercise completed at the onset of the plan development. The recommendations encompass education, encouragement, and enforcement activities.

TABLE C-6: CALISTOGA PROGRAM AND POLICY RECOMMENDATIONS	
Program or Policy	**Recommendations**
Education and Encouragement	
Safe Routes to School (SRTS) Coordination	Coordinate with the Napa County Office of Education to continue SRTS programs in the city, and determine feasibility of implementing recommendations under the Safe Routes to School Support Program in the *Countywide Implementation* chapter of the countywide plan.
Safety and Enforcement	
Law Enforcement for Pedestrian Safety	Coordinate with NVTA to provide resources to officers in Calistoga on pedestrian safety principles / best practices and education outreach efforts to align with Countywide collision reduction goals. Consider designating traffic safety officers who conduct pedestrian related enforcement activities, such as monitoring school circulation activity during pick up and drop off periods. Determine feasibility of enforcement recommendations in *Countywide Implementation* chapter of the countywide plan.
NVTA Safety Campaign	Coordinate with NVTA on the media safety campaign that NVTA is pursuing, as an opportunity for education by distributing pedestrian safety pamphlets in-lieu of, or in addition to, citations.
Calistoga Elementary School Crossing Guard Training	Review crossing guard training and staffing to improve operations and reduce confusion.
Construction Coordination	Coordinate with stakeholders during traffic control plan development near key pedestrian nodes such as schools, parks and transit stops to ensure appropriate considerations for pedestrian circulation. Implement Policy 9.3 in the Calistoga ATP to require that construction projects minimize impacts to bicyclists and pedestrians through proper signage, equipment, and detours.
Maintenance	
Repair of Sidewalks, Crosswalks, and Curb Ramps	• Continue to regularly improve and repair uneven sidewalk, broken asphalt in crosswalks, and install new curb ramps as part of the citywide Sidewalk Maintenance Program above. Determine feasibility of following the recommended timetable for maintenance activities in the Calistoga 2014 citywide ATP (Table 16, pg. 69-70). This could include efforts as part of the ADA Transition Plan and/or the trip and fall monitoring program. • Assign a point of contact in the Public Works Department to compile, track, and respond to routine bicycle and pedestrian maintenance issues in a timely manner (Policy 9.2, Calistoga ATP) • Determine feasibility of adding a page to the city's website to allow residents and visitors to more easily report and track hazards in the public right-of-way and to ensure all necessary sidewalk repairs are included in the city's Capital Improvement Program (CIP). This could include the reporting of maintenance needs for pedestrian-related pavement markings and traffic control devices.
Overgrown Vegetation on Sidewalks and Planting Strips	Continue to ensure citywide that landscapes at maturity do not interfere with safe sight distances for bicycle, pedestrian, or vehicular traffic; do not conflict with overhead lights, traffic controls, traffic signage, utility lines or poles, or walkway lights; and, do not block bicycle or pedestrian ways. Require adjacent property owners to maintain landscaped areas with live and healthy plant materials, replacing plant materials when necessary to maintain full function and aesthetics; to water, weed, prune, fertilize and keep sidewalks and planting strips litter free. Determine feasibility of implementing these monitoring activities based on the recommended timetable in the Calistoga citywide 2014 ATP (Table 16, pg. 69-70).

TABLE C-6: CALISTOGA PROGRAM AND POLICY RECOMMENDATIONS	
Program or Policy	**Recommendations**
Caltrans Coordination	Coordinate with Caltrans for sidewalk maintenance, crosswalk enhancements and curb ramp upgrades to directional along SR 29 (Lincoln Avenue)
Engineering and Design Standards	
Crosswalk Guidelines	Implement Crosswalk Guidelines, included in Appendix D of the Countywide Pedestrian Plan, to enable the city to respond to crosswalk requests in a manner that improves pedestrian accessibility and maintains public safety. Reference Guidelines when making decisions about where standard crosswalks (two, parallel white stripes) can be marked; where crosswalks with special treatments, such as high-visibility crosswalks, flashing beacons and other special features, should be employed; and where crosswalks will not be marked due to safety concerns resulting from volume, speed, or sight distance issues.
Place Making and Complete Streets	
Downtown Parking Plan	Develop parking plan to identify shared parking opportunities, consider parklets and mid-block crosswalks recommended in PSA report, and identify opportunities for bike parking to include bike corrals, which are an on-street bicycle parking facility that can accommodate up to 16 bicycles parked on racks in the same area as a single vehicle parking space.
Site Plan Review Checklist	Create checklist for development review to ensure site plans include considerations for pedestrian access, safety and sidewalk activation (including considerations for building frontage location, pocket parks, small plazas, or small retail/commercial kiosks and evaluation of pedestrian circulation in parking lots). Include items from MTC's Routine Accommodation Checklist for projects in the public right-of-way to ensure routine application of the Complete Streets policy. MTC's checklist can be found here: http://www.mtc.ca.gov/planning/bicyclespedestrians/Routine_Accommodation_checklist.pdf

Next Steps

Funding Sources

Sidewalks are included in Calistoga's Capital Improvement Program, with an annual funding level of approximately $50,000.

Federal, state, regional, county and local organizations provide funding for pedestrian and bicycle projects and programs. The most recent federal surface transportation funding program, Fixing America's Surface Transportation Act (FAST Act), was signed into law in December 2015. Details in this section are provided for funding programs that are used to fund scheduled projects through December 2020.

Fast Act funding is distributed to Federal and State surface transportation funds. Most of these resources are available to Calistoga through Caltrans, the Metropolitan Transportation Commission (MTC), and the Napa Valley Transportation Authority (NVTA).

Table C-7 summarizes the applicability of these various funding sources to projects, planning efforts, and programs proposed in this plan. Detailed descriptions of the grant funding sources are presented in **Appendix C** of the countywide plan. The most applicable funding sources for the improvements recommended by this plan are the Active Transportation Program, One Bay Area Grants, Highway Safety Improvement Program, and Transportation Development Act Article 3 funds.

TABLE C-7: REGIONAL FUNDING SOURCE APPLICABILITY MATRIX				
Funding Source	**Class I Multi-Use Path**	**Pedestrian Projects**	**Other Projects**	**Planning and Programs**
Highway Safety Improvement Program (HSIP) Grants	◒	●	●	○
Caltrans Transportation Planning Grants	○	○	○	●
Local Transportation Fund (LTF)	●	●	●	○
California State Parks Recreational Trails Program (RTP)	●	○	○	○
Land and Water Conservation Fund (LWCP)	●	○	○	○
Active Transportation Program (ATP), including Safe Routes to School	●	●	●	●
Transportation Development Act-Article 3 (TDA-3)	●	●	●	◒
One Bay Area Grant (OBAG)	●	●	●	●
Bay Area Air Quality Management District (BAAQMD) Transportation Fund for Clean Air	◒	◒	◒	○

Note:

1. ● indicate that funds may be used for this category; ○ indicate that funds may not be used for this category, and ◒ indicate that funds may be used, though restrictions apply.

Source: Fehr & Peers, 2016.

Cost of the Pedestrian Network

Table C-8 presents unit costs for standard pedestrian treatments, estimated using an ATP Cost Estimating Tool developed for the Alameda County Transportation Commission. The tool is used to estimate costs for bicycle and pedestrian projects at the network planning scale during the development of active transportation plans and in a sketch-planning capacity for a bicycle and/or pedestrian project. The costs shown represent the total construction for a typical treatment of that type, including engineering, design, construction management, mobilization, traffic control and general contingency. Contingency for drainage and utility relocation was also included for relevant treatment types, such as curb extensions. These numbers do not include right-of-way costs or inflation.

TABLE C-8: GENERALIZED UNIT COSTS FOR IMPROVEMENTS		
Facility Type	**Cost [1]**	**Unit**
Curb Extension/Bulbout	$56,000	Each
Pedestrian Refuge Island	$10,000	Each
Flashing Beacons (RRFBs)	$45,000	Per Crosswalk
Pedestrian Hybrid Beacon (PHB)	$144,000	Per Crosswalk
Customized Pedestrian Wayfinding Signs	$2,000	Per Sign

1. Costs reflect capital costs plus contingency for engineering design, environmental, construction management, mobilization, traffic control, and contingency.

Source: Fehr & Peers, ATP Cost Estimating Tool, 2015.

Project-level cost estimates were prepared for the top 5 Tier One projects determined in the previous section of this plan, while the remaining projects were assigned a ranking in Table C-5 to indicate an estimated range of cost level. Prepared cost estimates, included in **Appendix C-D**, include unit costs for individual improvements within the project and adjustments to account for traffic control, construction management, and mobilization. Additional factors were also used for overall contingency, engineering design, and environmental. A summary of the estimates is shown in **Table C-9** below.

TABLE C-9: TIER ONE PROJECT SUMMARY COSTS

Project	Total Cost[1]
C-1: Pedestrian Safety Improvements SR 29 & Cedar Street (No. 8 CTP Project)	$175,000
C-2: Pedestrian Safety Improvements SR 29 & Brannan Street (No. 9 CTP Project)	$100,800
C-11: Grant Street SRTS Improvements	-
Near Term	**$257,000**
Long Term	**$625,500**
C-12: Grant Street and Wappo Avenue Pathway Study	$35,000
C-13: Stevenson Street Safe Routes to School Improvements	$120,000

1. Costs reflect capital costs plus contingency for engineering design, environmental, construction management, mobilization, traffic control, and contingency.

Source: Fehr & Peers, ATP Cost Estimating Tool, 2016.

Countywide Performance Metrics and Evaluation

NVTA intends to monitor progress on the implementation of this plan over time. The *Countywide Implementation* chapter of the Countywide Pedestrian Plan summarizes key performance goals and associated metrics for this plan's implementation.

Calistoga Appendix

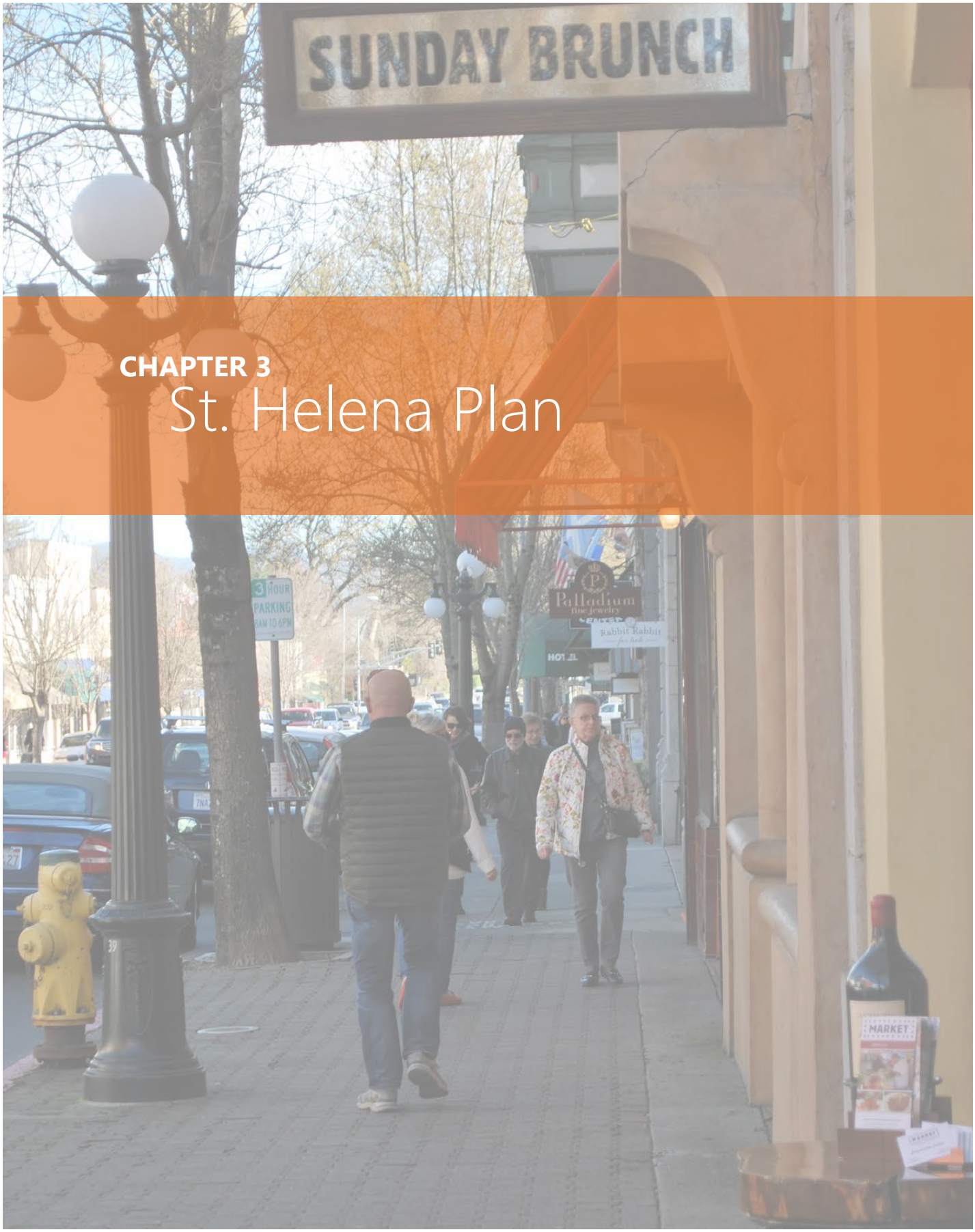
C-A Benchmarking Table

C-B Existing Pedestrian Policies

C-C Detailed Project Lists and Prioritization

C-D Cost Estimates

C-E Plan Adoption Resolution



CHAPTER 3

St. Helena Plan

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Chapter 3

St. Helena Plan

Pedestrian Setting

St. Helena is a rural suburban community in northern Napa County. St. Helena has a small-town atmosphere with approximately 6,000 residents within four square miles. The city's downtown is an attractive pedestrian corridor lined with pedestrian-scaled lighting as well as shopping and restaurants that honor the region's esteemed wine industry. SR 29 (Main Street) runs through the downtown core and carries high traffic volumes with frequent congestion. The downtown only has a few marked crosswalks, which presents challenges for pedestrians navigating traffic to cross the street. Sidewalk gaps are also common. New development south of the Sulphur Creek Bridge on Main Street as well as existing nearby attractions such as Gotts Roadside burger stand, a popular local eatery, and several hotels and inns present the need for improved sidewalk facilities that connect to downtown. The land use patterns for the city are shown in *Exhibit SH-1.* An interactive city destination map, including the locations of public buildings, shopping and tourist attractions, is provided on St. Helena's website and can be found at the following link: http://visitingmedia.com/collections/city-of-st-helena-california/.

Existing Policies and Programs

To help guide the development of key programs and policies for this plan, St. Helena's existing approaches to facilitating and enhancing walking were reviewed with a benchmarking matrix that compares the existing programs, policies, and practices with national best practices. The benchmarking analysis categorizes each jurisdiction's programs, policies, and practices into three areas as follows:

- **Key Strengths** (areas where the jurisdiction is exceeding national best practices)
- **Enhancement Areas** (areas where the jurisdiction is meeting best practices)
- **Opportunity Areas** (areas where the jurisdiction should consider meeting best practices)

As summarized in **Table SH-1**, the City of St. Helena has worked to create a pedestrian-friendly community through the adoption of several pedestrian-oriented ordinances and the implementation of reduced speed zones. This plan provides a framework for additional investments to create an accessible, connected pedestrian network citywide. Particular areas of opportunity that this plan addresses directly are the development of a pedestrian facility inventory, completion of walking audits, and collection of pedestrian volumes. The full benchmarking analysis for St Helena, with associated recommendations, is presented in **Appendix SH-A**.

TABLE SH-1: ST HELENA BENCHMARKING HIGHLIGHTS

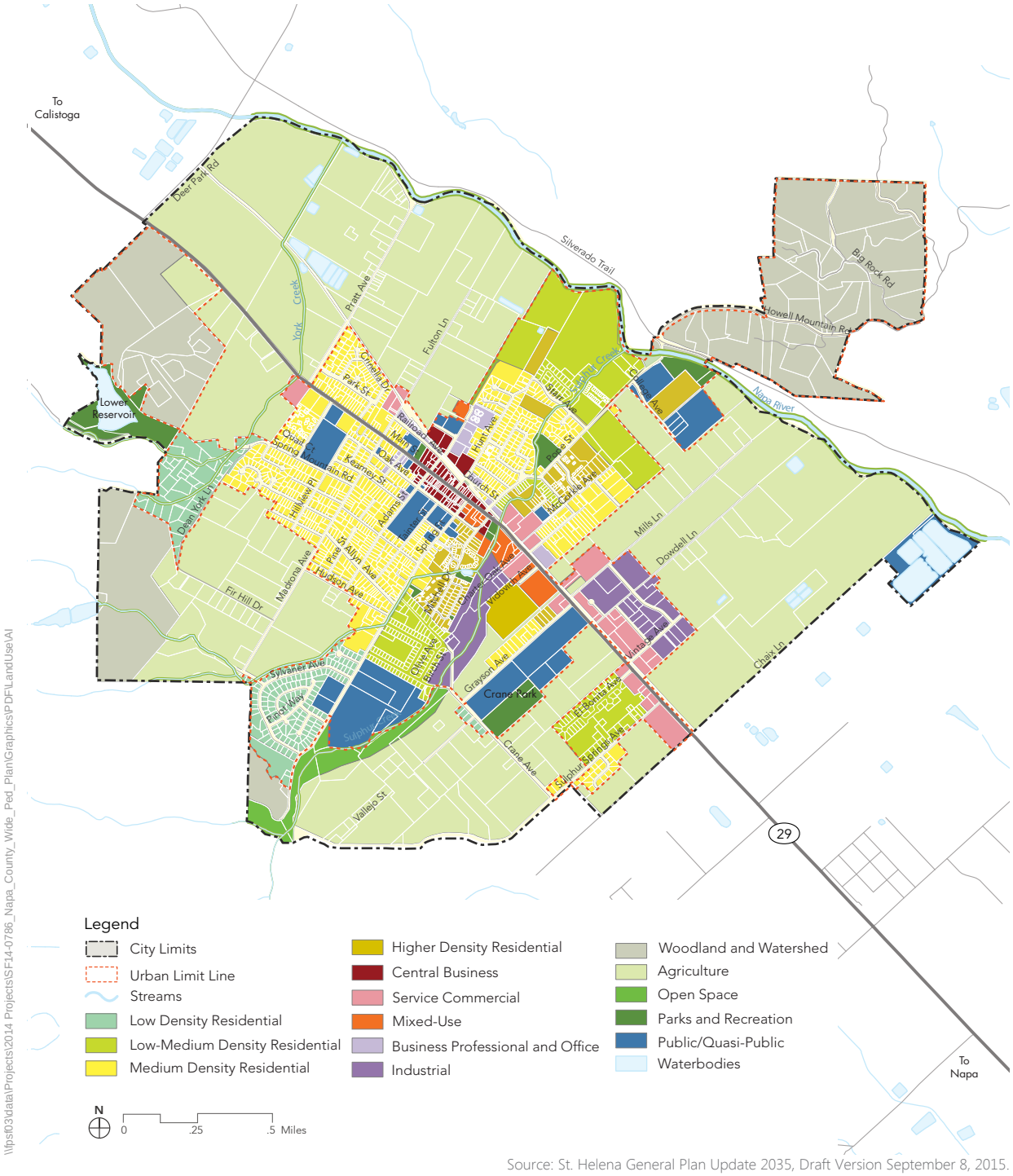
Plans, Policies, & Programs	St. Helena Current Practice	Best Practice Examples
Key Strengths		
ADA Transition Plan Involving non-traditional partners such as public health agencies, pediatricians, etc., in the planning or design of pedestrian facilities may create opportunities to be more proactive with pedestrian safety, identify pedestrian safety challenges and education venues, and secure funding. Additionally, under-reporting of pedestrian-vehicle collisions could be a problem that may be partially mitigated by involving the medical community in pedestrian safety planning.[1]	Live Healthy Napa County, a coalition of local community stakeholders for improving health in Napa County, recently completed the Napa County Community Health Improvement Plan (CHIP) in February 2014. The document proposes a plan to address health issues through new policies and health promotion strategies, including transportation policies that encourage walking and biking. In St. Helena, health agencies are involved in the development review process, but there is no special involvement for pedestrian facilities. Live Healthy Napa County completed the first ever Napa County Community Obesity Prevention Plan (Jan. 2015), which addresses the need to increase active transportation options countywide.	• Seek opportunities to meet goals in the CHIP related to active transportation, such as improving the built environment by ensuring all necessary sidewalk repairs are included in the city's Capital Improvement Program (CIP), and including additional pedestrian infrastructure projects in the program. Consider a trip and fall monitoring program and/or incorporating public comment from the recommended online comment form under Public Involvement below. • Continue to involve health agencies in the development review process, especially when it related to active transportation improvements. • Ensure consistency with the CHIP by seeking partnership opportunities between health agencies and SRTS Safe Routes to School to expand the reach of education and promotion of walking.

TABLE SH-1: ST HELENA BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**St. Helena Current Practice**	**Best Practice Examples**
Complete Streets Policy Routine Accommodations or Complete Streets Policies accommodate all modes of travel and travelers of all ages and abilities.	The City of St. Helena has a Complete Streets Policy resolution which follows the template provided by MTC. The next update to the General Plan will incorporate Complete Streets policies and principles; however, it has yet to be adopted. For implementation of the Complete Streets policy, designs of projects affecting the transportation system must be reviewed by the Active Transportation Committee for consistency with the Vine Trail plans and the Countywide Bicycle Plan. Routine data collection is also required to evaluate how well all users are being served by the transportation network. Commercial and residential development projects are required to include sidewalks and the city additionally requests ADA-compliant driveway designs during development review.	• Consider opportunities for Complete Streets, specifically pedestrian pathways and/or sidewalks, during restriping, repaving, new roadway construction, and utility installation projects. • Follow MTC's checklist procedure and guidelines for project review to ensure routine application of the Complete Streets policy. • Consider maintaining a GIS database of data collected as part of the policy evaluation, to include pedestrian volumes collected in this plan.
Newspaper Rack Ordinance Newspaper racks may obstruct walkways and reduce accessibility and pedestrian visibility when ordinances are not in place. A Newspaper Rack Ordinance improves the pedestrian realm by reducing clutter and organizing sidewalk zones and may detail size, location, and maintenance requirements.	St Helena has an ordinance which requires the placement and maintenance of a news rack not to interfere with building access or reduce the pedestrian travel way to less than six feet.	
Street Tree Ordinance Street trees enhance the pedestrian environment by providing shade and a buffer from vehicles. Street trees may also enhance property values, especially in residential neighborhoods. However, street trees, when improperly selected, planted, or maintained, may cause damage to adjacent public utilities.	The St Helena Tree Committee developed the Master Street Tree List, a guide that organizes trees into categories depending on the recommended street type (large commercial, major in-town streets, and small neighborhood streets). The guide includes a list of undesirable trees, in accordance with the city's street tree ordinance, which lists trees that cannot be planted without proper root-control barriers due to their potential to cause damage to sidewalks. According to the St Helena tree ordinance, property owners are responsible for repairing sidewalk damage by trees fronting their property, while the city takes responsibility for trimming and maintaining trees on Main Street.	
Speed Limits and Speed Surveys Pedestrian fatality rates increase exponentially with vehicle speed. Thus, reducing vehicle speeds in pedestrian zones may be one of the most important strategies for enhancing pedestrian safety.	Engineering speed studies are prepared every 5 years in St Helena, in accordance with state law. The city does use reduced speed limits of 15 mph in school zones as needed. De facto speed limits are 25 miles per hour.	• Proactively consider pedestrian volumes when setting speed limits, and consider traffic calming in pedestrian zones where speed surveys suggest traffic speeds are too high. • Ensure design standards in pedestrian areas do not contribute to a routine need for traffic calming.

TABLE SH-1: ST HELENA BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**St. Helena Current Practice**	**Best Practice Examples**
Key Opportunities		
Sidewalk or Street Furniture Ordinance Street furniture encourages walking by accommodating pedestrians with benches to rest along the route or wait for transit; trash receptacles to maintain a clean environment; street trees for shade, etc. Uniform street furniture requirements also enhance the design of the pedestrian realm and may improve economic vitality.	St Helena has no specific street furniture ordinance, but sidewalk dining is allowed with a permit in the zoning code. A four feet clear path of travel must be maintained.	• Consider adopting a Street Furniture Ordinance to include guidance for the design of transit stops and locations for additional street furniture amenities, other than those associated with transit stops, as appropriate.
Inventory of Pedestrian Facilities A GIS-based sidewalk inventory enables project identification and prioritization, as well as project coordination with new development, roadway resurfacing, etc.	The city does not have a GIS inventory of sidewalks or other pedestrian facilities, although trails and pathways are shown graphically in the City Bicycle Master Plan. Sidewalks are included in the City's Capital Improvement Program and has budgeted approximately $17,000/year for the last 3 years for sidewalk repairs, although not all of it was spent.	• This plan has developed a GIS-based inventory of sidewalks, curb ramps, crosswalks, and paths Citywide. This facility inventory could be expanded to include informal pathways and potential pedestrian opportunity areas in the City. • Consider implementing a trip and fall monitoring program and/or mapping public comment from the recommended comment form to ensure all necessary sidewalk repairs are included in the City's Capital Improvement Program (CIP).
Walking Audit Program Walking audits provide an interactive opportunity to receive feedback from key stakeholders about the study area as well as discuss potential solutions and their feasibility. They can be led by city staff, advocacy groups, neighborhood groups, or consultants.	St. Helena has not conducted pedestrian walking audits before this plan.	• Conduct regular walking audits as part of a citywide safety program for pedestrians. This effort could complement a "trip and fall" program or health-oriented programs within the city, as well as distribution of the media campaign NVTA is pursuing.
Pedestrian Volumes Pedestrian volume data is important for prioritizing projects, developing collision rates, and determining appropriate pedestrian infrastructure.	The City of St Helena does not collect pedestrian volumes as a matter of routine.	• Use collected volumes in this plan to identify pedestrian nodes in the next update to the General Plan. • Routinely collect pedestrian and bicycle volumes by requiring them to be conducted in conjunction with all traffic studies and manual intersection turning movement counts. • Geo-code existing and future pedestrian volume data with GIS software along with other data such as pedestrian control devices and collisions to analyze data for trends or hotspots related to pedestrian safety.

Notes:

1. Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113



\\fps\03\data\Projects\2014 Projects\SF14-0786_Napa_County_Wide_Ped_Plan\Graphics\PDF\LandUse\AI

Source: St. Helena General Plan Update 2035, Draft Version September 8, 2015.

Exhibit SH-1

St. Helena - Land Use Map

Existing Pedestrian Infrastructure

An inventory of existing sidewalks, marked crosswalks, curb ramps and trails was collected on key roadways throughout the city using a combination of aerial imagery and Google Street View imagery from the years 2011 – 2014 (imagery for a few small residential streets dated back to 2007).

A GIS database assembled for the inventory includes additional detail beyond what is illustrated in the inventory maps, including the style of crosswalk striping, the method of vehicle control at the crosswalk (i.e., traffic signal, flashing beacon, stop sign, or uncontrolled), whether the crosswalk was located in a school zone, and the curb ramp design (i.e., whether the ramp is directional or diagonal and if it has truncated domes). For more information and examples of these types of facilities, please see the Best Practices Toolkit, **Appendix D** of the Countywide Pedestrian Plan.

St. Helena Inventory

Pedestrian facilities were inventoried for the entire roadway network in St Helena. As shown in *Exhibit SH-2*, the majority of missing sidewalks is located on the outer edges of the city. Streets with sidewalk gaps that were identified by city staff as potential or existing pedestrian desire lines include north-west corridors Main Street and Hudson Avenue and east-west corridors Grayson Avenue and Mitchell Drive. According to city staff, Pope Street is a common route for seniors who walk from their homes into town. Although Pope Street has sidewalk along at least one side of the street between College Avenue and Main Street, *Exhibit SH-2* shows locations where sidewalk is missing on both sides or where the sidewalk is asphalt, which typically requires more maintenance than concrete sidewalks.

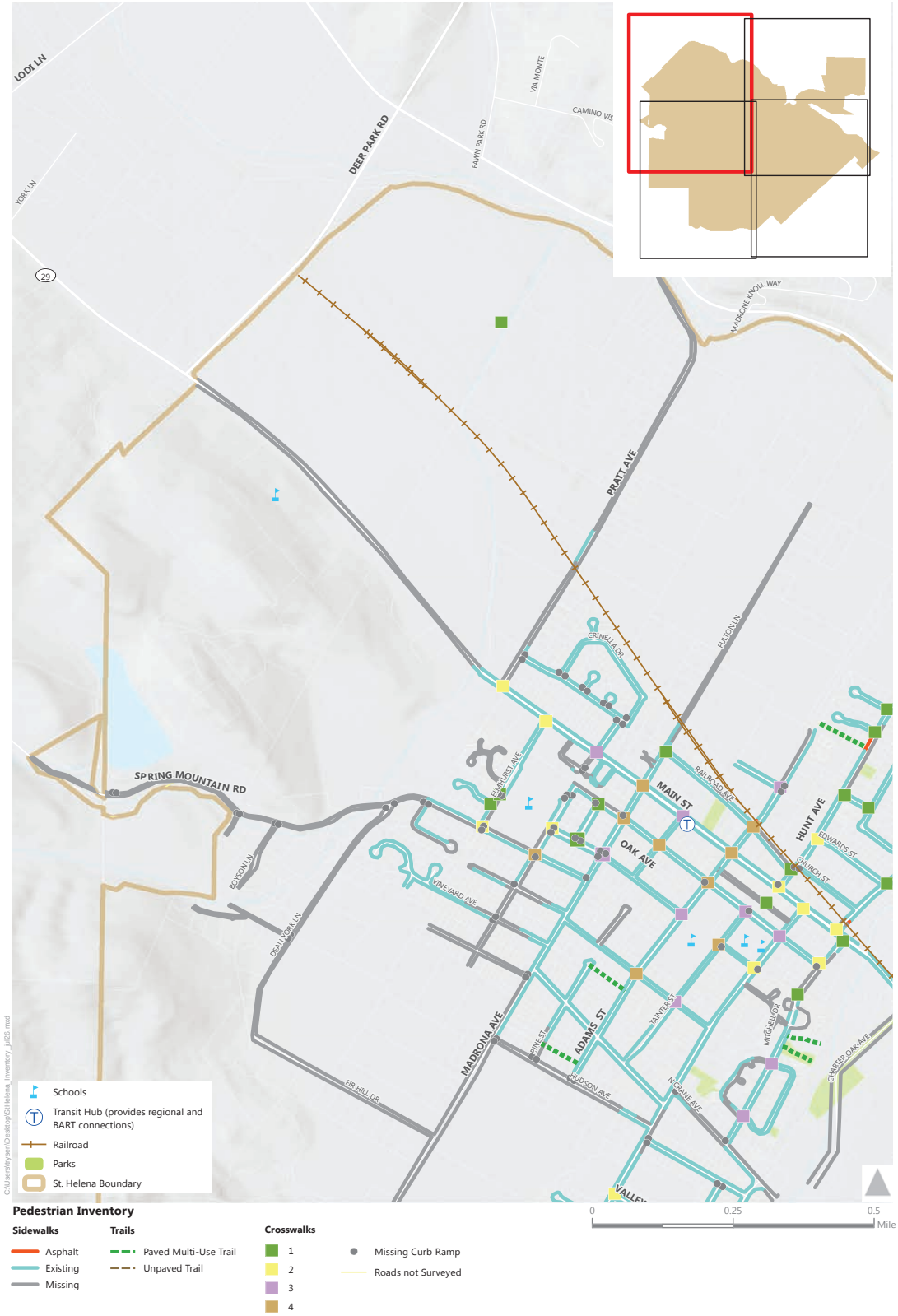
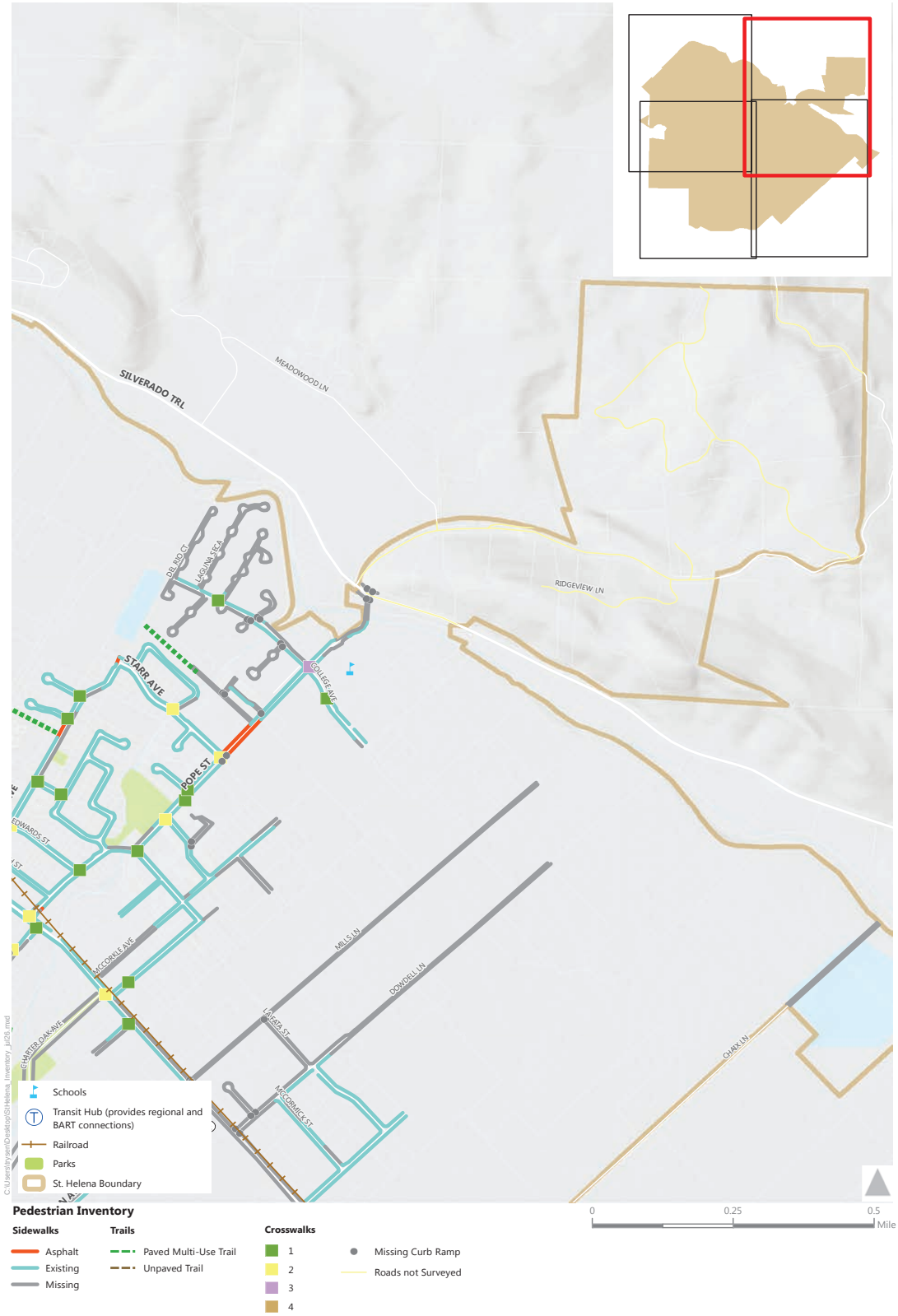


Exhibit SH-2a
Pedestrian Facility Inventory
City of St. Helena



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4

- Missing Curb Ramp
- Roads not Surveyed

Exhibit SH-2b
Pedestrian Facility Inventory
City of St. Helena

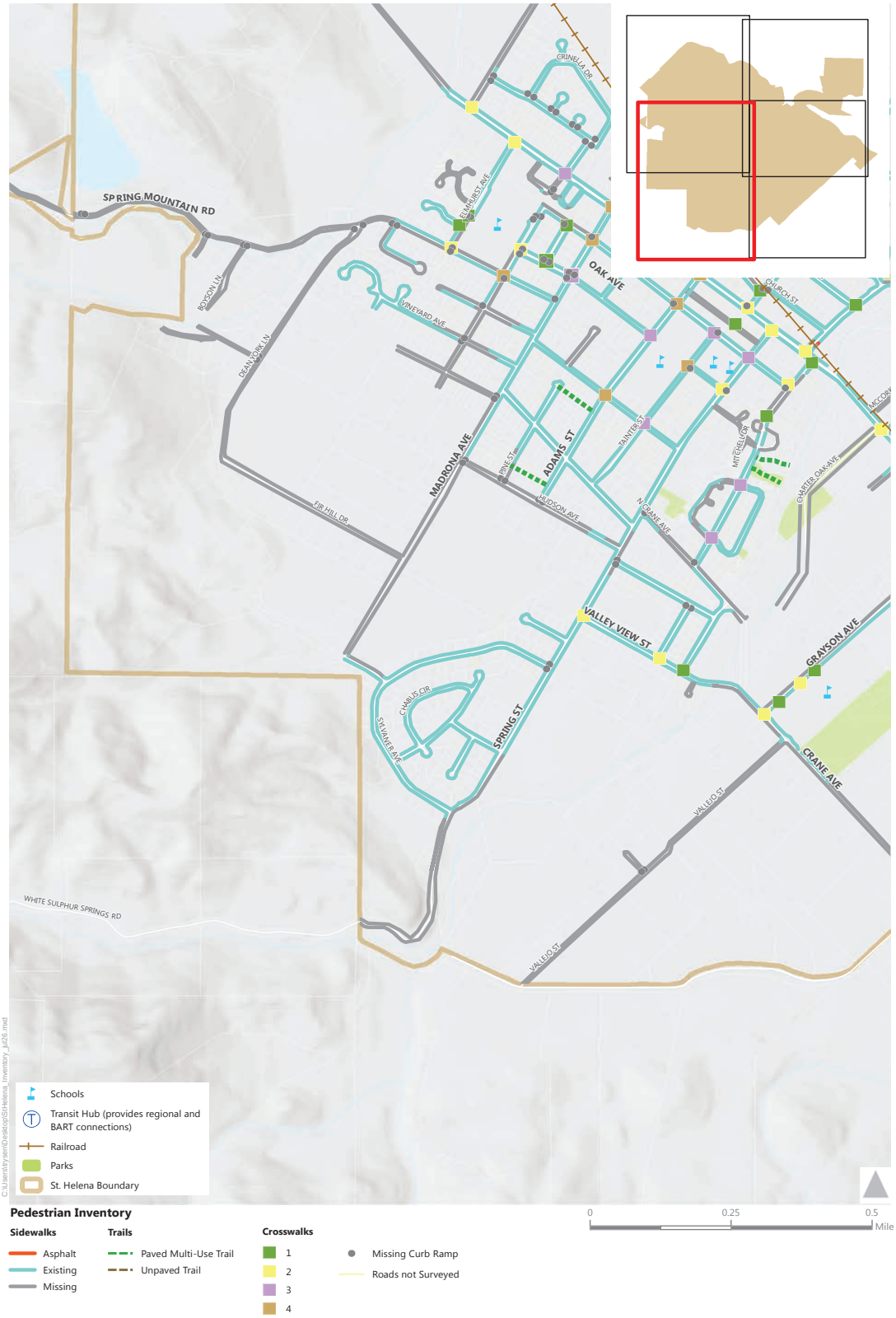


Exhibit SH-2c
Pedestrian Facility Inventory
City of St. Helena

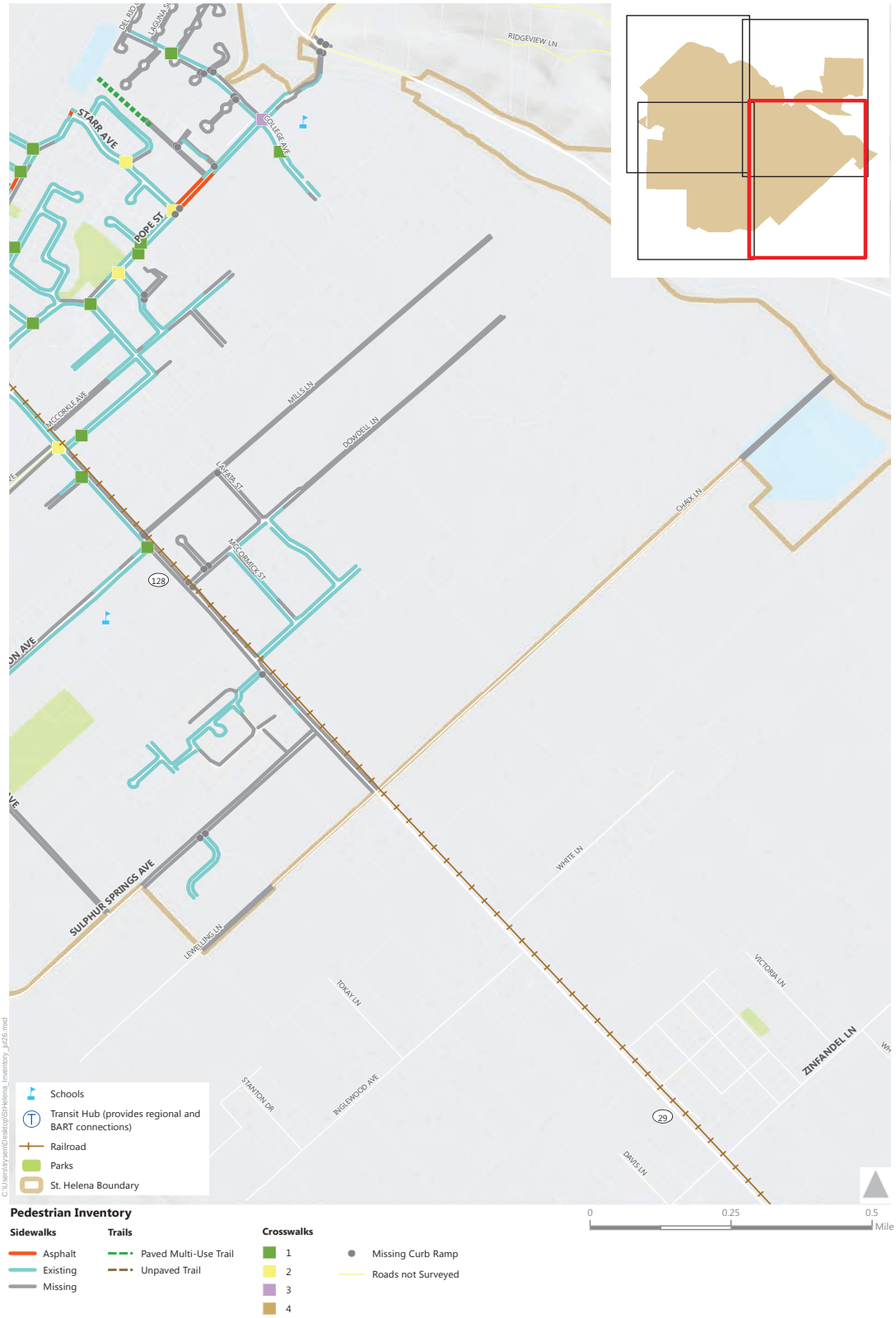


Exhibit SH-2d
Pedestrian Facility Inventory
City of St. Helena

Activity Levels

Pedestrian counts were conducted at eight locations throughout St. Helena in October and November 2015. These locations were selected based locations of proposed pedestrian projects in this plan, potential localized safety concerns, expected high expected levels of walking, and proximity to key pedestrian destinations, including schools and downtown commercial areas. **Table SH-2** provides a summary of the two-hour counts completed within the city. Count results varied significantly based on nearby population density, as well as by the adjacent land use.

TABLE SH-2: ST. HELENA COUNT PROGRAM LOCATIONS

ID	Jurisdiction	Location	Morning 7-9AM	Evening 4-6PM	School 2-4PM	Weekend 12-2PM
SH1	St. Helena	Main St. and Pope Street	55	134		
SH2	St. Helena	Main Street at Adams Street	112	321		798
SH3	St. Helena	Hunt Avenue at Proposed Path (1)	23	37		
SH4	St. Helena	Hunt Avenue at Proposed Path (2)	23	34		
SH5	St. Helena	Main and Grayson	8		16	
SH6	St. Helena	Main and El Bonita Avenue	5		8	7
SH7	St. Helena	Spring Mountain and Elmhurst	13		7	
SH8	St. Helena	Main and Pine	35	65		104

The highest rates of walking in St. Helena during all time periods were observed at the intersection of Main Street and Adams Street in downtown St. Helena. This location is in close proximity to several shops and restaurants, and is currently a signalized intersection with crosswalks across two of the intersection's three crossings. The highest observed pedestrian activity at this location was midday (12-2 PM) on Saturday, when nearly 800 crossings took place during the two-hour count period. Several other lower counts were also conducted along Main Street.

Counts were conducted at three locations in close proximity to St. Helena schools; two counts were conducted near St. Helena High School (SH5 and SH6) and one count location was selected near Robert Louis Stevenson Middle School (SH7). Counts at all schools showed fewer than 20 pedestrians over each two-hour period.

Going forward, NVTA intends to conduct annual counts throughout the County on an annual basis. Counts will primarily be conducted in locations evaluated in the baseline year (2015) to monitor travel trends and the impact of project implementation on pedestrian volumes, as well as justify funding for projects in this plan. With the collected counts, NVTA may compare travel patterns across different locations, measure changes in pedestrian use at a single location over time, and evaluate the extent to which pedestrian travel peaks throughout the course of the day or week. By collecting counts at different times of day, NVTA may evaluate if a given pedestrian facility is typically used for recreational or utilitarian purposes.

In the future, count locations may be added or omitted based on agency priorities, and could include pedestrian-involved collision locations to prioritize improvements in locations based on collision rates (collision/daily pedestrian volume).

Collision Analysis

Collision data was accessed from the California Highway Patrol Statewide Integrate Traffic Records System (SWITRS). This data represents all reported pedestrian-vehicle collisions occurring during the ten-year period from January 2003 to December 2012.

Exhibit SH-3 shows the locations of these pedestrian collisions in St Helena.

Exhibit SH-3 presents raw collision counts only. While this is illustrative of "hot spot" areas in St Helena, another important consideration for identifying safety focus areas can be collisions per pedestrian (or the collision rate). Collision rates (not included in the current analysis because pedestrian volume data is not available citywide) can highlight locations where improvements can be added to ensure a focus on areas that may not have as many people walking (but have high collision rates) in addition to areas with high pedestrian volumes and a high number of collisions.

Hot Spots

St Helena has the highest number of reported collisions per capita in the county, at approximately one reported collision for every 200 residents. Collision locations are concentrated near Main Street (SR 29) between Madrona Avenue and Pope Street, close to the downtown core. Collision hotspots include the intersection of Main Street and Adams Street, with four reported injury collisions over the last ten years, and Main Street at Fulton Lane with two injury collisions.

Countywide Demographic and Seasonal Trends

For this plan, a review of collisions countywide included organizing the data by age for children and seniors, and comparing the results across each jurisdiction. Daily and seasonal trends for collision occurrences and primary collision factors were also reviewed countywide. A summary of these results can be found in the *Countywide Walking Trends* chapter of the Countywide Plan.

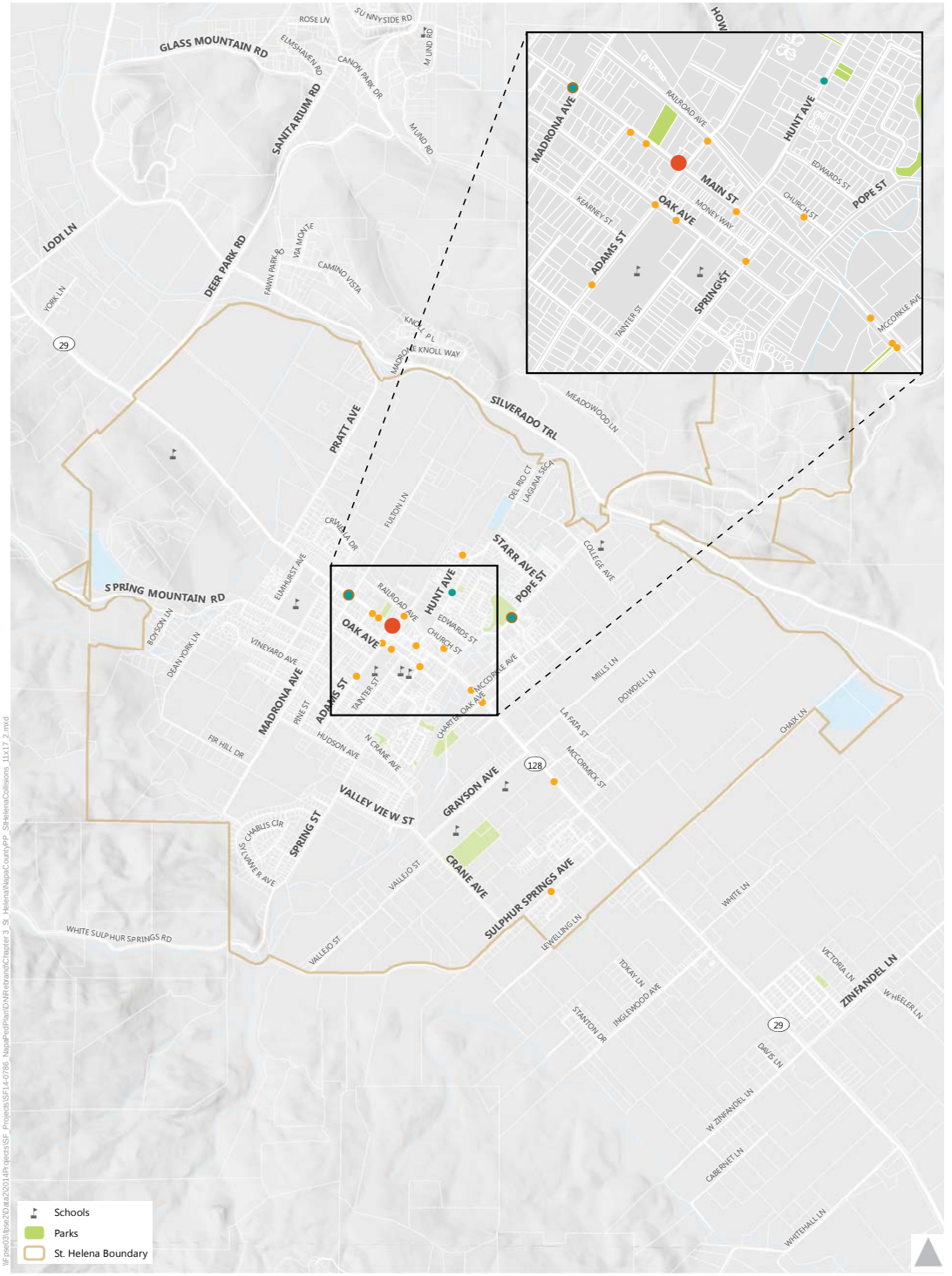
Pedestrian Actions

Perhaps one of the more telling sources of information in the SWITRS data is the Pedestrian Action variable, which describes what the pedestrian was doing immediately before the collision occurred. According to the pedestrian actions presented in **Table SH-3**, pedestrian safety issues surrounding collisions are typically focused around crossing locations.

TABLE SH-3: ST HELENA COLLISION SUMMARY PEDESTRIAN ACTIONS (2003-2012)			
Pedestrian Action	Number of Collisions		
	Injury	Fatality	Total[1]
Crossing in Crosswalk at Intersection	12	2	14
Crossing Not in Crosswalk	8	0	8
Walking In Road, Including Shoulder	3	0	3
Walking, Not in Road	2	1	3

1. Some of the recorded collisions were unable to be mapped due to a missing location in the database.

Source: SWITRS



Pedestrian-Involved Collisions 2003-2012

- 1 Fatal Collision
- 1, 2, 3 - 4: Injury Collisions

Pedestrian Collision Hotspots

Density	Intersection	Total Collisions
	Main St. and Fulton Ln.	2
	Pope St. and Mariposa Ln.	2
	Main St. and Adams St.	4

Exhibit SH-3
Pedestrian-Involved Collisions
2003 - 2012 City of St. Helena

Public and Stakeholder Input

Countywide Outreach

Input on plan goals and objectives, current pedestrian issues, and desired locations for improvement was solicited through meetings with jurisdiction staff and key stakeholders, countywide public workshops, and an interactive mapping tool made available online. The goal was to develop a community-supported vision for pedestrian improvements. A summary of all input received during this process countywide is displayed in **Table SH-4**. Connectivity and safety were the key themes across the countywide comments.

TABLE SH-4: PUBLIC INPUT RECEIVED COUNTYWIDE

Comment	Comment Type	Percent of Total Comments
Add a sidewalk here	Connectivity	16%
Make it safer to cross the street here	Safety	15%
Make it safer to walk here	Safety	14%
Add a pedestrian pathway	Connectivity	13%
High traffic volume or speed here	Safety / Walkability	8.5%
Pedestrian facilities need maintenance here	Walkability	4.5%
Barrier for persons with disabilities here	Accessibility	2%
Other (Add your own idea)		27%

Source: Fehr & Peers, 2015

Examples of the comments that were categorized as “other” in St. Helena are included in the Station One narrative below.

Public Workshops

Ongoing public outreach and participation was an integral element in developing the Countywide Pedestrian Plan. Public workshops were advertised on NVTA’s website, as well as via local media including the newspaper and radio. Invitations to the public workshops were also sent to local stakeholders, including senior centers, mobility impaired groups, advisory committees and local non-profit groups. The goal of the workshops was to identify public concerns and opportunity areas to inform focus areas, educate the stakeholders, and solicit feedback on the plan vision and goals.

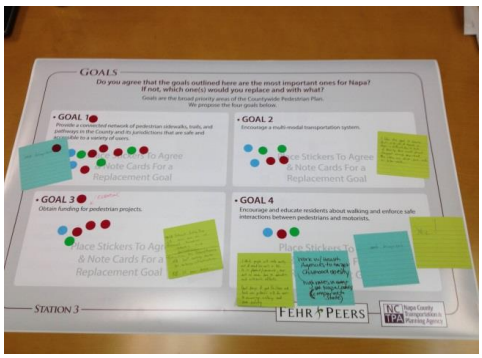
Public workshops were held throughout the County in Winter 2015: in Napa on January 22 at NVTA; in Yountville on January 27; in St. Helena on January 28; and in American Canyon on February 4. Due to recent public workshops held in Calistoga through development of their Active Transportation Plan in 2014, workshops were not held in the city. All workshops were open to all members of the public countywide. Photos of workshop posters are included in **Appendix A** of the countywide plan.

The format for each public workshop was the same and consisted of four stations:

- **Station One: Issues/Opportunities**

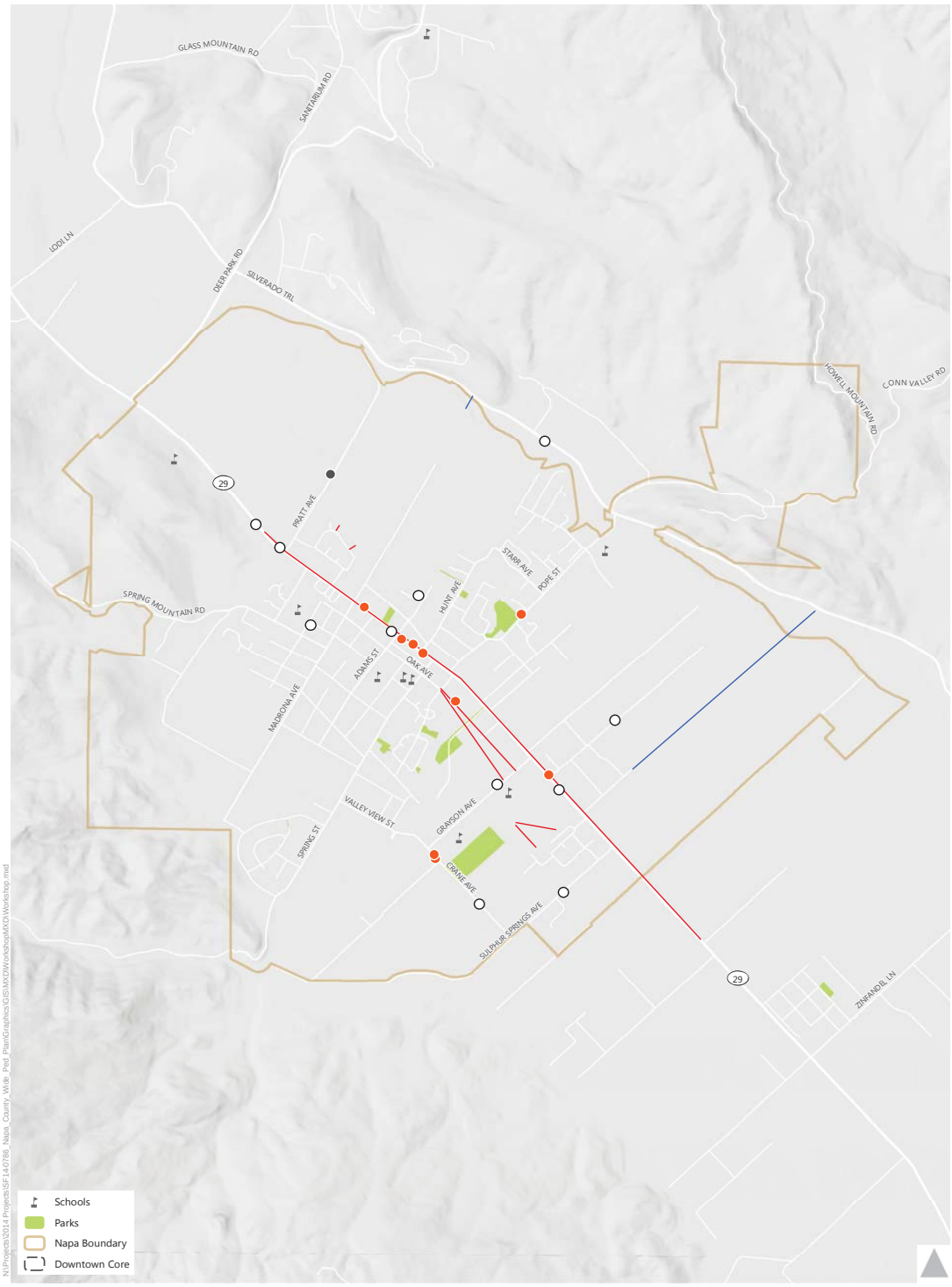
  At Station One, participants voted on a list of common barriers to walking to indicate which issues were most relevant to the walking environment in their jurisdiction and countywide. Participants also wrote comments on large-scale aerial maps placed on tables or on the floor to highlight existing barriers to pedestrian travel and locations where improvements were needed. Suggested comments included "Make it safer to cross the street here" or "High traffic volume or speed here". Comments were mapped in GIS after the workshops to visualize the areas of reported pedestrian needs and inform the decision for focus area locations. The results of this mapping exercise included over 30 comments in the City of St Helena, shown in *Exhibit SH-4*. Comments were grouped into six categories, including a miscellaneous category "Add your own idea". This category was used for comments that did not fall into any of the major themes shown in Table SH-4. Examples of these miscellaneous comments included documentation of routes used by hotel guests, suggestions to relocate parking off of Main Street, ideas to open up pedestrian alleyways in a residential neighborhood near Robert Louis Stevenson Middle School, and recommendations to reduce existing cross-sections on roadways in the south of town to accommodate pedestrian facilities. All public comments were considered in the process to choose focus areas for the Plan, discussed under *Opportunity Areas* in this Plan, and when identifying candidate pedestrian improvements.
- **Station Two: Best Practices Toolbox**

  Station Two was an informative station that displayed examples of best practices for pedestrian treatments frequently used in pedestrian planning efforts. Treatments included sidewalk buffers, intersection features, crosswalk enhancements, as well as signal and striping modifications.
- **Station Three: Goals Visioning**

  At Station Three, participants had the opportunity to weigh in on draft goals for the plan and write their own vision statement. Conflicting desires related to transportation were also presented on either end of the scale and participants were asked to place stickers where they thought the balance should be struck. Tradeoffs included ease of walking compared to ease of driving and creating a comprehensive pedestrian network compared to improved transit service. This information is valuable to determine where the public would like resources to be focused.
- **Station 4: Collision Maps**

  Station Four was an informative station that displayed the collision maps shown in this plan.



Safety
Maintenance
ADA
Other
Sidewalk/Pathway
Other

0 0.5 1 Mile

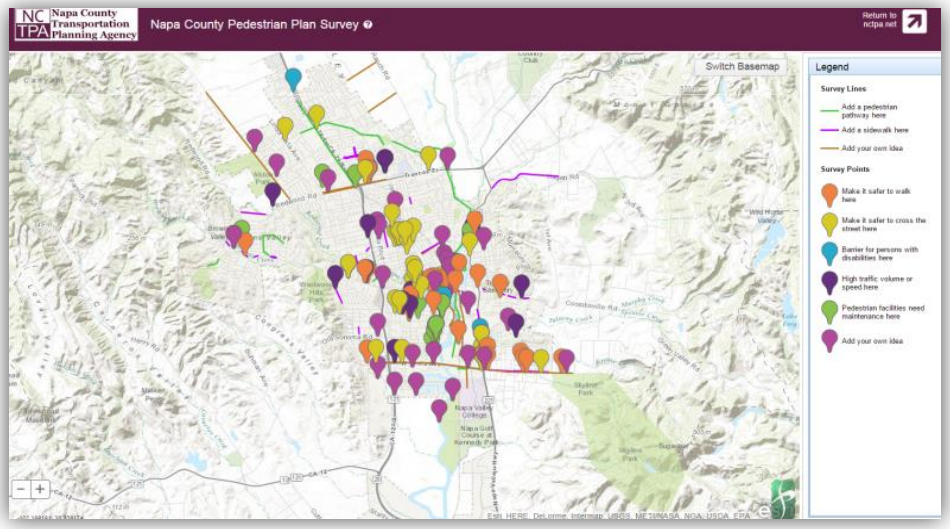
Exhibit SH-4

Workshop Comments
St. Helena

Online Survey Mapping Tool

Napa County residents, employees, and visitors who wanted to provide input but were unable or did not wish to attend the public workshops had the option of submitting their comments online through an interactive mapping tool. Users placed pins on the maps to highlight desired improvements using pre-set comments or creating their own comment. Preset comments included:

- Make it safer to walk here
- Make it safer to cross the street here
- Barrier for persons with disabilities here
- High traffic volume or speed here
- Pedestrian facilities need maintenance here
- Add a sidewalk here
- Add a pedestrian pathway here



Results from the 70 comments submitted countywide are shown in *Exhibit 2* of the countywide plan.

St Helena-Specific Focus Groups

At the outset of the plan development process, meetings were held with key staff from St. Helena to initiate the planning process on December 17, 2014.

This meeting included a discussion of existing programs, policies and practices. Examples from other cities as well as recommendations for improvements are provided in the benchmarking summary table in **Appendix SH-A**.

Jurisdiction staff also provided input during the initial benchmarking meeting and at the public workshops on key areas where pedestrian improvements are planned and in some cases, where connections and safety improvements are desired. This input was used to inform potential opportunities for walking audit routes, as well as discussed along with the facility inventory maps under the *Existing Pedestrian Infrastructure* section of this plan.

Additional focus group meetings were held for the St. Helena walking audit on May 12, 2015, and to review the list of suggested pedestrian projects on August 12, 2015.

Perceived Barriers

As shown in **Table SH-4**, connectivity and safety are two of the top pedestrian issues identified from the public. To geographically visualize the safety concerns in St Helena, a heat map was created, shown in Exhibit SH-5. This map shows the density of safety-related public comments received during the outreach process, and is intended to represent perceived barriers to walking. These locations may be under-represented in the collision data due to a high level of collision under-reporting with SWITRS data[3] or fewer people walking as a result of these perceived issues. This map provides an important lens into key areas for concern, and may help supplement collision data to identify locations where near misses and other safety-related (but non-reported) issues may be present.

[3] Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113

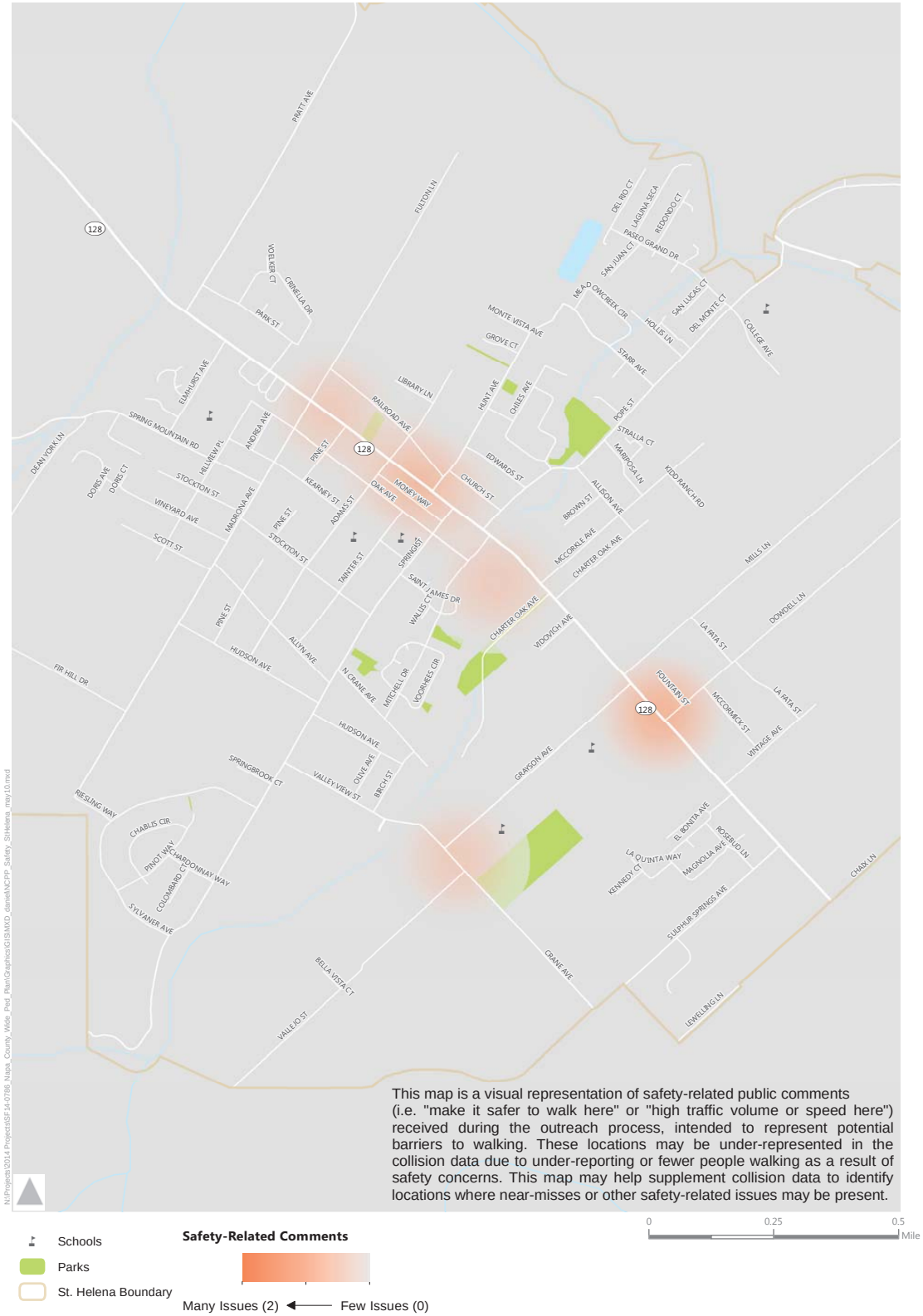


Exhibit SH-5
Perceived Barriers: As Visualized by Safety-Related Public Comments
City of St. Helena

Opportunity Areas

St. Helena's small-town feel, narrow residential roadways, numerous shopping and dining options and natural beauty create an attractive pedestrian environment. The city has seen recent growth and transition and has recognized this moment as a key opportunity to enhance pedestrian safety and mobility with the development of their General Plan update and new city leadership. This plan expands on those efforts by developing a list of proposed pedestrian facilities within key focus areas of the city and referencing those that have been developed by other plans. Initial focus areas for the plan were developed using a data-driven GIS process that evaluates several factors related to the built environment and demographics that affect the propensity to walk. This process, called the "Ped INDEX", was adapted by work done by the US Environmental Protection Agency (EPA) has been used in several plans in the Bay Area to map the qualitative likelihood of demand for pedestrian activity.

Ped INDEX

The main factors used in the Ped INDEX are population density, land use mix, presence of schools or parks, intersection density, location of downtown commercial areas, and age. These factors resulted in a "heat map" which displays an estimate for relative pedestrian demand on the streets throughout the City of St. Helena. More detail on the Ped INDEX methodology and results as well potential applications can be found in **Appendix B** of the countywide plan.

To balance high pedestrian demand areas with key areas of need in St. Helena, additional data layers were used to display pedestrian deficiencies. These include gaps in sidewalk and reported pedestrian-involved collisions. In general, places with high pedestrian demand and a high infrastructure need are shown as target areas that could be prioritized for pedestrian improvements. The resulting heat map with overlaid demand and deficiencies is shown in *Exhibit SH-6*.

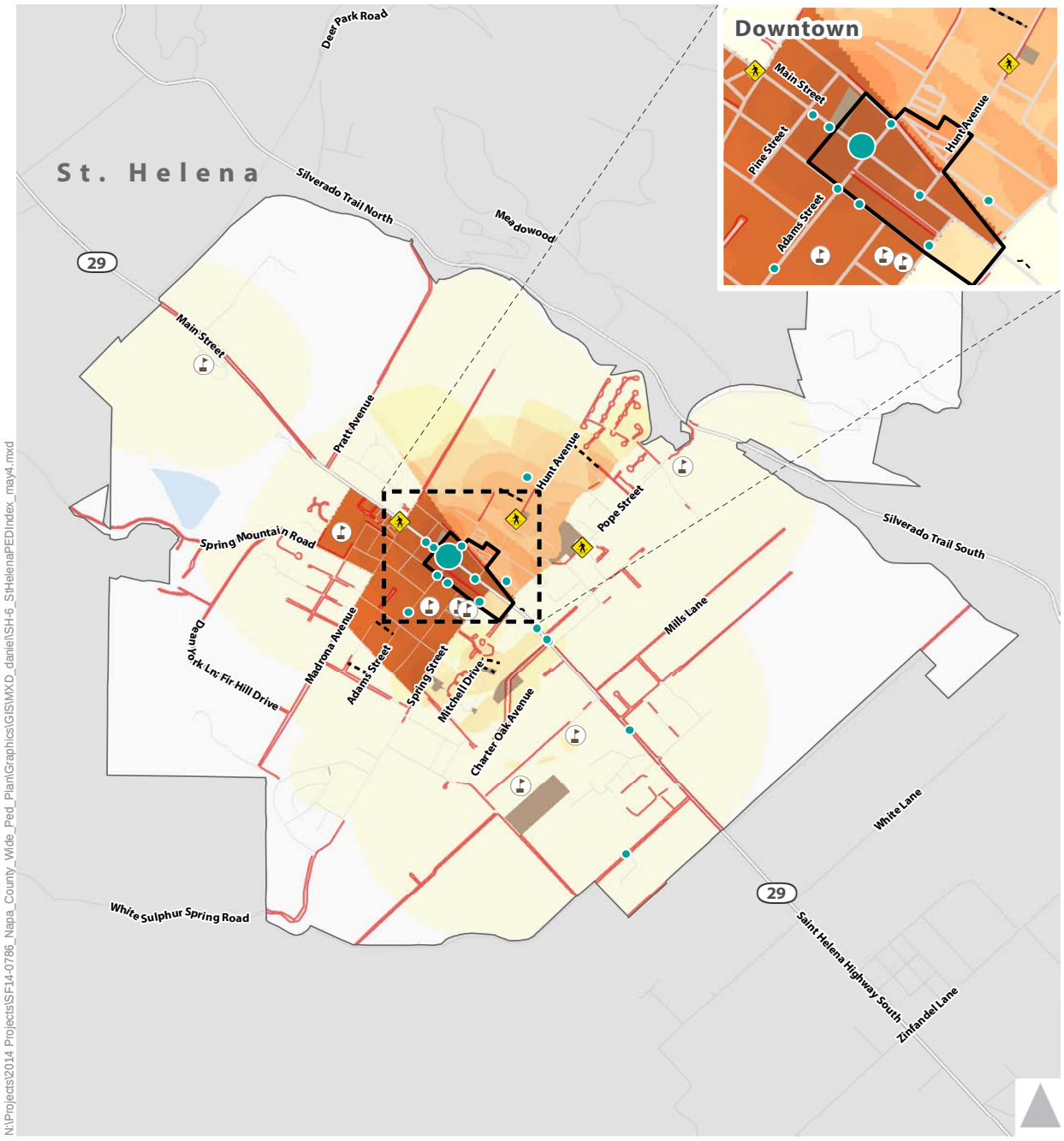
As illustrated on *Exhibit SH-6*, Ped INDEX focus locations include the downtown core and neighborhood pockets near St. Helena Elementary School, High School, and Robert Louis Stevenson Middle School. Feedback at the public workshop yielded multiple requests for reducing parking on Main Street and improved crossings while managing the vehicle congestion. After reviewing the locations of all comments received during public outreach and the alignment with focus locations on the Ped INDEX maps, two potential walking audits were recommended to city staff:

- **Hotels and High School**: Grayson Avenue and Crane Avenue along school frontage; Main Street between Grayson Avenue and Sulphur Springs Avenue (1.1 miles)
  This route includes the area with the shared concern from the city and the public that visitors staying in hotels on El Bonita Avenue and Sulphur Springs Avenue at the southern city limits use Main Street (SR 29) to walk into town, which has discontinuous sidewalks and facilities with maintenance needs. Other concerns in the area, voiced by both the city and the public, include speeding along the high school on Grayson Avenue and Crane Avenue, limited pedestrian connections to Grayson Avenue, and limited

pedestrian facilities along Grayson Avenue and Crane Avenue. Crossing challenges at Main Street to the bus stop at Dowdell Lane, a request from the public workshops, are also located on this route.

- **Downtown and Pope Street:** Main Street from Pine Street to Pope Street/Mitchell Drive; Pope Street from Main Street to Paseo Grand Drive (1 mile)
  Collision data shows clusters of collisions have occurred in the core of downtown between Hunt Avenue and Pine Street, with the largest concentration at the intersection of Main Street and Adams Street (four collisions in the last ten years). This area also features high pedestrian activity levels and key tourist attractions.

After discussions with city staff regarding candidate locations, a combination of the above recommended focus areas, for a total of approximately one mile, was chosen for study during walking audits: Main Street from Pine Street to Sulphur Springs Avenue.



Demand:

Pedestrian Index Score

High — Low

Deficiencies:

Pedestrian Collisions (Injuries)

1 2 4 5-7

Pedestrian Fatality

Missing Sidewalks

Legend:

Major Retail

Parks

Trail/Path

School

Exhibit SH-6

St. Helena - Pedestrian Index
Demand & Deficiencies

Priority Project and Implementation Plan

An important outcome of this plan is the designation of a priority project list and an implementation plan for these projects. The priority project list was assembled based on:

- Results of the Walking Audit conducted for the plan
- Projects recommended through related planning efforts, such as the Countywide Transportation Plan (CTP)
- Conversations with staff and stakeholders regarding other local priorities

Walking Audits

Walking audits were conducted in April 2015 with key stakeholders to observe field conditions and brainstorm potential ideas for improvement. The following stakeholders attended walking audits in St. Helena:

- Steve Palmer, Director of Public Works
- Alan Galbraith, Mayor
- Jim Haller, Park Supervisor/City Arborist
- Mary Sherman, Senior Advocate
- Sergio Ruiz, Caltrans

During the walking audits, visual surveys were conducted to observe physical characteristics and conditions of the pedestrian environment as well as the connectivity and continuity of the surrounding pedestrian network. A debrief was held afterwards with the group to discuss observations and determine suggestions for improvements.

Project List and Map

Suggested pedestrian projects developed during the Pedestrian Plan walking audits and similar, recent efforts are shown in *Exhibit SH-7*. Descriptions of each project and additional program and policy recommendations are included below under *Priority Projects.*

Exhibit SH-7

St. Helena - Project Locations

Priority Projects

Existing funding for pedestrian facilities is limited and cannot successfully cover more than a fraction of the recommendations in this plan. Available regional, state and Federal funding sources and grant cycles are highly competitive among worthy projects and other jurisdictions. Using consistent prioritization criteria countywide, this plan includes a tiered list of projects for St. Helena reflecting:

- Local importance
- Safety enhancements
- Proximity to schools
- Proximity to transit
- Sidewalk gap and trail connections
- Cost

These criteria and the metrics used to define them are described in more detail in **Appendix SH-C**. Each pedestrian improvement project is shown in one of two tiers based on the number of evaluation criteria it meets. Detailed results and project descriptions can be found in **Appendix SH-C.** A summary of the improvements is shown in **Table SH-5**.

Funded or Constructed Projects

The City of St. Helena recently secured funding for a sidewalk gap closure project on Mitchell Drive through the Transportation Development Act Article 3 funds, or TDA-3, available through MTC. This project will connect residential neighborhoods with an adjacent commercial center and a nearby school. Recommended pedestrian improvements are also being considered by Caltrans as additions to a funded signal project at Main Street and Grayson Avenue, which is currently in the final stages of design. These recently completed and funded projects were assigned to “Tier Zero” in **Table SH-5** and were not evaluated for prioritization.

TABLE SH-5: ST HELENA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
ON-GOING SYSTEM MAINTENANCE				
Sidewalk Gap Closure and Maintenance (No. 29 2015 CTP Program)	Citywide	Sidewalk maintenance, rehabilitation and expansion to include 29 miles of Citywide sidewalk gap closure	Sidewalks Maintenance	$$$
TIER ZERO (FUNDED OR CONSTRUCTED PROJECTS)				
T0-1 Additions to Planned Projects	Main Street at Grayson Avenue	Marked crosswalks on all legs with crosswalk enhancements and directional curb ramps for west leg crosswalk	Crossing treatments ADA ramps	-
T0-2 Mitchell Drive Sidewalk	Mitchell Drive, Oak Avenue to St. James Court	Sidewalk on the north side of the street	Sidewalk	-
TIER ONE				
SH-1 RLS Middle School Sidewalk and Hunt Avenue Improvements	Hillview Place, Spring Mountain Road, Elmhurst Avenue at RLS Middle School	Sidewalks	Sidewalk	$399,000[2]
	Hunt Avenue, Monte Vista Avenue to June Lane	Sidewalks	Sidewalks	
	Hunt Avenue at Edwards Street, Hunt Avenue at June Lane	Curb ramp upgrades	ADA Ramps	
	Hunt Avenue, Grove Court to June Lane	Class I pathway and enhanced1 midblock crosswalk	Crossing treatments Pathway	
SH-2 Downtown Pedestrian Improvements (No. 35 2015 CTP Constrained Project)	Main Street, Spring Street to Adams Street	Sidewalk upgrades and streetscape improvements	Maintenance Sidewalks Place making	$1,355,900
		Traffic calming (such as bulb outs)	Traffic calming	
	Main Street at Pine Street	Crosswalk enhancements and tree trimming	Crossing treatments ADA ramps Maintenance	
	Main Street at Adams Street	Crosswalk enhancements and tree trimming	Crossing treatments ADA ramps	

TABLE SH-5: ST HELENA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
			Maintenance	
	Main Street at Hunt Avenue	Enhanced marked crosswalk	Crossing treatments ADA ramps	
		Pedestrian wayfinding	Wayfinding	
	Main Street at Spring Street	Enhanced marked crosswalk	Crossing treatments ADA ramps	
	Main Street – Entire Corridor	Raised median	Traffic calming	
		Pedestrian paseo / alley way study	Wayfinding Place making	
SH-3 Sulphur Creek Class I Multi-Use Pathway (No. 36 on Constrained CTP Project List)	Sulphur Springs Avenue to Napa River	Class I Multi-Use Path	Pathway	$$$
SH-4 Napa River Class I Multi-Use Pathway (Unconstrained 2015 CTP Project)	Napa River from South City Limit to North City Limit	Class I Multi-Use Path	Pathway	$$$
SH-5 SHUSD Main Street Frontage Sidewalk	Main Street, Grayson Street to Dowdell Lane	Sidewalk	Sidewalk	$184,300
SH-6 Downtown Operations Study	Main Street, Pine Street to Mitchell Drive	Signal coordination study and assessment of pedestrian signal timing improvements	Signal timing/operations	$53,000
	Main Street at Pope Street	Roundabout feasibility study to include analysis of circulation modifications as alternative	Signal timing/operations	
SH-9 Main Street ADA Improvements	Main Street, Spring Street to Pop Street	ADA driveways	ADA	$137,700
	Main Street, Dowdell Lane to El Bonita Avenue	DG pathway	Pathway	
	Main Street at El Bonita Avenue	Sidewalk repair	Maintenance	

TABLE SH-5: ST HELENA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
	Main Street at St Helena Chamber of Commerce	Detectable warning strip along sidewalk	ADA	
TIER TWO				
SH-7 Main Street Business Frontage Improvements	Main Street at Pope Street	Sidewalk activation considerations	Place making	$$
	Main Street at Gott's	Driveway closure		
		Wayfinding and landscape improvements		
SH-8 Main Street SRTS Improvements	Main Street at Charter Oak Avenue	Enhanced marked crosswalk with RRFBs	Crossing Improvements ADA ramps	$$
		Crosswalk enhancements		
	Main Street at Vidovich Lane	Enhanced marked crosswalk		
SH-10 Main Street/ Dowdell Transit Access Improvements	Main Street at Dowdell Lane	Bus stop relocation	ADA ramps Sidewalks Crossing Improvements	$$
SH-11 South St Helena/ Unincorporated Connection	Main Street at El Bonita Avenue to Inglewood Avenue	Sidewalk or enhanced marked crosswalk for Vine Trail connection	Sidewalks Crossing Improvements	$$$[3]
SH-12[4] Sulphur Creek Crossing	Southern terminus of Oak Avenue to Grayson Avenue over Sulphur Creek	Feasibility study for pedestrian crossing	Crossing Improvements	$$

1. An enhanced crosswalk includes additional safety treatments such as curb extensions, reduced curb radii, or pedestrian refuge islands. These enhancements are recommended to address safety concerns such as higher speed or volume roadways, wider roadways, and roadways where motorists are less likely to yield to pedestrians. Specific recommendations are included in Appendix SH-C. For additional information on the application of these enhancements, refer to the Crosswalk Guidelines of this plan.

2. Source: Total Project Cost Estimate, St. Helena New Sidewalk Construction Project, ATP Cycle 2 Application Form, 2015

3. Based on cost of sidewalk

4. This crossing was identified as part of the pending General Plan update, public comment, and discussion with the city. Due to early planning stages, it was not included in the evaluation for prioritization.

$$$ - high cost (>$1million); $$ - medium cost ($100k-$1million); $ - low cost (<$100k)

Source: Fehr & Peers, 2015

Sidewalk gap closure projects are an important enhancement to pedestrian mobility. City staff identified sidewalk projects as a citywide need, especially south of the Sulphur Creek Bridge on Main Street, where facilities have maintenance needs. Several sidewalk gaps were identified during the public workshops and

discussions with city staff that are outside of the walking audits for this plan, including Grayson Avenue along the frontage of St. Helena High School and along Hudson Avenue. The city has approximately 29 miles of sidewalk gaps and filling these gaps is included as an on-going effort in Table SH-4, as adopted in the Countywide Transportation Plan (2015). Other pedestrian needs identified by staff for consideration for future walking audits include accommodations for recreational use along the railroad tracks and safety enhancements for seniors along Pope Street.

Supporting Programs and Policies

Key program and policy recommendations that complement the engineering-related projects are shown below in **Table SH-6**. Many of these recommendations draw from the benchmarking exercise completed at the onset of the plan development. The recommendations encompass education, encouragement, and enforcement activities.

TABLE SH-6: ST HELENA PROGRAM AND POLICY RECOMMENDATIONS	
Program or Policy	**Recommendations**
Education and Encouragement	
Safe Routes to School (SRTS) Coordination	Coordinate with the Napa County Office of Education to continue SRTS programs in the City, and determine feasibility of implementing recommendations under the Safe Routes to School Support Program in the Countywide Implementation chapter of the countywide plan.
Safety and Enforcement	
Law Enforcement for Pedestrian Safety	Coordinate with NVTA to provide resources to officers in St. Helena on pedestrian safety enforcement principles / best practices and education outreach efforts to align with Countywide collision reduction goals. Consider designating traffic safety officers who conduct pedestrian related enforcement activities, such as monitoring school circulation activity during pick up and drop off periods. Determine feasibility of enforcement recommendations in *Countywide Implementation* chapter of the countywide plan.
NVTA Safety Campaign	Coordinate with NVTA on the media safety campaign that NVTA is pursuing, as an opportunity for education by distributing pedestrian safety pamphlets in-lieu of, or in addition to, citations.
Maintenance	
Repair of Sidewalks, Crosswalks, and Curb Ramps	• Continue to regularly improve and repair uneven sidewalk, broken asphalt in crosswalks, and install new curb ramps as part of the Citywide Sidewalk Maintenance Program above. This could include consideration of implementing an ADA Transition Plan and/or a trip and fall monitoring program. • Determine feasibility of adding a page to the city's website to allow residents and visitors to more easily report and track hazards in the public right-of-way and to ensure all necessary sidewalk repairs are included in the City's Capital Improvement Program (CIP). This could include the reporting of maintenance needs for pedestrian-related pavement markings and traffic control devices.
Overgrown Vegetation on Sidewalks and Planting Strips	• Continue to trim and maintain trees on Main Street, especially those at intersections to improve street light visibility. For specific locations where tree obstructions were observed during the walking audits, reference Improvement SH-2 in Appendix SH-C. • Citywide, ensure that landscapes at maturity do not interfere with safe sight distances for bicycle, pedestrian, or vehicular traffic; do not conflict with overhead lights, traffic controls, traffic signage, utility lines or poles, or walkway lights; and, do not block bicycle or pedestrian ways. Require adjacent property owners to maintain landscaped areas with live and healthy plant materials, replacing plant materials when necessary to maintain full function and aesthetics; to water, weed, prune, fertilize and keep sidewalks and planting strips litter free.
Caltrans Coordination	Sidewalk maintenance and curb ramp upgrades to directional through existing Caltrans right of way relinquishment for sidewalks (Charter Oak Avenue to Pratt Avenue). Coordinate with Caltrans on crosswalk enhancements along corridor and sidewalk improvements beyond existing right of way relinquishment.

TABLE SH-6: ST HELENA PROGRAM AND POLICY RECOMMENDATIONS	
Program or Policy	**Recommendations**
Engineering and Design Standards	
Crosswalk Guidelines	Implement Crosswalk Guidelines, included in Appendix D of the Countywide Pedestrian Plan, to enable the city to respond to crosswalk requests in a manner that improves pedestrian accessibility and maintains public safety. Reference Guidelines when making decisions about where standard crosswalks (two, parallel white stripes) can be marked; where crosswalks with special treatments, such as high-visibility crosswalks, flashing beacons and other special features, should be employed; and where crosswalks will not be marked due to safety concerns resulting from volume, speed, or sight distance issues.
Place Making and Complete Streets	
Downtown Parking Plan	Determine shared parking opportunities downtown to consider parklet in front of bakery on west side of Main Street and identify opportunities for bike parking to include bike corrals.
Site Plan Review Checklist	Create checklist for development review to ensure site plans include considerations for pedestrian access, safety, and sidewalk activation (i.e., considerations for building frontage location, pocket parks, small plazas or mini-shops, and pedestrian paths of travel through parking lots). Include items from MTC's Routine Accommodation Checklist for projects in the public right-of-way to ensure routine application of the Complete Streets policy. MTC's checklist can be found here: http://www.mtc.ca.gov/planning/bicyclespedestrians/Routine_Accommodation_checklist.pdf

Next Steps

Funding Sources

Federal, state, regional, county and local organizations provide funding for pedestrian and bicycle projects and programs. The most recent federal surface transportation funding program, Fixing America's Surface Transportation Act (FAST Act), was signed into law in December 2015. Details in this section are provided for funding programs that are used to fund scheduled projects through December 2020.

FAST Act funding is distributed to Federal and state surface transportation funds. Most of these resources are available to St. Helena through Caltrans, the Metropolitan Transportation Commission (MTC), and the Napa Valley Transportation Authority (NVTA).

According to St. Helena staff, sidewalks are included in the City's Capital Improvement Program and the city has budgeted approximately $17,000/year for the last three years for sidewalk repairs, although not all of it was spent.

Table SH-7 summarizes the applicability of these various funding sources to projects, planning efforts, and programs proposed in this plan. Detailed descriptions of the grant funding sources are presented in **Appendix C** of the countywide plan. The most applicable funding sources for the improvements recommended by this plan are the Active Transportation Program, One Bay Area Grants, and Highway Safety Improvement Program, and Transportation Development Act Article 3 funds.

TABLE SH-7: REGIONAL FUNDING SOURCE APPLICABILITY MATRIX				
Funding Source	**Class I Multi-Use Path**	**Pedestrian Projects**	**Other Projects**	**Planning and Programs**
Highway Safety Improvement Program (HSIP) Grants	◒	●	●	○
Caltrans Transportation Planning Grants	○	○	○	●
Local Transportation Fund (LTF)	●	●	●	○
California State Parks Recreational Trails Program (RTP)	●	○	○	○
Land and Water Conservation Fund (LWCP)	●	○	○	○
Active Transportation Program (ATP), including Safe Routes to School	●	●	●	●
Transportation Development Act, Article 3 (TDA-3)	●	●	●	◒
One Bay Area Grant (OBAG)	●	●	●	●
Bay Area Air Quality Management District (BAAQMD) Transportation Fund for Clean Air	◒	◒	◒	○

Notes:

1. ● indicates that funds may be used for this category; ○ indicate that funds may not be used for this category, and ◒ indicate that funds may be used, though restrictions apply.

Source: Fehr & Peers, 2016.

Cost of the Pedestrian Network

Table SH-8 presents unit costs for standard pedestrian treatments, estimated using an ATP Cost Estimating Tool developed for the Alameda County Transportation Commission. The tool is used to estimate costs for bicycle and pedestrian projects at the network planning scale during the development of active transportation plans and in a sketch-planning capacity for a bicycle and/or pedestrian project. The costs shown represent the total construction for a typical treatment of that type, including engineering, design, construction management, mobilization, traffic control and general contingency. Contingency for drainage and utility relocation was also included for relevant treatment types, such as curb extensions. These numbers do not include right-of-way costs or inflation.

TABLE SH-8: GENERALIZED UNIT COSTS FOR IMPROVEMENTS		
Facility Type	**Cost**	**Unit**
Curb Extension/Bulbout	$56,000	Each
Pedestrian Refuge Island	$10,000	Each
Flashing Beacons (RRFBs)	$45,000	Per Crosswalk
Pedestrian Hybrid Beacon (PHB)	$144,000	Per Crosswalk
Customized Pedestrian Wayfinding Signs	$2,000	Per Sign

1. Costs reflect capital costs plus contingency for engineering design, environmental, construction management, mobilization, traffic control, and contingency.

Source: Fehr & Peers, ATP Cost Estimating Tool, 2016.

Project-level cost estimates were prepared for Tier One projects determined in the previous section of this plan, while the remaining projects were assigned a ranking in Table SH-5 to indicate an estimated range of cost level. Prepared cost estimates, included in **Appendix SH-D**, include unit costs for individual improvements within the project and adjustments to account for traffic control, construction management, and mobilization. Additional factors were also used for overall contingency, engineering design, and environmental. A summary of the estimates is shown in **Table SH-9** below.

TABLE SH-9: TIER ONE PROJECT SUMMARY COSTS	
Project	**Total Cost[1]**
SH-1: RLS Middle School Sidewalk and Hunt Avenue Improvements	$399,000
SH-2: Downtown Pedestrian Improvements (No. 35 CTP Project)	$1,355,900
SH-5: SHUSD Main Street Frontage Sidewalk	$184,300
SH-6: Downtown Operations Study	$53,000
SH-9: Main Street ADA Improvements	$137,700

1. Costs reflect capital costs plus contingency for engineering design, environmental, construction management, mobilization, traffic control, and contingency.

Source: Fehr & Peers, ATP Cost Estimating Tool, 2016.

Note: For estimated costs for projects SH-3 and SH-4, refer to Napa Countywide Transportation Plan, Vision 2040 (2015).

Countywide Performance Metrics and Evaluation

NVTA intends to monitor progress on the implementation of this plan over time. The *Countywide Implementation* chapter of the Countywide Pedestrian Plan summarizes key performance goals and associated metrics for this plan's implementation.

St. Helena Appendix

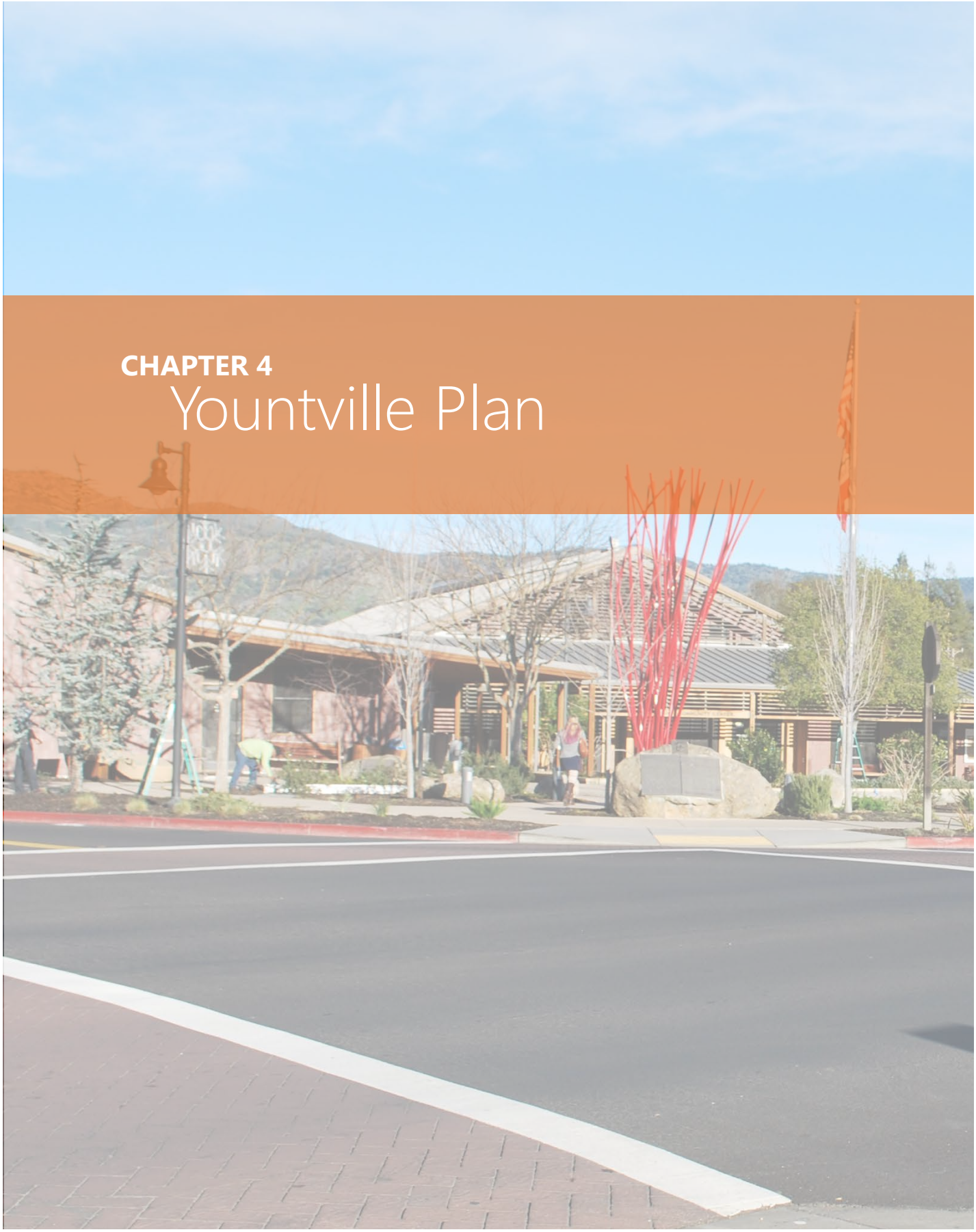
SH-A Benchmarking Table

SH-B Existing Pedestrian Policies

SH-C Detailed Project Lists and Prioritization

SH-D Cost Estimates

SH-E Plan Adoption Resolution



CHAPTER 4

Yountville Plan

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Chapter 4
Yountville Plan

Pedestrian Setting

Yountville is a small, walkable town with approximately 3,000 residents, where visitors are drawn to the esteemed dining and premium hotels and inns. Historic buildings dating back to the late 1800s are home to a collection of shops and restaurants, and art installations spill onto the downtown streets. This setting makes for an interesting and pleasant walking experience. While the majority of streets in the town center have sidewalks or asphalt pathways, one neighborhood includes gravel shoulders or no sidewalks to maintain the "old town" character, an important community value. The Town is located in central Napa County, approximately 7 miles north of the City of Napa along SR 29. Unlike other cities in Napa County, there are no state highways that overlap with local roadways in the town of Yountville, creating a much different experience for pedestrians. Land use patterns for the town are shown in *Exhibit Y-1* and a town destination map, including the locations of public buildings, shopping and tourist attractions, is shown in *Exhibit Y-2*.

Existing Policies and Programs

To help guide the development of key programs and policies for this plan, Yountville's existing approaches to facilitating and enhancing walking were reviewed with a benchmarking matrix that compares the existing programs, policies, and practices with national best practices. The benchmarking analysis categorizes each jurisdiction's programs, policies, and practices into three areas as follows:

- **Key Strengths** (areas where the jurisdiction is exceeding national best practices)
- **Enhancement Areas** (areas where the jurisdiction is meeting best practices)
- **Opportunity Areas** (areas where the jurisdiction should consider meeting best practices)

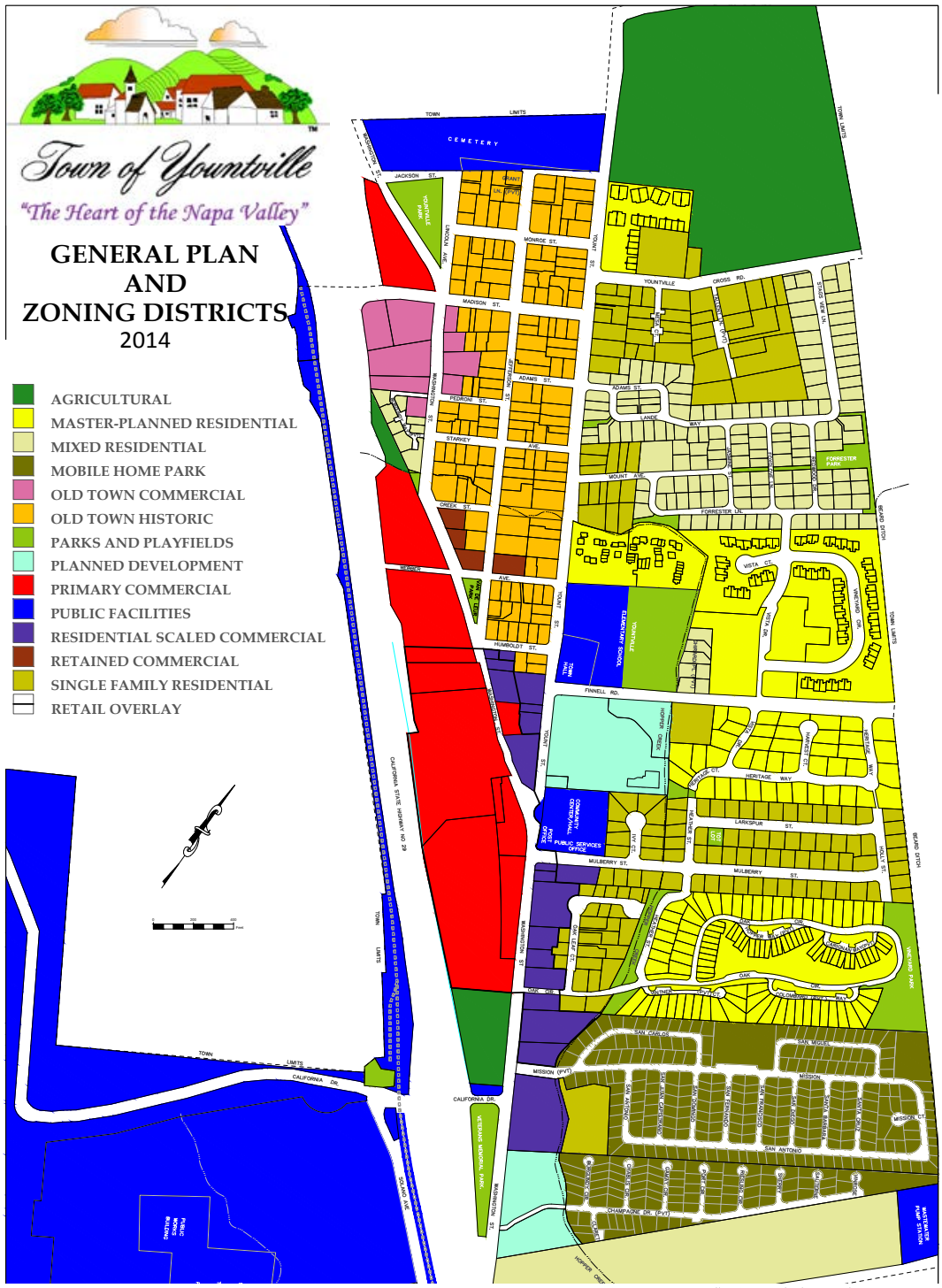
The Town of Yountville has made significant efforts to create a pedestrian-friendly community and excels in such areas as collision reporting, public involvement, design and development standards, and historical preservation. This plan will provide pedestrian volumes, conduct walking audits, and provide a framework for additional investments in order to create an accessible, connected pedestrian network throughout the town. Select key strengths and key opportunities from the benchmarking interview are highlighted below in **Table Y-1.** The full benchmarking analysis for Yountville, with associated recommendations, is presented in **Appendix Y-A**.

TABLE Y-1: YOUNTVILLE BENCHMARKING HIGHLIGHTS

Plans, Policies, & Programs	Yountville Current Practice	Best Practice Examples
Key Strengths		
Collision Reporting Identifying and responding to collision patterns on a regular basis is an important reactive approach to pedestrian safety (which may be combined with proactive measures).	Yountville has a GIS program in place that is funded, and the Town generates quarterly collision reports which are reviewed with Council. According to town staff, this has proved sufficient for monitoring collisions.	
Public Involvement Responding to public concerns through public feedback mechanisms represents a more proactive and inclusive approach to pedestrian safety compared to a conventional approach of reacting to pedestrian collisions.	The Town of Yountville recently developed an online community engagement platform called Speak Up Yountville, a forum for the public to post ideas and provide feedback as well as comment on specific items or legislation on the agenda for upcoming public meetings.	• Add a page to Speak Up Yountville dedicated to receiving public input regarding transportation issues and a subsection for pedestrian topics. This category or subcategory may allow residents to file comments or complaints for traffic control devices or dangerous conditions.

TABLE Y-1: YOUNTVILLE BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**Yountville Current Practice**	**Best Practice Examples**
Design and Development Standards Design policies and development standards can improve the pedestrian walking experience, encourage walking, enhance economic vitality, and offer funding opportunities for pedestrian improvements.	Public Works standards include sidewalks on both sides of commercial and residential streets (excluding the Historic Old Town Neighborhood). The Yountville Bike Plan provides design guidelines for the path along Hopper Creek and the municipal code includes policies to provide new segments of the path. Additional policies in the municipal code include requiring active uses along Washington Street core business area, enhancing pedestrian activity and interest as well as locating parking behind commercial buildings to preserve the street frontage. Pedestrian-oriented design standards are provided in the municipal code for the Old Town Commercial District and include guidance for building façades and setbacks, pedestrian amenities like street furniture and public art, pedestrian-scaled signage, and pedestrian pathways. These design standards also play an important role in the Primary Commercial and Residential Scaled Commercial zoning districts.	• Incorporate elements of the Best Practices Toolkit, presented in **Appendix D** of the Countywide Pedestrian Plan as part of the development review process and to existing facilities when possible.
Historical Preservation Historic walking routes, such as the famous Freedom Trail in Boston, encourage walking and enhance economic vitality.	The Town of Yountville has several properties identified in the California Register, a master list of State historical resources. There are also several properties listed on the National Register of Historic Places. The Old Town Commercial District was created to maintain the historic character of Yountville and encourage pedestrian-oriented design. Wayfinding signs are posted in the area, which direct pedestrians to key destinations. The Yountville Chamber of Commerce provides Historical Walking Tour & Pathway Maps to the public. In addition, the Historic Walking Tour and Public Art Tour are posted online and on the town's app.	

TABLE Y-1: YOUNTVILLE BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**Yountville Current Practice**	**Best Practice Examples**
Key Opportunities		
Pedestrian Volumes Pedestrian volume data is important for prioritizing projects, developing collision rates, and determining appropriate pedestrian infrastructure.	Yountville does not routinely collect pedestrian volumes, and they are not typically collected for traffic studies.	• Use collected volumes in this plan to monitor volume levels. • Routinely collect and geocode pedestrian and bicycle volumes by requiring them to be conducted in conjunction with all traffic studies and manual intersection turning movement counts.
Walking Audit Program Walking audits provide an interactive opportunity to receive feedback from key stakeholders about the study area as well as discuss potential solutions and their feasibility. They can be led by Town staff, advocacy groups, neighborhood groups, or consultants.	Yountville has not conducted comprehensive pedestrian walking audits before this plan although annual sidewalk audits are completed as part of the Town's sidewalk inspection program to evaluate the need for maintenance or expansion. Tripping hazards are documented within the town's GIS database. Town staff walks the roadways daily and notes potential hazards or opportunities for improvement.	• Expand the town's sidewalk inspection program to include walking audits that document existing staff recommendations and evaluate the need for additional features at mid-block crossing locations, existing desire lines, and desired traffic calming, similar to the initial round of walking audits completed with this plan.



Source: Yountville General Plan and Zoning Districts, 2014.

Exhibit Y-1

Yountville - Land Use Map

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Source: Hotel Yountville, Yountville Dining and Wine Tasting Map.

Exhibit Y-2

Yountville - Destination Map

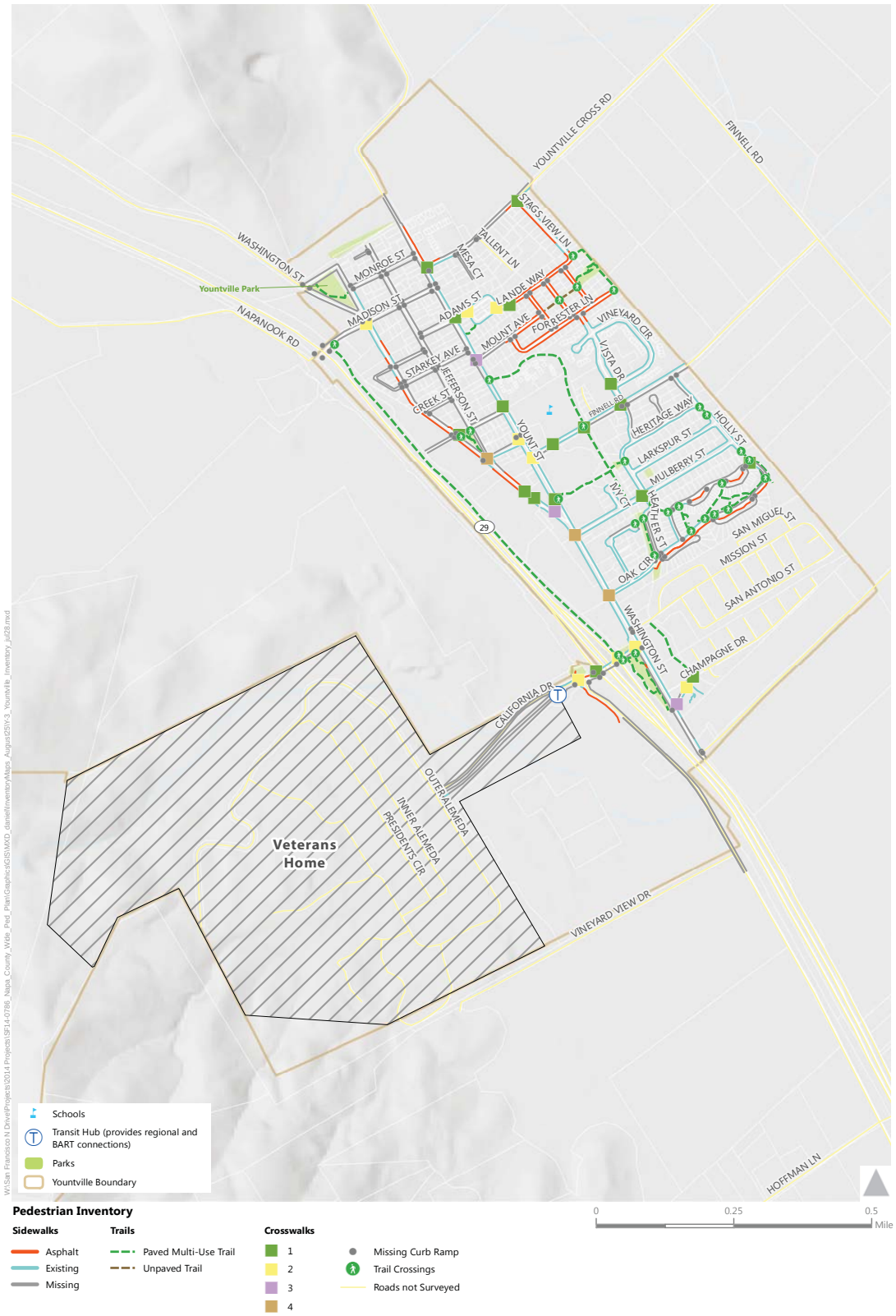
Existing Pedestrian Infrastructure

An inventory of existing sidewalks, marked crosswalks, curb ramps and trails was collected on key roadways throughout the Town using a combination of aerial imagery and Google Street View imagery from the years 2011 – 2014 (imagery for a few small residential streets dated back to 2007).

A GIS database assembled for the inventory includes additional detail beyond what is illustrated in the inventory maps, including the style of crosswalk striping, the method of vehicle control at the crosswalk (i.e., traffic signal, flashing beacon, stop sign, or uncontrolled), whether the crosswalk was located in a school zone, and the curb ramp design (i.e., whether the ramp is directional or diagonal and if it has truncated domes).

Yountville Inventory

Pedestrian facilities were inventoried for the entire roadway network in Yountville. As shown in Exhibit Y-3, the town has a well-established network of pedestrian pathways and cut-throughs that connect the adjoining neighborhoods. While Exhibit *Y-3* shows a lack of sidewalks along streets in the north of town (Old Town), these locations have gravel shoulders which are used in Yountville to preserve the rural character and were not captured as a sidewalk type in the countywide inventory methodology. Roadways that have these gravel pathways include sections of Madison Street, Starkey Avenue, and Monroe Street that abut Old Town. Town staff identified the need for pedestrian facilities along Yountville Cross Road, shown on Exhibit Y-3 as lacking sidewalk and curb ramps between Stags View Lane and Yount Street, along with the desire to complete pedestrian connections to Yountville Park.



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4

- Missing Curb Ramp
- Trail Crossings
- Roads not Surveyed

Exhibit Y-3
Pedestrian Facility Inventory
Town of Yountville

Activity Levels

Pedestrian counts were conducted at five locations throughout Yountville in October and November 2015. These locations were selected based on locations of proposed pedestrian projects in this plan, potential localized safety concerns, expected high levels of walking, and proximity to key pedestrian destinations, including schools and downtown commercial areas. **Table Y-2** provides a summary of the two-hour counts completed within the town. Count results varied significantly based on population density of a given neighborhood, as well as by the adjacent land use.

TABLE Y-2: YOUNTVILLE COUNT PROGRAM LOCATIONS

ID	Jurisdiction	Location	Morning	Evening	School	Weekend
			7-9AM	4-6PM	2-4PM	12-2PM
YT1	Yountville	Madison Street and Washington Street	100	73		
YT2	Yountville	Washington Street and Yount Street	149	245		797
YT3	Yountville	Yount Street and Mt Avenue	56	14	27	
YT4	Yountville	California Drive and Washington Street	96	59		
YT5	Yountville	Yount Street and Finnell Road	95	94	72	

The highest rates of walking in Yountville during all time periods were observed at the intersection of Washington Street and Yount Street in downtown Yountville. This location is in close proximity to several shops and restaurants, and is currently an all-way stop controlled intersection with marked crosswalks across all of the intersection's legs. The highest observed pedestrian activity at this location was midday (12-2 PM) on Saturday, when nearly 800 crossings took place during the two-hour count period. Pedestrians were also counted at the downtown intersection of Madison Street and Washington Street, where an average of 87 crossings were observed.

Going forward, NVTA intends to conduct annual counts throughout the County on an annual basis. Counts will primarily be conducted in locations evaluated in the baseline year (2015) to monitor travel trends and the impact of project implementation on pedestrian volumes, as well as justify funding for projects in this plan. With the collected counts, NVTA may compare travel patterns across different locations, measure changes in pedestrian use at a single location over time, and evaluate the extent to which pedestrian travel peaks throughout the course of the day or week. By collecting counts at different times of day, NVTA may evaluate if a given pedestrian facility is typically used for recreational or utilitarian purposes.

In the future, count locations may be added or omitted based on agency priorities, and could include pedestrian-involved collision locations to prioritize improvements in locations based on collision rates (collision/daily pedestrian volume).

Collision Analysis

Collision data was accessed from the California Highway Patrol Statewide Integrate Traffic Records System (SWITRS). This data represents all reported pedestrian-vehicle collisions occurring during the ten-year period from January 2003 to December 2012.

Exhibit Y-4 shows the locations of these pedestrian collisions in Yountville.

Exhibit Y-4 presents raw collision counts only. While this is illustrative of "hot spot" areas in Yountville, another important consideration for identifying safety focus areas can be collisions per pedestrian (or the collision rate). Collision rates (not included in the current analysis because pedestrian volume data is not available Town-wide) can highlight locations where improvements can be added to ensure a focus on areas that may not have as many people walking (but have high collision rates) in addition to areas with high pedestrian volumes and a high number of collisions.

Hot Spots

All reported pedestrian-involved collisions in Yountville were along or near Washington Street south of the "Y" of Yountville, the intersection of Yount Street and Washington Street, where the majority of vehicles enter the Town from SR 29. While most locations in Yountville only had one reported collision occurrence if any, the intersection of Washington Street and Oak Circle had two reported collisions. The town did not have any pedestrian fatalities over the last ten years.

Countywide Demographic and Seasonal Trends

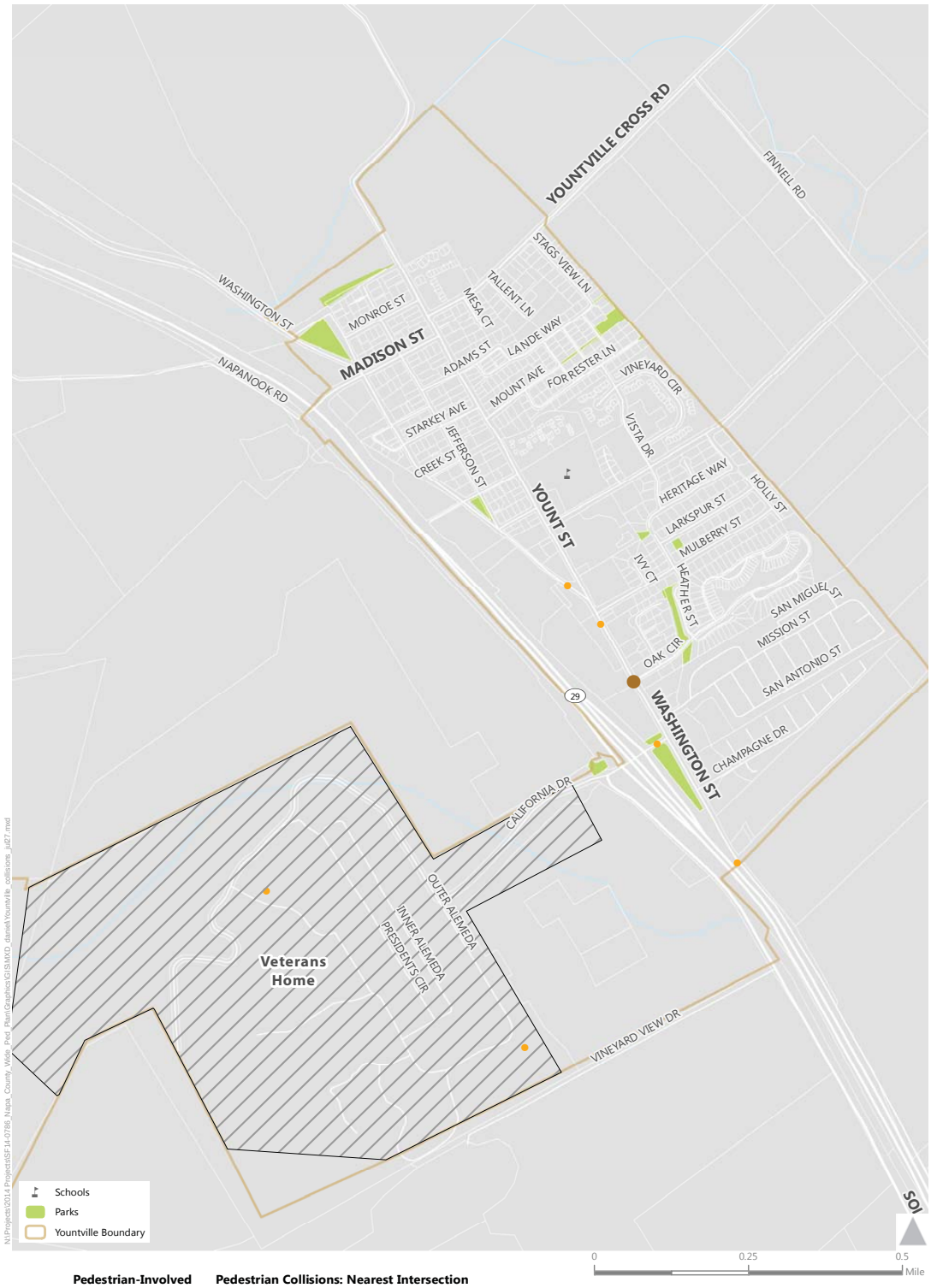
For this plan, a review of collisions countywide included organizing the data by age for children and seniors, and comparing the results across each jurisdiction. Daily and seasonal trends for collision occurrences and primary collision factors were also reviewed countywide. A summary of these results can be found in the *Countywide Walking Trends* section of the countywide plan.

Pedestrian Actions

Perhaps one of the more telling sources of information in the SWITRS data is the Pedestrian Action variable, which describes what the pedestrian was doing immediately before the collision occurred. **Table Y-3** shows the recorded pedestrian actions that occurred before collisions in Yountville, indicating that collisions are typically focused on locations where pedestrians are walking along the roadway.

TABLE Y-3: YOUNTVILLE COLLISION SUMMARY PEDESTRIAN ACTIONS (2003-2012)			
Pedestrian Action	Number of Collisions		
	Injury	Fatality	Total
Walking, Not in Road	3	0	3
Walking In Road, Including Shoulder	2	0	2
Crossing in Crosswalk, Not at Intersection	1	0	1
Crossing Not in Crosswalk	1	0	1
Not Stated	1	0	1

Source: SWITRS



Pedestrian-Involved Collisions 2003-2012

1

2

Pedestrian Collisions: Nearest Intersection

Density	Intersection	Total Collisions
●	Presidents Cir. and Outer Alameda	1
●	Washington St. and Yount St.	1
●	California Dr. and Washington St.	1
●	Washington St. and Mulberry St.	1
●	Presidents Cir. and California Dr.	1
●	Washington St. and Land Ln.	1
●	Washington St. and Oak Cir.	2

None of these intersections experienced a fatal collision.

Exhibit Y-4
Pedestrian-Involved Collisions
2003 - 2012 Town of Yountville

Public and Stakeholder Input

Countywide Outreach

Input on plan goals and objectives, current pedestrian issues, and desired locations for improvement was solicited through meetings with jurisdiction staff and key stakeholders, countywide public workshops, and an interactive mapping tool made available online. The goal was to develop a community-supported vision for pedestrian improvements. A summary of all input received during this process countywide is displayed in **Table Y-4**. Connectivity and safety were the key themes across the countywide comments.

TABLE Y-4: PUBLIC INPUT RECEIVED COUNTYWIDE

Comment	Comment Type	Percent of Total Comments
Add a sidewalk here	Connectivity	16%
Make it safer to cross the street here	Safety	15%
Make it safer to walk here	Safety	14%
Add a pedestrian pathway	Connectivity	13%
High traffic volume or speed here	Safety / Walkability	8.5%
Pedestrian facilities need maintenance here	Walkability	4.5%
Barrier for persons with disabilities here	Accessibility	2%
Other (Add your own idea)		27%

Source: Fehr & Peers, 2015

Examples of the comments that were categorized as “other” in Yountville are included in the Station One narrative below.

Public Workshops

Ongoing public outreach and participation was an integral element in developing the Countywide Pedestrian Plan. Public workshops were advertised on NVTA’s website, as well as via local media including the newspaper and radio. Invitations to the public workshops were also sent to local stakeholders, including senior centers, mobility impaired groups, advisory committees and local non-profit groups. The goal of the workshops was to identify public concerns and opportunity areas to inform focus areas, educate the stakeholders, and solicit feedback on the plan vision and goals.

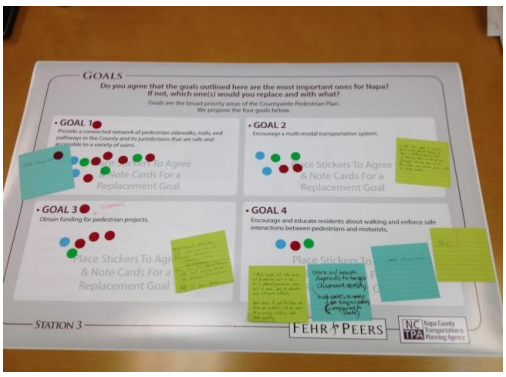
Public workshops were held throughout the County in Winter 2015: in Napa on January 22 at NVTA; in Yountville on January 27; in St. Helena on January 28; and in American Canyon on February 4. Due to recent public workshops held in Calistoga through development of their Active Transportation Plan in 2014, workshops were not held in the city. All workshops were open to all members of the public countywide. Photos of workshop posters are included in **Appendix A** of the countywide plan.

The format for each public workshop was the same and consisted of four stations:

- **Station One: Issues/Opportunities**

  At Station One, participants voted on a list of common barriers to walking to indicate which issues were most relevant to the walking environment in their jurisdiction and countywide. Participants also wrote comments on large-scale aerial maps placed on tables or on the floor to highlight existing barriers to pedestrian travel and locations where improvements were needed. Suggested comments included "Make it safer to cross the street here" or "High traffic volume or speed here". Comments were mapped in GIS after the workshops to visualize the areas of reported pedestrian needs and inform the decision for focus area locations. The results of this mapping exercise included 39 comments in the Town of Yountville, shown in *Exhibit Y-5.* Comments were grouped into six categories, including a miscellaneous category "Add your own idea". This category was used for comments that did not fall into any of the major themes shown in Table Y-4. Examples of these miscellaneous comments included documentation of pedestrian routes used by the 7th Day Adventist community, suggestions for aesthetic treatments to downtown crosswalks, and recommendation for a pedestrian bridge crossing the creek on Jefferson Street. All public comments were considered in the process to choose focus areas for the Plan, discussed under *Opportunity Areas* in this Plan, and when identifying candidate pedestrian improvements.
- **Station Two: Best Practices Toolbox**

  Station Two was an informative station that displayed examples of best practices for pedestrian treatments frequently used in pedestrian planning efforts. Treatments included sidewalk buffers, intersection features, crosswalk enhancements, as well as signal and striping modifications.
- **Station Three: Goals Visioning**

  At Station Three, participants had the opportunity to weigh in on draft goals for the plan and write their own vision statement. Conflicting desires related to transportation were also presented on either end of the scale and participants were asked to place stickers where they thought the balance should be struck. Tradeoffs included ease of walking compared to ease of driving and creating a comprehensive pedestrian network compared to improved transit service. This information is valuable to determine where the public would like resources to be focused.
- **Station 4: Collision Maps**

  Station Four was an informative station that displayed the collision maps shown in this plan.

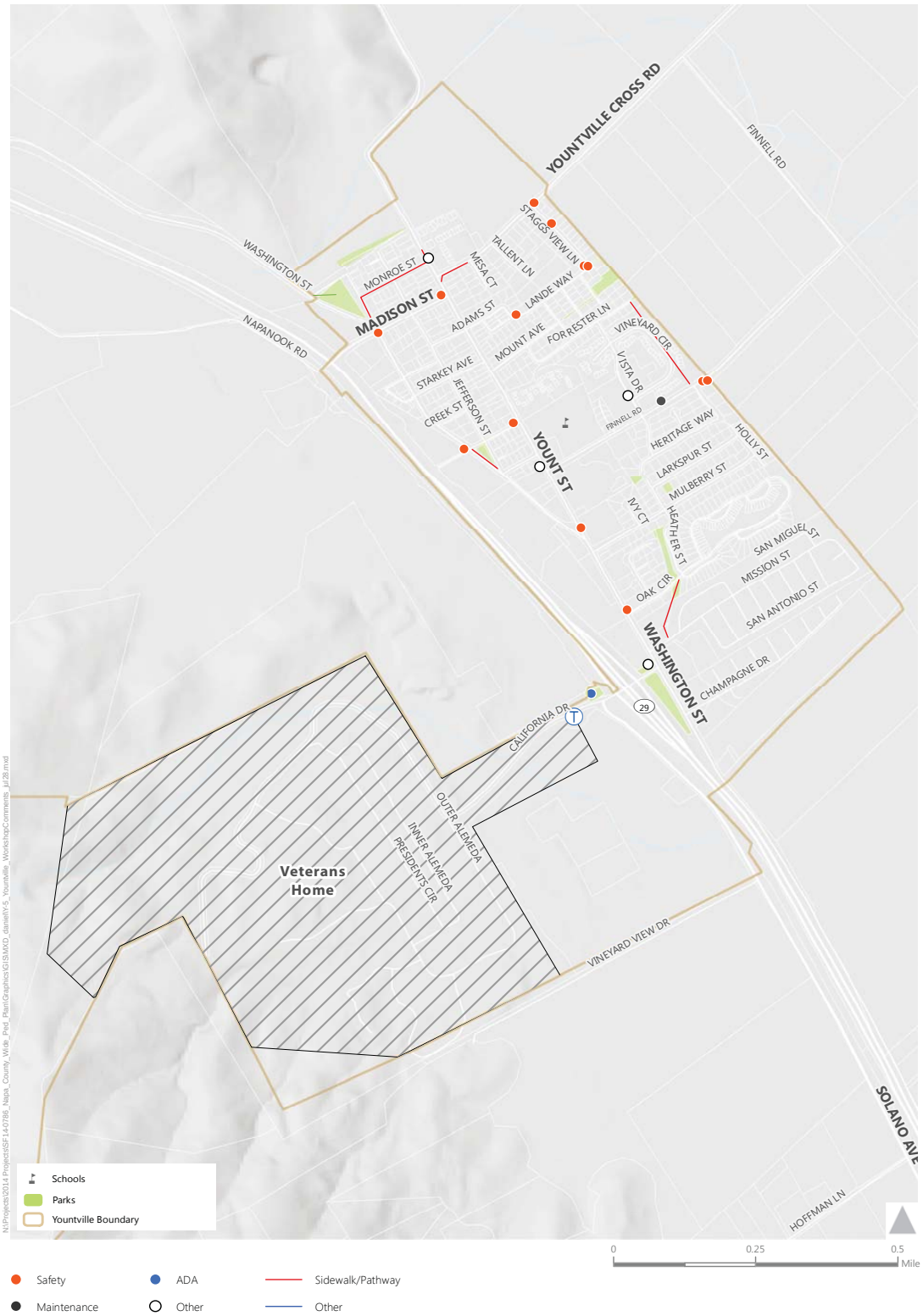
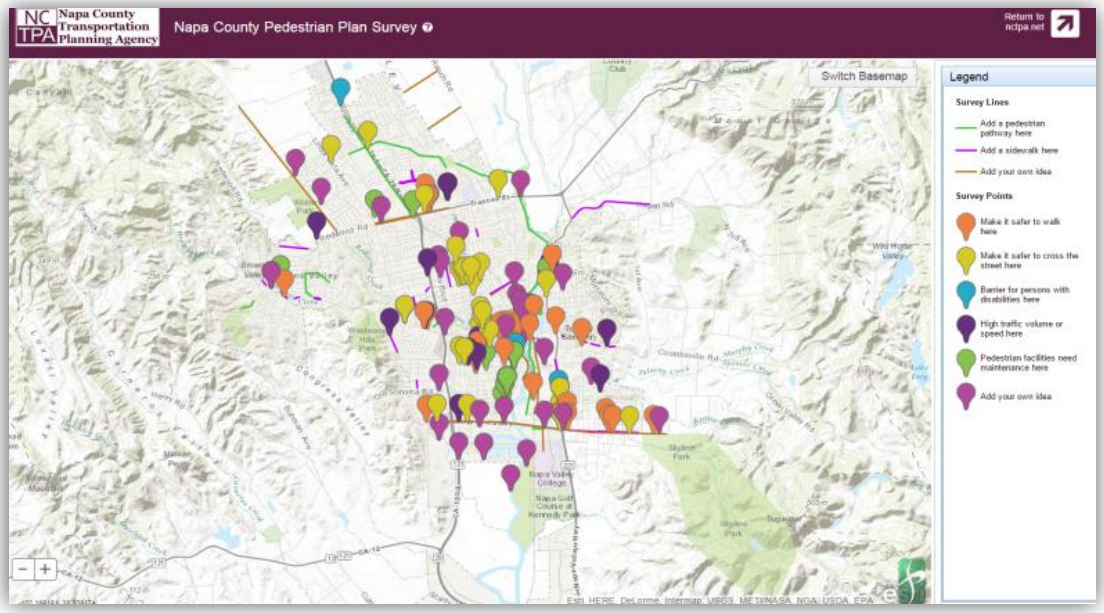


Exhibit Y-5
Workshop Comments
Town of Yountville

Online Survey Mapping Tool

Napa County residents, employees, and visitors who wanted to provide input but were unable or did not wish to attend the public workshops had the option of submitting their comments online through an interactive mapping tool. Users placed pins on the maps to highlight desired improvements using pre-set comments or creating their own comment. Preset comments included:

- Make it safer to walk here
- Make it safer to cross the street here
- Barrier for persons with disabilities here
- High traffic volume or speed here
- Pedestrian facilities need maintenance here
- Add a sidewalk here
- Add a pedestrian pathway here



Results from the 70 comments submitted countywide are shown in Exhibit 2 of the countywide plan.

Yountville-Specific Focus Groups

At the outset of the plan development process, meetings were held with key staff from Yountville to initiate the planning process on December 9, 2014.

This meeting included a discussion of existing programs, policies and practices. Recommendations for improvements are provided in the benchmarking summary table in **Appendix Y-A**.

Jurisdiction staff also provided input during the initial benchmarking meeting and at the public workshops on key areas where pedestrian improvements are planned and in some cases, where connections and safety improvements are desired. This input was used to inform potential opportunities for walking audit routes, as well as discussed along with the facility inventory maps under the *Existing Pedestrian Infrastructure* section of this plan.

Key goals for the pedestrian planning process were also discussed with Yountville staff and included conducting pedestrian counts, coordinating efforts with the Town ADA Transition Plan, and preserving the rural character. These goals are incorporated into key programmatic and policy recommendations in this plan.

Additional focus group meetings were held for the Yountville walking audit on May 11, 2015, and to review the list of suggested pedestrian projects on August 12, 2015.

Perceived Barriers

As shown in **Table Y-4**, connectivity and safety are two of the top pedestrian issues identified from the public. To geographically visualize the safety concerns in Yountville, a heat map was created, shown in Exhibit Y-6. This map shows the density of safety-related public comments received during the outreach process, and is intended to represent perceived barriers to walking. These locations may be under-represented in the collision data due to a high level of collision under-reporting with SWITRS data[4] or fewer people walking as a result of the these perceived issues. This map provides an important lens into key areas for concern, and may help supplement collision data to identify locations where near misses and other safety-related (but non-reported) issues may be present.

[4] Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113

Exhibit Y-6
Perceived Barriers: As Visualized by Safety-Related Public Comments
Town of Yountville

Opportunity Areas

Yountville's small-town layout, historic charm, numerous dining and shopping attractions, and network of neighborhood pathways create a well-connected and enjoyable environment for pedestrians. The town is also focused on implementing their ADA Transition Plan, and has recognized this moment as a key opportunity to enhance pedestrian safety and mobility in concert with the accessibility updates. This plan expands on those efforts by developing a list of proposed pedestrian facilities within key focus areas of the town and referencing those that have been developed by other plans. Initial focus areas for the plan were developed using a data-driven GIS process that evaluates several factors related to the built environment and demographics that affect the propensity to walk. This process, called the "Ped INDEX", was adapted by work done by the US Environmental Protection Agency (EPA) has been used in several plans in the Bay Area to map the qualitative likelihood of demand for pedestrian activity.

Ped INDEX

The main factors used in the Ped INDEX are population density, land use mix, presence of schools or parks, intersection density, location of downtown commercial areas, and age. These factors resulted in a "heat map" which displays an estimate for relative pedestrian demand on the streets throughout the Town of Yountville. More detail on the Ped INDEX methodology and results as well potential applications can be found in **Appendix B** of the countywide plan**.**

To balance high pedestrian demand areas with key areas of need in Yountville, additional data layers were used to display pedestrian deficiencies. These include gaps in sidewalk and reported pedestrian-involved collisions. In general, places with high pedestrian demand and a high infrastructure need are shown as target areas that could be prioritized for pedestrian improvements. The resulting heat map with overlaid demand and deficiencies is shown in *Exhibit Y-7*.

As illustrated on *Exhibit Y-7*, Ped INDEX focus locations include the downtown core and neighborhood pockets near Mulberry Street and Forrester Lane. After reviewing the locations of comments received during public outreach and the alignment with focus locations on the Ped INDEX maps, three potential walking audit were recommended for consideration to town staff:

- **Town Entrances**: Finnell Road from Yount Street to town boundary; Yountville Cross Road from Yount Street to town boundary; Stags View Lane from Yountville Cross Road to Lande Way (.7 miles)
  Both Finnell Road and Younville Cross Road are key entrances to the town from the unincorporated areas. Several comments from the town staff and the public highlight concerns of speeding along these roadways and the need for traffic calming and pedestrian facilities. Many comments during the public workshop were centered around the residents of the 7th Day Adventist Community, who frequently walk along Finnell Road, highlighting the need for sidewalk maintenance along the roadway adjacent to the

community. This focus area also includes children walking to Yountville Elementary School, consideration of a pathway north of Heritage Way, and parking conflicts on Stags View Lane.

- **North-South Corridors:** Washington Street from Humboldt to Madison; Yount Street from Madison to Oak Circle (1.1 miles)
  This focus area addresses comments from both town staff and the public about the desire for pedestrian accommodations at the south end of Yountville Park and the diagonal desire lines at the intersection of Madison Street and Washington Street, a five-legged intersection. Several other comments were made during the public workshop requesting improved crossings at the intersections of Washington Street at Webber Avenue, Madison Street at Yount Street, and Yount Street at Webber Avenue. This focus area also includes a potential need for crosswalk enhancements at Yount Street and Oak Circle, and the block between Mulberry Street and Oak Circle, where 3 pedestrian collisions have occurred in the last 10 years and the public voiced concerns about stop sign violations.
- **Jefferson Street:** Jefferson Street from Humboldt to Monroe (.4 miles)
  This focus area includes the Hopper Creek Bridge and a corridor with limited pedestrian facilities.

After discussions with town staff regarding candidate locations, a combination of the above recommended focus areas, for a total of approximately one mile, was chosen for study during walking audits:

- Washington Street, from Oak Circle to Madison Street
- Yountville Cross Road, from Yount Street to eastern town boundary
- Finnell Road, from Yount Street to eastern town boundary

Demand:

Pedestrian Index Score

High – Low

Deficiencies:

Pedestrian Collisions (Injuries)

1 2

Pedestrian Fatality

Missing Sidewalks

Legend:

Downtown Core (Retail Overlay)

Parks

School

Trail/Path

Exhibit Y-7

Yountville - Pedestrian Index Demand & Deficiencies

Priority Projects and Implementation Plan

An important outcome of this plan is the designation of a priority project list and an implementation plan for these projects. The priority project list was assembled based on:

- Results of the Walking Audit conducted for the plan
- Projects recommended through related planning efforts, such as the Countywide Transportation Plan (CTP)
- Conversations with staff and stakeholders regarding other local priorities

Walking Audits

Walking audits were conducted in April 2015 with the Yountville Public Works Director, Joe Tagliaboschi, to observe field conditions and brainstorm potential ideas for improvement.

During the walking audits, visual surveys were conducted to observe physical characteristics and conditions of the pedestrian environment as well as the connectivity and continuity of the surrounding pedestrian network. A debrief was held afterwards with the group to discuss observations and determine suggestions for improvements.

Project List and Map

Suggested pedestrian projects developed during the Pedestrian Plan walking audits and similar, recent efforts are shown in *Exhibit Y-8*. Descriptions of each project and additional program and policy recommendations are included below under *Priority Projects.*

Exhibit Y-8

Yountville - Project Locations

Priority Projects

Existing funding for pedestrian facilities is limited and cannot successfully cover more than a fraction of the recommendations in this plan. Available regional, state and Federal funding sources and grant cycles are highly competitive among worthy projects and other jurisdictions. Using consistent prioritization criteria countywide, this plan includes a tiered list of projects for Yountville reflecting:

- Local importance
- Safety enhancements
- Proximity to schools
- Proximity to transit
- Sidewalk gap and trail connections
- Cost

These criteria and the metrics used to define them are described in more detail in **Appendix Y-C**. Each pedestrian improvement project is shown in one of two tiers based on the number of evaluation criteria it meets. Detailed results and project descriptions can be found in **Appendix Y-C.** A summary of the improvements is shown in **Table Y-5**.

Funded or Constructed Projects

The Town of Yountville and private property owners have completed several recent projects in 2015 to improve pedestrian mobility, including replacing an asphalt pathway with concrete sidewalk near Van De Leur Park and adding a marked crosswalk to connect to the park across Washington Street. In-roadway signs at uncontrolled locations townwide were recently updated to the California standard of “Yield to Pedestrians” as well. In addition, the town has secured funding for several sidewalk and crosswalk projects scheduled to be constructed in the near future. These recently completed and funded projects were assigned to “Tier Zero” in **Table Y-5** and were not evaluated for prioritization.

TABLE Y-5: YOUNTVILLE PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
ON-GOING SYSTEM MAINTENANCE				
Sidewalk Gap Closure and Maintenance (No. 32 2015 CTP Program)	Townwide	Sidewalk maintenance, rehabilitation and expansion	Sidewalks Maintenance	$$$
TIER ZERO (FUNDED OR CONSTRUCTED PROJECTS)				
T0-1[1] RH Gallery Funded Improvements	Washington Street at Pedroni Street	Sidewalk and crosswalk enhancements2; bus stop relocation	Sidewalk Crossing treatments	--
T0-2 Washington / Webber Intersection Improvements	Washington Street at Webber Avenue	Sidewalk, crosswalk enhancements2	Sidewalk Crossing treatments ADA Ramps	--
T0-3 Finnell Road Improvements	Finnell Road, Vista Drive to Heritage Way	Sidewalk	Sidewalk	--
	Finnell Road, Heritage Way to Yount Street	Class II bike lanes	Bicycle treatments	--
	Finnell Road at Heritage Way	Marked crosswalk with MUTCD signage	Crossing treatments	--
	Finnell Road at Vista Drive	Marked crosswalks	Crossing treatments	--
	Finnell Road at Town Limits	Speed bump	Traffic Calming	--
T0-4 Yountville Park ADA Improvements	Yountville Park	Accessibility upgrades	ADA	--
T0-5 Yountville Crossroads Complete Streets Project (No. 54 on Constrained CTP Project List)	Yountville Cross Road, Yount Street to Stags View Lane	Sidewalk and sharrow markings	Sidewalks	--
		Walk Audit Recommendations	Pathway Wayfinding	--
		Wayfinding study and striping enhancements		

TABLE Y-5: YOUNTVILLE PEDESTRIAN IMPROVEMENTS

Project ID	Location	Description	Pedestrian Component	Estimated Cost
T0-6 Vine Trail Improvements		**Walk Audit Recommendations**		
	Washington street at Madison Street	Wayfinding	Wayfinding	--
	California Drive at SR 29 northbound ramps			
	Washington Street at Webber Avenue	Wayfinding Marked crosswalk	Wayfinding Crossing treatments	
T0-7 Townwide Crosswalk Signage	Townwide	**Walk Audit Recommendations**	Crossing treatments	--
		In-roadway signs at uncontrolled locations changed to "Yield to Pedestrians" instead of "Stop for Pedestrians"		
TIER ONE				
Y-1 Washington Park ADA Improvement Project (No. 53 on Constrained CTP Project List)	Washington Park Subdivsion	Improve the paved shoulders to be more accessible for pedestrians	ADA	$850,000[4]
Y-2 Yountville Park Improvements	Washington Street at Lincoln Avenue	Near Term: Restriping intersection for realignment and traffic calming; marked crosswalk	Traffic Calming Crossing Treatments	$65,300
		Long Term: Feasibility study for formalizing realignment with curb extensions or roundabout		$50,000
Y-3 Washington Intersection Improvements	Washington Street at Humboldt Street	Striped bus platform for vehicle channelization	Traffic Calming	$25,000
	Washington Street at Yount Street	Review for potential pedestrian enhancements	Crossing treatments	
	Washington Street at Mulberry Street	Stamped crosswalk		
	Washington Street at Oak Circle	Review for potential pedestrian enhancements		

TABLE Y-5: YOUNTVILLE PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
TIER TWO				
Y-4 Business Frontage Improvements[3]	Washington Street at Creek Street	Marked crosswalk with crosswalk enhancements2	Crossing treatments	$$
	Washington Street; Humboldt Street to Buchon Bakery	Review for potential pedestrian enhancements	Crossing treatments	
	Hope and Grace Winery	Review for potential pedestrian enhancements	Wayfinding	
	Washington Street at Vintage Estate Parking Access	Review for potential pedestrian enhancements	Sidewalk Crossing treatments	
	Ranch Market Too	Review for potential pedestrian enhancements	Crossing treatments	
Y-5 Finnell Road Intersection Improvements	Finnell Road at Yount Street	Review for potential pedestrian enhancements	Crossing treatments	$
	Finnell Road at Yountville Town Hall			
	Finnell Road at Vista Drive			
Y-6 Madison Street Wayfinding	Madison Street; Washington Street to Yount Street	Wayfinding and enhanced walkway	Wayfinding Enhanced Walkway	$

1. Project is expected to be completed by the summer of 2016
2. An enhanced crosswalk includes additional safety treatments such as curb extensions, reduced curb radii, or pedestrian refuge islands. These enhancements are recommended to address safety concerns such as higher speed or volume roadways, wider roadways, and roadways where motorists are less likely to yield to pedestrians. Specific recommendations are included in Appendix C-C. For additional information on the application of these enhancements, refer to the Crosswalk Guidelines in Appendix D of the Countywide Pedestrian Plan.
3. Elements of these improvements are located on private property and would be completed by business owners rather than the Town.
4. Source: Napa Countywide Transportation Plan, 2015

$$$ - high cost (>$1million); $$ - medium cost ($100k-$1million); $ - low cost (<$100k)

Source: Fehr & Peers, 2016

Preserving the rural character is an important value to the community and a key consideration in the design of pedestrian infrastructure, especially when considering alternatives to sidewalk installation. Several roadways in Yountville were identified during the walking audits as potential candidates for in-street walkways where sidewalks may be infeasible due to engineering constraints or community values. This low cost improvement could include a combination of striping, pavement markings, and signage to designate an existing shoulder or bike lane as a shared space for bicyclists and pedestrians. Additional design guidance is provided in the Best Practices Toolkit (**Appendix D** of the Countywide Pedestrian Plan) under *Enhanced Walkways*. Variations of this treatment

could be used as an interim or near term improvement while funding is secured for sidewalks, such as on Yountville Cross Road. Specific locations where this treatment could apply are Yountville Cross Road and Madison Street, as shown in Improvement Y-2 and Y-9.

Supporting Programs and Policies

Key program and policy recommendations that complement the engineering-related projects are shown below in **Table Y-6**. Many of these recommendations draw from the benchmarking exercise completed at the onset of the plan development. The recommendations encompass education, encouragement, and enforcement activities.

TABLE Y-6: YOUNTVILLE PROGRAM AND POLICY RECOMMENDATIONS	
Program or Policy	**Recommendations**
Education and Encouragement	
Safe Routes to School (SRTS) Coordination	Coordinate with the Napa County Office of Education to continue SRTS programs in the Town, and determine feasibility of implementing recommendations under the Safe Routes to School Support Program in the *Countywide Implementation* chapter of the countywide plan.
Safety and Enforcement	
Law Enforcement for Pedestrian Safety	Encourage coordination with law enforcement on pedestrian safety. Consider designating traffic safety officers who conduct pedestrian related enforcement activities, such as monitoring school circulation activity during pick up and drop off periods. Determine feasibility of enforcement recommendations in *Countywide Implementation* chapter of the countywide plan.
NVTA Safety Campaign	Coordinate with NVTA on the media safety campaign that NVTA is pursuing, as an opportunity for education by distributing pedestrian safety pamphlets in-lieu of, or in addition to, citations.
Maintenance	
Repair of Sidewalks, Crosswalks, and Curb Ramps	• Continue to regularly improve and repair uneven sidewalk, broken asphalt in crosswalks, and install new curb ramps as part of the Townwide Sidewalk Maintenance Program above. This could include efforts as part of the Town's ADA Transition Plan and/or the sidewalk monitoring program. • Determine feasibility of adding a page to Speak Up Yountville to allow residents and visitors to more easily report and track hazards in the public right-of-way and to ensure all necessary sidewalk repairs are included in the Town's Capital Improvement Program (CIP). This could include the reporting of maintenance needs for pedestrian-related pavement markings and traffic control devices.
Overgrown Vegetation on Sidewalks and Planting Strips	Continue to ensure townwide that landscapes at maturity do not interfere with safe sight distances for pedestrian or vehicular traffic; do not conflict with overhead lights, traffic controls, traffic signage, utility lines or poles, or walkway lights; and, do not block bicycle or pedestrian ways. Require adjacent property owners to maintain landscaped areas with live and healthy plant materials, replacing plant materials when necessary to maintain full function and aesthetics; to water, weed, prune, fertilize and keep sidewalks and planting strips litter free. Specific locations for implementation include: • Hedge trimming for wheelchair visibility at marked crosswalk on Vista Drive at Vineyard Circle • Vegetation trimming along north side of Yountville Cross Road east of Mesa Court
Engineering and Design Standards	
Crosswalk Guidelines	Implement Crosswalk Guidelines, included in Appendix D of the Countywide Pedestrian Plan, to enable the Town to respond to crosswalk requests in a manner that improves pedestrian accessibility and maintains public safety. Reference Guidelines when making decisions about where standard crosswalks (two, parallel white stripes) can be marked; where crosswalks with special treatments, such as high-visibility crosswalks, flashing beacons and other special features, should be employed; and where crosswalks will not be marked due to safety concerns resulting from volume, speed, or sight distance issues.

TABLE Y-6: YOUNTVILLE PROGRAM AND POLICY RECOMMENDATIONS	
Program or Policy	**Recommendations**
Place Making and Complete Streets	
Parking Plan	Consider long term options for shared parking to allow for flexibility to repurpose parking through the town for such improvements as curb extensions, midblock crosswalks, etc. Consider red curb to prevent parking on sidewalk along Forrester Lane to maintain connection to neighborhood trail entrance.
Site Plan Review Checklist	Create checklist for development review to ensure site plans include considerations for pedestrian access, safety and sidewalk activation (including considerations for building frontage location, pocket parks, small plazas, or mini shops and evaluation of pedestrian circulation in parking lots). Include items from MTC's Routine Accommodation Checklist for projects in the public right-of-way to ensure routine application of the Complete Streets policy. MTC's checklist can be found here: http://www.mtc.ca.gov/planning/bicyclespedestrians/Routine_Accommodation_checklist.pdf

Next Steps

Funding Sources

Yountville is uniquely positioned to invest in community development projects through robust local revenues and pays for the majority of pedestrian improvements with General Fund monies. Pedestrian-related expenditures in Yountville since 2010 have totaled $1,500,000.

Federal, state, regional, county and local organizations provide funding for pedestrian and bicycle projects and programs. The most recent Federal surface transportation funding program, Fixing America's Surface Transportation Act (FAST Act), was signed into law in December 2015. Details in this section are provided for funding programs that are used to fund scheduled projects through December 2020.

FAST Act funding is distributed to Federal and state surface transportation funds. Most of these resources are available to Yountville through Caltrans, the Metropolitan Transportation Commission (MTC), and the Napa Valley Transportation Authority (NVTA).

Table Y-7 summarizes the applicability of these various funding sources to projects, planning efforts, and programs proposed in this plan. Detailed descriptions of the grant funding sources are presented in **Appendix C** of the countywide plan. The most applicable funding sources for the improvements recommended by this plan are the Active Transportation Program, One Bay Area Grants, and Highway Safety Improvement Program, and Transportation Development Act Article 3 funds.

TABLE Y-7: REGIONAL FUNDING SOURCE APPLICABILITY MATRIX				
Funding Source	**Class I Multi-Use Path**	**Pedestrian Projects**	**Other Projects**	**Planning and Programs**
Highway Safety Improvement Program (HSIP) Grants	◒	●	●	○
Caltrans Transportation Planning Grants	○	○	○	●
Local Transportation Fund (LTF)	●	●	●	○
California State Parks Recreational Trails Program (RTP)	●	○	○	○
Land and Water Conservation Fund (LWCP)	●	○	○	○
Active Transportation Program (ATP), including Safe Routes to School	●	●	●	●
Transportation Development Act Article 3 (TDA-3)	●	●	●	◒
One Bay Area Grant (OBAG)	●	●	●	●
Bay Area Air Quality Management District (BAAQMD) Transportation Fund for Clean Air	◒	◒	◒	○

Notes:

1. ● indicates that funds may be used for this category; ○ indicate that funds may not be used for this category, and ◒ indicate that funds may be used, though restrictions apply.

Source: Fehr & Peers, 2016.

Cost of the Pedestrian Network

Table Y-8 presents unit costs for standard pedestrian treatments, estimated using an ATP Cost Estimating Tool developed for the Alameda County Transportation Commission. The tool is used to estimate costs for bicycle and pedestrian projects at the network planning scale during the development of active transportation plans and in a sketch-planning capacity for a bicycle and/or pedestrian project. The costs shown represent the total construction for a typical treatment of that type, including engineering, design, construction management, mobilization, traffic control and general contingency. Contingency for drainage and utility relocation was also included for relevant treatment types, such as curb extensions. These numbers do not include right-of-way costs or inflation.

TABLE Y-8: GENERALIZED UNIT COSTS FOR IMPROVEMENTS		
Facility Type	**Cost**	**Unit**
Curb Extension/Bulbout	$56,000	Each
Pedestrian Refuge Island	$10,000	Each
Flashing Beacons (RRFBs)	$45,000	Per Crosswalk
Pedestrian Hybrid Beacon (PHB)	$144,000	Per Crosswalk
Customized Pedestrian Wayfinding Signs	$2,000	Per Sign

1. Costs reflect capital costs plus contingency for engineering design, environmental, construction management, mobilization, traffic control, and contingency.

Source: Fehr & Peers, ATP Cost Estimating Tool, 2016.

Project-level cost estimates were prepared for Tier One projects determined in the previous section of this plan, while the remaining projects were assigned a ranking in Table Y-5 to indicate an estimated range of cost level. Prepared cost estimates, included in **Appendix Y-D**, include unit costs for individual improvements within the project and adjustments to account for traffic control, construction management, and mobilization. Additional factors were also used for overall contingency, engineering design, and environmental. A summary of the estimates is shown in **Table Y-9** below.

TABLE Y-9: TIER ONE PROJECT SUMMARY COSTS	
Project	**Total Cost[1]**
Y-1: Washington Park ADA Improvement Project (No. 53 CTP Project)	$850,000
Y-2: Yountville Park Improvements	-
Near Term	**$65,300**
Long Term	**$115,300**
Y-3: Washington Intersection Improvements	$25,000

1. Costs reflect capital costs plus contingency for engineering design, construction management, mobilization, traffic control, and contingency.

Source: Fehr & Peers, ATP Cost Estimating Tool, 2016.

Countywide Performance Metrics and Evaluation

NVTA intends to monitor progress on the implementation of this plan over time. The *Countywide Implementation* chapter of the Countywide Pedestrian Plan summarizes key performance goals and associated metrics for this plan's implementation.

Yountville Appendix

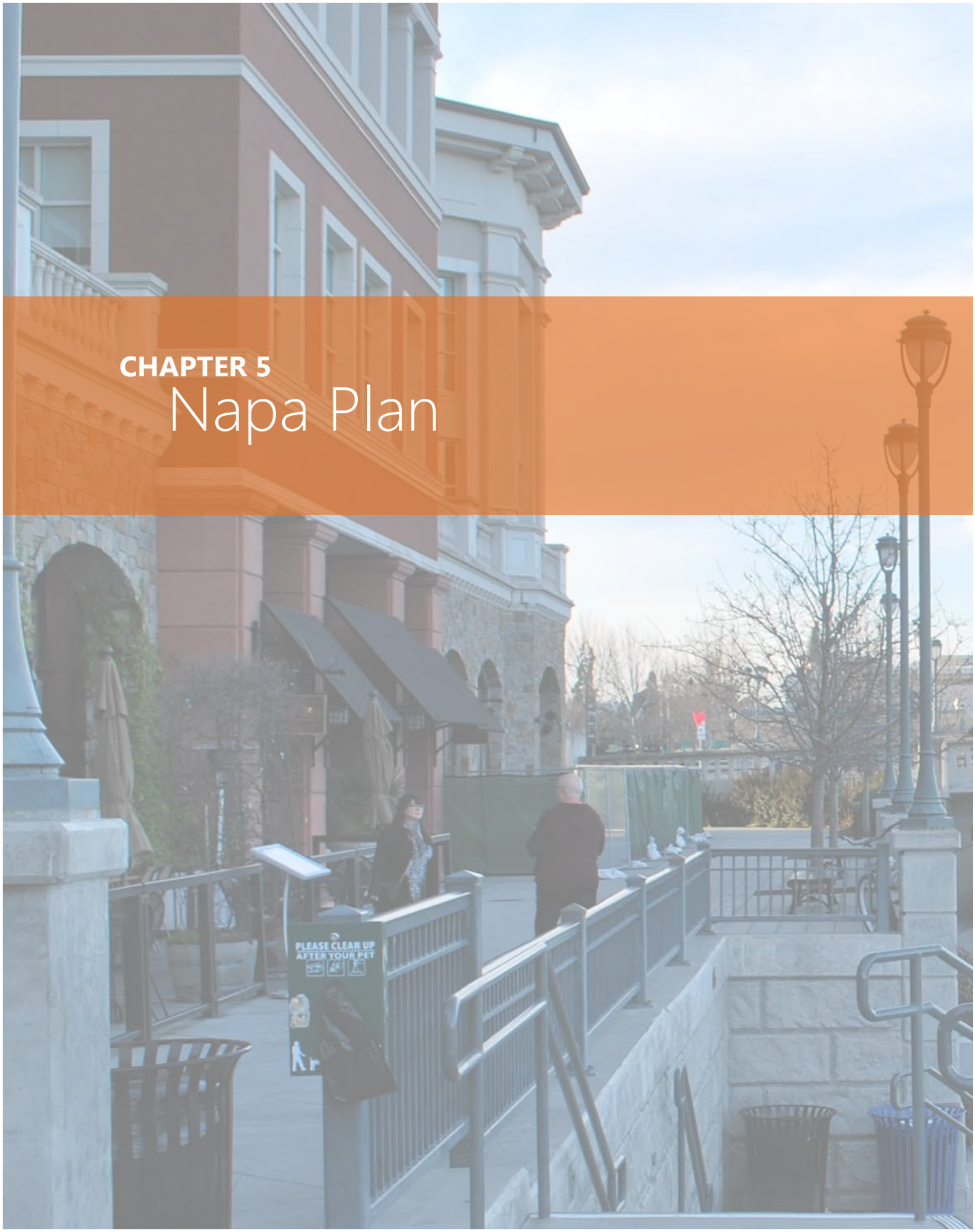
Y-A Benchmarking Table

Y-B Existing Pedestrian Policies

Y-C Detailed Project Lists and Prioritization

Y-D Cost Estimates

Y-E Plan Adoption Resolution



CHAPTER 5

Napa Plan

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Chapter 5

Napa Plan

Pedestrian Setting

Napa is a suburban community in the heart of Napa County with approximately 79,000 residents. The city attracts year-round visitors with its flourishing vineyards, reputable restaurants, and beautiful Napa Riverfront. The city's downtown is an active pedestrian center, with a traditional grid network and attractive building facades that honor the region's history, making pedestrian trips efficient and enjoyable. Several pathways along the Napa River have recently been completed with plans to develop additional connections. Outside of downtown, roadways are often designed to carry high vehicle volumes, which can result in higher speeds along four-lane roadways that are difficult to cross. The planning areas for the city and associated development potential are shown in *Exhibit N-1* and a downtown destination map, including the locations of public buildings, parks, and community amenities, is shown in *Exhibit N-2*.

Existing Policies and Programs

To help guide the development of key programs and policies for this plan, Napa's existing approaches to facilitating and enhancing walking were reviewed with a benchmarking matrix that compares the existing programs, policies, and practices with national best practices. The benchmarking analysis categorizes each jurisdiction's programs, policies, and practices into three areas as follows:

- **Key Strengths** (areas where the jurisdiction is exceeding national best practices)
- **Enhancement Areas** (areas where the jurisdiction is meeting best practices)
- **Opportunity Areas** (areas where the jurisdiction should consider meeting best practices)

The City of Napa has robust design guidelines for creating a pedestrian-oriented environment in the downtown core through the adoption of the Napa Downtown Specific Plan, and this plan will provide a framework for expanding policies in the General Plan, ADA Transition Plan, public works standards, and city municipal code as well as future investments to create a safe and continuous pedestrian network citywide. The city also has exceled at pedestrian inventory collection and adoption of a pedestrian-friendly street tree ordinance. As summarized in **Table N-1**, potential areas of opportunity that this plan addresses include collision reporting, coordination with transit providers, and Napa-specific crosswalk design guidelines. The full benchmarking analysis for Napa, with associated best practice examples, is presented in **Appendix N-A**.

Downtown Napa: Riverfront Promenade

TABLE N-1: NAPA BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**Napa Current Practice**	**Best Practice Examples**
Key Strengths		
Inventory of Pedestrian Facilities A GIS-based sidewalk inventory enables project identification and prioritization, as well as project coordination with new development, roadway resurfacing, etc.	The City is currently assembling a GIS-based inventory of existing or missing sidewalks and curb ramps through their Asset Management Plan, which is separate from the inventory collection process for this plan. Sidewalk projects are funded through the CIP and the sidewalk maintenance program, which has an annual funding level of approximately $1,500,000. This program includes maintaining curb ramps, repairing tree damage, and constructing missing sections of sidewalk. Additionally, the city coordinates efforts for the 10-mile repaving program with sidewalk repair projects to combine resources if possible. The city offers partial reimbursement of funds for repairs of displaced or damaged sidewalks to property owners through the Sidewalk Repair Program.	• Expanding the GIS sidewalk inventory to include informal pathways and key pedestrian opportunity areas in the city.
Design and Development Standards Design policies and development standards can improve the pedestrian walking experience, encourage walking, enhance economic vitality, and offer funding opportunities for pedestrian improvements.	The city has developed and adopted the 2012 Downtown Napa Specific Plan (DNSP), providing local design guidelines for walkability and pedestrian facilities. The DNSP also includes a proposed streetscape plan and typical cross-sections with minimum sidewalk widths for identified “Core Streets” and “Secondary Streets”. Zoning overlays govern the allowed Building Forms for development that continue to a “sense of place” in Downtown Napa The DNSP also recommends adopting a policy to balance the design requirements of delivery vehicles and pedestrians downtown by designating pedestrian-oriented streets and delivery vehicle-oriented streets with appropriate design guidelines for each. Pedestrian-friendly design is included in the development guidelines for the Soscol / Downtown Riverfront Design Guidelines, with a focus on human-scale design and streetscape improvements. The 2004 Residential Design Guidelines emphasize place making for infill neighborhoods in evolving areas and encourage new projects to consider pedestrian connections, avoid parking that separates the project from the street edge, include a streetscape plan, and fully integrate parks and community facilities.	• Consider a refresh of the Napa Residential Design Guidelines (2004) to determine their effectiveness to promote pedestrian-friendly neighborhoods and for consistency with the more recent Housing Element of 2015. • Following the DNSP guidelines for delivery vehicle-oriented streets and pedestrian-oriented streets when appropriate and consider designating streets downtown for the appropriate application.

TABLE N-1: NAPA BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**Napa Current Practice**	**Best Practice Examples**
Street Tree Ordinance Street trees enhance the pedestrian environment by providing shade and a buffer from vehicles. Street trees may also enhance property values, especially in residential neighborhoods. However, street trees, when improperly selected, planted, or maintained, may cause damage to adjacent public infrastructure and/or utilities.	Napa has a street tree ordinance specifying the responsibility of maintenance of street trees and the permitting requirements for planting and removal of street trees. The Tree Advisory Committee maintains a tree species list that is approved to prevent root damage to sidewalks.	
Key Opportunities		
Collision Reporting Identifying and responding to collision patterns on a regular basis is an important reactive approach to pedestrian safety (which may be combined with proactive measures).	The City of Napa reviews collision data, to help identify CIP projects and evaluate development in the area. Staff can run queries using the crossroads software as needed. The crossroads software allows for geo-coding (mapping) and comprehensive monitoring.	• Expanding monitoring practices to include collision typing for countermeasure selection could allow for more proactive pedestrian safety projects. Pedestrian volume data could be used to prioritize collision locations based on collision rates (collisions/daily pedestrian volume). This could lead to a proactive approach to identify treatments and program City CIP funding. Volunteers can collect pedestrian volumes and other data at collision locations.
Coordination with Emergency Response and Transit Providers Emergency response vehicles require special roadway design considerations that sometimes conflict with bicycle and pedestrian treatments. For example, while pedestrians benefit from reduced speeds of smaller curb radii, larger vehicles such as fire trucks and buses have more difficulty performing the turn within the smaller space. These conflicts require consensus building between the city and the respective departments.	Police and Fire Department staff is involved in the city's plan-check process. Transit agencies are a key stakeholder in pedestrian-related improvements since many transit riders walk to and from their destinations on either end of their transit trip. There is minimal coordination between transit planning and pedestrian planning in Napa, although the General Plan does include a policy to consider a Safe Routes to Transit Program.	• Seeking opportunities for technical collaboration and funding with first responders and transit providers. • Exploring ways to implement a Safe Routes to Transit Program that prioritizes bike and pedestrian access to major transit connection points and transit centers. In Napa, this would align with the General Plan and the Napa Bike Plan.
Crosswalk Design Guidelines A formal policy for crosswalk installation, removal, and enhancement provides transparency in decision-making and creates a consistent application of treatments citywide.	The city currently does not have a crosswalk policy, but design guidelines for enhanced crosswalks in downtown are included in the Downtown Napa Specific Plan., The city makes decisions regarding crosswalks on a case by case basis, and prefers crosswalks to be located at signalized crossings rather than mid-block. The city has removed mid-block crossings downtown and requires strong justification based on engineering evaluation for new mid-block crossings to be approved.	• Consider adopting a local crosswalk policy to include criteria for appropriate locations to install crosswalk enhancements such as flashing beacons or advanced yield markings. • Conducting audits of the adequacy of current crosswalks to address pedestrian safety, using nationally accepted best practices and recent research.

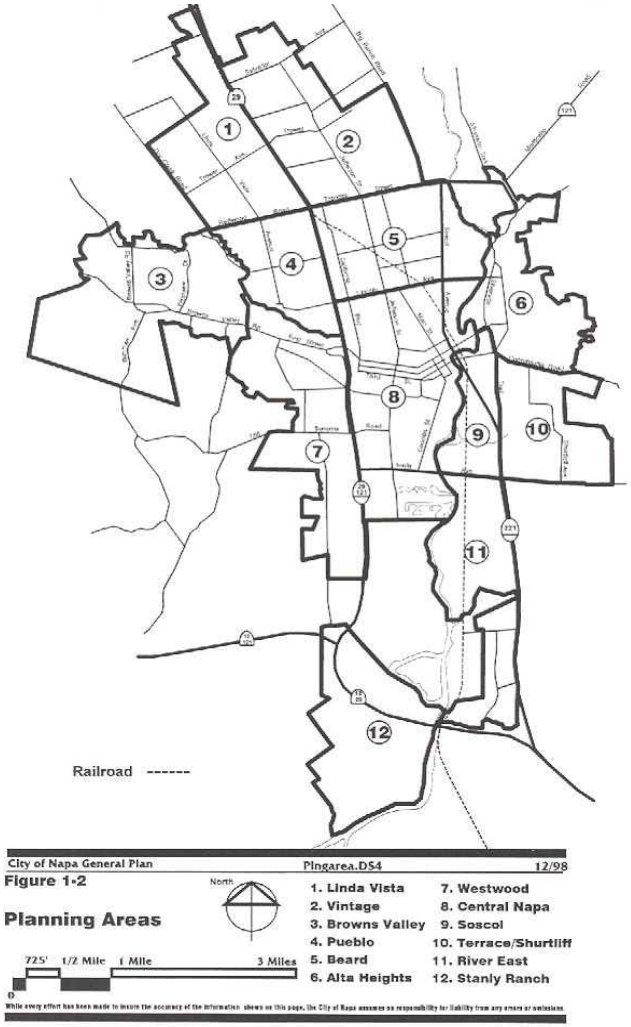


Table 1-2

SUMMARY OF DEVELOPMENT POTENTIAL BY PLANNING AREA

	Planning Area	Residential (Dwelling Units)		Commercial/Industrial (Sq. Ft.)	
		Existing*	Additional	Existing*	Additional
1	Linda Vista	2,752	1,277	247,365	111,524
2	Vintage	3,189	1,611	555,629	157,494
3	Browns Valley	2,329	609	27,425	8,584
4	Pueblo	2,157	212	96,935	36,402
5	Beard	3,884	623	1,050,914	322,523
6	Alta Heights	1,406	296	14,405	16,345
7	Westwood	3,301	927	392,869	273,465
8	Central Napa	5,765	844	2,997,572	681,579
9	Soscol	121	108	625,142	387,208
10	Terrace/Shurtleff	2,193	733	103,319	52,736
11	River East	0	0	892,641	1,014,794
12	Stanly Ranch	1	600	0	109,314
Total		27,098	7,840	7,004,216	3,171,968

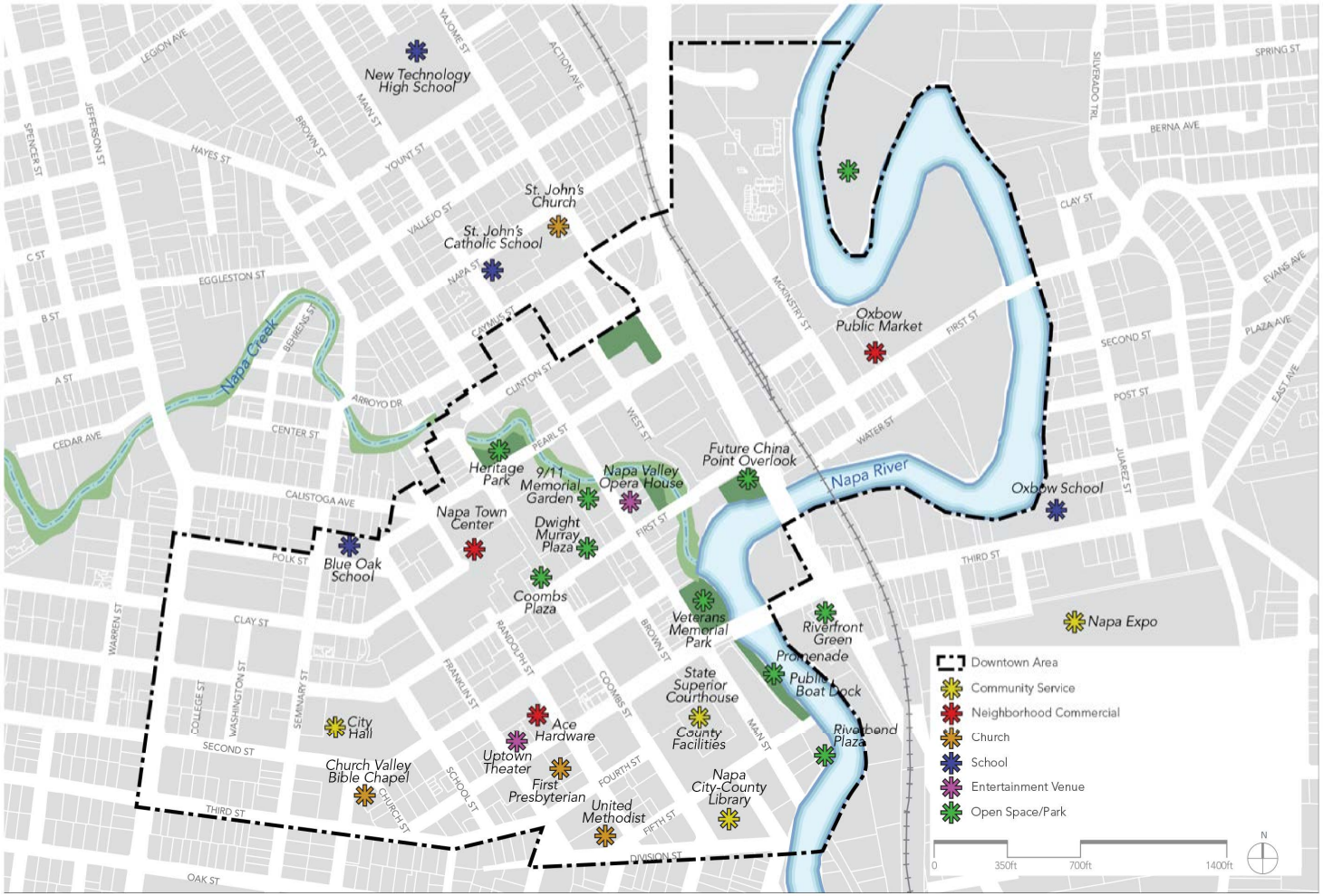
*April 1994
Source: City of Napa Planning Department

Source: Envision Napa 2020, Policy Document.

Figure N-1

Napa - Planning Areas

\\fpsf03\data\Projects\2014 Projects\SF14-0786_Napa_County_Wide_Ped_Plan\Graphics\PDF\LandUse\AI



Source: City of Napa, 2016

Exhibit N-2

Downtown Napa - Destination Map

Existing Pedestrian Infrastructure

An inventory of existing sidewalks, marked crosswalks, curb ramps and trails was collected on key roadways throughout the city as part of this plan using a combination of aerial imagery and Google Street View imagery from the years 2011 – 2014 (imagery for a few small residential streets dated back to 2007). For the City of Napa, this data was supplemented by a digital infrastructure inventory collected by the city as part of their Asset Management Program in March of 2014.

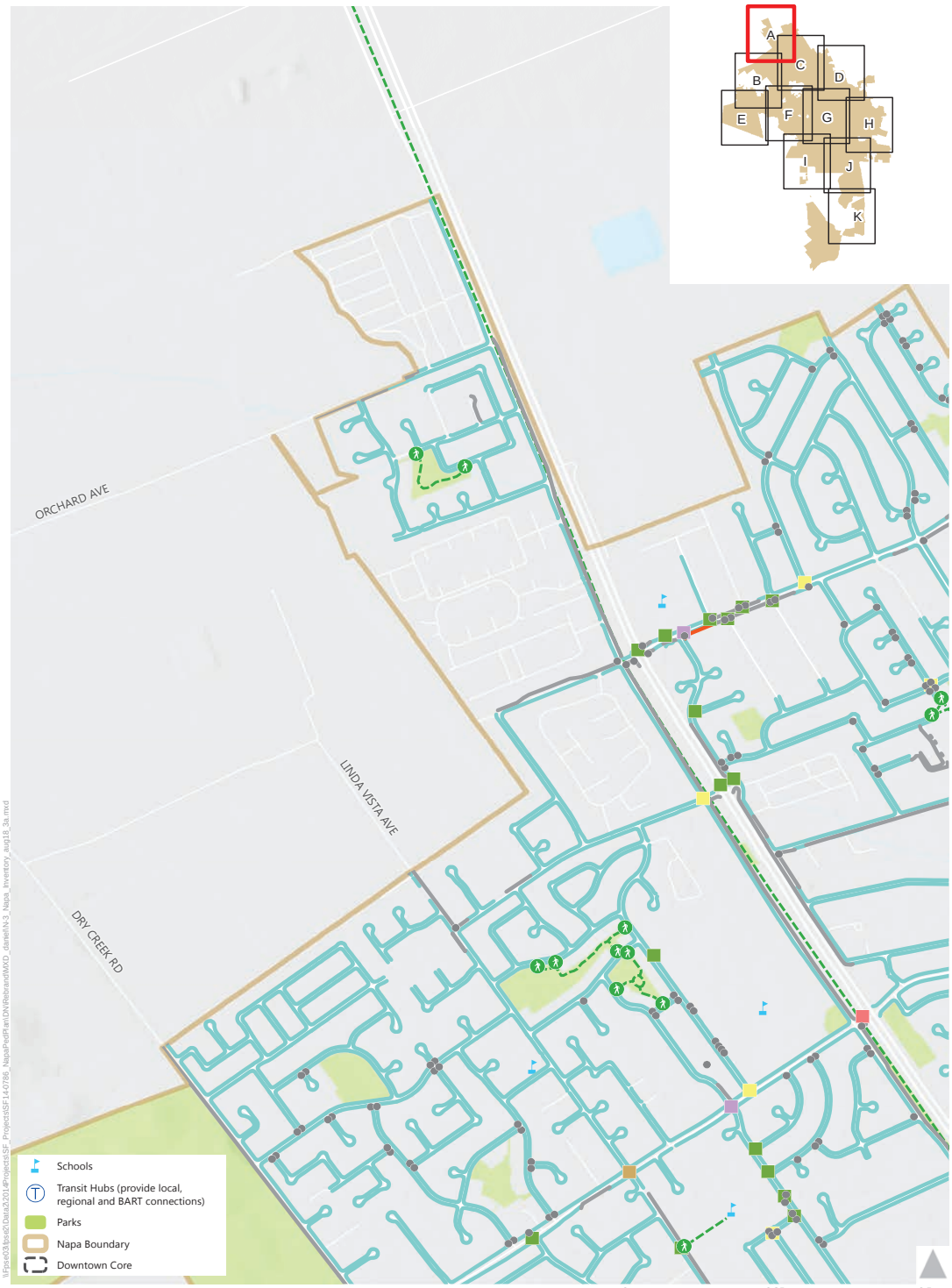
A GIS database assembled for the plan inventory includes additional detail beyond what is illustrated in the inventory maps, including the style of crosswalk striping, the method of vehicle control at the crosswalk (i.e., traffic signal, flashing beacon, stop sign, or uncontrolled), whether the crosswalk was located in a school zone, and the curb ramp design (i.e., whether the ramp is directional or diagonal and if it has truncated domes).

Napa Inventory

A roadway network of 111 miles in the City of Napa was identified by city staff for inventory collection as part of this plan. Key considerations for the plan inventory network included:

- Locations near the Downtown Core
- Roadways that connect residential development to both schools and downtown
- Locations near bus stops
- Blocks surrounding identified pedestrian collisions

This network was superseded by data from 219 miles of survey completed by the city as part of their Asset Management Program and is displayed on *Exhibit N-3*. As shown in Exhibit *N-3*, the downtown has a high concentration of marked crosswalks and a connected sidewalk network. Key corridors that have sidewalk gaps include Coombsville Road, Silverado Trail, Redwood Road, Linda Vista Avenue, Imola Avenue, Browns Valley Road, Sierra Avenue, and Salvador Avenue; sidewalk installation is planned along several of these corridors in the Countywide Transportation Plan (CTP), pending available funding.



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

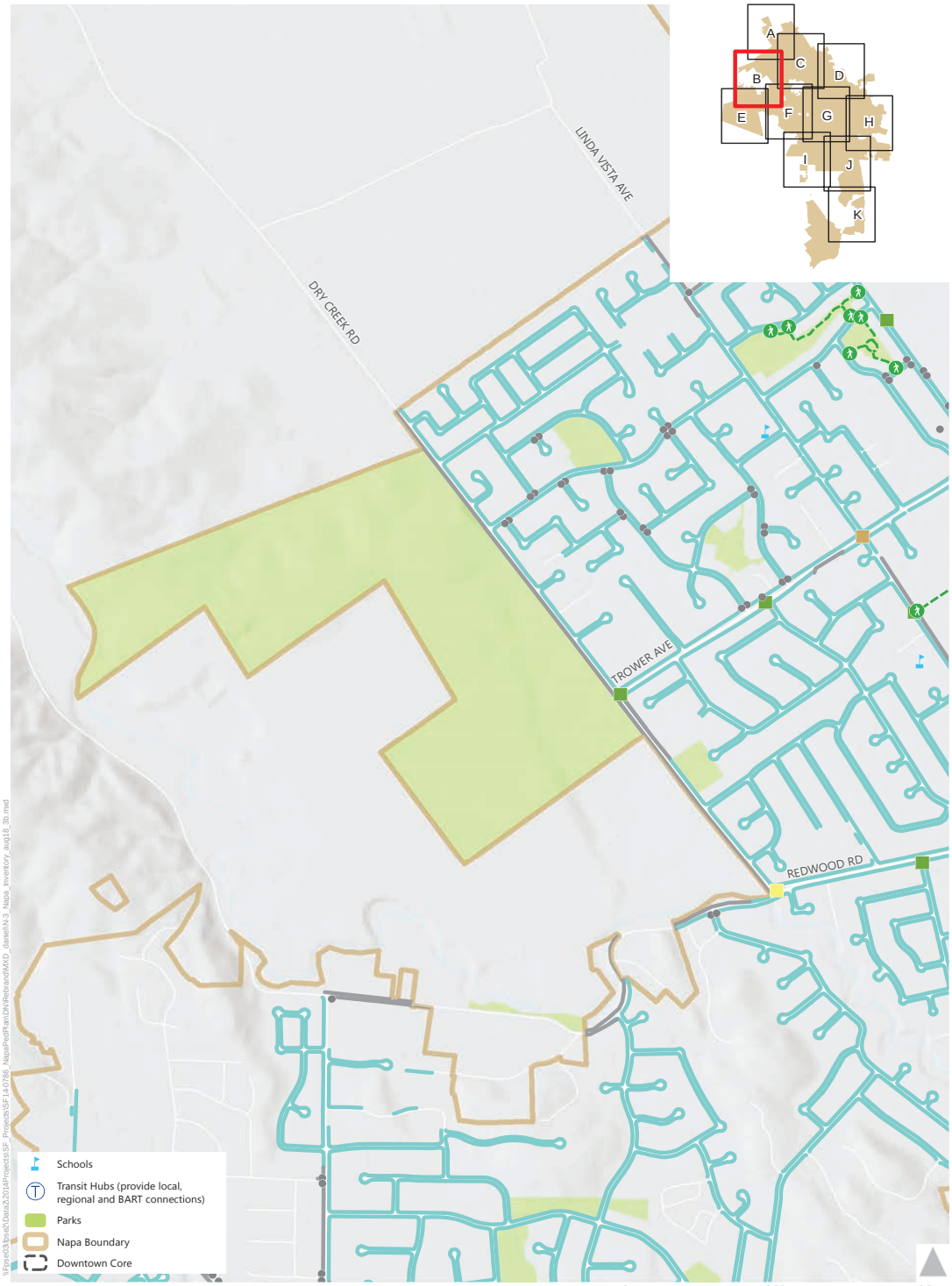
Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

** The intersection of a trail with a roadway, including the beginning or end of a trail.*

Sidewalk and curb ramp information on this map includes data collected as part of the City of Napa Asset Management efforts. Sidewalk condition is not displayed, only the presence of sidewalk.

Exhibit N-3a
Pedestrian Facility Inventory
City of Napa



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

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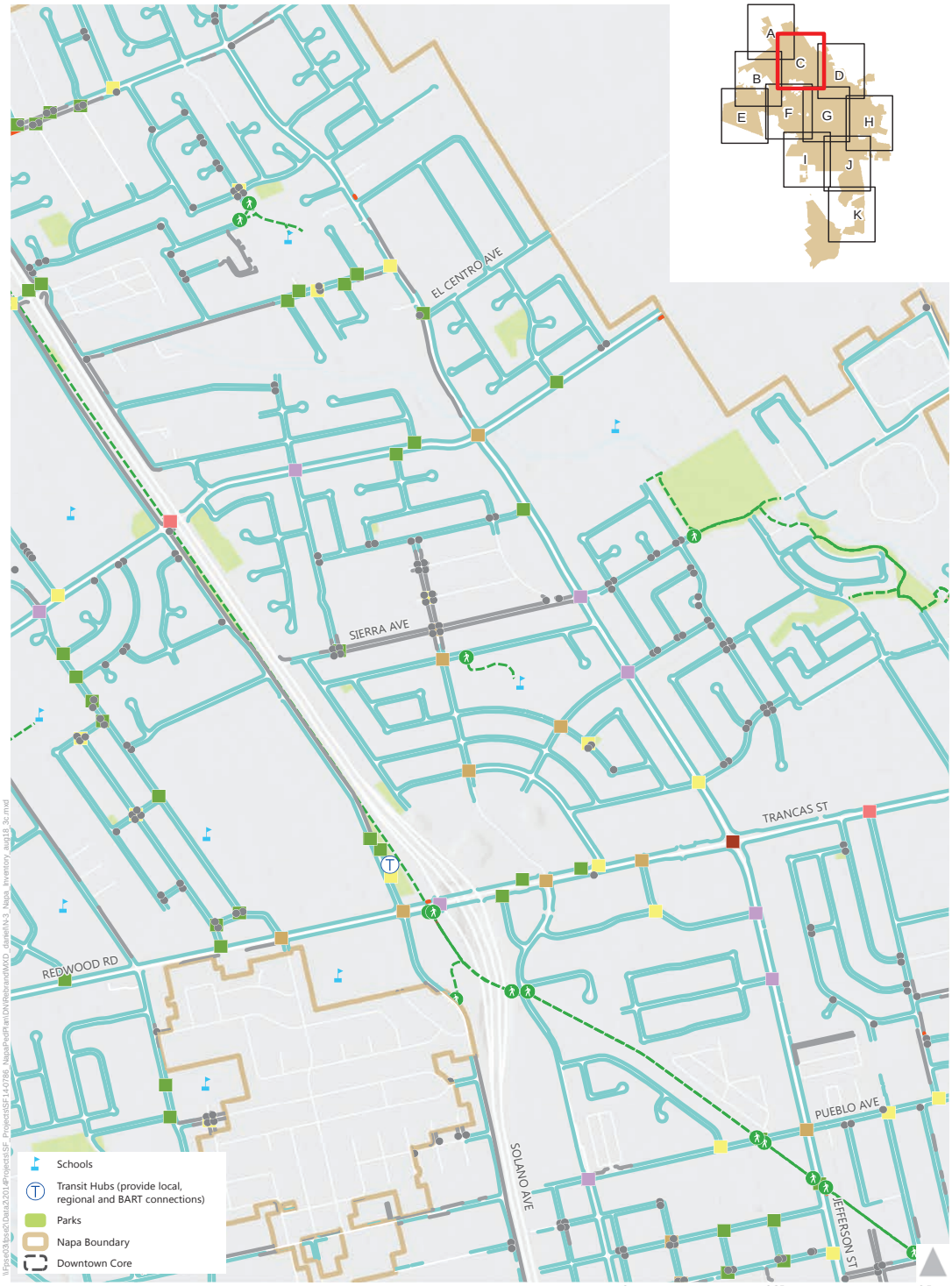
Exhibit N-3b
Pedestrian Facility Inventory
City of Napa



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

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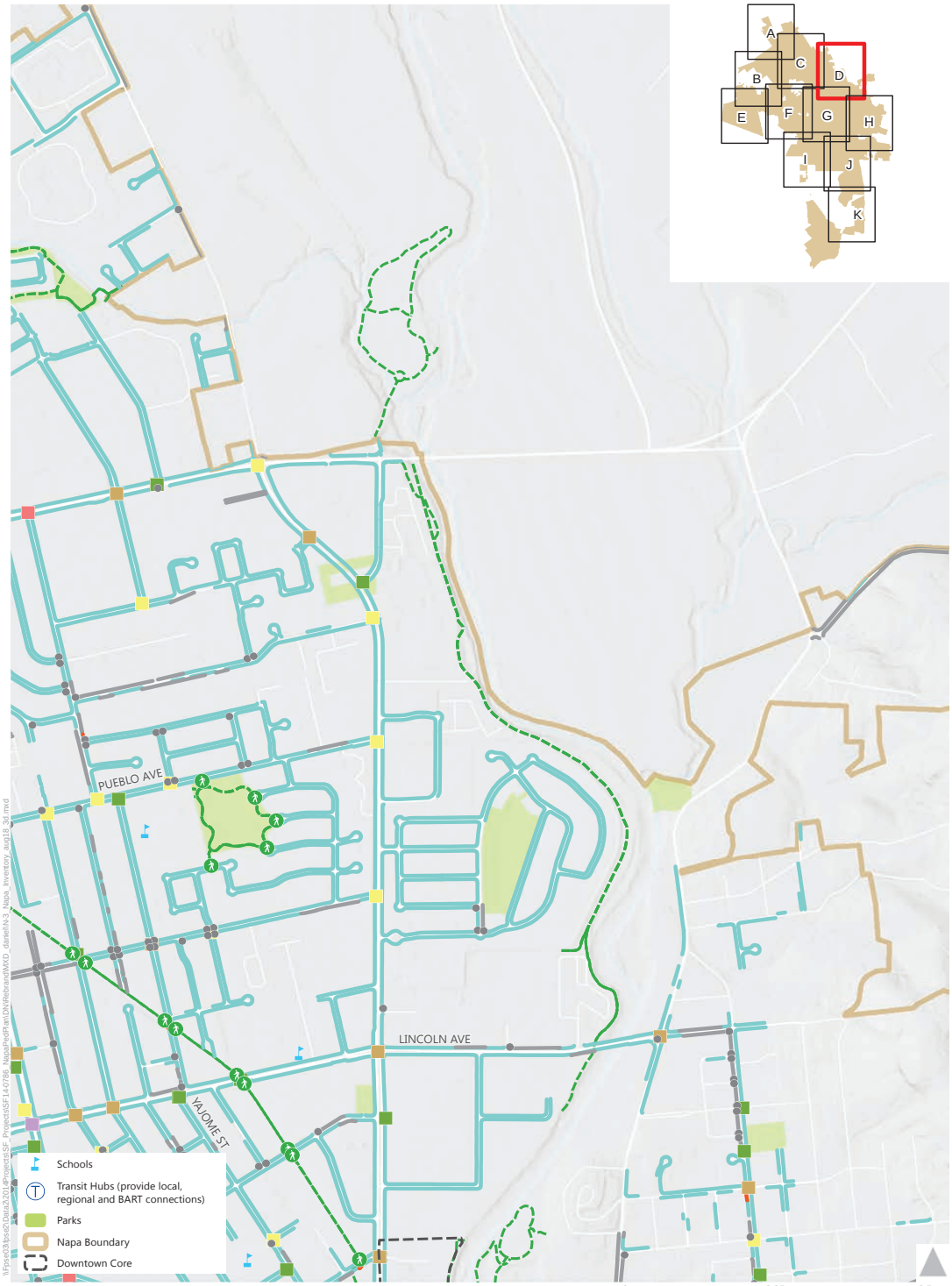
Exhibit N-3c
Pedestrian Facility Inventory
City of Napa



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

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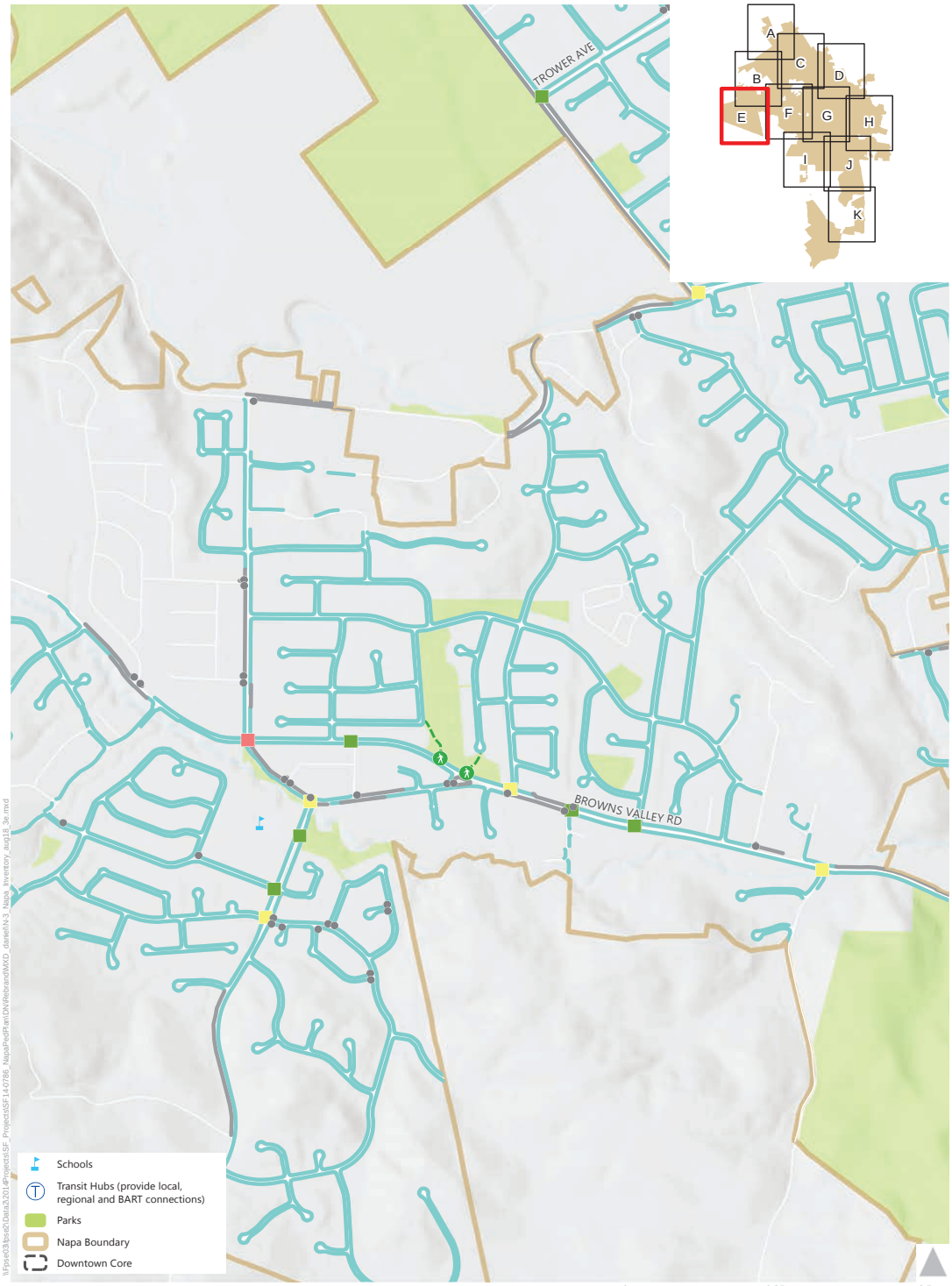
Sidewalk and curb ramp information on this map includes data collected as part of the City of Napa Asset Management efforts. Sidewalk condition is not displayed, only the presence of sidewalk.

Exhibit N-3d
Pedestrian Facility Inventory
City of Napa



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

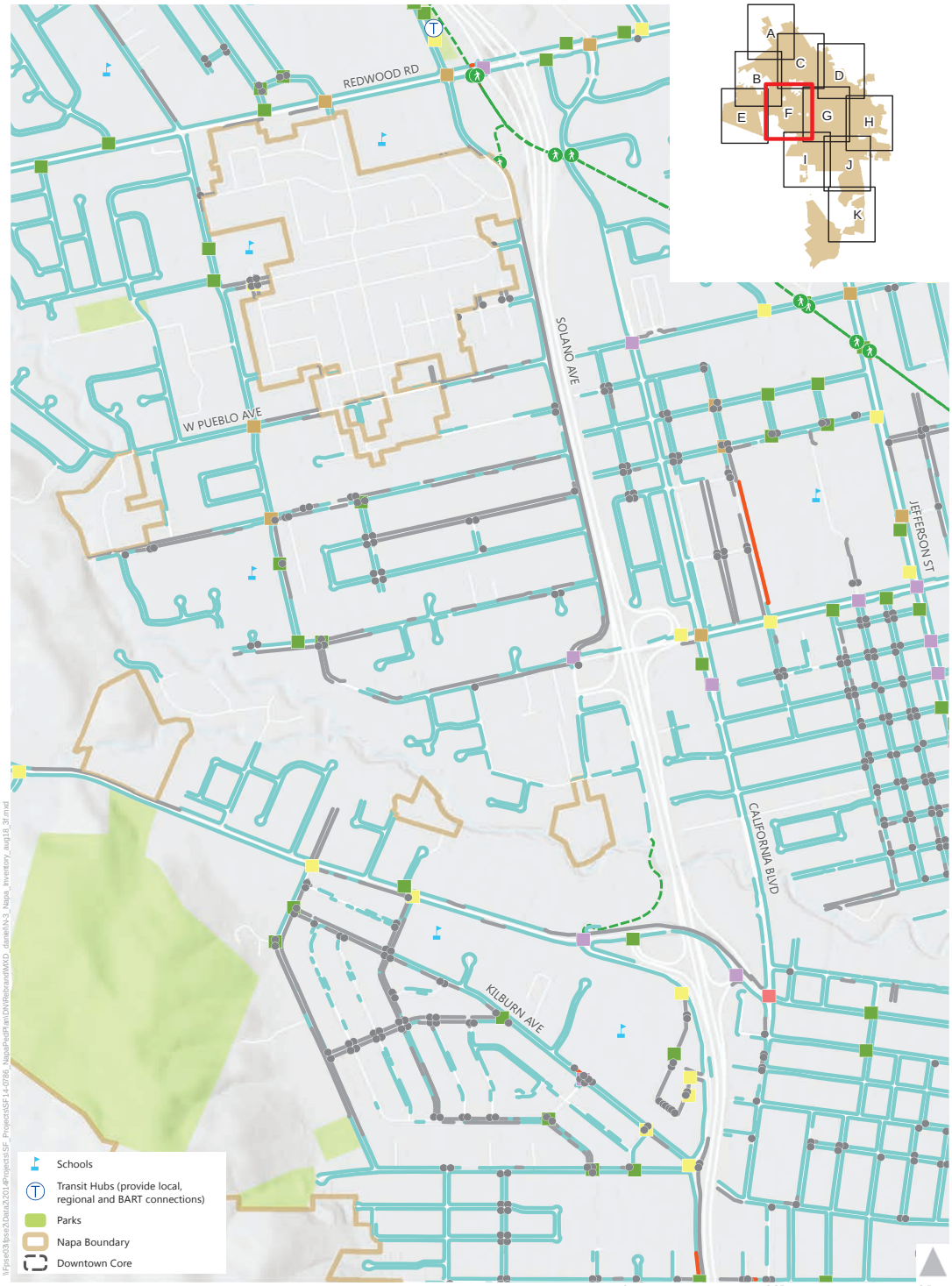
Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

** The intersection of a trail with a roadway, including the beginning or end of a trail.*

Sidewalk and curb ramp information on this map includes data collected as part of the City of Napa Asset Management efforts. Sidewalk condition is not displayed, only the presence of sidewalk.

Exhibit N-3e
Pedestrian Facility Inventory
City of Napa



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

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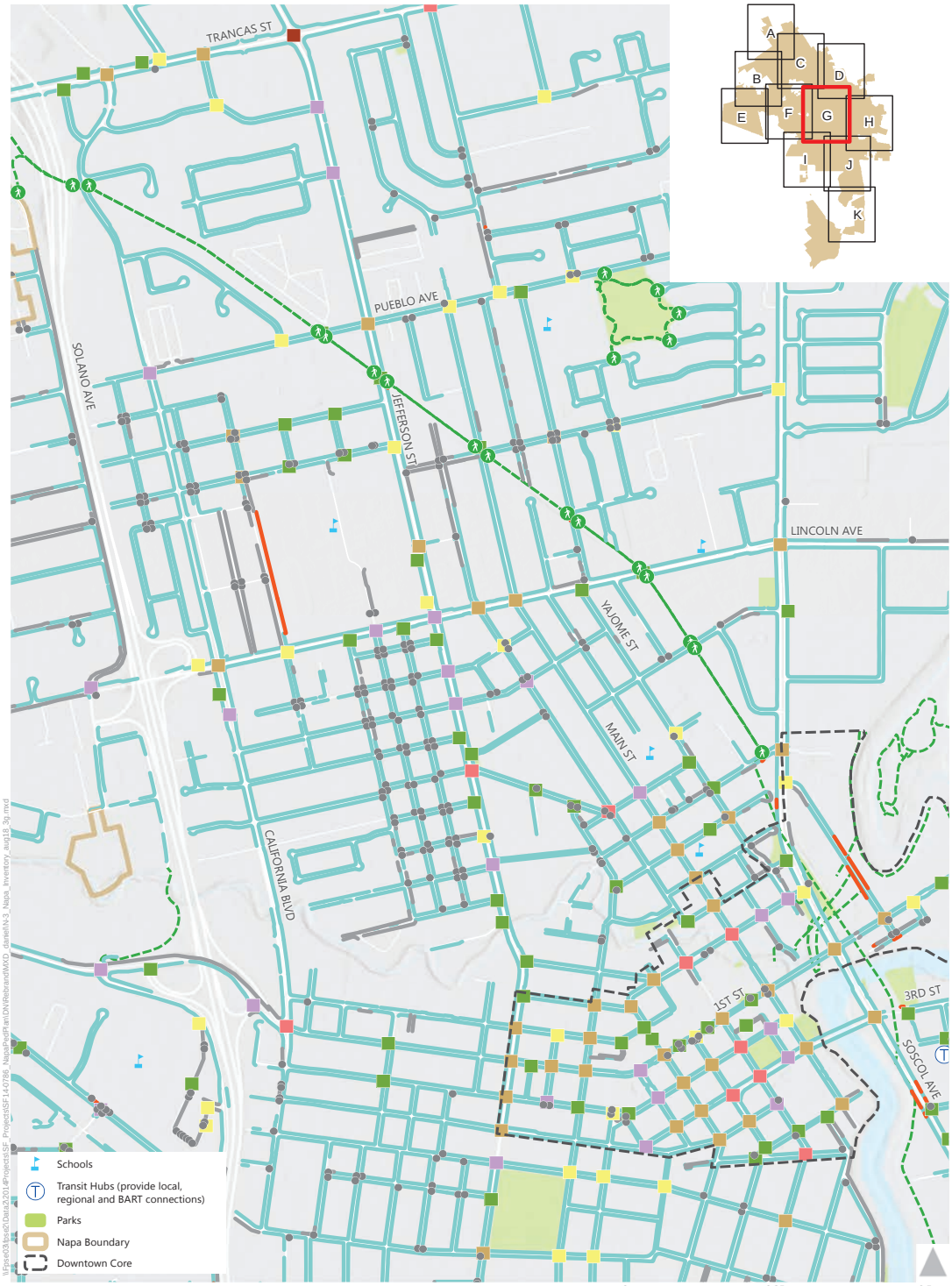
Sidewalk and curb ramp information on this map includes data collected as part of the City of Napa Asset Management efforts. Sidewalk condition is not displayed, only the presence of sidewalk.

Exhibit N-3f
Pedestrian Facility Inventory
City of Napa



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

** The intersection of a trail with a roadway, including the beginning or end of a trail.*

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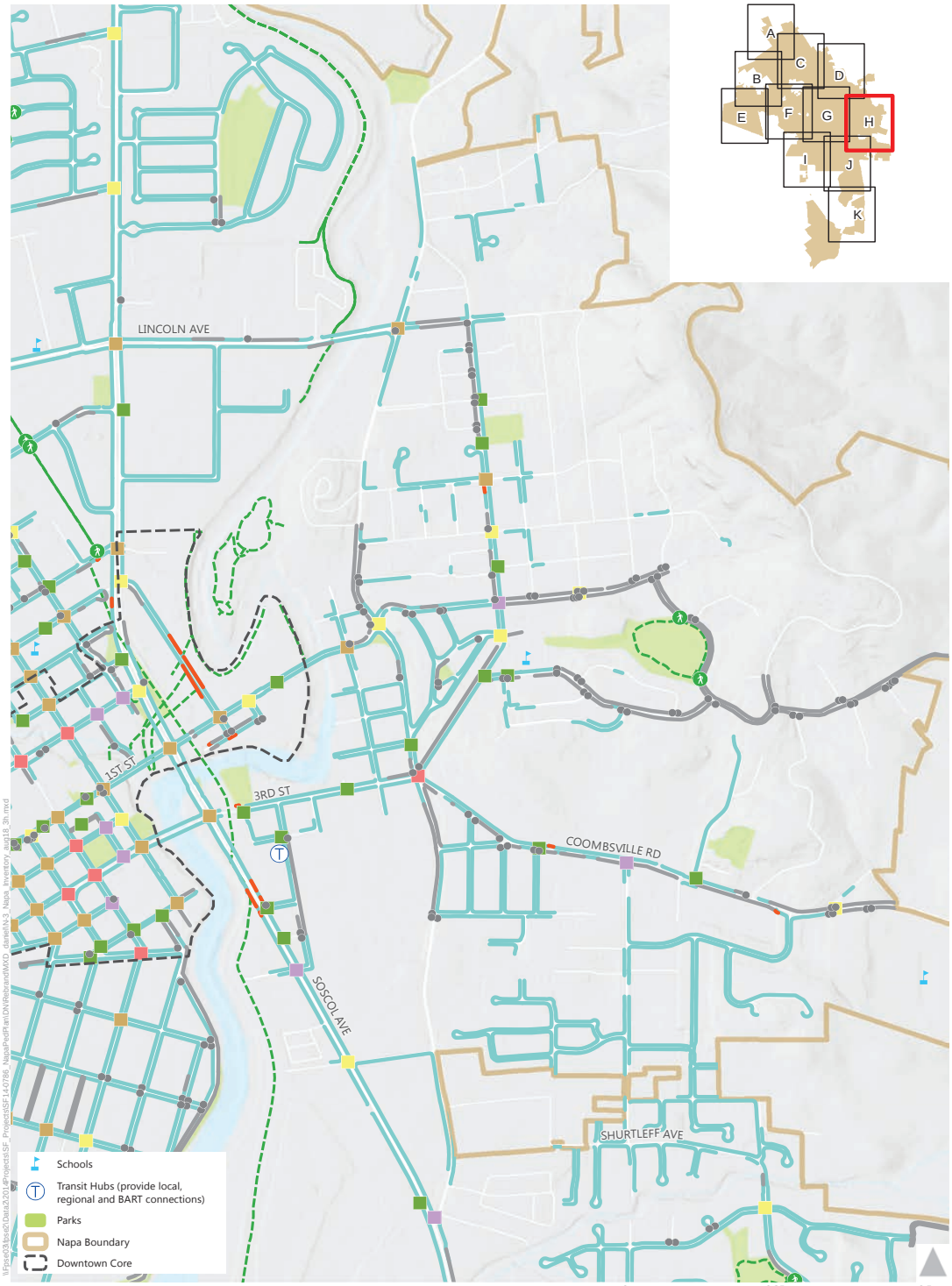
Exhibit N-3g
Pedestrian Facility Inventory
City of Napa



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

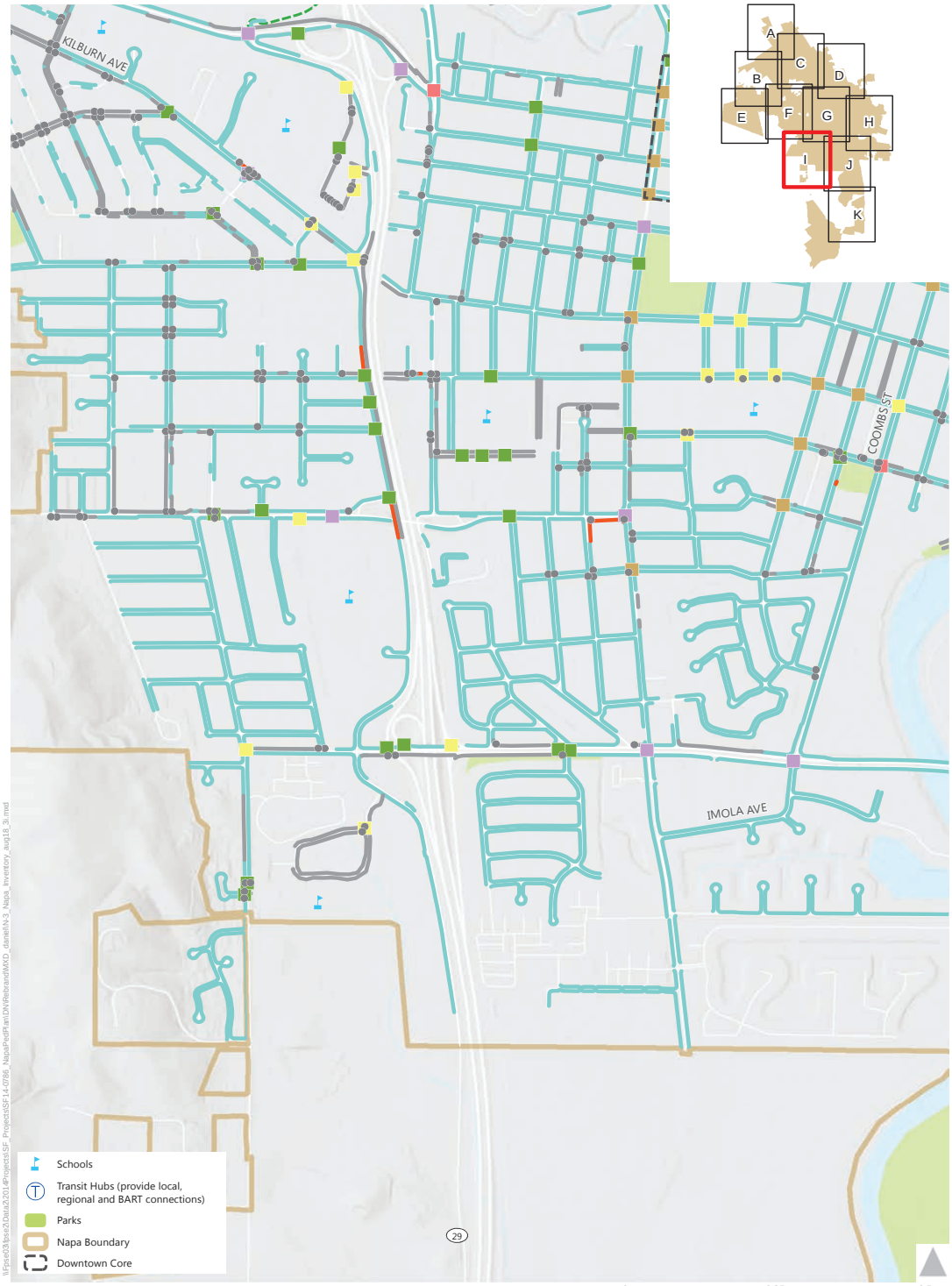
Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

** The intersection of a trail with a roadway, including the beginning or end of a trail.*

Sidewalk and curb ramp information on this map includes data collected as part of the City of Napa Asset Management efforts. Sidewalk condition is not displayed, only the presence of sidewalk.

Exhibit N-3h
Pedestrian Facility Inventory
City of Napa



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

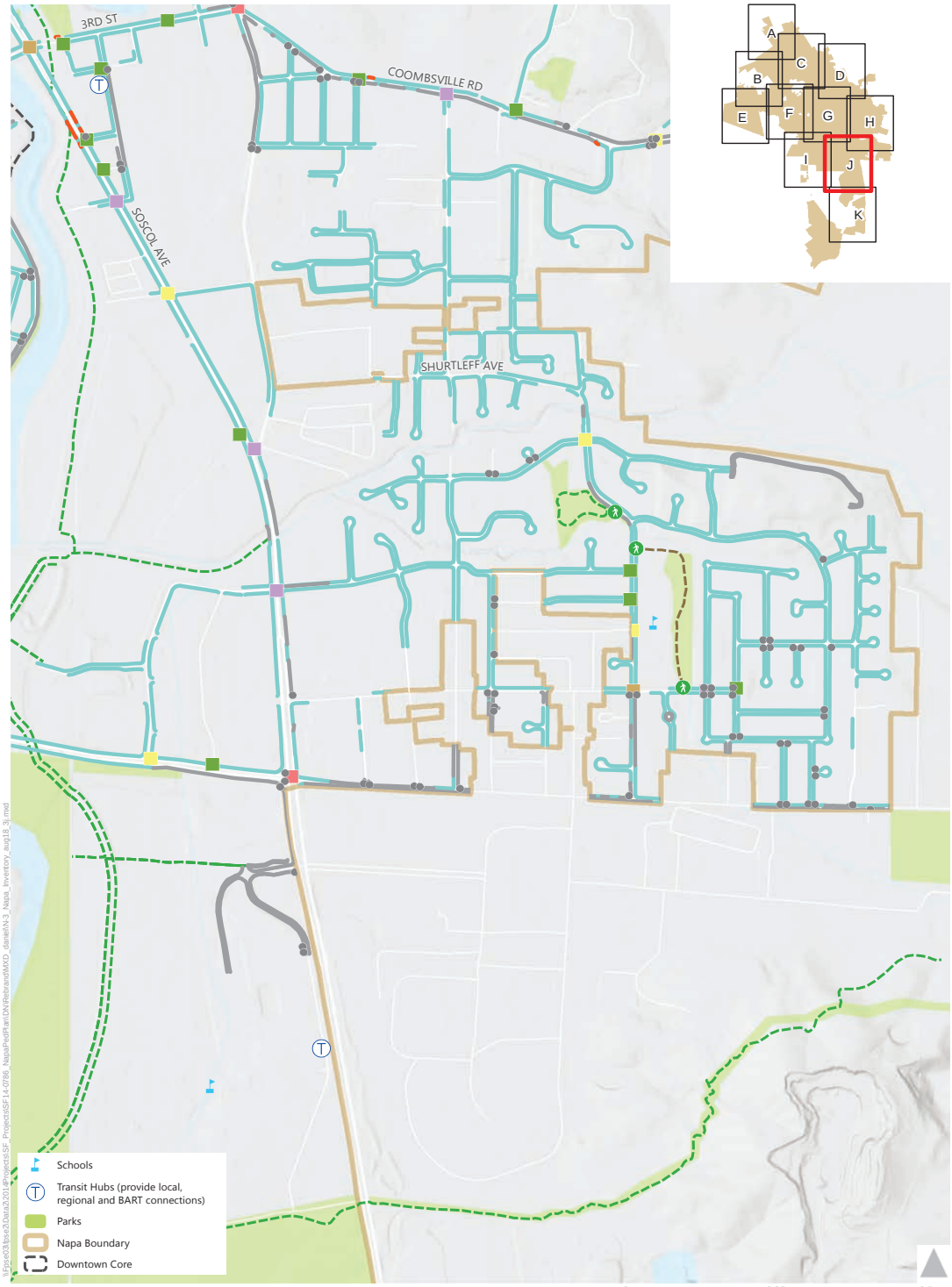
Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

** The intersection of a trail with a roadway, including the beginning or end of a trail.*

Sidewalk and curb ramp information on this map includes data collected as part of the City of Napa Asset Management efforts. Sidewalk condition is not displayed, only the presence of sidewalk.

Exhibit N-3i
Pedestrian Facility Inventory
City of Napa



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

** The intersection of a trail with a roadway, including the beginning or end of a trail.*

Sidewalk and curb ramp information on this map includes data collected as part of the City of Napa Asset Management efforts. Sidewalk condition is not displayed, only the presence of sidewalk.

Exhibit N-3j
Pedestrian Facility Inventory
City of Napa

Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings*

** The intersection of a trail with a roadway, including the beginning or end of a trail.*

Sidewalk and curb ramp information on this map includes data collected as part of the City of Napa Asset Management efforts. Sidewalk condition is not displayed, only the presence of sidewalk.

Exhibit N-3k
Pedestrian Facility Inventory
City of Napa

Activity Levels

Pedestrian counts were conducted at 13 locations throughout Napa in October and November 2015. These locations were selected based on locations of proposed and potential projects in this plan, potential localized safety concerns, expected high levels of walking, and proximity to key pedestrian destinations, including schools and downtown commercial areas. **Table N-2** provides a summary of the two-hour counts completed within the city. Count results varied significantly based on population density of a given neighborhood, as well as by the adjacent land use.

TABLE N-2: COUNT PROGRAM LOCATIONS

ID	Jurisdiction	Location	Morning	Evening	School
			7-9AM	4-6PM	2-4PM
NA1	City of Napa	Browns Valley Road and Westview Drive	26	17	
NA2	City of Napa	First Street and Freeway Drive	67	30	
NA3	City of Napa	Imola Ave and Parrish Road	17	112	
NA4	City of Napa	Jefferson Street and Old Sonoma Road	12	27	
NA5	City of Napa	Jefferson Street and Sierra Avenue	206	43	138
NA6	City of Napa	Salvador Ave and Escuela Drive	34	26	29
NA7	City of Napa	Redwood Road. and Solano Avenue	189	106	194
NA8	City of Napa	Silverado Trail at 3rd Street/Coombsville/ East	24	17	34
NA9	City of Napa	Soscol Avenue and First Street	89	143	
NA10	City of Napa	Imola Avenue and Foster Road	63	34	67
NA11	City of Napa	Soscol Avenue at Kansas Avenue	44	49	
NA12	City of Napa	Soscol Avenue at Imola Avenue	23	117	
NA13	City of Napa	Undercrossing: SR 29 and Napa Creek	7	42	31

Counts were conducted near several schools to gauge the volume of students walking to and from school:

- Vintage High School (NA5)
- Salvador Elementary School (NA6)
- Redwood Middle School (NA7)
- Irene M. Snow Elementary School (NA10)

At the elementary schools, about 30-60 pedestrians were observed during the AM period (7-9 AM) and concurrent with school dismissal (2-4 PM). In contrast, between 140 and 200 pedestrians were observed walking through the selected intersections near Vintage High School and Redwood Middle School.

Two count sites (NA3 and NA12) were selected in close proximity to Napa State Hospital. Both locations observed limited walking during the AM period (less than 30 pedestrians in two hours), yet both recorded over 100 pedestrian crossings during the PM period (4-6 PM).

Pedestrian volumes at the intersection of Redwood Road and Solano Avenue were some of the highest observed of the selected count locations. Volumes were consistently higher than 100 for all three time periods observed, and were close to 200 during the afternoon period of 2-4 PM.

Going forward, NVTA intends to conduct annual counts throughout the County on an annual basis. Counts will primarily be conducted in locations evaluated in the baseline year (2015) to monitor travel trends and the impact of project implementation on pedestrian volumes, as well as justify funding for projects in this plan. With the collected counts, NVTA may compare travel patterns across different locations, measure changes in pedestrian use at a single location over time, and evaluate the extent to which pedestrian travel peaks throughout the course of the day or week. By collecting counts at different times of day, NVTA may evaluate if a given pedestrian facility is typically used for recreational or utilitarian purposes.

In the future, count locations may be added or omitted based on agency priorities, and could include pedestrian-involved collision locations to prioritize improvements in locations based on collision rates (collision/daily pedestrian volume).

Collision Analysis

Collision data was accessed from the California Highway Patrol Statewide Integrate Traffic Records System (SWITRS). This data represents all reported pedestrian-vehicle collisions occurring during the ten-year period from January 2003 to December 2012. During this study period, the City has implemented several improvements such as sidewalk gap closures, bike lanes, and flashing beacons along the Lincoln Avenue, Jefferson Street, and California Boulevard corridors as well as at other locations in the City. Future data collection efforts such as pedestrian counts and collision monitoring in these locations will help determine the success of these projects.

Exhibit N-4 shows the locations of pedestrian collisions from 2003 – 2012 in Napa.

Exhibit N-4 presents raw collision counts only. While this is illustrative of “hot spot” areas in Napa (locations with three or more collisions), another important consideration for identifying safety focus areas can be collisions per pedestrian (or the collision rate). Collision rates (not included in the current analysis because pedestrian volume data is not available citywide) can highlight locations where improvements can be added to ensure a focus on areas that may not have as many people walking (but have high collision rates) in addition to areas with high pedestrian volumes and a high number of collisions.

Hot Spots

As shown in *Exhibit N-4*, reported collisions in Napa from 2003-2012 outside of downtown are concentrated along Lincoln Avenue, Trancas Street, and Jefferson Street. Collision hotspots within the limits of downtown include the intersection of Jefferson Street at Clay Street and Pearl Street at Main Street.

Countywide Demographic and Seasonal Trends

For this plan, a review of collisions countywide included organizing the data by age for children and seniors, and comparing the results across each jurisdiction. Daily and seasonal trends for collision occurrences and primary collision factors were also reviewed countywide. A summary of these results can be found in the *Countywide Walking Trends* chapter of the countywide plan.

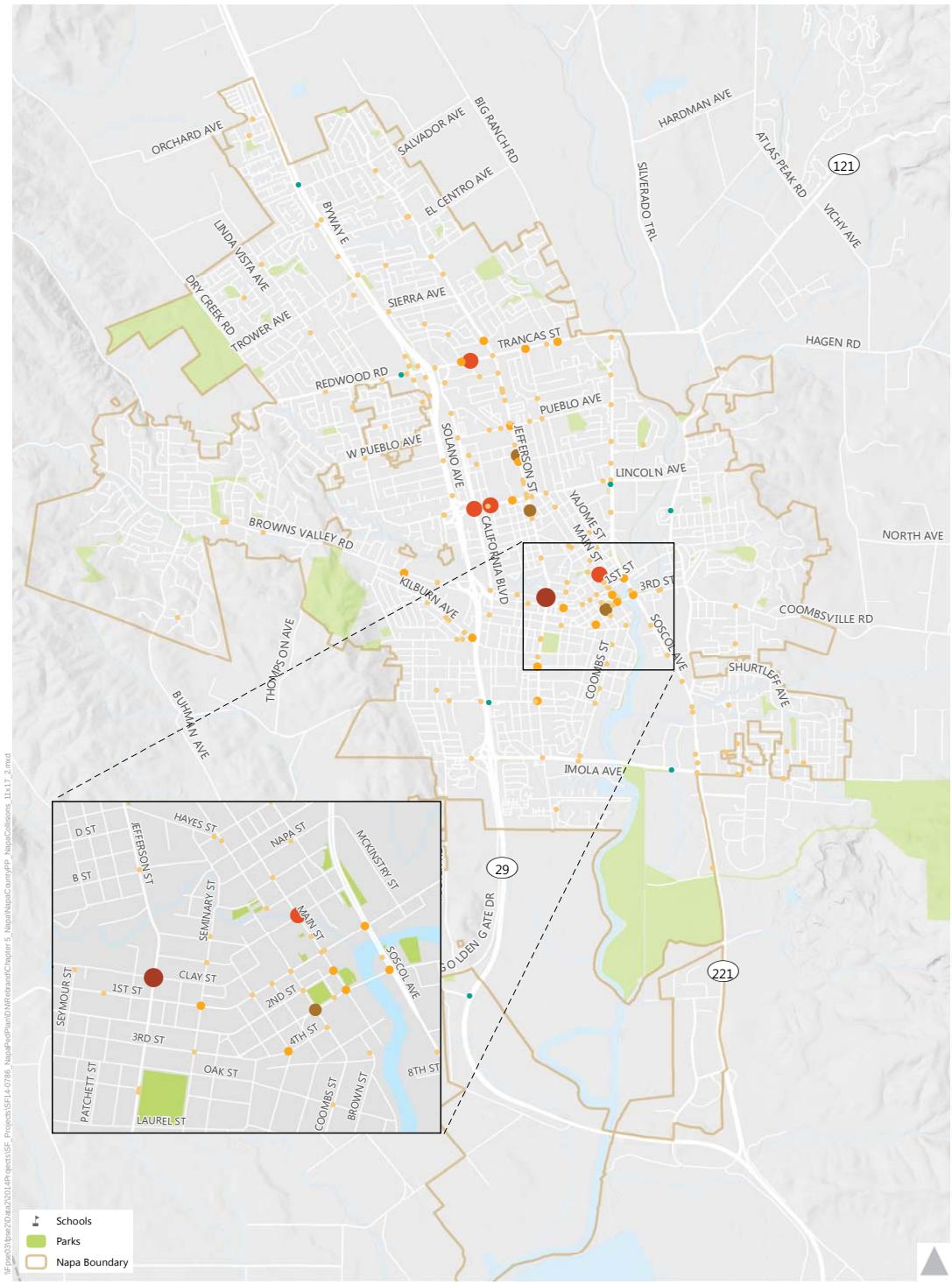
Pedestrian Actions

Perhaps one of the more telling sources of information in the SWITRS data is the Pedestrian Action variable, which describes what the pedestrian was doing immediately before the collision occurred. According to the pedestrian actions presented in **Table N-3** pedestrian safety issues surrounding collisions are typically focused around crossing locations. Systematic review and enhancements of crosswalks may be helpful to enhance safety in this area. Research and best practices on crosswalk enhancements are provided in the Crosswalk Guidelines in **Appendix D** of the Countywide Pedestrian Plan.

TABLE N-3: NAPA COLLISION SUMMARY PEDESTRIAN ACTIONS (2003-2012)

Pedestrian Action	Number of Collisions		
	Injury	Fatality	Total
Crossing in Crosswalk at Intersection	109	1	110
Crossing Not in Crosswalk	61	4	65
Walking In Road, Including Shoulder	38	1	39
Crossing in Crosswalk, Not at Intersection	9	0	9
Walking, Not in Road	8	0	8
Not Stated	3	0	3

Source: SWITRS



Pedestrian-Involved Collisions 2003-2012

- 1
- 2
- 3
- 4 - 5
- 6 - 7

Injury Collisions

- 1 Fatal Collision

Pedestrian Collision Hotspots

Density	Intersection	Total Collisions	Density	Intersection	Total Collisions
	3rd St and Coombs St	3		Lincoln Ave and California Blvd	4
	Jefferson St and H St	3		Trancas St and Claremont Way	4
	Jefferson St and Park Ave	3		Lincoln Ave and Marin St	5
	Main St and Pearl St	4		Jefferson St and Clay St	7

0 0.5 1 Mile

Exhibit N-4
Pedestrian-Involved Collisions
2003 - 2012 City of Napa

Public and Stakeholder Input

Countywide Outreach

Input on plan goals and objectives, current pedestrian issues, and desired locations for improvement was solicited through meetings with jurisdiction staff and key stakeholders, countywide public workshops, and an interactive mapping tool made available online. The goal was to develop a community-supported vision for pedestrian improvements. A summary of all public input received during this process countywide is displayed in **Table N-4**. Connectivity and safety were the key themes across the countywide comments.

TABLE N-4: PUBLIC INPUT RECEIVED

Comment	Comment Type	Percent of Total Comments
Add a sidewalk here	Connectivity	16%
Make it safer to cross the street here	Safety	15%
Make it safer to walk here	Safety	14%
Add a pedestrian pathway	Connectivity	13%
High traffic volume or speed here	Safety / Walkability	8.5%
Pedestrian facilities need maintenance here	Walkability	4.5%
Barrier for persons with disabilities here	Accessibility	2%
Other (Add your own idea)		27%

Source: Fehr & Peers, 2015

Examples of the comments that were categorized as “other” in Napa are included in the Station One narrative below.

Public Workshops

Ongoing public outreach and participation was an integral element in developing the Countywide Pedestrian Plan. Public workshops were advertised on NVTA’s website, as well as via local media including the newspaper and radio. Invitations to the public workshops were also sent to local stakeholders, including senior centers, mobility impaired groups, advisory committees and local non-profit groups. The goal of the workshops was to identify public concerns and opportunity areas to inform focus areas, educate the stakeholders, and solicit feedback on the plan vision and goals.

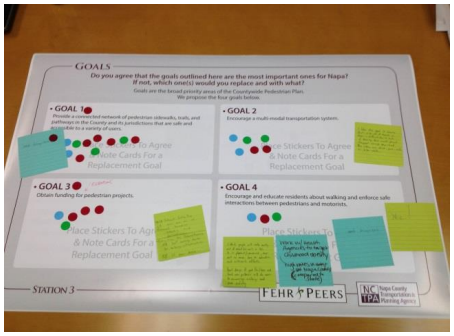
Public workshops were held throughout the County in Winter 2015: in Napa on January 22 at NVTA; in Yountville on January 27; in St. Helena on January 28; and in American Canyon on February 4. Due to recent public workshops held in Calistoga through development of their Active Transportation Plan in 2014, workshops were not held in the city. All workshops were open to all members of the public countywide. Photos of workshop posters are included in **Appendix A** of the countywide plan.

The format for each public workshop was the same and consisted of four stations:

- **Station One: Issues/Opportunities**

  At Station One, participants voted on a list of common barriers to walking to indicate which issues were most relevant to the walking environment in their jurisdiction and countywide. Participants also wrote comments on large-scale aerial maps placed on tables or on the floor to highlight existing perceived barriers to pedestrian travel and locations where improvements were desired. Suggested comments included "Make it safer to cross the street here" or "High traffic volume or speed here". Comments were mapped in GIS after the workshops to visualize the areas of reported pedestrian needs and were used as one of many inputs to inform the decision for recommended improvements in this plan. The results of this mapping exercise included just fewer than 80 comments in the City of Napa, and results are shown in *Exhibit N-5*. Comments were grouped into six categories, including a miscellaneous category "Add your own idea". This category was used for comments that did not fall into any of the major themes shown in Table N-4. Examples of these miscellaneous comments included suggestions for specific treatments such as sidewalk widening, stop signs, or landscaped medians as well as general comments to improve corridors or opportunities to improve pedestrian facilities along the Napa River. All public comments were considered in the process to choose focus areas for the Plan, discussed under *Opportunity Areas* in this plan, and when identifying candidate pedestrian improvements.
- **Station Two: Best Practices Toolbox**

  Station Two was an informative station that displayed examples of best practices for pedestrian treatments frequently used in pedestrian planning efforts. Treatments included sidewalk buffers, intersection features, crosswalk enhancements, as well as signal and striping modifications.
- **Station Three: Goals Visioning**

  At Station Three, participants had the opportunity to weigh in on draft goals for the plan and write their own vision statement. Conflicting desires related to transportation were also presented on either end of the scale and participants were asked to place stickers where they thought the balance should be struck. Tradeoffs included ease of walking compared to ease of driving and creating a comprehensive pedestrian network compared to improved transit service. This information is valuable to determine where the public would like resources to be focused.
- **Station 4: Collision Maps**

  Station Four was an informative station that displayed the collision maps shown in this plan.

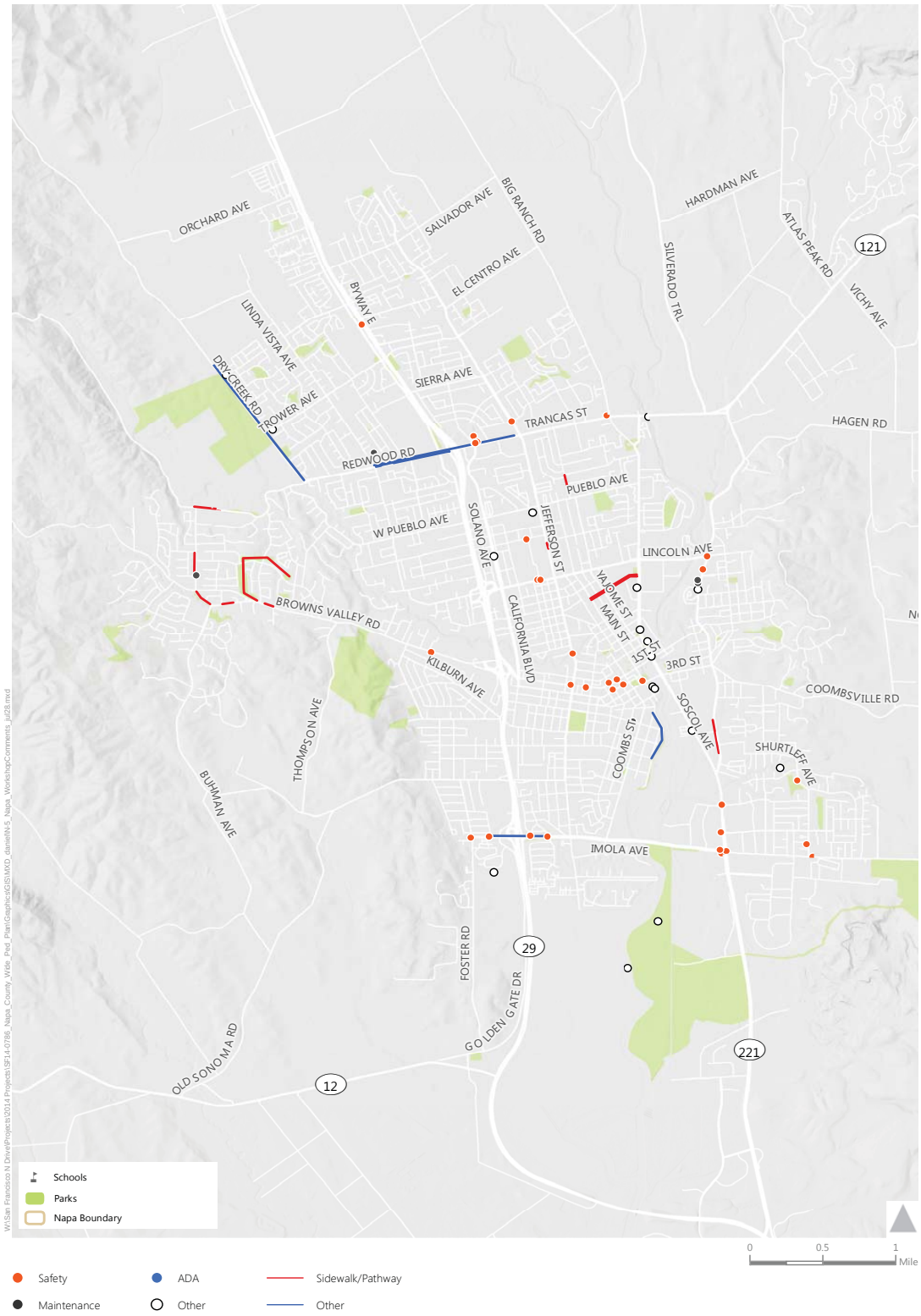
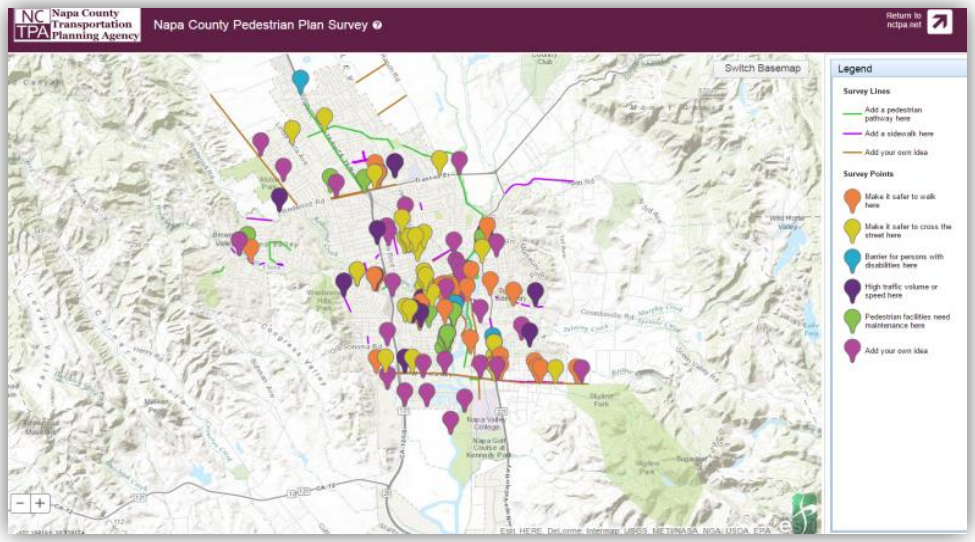


Exhibit N-5
Workshop Comments
City of Napa

Online Survey Mapping Tool

Napa County residents, employees, and visitors who wanted to provide input but were unable or did not wish to attend the public workshops had the option of submitting their comments online through an interactive mapping tool. Users placed pins on the maps to highlight desired improvements using pre-set comments or creating their own comment. Preset comments included:

- Make it safer to walk here
- Make it safer to cross the street here
- Barrier for persons with disabilities here
- High traffic volume or speed here
- Pedestrian facilities need maintenance here
- Add a sidewalk here
- Add a pedestrian pathway here



Results from the 70 comments submitted countywide are shown in *Exhibit 2* of the countywide plan.

Napa-Specific Focus Groups

At the outset of the plan development process, meetings were held with key staff from Napa to initiate the planning process on December 17, 2014.

This meeting included a discussion of existing programs, policies and practices. Key strengths, enhancements, and opportunity areas are provided in the benchmarking summary table in **Appendix N-A**.

Jurisdiction staff also provided input during the initial benchmarking meeting and at the public workshops on key areas where pedestrian improvements are planned and in some cases, where connections and safety improvements are desired. This input was used to inform potential opportunities for walking audit routes, as well as discussed along with the facility inventory maps under the *Existing Pedestrian Infrastructure* section of this plan.

Additional focus group meetings were held for the Napa walking audit on May 18, 2015, and to review the list of suggested pedestrian projects on September 18, 2015.

Perceived barriers

As shown in **Table N-4**, connectivity and safety are two of the top pedestrian issues identified from the public. To geographically visualize the safety-related public comments received during the outreach process in Napa, a heat map was created, shown in Exhibit N-6. This map is intended to represent perceived barriers to walking. The locations shown may be under-represented in the collision data due to under-reporting of SWITRS data[5] or fewer people walking as a result of these perceived issues. The map may help supplement collision data to identify locations where near misses or other safety-related issues may be present.

[5] Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113

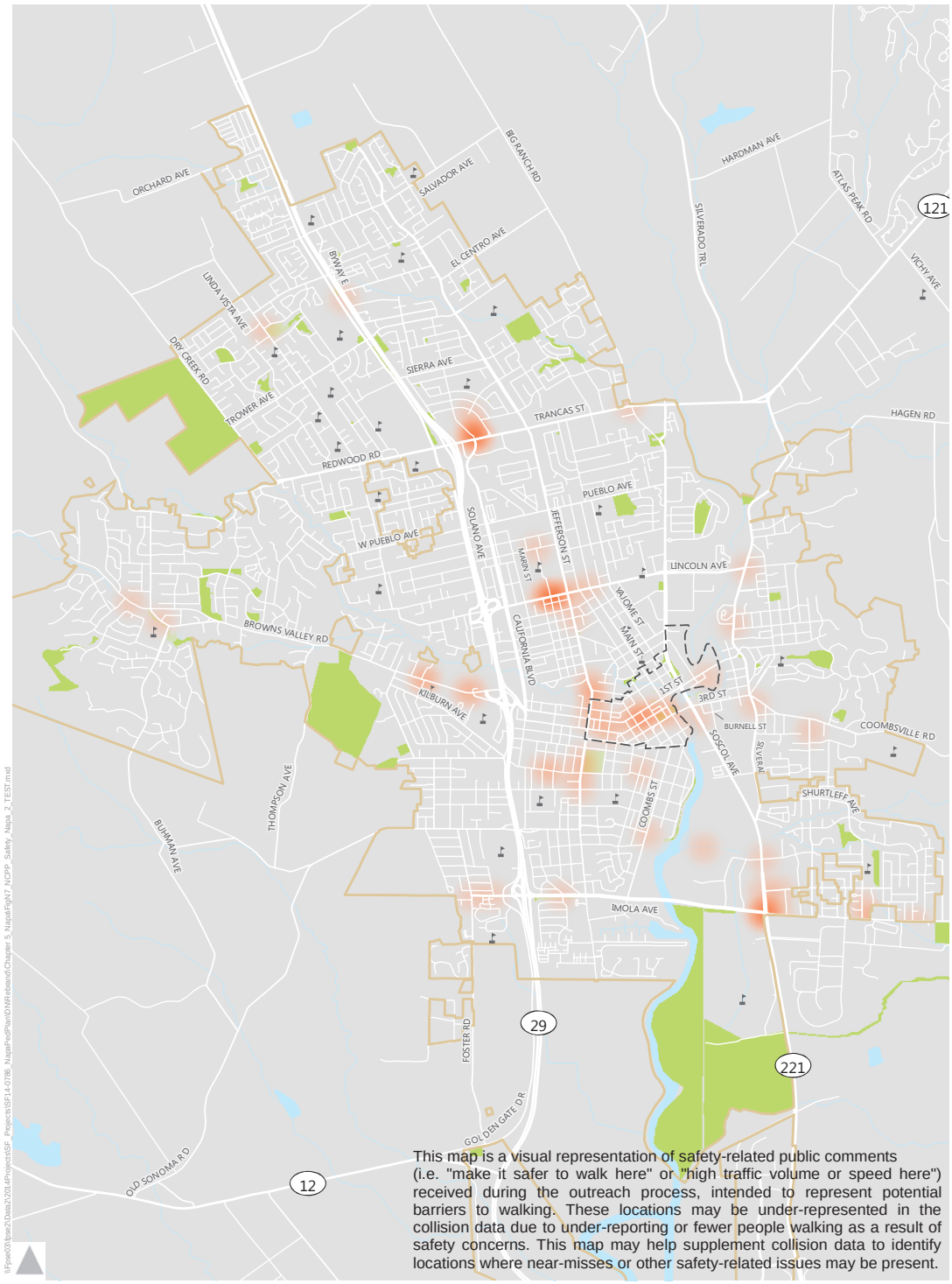


Exhibit N-6
Perceived Barriers: As Visualized by Safety-Related Public Comments
City of Napa

Opportunity Areas

Napa's historic street grid network downtown, expanding trail system, numerous shopping and dining options and beautiful riverfront create many enjoyable places to walk. The city has identified numerous projects as part of the Countywide Transportation Plan that will improve pedestrian mobility and connectivity and this plan expands on those efforts by developing a list of additional recommended pedestrian facilities within key focus areas of the city and referencing those that have been developed by other plans. Initial suggested focus areas for the plan were developed using a data-driven GIS process that evaluates several factors related to the built environment and demographics that affect the propensity to walk. This process, called the "Ped INDEX", was adapted by work done by the US Environmental Protection Agency (EPA) has been used in several plans in the Bay Area to map the qualitative likelihood of demand for pedestrian activity.

Ped INDEX

The main factors used in the Ped INDEX are population density, land use mix, presence of schools or parks, intersection density, location of downtown commercial areas, and age. These factors resulted in a "heat map" which displays an estimate for relative pedestrian demand on the streets throughout the City of Napa. More detail on the Ped INDEX methodology and results as well potential applications can be found in **Appendix B** of the countywide plan.

To balance high pedestrian demand areas with key areas of need in Napa, additional data layers were used to display pedestrian deficiencies. These include gaps in sidewalk and reported pedestrian-involved collisions. In general, places with high pedestrian demand and a high infrastructure need are shown as target areas that could be prioritized for pedestrian improvements. The resulting heat map with overlaid demand and deficiencies is shown in *Exhibit N-7*.

As illustrated on *Exhibit N-7*, Ped INDEX focus locations (areas with high potential for pedestrian demand) include the downtown core, Redwood Road near Solano Avenue, Trancas Street to the east and west of Jefferson Street, areas along Lincoln Avenue and Jefferson Street near Napa High School, and neighborhood pockets near Phillips Charter School and Imola Avenue. After reviewing the locations of comments received during public outreach and the alignment with focus locations on the Ped INDEX maps, potential walking audit routes were recommended to city staff:

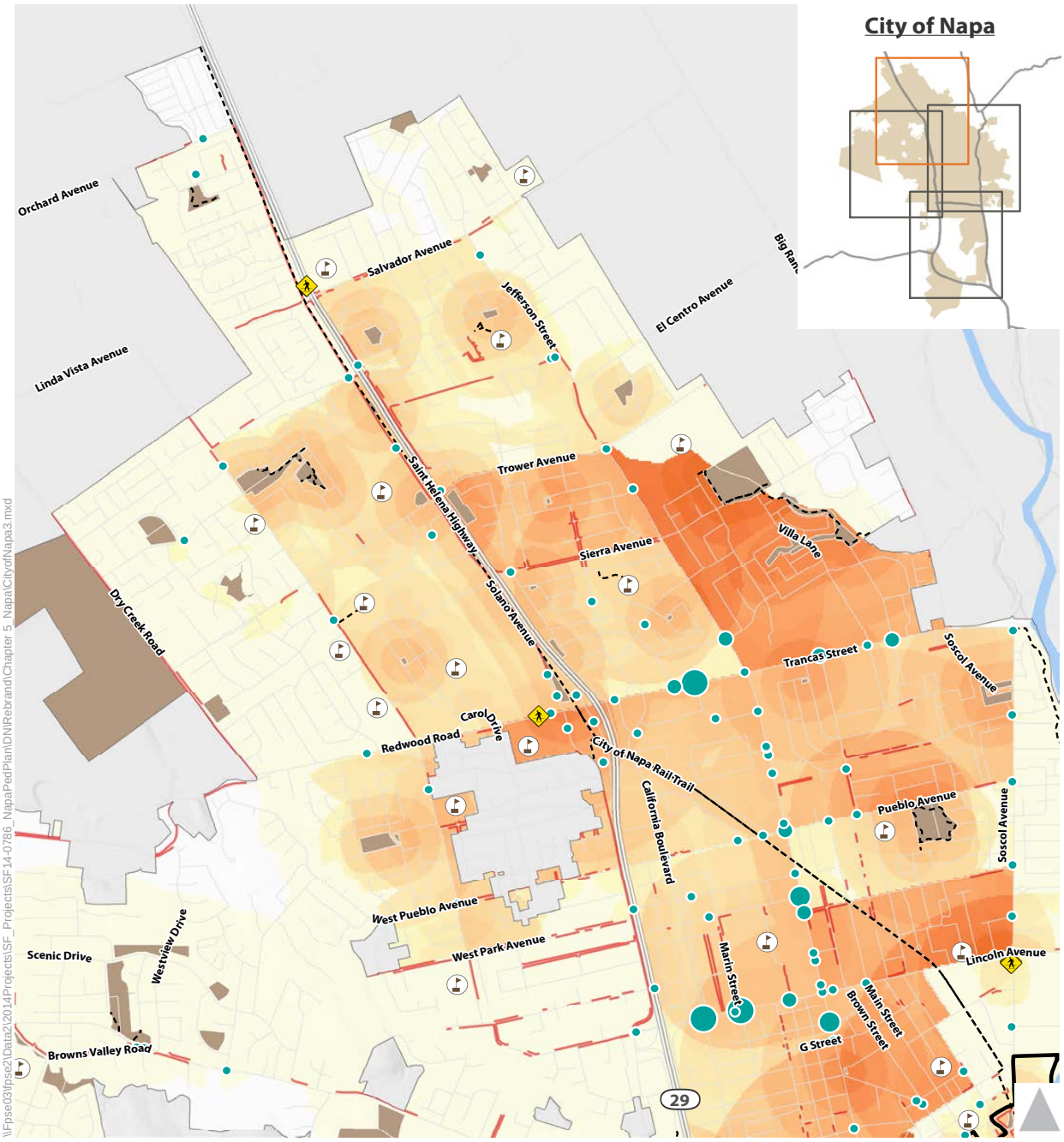
- **Imola Corridor**: Imola Avenue from Coombs Street to Patton Avenue (1.75 miles)
  Imola Corridor is a priority corridor for the city and sidewalk improvements are included on the CTP Project list. Walking audits were completed on July 30 2014 to identify issues, although visual aid graphics were not completed as a result. This potential walking audit was suggested to coordinate with any existing plans for the corridor and help identify additional traffic calming and crossing improvements, with an expanded group of stakeholders.

- **Jefferson Street:** Jefferson Street from Pine Street to B Street (.8 miles)
  This roadway received several public comments between Pine Street and A Street regarding the desire for crossing improvements at several intersections north of 2nd Street and the concern of high vehicle speeds along Fuller Park. This potential walking audit route was suggested to overlap with multiple pedestrian collision "hot spots" within the past ten years, including seven at Jefferson Street and Clay Streets, three between Laurel Street and Pine Street, and two at Jefferson Street and Stockton Street. The street is also adjacent to downtown and serves as a vital north-south connection from the neighborhoods to the south.
- **Lincoln Avenue:** Lincoln Avenue from Jefferson Street to California Boulevard (.35 miles)
  This corridor has several pedestrian collision "hot spots" in the last 10 years, including five at Lincoln Avenue and Marin Street, four at Lincoln Avenue and California Boulevard, and 6 near Jefferson Street and Lincoln Avenue. This stretch of Lincoln Avenue also overlaps with several public comments requesting improved crossings of Lincoln Avenue between Jefferson Street and York Street, adjacent to Napa High School.
- **Redwood Road / Trancas Street:** Redwood Road / Trancas Street from Redwood Retirement Living to Beard Road – 1.1 miles
  Redwood Road/Trancas Street was a topic of conversation at the public workshop, especially near the Bel Aire Plaza. Several attendees reported walking along Redwood Road to access the shopping center, and requested sidewalk improvements along the corridor as well as crossing improvements at the shopping center entrance and within the shopping center itself. The intersection of Trancas Street and Claremont Way had four reported pedestrian collisions in the last 10 years, and 5 additional pedestrian collisions have been reported along the roadway near the hospital and 3 just west of SR 29.

Downtown was not included in the suggested walking audits because the area was recently studied with the Downtown Specific Plan (2014); however, candidate locations for a future walk audit downtown that aligns with several public comments and pedestrian-involved collisions, include 1st Street, 2nd Street, Main Street, Franklin Street, and Coombs Street, to total .75 miles.

After discussions with city staff regarding candidate locations, it was determined that the Imola Avenue corridor would not be the best use of time and study because walking audits and stakeholder recommendations were recently completed along the corridor. A combination of the above recommended focus areas, to maximize the distance that could be feasibly studied during a half-day walking audit, for a total of approximately one and a half miles, was chosen for study:

- Jefferson Street from B Street to Old Sonoma Road
- Redwood Road from Linda Vista Avenue to Solano Avenue



Demand:

Pedestrian Index Score

High – Low

Deficiencies:

Pedestrian Collisions (Injuries)

1 2 3 4-5

Pedestrian Fatality

Missing Sidewalks

Legend:

Downtown

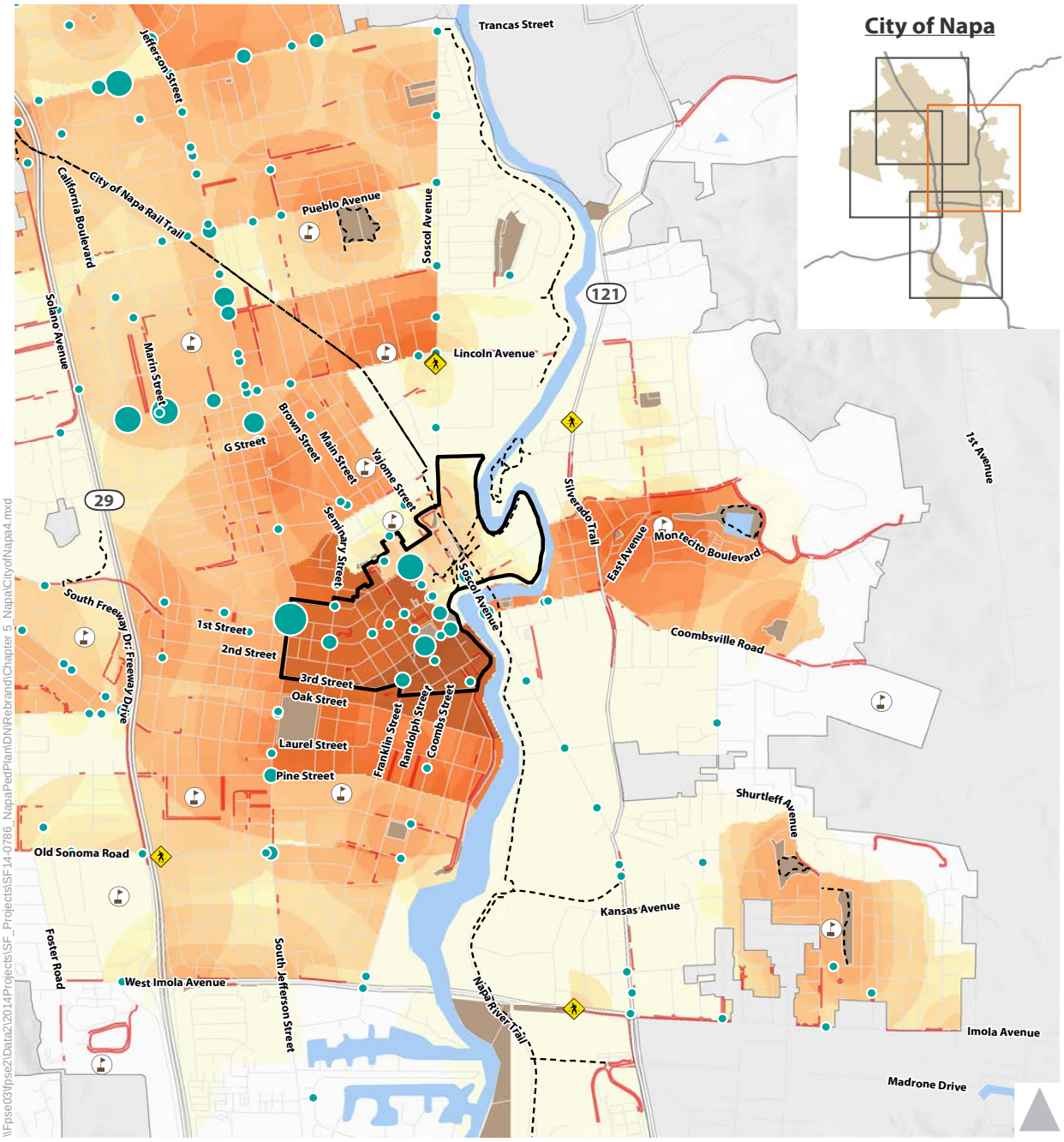
Parks

Trail/Path

School

Exhibit N-7a

North Napa - Pedestrian Index
Demand & Deficiencies



Demand:

Pedestrian Index Score

High – Low

Deficiencies:

Pedestrian Collisions (Injuries)

1 2 3 4-5 6-7

Pedestrian Fatality

Missing Sidewalks

Legend:

Downtown

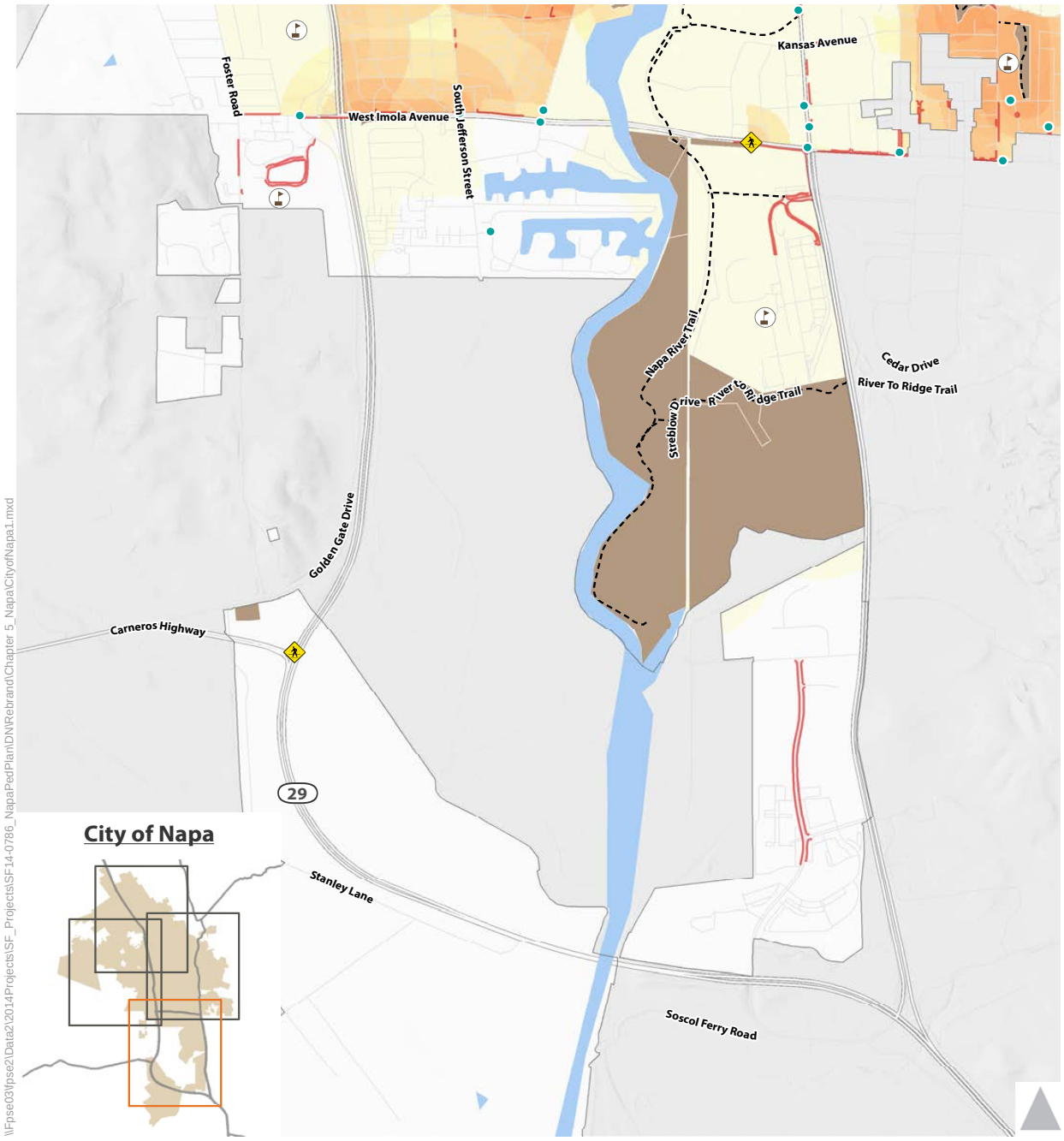
Parks

Trail/Path

School

Exhibit N-7b

East Napa - Pedestrian Index Demand & Deficiencies



Demand:

Pedestrian Index Score

High – Low

Deficiencies:

Pedestrian Collisions (Injuries)

1

Pedestrian Fatality

Missing Sidewalks

Legend:

Downtown

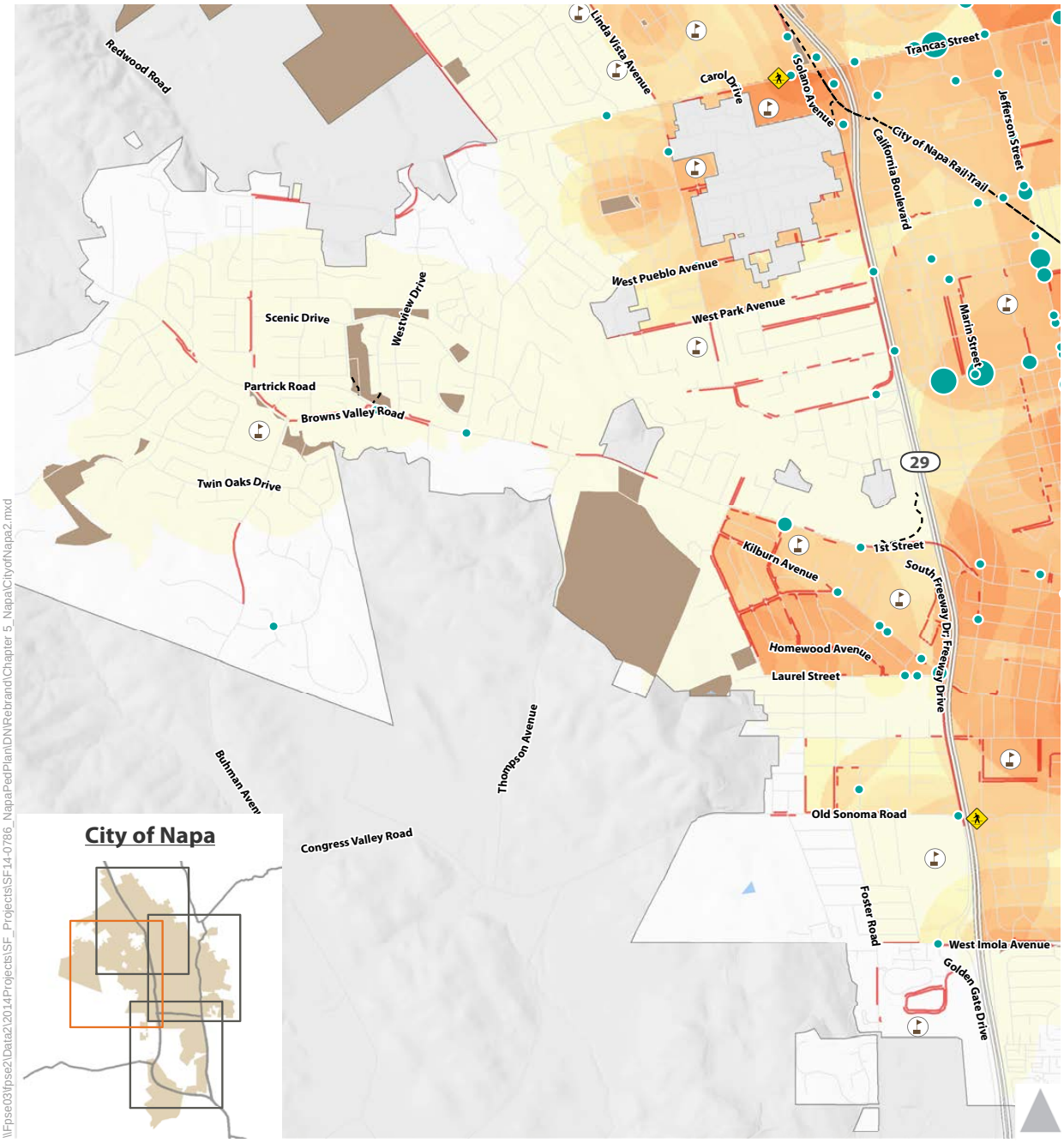
Parks

Trail/Path

School

Exhibit N-7c

South Napa - Pedestrian Index Demand & Deficiencies



Demand:

Pedestrian Index Score

High – Low

Deficiencies:

Pedestrian Collisions (Injuries)

1 2 3 4-5

Pedestrian Fatality

Missing Sidewalks

Legend:

Downtown

Parks

Trail/Path

School

Exhibit N-7d

West Napa - Pedestrian Index
Demand & Deficiencies

Project Development and Evaluation

An important outcome of this plan is the designation of a project list and a set of evaluation criterion. The project list was assembled based on:

- Results of the Walking Audit conducted for the plan
- Projects recommended through related planning efforts, such as the Countywide Transportation Plan (CTP)
- Conversations with staff and stakeholders regarding other local priorities

Walking Audits

Walking audits were conducted in May 2015 to observe field conditions and brainstorm potential ideas for improvement with the following stakeholders:

- Julie Lucido, Senior Civil Engineer
- Lorien Clark, Transportation Planner
- Michael Walker, Senior Planner
- Joel King, NVTA ATAC

During the walking audits, visual surveys were conducted to observe physical characteristics and conditions of the pedestrian environment as well as the connectivity and continuity of the surrounding pedestrian network. A debrief was held afterwards with the group to discuss observations and potential enhancements.

Project List and Map

Pedestrian projects developed by the city during the efforts for the CTP or similar, recent efforts are shown on *Exhibit N-8*. Potential enhancements discussed during the Pedestrian Plan walking audits are shown in *Exhibit N-9*.

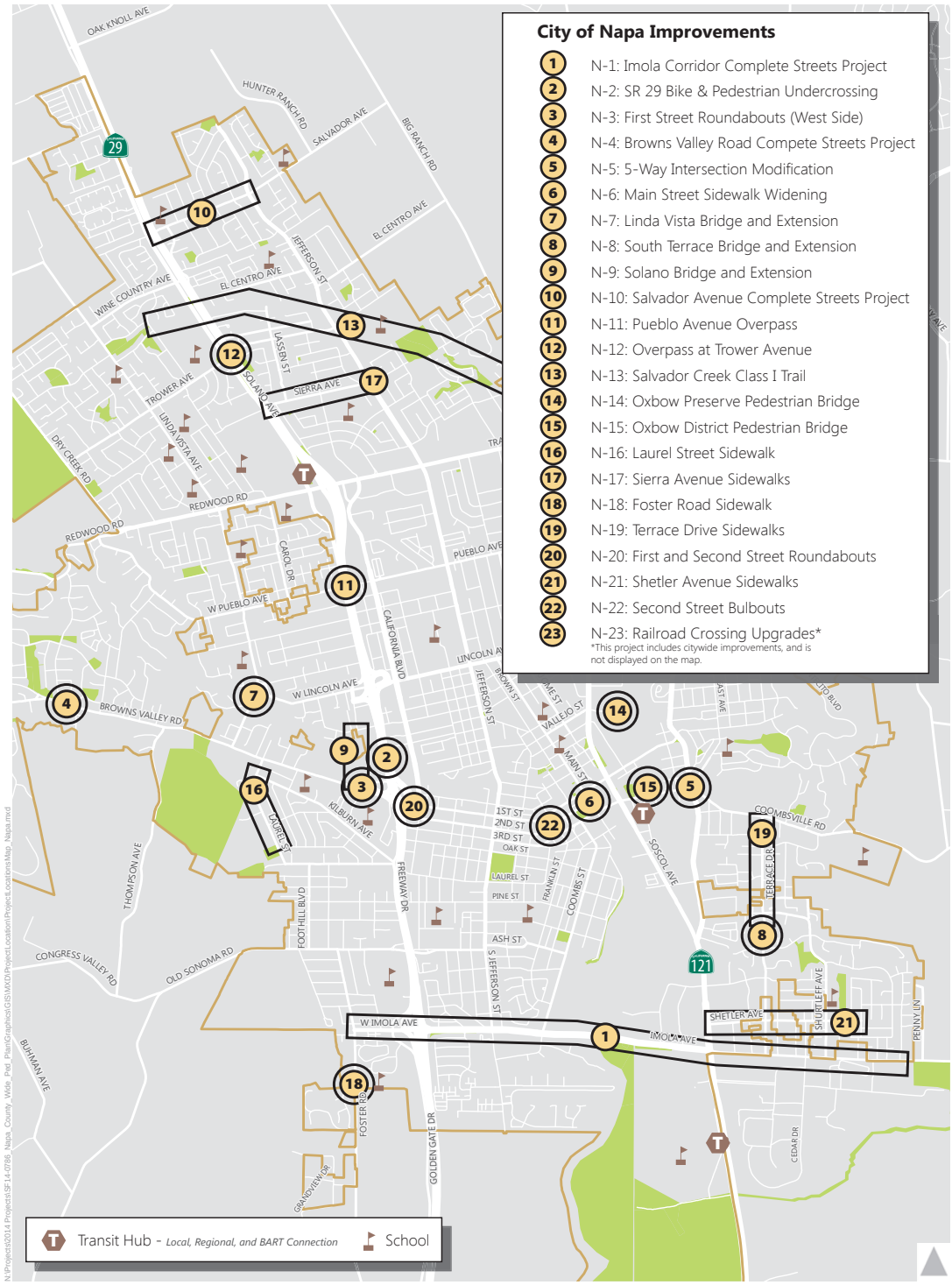


Exhibit N-8
City of Napa - Project Locations

Exhibit N-9

City of Napa - Walk Audit Potential Enhancements

Project Benefits

Existing funding for pedestrian facilities is limited and cannot successfully cover more than a fraction of the recommendations in this plan. Available regional, state and federal funding sources and grant cycles are highly competitive among worthy projects and other jurisdictions. By using a set of consistent metrics Citywide, city staff can determine the relevance of projects for specific funding sources and weigh the benefits of eligible projects as funding opportunities arise. The proposed projects and potential enhancements in this plan were preliminarily evaluated in Napa according to:

- Local support
- Safety enhancements
- Proximity to transit
- Proximity to schools
- Connectivity, including sidewalk gap and trail connections

These criteria and the metrics used to define them are described in more detail in **Appendix N-C**. A summary of each pedestrian improvement project and recommendations from the walking audits are shown in **Table N-5** below. Detailed descriptions of the improvements and evaluation results can be found in **Appendix N-C.**

Funded or Constructed Projects

A southbound bus stop on Jefferson Street was recently relocated from Calistoga Avenue to B Street, improving motorists' visibility of pedestrians crossing Jefferson Street to access the bus stop. Additionally, the City of Napa has recently installed several Rectangular Rapid Flashing Beacons at multiple crosswalks around the city.

On-Going Maintenance, Planned Projects and Potential Enhancements

The City of Napa manages on-going maintenance needs of the pedestrian network citywide, often due to buckling sidewalks from root damage and other requests from the community. Due to limited funding and the desire to balance the needs of all users with available resources, the city focuses on maintaining and expanding the existing sidewalk network. The city has also identified several other projects as part of the CTP, shown in **Table N-5**. Sidewalk gap closure projects are an important enhancement to pedestrian mobility, and several sidewalk projects are included as part of the city's planned project list below. Several sidewalk gaps were noted during the walking audits for this plan, many of which presented engineering and cost challenges due to right-of-way constraints or significant utility conflicts. Walking audit recommendations represent potential improvements to the study locations, and could serve as examples to consider in other areas of the city, based on local priorities. Several potential enhancements developed during the walking audits along Redwood Road and Jefferson Street present potential opportunities for coordination with CTP projects and thus efficiencies in funding and implementation.

TABLE N-5: NAPA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost[3]**
ON-GOING SYSTEM MAINTENANCE AND GAP CLOSURE				
Sidewalk Gap Closure and Maintenance (No. 18 CTP Program)	Citywide	Sidewalk maintenance, rehabilitation, and expansion	Sidewalks Maintenance	$$$
CTP OR PRIOR PLANNED PROJECTS				
N-1 Imola Corridor Bicycle and Pedestrian Improvements (No. 12 Constrained CTP Project)	Imola Avenue from Foster Road to Eastern city limits	Sidewalks and bicycle facilities	Sidewalks Pathway	$6,500,000
N-2 SR 29 Bike & Pedestrian Undercrossing (No. 14 Constrained CTP Project)	North Bank of Napa Creek, under SR 29 at approximately post mile 11.67	Bicycle and pedestrian undercrossing	Pathway	$850,000
N-3 First Street Roundabouts (West Side) (No. 16 Constrained CTP Project)	First Street at Freeway Drive and at SR 29 Southbound Ramps	Roundabouts	Traffic Calming	$8,500,000
N-4 Browns Valley Road Complete Streets Project (No. 17 Constrained CTP Project)	Browns Valley Road from Westview Drive to McCormick Lane	Widening to provide sidewalks and bike lanes	Sidewalks	$3,500,000
N-5 5-Way Intersection Modification (No. 18 Constrained CTP Project)	Silverado Trail at 3rd Street / Coombsville Road / East Avenue	Intersection alignment and crossing enhancements	Crossing treatments	$8,500,000

TABLE N-5: NAPA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost[3]**
N-6 Main Street Sidewalk Widening (No. 20 Constrained CTP Project)	Main Street from 1st to 3rd Street	Sidewalk widening, signal timing improvements for crossings	Sidewalks Crossing treatments Signal timing/operations	$2,000,000
N-7 Linda Vista Bridge and Extension (No. 21 Constrained CTP Project)	Linda Vista Avenue from southern terminus of Linda Vista to Robinson Lane	New bridge over Redwood Creek and extension	Sidewalks Crossing barrier removal	$3,500,000
N-8 South Terrace Bridge and Extension (No. 34 CTP Project)	Terrace Drive from Southern terminus of Terrace Drive to Northern Terminus South Terrace Drive	New bridge over Cayetano Creek and extension	Sidewalks Crossing barrier removal	$3,500,000
N-9 Solano Bridge and Extension (No. 35 CTP Project)	Solano Avenue from southern terminus of Solano Avenue to First Street	New bridge over Napa Creek and extension	Sidewalks Trail connection Crossing barrier removal	$7,000,000
N-10 Salvador Avenue Complete Streets Project (No. 37 CTP Project)	Salvador Avenue from SR 29 to Jefferson Street	Widening to provide sidewalks and bike lanes	Sidewalks	$2,500,000
N-11 Pueblo Avenue Overpass (No. 39 CTP Project)	Pueblo Avenue from West Pueblo Avenue to Pueblo Avenue	Pueblo Avenue overpass	Sidewalks Crossing barrier removal	$30,000,000
N-12 Overpass at Trower Avenue (No. 40 CTP Project)	Trower Avenue at SR 29	Grade separation improvements	Crossing treatments Crossing barrier removal Traffic Calming	$30,000,000
N-13 Salvador Creek Class I Trail (No. 52 CTP Project)	Adjacent to Salvador Creek, Maher Street to Big Ranch Road	Class I multi-use path	Pathway	$800,000

TABLE N-5: NAPA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost[3]**
N-14 Oxbow Preserve Pedestrian Bridge (No. 54 CTP Project)	Napa River, River Trail to Oxbow Preserve	Pedestrian bridge	Pathway Crossing barrier removal	$1,250,000
N-15 Oxbow District Pedestrian Bridge (No. 55 CTP Project)	Napa River, River Trail to Third Street	Pedestrian bridge	Pathway Crossing barrier removal	$1,250,000
N-16 Laurel Street Sidewalk (No. 56 CTP Project)	Laurel Street from Laurel Manor to Laurel Park	Sidewalks	Sidewalks	$2,500,000
N-17 Sierra Avenue Sidewalks (No. 58 CTP Project)	Sierra Avenue from SR 29 to Jefferson Street	Sidewalks	Sidewalks	$800,000
N-18 Foster Road Sidewalk (No. 59 CTP Project)	Foster Road adjacent to Snow Elementary School	Sidewalks	Sidewalks	$750,000
N-19 Terrace Drive Sidewalks (No. 60 CTP Project)	Terrace Drive	Sidewalks	Sidewalks	$1,500,000
N-20 First and Second Street Roundabouts	California Boulevard at First Street and at Second Street	Roundabouts	Traffic Calming	$8,500,000
	First Street at SR 29 NB On/Off Ramps	Roundabouts	Traffic Calming	$8,500,000
N-21 Shetler Avenue Sidewalks	Shetler Avenue, corridor wide	Sidewalk gap closure	Sidewalks	$$$
N-22 Second Street Bulbouts	Second Street at Franklin Street and at School Street	Curb extensions	Crossing treatments	$$
N-23 Railroad Crossing Upgrades (No. 24 CTP Project)	Citywide	Concrete panels with flangeway fillers	ADA	$$$

TABLE N-5: NAPA PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost[3]**
WALK AUDIT POTENTIAL ENHANCEMENTS[1]				
N-24 Redwood Road Corridor Improvements	Redwood Road from Linda Vista Avenue to Solano Avenue	Road diet feasibility assessment, sidewalk or walkway	Traffic Calming Sidewalks	$$$
N-25 Redwood Road Intersection Improvements	Redwood Road at Linda Vista Avenue, at Dover Street, and at Carol Drive	Crosswalk enhancements[2], signal timing improvements	Crossing treatments Signal timing/operations	$$
	Redwood Road at Solano Avenue	Crosswalk enhancements[2]	Crossing treatments	
N-26 Redwood Road Transit Improvements	Redwood Center Shopping	Bus shelter	Transit	$$
N-27 Jefferson Street Intersection Improvements	Jefferson Street at B Street and at Calistoga Avenue	Crosswalk enhancements[2]	Crossing treatments	$$$
	Jefferson Street at Clay Street	Crosswalk enhancements[2]	Crossing treatments	
	Jefferson Street at 1st, 2nd, and 3rd Street	Crosswalk enhancements[2], sidewalk, and signal timing improvements	Crossing treatments Signal timing/operations Sidewalk	
	Jefferson Street at Oak Street, Jefferson Street at Laurel Street, and at Fuller Way	Crosswalk enhancements[2], repurposed southbound right turn lane, marked crosswalks	Place Making Crossing treatments	
	Jefferson Street at Pine Street	Crossing enhancements[2]	Crossing treatments	
	Jefferson Street at Elm Street	Crosswalk enhancements[2]	Crossing treatments	
	Jefferson Street at Old Sonoma Road	Marked crosswalk, sidewalk and crossing enhancements[2]	Crossing treatments Sidewalk	
N-28 Jefferson Street Corridor Improvements	Jefferson Street from B Street to Old Sonoma Road	Pedestrian-scale lighting	Place Making	$$$
	Jefferson Street from Elm Street to Ash Street	Sidewalk	Sidewalks	

1. These do not represent planned improvements but rather potential enhancements to the roadways walked during the May 2015 walking audits.
2. See Appendix N-C for Additional details on potential enhancements
3. Costs that do not include an estimated range (i.e. $, $$, or $$$) were sourced from the Napa Countywide Transportation Plan, 2015

$$$ - high cost (>$1million); $$ - medium cost ($100k-$1million); $ - low cost (<$100k)
Source: Fehr & Peers, 2016

Supporting Programs and Policies

Key program and policy recommendations that complement the engineering-related projects are shown below in **Table N-6**. Many of these recommendations draw from the benchmarking exercise completed at the onset of the plan development. The recommendations encompass education, encouragement, and enforcement activities.

Downtown Napa: Dwight Murray Plaza

TABLE N-6: NAPA PROGRAM AND POLICY RECOMMENDATIONS	
Program or Policy	**Recommendations**
Education and Encouragement	
Safe Routes to School (SRTS) Coordination	Coordinate with the Napa County Office of Education to continue SRTS programs in the city, and determine feasibility of implementing recommendations under the Safe Routes to School Support Program in the *Countywide Implementation* chapter of the countywide plan. Continue to seek funding for infrastructure projects that support safe routes to school.
Safety and Enforcement	
Law Enforcement for Pedestrian Safety	Coordinate with NVTA to provide resources for pedestrian safety principles/best practices and education outreach efforts. Consider working with the police department to designate traffic safety officers who conduct pedestrian related enforcement activities, such as monitoring school circulation activity during pick up and drop off periods. Determine feasibility of enforcement recommendations in *Countywide Implementation* chapter of the countywide plan.
NVTA Safety Campaign	Coordinate with NVTA on the media safety campaign that NVTA is pursuing, as an opportunity for education by distributing pedestrian safety pamphlets in-lieu of, or in addition to, citations.
Maintenance	
Repair of Sidewalks, Crosswalks, and Curb Ramps	Continue to regularly improve and repair uneven sidewalk, broken asphalt in crosswalks, and install new curb ramps as part of the Citywide Sidewalk Maintenance Program in Table N-5, to complement the city's ADA Transition Plan and Sidewalk Maintenance program.
Overgrown Vegetation on Sidewalks and Planting Strips	Citywide, continue to ensure that landscapes at maturity do not interfere with safe sight distances for bicycle, pedestrian, or vehicular traffic; do not conflict with overhead lights, traffic controls, traffic signage, utility lines or poles, or walkway lights; and, do not block bicycle or pedestrian ways. Require adjacent property owners to maintain landscaped areas with live and healthy plant materials, replacing plant materials when necessary to maintain full function and aesthetics; to water, weed, prune, fertilize and keep sidewalks and planting strips litter free.
Engineering and Design Standards	
Crosswalk Guidelines	Consider adopting a local crosswalk policy to include criteria for appropriate locations to install crosswalk enhancements such as flashing beacons or advanced yield markings and conducting audits of current crosswalks for implementation, using nationally accepted best practices and recent research.
Place Making and Complete Streets	
Site Plan Review Checklist	Continue to encourage pedestrian friendly design and connectivity.

Next Steps

Funding Sources

Sidewalk projects in Napa are funded through the Capital Improvement Program (CIP) and the sidewalk maintenance program, which has an annual funding level of approximately $1,500,000. This program includes maintaining curb ramps, repairing tree damage, and constructing missing sections of sidewalk. The city coordinates efforts for their 10-mile repaving program with sidewalk repair projects to combine resources if possible. Additionally, Napa was awarded $75,000 for installation of in-pavement lighted crosswalks near schools, funded by a Transportation Development Act Arcticle-3 (TDA-3) Grant in February 2010.

Federal, state, regional, county and local organizations provide funding for pedestrian and bicycle projects and programs. The most recent Federal surface transportation funding program, Fixing America's Surface Transportation Act (FAST Act), was signed into law in December 2015. Details in this section are provided for funding programs that are used to fund scheduled projects through December 2020.

FAST Act funding is distributed to Federal and state surface transportation funds. Most of these resources are available to Napa through Caltrans, the Metropolitan Transportation Commission (MTC), and the Napa Valley Transportation Authority (NVTA).

Table N-7 summarizes the applicability of these various funding sources to projects, planning efforts, and programs proposed in this plan. Detailed descriptions of the grant funding sources are presented in **Appendix C** of the countywide plan. The most applicable funding sources for the improvements recommended by this plan are the Active Transportation Program, One Bay Area Grants, and Highway Safety Improvement Program, and Transportation Development Act Article 3 funds.

TABLE N-7: REGIONAL FUNDING SOURCE APPLICABILITY MATRIX				
Funding Source	**Class I Multi-Use Path**	**Pedestrian Projects**	**Other Projects**	**Planning and Programs**
Highway Safety Improvement Program (HSIP) Grants	◒	●	●	○
Caltrans Transportation Planning Grants	○	○	○	●
Local Transportation Fund (LTF)	●	●	●	○
California State Parks Recreational Trails Program (RTP)	●	○	○	○
Land and Water Conservation Fund (LWCP)	●	○	○	○
Active Transportation Program (ATP), including Safe Routes to School	●	●	●	●
Transportation Development Act Article 3 (TDA-3)	●	●	●	◒
One Bay Area Grant (OBAG)	●	●	●	●
Bay Area Air Quality Management District (BAAQMD) Transportation Fund for Clean Air	◒	◒	◒	○

Notes:

1. ● indicate that funds may be used for this category; ○ indicate that funds may not be used for this category, and ◒ indicate that funds may be used, though restrictions apply.

Source: Fehr & Peers, 2016.

Cost of the Pedestrian Network

Typical costs for pedestrian treatments and projects vary by type and location. Construction costs include costs for engineering, design, environmental, construction management, mobilization, traffic control, construction and right-of-way. Costs to maintain the pedestrian network include costs for on-going maintenance and replacement.

Examples of low cost pedestrian improvements ($10,000 - $100,000) are those that are implemented as spot improvements, and generally include signing and striping, individual curb extensions or refuge islands, and rectangular rapid flashing beacons (RRFBs). More robust improvements such as Pedestrian Hybrid Beacons and minor sidewalk gap closure projects can generally be classified as medium cost projects ($100,000 - $1,000,000), while most corridor projects such as sidewalks, pedestrian-scale lighting, and traffic control improvements or large infrastructure projects such as pedestrian overpasses are generally higher cost (greater than $1,000,000). Substantial drainage and utility modifications can increase the cost of any given project.

Countywide Performance Metrics and Evaluation

NVTA intends to monitor progress on the implementation of this plan over time. The *Countywide Implementation* chapter of the Countywide Pedestrian Plan summarizes key performance goals and associated metrics for this plan's implementation.

Napa Appendix

N-A Benchmarking Table

N-B Existing Pedestrian Policies

N-C Detailed Project Lists and Evaluation Criteria

N-D Plan Adoption Resolution

CHAPTER 6

American Canyon Plan

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Chapter 6
American Canyon Plan

Pedestrian Setting

American Canyon is a suburban community at the southern edge of Napa County, with approximately 20,000 residents. It acts as a gateway to Napa County for the many visitors traveling by car from San Francisco to the south and from the west across San Pablo Bay. The city was incorporated in 1992 and although most of the city has sidewalks, some older neighborhoods maintain a rural character with few sidewalks and open vistas. Residents enjoy a well-developed trail system, including small pedestrian pathways that connect neighborhoods and open space. The city does not have a centralized downtown; the main commercial corridor is clustered around SR 29, which runs through the center of American Canyon. Several future developments are expected to provide enhanced pedestrian facilities and potential pedestrian nodes, including Watson Ranch and the industrial development along the northern border of the City just south of the Napa County Airport. Land use patterns for the City are shown in *Exhibit AC-1.* A city destination map, including the locations of public buildings, shopping and tourist attractions, is shown in *Exhibit AC-2*.

Existing Policies and Programs

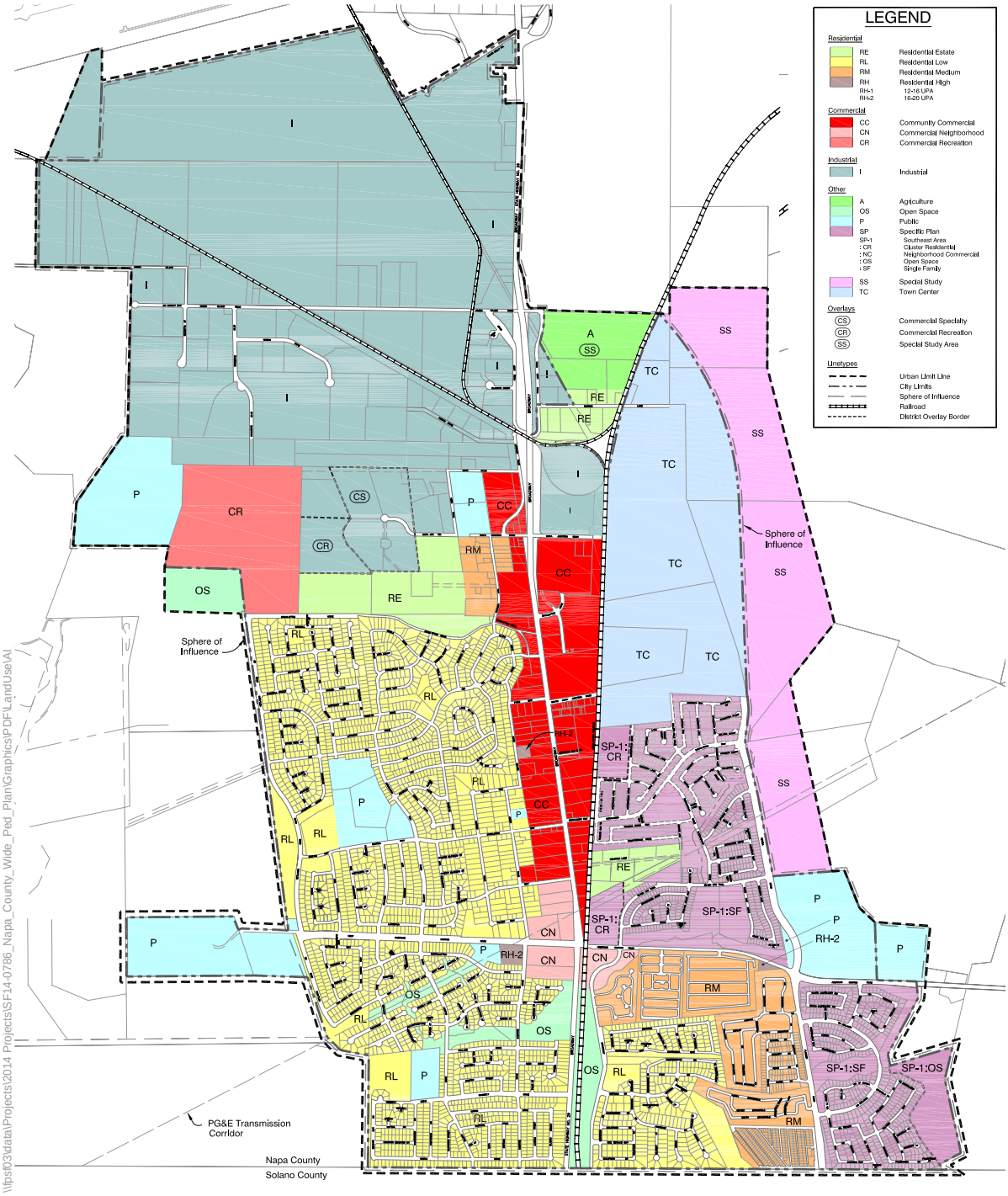
To help guide the development of key programs and policies for this Plan, American Canyon's existing approaches to facilitating and enhancing walking were reviewed with a benchmarking matrix that compares the existing programs, policies, and practices with national best practices. The benchmarking analysis categorizes each jurisdiction's programs, policies, and practices into three areas as follows:

- **Key Strengths** (areas where the jurisdiction is exceeding national best practices)
- **Enhancement Areas** (areas where the jurisdiction is meeting best practices)
- **Opportunity Areas** (areas where the jurisdiction should consider meeting best practices)

As summarized in **Table AC-1**, the City of American Canyon has made investments in making its streets more accessible to pedestrians of all abilities through its ADA Transition Plan update and excels in such areas as public involvement and traffic calming programs. This plan provides a framework for expanding pedestrian investments in areas of opportunity such as collision reporting and prioritization, inventory of pedestrian facilities, walking audits, and crosswalk design guidelines. The full benchmarking analysis for American Canyon, with associated recommendations, is presented in **Appendix AC-A**.

TABLE AC-1: AMERICAN CANYON BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**American Canyon Current Practice**	**Best Practice Examples**
Key Strengths		
ADA Transition Plan Compliance with the Americans with Disability Act (ADA) guidelines is important not only to enhance community accessibility, but also to improve walking conditions for all pedestrians. An ADA Transition Plan sets forth the process for bringing public facilities into compliance with ADA regulations.	The city has an ADA Transition Plan from 2008 that includes an inventory of needed improvements for deficient sidewalks and curb ramps in the public right-of-way along priority corridors. The city uses Caltrans standard drawings for curb ramps which include tactile grooves; however, they do not include truncated domes or directional curb ramps.	• Consider tracking ADA improvements using practices recommended in the ADA Transition Plan 2015 update, to be implemented by the ADA Coordinator • Implement directional curb ramps where practical and truncated domes in all cases. Review and revise standard drawings to align with PROWAG recommendations.
Traffic Calming Program Traffic Calming Programs and policies set forth a systematic and consistent approach for addressing neighborhood requests and approvals, as well as standard treatments and criteria.	American Canyon has a Traffic Calming Program that outlines the steps for a community interested in traffic calming, defines the various traffic calming options and appropriate uses, and establishes guidelines for installing the traffic calming measures.	• Include a line item in the annual budget to create a formal Neighborhood Traffic Management Program (NTMP) to allow additional traffic calming implementation and an inventory of improvements. • Encourage the routine use of traffic calming measures beyond speed humps.
Public Involvement Responding to public concerns through public feedback mechanisms represents a more proactive and inclusive approach to pedestrian safety compared to a conventional approach of reacting to pedestrian collisions. Advisory committees serve as important sounding boards for new policies, programs, and practices. A citizens' pedestrian advisory committee is also a key component of proactive public involvement for identifying pedestrian safety issues and opportunities.	The city's "SeeClickFix" app allows people to report non-emergency issues on a web-based map of the city. Residents can submit information directly to the city regarding damaged sidewalk, deficient lighting, or other non-emergency issues.	• Consider adding a page to the City's website for public input regarding transportation issues with a subsection for pedestrian topics. This category or subcategory may allow residents to file comments or complaints for traffic control devices or dangerous conditions. Encourage broad use of the "SeeClickFix" app for pedestrian issue and opportunity input. • Consider creating a formal Active Transportation Advisory Committee (ATAC) for city-specific issues. This Committee could include the American Canyon representative on the ATAC for NVTA. • Consider organizing neighborhood groups that identify street needs, including greening and traffic calming.
Key Opportunities		
Collision Reporting Identifying and responding to collision patterns on a regular basis is an important reactive approach to pedestrian safety (which may be combined with proactive measures).	American Canyon does not have a regular practice of reviewing collision data and reports are reviewed as needed on a case-by-case basis. City engineers previously received regular reports from SWITRS, but this data now goes straight to the Police Department.	• Mapping and monitoring using Crossroads software would allow for more proactive pedestrian safety projects and collision typing for countermeasure selection. GIS efforts may be funded through an Office of Traffic Safety grant. • Pedestrian volume data could be used to prioritize locations based on collision rates (collisions/ pedestrian), creating a proactive method to identify treatments and program funding. For implementation, see the Countywide Count Evaluation Program in this plan.

TABLE AC-1: AMERICAN CANYON BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**American Canyon Current Practice**	**Best Practice Examples**
Inventory of Pedestrian Facilities A GIS-based sidewalk inventory enables project identification and prioritization, as well as project coordination with new development, roadway resurfacing, etc.	The city does not have a GIS inventory of sidewalks or other pedestrian facilities. While sidewalk projects do not have a set annual budget, they tend to comprise approximately $100,000 of the annual capital improvements program funding. The majority of sidewalk projects in the City are funded through grants in addition to local funds.	• Expand the GIS-based facility inventory, created as part of this plan, to include informal pathways and key pedestrian opportunity areas in the City.
Walking Audit Program Walking audits provide an interactive opportunity to receive feedback from key stakeholders about the study area as well as discuss potential solutions and their feasibility.	American Canyon has not conducted pedestrian walking audits before this plan.	• Conduct regular walking audits as part of a citywide safety program for pedestrians. This effort could complement a "trip and fall" program or health-oriented programs within the city, as well as distribution of the media campaign NVTA is pursuing.
Crosswalk Design Guidelines A formal policy for crosswalk installation, removal, and enhancement provides transparency in decision-making and creates a consistent application of treatments citywide.	The city currently does not have a crosswalk policy and makes decisions regarding crosswalks on a case by case basis.	• Consider adopting a crosswalk policy as part of this plan that reflects best practices and recent research to include criteria for installing crosswalk enhancements such as flashing beacons, advanced yield markings, or in-roadway pedestrian signs as well as criteria for midblock crossings where strong desire lines exist. • Include criteria in the crosswalk policy for identifying, installing, and enhancing midblock crossings where strong desire lines exist.



Source: City of American Canyon General Plan Map, December 2010.

Exhibit AC-1

American Canyon - Land Use Map

Community Amenities

SR-29 Priority Development Area Specific Plan

LEGEND

- City of American Canyon
- Priority Development Area
- Park
- Civic Asset/Node
- Residential Node
- Commercial Node
- Place of Worship

Source: MIG.

Exhibit AC-2

American Canyon - Destination Map

Existing Pedestrian Infrastructure

An inventory of existing sidewalks, marked crosswalks, curb ramps and trails was collected on key roadways throughout the city using a combination of aerial imagery and Google Street View imagery from the years 2011 – 2014 (imagery for a few small residential streets dated back to 2007).

A GIS database assembled for the inventory includes additional detail beyond what is illustrated in the inventory maps, including the style of crosswalk striping, the method of vehicle control at the crosswalk (i.e., traffic signal, flashing beacon, stop sign, or uncontrolled), whether the crosswalk was located in a school zone, and the curb ramp design (i.e., whether the ramp is directional or diagonal and if it has truncated domes). For more information and examples of these types of facilities, please see the Best Practices Toolkit, **Appendix D** of the Countywide Pedestrian Plan.

American Canyon Inventory

A roadway network of 34 miles in the City of American Canyon was identified by city staff for inventory collection. This network was determined by excluding roadways within residential developments constructed after the year 1996, due to adequate sidewalk coverage and curb ramps compliant with ADA legislation at that time. As shown in *Exhibit AC-3*, the residential roadways surveyed generally have a connected sidewalk network, with the exception of the Mc Knight Acres neighborhood which includes north-south streets James Road and Andrew Road, as well as east-west streets Donaldson Way and Crawford Way. City staff identified existing development as a potential constraint for sidewalk installation in this area, as many houses are located close to the edge of the street. City staff also identified the need for crossing improvements at the signalized intersection of SR 29 and Donaldson Way, where crosswalks are marked along all but the north leg. Sidewalk gaps are also present along Donaldson Way approaching SR 29 from both the East and the West. Several completed segments of the Vine Trail and Bay trail run through American Canyon, shown as multi-use pathways on *Exhibit AC-3*, as well as smaller path systems that serve as neighborhood pedestrian connections.

American Canyon: Benton Way at Chaucer Lane

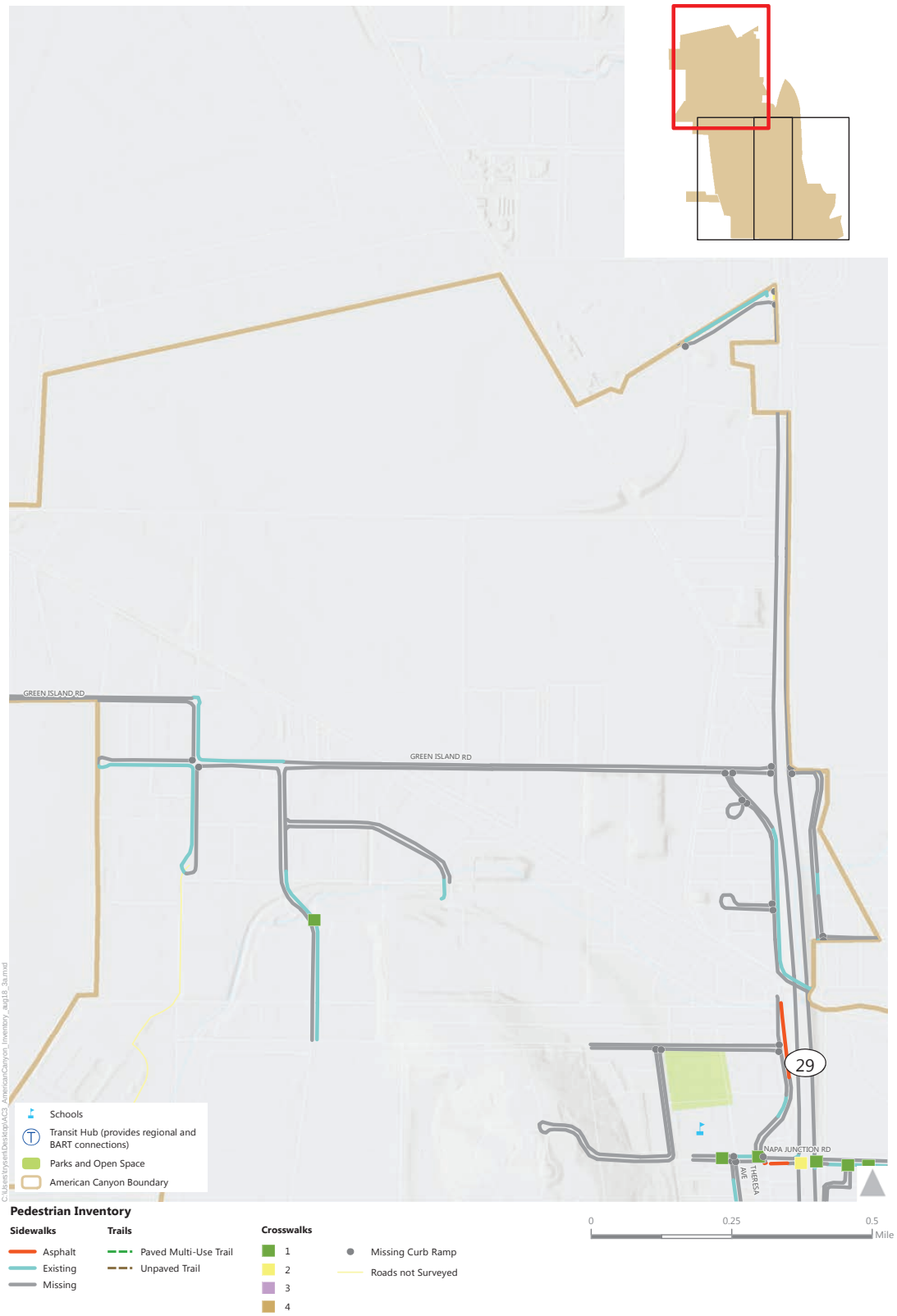


Exhibit AC-3a
Pedestrian Facility Inventory
City of American Canyon

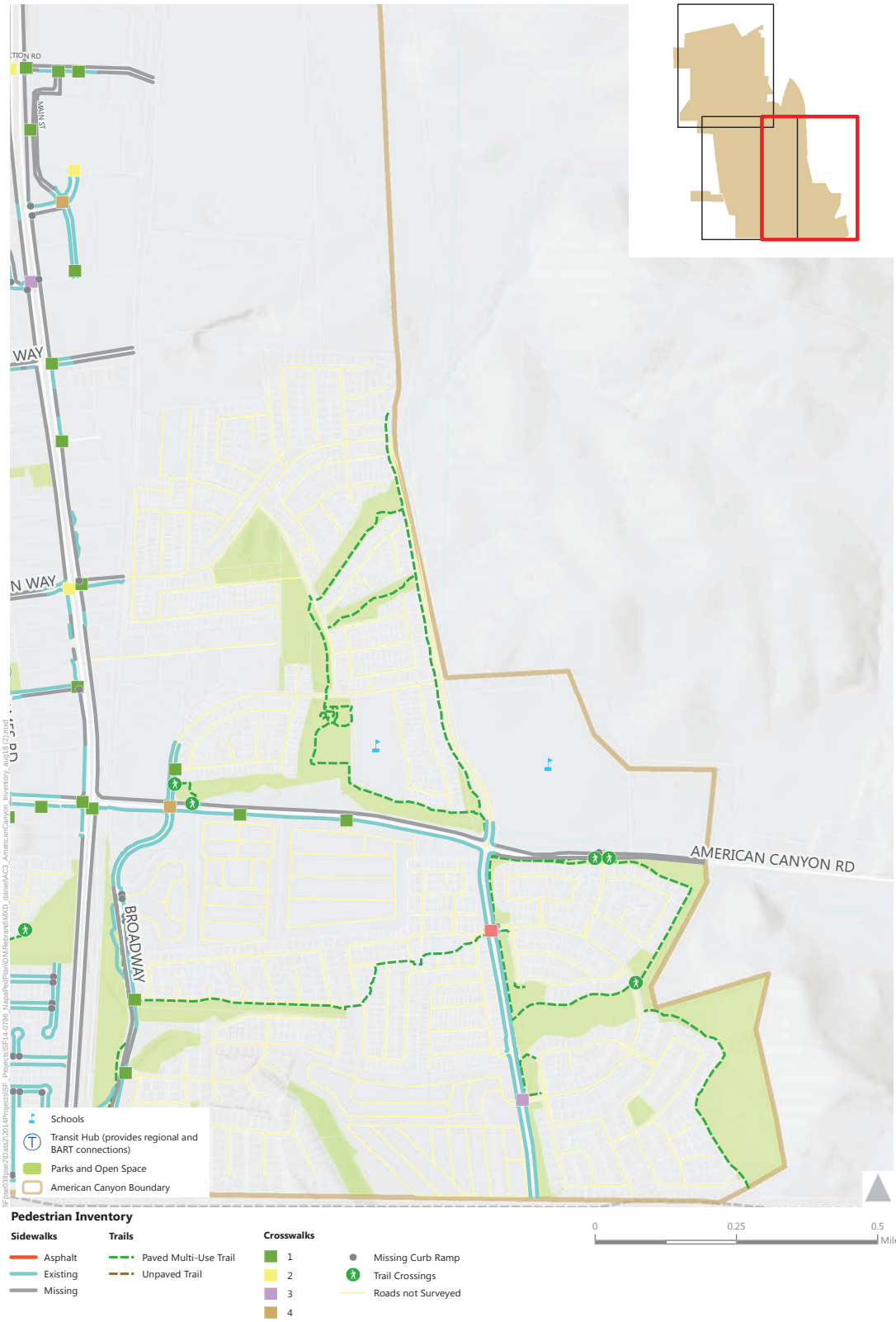
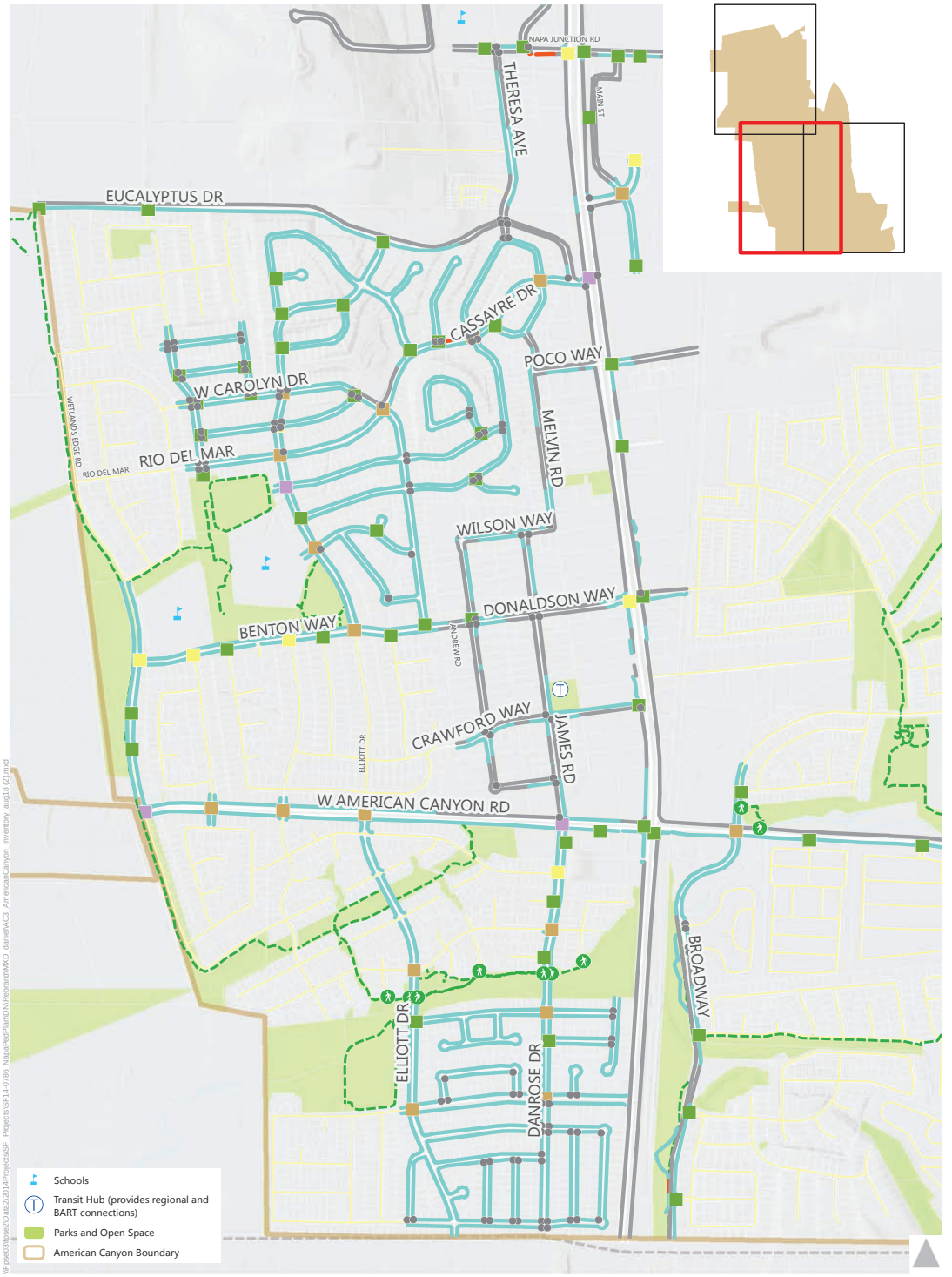


Exhibit AC-3c
Pedestrian Facility Inventory
City of American Canyon



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4

- Missing Curb Ramp
- Trail Crossings
- Roads not Surveyed

0 0.25 0.5 Mile

Exhibit AC-3b
Pedestrian Facility Inventory
City of American Canyon

Activity Levels

Pedestrian counts were conducted at five locations throughout American Canyon in October and November 2015. These locations were selected based on locations of proposed pedestrian projects in this plan, potential localized safety concerns, expected high expected levels of walking, and proximity to key pedestrian destinations, including schools and downtown commercial areas. **Table AC-2** provides a summary of the two-hour counts completed within the jurisdiction. Count results varied significantly based on nearby neighborhood population density, as well as by the adjacent land use.

TABLE AC-2: AMERICAN CANYON COUNT PROGRAM LOCATIONS

ID	Jurisdiction	Location	Morning	Evening	School
			7-9AM	4-6PM	2-4PM
AC1	American Canyon	SR 29 and American Canyon Rd.	32	90	
AC2	American Canyon	Melvin Road at Poco Way	3	6	
AC3	American Canyon	James Road at Donaldson Way	23	42	
AC4	American Canyon	Elliott Drive at Donaldson Way	97	55	196
AC5	American Canyon	Elliott Drive at Crawford Way	25		33

The highest volumes of pedestrians were observed at the intersection of Donaldson Way and Elliot Drive, located in close proximity to American Canyon Middle School and Donaldson Way Elementary School, during the hours of 2-4 PM. Observed pedestrian activity at this location was consistently high relative to other locations within American Canyon; nearly 100 pedestrian crossings were recorded during the AM period of 7-9 AM (concurrent with student arrival times) and almost 200 pedestrian crossings were recorded during the afternoon period, which coincides with school dismissal.

The intersection of Melvin Road and Poco Way (AC2) recorded the fewest pedestrian crossings – fewer than 10 pedestrians over each two-hour period observed. Melvin Road is a predominantly residential corridor. There are no marked crosswalks at this one-way stop controlled intersection, and sidewalks are present along one side of each of the intersecting streets.

Collision Analysis

Collision data was accessed from the California Highway Patrol Statewide Integrate Traffic Records System (SWITRS). This data represents all reported pedestrian-vehicle collisions occurring during the ten-year period from January 2003 to December 2012.

Exhibit AC-4 shows the locations of these pedestrian collisions in American Canyon.

Exhibit AC-4 presents raw collision counts only. While this is illustrative of “hot spot” areas in American Canyon, another important consideration for identifying safety focus areas can be collisions per pedestrian (or the collision

rate). Collision rates (not included in the current analysis because pedestrian volume data is not available citywide) can highlight locations where improvements can be added to ensure a focus on areas that may not have as many people walking (but have high collision rates) in addition to areas with high pedestrian volumes and a high number of collisions.

Hot Spots

According to data from the California Household Travel Survey (CHTS, 2012), the walking mode share in American Canyon for all trips is 2%, as compared to the countywide walking share of 10%. This aligns with the number of reported pedestrian-related collisions in the city, which is relatively low compared to the rest of the jurisdictions. Three collisions were reported along American Canyon Road in the last ten years and two at the intersection of Benton Way and Wetlands Edge Road along the frontage of American Canyon Middle School.

Countywide Demographic and Seasonal Trends

For this plan, a review of collisions countywide included organizing the data by age for children and seniors, and comparing the results across each jurisdiction. Daily and seasonal trends for collision occurrences and primary collision factors were also reviewed countywide. A summary of these results can be found in the *Countywide Walking Trends* chapter of the countywide plan.

Pedestrian Actions

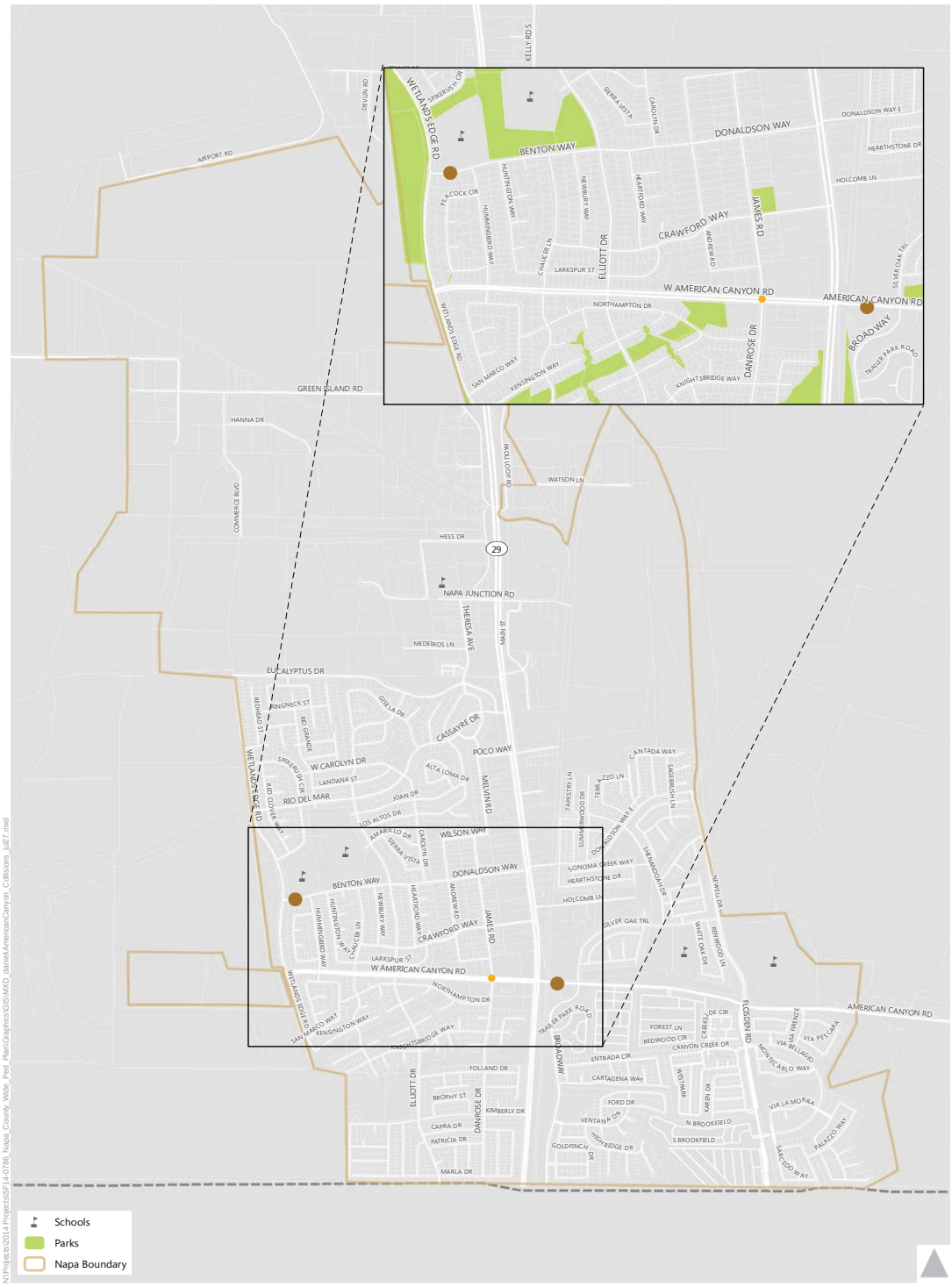
Perhaps one of the more telling sources of information in the SWITRS data is the Pedestrian Action variable, which describes what the pedestrian was doing immediately before the collision occurred. According to the pedestrian actions presented in **Table AC-3**, pedestrian safety issues surrounding collisions in American Canyon are typically focused around crossing locations.

TABLE AC-3: AMERICAN CANYON COLLISION SUMMARY PEDESTRIAN ACTIONS (2003-2012)

Pedestrian Action	Number of Collisions		
	Injury	Fatality	Total[1]
Crossing Not in Crosswalk	4	0	4
Crossing in Crosswalk at Intersection	3	0	3
Walking, Not in Road	1	0	1

1. Some of the recorded collisions were unable to be mapped due to a missing location in the database.

Source: SWITRS



Pedestrian-Involved Collisions 2003-2012

1 # of Injury Collisions
2

Pedestrian Collision Hotspots

Density	Intersection	Total Collisions
●	American Canyon Rd. and James Rd.	1
●	Benton Way and Wetlands Edge Rd.	2
●	Broadway and American Canyon Rd.	2

None of these intersections experienced a fatal collision.

Exhibit AC-4
Pedestrian-Involved Collisions
2003 - 2012 City of American Canyon

Public and Stakeholder Input

Countywide Outreach

Input on plan goals and objectives, current pedestrian issues, and desired locations for improvement was solicited through meetings with jurisdiction staff and key stakeholders, countywide public workshops, and an interactive mapping tool made available online. The goal was to develop a community-supported vision for pedestrian improvements. A summary of all input received during this process countywide is displayed in **Table AC-4**. Connectivity and safety were the key themes across the countywide comments.

TABLE AC-4: PUBLIC INPUT RECEIVED COUNTYWIDE

Comment	Comment Type	Percent of Total Comments
Add a sidewalk here	Connectivity	16%
Make it safer to cross the street here	Safety	15%
Make it safer to walk here	Safety	14%
Add a pedestrian pathway	Connectivity	13%
High traffic volume or speed here	Safety / Walkability	8.5%
Pedestrian facilities need maintenance here	Walkability	4.5%
Barrier for persons with disabilities here	Accessibility	2%
Other (Add your own idea)		27%

Source: Fehr & Peers, 2015

Examples of the comments that were categorized as “add your own idea” in American Canyon are included in the Station One narrative below.

Public Workshops

Ongoing public outreach and participation was an integral element in developing the Countywide Pedestrian Plan. Public workshops were advertised on NVTA’s website, as well as via local media including the newspaper and radio. Invitations to the public workshops were also sent to local stakeholders, including senior centers, mobility impaired groups, advisory committees and local non-profit groups. The goal of the workshops was to identify public concerns and opportunity areas to inform focus areas, educate the stakeholders, and solicit feedback on the plan vision and goals.

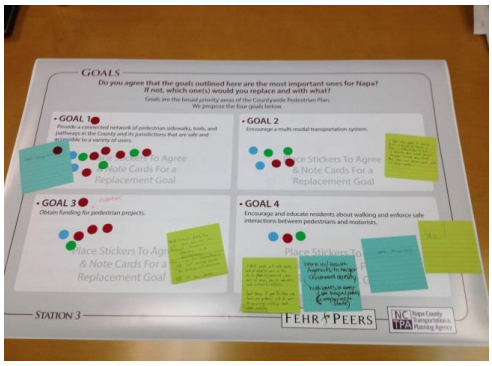
Public workshops were held throughout the County in Winter 2015: in Napa on January 22 at NVTA; in American Canyon on January 27; in St. Helena on January 28; and in American Canyon on February 4. Due to recent public workshops held in Calistoga through development of their Active Transportation Plan in 2014, workshops were not held in the City. All workshops were open to all members of the public countywide. Photos of workshop posters are included in **Appendix A** of the countywide plan.

The format for each public workshop was the same and consisted of four stations:

- **Station One: Issues/Opportunities**

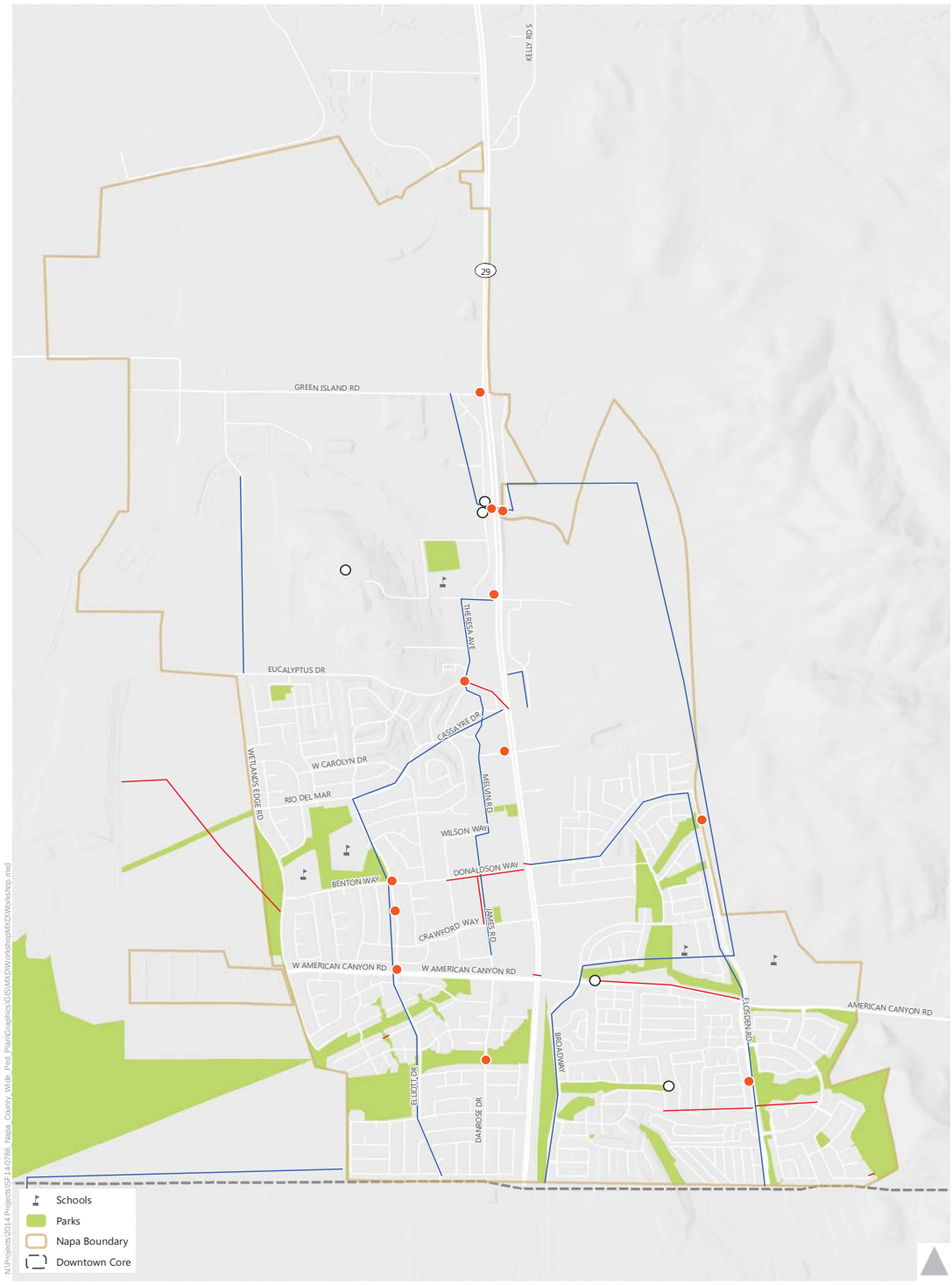
  At Station One, participants voted on a list of common barriers to walking to indicate those that were most relevant to the walking environment in their jurisdiction and countywide. Participants also wrote comments on large-scale aerial maps placed on tables or on the floor to highlight existing barriers to pedestrian travel and locations where improvements were needed. Suggested comments included "Make it safer to cross the street here" or "High traffic volume or speed here". Comments were mapped in GIS after the workshops to visualize the areas of reported pedestrian needs and inform the decision for focus area locations. The results of this mapping exercise included over 40 comments in the City of American Canyon, and results are shown in *Exhibit AC-5*. Comments were grouped into six categories, including a miscellaneous category "Add your own idea". This category was used for comments that did not fall into any of the major themes shown in Table AC-4. Examples of these miscellaneous comments included documentation of cut-through traffic, future Vine Trail connections, and locations of barriers to neighborhood pedestrian connections. All public comments were considered in the process to choose focus areas for the Plan, discussed under *Opportunity Areas* in this Plan, and when identifying candidate pedestrian improvements.
- **Station Two: Best Practices Toolbox**

  Station Two was an informative station that displayed examples of best practices for pedestrian treatments frequently used in pedestrian planning efforts. Treatments included sidewalk buffers, intersection features, crosswalk enhancements, as well as signal and striping modifications.
- **Station Three: Goals Visioning**

  At Station Three, participants had the opportunity to weigh in on draft goals for the plan and write their own vision statement. Conflicting desires related to transportation were also presented on either end of the scale and participants were asked to place stickers where they thought the balance should be struck. Tradeoffs included ease of walking compared to ease of driving and creating a comprehensive pedestrian network compared to improved transit service. This information is valuable to determine where the public would like resources to be focused.
- **Station 4: Collision Maps**

  Station Four was an informative station that displayed the collision maps shown in this plan.



Safety
Maintenance
ADA
Other
Sidewalk/Pathway
Other

0 0.5 1 Mile

Exhibit AC-5

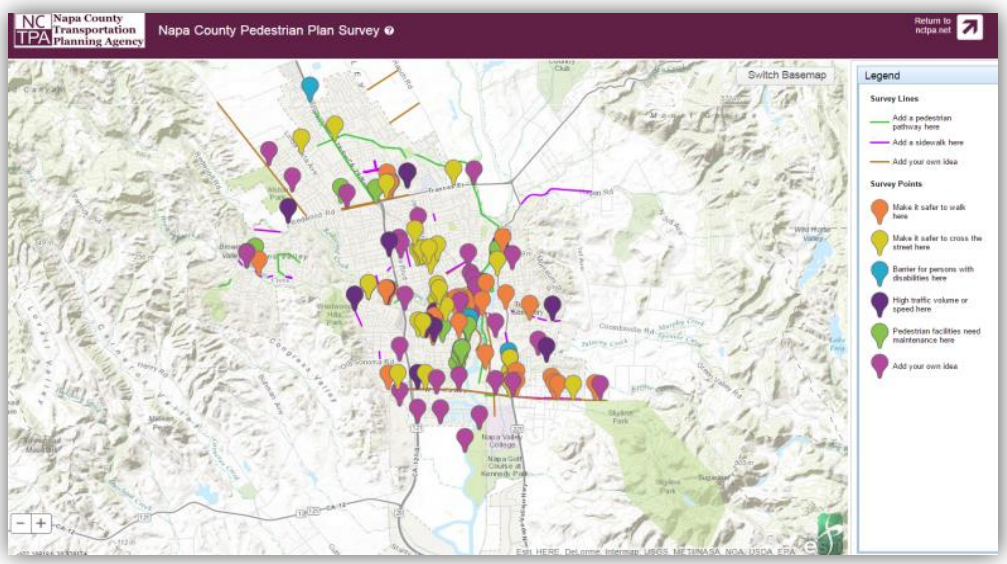
Workshop Comments
American Canyon

Online Survey Mapping Tool

Napa County residents, employees, and visitors who wanted to provide input but were unable or did not wish to attend the public workshops had the option of submitting their comments online through an interactive mapping tool. Users placed pins on the maps to highlight desired improvements using pre-set comments or creating their own comment. Preset comments included:

- Make it safer to walk here
- Make it safer to cross the street here
- Barrier for persons with disabilities here
- High traffic volume or speed here
- Pedestrian facilities need maintenance here
- Add a sidewalk here
- Add a pedestrian pathway here

Results from the 70 comments submitted countywide are shown in *Exhibit 2* of the countywide plan.



American Canyon-Specific Focus Groups

At the outset of the plan development process, meetings were held with key staff from American Canyon to initiate the planning process on December 16, 2014.

This meeting included a discussion of existing programs, policies and practices. Examples from other cities as well as recommendations for improvements are provided in the benchmarking summary table in **Appendix AC-A**.

Jurisdiction staff also provided input during the initial benchmarking meeting and at the public workshops on key areas where pedestrian improvements are planned and in some cases, where connections and safety improvements are desired. This input was used to inform potential opportunities for walking audit routes, as well as discussed along with the facility inventory maps under the *Existing Pedestrian Infrastructure* section of this plan.

Key goals for the pedestrian planning process were also discussed with American Canyon staff and included creating a sidewalk maintenance policy and updating the ADA Transition Plan. These goals are incorporated into key programmatic and policy recommendations in this plan.

Additional focus group meetings were held for the American Canyon walking audit on May 19, 2015, and to review the list of suggested pedestrian projects on August 20, 2015.

Perceived Barriers

As shown in **Table AC-4**, connectivity and safety are two of the top pedestrian issues identified from the public. To geographically visualize the safety concerns in American Canyon, a heat map was created, shown in Exhibit AC-6. This map shows the density of safety-related public comments received during the outreach process, and is intended to represent perceived barriers to walking. These locations may be under-represented in the collision data due to a high level of collision under-reporting with SWITRS data[6] or fewer people walking as a result of these perceived issues. This map provides an important lens into key areas for concern, and may help supplement collision data to identify locations where near misses and other safety-related (but non-reported) issues may be present.

[6] Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113

Schools

Parks

American Canyon Boundary

Safety-Related Comments

Many Issues (2) ← Few Issues (0)

0 0.5 1 M

Exhibit AC-6
Perceived Barriers: As Visualized by Safety-Related Public Comments
City of American Canyon

Opportunity Areas

The City of American Canyon is focused on updating and implementing their ADA Transition Plan, and they have recognized this moment as a key opportunity to enhance pedestrian safety and mobility in concert with the accessibility updates. The city's single-family residential subdivisions and the commercial corridor's orientation along SR 29 present unique challenges to the pedestrian environment. This plan expands on existing efforts by developing a list of proposed pedestrian facilities within key focus areas of the city and referencing those that have been developed by other plans. Initial focus areas for the Plan were developed using a data-driven GIS process that evaluates several factors related to the built environment and demographics that affect the propensity to walk. This process, called the "Ped INDEX", was adapted by work done by the US Environmental Protection Agency (EPA) has been used in several plans in the Bay Area to map the qualitative likelihood of demand for pedestrian activity.

Ped INDEX

The main factors used in the Ped INDEX are population density, land use mix, presence of schools or parks, intersection density, location of downtown commercial areas, and age. These factors resulted in a "heat map" which displays an estimate for relative pedestrian demand on the streets throughout the City of American Canyon. More detail on the Ped INDEX methodology and results as well potential applications can be found in **Appendix B** of the countywide plan.

To balance high pedestrian demand areas with key areas of need in American Canyon, additional data layers were used to display pedestrian deficiencies. These include gaps in sidewalk and reported pedestrian-involved collisions. In general, places with high pedestrian demand and a high infrastructure need are shown as target areas that could be prioritized for pedestrian improvements. The resulting heat map with overlaid demand and deficiencies is shown in *Exhibit AC-7*.

As illustrated on *Exhibit AC-7*, Ped INDEX focus locations include the area adjacent to American Canyon Road and Canyon Oaks Elementary School, neighborhoods adjacent to Donaldson Way Elementary School, as well as neighborhood pockets near Elliott Drive and Folland Drive. After reviewing the locations of comments received during public outreach and the alignment with focus locations on the Ped INDEX maps, two potential walking audits were recommended to city staff:

- **Western Routes to School**: Elliot Drive from American Canyon Road to Donaldson Way; Donaldson Way from Elliot Drive to SR 29; James Road from Donaldson Way to Crawford Way (1 mile)
  This area includes connections to the hot spots such as Donaldson Elementary School and American Canyon Middle School. It also covers a portion of Donaldson Way that lacks sidewalks and acts as a key route for school children, which aligns with desired improvements from both city staff and the public input. James Road also lacks sidewalk and is a key connector to this route. Several public comments were

received highlighting the need for traffic calming along Elliot Drive due to cut through traffic as well as the need for improved crossings at SR 29 and Donaldson Way.

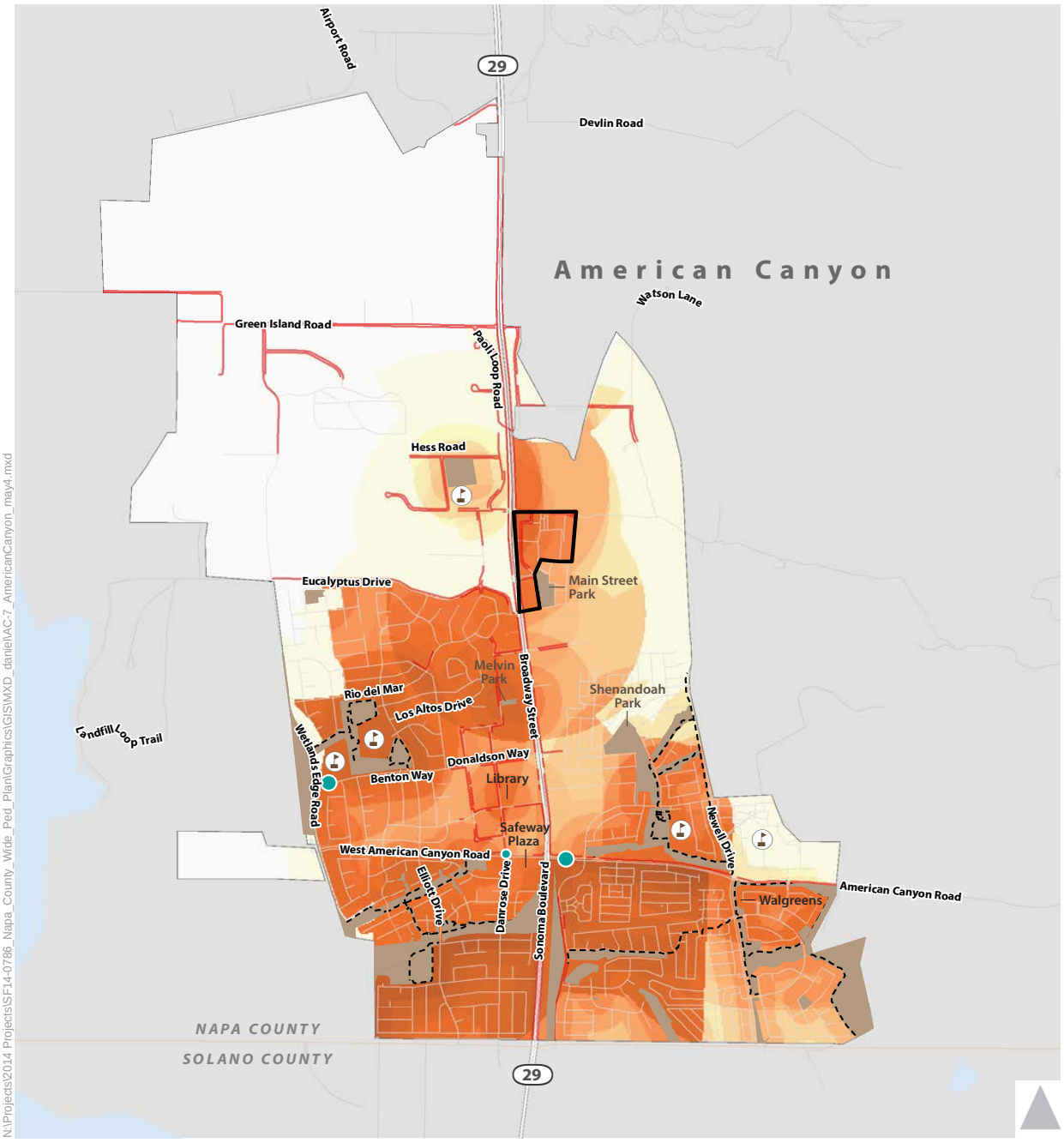
- **Eastern Routes to School:** American Canyon Road from Newell Drive to Danrose Drive; James Road from American Canyon Road to Crawford Way (1 mile)
  Several comments during the workshop highlighted the lack of sidewalk along American Canyon Road, a key connection to the high school. Several pedestrian collisions have also been reported along this route, between James Road and Broadway. This walking audit route also addresses pedestrian connections from the residential development south of American Canyon Road through Silver Oak Park to Canyon Oaks Elementary School.

After discussions with city staff regarding candidate locations, a combination of the above recommended focus areas, for a total of just over one mile, was chosen for study during walking audits:

- Donaldson Way from SR 29 to Elliot Drive
- James Road from Donaldson Way to Crawford Way
- Elliot Drive from Donaldson Way to W American Canyon Road

2016 ADA Transition Plan Update

The city refreshed their 2008 ADA Transition Plan to document any recently improved curb ramps and sidewalks marked deficient in the original Plan. Field measurements were also collected along the walking audit routes shown above to determine the accessibility of sidewalks, curb ramps, driveways, and signal accommodations in the public right of way. The survey results for each location were mapped in GIS for future tracking. Areas that were outside of the audit route that were listed as deficient in the 2008 plan were also mapped – these areas were noted as needing updates or as recently improved requiring field verification. A refreshed schedule of improvements and prioritization categories for removing accessibility barriers in the public right-of-way was also developed as part of the updated plan. Best practices for tracking compliance of facilities were discussed and summarized for use going forward.



Demand:

Pedestrian Index Score

High – Low

Deficiencies:

Pedestrian Collisions (Injuries)

1 2

Pedestrian Fatality

Missing Sidewalks

Legend:

Major Retail

Parks

Trail/Path

School

Exhibit AC-7

American Canyon - Pedestrian Index Demand & Deficiencies

Priority Projects and Implementation Plan

An important outcome of this plan is the designation of a priority project list and an implementation plan for these projects. The priority project list was assembled based on:

- Results of the Walking Audit conducted for the plan
- Projects recommended through related planning efforts, such as the Countywide Transportation Plan (CTP)
- Conversations with staff and stakeholders regarding other local priorities

Walking Audits

Walking audits were conducted in April 2015 with Cheryl Braulick of American Canyon Public Works to observe field conditions and brainstorm potential ideas for improvement.

During the walking audits, visual surveys were conducted to observe physical characteristics and conditions of the pedestrian environment as well as the connectivity and continuity of the surrounding pedestrian network. A debrief was held afterwards with the group to discuss observations and determine suggestions for improvements.

Project List and Map

Suggested pedestrian projects developed during the Pedestrian Plan walking audits and similar, recent efforts are shown in *Exhibit AC-8*. Descriptions of each project and additional program and policy recommendations are included below under *Priority Projects.*

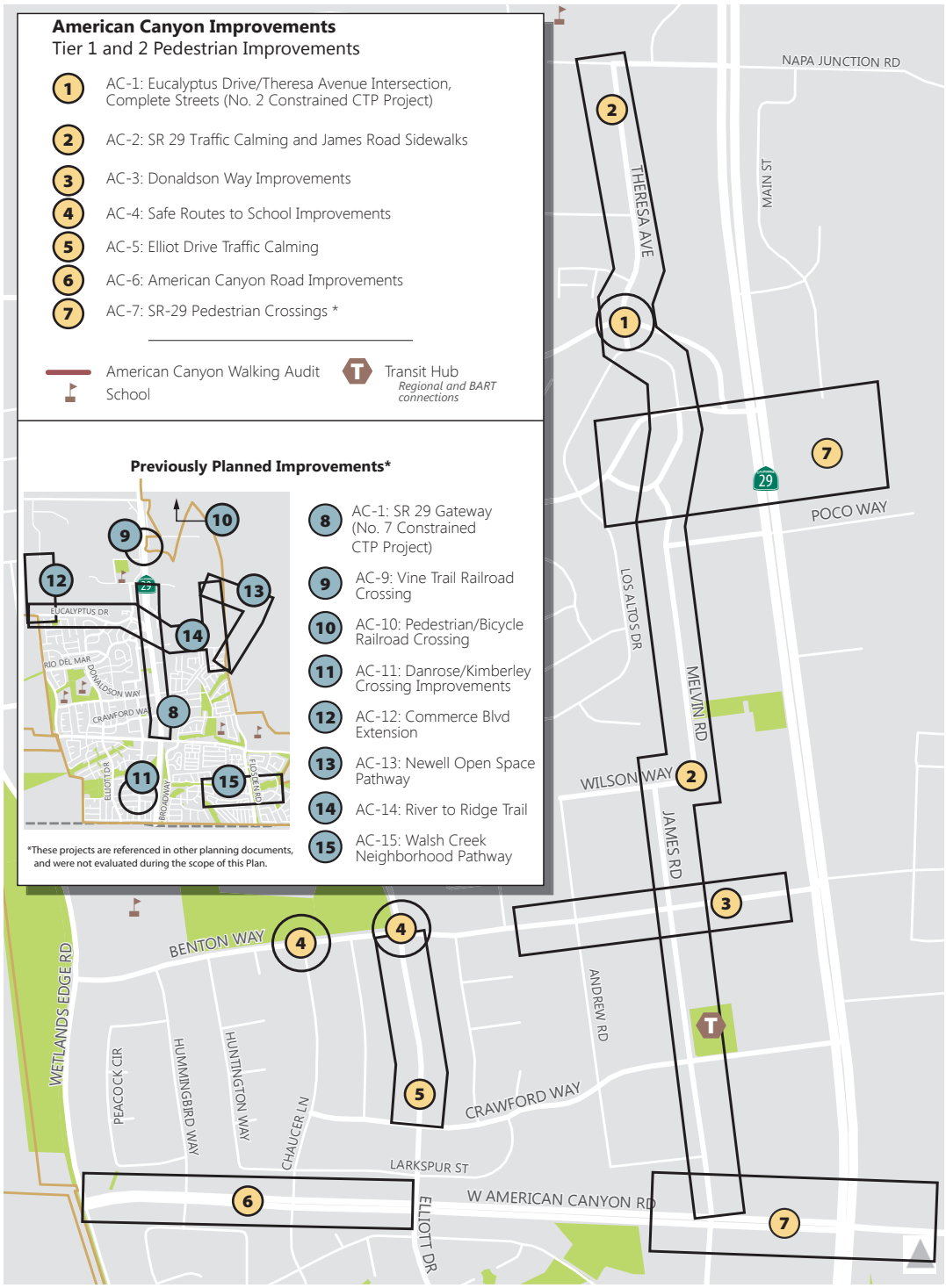


Exhibit AC-8
American Canyon - Project Locations

Priority Projects

Existing funding for pedestrian facilities is limited and cannot successfully cover more than a fraction of the recommendations in this plan. Available regional, state and Federal funding sources and grant cycles are highly competitive among worthy projects and other jurisdictions. To help prioritize pedestrian investments for the limited available funding, this plan prioritizes projects according to six criteria:

- Local importance
- Safety enhancements
- Proximity to schools
- Proximity to transit
- Sidewalk gap and trail connections
- Cost

These criteria and the metrics used to define them are described in more detail in **Appendix AC-C**. Each pedestrian improvement project is shown in one of two tiers based on the number of evaluation criteria it meets. Detailed results and project descriptions can be found in **Appendix AC-C.** A summary of the improvements is shown in **Table AC-5**.

Other Planned Improvements

The City of American Canyon recently identified several pedestrian-related improvements in planning efforts beyond this plan, such as the *General Plan Circulation Element* (2013) and the *American Canyon Bicycle Plan* (2012). Improvements include pedestrian overcrossings of SR 29, enhanced pedestrian access on Commerce Boulevard to connect to the northern industrial area of the city, several multi-use pathway connections, and crossing enhancements at the residential intersection of Danrose Drive and Kimberly Drive. These improvements are in various stages of planning; many are being considered as a component of specific development such as the American Canyon Town Center or focused planning efforts such as the Broadway District Specific Plan. These planned improvements were assigned to “Tier Three” in **Table AC-5** and were not evaluated for prioritization.

TABLE AC-5: AMERICAN CANYON PEDESTRIAN IMPROVEMENTS

Project ID	Location	Description	Pedestrian Component	Estimated Cost
ON-GOING SYSTEM MAINTENANCE				
Sidewalk Gap Closure and Maintenance (No. 1 2015 CTP Program)	Citywide	Sidewalk maintenance, rehabilitation and expansion	Sidewalks Maintenance	$$$
TIER ONE				
AC-2 SR 29 Traffic Calming and James Road Sidewalks	James Road, Melvin Road, Cassavre Drive, Theresa Avenue	Traffic calming study	Traffic calming	$1,035,000
	James Road, Donaldson Way to American Canyon Road	Near Term: Sidewalk installation	Sidewalks	
		Medium-Term: Sidewalk installation	Sidewalks	
		Long-Term: Sidewalk installation	Sidewalks	
AC-3 Donaldson Way Improvements	Donaldson Way, SR 29 to James Road	Sidewalk	Sidewalk	$570,900
	Donaldson Way, James Road to Andrew Road	Tree trimming	Maintenance	
	Donaldson Way at Andrew Road	Marked crosswalks	Crossing treatments	
	Donaldson Way, Carolyn Drive to Andrew Road	Sidewalks	Sidewalk	
AC-4 Safe Routes to School Improvements	Donaldson Way at Elliott Drive	Roundabout and relocated bus stop	Traffic calming Crossing treatments	$356,600
	Benton Way at Chaucer Lane	Crosswalk enhancements[1]	Crossing treatments	
AC-7 SR 29 Pedestrian Crossings[2]	SR 29 at American Canyon Road and Rio Del Mar	Grade-separated pedestrian crossings	Crossing treatments	$$$
TIER TWO				
AC-1 Eucalyptus Drive/Theresa Avenue Intersection, Complete Streets (No. 2 CTP Project)	Eucalyptus Drive at Theresa Avenue	Roundabout (As part of Eucalyptus Drive Realignment Project)	Traffic Calming	$$

TABLE AC-5: AMERICAN CANYON PEDESTRIAN IMPROVEMENTS

Project ID	Location	Description	Pedestrian Component	Estimated Cost
AC-5 Elliot Drive Traffic Calming	Elliot Drive from Donaldson Way to Crawford Way	Neck downs with bicycle access	Traffic calming	$$
		Signage	Signing and striping	
	Elliot Drive at Crawford Way	Traffic circle with enhanced[1] marked crosswalk	Traffic calming Crossing treatments	
	Elliot Drive at Larkspur Street	Traffic circle	Traffic calming	
	Elliot Drive from Larkspur Street to American Canyon Road	Raised median with restriping and relocated bus stop	Crossing treatments Transit	
AC-6 American Canyon Road Improvements	American Canyon Road at Elliot Drive	Near Term: Crosswalk enhancements[1]	Crossing treatments ADA ramps	$$
	West of Elliot Drive	Long Term: Feasibility study for linear park	Pathway Traffic calming	
PREVIOUSLY PLANNED IMPROVEMENTS[4]				
AC-8 SR 29 Gateway (No. 7 CTP Constrained Project list)	SR 29, American Canyon Road to Napa Junction Road	Pathway, enhanced crosswalks[1], Class I pathway and Class IV bikeways	Sidewalks Crossing Treatments Pathway	$$$
	SR 29 at Donaldson Way	Crosswalk enhancements[1]	Crossing treatments ADA ramps	
AC-9 Vine Trail Railroad Crossing[3]	SR 29 at Paoli Loop Road	Grade-separated Vine Trail crossing	Crossing treatments	$$$
AC-10 Pedestrian/Bicycle Railroad Crossing[3]	Railroad tracks east of SR 29 near proposed "Town Center"	Grade-separated pedestrian crossing	Crossing treatments	$$$
AC-11 Danrose / Kimberly Crossing Improvements[3]	Danrose Drive at Kimberly Drive	Feasibility study for reduced crossing distances	Traffic calming Crossing treatments	$

TABLE AC-5: AMERICAN CANYON PEDESTRIAN IMPROVEMENTS

Project ID	Location	Description	Pedestrian Component	Estimated Cost
AC-12 Commerce Boulevard Extension[3]	Commerce Boulevard, from Eucalyptus Drive to southern terminus of Commerce Boulevard	Multi-use path	Pathway	$$
AC-13 Newell Open Space Pathway[3]	Newell Creek, Newell Open Space Entrance at Newell Drive through Newell Open Space	River to Ridge multi-use path connection	Pathway	$$$
AC-14 River to Ridge Trail[3]	Eucalyptus Drive and South Napa Junction Road from Wetlands Edge Road to Newell Drive	Multi-use path from Theresa Avenue to Newell Drive; Class II bike lanes west of Theresa Avenue	Pathway / Bike Lanes	$$$
AC-15 Walsh Creek Neighborhood Pathway[3]	Walsh Creek, from Cartagena Way to Via Bellagio	Multi-use path and pedestrian bridge	Pathway	$$$

1. An enhanced crosswalk includes additional safety treatments such as curb extensions, reduced curb radii, or pedestrian refuge islands. These enhancements are recommended to address safety concerns such as higher speed or volume roadways, wider roadways, and roadways where motorists are less likely to yield to pedestrians. Specific recommendations are included in Appendix C-C. For additional information on the application of these enhancements, refer to the Crosswalk Policy of this plan.
2. Source: American Canyon Circulation Element, 2013. This project was developed through separate and ongoing efforts and was evaluated for prioritization due to local importance.
3. Source: American Canyon Bicycle Plan, 2012
4. These projects are pedestrian projects that are referenced in other planning documents. These projects were not evaluated during the scope of this Plan; however, they may be pursued through separate and ongoing efforts.

$$$ - high cost (>$1million); $$ - medium cost ($100k-$1million); $ - low cost (<$100k)

Source: Fehr & Peers, 2016

The trail system in American Canyon is a key asset to the community and several recommendations for new trail segments, including neighborhood connections and cut-throughs, shown in Exhibit AC-5, were received during the public workshops for this plan. When possible, these recommendations should be considered as trail segments such as those in AC-10, AC-15, and AC-18 are developed and implemented. Coordination with regional trail planning will also help ensure planned trail segments such as the Vine Trail and River to Ridge trail have community support and include local wayfinding.

Specific locations for sidewalk maintenance needs were noted during the walking audits and are included in project AC-6. Ongoing monitoring of sidewalks will ensure a broad and continuous application of sidewalk maintenance citywide. These efforts could be coordinated with accessibility updates for priority sidewalks and curb ramps in the ADA Transition Plan, to include consideration of locations surveyed as part of the 2015 ADA Transition Plan Update. Suggested

tracking methods in the Update will ensure efficient use of construction resources and implementation of the ADA Transition Plan by documenting ADA compliance in the field.

Supporting Programs and Policies

Key program and policy recommendations that complement the engineering-related projects are shown below in **Table AC-6**. Many of these recommendations draw from the benchmarking exercise completed at the onset of the plan development. The recommendations encompass education, encouragement, and enforcement activities.

TABLE AC-6: AMERICAN CANYON PROGRAM AND POLICY RECOMMENDATIONS

Program or Policy	Recommendations
Education and Encouragement	
Safe Routes to School (SRTS) Coordination	Coordinate with the Napa County Office of Education to continue SRTS programs in the city, and determine feasibility of implementing recommendations under the Safe Routes to School Support Program in the *Countywide Implementation* chapter of the countywide plan.
Safety and Enforcement	
Law Enforcement for Pedestrian Safety	Coordinate with NVTA to provide resources to officers in American Canyon on pedestrian safety enforcement principles and education outreach efforts to align with Countywide collision reduction goals. Consider designating traffic safety officers who conduct pedestrian related enforcement activities, such as monitoring school circulation activity during pick up and drop off periods. Determine feasibility of enforcement recommendations in *Countywide Implementation* chapter of the countywide plan.
NVTA Safety Campaign	Coordinate with NVTA on the media safety campaign that NVTA is pursuing, as an opportunity for education by distributing pedestrian safety pamphlets in-lieu of, or in addition to, citations.
Maintenance	
Repair of Sidewalks, Crosswalks, and Curb Ramps	• Continue to regularly improve and repair uneven sidewalk, broken asphalt in crosswalks, and install new curb ramps as part of the Citywide Sidewalk Maintenance Program in Table AC-5. This effort could complement the update schedule for curb ramps and sidewalks in the ADA Transition Plan and/or a trip and fall monitoring program. • Determine feasibility of adding a page to the city's website to allow residents and visitors to more easily report and track hazards in the public right-of-way and to ensure all necessary sidewalk repairs are included in the City's Capital Improvement Program (CIP). This could be coordinated with use of the "SeeClickFix" app to report maintenance needs for pedestrian-related pavement markings and traffic control devices.

TABLE AC-6: AMERICAN CANYON PROGRAM AND POLICY RECOMMENDATIONS	
Program or Policy	**Recommendations**
Overgrown Vegetation on Sidewalks and Planting Strips	Continue to ensure citywide that landscapes at maturity do not interfere with safe sight distances for bicycle, pedestrian, or vehicular traffic; do not conflict with overhead lights, traffic controls, traffic signage, utility lines or poles, or walkway lights; and, do not block bicycle or pedestrian ways. Develop ordinance to encourage adjacent property owners to maintain landscaped areas with live and healthy plant materials, replace plant materials when necessary to maintain full function and aesthetics; to water, weed, prune, fertilize and keep sidewalks and planting strips litter free.
Engineering and Design Standards	
ADA Compliance Tracking Program	Determine feasibility of tracking ADA improvements and updates using practices recommended as part of the ADA Transition Plan update, to be coordinated by the ADA Coordinator. Maintain and update GIS database of ADA curb ramps and sidewalk in the public-right-of way to align with priority schedule in the updated ADA Transition Plan.
Crosswalk Guidelines	Implement Crosswalk Guidelines, included in Appendix D of the Countywide Pedestrian Plan, to enable the city to respond to crosswalk requests in a manner that improves pedestrian accessibility and maintains public safety. Reference Guidelines when making decisions about where standard crosswalks (two, parallel white stripes) can be marked; where crosswalks with special treatments, such as high-visibility crosswalks, flashing beacons and other special features, should be employed; and where crosswalks will not be marked due to safety concerns resulting from volume, speed, or sight distance issues.
Place Making and Complete Streets	
Site Plan Review Checklist	Create checklist for development review to ensure site plans include considerations for pedestrian access, safety and sidewalk activation (including considerations for building frontage location, pocket parks, small plazas, or mini shops and evaluation of pedestrian circulation in parking lots). Include items from MTC's Routine Accommodation Checklist for projects in the public right-of-way to ensure routine application of the Complete Streets policy. MTC's checklist can be found here: http://www.mtc.ca.gov/planning/bicyclespedestrians/Routine_Accommodation_checklist.pdf

Next Steps

Funding Sources

According to American Canyon staff, funding is the greatest obstacle to implementing pedestrian projects. For example, there is no specific funding source set aside for the Traffic Calming Program. While sidewalk projects do not have a set annual budget, they tend to comprise approximately $100,000 of the annual capital improvements program funding. The majority of sidewalk projects in the city are funded through grants in addition to local funds.

Federal, state, regional, county and local organizations provide funding for pedestrian and bicycle projects and programs. The most recent Federal surface transportation funding program, Fixing America's Surface Transportation Act (FAST Act), was signed into law in July 2012. Details in this section are provided for funding programs that are used to fund scheduled projects through December 2020.

FAST Act funding is distributed to Federal and state surface transportation funds. Most of these resources are available to American Canyon through Caltrans, the Metropolitan Transportation Commission (MTC), and the Napa Valley Transportation Authority (NVTA).

Table AC-7 summarizes the applicability of these various funding sources to projects, planning efforts, and programs proposed in this plan. Detailed descriptions of the grant funding sources are presented in **Appendix B** of the countywide plan. The most applicable funding sources for the improvements recommended by this plan are the Active Transportation Program, One Bay Area Grants, and Highway Safety Improvement Program, and Transportation Development Act Article 3 funds.

TABLE AC-7: REGIONAL FUNDING SOURCE APPLICABILITY MATRIX				
Funding Source	**Class I Multi-Use Path**	**Pedestrian Projects**	**Other Projects**	**Planning and Programs**
Highway Safety Improvement Program (HSIP) Grants	◒	●	●	○
Caltrans Transportation Planning Grants	○	○	○	●
Local Transportation Fund (LTF)	●	●	●	○
California State Parks Recreational Trails Program (RTP)	●	○	○	○
Land and Water Conservation Fund (LWCP)	●	○	○	○
Active Transportation Program (ATP), including Safe Routes to School	●	●	●	●
Transportation Development Act Article 3 (TDA-3)	●	●	●	◒
One Bay Area Grant (OBAG)	●	●	●	●
Bay Area Air Quality Management District (BAAQMD) Transportation Fund for Clean Air	◒	◒	◒	○

Notes:

1. ● indicate that funds may be used for this category; ○ indicate that funds may not be used for this category, and ◒ indicate that funds may be used, though restrictions apply.

Source: Fehr & Peers, 2016.

Cost of the Pedestrian Network

Table AC-8 presents unit costs for standard pedestrian treatments, estimated using an ATP Cost Estimating Tool developed for the Alameda County Transportation Commission. The tool is used to estimate costs for bicycle and pedestrian projects at the network planning scale during the development of active transportation plans and in a sketch-planning capacity for a bicycle and/or pedestrian project. The costs shown represent the total construction for a typical treatment of that type, including engineering, design, construction management, mobilization, traffic control and general contingency. Contingency for drainage and utility relocation was also included for relevant treatment types, such as curb extensions. These numbers do not include right-of-way costs or inflation.

TABLE AC-8: GENERALIZED UNIT COSTS FOR IMPROVEMENTS		
Facility Type	**Cost**	**Unit**
Curb Extension/Bulbout	$56,000	Each
Pedestrian Refuge Island	$10,000	Each
Flashing Beacons (RRFBs)	$45,000	Per Crosswalk
Pedestrian Hybrid Beacon (PHB)	$144,000	Per Crosswalk
Customized Pedestrian Wayfinding Signs	$2,000	Per Sign

1. Costs reflect capital costs plus contingency for engineering design, environmental, construction management, mobilization, traffic control, and contingency.

Source: Fehr & Peers, ATP Cost Estimating Tool, 2016.

Project-level cost estimates were prepared for Tier One projects determined in the previous section of this plan, while the remaining projects were assigned a ranking in Table AC-5 to indicate an estimated range of cost level. Prepared cost estimates, included in **Appendix AC-D**, include unit costs for individual improvements within the project and adjustments to account for traffic control, construction management, and mobilization. Additional factors were also used for overall contingency, engineering design and environmental. A summary of the estimates is shown in **Table AC-9** below.

TABLE AC-9: TIER ONE PROJECT SUMMARY COSTS	
Project	**Total Cost[1]**
AC-2: SR 29 Traffic Calming and James Road Sidewalks	$1,035,000
AC-3: Donaldson Way Improvements	$570,900
AC-4: Safe Routes to School Improvements	$356,600

1. Costs reflect capital costs plus contingency for engineering design, construction management, mobilization, traffic control, and contingency.

Source: Fehr & Peers, ATP Cost Estimating Tool, 2016.

Note: For an estimated cost for the SR 29 Pedestrian Crossings (AC-7), which was developed through separate planning efforts, please refer to the Countywide Plan Vision 2040.

Countywide Performance Metrics and Evaluation

NVTA intends to monitor progress on the implementation of this plan over time. The *Countywide Implementation* chapter of the Countywide Pedestrian Plan summarizes key performance goals and associated metrics for this plan's implementation.

American Canyon Appendix

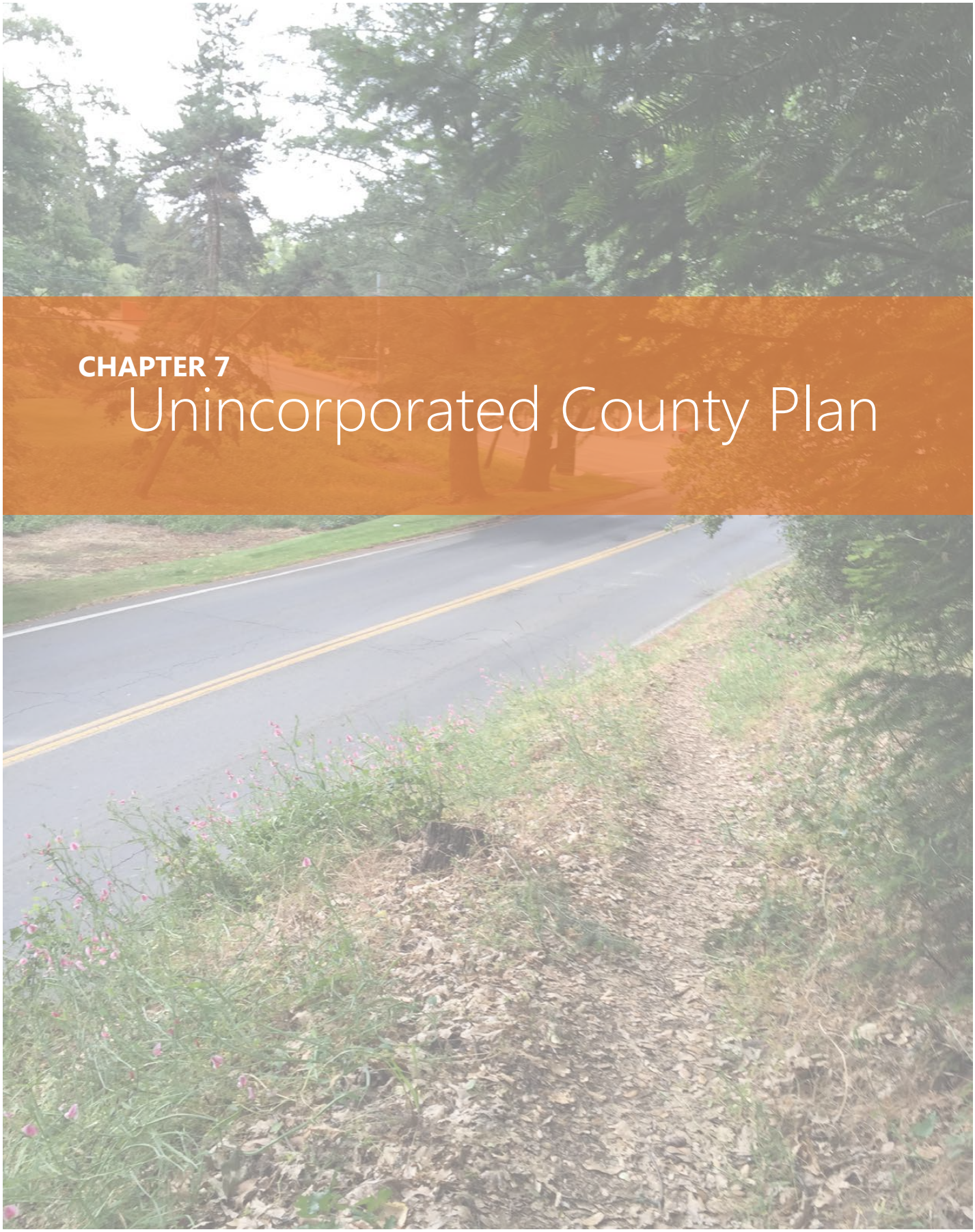
AC-A Benchmarking Table

AC-B Existing Pedestrian Policies

AC-C Detailed Project Lists and Prioritization

AC-D Cost Estimates

AC-E Plan Adoption Resolution



CHAPTER 7

Unincorporated County Plan

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Chapter 7
Unincorporated Plan

Pedestrian Setting

The unincorporated areas of Napa County provide a cherished rural setting for residents and visitors with open vistas of vineyards and the surrounding landscape. Residents primarily travel by car due to their remote location and the distances between pockets of development; however, pedestrian trips frequently occur within the rural community centers such as Angwin, Oakville, Rutherford, and Oak Knoll. Pedestrian trips are also concentrated near the borders of incorporated jurisdictions to connect hotels or residential uses to local grocery stores, wineries, schools or transit stops. The Unincorporated County has several developed trail systems. Neighborhood streets typically do not have sidewalks and few intersections currently have marked crosswalks. Land use patterns for the County are shown in *Exhibit UNC-1* and a map of all the wineries countywide is shown in *Exhibit UNC-2*.

Existing Policies and Programs

To help guide the development of key programs and policies for this plan, the Unincorporated County's existing approaches to facilitating and enhancing walking were reviewed with a benchmarking matrix that compares the existing programs, policies, and practices with national best practices. The benchmarking analysis categorizes each jurisdiction's programs, policies, and practices into three areas as follows:

- **Key Strengths** (areas where the jurisdiction is exceeding national best practices)
- **Enhancement Areas** (areas where the jurisdiction is meeting best practices)
- **Opportunity Areas** (areas where the jurisdiction should consider meeting best practices)

As summarized in **Table UNC-1**, the County of Napa, which has jurisdiction over the unincorporated areas, is interested in investing in pedestrian accommodations and excels in such areas as collision reporting, coordination with health agencies, and transportation demand management. This plan provides a framework for investments in accessibility improvements as well as context-appropriate design standards for pedestrian facilities on rural roadways. Other areas of opportunity that this plan addresses directly are the collection of pedestrian volumes, inventory of pedestrian facilities, and crosswalk design guidelines. The full benchmarking analysis for the Unincorporated County, with associated recommendations, is presented in **Appendix UNC-A**.

TABLE UNC-1: UNINCORPORATED COUNTY BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**Unincorporated County Current Practice**	**Best Practice Examples**
Key Strengths		
Collision Reporting Identifying and responding to collision patterns on a regular basis is an important reactive approach to pedestrian safety (which may be combined with proactive measures).	Collisions are geo-coded (mapped), reviewed, and monitored for recurring patterns by county staff.	• Expand monitoring practices to include collision typing for countermeasure selection could allow for more proactive pedestrian safety projects. • Pedestrian volume data could be used to prioritize collision locations based on collision rates (collisions/daily pedestrian volume). This could lead to a proactive approach to identify treatments and program funding. Volunteers can collect pedestrian volumes and other data at collision locations.
Transportation Demand Management Transportation Demand Management (TDM) programs encourage multi-modal travel by incentivizing non-auto options. As new development occurs, TDM programs can be expanded, formalized, and strengthened.	Employers of 50 or more full-time workers in the Bay Area are required to provide commuter benefits to their employees through The Bay Area Commuter Benefits Program to comply with California SB 1339. The Program includes benefit options like transit passes, employer-provided shuttles, and vanpool subsidies.	• Implement education strategies that collaborate with local hotels to support the "Car Free" tourism program of the Napa Valley Destination Council, to provide wayfinding, shuttle, and transit information to visitors so they can plan a trip without relying solely on a car. Prioritize improved access to transit in the unincorporated areas as part of these efforts.
Coordination with Health Agencies Involving non-traditional partners such as public health agencies, pediatricians, etc., in the planning or design of pedestrian facilities may create opportunities to be more proactive with pedestrian safety, identify pedestrian safety challenges and education venues, and secure funding. Additionally, under-reporting of pedestrian-vehicle collisions could be a problem that may be partially mitigated by involving the medical community in pedestrian safety planning.[7]	Live Healthy Napa County, a coalition of community stakeholders for improving health in Napa County, recently completed the countywide program Napa County Community Health Improvement Plan (CHIP) in February 2014. The document proposes a plan to address health issues through new countywide policies and health promotion strategies, including transportation policies that encourage walking and biking. Live Healthy Napa County is also working to complete the first ever Napa County Community Obesity Prevention Plan, which addresses the need to increase active transportation options countywide.	• Seek opportunities to include sidewalk projects and other pedestrian improvements in the unincorporated areas through the County's Capital Improvement Program to align with goals in the CHIP for improving the built environment to encourage active transportation. • Ensure consistency with the CHIP by seeking partnership opportunities between County health agencies and SRTS to expand the reach of education and promotion of walking in the unincorporated areas.

[7]Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113

TABLE UNC-1: UNINCORPORATED COUNTY BENCHMARKING HIGHLIGHTS		
Plans, Policies, & Programs	**Unincorporated County Current Practice**	**Best Practice Examples**
Key Opportunities		
Inventory of Pedestrian Facilities A GIS-based sidewalk inventory enables project identification and prioritization, as well as project coordination with new development, roadway resurfacing, etc.	The unincorporated County maintains a countywide GIS database, but it does not include pedestrian facilities.	• Maintain the GIS facility database created by this plan by updating the inventory as facilities are added or changed and to the extent that staff has local knowledge, expand inventory to areas outside of initial 50 miles. • Expand the GIS sidewalk inventory to include informal pathways and potential pedestrian opportunity areas in the County.
Pedestrian Volumes Pedestrian volume data is important for prioritizing projects, developing collision rates, and determining appropriate pedestrian infrastructure.	The County of Napa does not collect pedestrian volumes as a matter of routine.	• Routinely collect pedestrian volumes with all transportation impact studies (TIAs). • Use collected pedestrian volumes from this plan to identify pedestrian nodes in the next update to the General Plan. • Consider using volumes for collision monitoring and justification for pedestrian improvements.
Crosswalk Design Guidelines A formal policy for crosswalk installation, removal, and enhancement provides transparency in decision-making and creates a consistent application of treatments citywide.	The County uses the MUTCD warrants for decisions on placing crosswalks. Crosswalks are not always placed on all approaches of signalized intersections.	• Consider adopting a crosswalk policy as part of this plan that reflects best practices and recent research to include criteria for appropriate locations to install crosswalk enhancements such as flashing beacons, advanced yield markings, or in-roadway pedestrian signs. • Include criteria in the cross walk policy for identifying, installing, and enhancing crossings where strong desire lines exist, especially near transit stops in the County.

Notes:

1. Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113

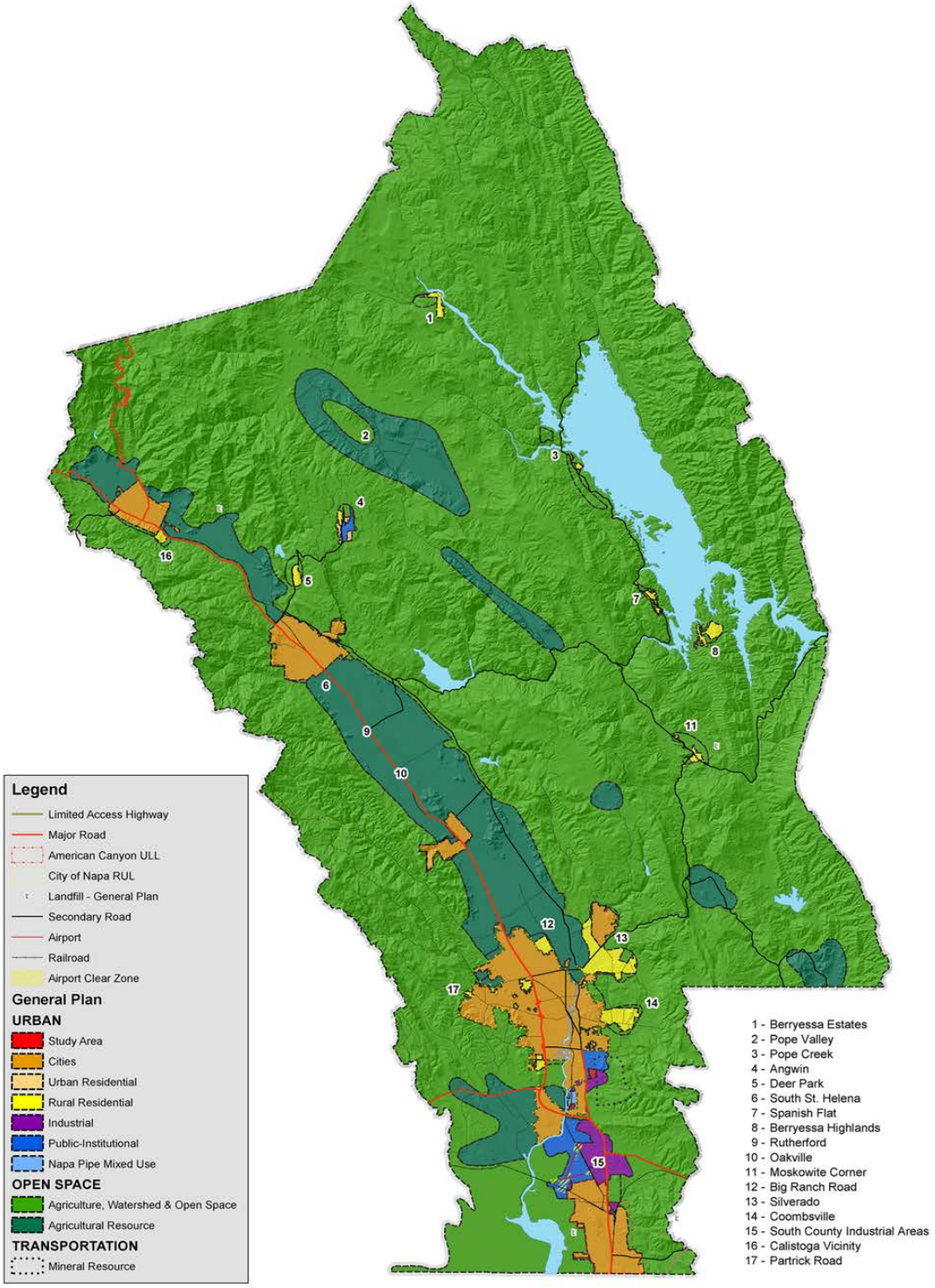
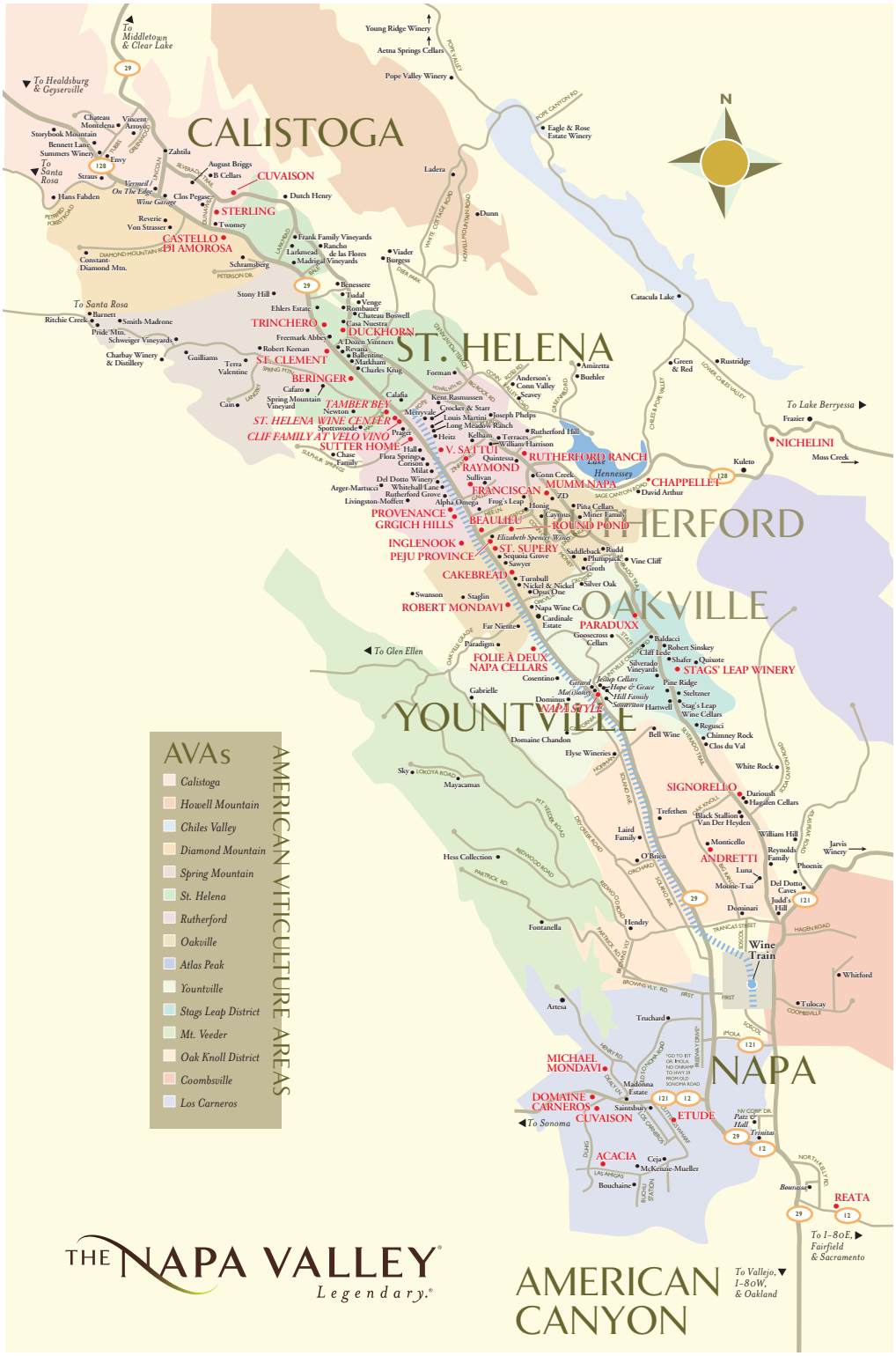


Exhibit UNC-1

Unincorporated - Land Use Map



Source: "Wineries of The Legendary Napa Valley".

Exhibit UNC-2

County Wide - Destination Map

Existing Pedestrian Infrastructure

An inventory of existing sidewalks, marked crosswalks, curb ramps and trails was collected on key roadways throughout the County using a combination of aerial imagery and Google Street View imagery from the years 2011 – 2014 (imagery for a few small residential streets dated back to 2007).

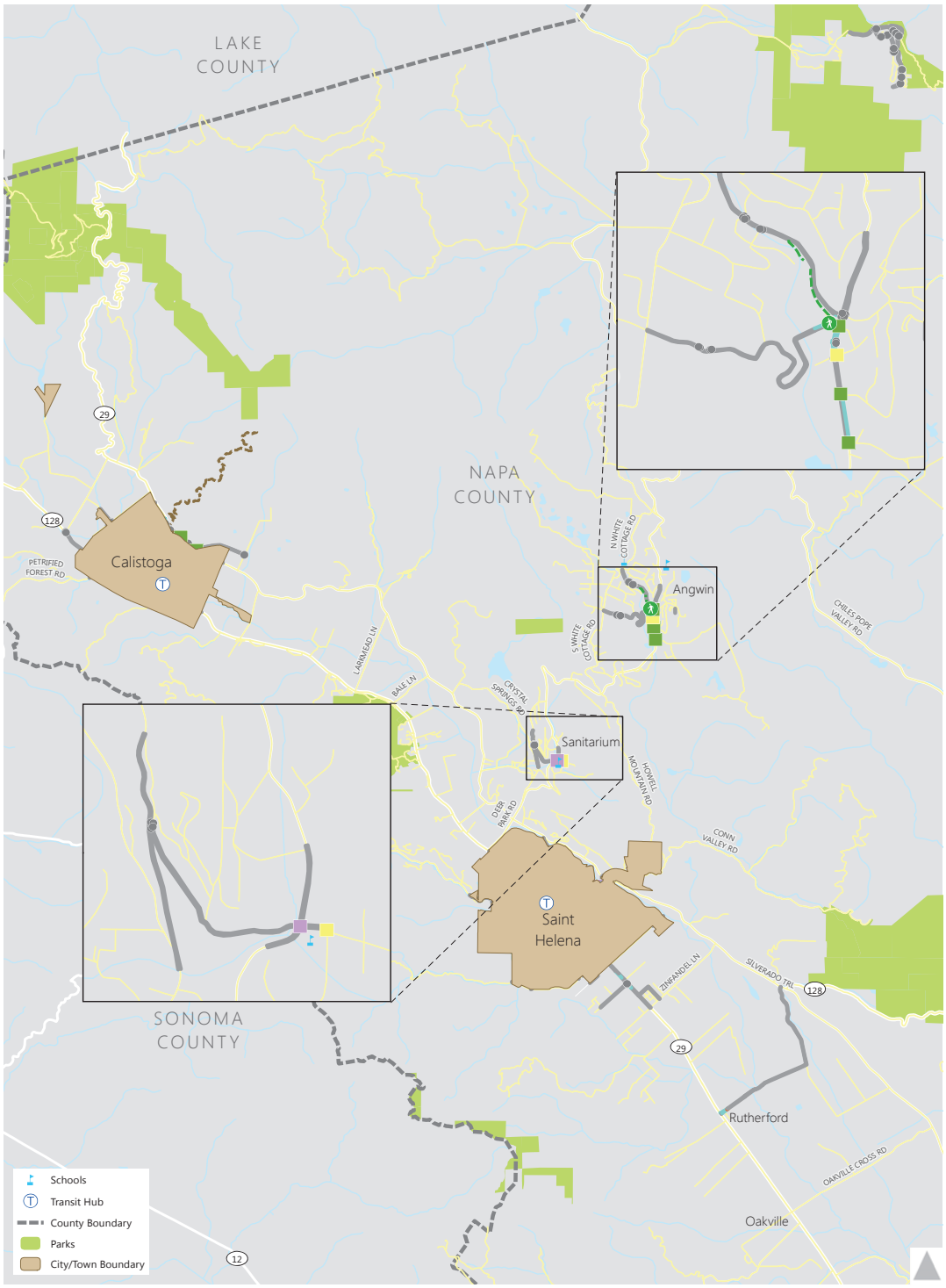
A GIS database assembled for the inventory includes additional detail beyond what is illustrated in the inventory maps, including the style of crosswalk striping, the method of vehicle control at the crosswalk (i.e., traffic signal, flashing beacon, stop sign, or uncontrolled), whether the crosswalk was located in a school zone, and the curb ramp design (i.e., whether the ramp is directional or diagonal and if it has truncated domes). For more information and examples of these types of facilities, please see the Best Practices Toolkit, **Appendix D** of the Countywide Pedestrian Plan.

Unincorporated County Inventory

A roadway network of 56 miles in the Unincorporated County was identified by County staff for data collection. The following were key considerations in choosing the final inventory network:

- Within a ¼ to ½ mile radius around key destinations (schools and retail nodes)
- Location of pedestrian collisions
- Location of bus stops

As shown in Exhibit UNC-3, most of the inventory network for the Unincorporated County lacks sidewalk coverage. A few marked crosswalks and curb ramps exist near small pockets of development.



Pedestrian Inventory

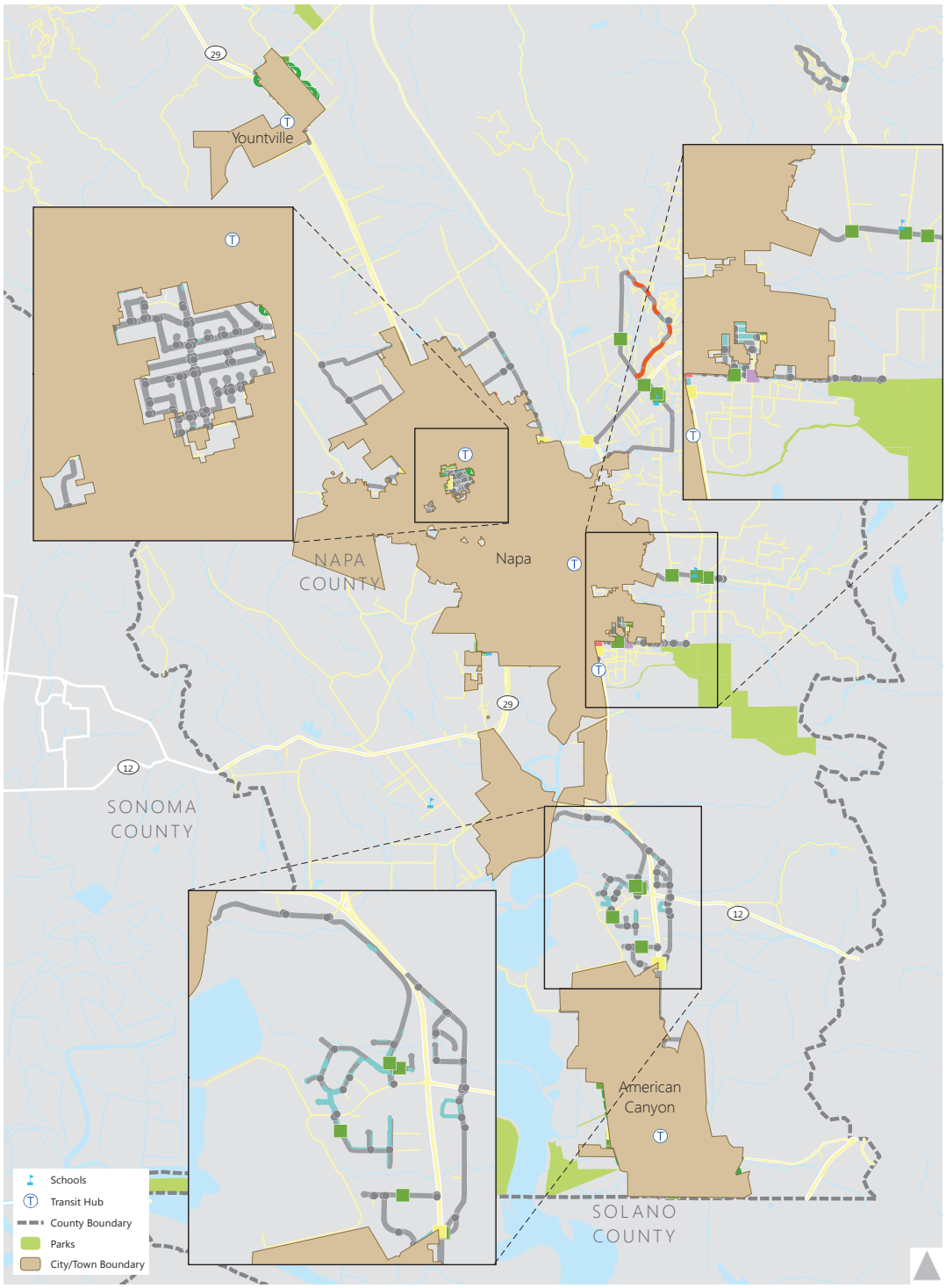
Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings
- Roads not Surveyed

Exhibit UNC-3a
Pedestrian Facility Inventory
Unincorporated Napa County
North County



Pedestrian Inventory

Sidewalks
- Asphalt
- Existing
- Missing

Trails
- Paved Multi-Use Trail
- Unpaved Trail

Crosswalks
- 1
- 2
- 3
- 4
- 5
- 8

- Missing Curb Ramp
- Trail Crossings
- Roads not Surveyed

Exhibit UNC-3b
Pedestrian Facility Inventory
Unincorporated Napa County
South County

Activity Levels

Pedestrian counts were conducted at three locations in Angwin, the highest populated community in the unincorporated area, in October and November 2015. These locations were selected based on locations of proposed pedestrian projects in this plan, potential localized safety concerns, expected high expected levels of walking, and proximity to key pedestrian destinations, including schools and downtown commercial areas. **Table UNC-2** provides a summary of the two-hour counts completed within the jurisdiction. Count results varied significantly based on the adjacent land use.

TABLE UNC-2: ANGWIN COUNT PROGRAM LOCATIONS

ID	Jurisdiction	Location	Morning	Evening	School
			7-9AM	4-6PM	2-4PM
UNC1	Angwin	Brookside Drive at Howell Mountain	18	23	30
UNC2	Angwin	White Cottage Road at College Avenue	14		11
UNC3	Angwin	Howell Mountain and Clark	1		0

The three intersections observed within the unincorporated community of Angwin were all unsignalized intersections with limited crosswalks and sidewalks on the intersection approaches. The highest level of pedestrian activity observed in Angwin was at the intersection of Brookside Drive and Howell Mountain Road (UNC1), adjacent to Pacific Union College and Pacific Union College Preparatory High School.

Collision Analysis

Collision data was accessed from the California Highway Patrol Statewide Integrate Traffic Records System (SWITRS). This data represents all reported pedestrian-vehicle collisions occurring during the ten-year period from January 2003 to December 2012.

Exhibit UNC-4 shows the locations of these pedestrian collisions in the Unincorporated County.

Exhibit UNC-4 presents raw collision counts only. While this is illustrative of “hot spot” areas in the Unincorporated County, another important consideration for identifying safety focus areas can be collisions per pedestrian (or the collision rate). Collision rates (not included in the current analysis because pedestrian volume data is not available citywide) can highlight locations where improvements can be added to ensure a focus on areas that may not have as many people walking (but have high collision rates) in addition to areas with high pedestrian volumes and a high number of collisions.

Hot Spots

The majority of collisions in the unincorporated County occurred near areas of development, especially near the border of the City of Napa. While unincorporated County areas do not have distinct “hot spots” (collision locations

where more than one collision occurred over the last 10 years), more than one fatality did occur along the same corridor. As shown in *Exhibit UNC-4*, two fatalities occurred each on Silverado Trail and SR 29 over this time period.

Countywide Demographic and Seasonal Trends

For this plan, a review of collisions countywide included organizing the data by age for children and seniors, and comparing the results across each jurisdiction. Daily and seasonal trends for collision occurrences and primary collision factors were also reviewed countywide. A summary of these results can be found in the *Countywide Walking Trends* chapter of the countywide plan.

Pedestrian Actions

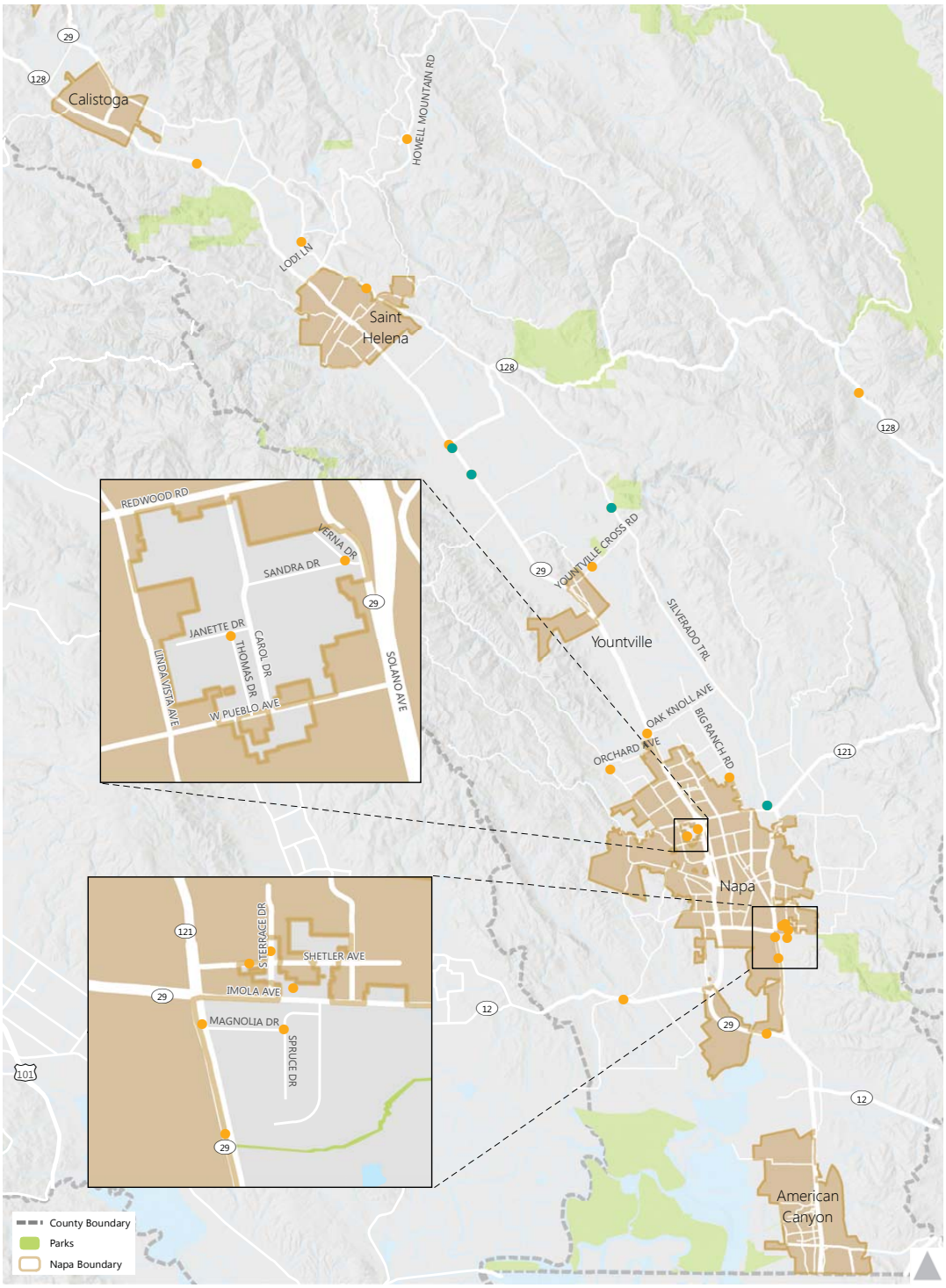
Perhaps one of the more telling sources of information in the SWITRS data is the Pedestrian Action variable, which describes what the pedestrian was doing immediately before the collision occurred. According to the pedestrian actions presented in **Table UNC-3**, pedestrian safety issues surrounding collisions are typically focused around walking on the road or shoulder in the Unincorporated County.

TABLE UNC-3: UNINCORPORATED COUNTY COLLISION SUMMARY PEDESTRIAN ACTIONS (2003-2012)

Pedestrian Action	Number of Collisions		
	Injury	Fatality	Total[1]
Walking In Road, Including Shoulder	15	4	19
Crossing Not in Crosswalk	6	1	7
Crossing in Crosswalk at Intersection	3	0	3

1. Some of the recorded collisions were unable to be mapped due to a missing location in the database.

Source: SWITRS



Pedestrian-Involved Collisions 2003-2012
Unincorporated County

- Fatal Collision
- Injury Collision

Pedestrian Collision Fatalities

Density	Intersection	Total Collisions
●	Silverado Trail and Trancas St.	1
●	Silverado Trail and Yountville Cross Rd.	1
●	Route 29 and Bella Oaks Ln.	1
●	Route 29 and Niebaum Ln.	1

Exhibit UNC-4
Pedestrian-Involved Collisions
2003 - 2012 Unincorporated Napa County

Public and Stakeholder Input

Countywide Outreach

Input on plan goals and objectives, current pedestrian issues, and desired locations for improvement was solicited through meetings with jurisdiction staff and key stakeholders, countywide public workshops, and an interactive mapping tool made available online. The goal was to develop a community-supported vision for pedestrian improvements. A summary of all input received during this process countywide is displayed in **Table UNC-4**. Connectivity and safety were the key themes across the countywide comments.

TABLE UNC-4: PUBLIC INPUT RECEIVED COUNTYWIDE

Comment	Comment Type	Percent of Total Comments
Add a sidewalk here	Connectivity	16%
Make it safer to cross the street here	Safety	15%
Make it safer to walk here	Safety	14%
Add a pedestrian pathway	Connectivity	13%
High traffic volume or speed here	Safety / Walkability	8.5%
Pedestrian facilities need maintenance here	Walkability	4.5%
Barrier for persons with disabilities here	Accessibility	2%
Other (Add your own idea)		27%

Source: Fehr & Peers, 2015

Examples of the comments that were categorized as “other” in the unincorporated county are included in the Station One narrative below.

Public Workshops

Ongoing public outreach and participation was an integral element in developing the Countywide Pedestrian Plan. Public workshops were advertised on NVTA’s website, as well as via local media including the newspaper and radio. Invitations to the public workshops were also sent to local stakeholders, including senior centers, mobility impaired groups, advisory committees and local non-profit groups. The goal of the workshops was to identify public concerns and opportunity areas to inform focus areas, educate the stakeholders, and solicit feedback on the plan vision and goals.

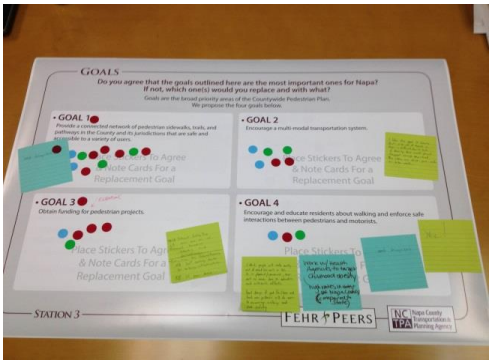
Public workshops were held throughout the County in Winter 2015: in Napa on January 22 at NVTA; in Yountville on January 27; in St. Helena on January 28; and in American Canyon on February 4. Due to recent public workshops held in Calistoga through development of their Active Transportation Plan in 2014, workshops were not held in the city. All workshops were open to all members of the public countywide. Photos of workshop posters are included in **Appendix A** of the countywide plan.

The format for each public workshop was the same and consisted of four stations:

- **Station One: Issues/Opportunities**

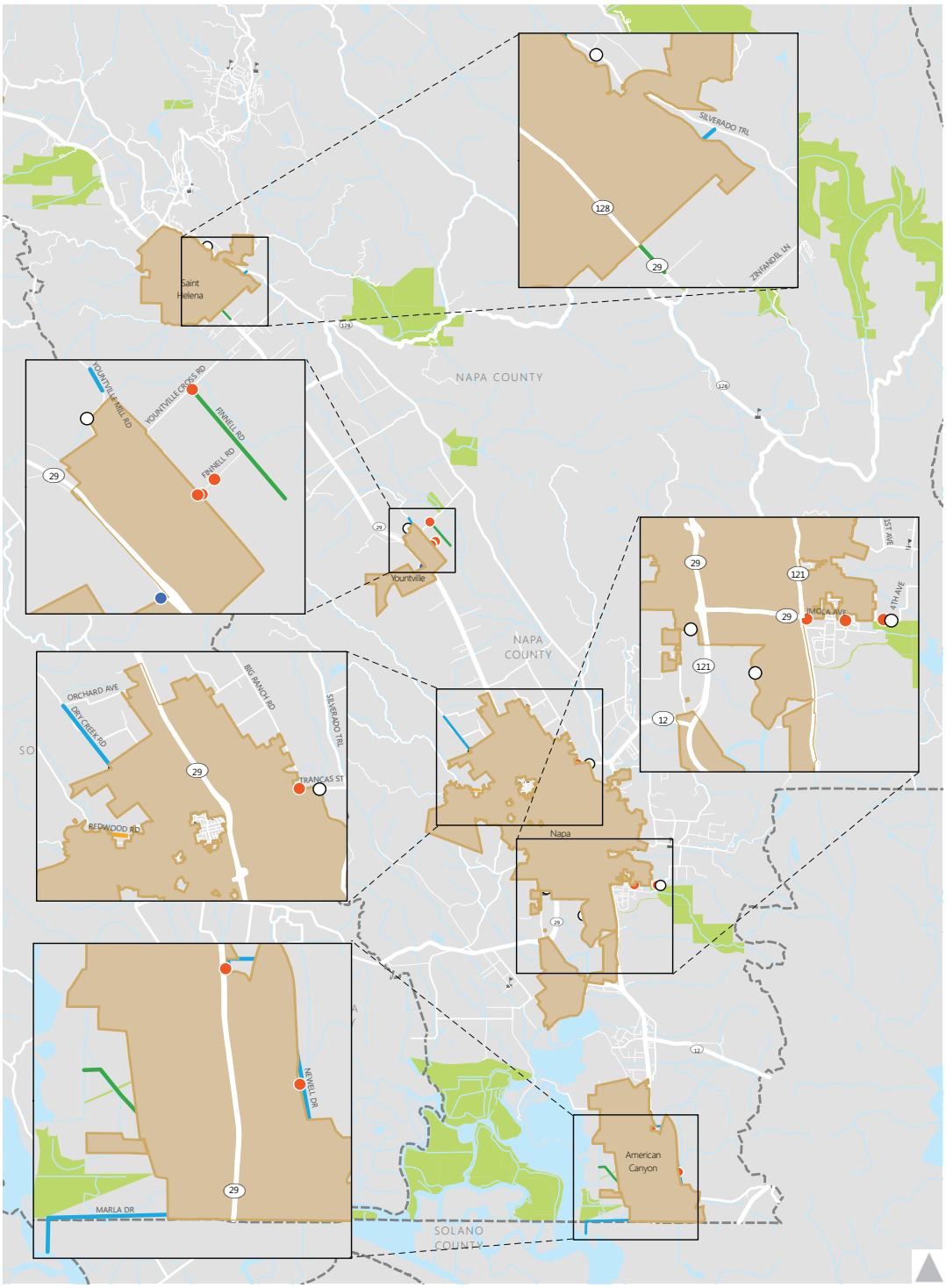
  At Station One, participants voted on a list of common barriers to walking to indicate which were most relevant to the walking environment in their jurisdiction and countywide. Participants also wrote comments on large-scale aerial maps placed on tables or on the floor to highlight existing barriers to pedestrian travel and locations where improvements were needed. Comments for unincorporated areas near jurisdictions in the county were received at all four workshops. Suggested comments included "Make it safer to cross the street here" or "High traffic volume or speed here". Comments were mapped in GIS after the workshops to visualize areas of reported pedestrian needs and inform the location of focus areas. The results of this mapping exercise included just fewer than 20 comments in the unincorporated county, shown in *Exhibit UNC-5.* Comments were grouped into six categories, including a miscellaneous category "Add your own idea". This category was used for comments that did not fall into any of the major themes shown in Table UNC-4. Many of these miscellaneous comments were received on the border of St. Helena, Yountville, and Napa and included suggestions for bike lanes, documentation of truck turning issues, and desired connections to Skyline Park near the City of Napa. All comments were considered in the process to choose focus areas for the Plan, discussed under *Opportunity Areas* in this Plan, and when identifying candidate pedestrian improvements.
- **Station Two: Best Practices Toolbox**

  Station Two was an informative station that displayed examples of best practices for pedestrian treatments frequently used in pedestrian planning efforts. Treatments included sidewalk buffers, intersection features, crosswalk enhancements, as well as signal and striping modifications.
- **Station Three: Goals Visioning**

  At Station Three, participants had the opportunity to weigh in on draft goals for the plan and write their own vision statement. Conflicting desires related to transportation were also presented on either end of the scale and participants were asked to place stickers where they thought the balance should be struck. Tradeoffs included ease of walking compared to ease of driving and creating a comprehensive pedestrian network compared to improved transit service. This information is valuable to determine where the public would like resources to be focused.
- **Station 4: Collision Maps**

  Station Four was an informative station that displayed the collision maps shown in this plan.



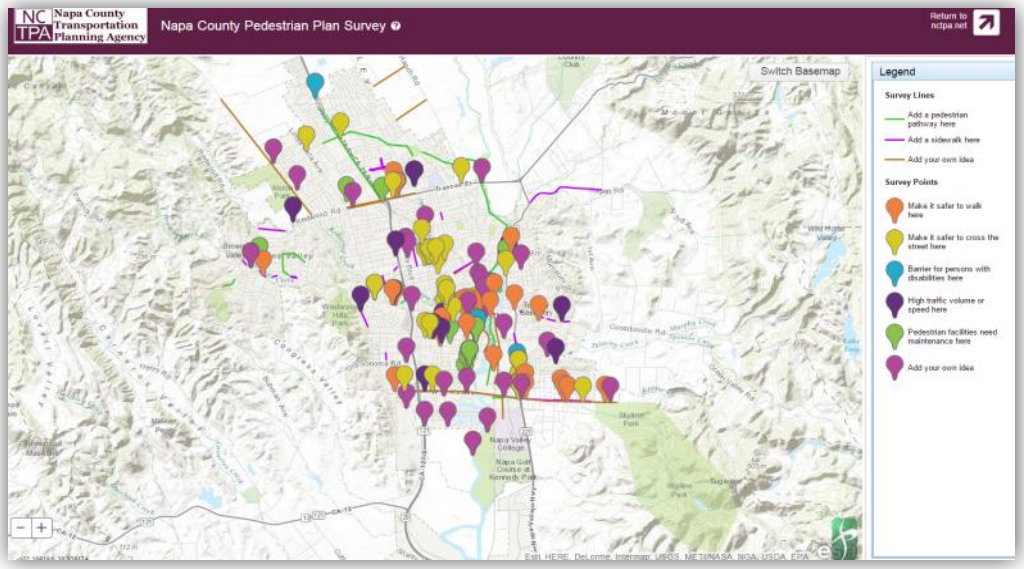
- Safety
- Maintenance
- ADA
- Other
- Add a Pedstrian pathway
- Add a Sidewalk Here
- Other

Exhibit UNC-5
Workshop Comments
Unincorporated Napa County

Online Survey Mapping Tool

Napa County residents, employees, and visitors who wanted to provide input but were unable or did not wish to attend the public workshops had the option of submitting their comments online through an interactive mapping tool. Users placed pins on the maps to highlight desired improvements using pre-set comments or creating their own comment. Preset comments included:

- Make it safer to walk here
- Make it safer to cross the street here
- Barrier for persons with disabilities here
- High traffic volume or speed here
- Pedestrian facilities need maintenance here
- Add a sidewalk here
- Add a pedestrian pathway here



Results from the 70 comments submitted countywide are shown in *Exhibit 2* of the countywide plan.

Unincorporated County-Specific Focus Groups

At the outset of the plan development process, meetings were held with key staff from the Unincorporated County to initiate the planning process on December 9, 2014.

This meeting included a discussion of existing programs, policies and practices. Examples from other cities as well as recommendations for improvements are provided in the benchmarking summary table in **Appendix UNC-A**.

Jurisdiction staff also provided input during the initial benchmarking meeting and at the public workshops on key areas where pedestrian improvements are planned and in some cases, where connections and safety improvements are desired. This input was used to inform potential opportunities for walking audit routes, as well as discussed along with the facility inventory maps under the *Existing Pedestrian Infrastructure* section of this plan.

Key goals for the pedestrian planning process were also discussed with County staff and included identifying appropriate criteria for pedestrian improvements that fit within the rural context of unincorporated roadways, including factors that may reduce the necessity for pedestrian facilities due to lack of pedestrian generators or limiting terrain and topography. County staff also expressed interest in focusing on schools, bus stops, and ADA access improvements. These goals are incorporated into key programmatic and policy recommendations in this plan.

Additional focus group meetings were held for the Unincorporated County walking audit (conducted in Angwin) on May 26, 2015, and to review the list of suggested pedestrian projects on August 20, 2015.

Potential Barriers

As shown in **Table UNC-4**, connectivity and safety are two of the top pedestrian issues identified from the public. To geographically visualize the safety concerns in the Unincorporated County, a heat map was created, as shown in Exhibit UNC-6. This map shows the density of safety-related public comments received during the outreach process as well as unincorporated pedestrian-involved collisions, and is intended to represent potential barriers to walking. By including safety-related public comments, this map displays locations that may be under-represented in the collision data due to a high level of collision under-reporting with SWITRS data[8] or fewer people walking as a result of these perceived issues, thus providing a more comprehensive look at potential safety issues. This map may help supplement collision data to identify locations where near misses and other safety-related (but non-reported) issues may be present.

[8] Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113

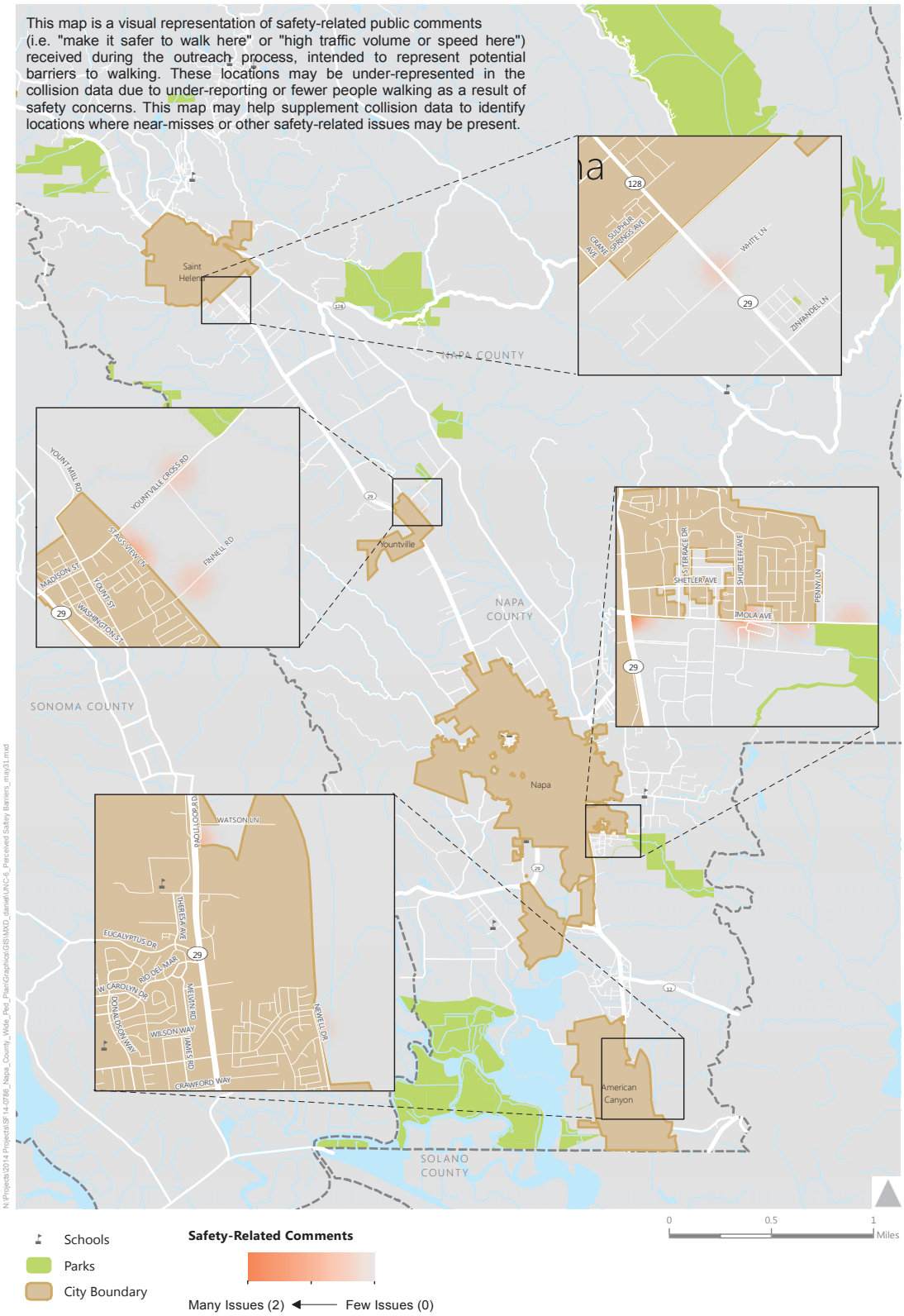


Exhibit UNC-6
Perceived Barriers: As Visualized by Safety-Related Public Comments
Unincorporated Napa County

Opportunity Areas

In the Unincorporated County, pedestrian activity is focused around village centers, trail systems, schools and transit stops. The terrain and topography present challenges for pedestrians, and walking is infrequent in more remote areas of the County; therefore, staff is focused on safety and ADA access near incorporated jurisdictions or other pockets of development. The County has recognized this plan as a key opportunity to identify unincorporated areas that have the greatest need for enhanced pedestrian safety and access. This plan directly addresses this goal by developing a list of proposed pedestrian facilities within key focus areas of the County. Initial focus areas for the plan were developed using a data-driven GIS process that evaluates several factors related to the built environment and demographics that affect the propensity to walk. This process, called the "Ped INDEX," was adapted by work done by the US Environmental Protection Agency (EPA) has been used in several plans in the Bay Area to map the qualitative likelihood of demand for pedestrian activity.

Ped INDEX

The main factors used in the Ped INDEX are population density, land use mix, presence of schools or parks, intersection density, location of downtown commercial areas, and age. These factors resulted in a "heat map" which displays an estimate for relative pedestrian demand on the streets throughout the Unincorporated County. More detail on the Ped INDEX methodology and results as well potential applications can be found in **Appendix B** of the countywide plan**.**

To balance high pedestrian demand areas with key areas of need in the Unincorporated County, additional data layers were used to display pedestrian deficiencies. These include gaps in sidewalk and reported pedestrian-involved collisions. In general, places with high pedestrian demand and a high infrastructure need are shown as target areas that could be prioritized for pedestrian improvements. The resulting heat map with overlaid demand and deficiencies is shown in *Exhibit UNC-7*.

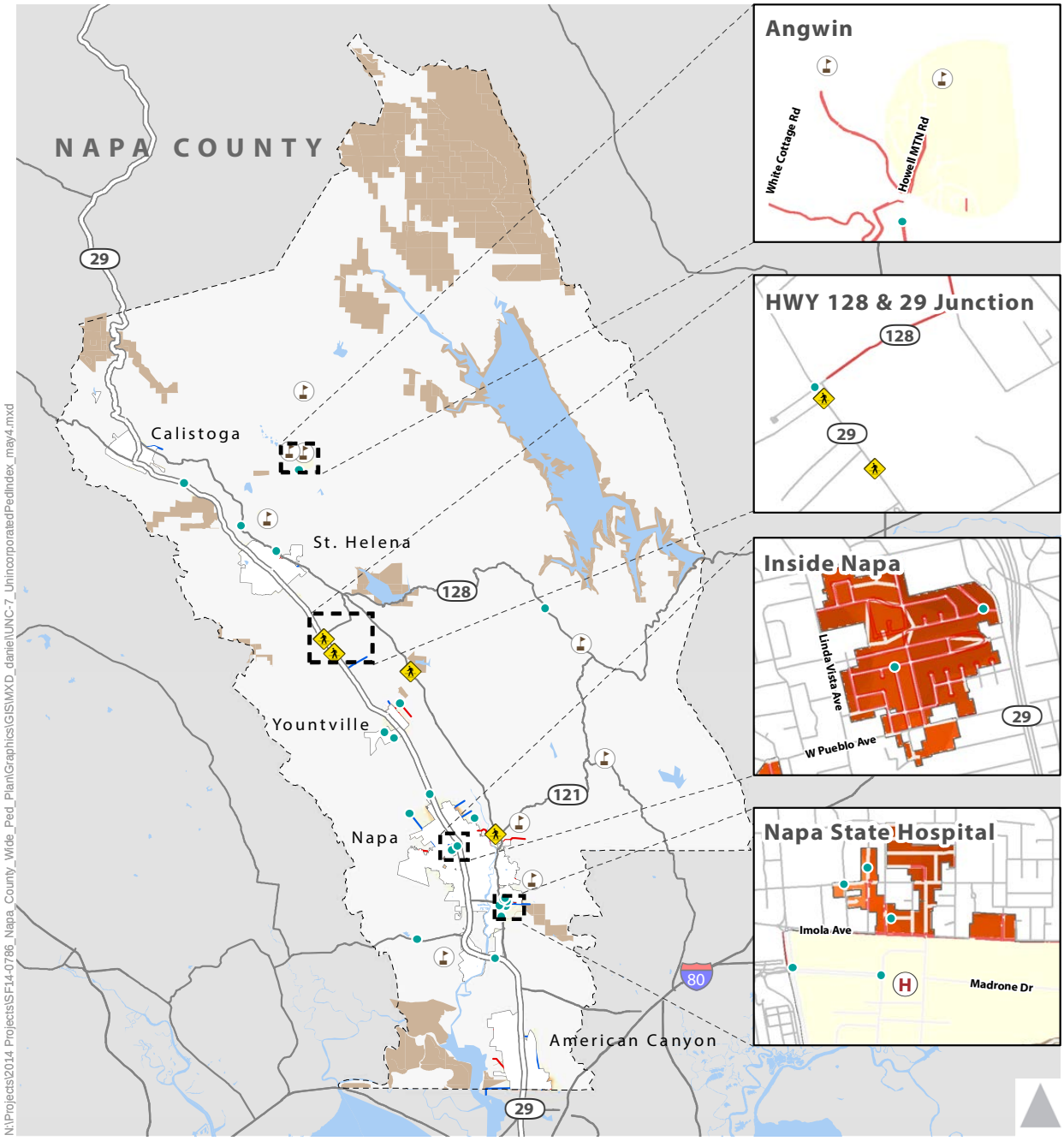
As illustrated on *Exhibit UNC-7*, Ped INDEX focus locations include the community of Angwin, unincorporated pockets near and within the City of Napa, and the community of Rutherford. After reviewing the locations of comments received during public outreach and the alignment with focus locations on the Ped INDEX maps, three potential walking audits were recommended to County staff:

- **Yountville Loop**: Yountville Cross Road from town to Finnell Road; Finnell Road from Yountville Cross Road to town boundary (1.1 miles)
  This walking audit could discuss options for traffic calming along Finell Road and Yountville Cross Road as they enter the Town of Yountville. One pedestrian collision was reported on unincorporated Yountville Cross Road in the last ten years, and several comments from the town and the public highlighted the need for traffic calming and pedestrian infrastructure along Yountville Cross Road and Finnell Road.

- **Unincorporated Neighborhood Pocket of Napa:** Candidate roadways include portions of Carol Drive, Kathleen Drive, and Janette Drive with soft shoulders in lieu of sidewalks, especially to serve Pueblo Vista Elementary School. These areas offer prototypical sites for countywide extrapolation. (1 mile)
- **Angwin Community:** Howell Mountain Road from Cold Springs Road to Clark Way; White Cottage Road from Toyon Street to Howell Mountain Elementary School, north driveway (1 mile)
  County staff expressed interest in studying this area due to the presence of two schools in combination with residential development, and the area includes Pacific Union College and Howell Mountain Elementary School.

After discussions with County staff regarding candidate locations, the third walking audit in the Angwin Community was chosen for study during walking audits, for a total of approximately one mile:

- White Cottage Road from College Avenue to Howell Mountain Elementary School
- Howell Mountain Road from Clark Way to Cold Springs Road



Demand:

Pedestrian Index Score

High – Low

Deficiencies:

Pedestrian Collisions (Injuries)

1

Pedestrian Fatality

Missing Sidewalks

Legend:

School

Parks

Exhibit UNC-7

Unincorporated Area - Pedestrian Index Demand & Deficiencies

Priority Projects and Implementation Plan

An important outcome of this plan is the designation of a priority project list and an implementation plan for these projects. The priority project list was assembled based on:

- Results of the Walking Audit conducted for the plan
- Projects recommended through related planning efforts, such as the Countywide Transportation Plan (CTP)
- Conversations with staff and stakeholders regarding other local priorities

Walking Audits

Walking audits were conducted in April 2015 to observe field conditions and brainstorm potential ideas for improvement with the following stakeholders:

- Rick Marshall, Public Works
- Kaycee Wanlass, Napa County Office of Education
- Sean Westenrider, Pacific Union College
- Cheryl Lynn de Werff, Howell Mountain School
- Harold Mills, Pacific Union College
- Lisa Bissell Paulson, Pacific Union College

During the walking audits, visual surveys were conducted to observe physical characteristics and conditions of the pedestrian environment as well as the connectivity and continuity of the surrounding pedestrian network. A debrief was held afterwards with the group to discuss observations and determine suggestions for improvements.

Project List and Map

Suggested pedestrian projects developed during the Pedestrian Plan walking audits and similar, recent efforts are shown in *Exhibit UNC-9*. Descriptions of each project and additional program and policy recommendations are included below under *Priority Projects.*

Exhibit UNC-8

Angwin - Project Locations

Priority Projects

Existing funding for pedestrian facilities is limited and cannot successfully cover more than a fraction of the recommendations in this plan. Available regional, state and Federal funding sources and grant cycles are highly competitive among worthy projects and other jurisdictions. Using consistent prioritization criteria countywide, this plan includes a tiered list of projects for the unincorporated county reflecting:

- Local importance
- Safety enhancements
- Proximity to schools
- Proximity to transit
- Sidewalk gap and trail connections
- Cost

These criteria and the metrics used to define them are described in more detail in **Appendix UNC-C**. Each pedestrian improvement project is shown in one of two tiers based on the number of evaluation criteria it meets. Detailed results and project descriptions can be found in **Appendix UNC-C.** A summary of the improvements is shown in **Table UNC-5**.

Funded or Constructed Projects

The County recently completed a pedestrian improvement project in 2015 to address traffic calming near Howell Mountain School. This included installing advance warning school zone signs and pavement markings prior to the school where a curve in the roadway presents visibility challenges for motorists. This recently completed project was assigned to “Tier Zero” in **Table UNC-5** and was not evaluated for prioritization.

TABLE UNC-5: UNINCORPORATED COUNTY PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
ON-GOING SYSTEM MAINTENANCE				
Sidewalk Gap Closure and Maintenance (No. 23 2015 CTP Program)	Countywide	Sidewalk maintenance, rehabilitation, and expansion	Sidewalks Maintenance	$$$
TIER ZERO (FUNDED OR RECENTLY CONSTRUCTED IMPROVEMENTS)				
T0-1 Howell Mountain Elementary School Advance Warning Signage	White Cottage Road north of Howell Mountain Elementary School	Advance warning signage and pavement markings	Traffic Calming	-
TIER ONE				
UNC-4 Advance Traffic Calming for Howell Mountain Elementary School	White Cottage Road north of Howell Mountain Elementary School	Speed feedback signs and rumble strips	Traffic calming	$5,700
UNC-9 Angwin Trail Improvements	Howell Mountain Road, College to Clark Way	Medium term: off-street path with trail crossing	Pathway Crossing treatments	$633,800
		Long term: Formalized hiking trail	Pathway	$82,500
UNC-10 Howell Mountain Road Traffic Calming	Howell Mountain Road, College to Clark Way	Lane width reduction and speed feedback signs	Traffic calming	$18,400
TIER TWO				
UNC-7 PUC Crossing Improvements	Howell Mountain Road at La Jota Drive	Crosswalk enhancements[1] and additional marked crosswalks	Crossing treatments ADA ramps	$952,800
	Howell Mountain Road at Angwin Avenue	Crosswalk enhancements[1] and additional marked crosswalks	Crossing treatments ADA ramps	

TABLE UNC-5: UNINCORPORATED COUNTY PEDESTRIAN IMPROVEMENTS

Project ID	Location	Description	Pedestrian Component	Estimated Cost
	Howell Mountain Road at PUC Driveway	Crosswalk enhancements[1] and additional marked crosswalks	Crossing treatments ADA ramps	
	Howell Mountain Road at Brookside Drive	Crosswalk enhancements[1] and additional marked crosswalks	Crossing treatments ADA ramps	
	Howell Mountain Road at La Jota Drive	ADA access path[2]	ADA	$42,400
	Angwin Avenue, east of Howell Mountain Road	Relocated crosswalk and pathway[2]	Crossing treatments Site access	
UNC-1 College Ave Multi-Use Path	College Avenue, White Cottage Road to Fire Station	Off-street pathway	Pathway	$$
UNC-2 Pathway Treatments Access to School	White Cottage Road at College Avenue	Crosswalk enhancements[1]	Crossing treatments ADA ramps	$$$
	White Cottage Road, Howell Mountain Elementary School to College Avenue	Near term: Buffer along shoulder	Pathway	
		Long term: Pedestrian pathway		
	White Cottage Road at Toyon Street	Enhanced marked crosswalk[1]	Crossing treatments ADA ramps	
TIER THREE				
UNC-3 Howell Mountain School Improvements	White Cottage Road at Howell Elementary School	Marked crosswalk with sidewalk extension[3] and ADA path	ADA Crossing treatments Sidewalks	$$
		Marked crosswalk removals	Crossing treatments	

TABLE UNC-5: UNINCORPORATED COUNTY PEDESTRIAN IMPROVEMENTS				
Project ID	**Location**	**Description**	**Pedestrian Component**	**Estimated Cost**
UNC-5 PUC South Gateway Treatments	Howell Mountain Road at Bishops Place	Speed feedback sign	Traffic calming	$$
	Howell Mountain Road at Cold Springs	Crosswalk enhancements[1]	Crossing treatments ADA ramps	
		Feasibility study for roundabout or Pedestrian Hybrid Beacon	Traffic calming Crossing treatments	
UNC-6 PUC Corridor Improvements	Howell Mountain Road, Cold Springs to Angwin Avenue	Pathway, lighting	Pathway	$$$
		Sidewalk	Sidewalks	
UNC-8 Howell Mountain Road	Howell Mountain Road at College	Near term: Enhanced marked crosswalks[1], driveway closure	Crossing treatments ADA ramps	$$
		Long term: Feasibility study for roundabout	Traffic calming	$

1. An enhanced crosswalk includes additional safety treatments such as high visibility striping, curb extensions, reduced curb radii, or pedestrian refuge islands. These enhancements are recommended to address safety concerns such as higher speed or volume roadways, wider roadways, and roadways where motorists are less likely to yield to pedestrians. Specific location-based recommendations are included in Appendix UNC-C. For additional information on the application of these enhancements, refer to the Crosswalk Policy of this plan.
2. These improvements are outside of County right-of-way on PUC property.
3. These improvements are outside of County right-of-way on Howell Mountain Elementary School property.

$$$ - high cost (>$1million); $$ - medium cost ($100k-$1million); $ - low cost (<$100k)

Source: Fehr & Peers, 2015

Preserving the rural character is an important value to the unincorporated communities and a key consideration in the design of pedestrian infrastructure, especially when considering alternatives to sidewalk installation. Several roadways in the unincorporated areas may be potential candidates for in-street walkways where sidewalks may be infeasible due to engineering constraints or community values. This low cost improvement could include a combination of striping, pavement markings, and signage to designate an existing shoulder or bike lane as a shared space for bicyclists and pedestrians. Additional design guidance is provided in the Design Guidelines (**Appendix UNC-F**) under *Enhanced Walkways*. Variations of this treatment could be used as an interim or near term improvement while funding is secured for longer term improvements, such as sidewalks. Specific locations where this treatment could apply are College Avenue and White Cottage Road, as shown in Improvement UNC-1 and UNC-2. For these locations, raised buffers could be included to increase separation from vehicles and improve pedestrian comfort.

Including landscaping can improve the beauty of the pedestrian environment, improve management of storm water, and can help to blend physical improvements into the natural landscape, especially in a more rural setting. This could include landscape strips and trees along sidewalks, bioswales at curb extensions, or native plants along a pathway. Specific locations where this may be appropriate are intersections along Howell Mountain Road, where curb extensions are recommended adjacent to Pacific Union College between La Jota Drive and Brookside Drive, described in Improvement UNC-7. Landscape strips and non-invasive trees could also be considered if right-of-way is available for the recommended sidewalk on Howell Mountain Road, Improvement UNC-6.

Supporting Programs and Policies

Key program and policy recommendations that complement the engineering-related projects are shown below in **Table UNC-6**. Many of these recommendations draw from the benchmarking exercise completed at the onset of the plan development. The recommendations encompass education, encouragement, and enforcement activities.

TABLE UNC-6: UNINCORPORATED COUNTY PROGRAM AND POLICY RECOMMENDATIONS

Program or Policy	Recommendations
Education and Encouragement	
Safe Routes to School (SRTS) Coordination	Coordinate with the Napa County Office of Education to continue SRTS programs in the County, and determine feasibility of implementing recommendations under the Safe Routes to School Support Program in the *Countywide Implementation* chapter of the countywide plan.
Safety and Enforcement	
Law Enforcement for Pedestrian Safety	Seek opportunities for increased enforcement of speeding on roadways near incorporated areas and potential pedestrian nodes to align with countywide collision reduction goals. Invite officers to ATAC meetings on a quarterly basis and consider working with neighboring incorporated police departments to designate traffic safety officers who conduct pedestrian related enforcement activities, such as monitoring school circulation activity during pick up and drop off periods. Determine feasibility of enforcement recommendations in *Countywide Implementation* chapter of the countywide plan.
NVTA Safety Campaign	Coordinate with NVTA on the media safety campaign that NVTA is pursuing, as an opportunity for education by distributing pedestrian safety pamphlets in-lieu of, or in addition to, citations.

TABLE UNC-6: UNINCORPORATED COUNTY PROGRAM AND POLICY RECOMMENDATIONS	
Program or Policy	**Recommendations**
Maintenance	
Repair of Sidewalks, Crosswalks, and Curb Ramps	• Continue to regularly improve and repair uneven sidewalk, broken asphalt in crosswalks, and install new curb ramps as part of the Countywide Sidewalk Maintenance Program in Table UNC-4 above. This could include consideration of implementing an ADA Transition Plan and/or a trip and fall monitoring program. • Determine feasibility of adding a page to the County's website to allow residents and visitors to more easily report and track hazards in the public right-of-way and to ensure all necessary sidewalk repairs are included in the County's Capital Improvement Program (CIP). This could include the reporting of maintenance needs for pedestrian-related pavement markings and traffic control devices.
Overgrown Vegetation on Sidewalks and Planting Strips	• Countywide, ensure that landscapes at maturity do not interfere with safe sight distances for bicycle, pedestrian, or vehicular traffic; do not conflict with overhead lights, traffic controls, traffic signage, utility lines or poles, or walkway lights; and, do not block bicycle or pedestrian ways. Require adjacent property owners to maintain landscaped areas with live and healthy plant materials, replacing plant materials when necessary to maintain full function and aesthetics; to water, weed, prune, fertilize and keep sidewalks and planting strips litter free.
Engineering and Design Standards	
Pedestrian Design Guidelines	• Adopt pedestrian design guidelines in this plan, Appendix UNC-F, especially those with rural context including distinctions for rural remote roadways and those near pedestrian generators • Implement Crosswalk Guidelines, included in Appendix UNC-F of this plan, to enable the County to respond to crosswalk requests in a manner that improves pedestrian accessibility and maintains public safety. Reference Guidelines when making decisions about where standard crosswalks (two, parallel white stripes) can be marked; where crosswalks with special treatments, such as high-visibility crosswalks, flashing beacons and other special features, should be employed; and where crosswalks will not be marked due to safety concerns resulting from volume, speed, or sight distance issues.
Complete Streets	
Development Review Checklist	Create checklist for development review to ensure considerations for pedestrian access and safety, especially near bus stops, schools, and through parking lots. Include items from MTC's Routine Accommodation Checklist for projects in the public right-of-way to ensure routine application of the Complete Streets policy. MTC's checklist can be found here: http://www.mtc.ca.gov/planning/bicyclespedestrians/Routine_Accommodation_checklist.pdf
Funding and Implementation	
Implementation Plan	Develop focus area list to identify projects beyond those recommended in this plan through use of PedINDEX map in this plan and public outreach to unincorporated communities. Prioritize ADA improvements and enhancements near schools and transit.

Next Steps

Funding Sources

The unincorporated County areas have very few pedestrian facilities and most were built by the developer of the fronting property, such as the Airport area and the Silverado residential community. Spending by County staff on maintaining existing pedestrian infrastructure is minimal and includes restriping existing crosswalks as needed.

Federal, state, regional, county and local organizations provide funding for pedestrian and bicycle projects and programs. The most recent Federal surface transportation funding program, Fixing America's Surface Transportation Act (FAST Act), was signed into law in December 2015. Details in this section are provided for funding programs that are used to fund scheduled projects through December 2020.

FAST Act funding is distributed to Federal and state surface transportation funds. Most of these resources are available to the Unincorporated County through Caltrans, the Metropolitan Transportation Commission (MTC), and the Napa Valley Transportation Authority (NVTA).

Table UNC-7 summarizes the applicability of these various funding sources to projects, planning efforts, and programs proposed in this plan. Detailed descriptions of the grant funding sources are presented in **Appendix C** of the countywide plan. The most applicable funding sources for the improvements recommended by this plan are the Active Transportation Program, One Bay Area Grants, and Highway Safety Improvement Program, and Transportation Development Act Article 3 funds.

TABLE UNC-7: REGIONAL FUNDING SOURCE APPLICABILITY MATRIX				
Funding Source	**Class I Multi-Use Path**	**Pedestrian Projects**	**Other Projects**	**Planning and Programs**
Highway Safety Improvement Program (HSIP) Grants	◒	●	●	○
Caltrans Transportation Planning Grants	○	○	○	●
Local Transportation Fund (LTF)	●	●	●	○
California State Parks Recreational Trails Program (RTP)	●	○	○	○
Land and Water Conservation Fund (LWCP)	●	○	○	○
Active Transportation Program (ATP), including Safe Routes to School	●	●	●	●
Transportation Development Act Article 3 (TDA-3)	●	●	●	◒
One Bay Area Grant (OBAG)	●	●	●	●
Bay Area Air Quality Management District (BAAQMD) Transportation Fund for Clean Air	◒	◒	◒	○

Notes:

1. ● indicate that funds may be used for this category; ○ indicate that funds may not be used for this category, and ◒ indicate that funds may be used, though restrictions apply.

Source: Fehr & Peers, 2016.

Cost of the Pedestrian Network

Table UNC-8 presents unit costs for standard pedestrian treatments, estimated using an ATP Cost Estimating Tool developed for the Alameda County Transportation Commission. The tool is used to estimate costs for bicycle and pedestrian projects at the network planning scale during the development of active transportation plans and in a sketch-planning capacity for a bicycle and/or pedestrian project. The costs shown represent the total construction for a typical treatment of that type, including engineering, design, construction management, mobilization, traffic control and general contingency. Contingency for drainage and utility relocation was also included for relevant treatment types, such as curb extensions. These numbers do not include right-of-way costs or inflation.

TABLE UNC-8: GENERALIZED UNIT COSTS FOR IMPROVEMENTS		
Facility Type	**Cost**	**Unit**
Curb Extension/Bulbout	$56,000	Each
Pedestrian Refuge Island	$10,000	Each
Flashing Beacons (RRFBs)	$45,000	Per Crosswalk
Pedestrian Hybrid Beacon (PHB)	$144,000	Per Crosswalk
Customized Pedestrian Wayfinding Signs	$2,000	Per Sign

1. Costs reflect capital costs plus contingency for engineering design, environmental, construction management, mobilization, traffic control, and contingency.

Source: Fehr & Peers, ATP Cost Estimating Tool, 2016.

Project-level cost estimates were prepared for the top 4 priority projects determined in the previous section of this plan, while the remaining projects were assigned a ranking in Table UNC-5 to indicate an estimated range of cost level. Prepared cost estimates, included in **Appendix UNC-D**, include unit costs for individual improvements within the project and adjustments to account for traffic control, construction management, and mobilization. Additional factors were also used for overall contingency, engineering design and environmental. A summary of the estimates is shown in **Table UNC-9** below.

TABLE UNC-9: PRIORITY PROJECT COSTS

Project	Total Cost[1]
UNC-4: Advance Traffic Calming for Howell Mountain Elementary School	$5,700
UNC-7: PUC Crossing Improvements	-
County Total	$952,800
PUC Total	$42,400
UNC-9: Angwin Trail Improvements	-
Medium Term	$633,800
Long Term	$716,300
UNC-10: Howell Mountain Road Traffic Calming	$18,400

1. Costs reflect capital costs plus contingency for engineering design, construction management, mobilization, traffic control, and contingency.
Source: Fehr & Peers, ATP Cost Estimating Tool, 2016.

Countywide Performance Metrics and Evaluation

NVTA intends to monitor progress on the implementation of this plan over time. The *Countywide Implementation* chapter of the Countywide Pedestrian Plan summarizes key performance goals and associated metrics for this plan's implementation.

Unincorporated County Appendix

UNC-A Benchmarking Table

UNC-B Existing Pedestrian Policies

UNC-C Detailed Project Lists and Prioritization

UNC-D Cost Estimates

UNC-E Plan Adoption Resolution

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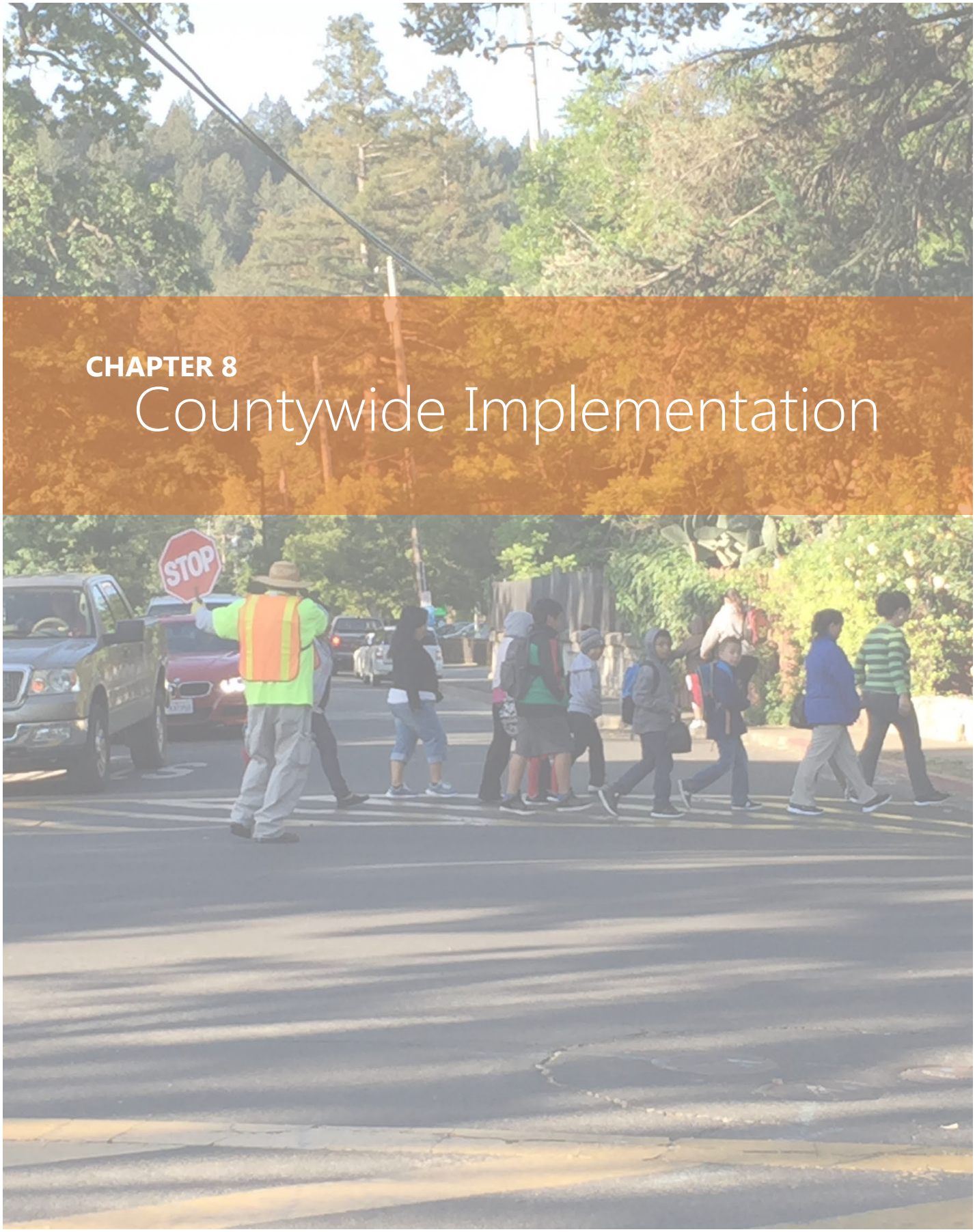

CHAPTER 8

Countywide Implementation

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Chapter 8
Countywide Implementation

Support Programs

Effective policies and comfortable, safe pedestrian designs are the foundation of pedestrian networks. However, policies and design are enhanced by accompanying programs that inform and educate users, enforce policies, and maintain infrastructure and can be key factors in increasing pedestrian safety. Successful and targeted education, enforcement, and engineering treatments can reduce pedestrian countywide pedestrian collision rates up to 13.3%[9]. Below are program recommendations for NVTA to initiate, enhance, or continue through direct sponsorship or indirect support. These programs incorporate elements of design, enforcement, education, encouragement and evaluation. Implementation of these programs depends on funding, availability of staff, and coordination with other groups and organizations. Three types of programs are addressed in the following section:

[9] C. V. Zegeer, S. Masten, L. Marchetti, Y. Fan, L. Sandt, A. Brown, J. Stutts, and L. Thomas, "Evaluation of Miami-Dade Pedestrian Safety Demonstration Project," *Transportation Research Record*, No. 2073, pp. 1-10.

Safe Routes to School (SRTS), a Countywide Count Evaluation Program, and Vision Zero. These programs are best managed at the county-level as they require coordination among multiple jurisdictions. NVTA will work closely with individual jurisdictions to ensure implementation matches the individual context of each community within Napa County.

Safe Routes To School (SRTS)

School zones are busy areas for pedestrians and bicyclists, with conflicts presented from navigating the many parents in cars dropping off or picking up students. However, children who walk or bike to school can experience improved physical health and can contribute to reducing traffic associated with school drop-off, as much as 25% of morning peak hour traffic[10]. The Napa County Office of Education (NCOE) currently has a four-year grant (though 2017) to administer programs to encourage children to safely walk or bicycle to school across the County as part of a SRTS Program. Program leaders have a goal of reaching every interested school by the end of the grant term, administering programs such as Walk and Roll to School Day, Bike Rodeos, and Safe Walking education presentations. Educational components of SRTS programs are especially important for school children where safe walking habits may be instilled as lifelong lessons.

Successful SRTS programs lead to changes in the way students and parents choose to travel to and from school. These programs succeed by including each of the "Five E's" of SRTS to ensure that their project is a well-rounded, comprehensive approach to getting more students walking and bicycling. The Five E's include education, encouragement, engineering, enforcement, and evaluation.

Education and Encouragement

As a result of the existing three-year SRTS grant, Napa County has implemented after-school and in-class education and encouragement programs in Calistoga, Howell Mountain, and throughout the Napa Valley Unified School District. The program includes events such as Walk and Roll to School Day, Bike Rodeos, and Safe Walking education presentations for students in grades K-3. Brochures in both English and Spanish are handed out during this program as well as at community events and PTA/parent meetings. Parent presentations include a review of pedestrian laws and ordinances. Although materials for these programs are available each year for schools across the County, reaching schools on a routine basis has not been possible due to understaffing and scarcity of volunteers.

Recommendations

- Coordinate with individual schools and Napa County Office of Education to distribute information to teachers, parents, and students about the following issues:
    - Recommended routes to walk or bike to school

[10] Pedestrian and Bicycle Information Center (PBIC), Safe Routes to School Guide, Introduction to Safe Routes to School: the Health, Safety and Transportation Nexus, 2007.

  - Benefits of walking or biking to school for parents and students
  - Location and prescribed traffic patterns for pick up and drop off areas
  - Potential fines for not obeying traffic laws in the school zone and pick up and drop off areas
  - Alternative locations for "park and walk" or "walking school bus"
  - Plan to roll out weekly Walk/Bike to School Day
- Ensure consistency with the Community Health Improvement Plan (CHIP) by seeking partnership opportunities between health agencies and SRTS to expand the reach of education and promotion of walking.

Engineering

For SRTS programs, engineering refers to creating operational and physical improvements to the infrastructure surrounding schools that reduce both the speeds and potential conflicts with motor vehicle traffic, and can establish safer and fully accessible crossings, walkways, and trails.

Recommendations

- Analyze the transportation and safety issues in each school area by coordinating a walk around the school site and along regularly traveled school routes with city and school staff, parents, and students. Also, identify areas for safe and secure long term bicycle parking. Determine solutions for existing concerns and potential funding sources for implementing improvements, including pursuit of grant funding.
- Coordinate with NVTA to seek additional funding for SRTS, especially for infrastructure projects recommended in the jurisdiction plans, Chapters 2-7.

Enforcement

SRTS enforcement involves partnering with local law enforcement to ensure that traffic laws are obeyed in the vicinity of schools and initiating community enforcement such as crossing guard programs and student safety patrols. Specific enforcement actions may be related to travel speeds, yielding to pedestrians in crosswalks, and proper walking and bicycling behaviors. The following recommendations would contribute to pedestrian safety and should be considered by local police departments for feasibility based on scale and available resources.

Recommendations

- Individual jurisdiction's police departments should be a visible presence during school pick up and drop off periods, ticketing violators of traffic regulations in school zones, including speeding, illegal parking, not stopping for pedestrians in the cross walk, and U-turns.
- Tracking pedestrian-involved collisions aligned with enforcement efforts could help analyze trends and effectiveness of enforcement methods, where applicable.

Evaluation

To measure the success of a SRTS program, local agencies should monitor and document outcomes, attitudes, and trends through the collection of data before and after different interventions. In Napa County, weekly travel mode to school data was collected in Spring 2015 for students in K-6. In addition, parent surveys were conducted to determine mode and distance traveled to school. Staff surveys were completed to gauge safety and infrastructure needs at specific school sites.

Recommendations

- Use home distances from school from parent survey results to determine feasibility of rolling out Walking School Bus program where applicable. Track the number of children walking and biking to school and survey participating schools to track the success of implemented Walking School Bus programs.
- Refer to requested infrastructure needs from staff surveys during recommended site walks under *Engineering* above.
- This plan will establish an ongoing countywide count program for Napa County. While the program will encompass a range of different site types throughout the County, several will be located within a quarter-mile of primary and secondary schools. At these locations, counts will be completed during the typical morning (7-9 AM) and afternoon (4-6 PM) travel peaks, as well as during the afternoon dismissal period (2-4 PM). Consider monitoring pedestrian volumes near schools over time to document trends related to SRTS efforts. Reference these trends when applying for infrastructure funding.

Countywide Count Evaluation Program

Establishing a countywide count program allows Napa County to measure facility use over time, evaluate pedestrian volumes before and after project implementation, and monitor travel patterns and safety conditions. In addition, count data may be used to support NVTA and jurisdictions' applications for competitive grant funding by demonstrating the pedestrian demand in the project area. This count program could lead to a proactive approach to identify treatments and program funding as well as ensure that improvements are focused not only on areas with high pedestrian volumes and a high number of collisions, but also on areas with high collision rates (collision/daily pedestrian volume) that may not have as many people walking. Additionally, pedestrian volumes could be referenced proactively when setting speed limits and to determine if a reduced speed zone may be appropriate or other traffic calming measures may be needed, especially near school zones.

Count Methodology

Baseline counts were conducted at 42 locations throughout Napa County in October and November 2015. Locations were chosen based on priority projects in the Countywide Transportation Plan (2015) and high-ranking projects from the walking audits of this plan. Observed pedestrian activity periods included the baseline morning (7-9 AM) and afternoon (4-6 PM) peaks, as well as school and weekend periods which were added based on adjacent land use and input from jurisdiction staff. Locations near schools received a count during the afternoon school dismissal (2-4 PM) and downtown locations were counted during the weekend midday peak (12-2 PM)

when recommended by jurisdiction staff. The implemented count schedule followed the methodology put forth in the MTC Handbook for Bicyclist and Pedestrian Counts (2003) and is consistent with researched best practices Statewide. The results of the counts are summarized in **Table 9** below.

TABLE 9: PEDESTRIAN COUNT PROGRAM VOLUMES

ID	Jurisdiction	Location	Morning	Evening	School	Weekend
			7-9AM	4-6PM	2-4PM	12-2PM
AC1	American Canyon	SR 29 and American Canyon Rd.	32	90		
AC2	American Canyon	Melvin Road at Poco Way	3	6		
AC3	American Canyon	James Road at Donaldson Way	23	42		
AC4	American Canyon	Elliott Drive at Donaldson Way	97	55	196	
AC5	American Canyon	Elliott Drive at Crawford Way	25		33	
UNC1	Angwin	Brookside Drive at Howell Mountain	18	23	30	
UNC2	Angwin	White Cottage Road at College Avenue	14		11	
UNC3	Angwin	Howell Mountain and Clark	1	0		
CA1	Calistoga	SR 29 and Cedar Street	80	256		
CA2	Calistoga	Petrified Forest Road and Foothill Boulevard	2	5		20
CA3	Calistoga	Brannan and Lincoln	47	20		
CA4	Calistoga	Berry and Cedar	214		173	
CA5	Calistoga	Grant and Stevenson	22	22	10	
CA6	Calistoga	Grant Street and N. Oak Street	13	12		11
CA7	Calistoga	Lake County Hwy / Silverado Trail N / Lake Street		3		6
CA8	Calistoga	Lake Street and Grant Street	60		66	
NA1	City of Napa	Browns Valley Road and Westview Drive	26	17		
NA2	City of Napa	First Street and Freeway Drive	67	30		
NA3	City of Napa	Imola Ave and Parrish Road	17	112		
NA4	City of Napa	Jefferson and Old Sonoma Road	12	27		
NA5	City of Napa	Jefferson and Sierra Avenue	206	43	138	
NA6	City of Napa	Salvador Ave and Escuela Drive	34	26	29	
NA7	City of Napa	Redwood Rd. and Solano Avenue	189	106	194	
NA8	City of Napa	Silverado Trail at 3rd Street/Coombsville/ East	24	17	34	
NA9	City of Napa	Soscol and First Street	89	143		
NA10	City of Napa	Imola Avenue and Foster Rd	63	34	67	
NA11	City of Napa	Soscol at Kansas	44	49		
NA12	City of Napa	Soscol at Imola	23	117		
NA13	City of Napa	Undercrossing: SR 29 and Napa Creek	7	42	31	
SH1	St. Helena	Main St. and Pope Sreet	55	134		
SH2	St. Helena	Main Street at Adams Street	112	321		798
SH3	St. Helena	Hunt Avenue at Proposed Path (1)	23	37		

TABLE 9: PEDESTRIAN COUNT PROGRAM VOLUMES						
ID	Jurisdiction	Location	Morning	Evening	School	Weekend
			7-9AM	4-6PM	2-4PM	12-2PM
SH4	St. Helena	Hunt Avenue at Proposed Path (2)	23	34		
SH5	St. Helena	Main and Grayson	8		16	
SH6	St. Helena	Main and El Bonita Avenue	5		8	7
SH7	St. Helena	Spring Mountain and Elmhurst	13		7	
SH8	St. Helena	Main and Pine	35	65		104
YT1	Yountville	Madison St. and Washington St.	100	73		
YT2	Yountville	Washington Street and Yount Street	149	245		797
YT3	Yountville	Yount Street and Mt Avenue	56	14	27	
YT4	Yountville	California Drive and Washington Street	96	59		
YT5	Yountville	Yount Street and Finnell	95	94	72	

The number of pedestrians observed during the morning hours of 7-9 AM ranged from 1 to 214. The highest volumes observed during this period were near schools, with over 200 pedestrians counted in Calistoga near Calistoga Elementary School and in the City of Napa near Vintage High School and Bel Aire Park Magnet School. The lowest volumes observed during this period were near the northeast corner of the unincorporated community of Angwin along Clark Way and near the southwest corner of the City of Calistoga at Petrified Forest Road and SR 128.

During the evening hours of 4-6 PM, pedestrian volumes observed throughout the County ranged from 0 to 321. The highest volumes were observed in downtown locations, with about 250 pedestrians observed in downtown Calistoga and in downtown Yountville, and 321 observed in downtown St. Helena. The lowest volumes observed during this period were in the unincorporated community of Angwin adjacent to Clark Way and in the City of Calistoga near the northeast city boundary at the intersection of Silverado Trail N and Lake Street.

Pedestrians observed throughout the County during the school dismissal period of 2-4 PM ranged from 7 to 196. The highest number of pedestrians during this period was about 200 in the City of American Canyon and the City of Napa, and the lowest were in St. Helena where less than 10 pedestrians were counted.

Weekend counts were collected in the afternoon from 12-2 PM and ranged from 6 to 798 pedestrians. The highest volumes were observed in downtown Yountville and St. Helena, where close to 800 pedestrians were counted. The lowest number of pedestrians were in Calistoga near Oat Hill Mine Trailhead and near the southern end of St. Helena at SR 29 and El Bonita Avenue.

Of all locations observed throughout the county, an average of 54 pedestrians was recorded during the AM period (7-9 AM) and an average of 68 were observed during the PM period (4-6 PM). During the midday school observations (2-4 PM), an average of 63 pedestrians were counted at each location evaluated. An average number of 249 pedestrians was counted during the weekend count period (12-2 PM). These values varied significantly

based on population density of a given neighborhood or jurisdiction, as well as by the adjacent land use. Individual jurisdiction plans provide additional details about the pedestrian counts completed within those locations.

Evaluation and Next Steps

Going forward, NVTA intends to conduct annual counts throughout the County on an annual basis. Counts will primarily be conducted in locations evaluated in the baseline year (2015) to monitor travel trends and the impact of project implementation on pedestrian volumes, as well as justify funding for priority projects in this plan. With the collected counts, NVTA may compare travel patterns across different locations, measure changes in pedestrian use at a single location over time, and evaluate the extent to which pedestrian travel peaks throughout the course of the day or week. By collecting counts at different times of day, NVTA may evaluate if a given pedestrian facility is typically used for recreational or utilitarian purposes.

NVTA should consider purchasing a mobile automated trail counter. With this counter, NVTA may collect data for extended periods of time at different locations, providing a more holistic understanding of pedestrian behavior at these sites.

In the future, count locations may be added or omitted based on agency priorities, and could include pedestrian-involved collision locations to prioritize improvements in locations based on collision rates (collision/daily pedestrian volume). Individual jurisdictions may choose to add additional count locations at midblock locations where marked crosswalks may be considered based on existing pedestrian demand. These could be midblock locations where pedestrians are observed crossing the street such as between a hotel and a winery, a residential zone and a shopping center, or shopping and public parking. Pedestrian volumes at these locations could help determine if a midblock crosswalk should be evaluated based on the Crosswalk Guidelines in this plan.

Vision Zero

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. The initiative has gained momentum in major American cities including San Francisco, New York City, Chicago, Los Angeles, Seattle, Washington DC and San Jose. In the form of a plan and/or policy, it challenges the existing approach to traffic safety by acknowledging that traffic deaths and severe injuries are preventable and by taking a multidisciplinary approach to tackle this complex problem. Vision Zero often starts at the local level and engages law enforcement, engineering, education, and evaluation to help reach its goals. Implementation can include development of data-driven tools to identify high-injury networks and select priority locations for targeted engineering, education, and enforcement.

Recommendations

- Identify opportunities for funding for Vision Zero efforts, such as developing a Countywide database to inventory collision data and environmental factors, undertaking a comprehensive analysis to understand collision patterns, and facilitating an outreach process to identify community safety priorities and determine where to focus safety investments and improvements.

Performance Goals

Napa County intends to monitor progress on the implementation of this Pedestrian Plan over time. **Table 10** summarizes the County's four performance goals and includes information on the associated metrics and policies to make progress toward meeting those goals.

This plan will be updated every 5-7 years, including an analysis of the increase in walking from the implementation of proposed facilities through the Countywide Count Evaluation Program, as well as an evaluation of the remaining project list. This update will ensure that proposed projects still meet the needs of the community.

TABLE 10: PERFORMANCE GOALS		
Goal	**Metric**	**Key Actions**
1. Provide a connected network of pedestrian sidewalks, trails, and pathways in the County and its jurisdictions that are safe and accessible to a variety of users and that foster community interactions	Establish a construction pace of one pedestrian capital improvement project per year per jurisdiction Coordinate with NVTA to seek additional funding for infrastructure projects that support safe routes to school	• Continue to seek grant funding to implement the projects recommended in each jurisdiction plan • Coordinate with jurisdiction staff to inform schools and communities of relevant funding and grant opportunities • Reference the public involvement, analysis, and project evaluation efforts of this plan when applying for grants to fund projects
	Reduce annual pedestrian related collision rate by half by 2040	• Address collision locations identified in this plan by installing the projects identified and implementing the planned education and enforcement programs in Chapter 8. • Use 2015 as the baseline year for evaluation with progress evaluations at five-year intervals.
2. Encourage walking trips through enhancing key pedestrian connections to transit	Increase the number of walking trips to transit by 50% by 2040	• Work with NVTA and VINE to monitor the percentage of riders walking to transit • Prioritize and implement improvements near the VINE stations and high use stops in support of this goal
3. Take advantage of overlapping opportunities	Identify Complete Streets funding and project synergies with development and infrastructure projects	• Review environmental documents and proposed development plans for consistency with this plan and for a proposed facility's ability to accommodate the needs of users of all ages and abilities • Consider pedestrian facilities in all road resurfacing and intersection improvements
4. Encourage and educate residents about walking and enforce safe interactions between pedestrians and motorists	Administer SRTS programs to each interested school by the end of the grant cycle (2016) and secure grant to continue program Launch Safe Routes for Seniors and Safe Routes to Transit initiatives	• Implement the SRTS Program recommendations in this plan • Distribute pedestrian safety brochures to the public to promote walking to community events • Pursue grant funding through the California Office of Traffic Safety for a media safety campaign for motorists and implement campaign countywide through advertisements on buses and bus shelters, through SRTS and in-school curriculum, public service announcements, and/or brochures distributed by law enforcement • Collaborate with senior centers and advocates to implement education, encouragement, and engineering projects to improve mobility for senior pedestrians • Collaborate with transit providers to prioritize and implement access improvements to transit stops

Plan Consistency

This plan will build on, and need to coordinate with, a number of related planning efforts occurring not only at the countywide level but also at the city, regional, state, and federal levels. This section provides an overview of the policy framework surrounding pedestrian planning in Napa County by summarizing the key plans and policies that will affect and be affected by implementation of this plan. Key planning efforts include various routine accommodation and "complete streets" policies at the federal, state and regional levels; recent state legislation related to global warming and emissions of greenhouse gases; the MTC Bay Area Regional Bicycle Plan; NVTA's Countywide Bicycle Plan; and local general plans.

This plan is consistent with plans and policies at federal, state, and local levels.

Federal Policies

The United States Department of Transportation (US DOT) can issue Policy Statements to help guide actions at lower levels of government

US DOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations

In 2010, the United States Department of Transportation (US DOT) issued a policy directive in support of walking and bicycling, encouraging transportation agencies to go beyond minimum standards in fully integrating active transportation into projects. As part of the statement, the US DOT encouraged agencies to adopt similar policy statements in support of walking and bicycling considerations such as:

- Considering walking and bicycling as equals with other transportation modes
- Ensuring availability of transportation choices for people of all ages and abilities
- Going beyond minimum design standards
- Integrating bicycling and pedestrian accommodations on new, rehabilitated, and limited access bridges
- Collecting data on walking and bicycling trips
- Setting mode share for walking and bicycling and tracking them over time
- Removing snow from sidewalks and shared use paths
- Improving non-motorized facilities during maintenance projects

Americans with Disabilities Act

The Americans with Disabilities Act Title III is legislation enacted in 1990 that provides thorough civil liberties protections to individuals with disabilities with regards to employment, state and local government services, and access to public accommodations, transportation, and telecommunications. Title III of the Act requires places of

public accommodation to be accessible and usable to all people, including those with disabilities. While the letter of the law applies to "public accommodations," the spirit of the law applies not only to public agencies but to all facilities serving the public, whether publicly or privately funded.

State Policies

State policies that relate to this plan include:

Complete Streets Act of 2008

California's Complete Streets Act of 2008 (Assembly bill 1358) requires all cities and counties to modify the circulation element of their general plan to "plan for a balanced, multimodal transportation network that meets the needs of all users" when a substantive revision of the circulation element occurs. The law went into effect on January 1, 2011. The law also directs the Governor's Office of Planning and Research to amend its guidelines for the development of circulation elements to aid cities and counties in meeting the requirements of the Complete Streets Act.

Senate Bill 375 / Assembly Bill 32

California Assembly Bill 32 requires greenhouse gas (GHG) emissions to be reduced by 28 percent by the year 2002 and by 50 percent by the year 2050 in response to climate change. Senate Bill 375 provides the implementation mechanisms for AB 32. It requires metropolitan planning organizations and regional planning agencies to plan for these reductions with the development of Sustainable Community Strategies, which will be a regional guide for housing, land uses, and transportation and will incorporate the Regional Transportation Plan (RTP). One key component of this is the reduction of automobile trips and vehicle miles traveled. Planning for increases in walking, bicycling, and transit use as viable alternatives are important components of these plans.

Caltrans Deputy Directive 64

In 2001, the California Department of Transportation (Caltrans) adopted Deputy Directive 64 (DD-64), "Accommodating Non-motorized Travel," which contained a routine accommodation policy. The directive was updated in 2008 and in 2014 as "Complete Streets—Integrating the Transportation System." The new policy reads in part:

> "Caltrans views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.
>
> Caltrans develops integrated multimodal projects in balance with community goals, plans, and values. Addressing the safety and mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding, is implicit in these objectives. Bicycle, pedestrian and transit travel is facilitated by

creating "complete streets" beginning early in system planning and continuing through project delivery and maintenance and operations…."

The directive establishes Caltrans' own responsibilities under this policy. Among the responsibilities that Caltrans assigns to various staff positions under the policy are:

- Ensure bicycle, pedestrian, and transit interests are appropriately represented on interdisciplinary planning and project delivery development teams.
- Ensure bicycle, pedestrian, and transit user needs are addressed and deficiencies identified during system and corridor planning, project initiation, scoping, and programming.
- Ensure incorporation of bicycle, pedestrian, and transit travel elements in all Caltrans transportation plans and studies.
- Promote land uses that encourage bicycle, pedestrian, and transit travel.
- Research, develop, and implement multimodal performance measures.

Regional and County Policies and Connections

This plan is consistent with regional- and county-level plans. Pedestrian and bicycle networks were reviewed from local and regional agencies, including MTC, the Association of Bay Area Governments (ABAG), and NVTA to promote a coordinated regional system. These plans are described briefly below.

Sonoma County Bicycle and Pedestrian Plan (2010)

Completed in 2010, the Sonoma County Bicycle and Pedestrian Plan provides a list of policies, projects, and programs for increasing bicycle and pedestrian mode share throughout Sonoma County. While no policies explicitly highlight connections to Napa County, several identified projects terminate at the Napa-Sonoma County border. Portions of the Sonoma County Bay Trail connect directly with the Napa County sections of the Bay Trail. For example, the Sonoma Plan proposes Bay Trail segments from Hudeman Slough (Project 206C) and from Dale Avenue (Project 206A) to the Napa County border.

Solano Countywide Pedestrian Transportation Plan (2012)

The Solano Countywide Pedestrian Transportation Plan, approved in 2012, explicitly discusses how the plan fits within the regional pedestrian context. The plan includes a goal to "develop a pedestrian connections network that connects to northern California's alternative modes system", with a specific objective to "plan and implement access to public transit connections to neighboring counties (i.e. Yolo County, Napa County, Sacramento County, etc.)". Portions of the Bay Trail in Solano County extend along the Vallejo waterfront with plans to ultimately route the trail to Bay Trail segments in American Canyon in Napa County.

Bay Trail Gap Analysis Study (2005)

The Bay Trail Project is a nonprofit organization administered by ABAG that plans, promotes and advocates for the implementation of a continuous 500- mile bicycling and hiking path around San Francisco Bay. When complete, the Trail will pass through 47 cities, all nine Bay Area counties, and cross seven toll bridges. The Gap Analysis Study identifies portions of the Trail yet to be completed, and groups these into short-, medium-, and long-term projects. Much of the Bay Trail development in the past has been in San Francisco, San Mateo, Alameda, Contra Costa, and Marin Counties. Physical and environmental constraints in the North Bay have limited Bay Trail development in Sonoma and Napa Counties; however, projects such as the Sonoma Baylands, Sears Point Restoration, Napa Sonoma Marsh and Wetlands Edge Trail in American Canyon are representative of increasing progress toward Bay Trail implementation in the North Bay. This study includes several proposed Bay Trail projects within Napa County:

- 6.9 miles of the Bay Trail are included in the plan as short-term projects
- 22.4 miles of Bay Trail are included in the plan as medium-term projects
- 3.86 miles of Bay Trail are included in the plan as long-term projects

Napa Valley Vine Trail Project Plan (2013)

The Napa Valley Vine Trail Project Plan describes an initiative to build a walking and bicycling trail connecting the entire Napa Valley. This proposed 47-mile Napa Valley Vine Trail is seen as the key link in a Napa County-wide trail system, which also includes portions of the region-wide Bay Trail and Ridge Trail. The Trail project is a partnership between the NVTANVTA and the Napa Valley Vine Trail Coalition. Several recommended improvements in this plan align with existing or planned segments of the Vine Trail and include:

- Redwood Road at Solano Avenue Intersection Improvements in Napa (Improvement N-26)
- RLS Middle School Sidewalk and Hunt Avenue Improvements in St. Helena (Improvement SH-1)
- South St Helena / Unincorporated Connection in St. Helena (Improvement SH-11)
- Vine Trail Improvements in Yountville (Improvement Y-4)
- Madison Street Wayfinding in Yountville (Improvement Y-9)

Napa County Regional Park and Open Space District Master Plan (2009, 2012 update)

The first Master Plan for the Napa County Regional Park and Open Space District was adopted by the Board of Directors in 2009, with a plan update approved in 2012. Of the plan's guiding policies, two are of particular relevance to this planning effort:

- Promote non-motorized recreation facilities such as hiking trails, bicycle routes and other facilities that link the County's cities, town and communities to each other and to regional parks and other important destinations.

- Increase recreational trails open to the public by at least 100 miles, working in partnership with other governmental agencies and non-profit land conservation organizations.

MTC Policy on Routine Accommodation

MTC is the regional transportation planning agency for the Bay Area. In 2006, MTC adopted a policy on "Routine Accommodation." The policy states that pedestrian and bicyclist consideration must be integrated into planning, design, and construction of transportation projects that use regional transportation funds. The policy requires sponsors of a project, such as a city or county agency, to complete a project checklist, often referred to as a Complete Street Checklist. The checklist is intended to be completed at the earliest stages of the projects so that considerations for bicyclist and pedestrian accommodation can be made at the inception of the project.

Plan Bay Area Regional Transportation Plan

The Association of Bay Area Governments (ABAG) is the comprehensive regional planning agency and Council of Governments for the nine counties and 101 cities of the San Francisco Bay region. Motivated by the California Sustainable Communities and Climate Protection Act of 2008, ABAG developed Plan Bay Area in July 2013, as regional transportation plan that guides the Bay Area in a long-range plan to significantly reduce greenhouse gases by 2040. The focus of this plan is to devote most (87%) of funding to operate and maintain the existing transportation network, with the remaining budget aimed at next-generation transit projects and other programs that support reducing GHG emissions.

Vision 2040: Moving Napa Forward

The Napa Countywide Transportation Plan – Vision 2040: Moving Napa Forward is a long-range transportation plan that includes a list of transportation investments for the next 25 years. The Napa Countywide Transportation Plan identifies goals and objectives that apply to all modes of transportation and identifies issues and challenges while setting the stage for a long range vision for the county. Several objectives highlighted in Moving Napa Forward align with the goals of this plan:

- Educate all roadway users so they may safely coexist.
- Work with Napa County jurisdictions to adopt complete streets policies to meet the MTC funding eligibility requirements.
- Prioritize projects that expand travel options for cyclists and pedestrians as well as those projects that improve operation and safety for vehicles, pedestrians, and cyclists
- Increase mode share for transit, walking, and bicycling to 10% by 2035

The plan also identifies key active transportation policies and concepts, discussing the role of complete streets, complete bicycle and pedestrian networks, and wayfinding and signage in encouraging active transportation within the county. Moving Napa Forward also includes a chapter focused on Transportation and Health, identifying a key priority action area as "[improving] wellness and healthy lifestyles".

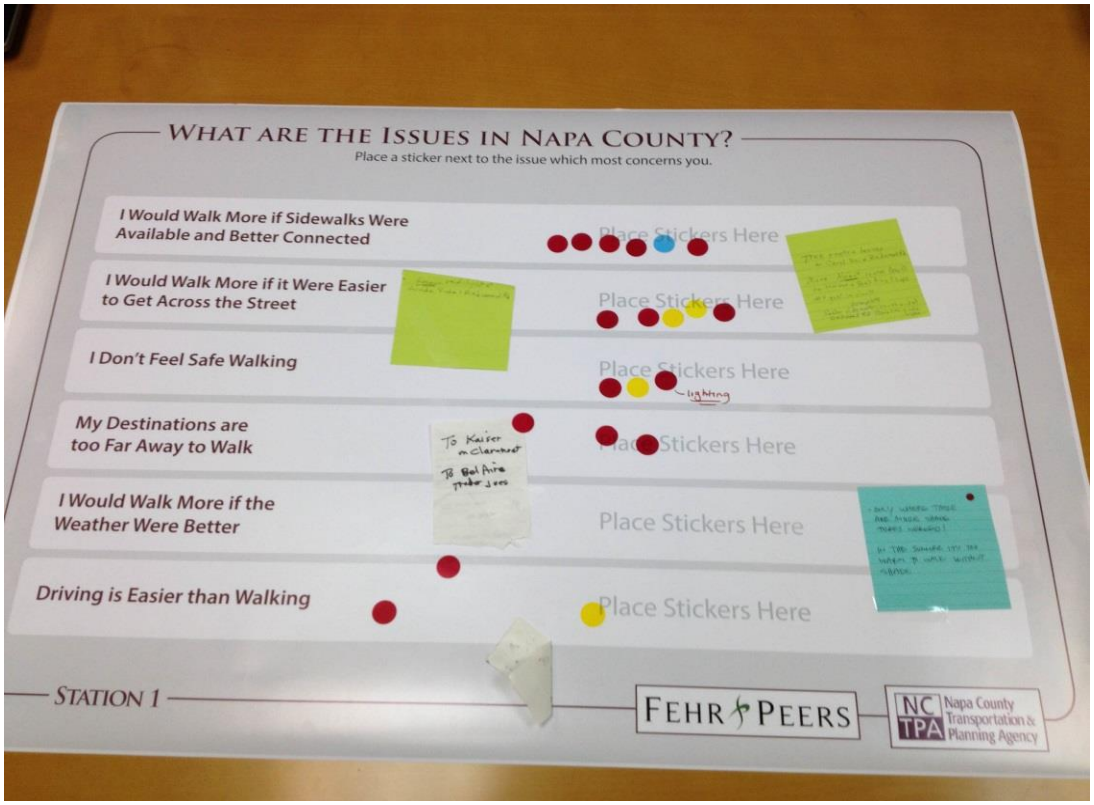
Local Plans

Evaluation and Next Steps

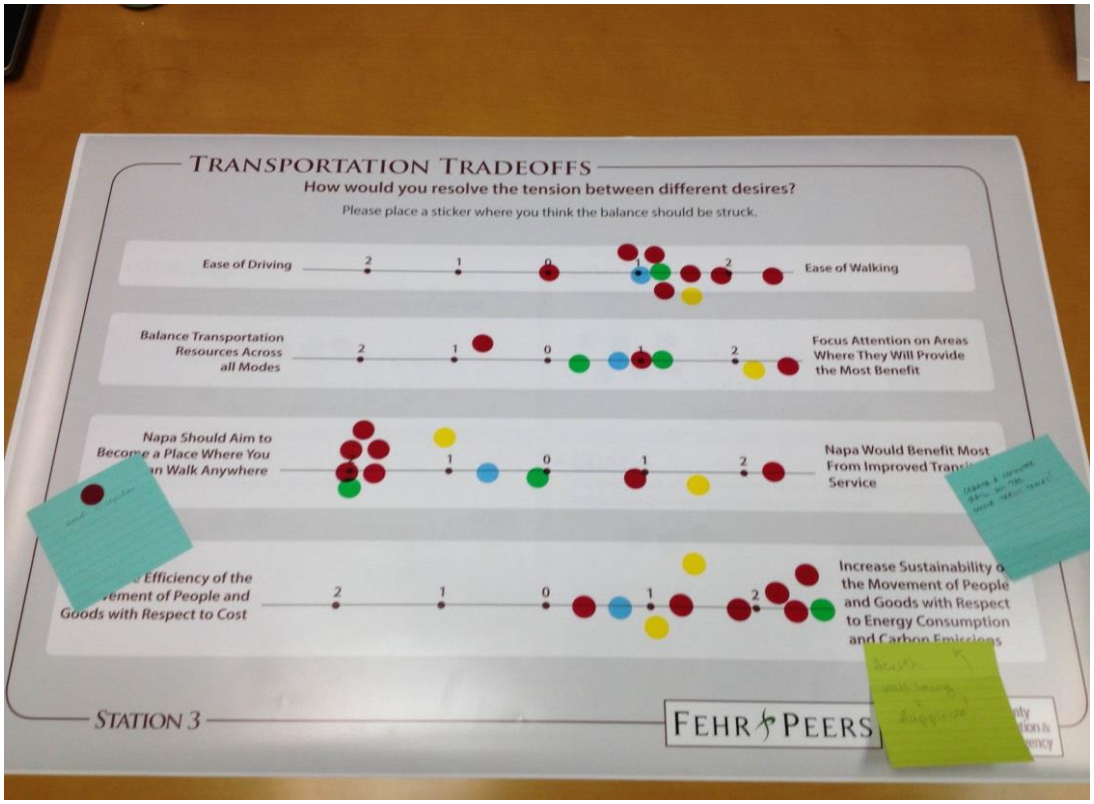
Napa County consists of six local jurisdictions: four cities, one town and the County government, which has responsibility for the unincorporated areas of the County. All six jurisdictions have adopted policies as part of their respective general plans in support of walking. A list of these policies can be found in Appendix B of each Jurisdiction Plan, *Existing Pedestrian Policies*.

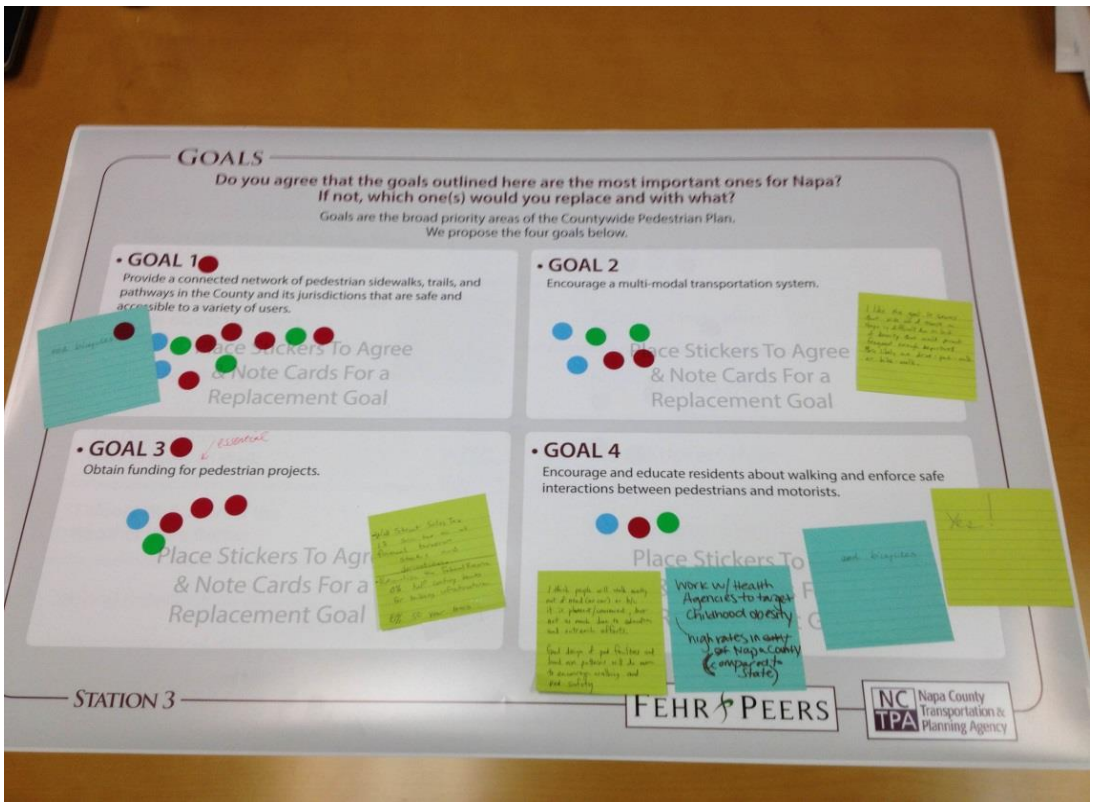
Appendix A – Public Workshop Materials

January 22, 2015 - NVTA

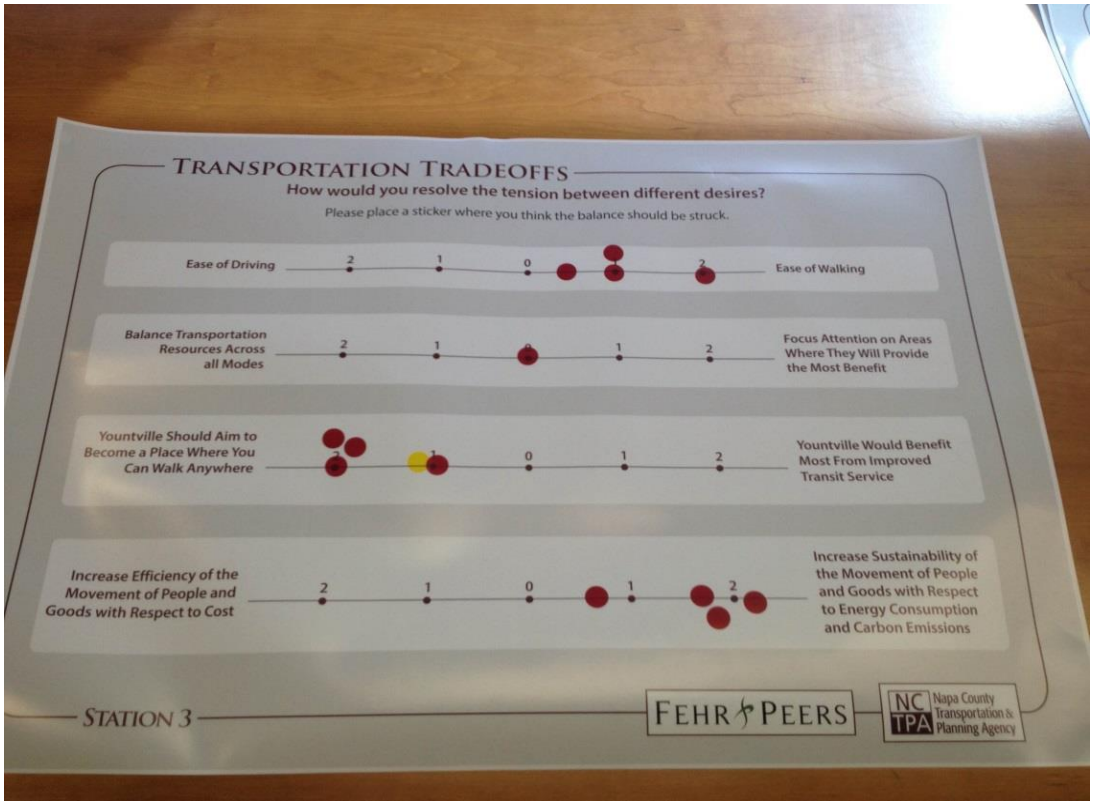


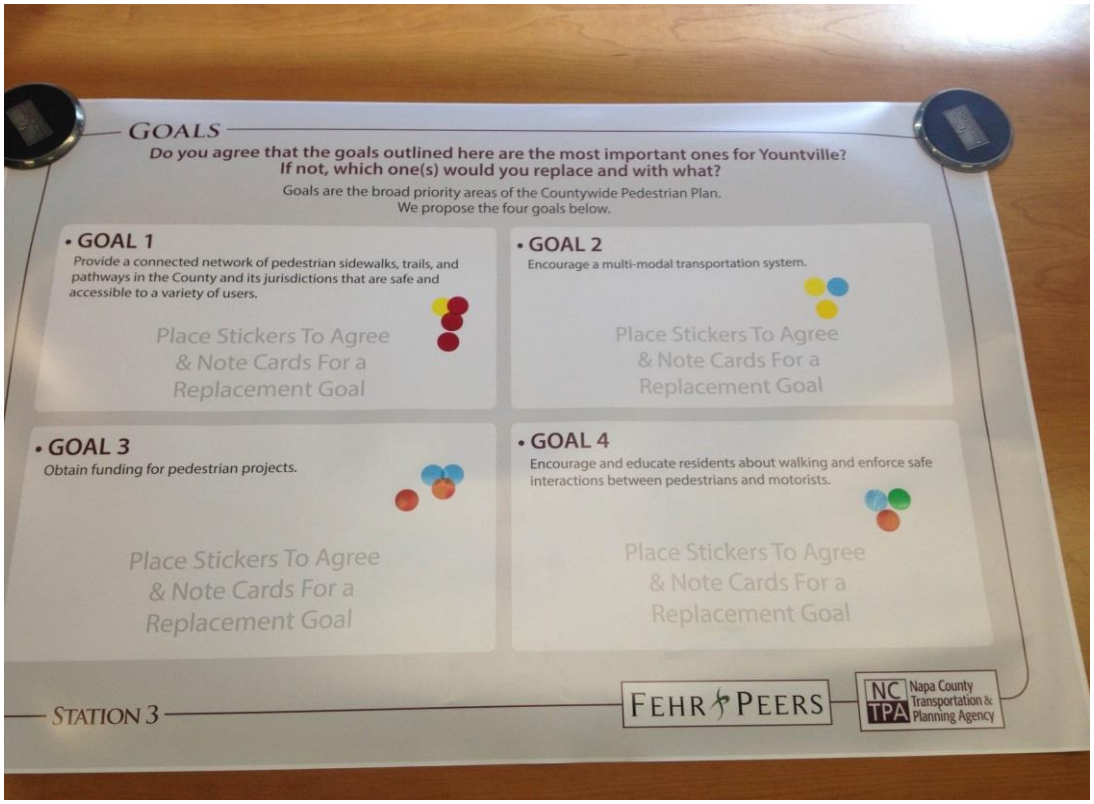
APPENDIX A


TRANSPORTATION TRADEOFFS
How would you resolve the tension between different desires?
Please place a sticker where you think the balance should be struck.
Ease of Driving
Ease of Walking
Balance Transportation Resources Across all Modes
Focus Attention on Areas Where They Will Provide the Most Benefit
Napa Should Aim to Become a Place Where You Can Walk Anywhere
Napa Would Benefit Most From Improved Transit Service
Efficiency of the Movement of People and Goods with Respect to Cost
Increase Sustainability of the Movement of People and Goods with Respect to Energy Consumption and Carbon Emissions
STATION 3
FEHR PEERS

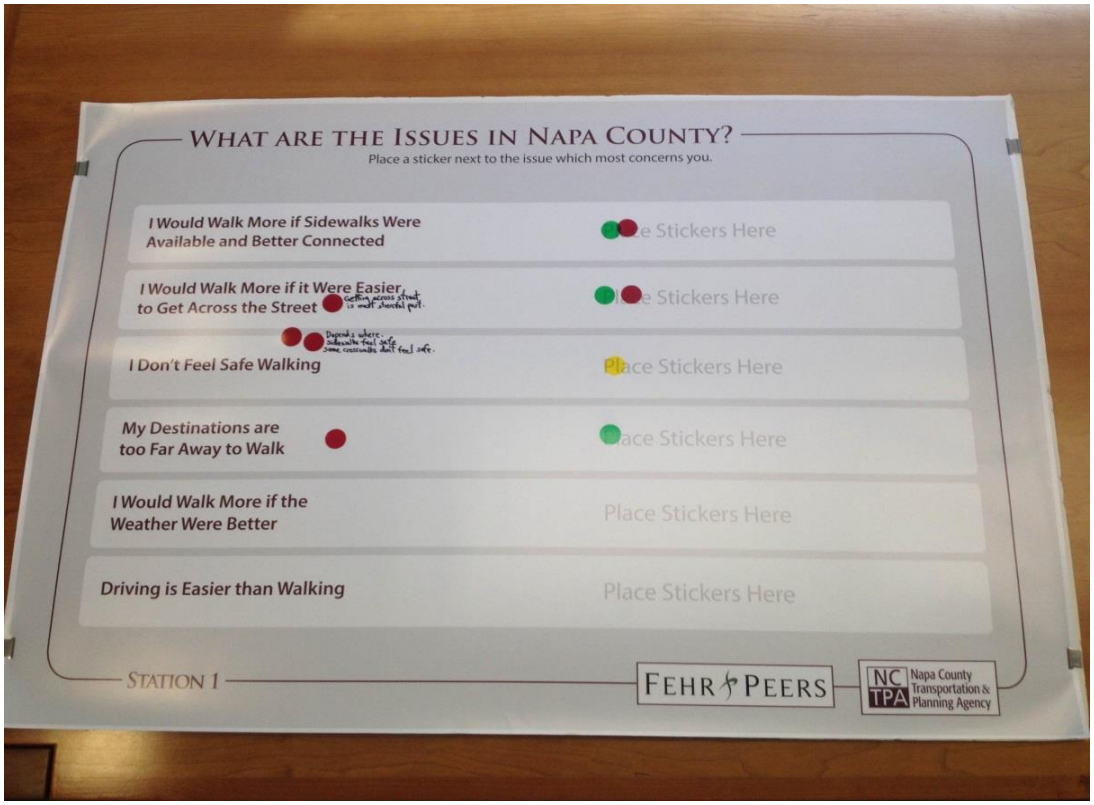

GOALS
Do you agree that the goals outlined here are the most important ones for Napa?
If not, which one(s) would you replace and with what?
Goals are the broad priority areas of the Countywide Pedestrian Plan.
We propose the four goals below.
• GOAL 1
Provide a connected network of pedestrian sidewalks, trails, and pathways in the County and its jurisdictions that are safe and accessible to a variety of users.
• GOAL 2
Encourage a multi-modal transportation system.
• GOAL 3
Obtain funding for pedestrian projects.
• GOAL 4
Encourage and educate residents about walking and enforce safe interactions between pedestrians and motorists.
Work w/ Health Agencies to target Childhood obesity
STATION 3
FEHR PEERS
NC TPA Napa County Transportation & Planning Agency

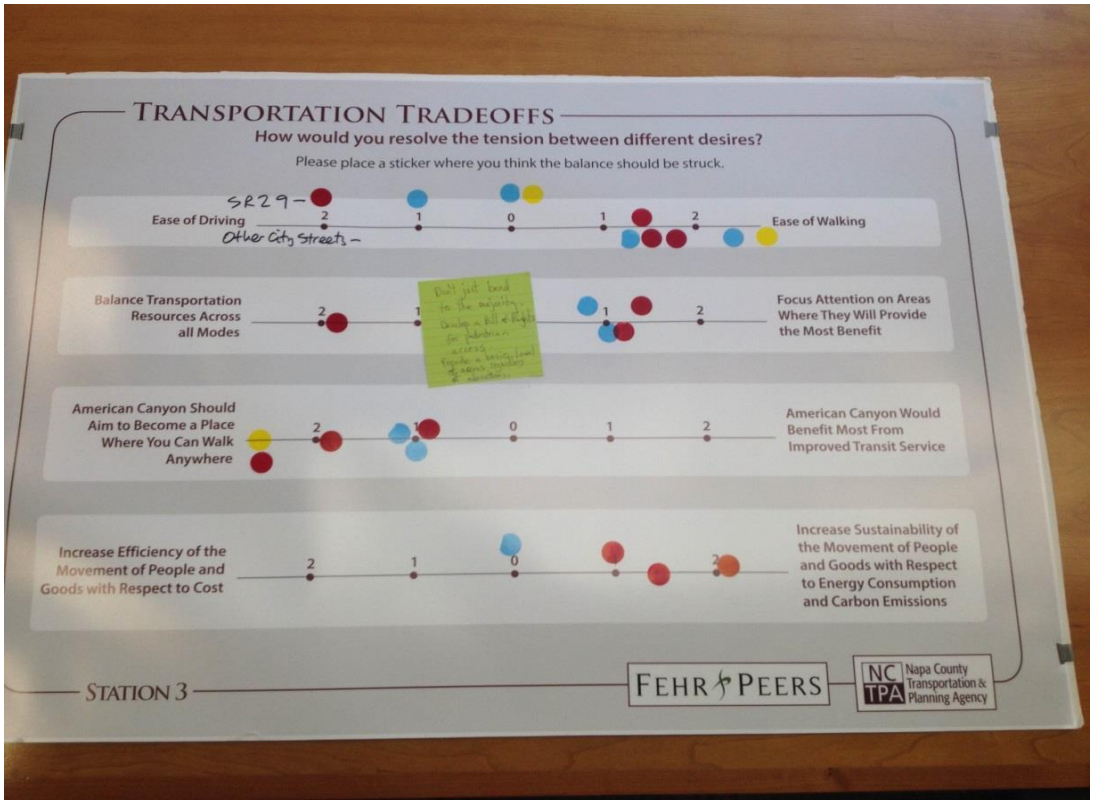
January 27, 2015 – Yountville Town Hall



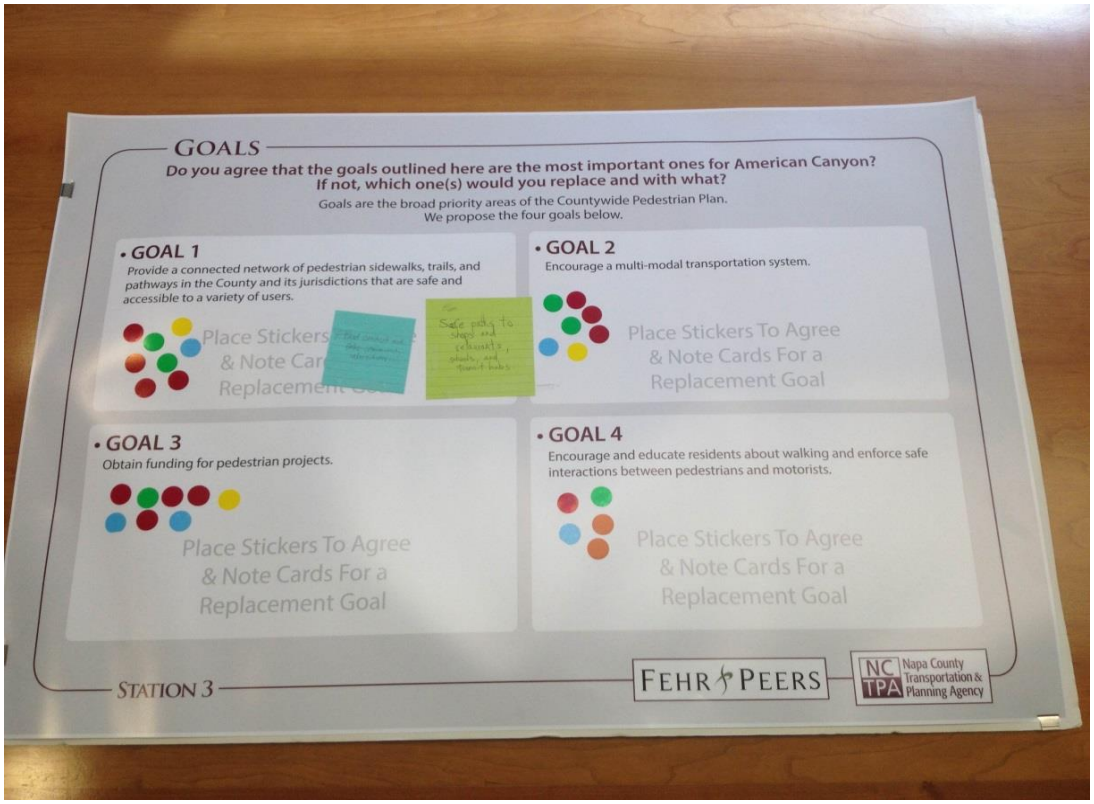

GOALS
Do you agree that the goals outlined here are the most important ones for Yountville?
If not, which one(s) would you replace and with what?
Goals are the broad priority areas of the Countywide Pedestrian Plan.
We propose the four goals below.
• GOAL 1
Provide a connected network of pedestrian sidewalks, trails, and pathways in the County and its jurisdictions that are safe and accessible to a variety of users.
Place Stickers To Agree & Note Cards For a Replacement Goal
• GOAL 2
Encourage a multi-modal transportation system.
Place Stickers To Agree & Note Cards For a Replacement Goal
• GOAL 3
Obtain funding for pedestrian projects.
Place Stickers To Agree & Note Cards For a Replacement Goal
• GOAL 4
Encourage and educate residents about walking and enforce safe interactions between pedestrians and motorists.
Place Stickers To Agree & Note Cards For a Replacement Goal
STATION 3
FEHR PEERS
NC TPA Napa County Transportation & Planning Agency

February 4, 2015 – American Canyon City Hall




TRANSPORTATION TRADEOFFS
How would you resolve the tension between different desires?
Please place a sticker where you think the balance should be struck.
SR29 –
Other City Streets –
Ease of Driving
2
1
0
1
2
Ease of Walking
Balance Transportation Resources Across all Modes
Focus Attention on Areas Where They Will Provide the Most Benefit
American Canyon Should Aim to Become a Place Where You Can Walk Anywhere
American Canyon Would Benefit Most From Improved Transit Service
Increase Efficiency of the Movement of People and Goods with Respect to Cost
Increase Sustainability of the Movement of People and Goods with Respect to Energy Consumption and Carbon Emissions
STATION 3
FEHR PEERS
NC TPA Napa County Transportation & Planning Agency

APPENDIX A


GOALS
Do you agree that the goals outlined here are the most important ones for American Canyon?
If not, which one(s) would you replace and with what?
Goals are the broad priority areas of the Countywide Pedestrian Plan.
We propose the four goals below.
• GOAL 1
Provide a connected network of pedestrian sidewalks, trails, and pathways in the County and its jurisdictions that are safe and accessible to a variety of users.
• GOAL 2
Encourage a multi-modal transportation system.
Place Stickers To Agree & Note Cards For a Replacement Goal
• GOAL 3
Obtain funding for pedestrian projects.
Place Stickers To Agree & Note Cards For a Replacement Goal
• GOAL 4
Encourage and educate residents about walking and enforce safe interactions between pedestrians and motorists.
Place Stickers To Agree & Note Cards For a Replacement Goal
STATION 3
FEHR PEERS
NC TPA Napa County Transportation & Planning Agency

Appendix B – Ped INDEX Methodology

This Appendix presents the approach to estimating pedestrian demand within Napa County and summarizes the methodology and preliminary results. The results helped inform the decision for priority focus areas and walking audit locations; additional factors that were considered to provide context for that decision are discussed under *High Improvement Need*. In addition to developing suggested focus areas for this plan, further recommended next steps are listed at the end of this Appendix.

Methodology

Fehr & Peers used existing GIS data to develop a pedestrian demand model that identifies variations in pedestrian activity and potential demand on streets throughout Napa County. Pedestrian demand is based on several variables, including proximity, built environment, demographic, and zoning factors that are considered indicators for pedestrian activity. The variables, sources and scoring criteria are summarized in **Table B-1**. Each heading is defined below:

- **Input Factor** – pedestrian demand variable considered
- **Source/Format** – data source and GIS format (either point or polygon)
- **Range of Factor** – range of possible values associated with the factor, grouped for scoring purposes
- **Variable Score** – score assigned to reflect importance of value range for pedestrian demand, from zero to 100
- **Processing** – description of how factor is mapped and scored
- **Significance and Weighting Factor** – significance of variable to overall pedestrian demand, and relative scoring factor, applied when all factors are considered together for the total pedestrian demand score of each roadway segment. The weighting factors listed in the table add up to 100, so the compiled scores range from zero to 100.

APPENDIX B

TABLE B-1: LIST OF VARIABLES USED IN GIS PEDESTRIAN DEMAND MODEL					
Input factor	**Source / Format**	**Range of Factor**	**Variable Score**	**Processing**	**Significance and Weighting Factor**
Built Environment (Density and Diversity of Land Uses)					
Population Density – per acre	Census 2010/ Polygon	0-3 persons per acre	0	Uses kernel density (persons per acre) to derive average density within a 1 mile buffer using census block group data Assigns average grid value to street centerline	High 14/100
		3-6	20		
		6-9	40		
		9-12	60		
		12-15	80		
		15+	100		
Employment Density – per acre	Smart Database Job Locations/ Polygon	0-3 persons per acre	0	Uses kernel density (per acre) to derive average number of employees within a 1 mile buffer using census block group data Assigns average grid value to street centerline	High 14/100
		3-6	20		
		6-9	40		
		9-12	60		
		12-15	80		
		15+	100		
Intersection Density	Smart Database – Street Intersection Density	0-50	0	Calculates total intersection density, weighted to reflect connectivity for pedestrian and bicycle travel. The denominator is total land area.	High 14/100
		50-100	25		
		100-150	50		
		150-200	75		
		200+	100		
Land Use Mix – ratio in each census block group	Smart Database Jobs-to-Population Ratio/ Polygon	0-.1	0	Calculates the jobs to population ratio for census block group Assigns average grid value to street centerline ***Census block groups with a population density less than 3 persons/sq. mile were excluded in the analysis to filter out rural areas that may otherwise get a high score*	Medium 10/100
		0.1-0.2	25		
		0.2-0.3	50		
		0.3-0.4	75		
		40+	100		
Proximity Factors (Destinations)					
Schools – distance in feet	City/ Polygon	0-330 feet	100	Uses buffer to define ranges of distance to nearest school Assigns average grid value to street centerline	Medium 9/100
		330-660	95		
		660-1320	85		
		1320-2640	50		
		2640-5280	25		
		5280+	0		

TABLE B-1: LIST OF VARIABLES USED IN GIS PEDESTRIAN DEMAND MODEL					
Input factor	**Source / Format**	**Range of Factor**	**Variable Score**	**Processing**	**Significance and Weighting Factor**
Parks – distance in feet	City/ Polygon	0-330feet	100	Uses buffer to define ranges of distance to nearest park Assigns average grid value to street centerline	Medium 9/100
		330-660	75		
		660-1320	50		
		1320-2640	25		
		2640+	0		
Transit Proximity, Bus Stops – distance in feet	City, MTC/ Points	0-330feet	100	Uses buffer to define ranges of distance to nearest bus stop Assigns average grid value to street centerline	Medium 9/100
		330-660	95		
		660-1320	85		
		1320-2640	75		
		2640+	0		
		660-1320	95		
		1320-2640	75		
		2640-5280	50		
		5280+	0		
Major Retail Destinations/ Downtown/Community Commercial Zone – distance in miles	Neighborhood Shopping Districts and other Retail Areas (city zoning plans)/Polygons	0 miles	100	Uses buffer to define ranges of distance to nearest retail corridor Assigns average grid value to street centerline	Medium 9/100
		0-.5	50		
		.5+	0		
		660-1320	75		
		1320-2640	50		
		2640-5280	25		
		5280+	0		
Demographics					
Age - % under 18 and over 65	Census 2010/ Polygons	0-15 %	0	Calculates percentage of under 18 and over 65 population in census block group Assigns average grid value to street centerline	Low 4/100
		15-35	25		
		35-40	50		
		40-43	75		
		43+	100		
Income - % below poverty level	Census 2010/ Polygons	0-.5 %	0	Calculates percentage of population below poverty level in census block group Assigns average grid value to street centerline	Low 4/100
		.5-1	20		
		1-2	40		
		2-3	60		
		3-4	80		
		4+	100		

TABLE B-1: LIST OF VARIABLES USED IN GIS PEDESTRIAN DEMAND MODEL					
Input factor	**Source / Format**	**Range of Factor**	**Variable Score**	**Processing**	**Significance and Weighting Factor**
Vehicle Ownership - % households with 1 or fewer vehicles	Census 2010/ Polygons	0-10 %	0	Calculates percentage of households with 1 or fewer vehicles in census block group Assigns average grid value to street centerline	Low 4/100
		10-20	20		
		20-30	40		
		30-40	60		
		40-50	80		
		50+	100		

Each weighted variable is combined into a single heat map for each jurisdiction (Calistoga, St. Helena, Yountville, City of Napa, American Canyon and the Unincorporated Areas) to identify the highest and lowest areas of pedestrian demand[11] within each area based on the composite score.

Results

The results of the Pedestrian Demand model are illustrated in the Pedestrian Index maps, *Exhibit 8* of each Jurisdiction Plan (Chapters 2-7)**,** where the range of pedestrian demand across each jurisdiction is shown with a color gradient from dark purple to light green. Locations with a relatively high population or employment density and proximity to significant destinations immediately rise to the top and are given the highest scores, as shown in the darkest colors – black and purple. The lowest scores are found in the areas with low to no housing or employment and are represented in a pale green color. Since the majority of the data used in the PedINDEX comes from the Census (Census 2010 and the Smart Database), the data is applied at the Census block-level rather than an individual block-level, which can cause the resulting "heat" or colors of some of the maps to appear in large sections rather than on a finer-grained scale. Census blocks are polygons created around a cluster of blocks for which the results are reported for the entire group to address privacy concerns. The following findings stand out on the Demand exhibits for the jurisdictions.

Highest Pedestrian Demand Areas

High pedestrian demand areas are found in and around the downtown cores, close to important economic activity generators, and where schools and parks are located in areas with relatively dense population. The downtown cores have the highest concentration of destinations in the cities and town, including retail corridors and employment density. Most of the variables listed in Table 1 are found in the Downtown Core.

In American Canyon, the absence of a downtown core pulls the emphasis around other variables such as population density, schools and parks. For example, the area south of American Canyon Road to the east of SR 29

[11] This relative demand measure reflects latent demand, and does not account for the barriers that may prevent demand from being realized. Identifying and reducing these barriers is a key opportunity for this Plan to maximize demand.

includes American Canyon Apartments, a high-density housing complex, making it one of the higher concentrations of population in a city where the majority of housing is low-density single family homes. This relatively high population density, a variable ranked with high significance in the model, and the presence of multiple parks and schools nearby, both variables ranked with medium significance, make this an area of high pedestrian demand. Portions of The Preserve, Rancho Del Mar, and Napa Glen neighborhoods that are within walking distance of Donaldson Way Elementary School, American Canyon Middle School and multiple parks also receive a high pedestrian demand score.

Other high pedestrian demand areas are located in unincorporated areas in the center of the City of Napa or along the border of the city, and are shown in greater detail on *Exhibit UNC-8*, the Unincorporated Area Pedestrian Index. These areas are near multiple schools and parks as well as a mix of residential and commercial land uses. Parks and schools are both highly weighted in the model, so the proximity to both of these destinations increases pedestrian demand. The shorter blocks and more grid-like patterns of the road network in these unincorporated areas also result in a higher intersection density, which contributes to the high demand level.

Medium Pedestrian Demand Areas

Medium pedestrian demand areas are found farther from the core of the incorporated jurisdictions. Neighborhoods in these areas usually have a low mix of land uses but may have reasonably high population density, which is weighted with one of the highest significance factor among all 11 variables. They also are often relatively close to schools, parks, or the downtown area. For example, the residential area in the City of Napa east of Soscol Avenue and north of Lincoln Avenue, which includes Vineyard Terrace Apartments, Kentwood Apartments, and Glen View Garden Apartments, has a medium pedestrian demand score. This area has no employment centers and a low mix of land use; however, it does include medium-density housing, a park, and is within a half mile of a few other parks and schools. It is also adjacent to Soscol Avenue, a transit corridor for Vine Transit, with five bus stops bordering this area north of Lincoln Avenue.

The residential neighborhood in the City of Calistoga west of Lincoln Avenue between Grant Street and the northern city border is also a medium pedestrian demand area. This area borders Napa County Fairgrounds and includes several resorts and hotels. It is also adjacent to two schools - Calistoga Junior-Senior High School and Palisades Continuation High School – which are weighted with a high significance factor.

Low Pedestrian Demand Areas

Low pedestrian demand areas are found in portions of the jurisdictions with low population density, few destinations other than parks, and primarily residential land use (low land use mix). Areas near the outer edges of the cities and town and within the open space of the eastern unincorporated areas stand out for their low demand scores.

High Improvement Need

Barriers to Pedestrian Connectivity

Gaps in pedestrian infrastructure connectivity may result in barriers to pedestrian movement and discourage walking. Understanding where barriers exist within the countywide pedestrian network helps inform where improvements could be most beneficial. Examples of physical barriers include freeways or arterials with limited or difficult pedestrian crossings, such as SR 29.

The PedINDEX demand maps illustrate many high demand areas that exist near the key north-south physical barrier in the county, SR 29. New pedestrian connections can be prioritized in areas near barriers and a high pedestrian demand, such as potential enhanced crossings of SR 29 in St. Helena and Calistoga through the downtown areas. While the area between Eucalyptus Drive and American Canyon Road along SR 29 in American Canyon does not stand out in the PedINDEX demand maps with respect to existing development, areas of future development such as the Watson Ranch Town Center may be more telling of the need and location of potential pedestrian crossings.

Pedestrian Infrastructure Gaps

In addition to removing high priority barriers, the conditions of the physical infrastructure supporting walking, such as sidewalks, is an important consideration in identifying where improvements are needed. The Pedestrian Index maps include an overlay of gaps in the sidewalk network on top of the pedestrian demand results to visualize the interaction between these two variables. The flow chart below illustrates this concept by demonstrating how these two factors should work in conjunction to determine future needs for high demand areas. In general, places with high pedestrian demand and a high infrastructure need demonstrate target areas that could be prioritized for pedestrian improvements.

For example, the unincorporated County neighborhood located within the center of the City of Napa, called out on *Exhibit UNC-8*, has one of the highest demand scores in the unincorporated areas. A high concentration of the unincorporated population is in this area, which also has a high intersection density compared to the rest of the unincorporated areas. As seen on *Exhibit N-8a*, the neighborhood is also near multiple schools. Adding sidewalks or trails to this neighborhood, which currently lacks sidewalk coverage, could improve connectivity for school children and residents to ensure that any pedestrian demand is met with adequate facilities. The neighborhoods between Calistoga Junior-Senior High School and the Napa County Fairgrounds, two potential pedestrian destinations, present an additional opportunity for pedestrian infrastructure improvements. The grid pattern of the streets in this area contributes to a higher intersection density which drives the demand up in the model and provides good

pedestrian connectivity to the two adjacent destinations. However, the lack of sidewalks and trails in this neighborhood, particularly between Grant Street and Fair Way, are a potential barrier to pedestrians and could be a candidate for improvements where speeds and traffic volume levels warrant.

Collisions

Pedestrian collisions are an important consideration when determining where to invest in pedestrian improvements. Prioritizing locations with high latent demand that also have a high frequency of pedestrian-involved collisions can encourage more of the latent demand to be realized, rather than be inhibited due to potential safety issues. By focusing improvements on areas where these two variables overlap, cities can work towards removing collision hot spots as a barrier to walking and giving pedestrian demand the chance to fully realize. If effectively implemented and demand fully realized, improvements in these high-potential areas can result in a good return-on-investment scenario in terms of benefit/costs.

Areas with Lower Pedestrian Demand

The information gathered from the GIS model provides a technical methodology for making informed decisions about areas which would most benefit from improvements. However, focusing improvements only on areas with highest pedestrian demand will not address all of the needs within the County. There may be areas, such as rural areas or streets around schools and senior centers, which have a lower pedestrian demand but would still benefit from pedestrian improvements.

Some areas may fit the low demand criteria for the PedINDEX demand maps and still be appropriate locations for a trail network, especially near parks in the eastern region of Napa County. Existing trails collected as part of the inventory in the *Countywide Napa Pedestrian Plan,* along with those available in GIS from jurisdiction staff, were overlaid on the PedINDEX maps to identify important investment opportunities related to potential areas of connectivity that the PedINDEX variables do not highlight.

Next Steps

The pedestrian demand analysis was used to:

- Provide a point of comparison to the public comment maps to understand the interaction between latent pedestrian demand and public concerns
- Inform the selection of walk audit locations along with several other inputs

In addition, the pedestrian demand analysis may be used in the following ways:

- To guide the development of policies and programs relating to specific geographic areas, destinations, built environment factors and demographics
- To inform recommendations for pedestrian infrastructure and design guidelines, which can be tailored and context specific based on the built environment and areas of varying demand
- As a guide for prioritizing future Capital Improvement Program lists and other investments, in particular as it relates to removing barriers or deficiencies in high potential areas

Appendix C – Grant Funding Sources

Federal Programs

The majority of public funds for bicycle, pedestrian, and trails projects are derived through a core group of federal and state programs. Federal funding is authorized through the Surface Transportation Program (STP). STP provides flexible funding that may be used by States and localities for projects on any Federal-aid highway. In the past this funding was authorized by the Moving Ahead for Progress in the 21st Century (MAP-21). Funding for STP is now authorized through FAST Act, with the same structure and goals of STP funding.

The Transportation Alternatives Program (TAP), included in MAP-21 and maintained in the FAST Act, provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, transit access, mobility, and recreation trails program. TAP broadens eligibility and flexibility for state allocation of TAP funds. Safe Routes to School programs, including infrastructure, encouragement, campaigns, education, outreach and a Safe Routes coordinator, are eligible under TAP, though no funds are dedicated for this.

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) also authorizes federal funds, including education programs. FAST Act maintains the existing CMAQ program and broadens eligibility for transit operations.

Federal funds from STP, TAP and CMAQ programs are allocated to MTC and distributed in Napa County. Distribution is allocated either competitively or proportionally according to jurisdiction population.

State Programs

Several state-wide funding sources and regionally administered funding sources are available for pedestrian projects and efforts.

Active Transportation Program

The Active Transportation Program (ATP) was created by SB 99/ Assembly Bill 101 in 2013 to encourage increased use of active modes of transportation such as biking and walking. The program consolidates five existing state funded programs: Transportation Alternatives Program, Recreational Trails program, Safe Routes to Schools, Environmental Enhancement and Mitigation Program and the Bicycle Transportation Account. It provides a comprehensive program that improves planning and flexibility and is more efficient than multiple programs. Another benefit is that funds can be directed to multi-year projects to make greater long-term improvements to active transportation.

The ATP mixes state and federal funds and provides approximately $130 million annually, with a focus on implementing active transportation improvements to support the goals of local SB 375 sustainable community strategies. This program is funded from a combination of federal and state funds from appropriations in the annual

state budget act. Forty percent of the funding will go toward metropolitan planning organizations in urban areas. Ten percent of the funds go to small urban and rural regions. The remaining fifty percent of the funds go to the California Transportation Commission for statewide projects. The ATP ensures that disadvantaged communities fully share in the benefits of the program by requiring that a minimum of 25% of fund be distributed to disadvantaged communities.

To maximize the effectiveness of program funds and to encourage the aggregation of small projects into a comprehensive bundle of projects, the minimum request for Active Transportation Program funds that will be considered is $250,000. This minimum does not apply to non-infrastructure projects, Safe Routes to Schools projects, and Recreational Trails projects.

Project types allowed under the ATP include: new bikeways serving major transportation corridors, new bikeways to improve bicycle commuting options, bicycle parking at transit and employment centers, traffic control devices to improve pedestrian and bicycle safety, improving and maintaining safety on existing bikeways, recreational facilities, Safe Routes to School projects, Safe Routes To Transit projects, education programs, and other improvements to bicycle-transit connections and urban environments.

For a project to contribute toward the Safe Routes to School funding requirement, the project must directly increase safety and convenience for public school students to walk and/or bike to school. Safe Routes to Schools infrastructure projects must be located within two miles of a public school or within the vicinity of a public school bus stop. Other than traffic education and enforcement activities, non-infrastructure projects do not have a location restriction. More information on the Active Transportation Program can be found at http://www.dot.ca.gov/hq/LocalPrograms/atp/.

Highway Safety Improvement Program

Caltrans administers two funding programs for roadway safety improvements: the Highway Safety Improvement Program (HSIP) and the Highway Rural Roads Program (HR3). These programs use cost-benefit ratios as a primary factor in the awarding of applications. Because both of these programs focus on roadway safety, projects with documented collision history – through frequency of collision but particularly collision severity – are typically ranked higher. Roadways with documented bicycle and pedestrian collision history, as discussed in Chapter 3 of this plan, may be well-qualified for HSIP and HR3 applications, particularly since many of the proposed projects would improve bicyclist and pedestrian safety at a lower cost than many of the highway projects also eligible under this funding source.

In its most recent grant cycle (November 2015), Caltrans awarded over $160 million to 182 projects. While this funding source is often used for major roadway improvement projects, installation of traffic signals, and most other cost-intensive projects, funding has routinely been awarded to bicycle and pedestrian projects.

Successful projects have included:

- Median refuges and curb extensions

- Curb, gutter, and sidewalk
- Paved shoulders
- Upgraded traffic signals with pedestrian countdown signals and pedestrian-scale lighting
- Bicycle lane striping
- Crosswalk striping
- Roundabouts
- Rectangular rapid flashing beacon (RRFB) at crossings

Many of these projects were applied for as standalone bicycle and pedestrian improvement projects; some bicycle and pedestrian improvements were included with a broader package of roadway improvement projects. The average programmed federal funding amount was about $880,000. The next call for projects, Cycle 8, is expected to be announced in April, 2016.

More information is available online:
http://www.dot.ca.gov/hq/LocalPrograms/hsip.htm

Other Statewide Funding Programs

Caltrans Sustainable Transportation Planning Grants are available to jurisdictions and can be used for planning or feasibility studies. The Division will award approximately $9.8 million in funding for Fiscal Year 2016-17. The maximum funding available per project is $300,000.

Limited amounts from the Local Transportation Fund (LTF), which is derived from a ¼ cent of the general sales tax collected statewide, can be used for bicycle and pedestrian facilities.

The California State Parks administers the state's Recreational Trails Program (RTP). RTP provides funds annually for recreational trails and trails-related projects. Cities are eligible applicants for the approximately $5.3 million available annually. The program requires an applicant match of 12 percent of the total project cost.

The National Park Service and California State Parks administer the Land and Water Conservation Fund (LWCP). The LWCF Program provides matching grants to states and local governments for the acquisition and development of public outdoor recreation areas and facilities cities are eligible applicants. Approximately $1.74 million is available annually; grants require a 50 percent local match.

Some of these programs will no longer be funded under proposed and current federal and state funding plans, and may only be short-term funding resources for the current schedule of projects. See below for proposed funding structures related to some of these programs.

One Bay Area Grant

One Bay Area Grant Program (OBAG) is now an umbrella for the previous MTC grant programs. Administered by NVTA, it combines funding for Transportation for Livable Communities, Bicycle, Local Streets and Roads Rehabilitation, and Safe Routes to School. NVTA anticipates that Cycle 2 will cover FY 2017-18 through FY 2021-22. This program is administered by MTC and awards funding to counties based on progress toward achieving local land-use and housing policies. Cities and counties can still use OBAG funds for projects described under these programs.

MTC OBAG program information:
http://www.mtc.ca.gov/funding/onebayarea/

http://www.nvta.ca.gov/one-bay-area-grant-obag

Surface Transportation Program

The Surface Transportation Program (STP) block grant provides FAST Act funding for transportation projects, including pedestrian and bicycle projects (see above discussion about Federal programs for details). This program is administered by MTC, which can prioritize projects for RSTP funding.

MTC STP program information:
http://www.mtc.ca.gov/funding/STPCMAQ/

Transportation Development Act, Article 3

Transportation Development Act (TDA), Article 3 funds statewide funds for planning and construction of pedestrian and bicycle facilities administered locally through MTC. TDA, Article 3 funds are allocated based on population and may be used for engineering, right of way, construction, retrofitting, route improvements, and an assortment of bicycle facilities.

BAAQMD Transportation Fund for Clean Air (TFCA)

Transportation Fund for Clean Air (TCFA) is a grant program administered by the Bay Area Air Quality Management District (BAAQMD). The purpose of the program, which is funded through a $4 surcharge on motor vehicles registered in the Bay Area, is to fund projects and programs that will reduce air pollution from motor vehicles. Grant awards are generally made on a first-come, first-served basis to qualified projects. A portion of TFCA revenues collected in each Bay Area county is returned to that county's congestion management agency (CMA) for allocation (Napa Valley Transportation Authority in Napa County). Applications are made from local agencies directly to the CMAs, but must also be approved by the BAAQMD.

TFCA County Program Manager Fund: http://www.baaqmd.gov/Divisions/Strategic-Incentives/Funding-Sources/TFCA/County-Program-Manager-Fund.aspx

Appendix D – Best Practices Toolkit

This document outlines guidelines for the design of walking facilities in Napa County. Safe, walkable streets are a vital aspect of the pedestrian environment, and they enhance the health of communities. Well-designed walking spaces should be comfortable for all residents – of all ages and abilities – to enjoy.

Creating a Walkable Network

A well-connected pedestrian network is a vital component of livable communities, which thrive on multimodal travel for all roadway users, regardless of age or ability. Multimodal travel incorporates the needs of not just motor vehicles in roadway design, but the needs of pedestrians, bicyclists, and transit users as well. The primary goal of the Best Practices Toolkit is to assist in creating streets Countywide that accommodate pedestrians through a set of recommended practices that enhance walkability. These practices are rooted in the larger concepts of Complete Streets and Traffic Calming, explained below.

Complete Streets

Complete streets accommodate safe access for all users, including pedestrians, bicyclists, transit riders, and motorists. A complete street is designed to make it easy for users of all ages and abilities to travel across and along the street. Complete street practices improve the pedestrian realm when properly integrated with the adjacent land use context, because they encourage the design of streets with well-connected and comfortable sidewalks, traffic calming measures to manage vehicle speeds and enhanced pedestrian crossings. Though the level of accommodation of all modes will vary in different land use contexts, incomplete streets—those designed primarily for automobile access—can be a barrier in any neighborhood, particularly for people with disabilities, older adults, and children.

Traffic Calming Best Practices

Traffic calming includes a suite of treatments designed to encourage safe, pedestrian-oriented speeds. Universal considerations for traffic calming along a pedestrian network can reduce the need for substantial and costly safety improvements in the future, such as large road diets or roundabouts. Considering the relationship between the design speed of a roadway and the desired speed, especially in the context of downtown locations and school zones, is an important first step to designing for a pedestrian-friendly environment. Examples of proactive traffic calming treatments include reduced lane widths, chicanes, and reduced curb radii. Reduced speeds from traffic calming can increase a driver's field of focus and attention to pedestrians that may be walking along or across the street. Additional design guidance is available on NACTO's website at: http://nacto.org/publication/urban-street-design-guide/intersection-design-elements/visibility-sight-distance/ and in the *Treatment Guidelines* section. .

The Pedestrian Realm

The pedestrian realm consists of walkways, pedestrian crossings, and open public spaces. The quality of the pedestrian realm has two components: accessibility and comfort.

These design guidelines will help each jurisdiction make decisions about the preferred application of pedestrian treatments in the following areas:

- Streets and Sidewalks
- Pathways/Trails
- Accessibility
- Crosswalk Guidelines for Uncontrolled and Controlled Crossings

The pedestrian enhancements described throughout these guidelines provide street design best practice guidance, which can enhance the safety, convenience, and mobility for pedestrians.

Streets and Sidewalks

Streets and sidewalks should support the activities and pedestrian levels along the street. Streets should be well-connected to ensure that destinations are within walking distance and wide enough to support the expected pedestrian volumes.

Sidewalk Zones

The application of sidewalks varies throughout Napa County. In some jurisdictions and within the unincorporated County where sidewalks may be cost-prohibitive and/or conflict with the desired rural character of the area, lower-cost alternatives should be considered as discussed below. Other more urban areas of the County include sidewalks that are built to specified minimum widths found in the standard street cross-sections for the jurisdiction where they are located and may vary depending on land use. **Table D-4** of the *Treatment Guidelines* section below provides guidelines on the design of organized sidewalk zones that meet walking demand and provide comfort to users.

Alternatives to Sidewalks

While many of the guidelines outlined here are appropriate in downtown or more urbanized locations, many of the roadways throughout the County are rural, especially in unincorporated areas, and some of the sidewalk guidelines are either not feasible or not a contextual fit. In these instances, pedestrian facilities (where warranted) can be provided through the use of paved multi-use shoulders, unpaved shoulders or pathways. The feasibility of most of these treatments will depend on available right-of-way and should be evaluated when certain general criteria are met, discussed below under *Considerations for Sidewalk and Shoulder Installation*. For additional design guidance on paved multi-use shoulders, see **Table D-10** of the *Treatment Guidelines* section. For design

guidance on pathways and trails, including materials that have been tested in rural settings for ADA applications, refer to the Pathways/Trails section below.

Considerations for Sidewalk and Shoulder Installation

Many rural roadways present engineering and cost challenges for pedestrian facilities due to steep terrain or narrow right-of-way. As such, a three step process for determining applicable facility types and locations is recommended: (1) collect contextual data, (2) evaluate data versus thresholds, and (3) select facility type.

Context

The appropriate location for pedestrian facilities, especially in rural contexts such as the unincorporated areas of Napa County, depends on several factors related to the potential for pedestrian demand including presence of pedestrian-oriented land uses (such as retail, schools or parks), presence of transit, and/or observed pedestrian volumes. More importantly, sidewalks are a documented safety countermeasure[12], and therefore should first be prioritized in locations where pedestrian-vehicle collisions have been recorded with a "walking along the roadway" crash type or there are reported safety concerns, independent of land use or other factors. In cases with no pedestrian demand and no documented safety concerns (reported or anecdotal), designated pedestrian facilities may not be required in a rural context.

Thresholds and Facility Selection

If pedestrian facilities are merited based on the contextual factors, the type of facility is determined based on the land use, vehicle volumes, and density of development. **Table D-1** below, developed for the FHWA, Office of Safety as part of the Pedestrian Safety Guide and Countermeasure Selection System, should be used as a resource to determine the appropriate type of pedestrian facility for the corridor.

While the table is intended to assist in the evaluation of existing conditions, future volumes and housing densities should also be considered to determine whether right-of-way should be preserved or secured in anticipation of sidewalks being warranted under a future condition.

TABLE D-1:
RECOMMENDED GUIDELINES FOR NEW SIDEWALK/WALKWAY INSTALLATION

Volume and Housing Density Thresholds by Land Use	Minimum and Preferred Sidewalk/Walkway Treatment
Rural	
Roadways with < 400 ADT	Shoulders preferred, with minimum of 3 ft.

[12] Zegeer, Charles V., Dan Nabors, Peter Lagerwey, "Pedestrian Safety Guide and Countermeasure Selection System", http://www.pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=1

TABLE D-1: RECOMMENDED GUIDELINES FOR NEW SIDEWALK/WALKWAY INSTALLATION	
Volume and Housing Density Thresholds by Land Use	**Minimum and Preferred Sidewalk/Walkway Treatment**
Roadways with 400 to 2,000 ADT	5-ft shoulders preferred, minimum of 4 ft required.
Rural / Suburban	
Roadways with ADT > 2,000 and less than 1 dwelling unit (d.u.) / acre	Off-street facility preferred (sidewalks or side paths[1]). Minimum of 6-ft shoulders required. Paved shoulders are preferred to unpaved shoulders to provide an all-weather surface.
Note: In rural settings, greater width shoulders (up to 8 to 10 feet) are desired along high-speed roadways, particularly with a large number of trucks.	
Roadways with 1 to 4 d.u. / acre	Sidewalks on both sides required unless side path provided.
Suburban / Urban Residential	
Non-Local Streets (i.e. major arterials, collectors, and minor arterials)	Sidewalks on both sides required.
Local streets with less than 1 d.u. / acre	Sidewalks on both sides preferred. Minimum of 5-ft shoulders required.
Local streets with 1 to 4 d.u. / acre	Both sides preferred. Second side recommended if density becomes greater than 4 d.u. / acre or if schools, bus stops, etc. are added.
Local streets with more than 4 d.u. / acre	Sidewalks on both sides required.
Urban Commercial	
All Commercial Urban Streets	Sidewalks on both sides required.
Industrial	
All Streets in Industrial Areas	Sidewalks on both sides preferred. Minimum of 5-ft shoulders required.

[1] Side path is a pathway separated from the travel way; an off-street pathway. It may be paved or unpaved, and is separated from the roadway by a grass or landscape strip without curbing.

Source: Zegeer, Charles V., Dan Nabors, Peter Lagerwey. "*Recommended Guidelines/Priorities for Sidewalks and Walkways*," Pedestrian Safety Guide and Countermeasure Selection System, August 2013.

Pathways/Trails

Pedestrian pathways, which include paved multi-use trails as well as informal, unpaved trails, are an asset to Napa County. They increase pedestrian connectivity and satisfy pedestrian desire lines that are otherwise not accommodated by pedestrian facilities. The design of a trail segment should accommodate users walking in both directions when possible. A pathway can be direct, especially when providing a useful connection between two pedestrian generators, or if the primary purpose is recreational they can meander and take advantage of natural landscape features such as creeks and open space. Perhaps the most important consideration for pedestrian safety in the design of trails is crossing locations. Refer to the Crosswalk Guidelines of this Appendix for applicable treatments based on locational context.

Unpaved Pathway/Trail Accessibility

Trails and unpaved pathways/shoulders should provide access to pedestrians of all abilities. According to the *Best Practices Design Guide for Designing Sidewalks and Trails for Access*, a guidebook published by the FHWA, the surface material for a trail should be firm and stable to satisfy accessibility requirements. Many natural materials can provide a firm and stable surface, as shown in **Table D-2** below. Slip resistance is also desirable although not always achievable. More information on accessible trail design is available in Chapter 15 of the FHWA guidebook, Recreational Trail Design, which can be viewed at the following link: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalk2/pdf/16chapter15.pdf.

TABLE D-2: FIRMNESS, STABILITY, AND SLIP RESISTANCE FOR A VARIETY OF COMMON TRAIL SURFACING MATERIALS

Surface Material	Firmness	Stability	Slip Resistance (dry conditions)
Asphalt	**Firm**	**Stable**	**Slip resistant**
Concrete	**Firm**	**Stable**	**Slip resistant***
Soil with Stabilizer	**Firm**	**Stable**	**Slip resistant**
Packed Soil without Stabilizer	**Firm**	**Stable**	Not slip resistant
Soil with High Organic Content	Soft	Unstable	Not slip resistant
Crushed rock (3/4" minus) with Stabilizer	**Firm**	**Stable**	**Slip resistant**
Crushed rock without Stabilizer	**Firm**	**Stable**	Not slip resistant
Wood Planks	**Firm**	**Stable**	**Slip resistant**
Engineered Wood Fibers that comply with ASTM F1951	Moderately firm	Moderately stable	Not slip resistant
Grass or Vegetative Ground Cover	Moderately firm	Moderately stable	Not slip resistant
Engineered Wood Fibers that do not comply with ASTM F1951	Soft	Unstable	Not slip resistant
Wood Chips (bark, cedar, generic)	Moderately firm to soft	Moderately stable to unstable	Not slip resistant
Pea Gravel or 1-1/2" Minus Aggregate	Soft	Unstable	Not slip resistant
Sand	Soft	Unstable	Not slip resistant

* A broom finish significantly improves the slip resistance of concrete.

Source: Designing Sidewalks and Trails for Access, Part II of II: *Best Practices Design Guide*, FHWA, 2001 http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalk2/pdf.cfm

Accessibility

The United States Access Board published proposed accessibility guidelines for pedestrian facilities in the public right-of-way in 2011 which have yet to be adopted formally into law. The most recent information can be found on the Board's website at www.access-board.gov/prowac/. These guidelines represent best practices and should be referenced when constructing new curb ramps and sidewalks to ensure accessibility for users of all abilities. FHWA

has also published *Designing Sidewalks and Trails for Access*, which includes guidance for designing accessible sidewalks and curb ramps. Relevant sections include Chapter 4 *Sidewalk Corridors*, Chapter 5 *Driveway Crossings* and Chapter 7 *Curb Ramps*. A summary of key specifications is included below in **Table D-3.** Additional guidance for surveying curb ramps can be found in the ADA Best Practices Toolkit for State and Local Governments, published by the United States Department of Justice, at https://www.ada.gov/pcatoolkit/app1curbramps.htm.

TABLE D-3: ACCESSIBILITY GUIDANCE FOR SIDEWALKS AND CURB RAMPS

Sidewalks	
Maximum running slope	5%[1]
Maximum cross-slope	2%
Minimum clear width at obstructions	3 feet
Minimum clear height at obstructions (includes signs placed on sidewalk)	7 feet
Surface	Firm, stable and slip resistant
Minimum vertical changes in elevation	0.25 inches
Note: Level landings should be provided at the back of sloped driveways to prevent abrupt changes in cross-slopes and accommodate wheelchairs	
Curb Ramps	
Maximum ramp slope	8.33%
Maximum gutter slope	5%
Minimum ramp width	36 inches; 48 inches desired
Minimum landing width	48 inches
Maximum flare slope	10%
Maximum cross slope	2%
Detectable warning width	24 inches
Note: Abrupt changes in elevation at the top or bottom of a curb ramp should be avoided. Two separate curb ramps should be provided at corners when possible, one for each crosswalk, to provide directional guidance to vision-impaired pedestrians.	

1: Except where the grade of the existing street exceeds 5%. Level landings should be provided at regular intervals in these cases.

Source: Designing Sidewalks and Trails for Access, Part II of II: *Best Practices Design Guide*, FHWA, 2001 *http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalk2/pdf.cfm*

Accessible Elements of a Curb Ramp

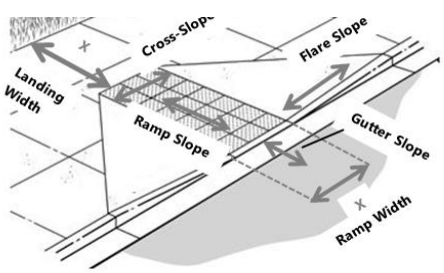


Image Source: https://www.ada.gov/pcatoolkit/app1curbramps.htm; Annotations: Fehr & Peers 2016

Accessible Elements of a Sidewalk

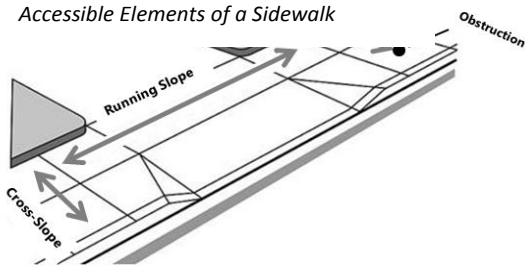
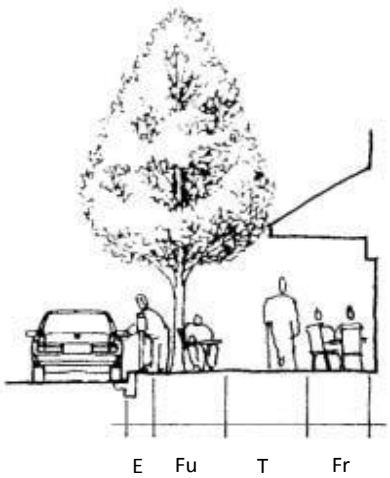


Image Source: http://www.ite.org/css/online/DWUT08.html; Annotations: Fehr & Peers 2016

Additional Treatment Guidelines

Table D-4: Sidewalk Zones and Corners

Description
The sidewalk zone is the portion of the street right-of-way between the curb and building front. Within this zone, four distinct areas serve different organizational purposes.
Design Example
 E = Edge Fu = Furnishings T = Throughway Fr = Frontage
Design Summary
Where right-of-way allows, sidewalks should be separated from vehicle lanes by a landscaped buffer. In addition to separating pedestrians from vehicle traffic, landscape buffers provide space for driveway curb cuts and reduce cross-slopes on sidewalks. Wider sidewalks can accommodate more pedestrians and further buffer pedestrians from vehicles. In busy pedestrian areas such as downtowns and school areas, sidewalks wider than 6’ should be considered. These sidewalks could include wider landscaped buffers, a pedestrian pathway, and/or vegetative strips along the building face. Elements such as street furniture, newspaper racks, bicycle parking racks, and trash bins should be kept in the furniture zone and should not impede a straight travel path along the sidewalk. Additionally, “meandering” sidewalks, as opposed to straight sidewalks, should be avoided since they are inconvenient for pedestrians and are challenging for disabled users.

- Edge/Curb Zone is the transition between the sidewalk and the road.
- Furnishing/Landscape Zone acts as a buffer between the curb and throughway zone. This is the areas where trees should be planted and benches should be located. Any sidewalk amenities should be located within this area and should not interfere with the throughway zone. Streets with higher speeds should have larger furnishing zones.
- Throughway Zone provides enough space for pedestrians to travel.
- Frontage Zone borders the building façade or fence. The primary purpose of this zone is to create a buffer between pedestrians walking in the throughway zone from people entering and exiting buildings. It provides opportunities for shops to place signs, planters, or chairs that do not encroach into the throughway zone.

Some zones are more important in specific settings; for example, most residential streets will not include a frontage zone and will only include a furnishing/landscape zone on streets with higher speeds.

These guidelines are nationally supported, and more information is available on the NACTO website: http://nacto.org/publication/urban-street-design-guide/street-design-elements/sidewalks/

Pedestrian Area at Corners

Corners must be functional and must accommodate those waiting to cross the street, those traveling along the sidewalk, and those who stop to congregate on the corner. The greater the number of expected pedestrians, the larger the pedestrian area should be. Other considerations sometimes erode the amount of usable space and hence the functionality of corners. Several strategies exist for expanding the pedestrian area at corners. Small corner radii generally provide the most usable space and the shortest crossing distances for pedestrians. Designers may also consider curb extensions, right-of-way acquisition, public easements across private property to expand the pedestrian area.

The pedestrian area should be clear of obstructions, especially in the triangle created by extending the property lines to the face of curb. Where existing obstructions such as utility poles or newspaper racks are removed, they should not be relocated such that they obstruct a pedestrian's line of travel.

The general rule for choosing a corner radius should be to choose the smallest possible, acknowledging that each location has a unique set of factors that determines the appropriate radius. Small corner radii improve comfort, and create a more enjoyable walking environment because they create more usable space for pedestrians at the corner. They improve safety because they slow vehicle speeds and shorten the crossing distance for pedestrians and improve sightlines. Smaller corner radii are also beneficial for street sweeping operations.

The County may choose to recommend specific corner radii based on roadway classification, presence of curbside parking and heavy truck or transit traffic.

Image Sources: Valley Transportation Authority Pedestrian Technical Guidelines; Chula Vista Pedestrian Master Plan; Fehr & Peers

Table D-5: Pedestrian Wayfinding

Description
A pedestrian wayfinding system provides consistent and user-friendly information about distances and routes to and from major transit centers and popular destinations, making these places easier to connect to, and encouraging people to make short trips on foot. Signs that explain pedestrian directions and summarize route distances make for a more enjoyable and comfortable walking experience. Wayfinding is an essential aspect of street infrastructure which makes pedestrians a priority within the streetscape and enhances the character of the street.
Design Example
Wayfinding (Napa and Yountville examples)
Design Summary
Wayfinding signage should cater to both vehicles and pedestrians, particularly in districts with high levels of walking activity. Signs and routes that direct pedestrians to specific destinations are key to providing adequate wayfinding for pedestrians.

Image Source: lajollalight.com (left); Fehr & Peers (right)

Table D-6: Pedestrian-Scale Lighting

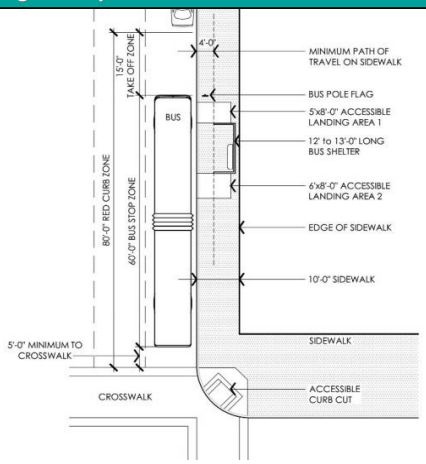
Description
Pedestrian-scale lighting improves pedestrian visibility and the perception of safety and comfort while walking. Well-lit pedestrian facilities are more inviting, and function well for pedestrians after sunset.
Design Example
Pedestrian-scale Lighting (South San Francisco and Calistoga)
Design Example
Pedestrian-scale lighting provides a better-lit environment for pedestrians while improving visibility for motorists. Sidewalks with frequent nighttime pedestrian activity particularly in the downtown area should have pedestrian lighting. All crosswalks should have pedestrian-scale lighting. Pedestrians tend to observe more details of the street environment since they travel at a slower pace than vehicles, and thus pedestrian-scale lighting should have shorter light poles and shorter spacing between posts. A height of 12- 20 feet is common for pedestrian lighting. The level of lighting should reflect the location and level of pedestrian activity. Pedestrian visibility needs and a desire in rural areas for starlit sky views can require tradeoffs in lighting decisions. Lighting requirement decisions in these situations should be documented for consistent implementation.

Image Source: Fehr & Peers and Seattle.gov

Table D-7: High-Quality Street Furniture

Description
High-quality street furniture provides pedestrians with inviting places to rest, and clearly defines the furnishings zone of a sidewalk. Street furniture enhances the streetscape with consistent design character, can protect landscape features, and formalizes waiting areas such as bus stops and street corners.
Design Example
Design Summary
Street furniture is normally placed on a sidewalk in the Frontage Zone to provide comfort for pedestrians and enhance place making within the pedestrian realm. Street furniture makes pedestrians feel welcome, but should not conflict with the pedestrian travel path. Street furniture can include benches, specially designed newspaper racks, fountains, special garbage/recycling containers, etc.

Table D-8: Bus Stop Accessibility

Description
The specific location and design of a bus stop within the right-of-way and pedestrian facilities are important for bus operations and accessibility. The best bus stops are operationally safe and efficient for both buses and passengers. The stop should be located to cause the minimum interference with pedestrian, bicycle and other vehicle movements. Bus stops should be located adjacent to the street curb in most cases, or at a bus bulb along busy transit routes or at transit centers and hubs. Minimum sidewalk and clearance is required for ADA accessibility. Ideally, bus stops also include a bus shelter for protection from sun or rain, and other amenities; at minimum they should include a bus stop pole and ADA compliant bench.
Design Example
 *Bus shelter with bench at back of sidewalk, leaving adequate ADA compliant clearance at curb.* *Image Source: www.actransit.org, napavalleyregister.com*
Design Summary
Bus stops must be long enough for the buses that use them so the buses do not hang into the travel lane when pulling in to the bus stop. Buses must stop flush with the curb to provide ADA compliant access to passengers with disabilities. Bus stop dimensions should be coordinated with the appropriate transit agencies. ADA Accessibility Guidelines (ADAAG) specifies that the paved boarding/alighting area must be at least eight feet deep from the curb and five feet along the curb. ADAAG also requires a minimum path of travel (sidewalk) clear of obstructions to and from this boarding area at least three feet wide. Many cities use four feet or even six feet as their standard. In most cases bus shelters should be placed at the back of the sidewalk in order to maintain pedestrian travel and meet ADA path of travel requirements. Exceptions are made and placement must consider security and line of sight at intersections and driveways.

Concrete bus pads can be used at bus stop locations to prevent and minimize pavement wear and maintain level grade at locations with heavy bus traffic.

These guidelines are nationally supported, and more information is available on the NACTO website: http://nacto.org/publication/urban-street-design-guide/street-design-elements/transit-streets/bus-stops/

Table D-9: Pedestrian Accommodations at Interchanges

Description
The Institute of Transportation Engineers (ITE) has drafted a new recommended practice: *Recommended Design Guidelines to Accommodate Pedestrians and Bicycles at Interchanges*. These guidelines provide best practices in accommodation of all modes through interchanges to enhance pedestrian and bicycle safety, connect pedestrian and bicycle facilities efficiently with surrounding land uses, and provide a consistent message. Napa County communities should follow guidance presented in this guide when designing or modifying interchanges. Guiding principles for pedestrians facilities include: • Provide pedestrian facilities to safely and efficiently accommodate pedestrians. • Design ramp geometries in ways that encourage slower vehicle speeds until past the pedestrian crosswalk (as illustrated in the design example below). • Locate the crosswalk at the location with the best visibility and before the point where vehicles begin to accelerate (as illustrated in the design example below). • Crosswalks should be designed to be as short as possible, but without deviating excessively from pedestrian desire lines. For long crosswalks, median pedestrian islands should be considered, as they can improve signal timing while making a long crossing less daunting for pedestrians. • Crosswalk Policies developed by each jurisdiction can be used to select appropriate crossing treatments. Treatments range from standard tools such as traffic signal and median pedestrian islands to advanced devices such as the High-Intensity Activated Crosswalk beacon (HAWK or Hybrid) and the rectangular rapid flashing beacon (RRFB).

Design Example

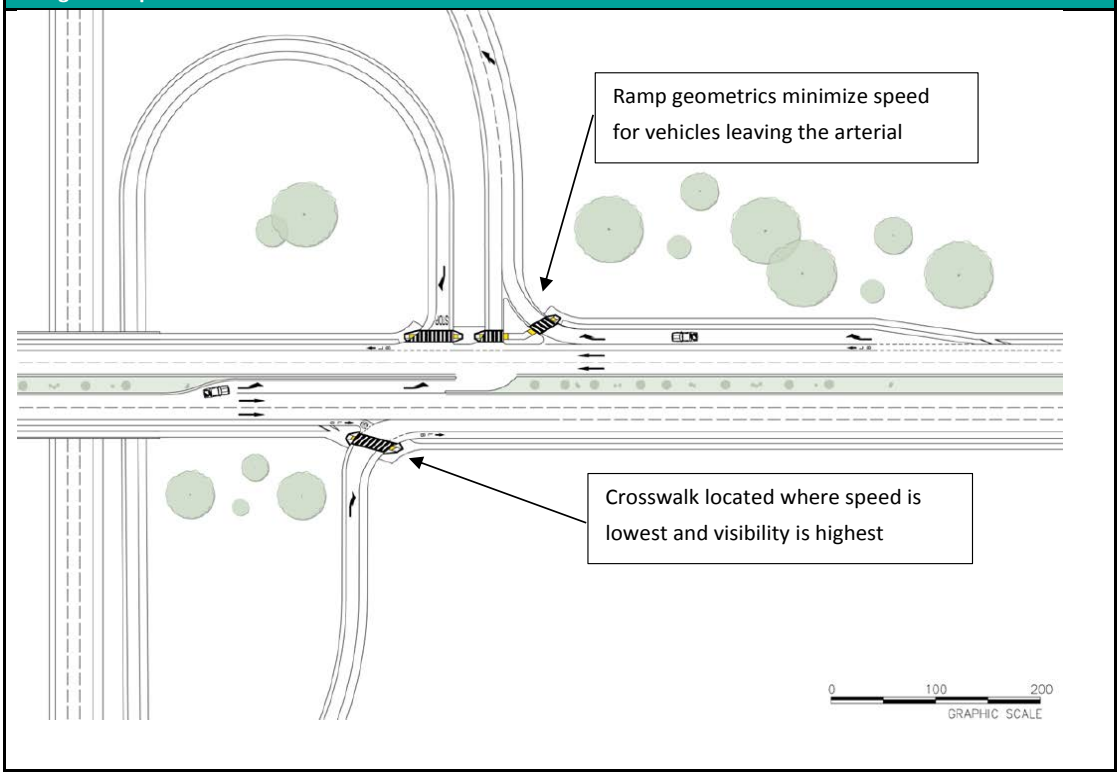
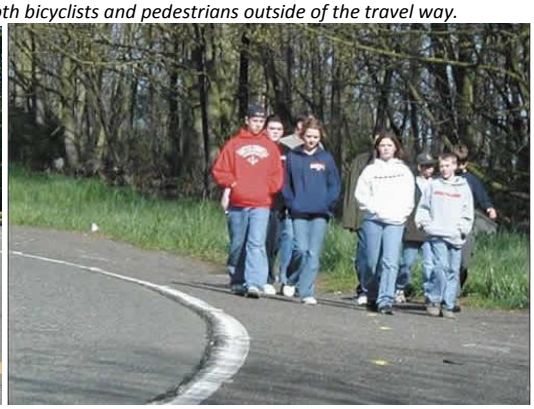


Image Source: ITE Recommended Practice: Design Guidelines to Accommodate Pedestrians and Bicyclists at Interchanges.

Table D-10: Multi-Use Shoulders (Paved or Unpaved)

Description
Where sidewalks are not feasible, a multi-use shoulder can improve the pedestrian experience, providing a space for bicyclists and pedestrians adjacent to the travel lane. Where feasible and especially when speeds or truck volumes are high, eight to ten-foot shoulders in each direction provides ample space for both bicyclists and pedestrians to get to their destinations and a higher level of pedestrian comfort. Guidance for minimum shoulder widths are provided in Table D-1.
Design Example
Wide shoulders *Eight to ten foot paved shoulders can provide space for both bicyclists and pedestrians outside of the travel way.* 

Enhanced Walkways

Enhanced multi-use shoulders are particularly appropriate where dedicated space is desired in rural contexts, such as in school-adjacent neighborhoods.

Existing - roadways with no sidewalks or designated walkways

Edgelines added

Edgelines and stamped, colorized asphalt added

Image Sources: FHWA (first), City of Walnut Creek Design Guidelines, Fehr & Peers (second)

Crosswalk Guidelines

Introduction

These Crosswalk Guidelines are aimed at improving pedestrian safety and enhancing pedestrian mobility. A comprehensive pedestrian safety strategy contains a three-pronged approach of engineering, enforcement, and education programs. This document focuses on engineering elements, such as pedestrian crossing treatments and intersection design.

This document describes the function of crosswalks and their legal context in the California Vehicle Code. It discusses the advantages and disadvantages of marked crosswalks and summarizes research in the United States focused on pedestrian safety and marked crosswalks. It provides a summary of best practices related to numerous pedestrian treatments, including geometric, signage and striping, and signal hardware or operational measures.

The purpose of these Guidelines is to enable the City to respond to crosswalk requests in a manner that improves pedestrian accessibility and maintains public safety. It provides information to be used when making decisions about where standard crosswalks (two, parallel white stripes) can be marked; where crosswalks with special treatments, such as high-visibility crosswalks, flashing beacons and other special features, should be employed; and where crosswalks will not be marked due to volume, speed, or sight distance considerations.

Crosswalk Fundamentals

Pedestrian crossing and right-of-way laws vary state to state, and are often a source of driver or pedestrian uncertainty and confusion for when crossing is legal. This section outlines the types of crosswalks, where crossing the street is legal in California, and guidance for identifying locations for marked crosswalks.

Types of Crosswalks

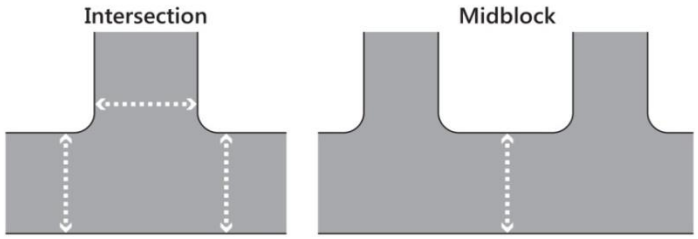
Crosswalks are primarily classified by three characteristics:

1. Whether they are marked (demarcated with striping on the street) or unmarked (no striping)
2. Whether they are controlled (by a traffic signal or stop-sign) or uncontrolled (with no intersection control)
3. Whether they are located at an intersection (where two streets meet) or mid-block (between intersections)

The following section outlines where crossing the street is legal in California. It also discusses key safety research regarding crosswalk markings and locational context..

Where Is Crossing the Street Legal?

In California, a legal crosswalk exists where a sidewalk meets a street, regardless of whether the crosswalk is marked (i.e., with or without striping to denote the crosswalk). Pedestrians may legally cross any street except at unmarked locations between immediately adjacent signalized



crossings, or where crossing is expressly prohibited. Marked crosswalks reinforce the location and legitimacy of a pedestrian crossing and clarify pedestrian right-of-way at midblock locations.

These legal statues are contained in the California Vehicle Code (CVC) as follows:

- Section 275 defines a legal crosswalk as:
  - That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersections where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street.

- Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.

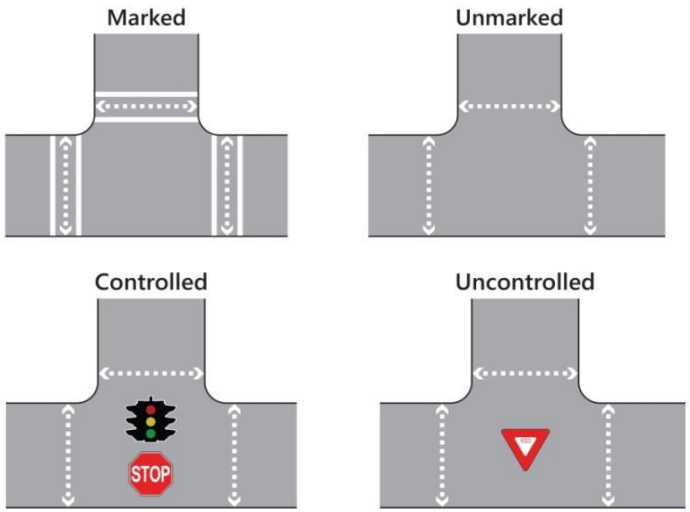
- Section 21950 describes right-of-way at a crosswalk:
  - The driver of a marked vehicle shall yield the right-of-way to a pedestrian crossing the roadway within any marked crosswalk or within any unmarked crosswalk at an intersection.
- Section 21955 describes where pedestrians may *not* cross a street:
  - Between adjacent intersections controlled by traffic control signal devices or by police officers, pedestrians shall not cross the roadway at any place except in a crosswalk.

Why Mark Crosswalks?

Sidewalks and crosswalks are essential links within a pedestrian network. Whether commuting, running an errand, exercising, or wandering, pedestrians will need safe and convenient crossing opportunities to reach their destinations. A marked crosswalk has three (3) primary functions:

1) To create reasonable expectations where pedestrians may cross a roadway
2) To improve predictability of pedestrian actions and movement
3) To channel pedestrians to designated crossing locations (often selected for their optimal sight distance)

Advantages of Marked Crosswalks



Marked crosswalks offer the following advantages:

- They help pedestrians find their way across complex intersections
- They can designate the shortest path
- They can direct pedestrians to locations of best sight distance
- They assure pedestrians of their legal right to cross a roadway at an intersection or mid-block crossing

This last bullet point is important. The *California Vehicle Code* gives the right-of-way to pedestrians at any marked or unmarked crosswalk (as noted above), although the law is not always obeyed by road users,

including both drivers and pedestrians. Drivers often fail to yield the right-of-way without the visual cue of a marked crosswalk. Pedestrians also do not always know the right-of-way law, and will either wait for a gap in traffic, or assert their right-of-way by stepping into the roadway.

Steps to Identify Candidate Locations for Marked Crosswalks at Uncontrolled Locations

Identifying candidate locations for marked crosswalks involves two steps.

The first step is to locate the places people would like to cross the street. These locations are called *pedestrian desire lines*, which represent the most desirable, and typically most direct, places that people want to cross a street. Pedestrian desire lines are influenced by elements of the roadway network, such as transit stops, and nearby land uses (homes, hotels, schools, parks, trails, commercial centers, wineries, etc.). This information provides a basis for identifying pedestrian crossing improvement areas and prioritizing such improvements, thereby creating a convenient, connected, and continuous walking environment.

The second step is to identify where people can cross safely. The primary consideration in this step is adequate stopping sight distance.

Once candidate locations are identified, an engineering evaluation should be conducted to determine if a marked crosswalk should be installed at an uncontrolled or mid-block location, and if so, what visibility enhancements should be included in the design. Crossings should be marked where all of the following occur:

- Sufficient demand exists to justify the installation of a crosswalk
- Sufficient sight distance as measured by stopping sight distance calculations exists and/or sight distance will be improved prior to crosswalk marking
- Safety considerations do not preclude a crosswalk

Figures A-1 and **A-2** describe the overall procedures from the moment City staff receives a request for a new marked crosswalk (or considers removing an existing marked crosswalk) to the installation of the treatment. As described, the first steps to determine the appropriate location and treatment for the crosswalk include a staff field visit.

Figure A-1: Uncontrolled Marked Crosswalk Placement

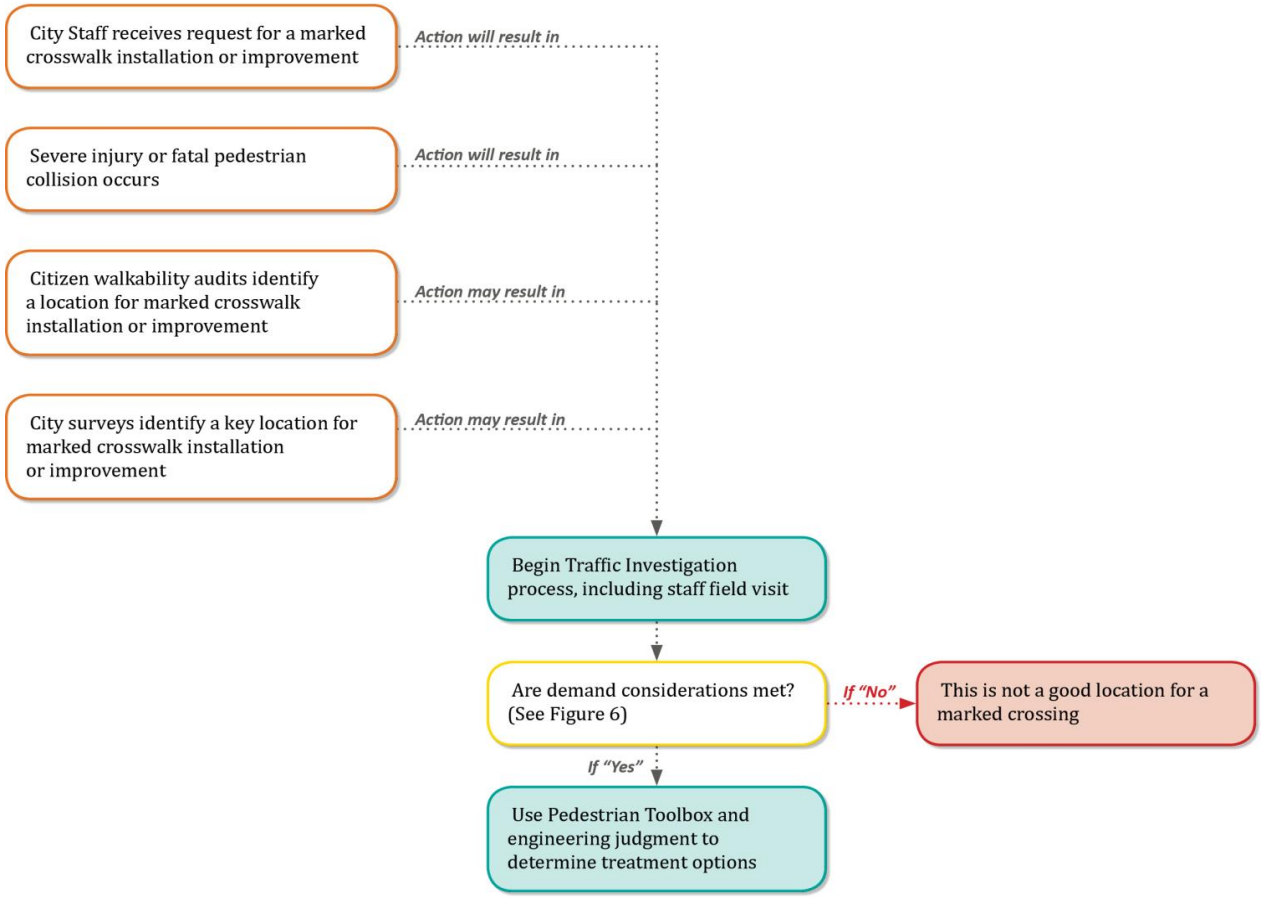
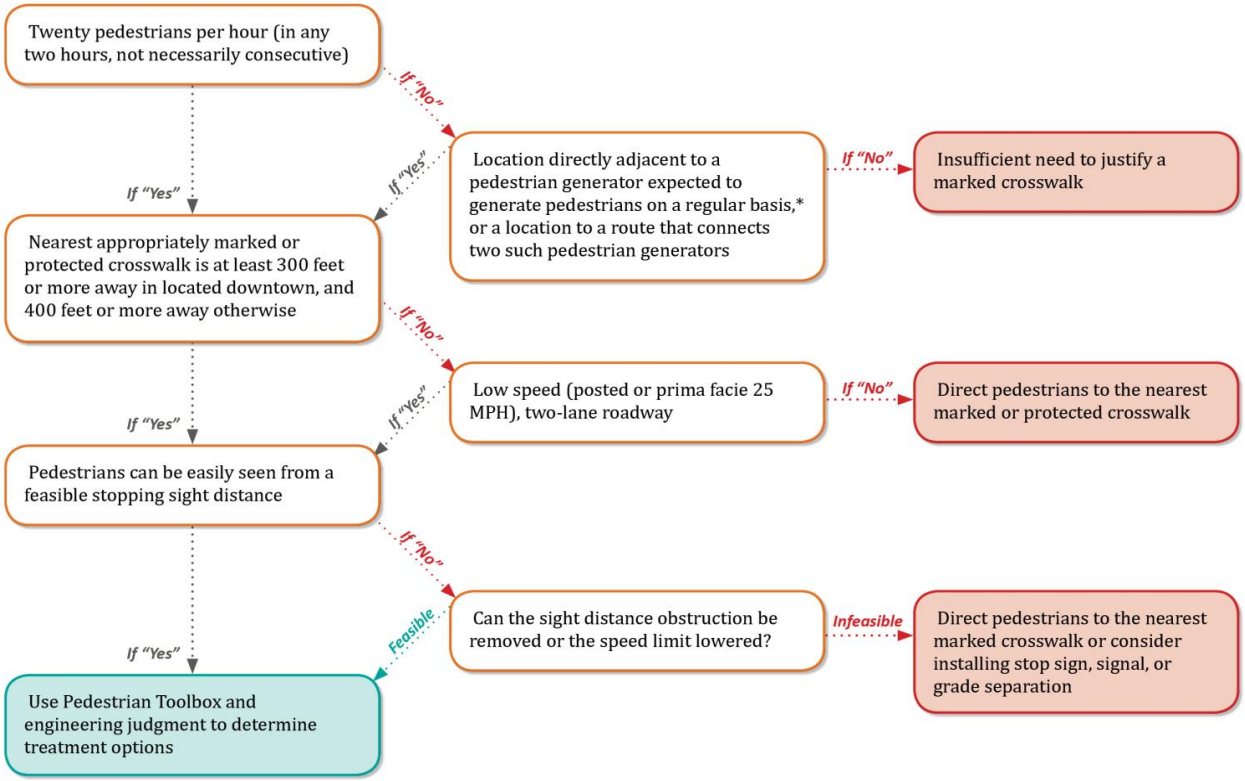


Figure A-2: Feasibility Analysis for Treatments at Uncontrolled Locations



* ***Note:*** *Where a marked crosswalk is not necessary based on Figure A-2, other treatment options are available. These include traffic calming measures, such as speeds tables and speed humps; curb extensions and refuges to narrow the roadway, speed feedback signs, and similar treatments to help reducing crossing distances and slow speeds. These engineering treatments are described in the following pages. In addition to engineering treatments, education and enforcement programs should be considered.*

Example pedestrian generators: *School, Hotel, restaurant, winery, park, bus stop, or hospital. For locations without pedestrian counts, consider whether location is directly adjacent to one of these generators a pedestrian generator such as a school, hotel, restaurant, winery, park, bus stop, or hospital and is expected to generate pedestrians on a regular basis, or is located on a route that connects two such pedestrian generators.*

Uncontrolled Crossing Enhancement Toolbox

This section presents best practices for the installation of marked crosswalks at uncontrolled intersections and mid-block locations. Uncontrolled crossings require additional consideration during planning and design as drivers must recognize the pedestrian and yield accordingly. Thus, providing appropriate enhancements to improve the visibility and safety of pedestrians crossing the street at an uncontrolled location is critical.

Crosswalk Safety Research

Several studies of pedestrian safety at uncontrolled crossings have been completed, from which conflicting research has at times emerged. Studies conducted in San Diego in the 1970s showed that pedestrian collision risk at marked, uncontrolled crosswalks was greater than at unmarked crossings. This led many cities to remove marked crosswalks, as they were suspected of providing a false sense of security that drivers would yield to pedestrians in the crosswalk. However, a more recent study[13] by the Federal Highway Administration (FHWA) comprehensively reviewed crossing safety at 1,000 marked and 1,000 matched unmarked crosswalks in 30 U.S. cities, controlling for site context factors. The study concluded that site factors related to pedestrian-involved collisions included pedestrian average daily traffic (ADT), vehicle ADT, number of lanes, median type, and the region of the U.S. At uncontrolled locations on two-lane roads and multi-lane roads with ADT below 12,000 vehicles, FHWA found that the presence of a marked crosswalk alone, compared with an unmarked crosswalk, made no statistically significant difference in the pedestrian crash rate. However, on multi-lane roads with an ADT of greater than 12,000 vehicles (without a raised median) and 15,000 vehicles (with a raised median) the presence of a marked crosswalk without other improvements was associated with a statistically significant higher rate of pedestrian collisions compared to sites with an unmarked crosswalk. These findings are summarized in Table X.

FHWA stressed that the results of the study should not encourage decision makers to simply remove (or fail to install) marked crosswalks. Rather, the

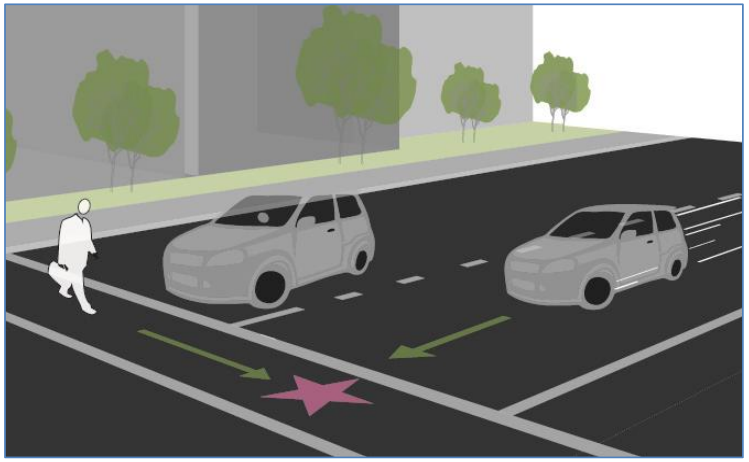
Mid-Block Crossings

Crosswalks can be marked at intersections and mid-block points. Mid-block crossings play an important role for pedestrian access; without mid-block crossing locations, pedestrians may face the undesirable choice to detour to a controlled crossing location, detour to an intersection where crossing is legal even if not controlled, or cross illegally (if the midblock crossing is between two signalized intersections). Where signals are spaced far apart (generally more than 600-800 feet), pedestrians may have to detour several minutes to a controlled crossing location. Pedestrians are more likely to wait for a gap in traffic and cross at an unmarked location, rather than travel a distance out of their way to find a marked crosswalk. Mid-block crossings also offer an important safety consideration: fewer potential conflict points between pedestrians and motorists.

[13] Zeeger, C., J. Stewart, and H. Huang. *Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations*. Publication FHWA-RD-01-142, FHWA, U.S. Department of Transportation, 2001.

study suggested adding crosswalk enhancements to the marked crosswalks to balance mobility needs with safety needs. These improvements include providing raised medians on multi-lane roads, installing traffic and pedestrian signals where warranted, adding curb extensions, providing adequate lighting, and designing intersections with tighter turn radii.

In the FHWA study, about 70 percent of the pedestrian crashes occurred at marked crosswalks on multi-lane roads. Of the pedestrian crashes at marked crosswalks, 17.6 percent were classified as multiple-threat collisions. Multiple-threat collisions occur as one car slows down to allow pedestrians to cross, but a second car approaching from behind in the adjacent lane may not see the pedestrian, as illustrated in the image to the right. The slowing vehicle blocks the sight line of both the pedestrian and the second motorist, leading to the pedestrian-vehicle collision. Multi-lane roadways are therefore not well-served by unmarked or marked crosswalks alone. At these sites, the study concluded, engineers should consider countermeasures that provide additional safety to pedestrians and alert motorists to upcoming crosswalks. These countermeasures include advanced yield lines with corresponding signs informing motorists where to yield. Other more substantial measures may also be considered, such as signalization, warning beacons, illumination, or raised medians.



Multiple threat conflicts on multi-lane roadways occur where a vehicle yielding to a pedestrian inhibits sight lines to another oncoming vehicle.

Table 1. Recommendations for installing marked crosswalks and other needed pedestrian improvements at uncontrolled locations.*

Roadway Type (Number of Travel Lanes and Median Type)	Vehicle ADT ≤ 9,000			Vehicle ADT >9000 to 12,000			Vehicle ADT >12,000 - 15,000			Vehicle ADT > 15,000		
	Speed Limit**											
	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h
2 Lanes	C	C	P	C	C	P	C	C	N	C	P	N
3 Lanes	C	C	P	C	P	P	P	P	N	P	N	N
Multi-Lane (4 or More Lanes) With Raised Median***	C	C	P	C	P	N	P	P	N	N	N	N
Multi-Lane (4 or More Lanes) Without Raised Median	C	P	N	P	P	N	N	N	N	N	N	N

* These guidelines include intersection and midblock locations with no traffic signals or stop signs on the approach to the crossing. They do not apply to school crossings. A two-way center turn lane is not considered a median. Crosswalks should not be installed at locations that could present an increased safety risk to pedestrians, such as where there is poor sight distance, complex or confusing designs, a substantial volume of heavy trucks, or other dangers, without first providing adequate design features and/or traffic control devices. Adding crosswalks alone **will not** make crossings safer, nor will they necessarily result in more vehicles stopping for pedestrians. Whether or not marked crosswalks are installed, it is important to consider other pedestrian facility enhancements (e.g., raised median, traffic signal, roadway narrowing, enhanced overhead lighting, traffic-calming measures, curb extensions), as needed, to improve the safety of the crossing. **These are general recommendations; good engineering judgment should be used in individual cases for deciding where to install crosswalks.**

** Where the speed limit exceeds 40 mi/h (64.4 km/h) marked crosswalks alone should not be used at unsignalized locations.

C = **Candidate sites for marked crosswalks**. Marked crosswalks must be installed carefully and selectively. Before installing new marked crosswalks, an engineering study is needed to determine whether the location is suitable for a marked crosswalk. For an engineering study, a site review may be sufficient at some locations, while a more in-depth study of pedestrian volume, vehicle speed, sight distance, vehicle mix, etc. may be needed at other sites. It is recommended that a minimum of 20 pedestrian crossings per peak hour (or 15 or more elderly and/or child pedestrians) exist at a location before placing a high priority on the installation of a marked crosswalk alone.

P = **Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements.** These locations should be closely monitored and enhanced with other pedestrian crossing improvements, if necessary, before adding a marked crosswalk.

N = **Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased due to providing marked crosswalks alone. Consider using other treatments, such as traffic-calming treatments, traffic signals with pedestrian signals where warranted, or other substantial crossing improvement to improve crossing safety for pedestrians.**

*** The raised median or crossing island must be at least 4 ft (1.2 m) wide and 6 ft (1.8 m) long to adequately serve as a refuge area for pedestrians in accordance with MUTCD and American Association of State Highway and Transportation Officials (AASHTO) guidelines.

With these studies as a backdrop, these Guidelines outline a decision making process to identify appropriate treatments for uncontrolled locations and presents a variety of treatment options to mitigate safety, visibility, or operational concerns at specific locations.

Treatment Selection

At uncontrolled locations, a marked crosswalk with striping alone may not provide adequate visibility to the pedestrian crossing, especially at high volume, high speed, or multi-lane crossings. Enhancements should be considered for installation to supplement crosswalk striping. Appropriate treatments should be identified based on:

- Site characteristics: presence of pedestrian desire lines, available sight distance and visibility, lighting
- Geometric configuration of the roadway: number of vehicle travel lanes and presence of curb extensions or median refuge islands
- Travel data: 85th percentile speeds, posted speed limits, and average daily traffic (ADT) volumes.

Marked crosswalks alone should not be installed on multi-lane streets (two or more lanes per direction; three or more lanes total) under the following conditions[14]:

- Speeds of greater than 40 miles per hour
- Average daily traffic volumes (ADT) greater than 12,000 without a raised median or pedestrian refuge island
- Average daily traffic volumes (ADT) greater than 15,000 with a raised median or pedestrian refuge island

Locations with speeds and ADT volumes below these thresholds may also warrant enhancements. The Uncontrolled Treatment Toolbox outlines considerations for the use of enhancements in various contexts as summarized in **Table D-11**. This Toolbox may be used to identify potential treatments at a candidate uncontrolled crosswalk location based on the results of **Figures A-1** and **A-2**.

A calculation of Pedestrian Level of Service forms the basis for the treatment identification. Pedestrian Level of Service is the average delay experienced by pedestrians as they are waiting to cross the street. Expected motorist compliance is another other key variable for treatment identification. Compliance is based on field observations and engineering judgment. It is meant to reflect typical motorist responses to pedestrians attempting to cross the street. If drivers are likely to stop for a pedestrian, the compliance is rated "high." If drivers rarely stop for pedestrians, compliance is "low." The compliance rate should be assumed to be low for all locations where the speed limit is greater than 30 MPH. **Table 5** summarizes the appropriate treatments based on level of enhancement needed (with the most significant enhancement required with the worst LOS and compliance rates).

[14] California MUTCD, Section 3B. 18.

TABLE D-11: APPLICATION OF ENHANCED TREATMENTS FOR UNCONTROLLED LOCATIONS			
Pedestrian Level of Service	**Expected Motorist Compliance**		
	Low (or Speed >30 mph)	**Moderate**	**High**
LOS A-D (average delay up to 30 seconds)	***LEVEL 3*** 2 lane road: In-pavement flashers, overhead flashing beacons Multi-lane road: RRFB *Plus LEVELS 1 and 2*	***LEVEL 2*** Curb Extensions, Bus Bulb, Reduced Curb Radii, Staggered Pedestrian Refuge *Plus LEVEL 1*	***LEVEL 1*** High Visibility Crosswalk Markings, Advanced Yield Lines, Advance Signage
LOS E-F (average delay greater than 30 seconds)	***LEVEL 4*** Pedestrian Hybrid Beacon, RRFB, or Direct Pedestrians to Nearest Safe Crossing *Plus LEVELS 1 and 2*	***LEVEL 3*** 2 lane road: In-pavement flashers, overhead flashing beacons Multi-lane road: RRFB *Plus LEVELS 1 and 2*	***LEVEL 2*** Curb Extensions, Reduced Curb Radii, Staggered Pedestrian Refuge *Plus LEVEL 1*

Notes: A pedestrian refuge island (median) is recommended for consideration in all scenarios with more than 2 lanes of traffic.

Level 1 represents a minor intervention, appropriate for situations with lower speeds and traffic volumes and high driver yielding rates. Higher levels represent more significant interventions. Treatments should be combined with higher level treatments added to lower level treatments (i.e., flashing beacons with curb extensions). Additional funding sources should be identified as needed for these enhancements. Failing to provide an enhanced crosswalk when needed and/or removing a marked crosswalk should be an option of last resort.

Treatment Options

The following tables described preferred pedestrian safety treatments for uncontrolled locations with different roadway characteristics:

- **Table D-12: Geometric Treatments**
- **Table D-13: Striping and Signage**
- **Table D-14: Signal Hardware and Operational Measures**

Within each table, devices are categorized in three levels based on the level of safety concern they are meant to address: Level 1 (all cases), Level 2 (enhancements), and Level 3 (advanced enhancements). Categories of improvements are cumulative; for example, a Level 2 device should also include appropriate Level 1 devices.

TABLE D-12: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
2-1. Fewer Travel Lanes ("Road Diet") *Image Source: Fehr & Peers*	Fewer travel lanes decrease roadway width and crosswalk length, reduce speeds, reduce left-turn and rear-end collisions, and often eliminate the multiple-threat collision. It takes an average pedestrian almost four seconds to cross each additional travel lane. Therefore, reducing the number of travel lanes minimizes the amount of time that pedestrians are in the crosswalk. More travel lanes than necessary can also increase vehicle travel speeds; research has shown that the severity of pedestrian collisions increases with vehicle travel speed. Where fewer travel lanes are not possible, travel lanes can be narrowed to as little as nine feet, especially left- and right-turn pockets.	**Level 1**	$20/LF (Includes removal of existing pavement markings and repainting. Assumes existing curbs remain as is)

TABLE D-12: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
2-2. Removal of Sight-Distance Obstructions *Image Source: Fehr & Peers*	If objects impede sight-distance, this may result in an unsafe condition where motorists and pedestrians are unable to see each other. Items such as parked cars, signage, landscaping, fencing, and street furniture should be placed in a location that will not obstruct sight distance.	**Level 1**	$150/EA (Item removed is anticipated to be no larger than a sign and post)

TABLE D-12: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
2-3. Pedestrian Refuge Island *Image Source: Fehr & Peers*	Raised islands are placed in the center of the roadway separating opposing lanes of traffic with cutouts or ramps for accessibility along the pedestrian path. Median refuge islands are recommended where right-of-way allows and conditions warrant. Studies show medians are one of the most important safety enhancements available for crosswalks. They simplify complicated multi-lane crossings by breaking the crossings/conflicts into two stages.	**Level 1**	$130/LF (New curb and new concrete barrier. Assumes 6 foot median)

TABLE D-12: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
2-4. Curb Extensions *Image Source: Fehr & Peers*	Curb extensions extend the curb and sidewalks further into the roadway, shortening the length of the crosswalk. They act as a traffic calming device by narrowing the effective width of the roadway and slowing turning speeds. Because they extend into the roadway, often past parallel-parked vehicles, they improve visibility for pedestrians. The also provide space for street furniture, landscaping, bicycle parking, and signs and signal poles. Curb extensions can be constructed with reduced curb radii and to accommodate ADA improvements, such as directional curb ramps.	**Level 1**	$140/LF (Curb, sidewalk, removal of existing curb, new bollards, does not include curb ramps)

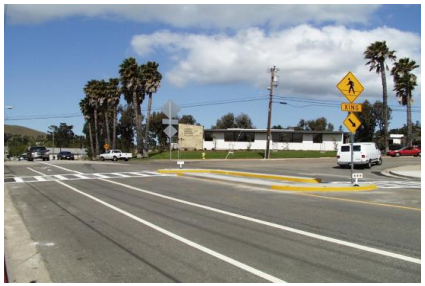
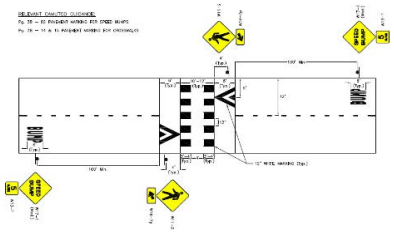
TABLE D-12: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
2-5. Split Pedestrian Crossover (SPXO)  *Image Source: Fehr & Peers*	This measure is similar to traditional median refuge islands; the difference is that the crosswalks in the roadway are staggered such that a pedestrian crosses half of the street and then walks toward traffic to reach the second half of the crosswalk. This measure must be designed for accessibility by including rails and truncated domes to direct sight-impaired pedestrians along the path of travel.	**Level 1** Note: see Table 11 for a Pedestrian Signal	$130/LF (Same materials as 6-3)
2-6. Raised Crosswalk  *Image Source: Fehr & Peers*	Raised crosswalks are speed tables (flat-topped speed humps) outfitted with crosswalk markings and signage, providing pedestrians with a level street crossing. By raising the level of the crossing, vehicles drive more slowly through the crosswalk and pedestrians are more visible to approaching motorists.	**Level 2**	$18,000/EA

TABLE D-12: UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
2-7. Pedestrian Overpass/Underpass *Image Source: Fehr & Peers*	This measure consists of a pedestrian or pedestrian/bicycle overpass or underpass of a roadway. It provides complete separation from motor vehicle traffic, normally where no other pedestrian facility is available, and connects off-road trails and paths across major barriers. Overpasses and underpasses should be used as a measure of last resort because of their cost and barriers to their effective/efficient use, with topographical and desire line considerations influencing their design. The cost of an undercrossing compared to an overcrossing can vary depending on multiple factors. On a busy roadway, an undercrossing will likely be more expensive than an overcrossing because of construction staging costs, and undercrossings can vary in cost depending on the presence of underground utilities and groundwater. The cost of either improvement will increase depending on desired aesthetics.	**Level 3**	$300/SF

Source: Fehr & Peers, 2014.

TABLE D-13: UNCONTROLLED CROSSINGS: STRIPING AND SIGNAGE			
Treatment	**Description**	**Level**	**Estimated Cost**
3-1. High Visibility Markings *Image Source: Fehr & Peers*	All uncontrolled marked crosswalks should feature high-visibility markings. Various striping patterns are available. At trail crossings, such as at the Vine Trail, a triple-four crossing with bicycle stencils in the middle to denote a shared crosswalk for bicyclist s and pedestrians should be considered.	**Level 1**	$6/Foot

TABLE D-13: UNCONTROLLED CROSSINGS: STRIPING AND SIGNAGE			
Treatment	**Description**	**Level**	**Estimated Cost**
3-2. Advanced Yield Line *Image Source: Fehr & Peers*	Advanced yield lines, often referred to as "sharks teeth", should be striped at all marked, uncontrolled crosswalks on multi-lane roadways. They should be placed 20-30 feet in front of the crosswalk. Their intention is to identify where vehicles should stop when yielding to a pedestrian to maintain adequate sight lines. These are typically use on multi-lane roadways but could be considered on two-lane roadways were driver encroachment and yielding are a concern. They should be used with the "Yield Here to Pedestrians" sign.	**Level 1**	$100/EA

TABLE D-13: UNCONTROLLED CROSSINGS: STRIPING AND SIGNAGE			
Treatment	**Description**	**Level**	**Estimated Cost**
3-3. Advanced Warning Signs *Image Source: Fehr & Peers*	High-visibility yellow or fluorescent-yellow-green (FYG) signs are posted at crossings to increase the visibility of a pedestrian crossing.	**Level 1**	$1,000/EA

TABLE D-13: UNCONTROLLED CROSSINGS: STRIPING AND SIGNAGE			
Treatment	**Description**	**Level**	**Estimated Cost**
3-4. In-Street Pedestrian Crossing Sign *Image Source: FHWA*	This measure involves posting regulatory pedestrian signage on lane edge lines and/or road centerlines. The in-street pedestrian crossing sign may be used to remind road users of laws regarding right-of-way at an uncontrolled pedestrian crossing. They can be installed on medians and may also be temporary signs, placed by school crossing guards during school hours.	**Level 1**	$400/EA

Source: Fehr & Peers, 2014.

TABLE D-14: UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
4-1. Pedestrian-Scale Lighting *Image source: www.ci.mil.wi.us*	Pedestrian-scale lighting improves visibility along a pedestrian's path and across driveways. It also improves visibility at pedestrian/vehicle conflict points in crosswalks.	**Level 1**	$10,000 per light assuming light every 100 feet

TABLE D-14: UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
4-2. Flashing Beacon *Image Source: Fehr & Peers*	Flashing amber lights are installed on overhead or post-mounted signs, in advance of the crosswalk or at the crosswalk's entrance. Full-time flashing beacons are not recommended; flashing beacons are most effective when they are activated by the crosswalk user (they should rest on dark). By resting on dark, they can also be solar powered.	**Level 2**	$20,000/EA

TABLE D-14: UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
4-3. Rectangular Rapid Flashing Beacon (RRFB) *Image Source: Fehr & Peers*	The RRFB is an enhancement of the flashing beacon that replaced the traditional slow flashing incandescent lamps with rapid flashing LED lamps. The RRFB may be push-button activated or activated with passive detection. This treatment was approved for use in California via Interim Approval IA-11-83 in 2011. Any installations should be reported to Caltrans for documentation, but do not require pre-approval for experimentation.	**Level 2**	$20,000/EA

TABLE D-14: UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
4-4. Pedestrian Hybrid Beacon (PHB) *Image Source: FHWA*	The PHB is a pedestrian-activated beacon that is a combination of a beacon flasher and a traffic control signal. When actuated, the PHB displays a yellow (warning) indication followed by a solid red indication. During the pedestrian clearance interval, the driver sees a flashing red "wig-wag" pattern until the clearance interval has ended and the beacon goes dark. The device is included in the 2012 California MUTCD for use at midblock locations.	**Level 3**	$80,000/EA

TABLE D-14: UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS			
Treatment	**Description**	**Level**	**Estimated Cost**
4-5. Pedestrian Signal *Image Source: Fehr & Peers*	A pedestrian signal is a conventional traffic control device with warrants for use based on the MUTCD. The pedestrian warrants were revised with the 2009 Federal and 2012 California MUTCD.	**Level 4**	$250,000/EA

Source: Fehr & Peers, 2013.

Controlled Crosswalk Treatment Toolbox

Controlled crosswalks are located at stop-controlled or signalized intersections. Generally, these crossings do not need enhancements beyond standard crosswalk markings (two parallel lines), as the traffic signal or stop-sign controls allocation of right-of-way. However, in some cases, such as in the Downtown, at skewed intersections, or near schools, the City may consider providing enhanced crossings or signal adjustments to create a sense of place or improved aesthetics, or to improve visibility or safety. This chapter presents preferred and enhanced measures for pedestrian treatments at controlled locations to:

- Improve the visibility of pedestrians to motorists and vice-versa
- Communicate to motorists and pedestrians who has the right-of-way
- Accommodate vulnerable populations such as the disabled, children, and the elderly
- Reduce conflicts between pedestrians and vehicles
- Reduce vehicular speeds at locations with potential pedestrian conflicts

All treatments identified in this chapter are required or allowed by the standards and specifications in the *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

Universal Considerations

The following treatments are identified as the basic pedestrian crossing improvements to be provided at all stop-controlled and signalized intersections. New controlled intersections should be designed with these treatments included; existing controlled intersections that require retrofits may be prioritized and upgraded as funds become available. These treatments are based on recommended best practices in pedestrian safety:[15]

- Mark crosswalks on all legs of the intersection
- Provide advanced stop bars with each crosswalk
- Minimize the number of vehicle traffic lanes pedestrians must cross
- Provide median refuge islands and thumbnails, as width and path of turn maneuvers allow
- Remove sight-distance obstructions
- Provide directional curb ramps for each crosswalk (e.g., two per corner)
- Eliminate free right-turn slip lanes, where feasible, and mitigate for pedestrian safety (slowing speeds) where they remain
- Locate bus stops on the far-side of the intersection (or in front of mid-block crossings)
- Minimize cycle lengths

[15] See America Walks *Signalized Intersection Enhancements that Benefit Pedestrians* http://americawalks.org/wp-content/upload/America-Walks-Signalized-Intersection-Enhancement-Report-Updated-8.16.2012.pdf (2012).

- Reduce prevalence or eliminate permitted signal phasing where pedestrian crossings exist
- Provide pedestrian signal heads for all crossings at signalized intersections
- Provide adequate pedestrian clearance intervals (crossing time) at signalized intersections
- Consider benefits of a roundabout (stop controlled or signalized locations) or signalization (stop controlled locations) for all users

Signalized Crossing Enhancements

To create a transparent and consistent decision making framework, four issue-specific flow charts follow a multi-step process to determine an enhanced treatment "match" for the signalized intersection characteristics.

CHART A:

Actuated Signals Pedestrian Option Flow Chart

Use this flow chart whenever traffic signal actuation is used at the study intersection.

CHART B:

Left-Turns on Two-Way Streets Pedestrian Options Flow Chart

Use this flow chart for new and retrofit signal installations, and where a conflict between pedestrians and left turning vehicles is observed/ apparent from collision data.

CHART C:

Right Turns on Two-Way Streets or Left Turns on One-Way Streets Pedestrian Options Flow Chart

Use this flow chart for new and retrofit signal installations, and where a conflict between pedestrians and right turning vehicles (or left turning on one-way streets) is observed/ apparent from collision data.

CHART D:

Pedestrian Scramble Flow Chart

Use this flow chart to supplement Chart B and Chart C as directed.

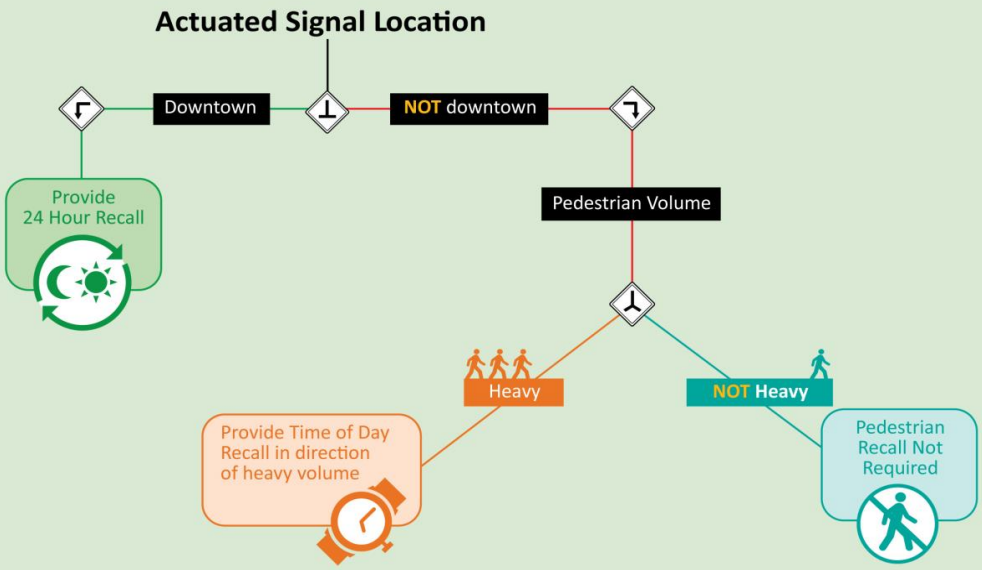
Intersection type and pedestrian conflict characteristics form the basis for completing Charts A, B, and C, and the applicable charts are then completed using existing and/or proposed intersection characteristics such as lane configurations, location along transit priority corridor, pedestrian and vehicle volumes, and signal phasing.

The first step of the left or right turn conflict flow charts is to determine if the pedestrian to vehicle conflict volume levels meet minimum pedestrian scramble considerations, which could lead to completion of the pedestrian scramble test (Chart D) or continuation on the original flow chart (Chart B or Chart C). If the scramble flow chart is completed and passed (*with operations analysis performed*), a pedestrian scramble phase is the recommended treatment. If the scramble flow chart is not completed, the inputs listed above will lead to identification of various pedestrian treatments as resolution to the specified conflicts.

Flow Chart A that is completed for all actuated signals recommends different signal timing pedestrian recall treatments based on the signal's location, such as a downtown location.

CHART A:

Actuated Signals



*Threshold for an anchor intersection for one hour on multiple days in a week. For neighborhood continuity, consider recall below the threshold for intersections within the same coordination group as the anchor or within the same land use context/linked destination.

**Provide no more than two recall periods in one day, and ideally only one. Provide a time buffer for the peak period.

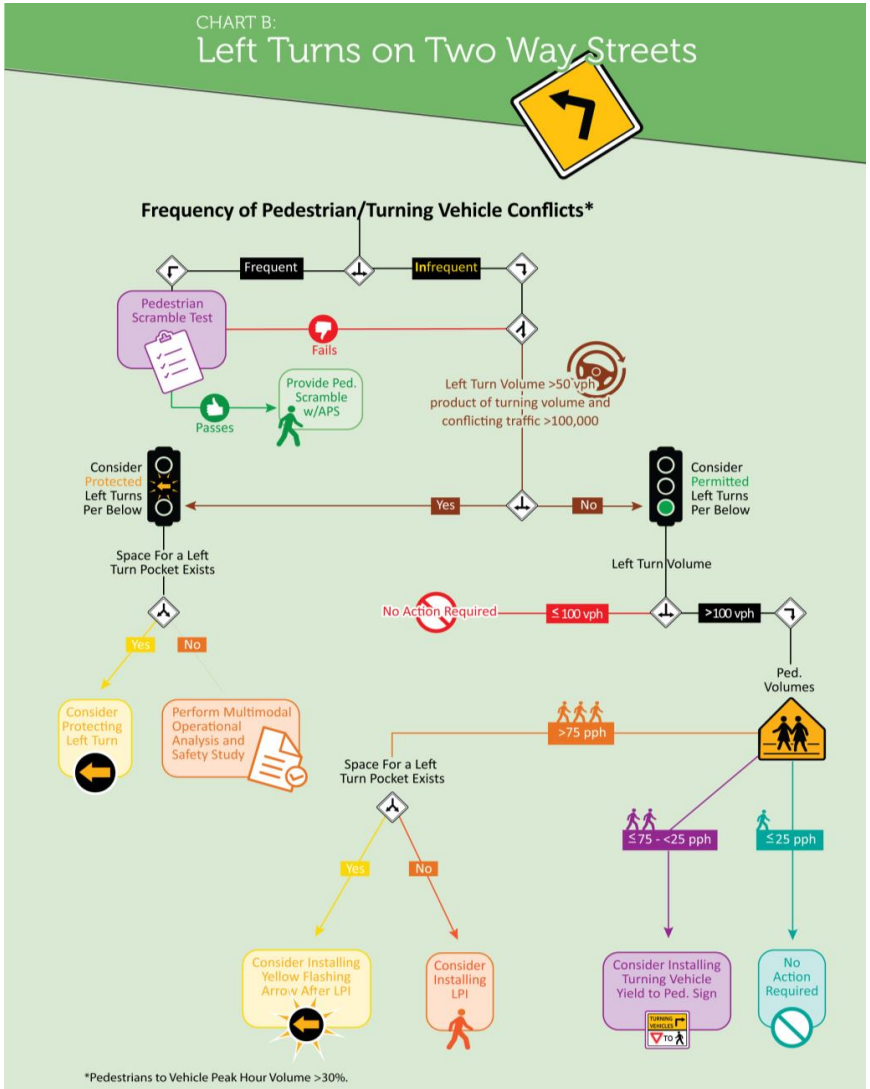


CHART B:
Left Turns on Two Way Streets
Frequency of Pedestrian/Turning Vehicle Conflicts*
Frequent
Infrequent
Pedestrian Scramble Test
Fails
Passes
Provide Ped. Scramble w/APS
Left Turn Volume >50 vph product of turning volume and conflicting traffic >100,000
Consider Protected Left Turns Per Below
Yes
No
Consider Permitted Left Turns Per Below
Space For a Left Turn Pocket Exists
Left Turn Volume
No Action Required
≤ 100 vph
>100 vph
Yes
No
Consider Protecting Left Turn
Perform Multimodal Operational Analysis and Safety Study
Ped. Volumes
>75 pph
Space For a Left Turn Pocket Exists
≤75 - <25 pph
≤25 pph
Yes
No
Consider Installing Yellow Flashing Arrow After LPI
Consider Installing LPI
Consider Installing Turning Vehicle Yield to Ped. Sign
No Action Required
*Pedestrians to Vehicle Peak Hour Volume >30%.

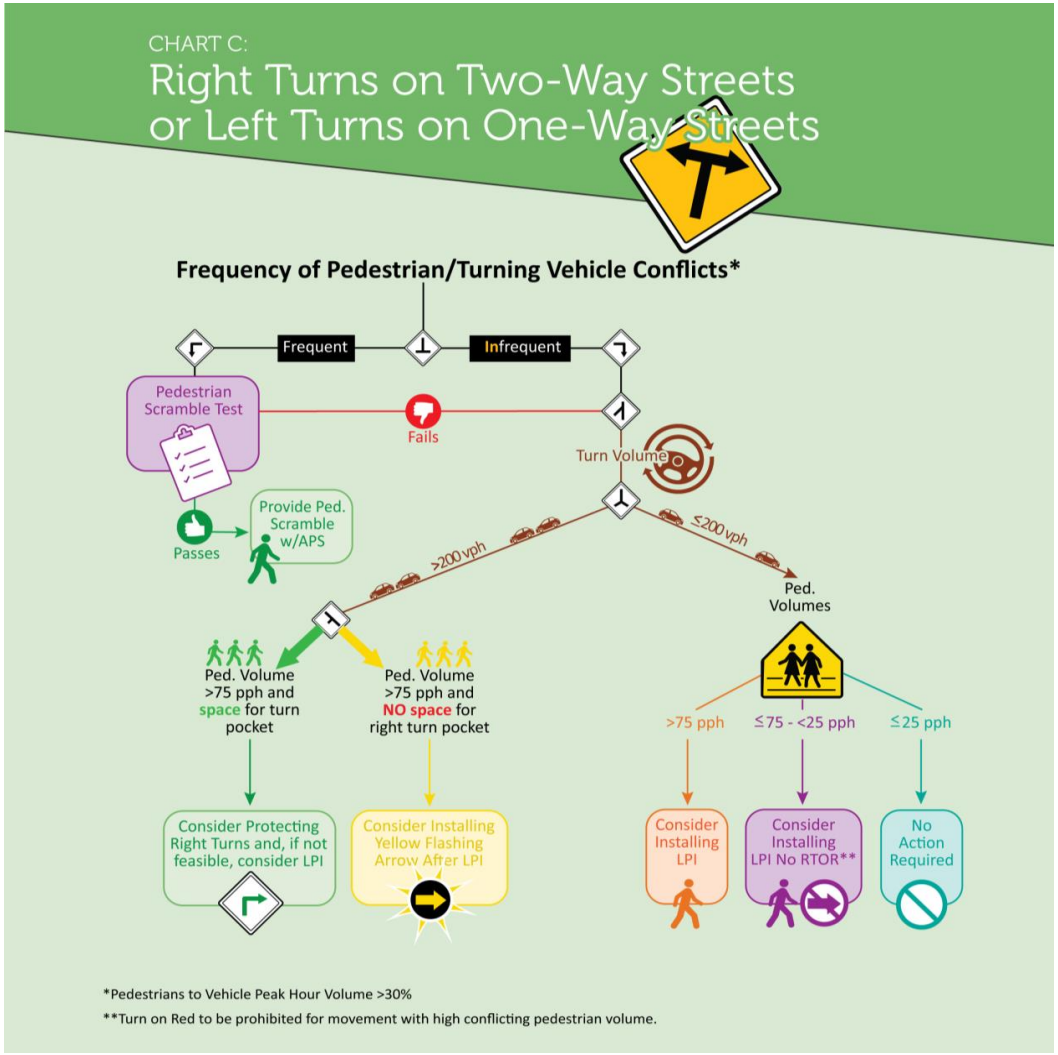


CHART C:
Right Turns on Two-Way Streets or Left Turns on One-Way Streets
Frequency of Pedestrian/Turning Vehicle Conflicts*
Frequent
Infrequent
Pedestrian Scramble Test
Fails
Passes
Provide Ped. Scramble w/APS
Turn Volume
>200 vph
≤200 vph
Ped. Volume >75 pph and space for turn pocket
Ped. Volume >75 pph and NO space for right turn pocket
Ped. Volumes
>75 pph
≤75 - <25 pph
≤25 pph
Consider Protecting Right Turns and, if not feasible, consider LPI
Consider Installing Yellow Flashing Arrow After LPI
Consider Installing LPI
Consider Installing LPI No RTOR**
No Action Required
*Pedestrians to Vehicle Peak Hour Volume >30%
**Turn on Red to be prohibited for movement with high conflicting pedestrian volume.

CHART D:
Pedestrian Scramble
Should a Pedestrian Scramble Be Installed?
Does the intersection have a history of pedestrian/vehicle collisions and/or is an intersection of two one-way streets?
Yes
No
Is the intersection located along a major transit corridor?
Yes
No
Can the diagonal crossing distance be less than 100 feet?
No
Yes
Can the cycle length be less than 100 seconds?
No
Yes
Perform multimodal operations analysis to consider a pedestrian scramble for all pedestrian phases.
Do NOT
Install Scramble

Flow Chart Footnotes

1. Time of Day Recall
   - One surveyed city does only 24 hour recall
   - Two surveyed cities run pedestrian recall only during the day or p eak hours when pedestrian volumes are higher.

2. Pedestrian Scramble with Accessible Pedestrian Signals (APS)
   - In three cities surveyed, used at intersections with complex geom etry or two one-
     way street intersections with high pedestrian volumes.

3. Turn volume for protected left
   - CA MUTCD section 4D.19

4. Left Turn Volume
   - AASHTO section 12.1.1

5. Pedestrian Volume
   - MUTCD section 4C.05 (pedestrian signalize intersection warrant) a nd 4F.01 (pedestrian hybrid beacon warrant)

6. Right Turn Volume
   - CA MUTCD section 4D.07

7. Flashing Arrow Leading Pedestrian Interval (LPI) with APS
   - Used by one city surveyed to provide a balance between the delay of a protected left and the safety benefits of a protected left. Re quires a turn pocket.

8. LPI with APS
   - Six cities surveyed have implemented LPIs at specific intersections , usually dependent on complaints/requests, collision history, and /or high vehicle turning and pedestrian volumes.

The following tables describe the preferred and optional enhanced pedestrian safety treatments that may be used for controlled locations:

- **Table A-5: Geometric Treatments**
- **Table A-6: Striping and Signage**
- **Table A-7: Signal Hardware and Operational Measures**

TABLE D-15: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS	
Treatment	**Description**
5-1. Fewer Travel Lanes ("Road Diet") *Image Source: Fehr & Peers*	Fewer travel lanes decrease roadway width and crosswalk length, reduce speeds, reduce left-turn and rear-end collisions, and often eliminate the multiple-threat collision. An average pedestrian takes almost four seconds to cross each additional travel lane. Therefore, reducing the number of travel lanes minimizes the amount of time that pedestrians are in the crosswalk. More travel lanes than necessary can also increase vehicle travel speeds; research has shown that the severity of pedestrian collisions increases with vehicle travel speed. Where fewer travel lanes are not possible, travel lanes can be narrowed to as little as nine feet, especially left- and right-turn pockets.

TABLE D-15: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS	
Treatment	**Description**
5-2. Pedestrian Refuge Island with "Thumbnail" *Image Source: Fehr & Peers*	Median pedestrian islands provide a refuge for pedestrians to stand if they do not have sufficient time to cross a street. They can be enhanced with median pedestrian push buttons at signalized crossings. Median islands can be installed throughout a corridor or only at specific crosswalks.

TABLE D-15: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS	
Treatment	**Description**
5-3. Removal of Sight-Distance Obstructions *Image Source: Fehr & Peers*	If objects impede sight-distance, an unsafe condition may arise where motorists and pedestrians are unable to see each other. Items such as parked cards, signage, landscaping, fencing, and street furniture should be placed in a location that will not obstruct sight-distance.

TABLE D-15: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS	
Treatment	**Description**
5-4. Directional Curb Ramps with Truncated Domes *Image Source: Fehr & Peers*	Curb ramps offer wheelchair access to/from the sidewalk and crosswalk. Truncated domes, or tactile strips, warn blind pedestrians that they are about to enter a crosswalk. The best practice for curb ramps is to install two per corner so that each ramp points directly into the crosswalk and to the curb ramp at the other side of the street. Corner bulbouts can be used to increase the amount of space available for directional curb ramps.

TABLE D-15: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS	
Treatment	**Description**
5-5. Right-Turn Lane Design *Image Source: Fehr & Peers*	Free right-turns allow vehicles to turn right at high speeds. Since the vehicles are not typically controlled by the traffic signal in this circumstance, crosswalks across the turn lanes are usually uncontrolled crosswalks. Controlled right-turn movements are preferable for pedestrians because they require a vehicle to stop on red before turning right. Where "pork-chop" islands that channelize right-turns are necessary to provide acceptable turning radii, raised crosswalks are a pedestrian enhancement. Other options include signalizing the crossing (especially if it is multi-lane) and designing the "pork-chop" for slower speeds and better visibility of pedestrians.

TABLE D-15: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS	
Treatment	**Description**
5-6. Far-Side Bus Stops *Image Source: Fehr & Peers*	Far-side bus stops allow pedestrians to cross behind the bus, improving pedestrian visibility. Far side bus stops also enhance transit operations by providing a guaranteed merging opportunity for buses. Exceptions for far-side bus stops include considerations for bus routing, sufficient sidewalk area, and conflicts with parking, land uses, or driveways.

TABLE D-15: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS	
Treatment	**Description**
5-7. Curb Extensions *Image Source: Fehr & Peers*	Curb extensions extend the curb and sidewalks farther into the roadway, shortening the length of the crosswalk. They act as a traffic calming device by narrowing the effective width of the roadway and slowing turning speeds. Because they extend into the roadway, often past parallel-parked vehicles, they improve visibility for pedestrians. The also provide space for street furniture, landscaping, bicycle parking, and signs and signal poles. Curb extensions can be constructed to accommodate ADA improvements, such as directional curb ramps.

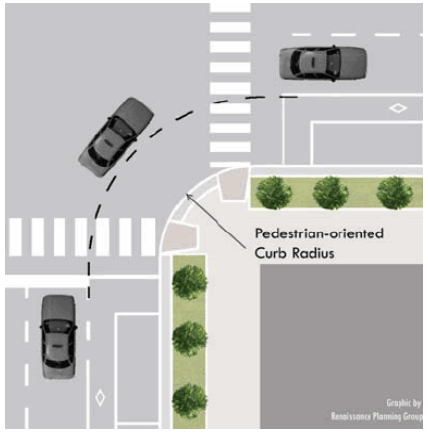
TABLE D-15: CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS	
Treatment	**Description**
5-8. Reduced Turn Radius  *Image Source: AARP*	Vehicles travel faster through turns with a large radius. Reducing the radius of a corner is an effective way of reducing vehicle speeds. In suburban environments, turn radii generally do not need to exceed 30 feet. In urban environments turn radii can be 10 feet or less, especially where the meeting of one-way streets prohibits turning movements. Where on-street parking is permitted and/or bicycle lanes are present on one or both streets, consideration for further reductions of radii should occur acknowledging that the effective radius is increased with on-street parking. Corner curb radii on multi-lane streets should acknowledge that trucks turning right can turn into two lanes.

TABLE D-16: CONTROLLED INTERSECTIONS: STRIPING AND SIGNAGE	
Treatment	**Description**
6-1. Marked Crosswalks *Image Source: Google Maps*	Marking a crosswalk across all approaches of an intersection improves pedestrian accessibility. At a four-way intersection, a closed crosswalk forces pedestrians to cross via three crosswalks instead of one. Crosswalks on all approaches can often be accommodated without a significant impact to traffic signal operations. At controlled trail crossings, high-visibility triple-four trail crossings with bicycle legends in the middle should be considered to indicate a shared crossing space for bicyclists and pedestrians.

TABLE D-16: CONTROLLED INTERSECTIONS: STRIPING AND SIGNAGE	
Treatment	**Description**
6-2. Advanced Stop Bar *Image Source: Fehr & Peers*	Advanced stop bars are placed five to seven feet in front of crosswalks. They keep vehicles from encroaching into the crosswalk when stopped at a red signal or stop sign.

TABLE D-16: CONTROLLED INTERSECTIONS: STRIPING AND SIGNAGE	
Treatment	**Description**
6-3. High Visibility Markings *Image Source: Fehr & Peers*	High-visibility crosswalks at controlled locations are appropriate in areas with high pedestrian volumes, at crosswalks with skewed geometries, or near sensitive land uses (such as schools).

TABLE D-16: CONTROLLED INTERSECTIONS: STRIPING AND SIGNAGE	
Treatment	**Description**
6-4. Textured Pavement or Colored Crosswalks *Image Source: Fehr & Peers*	Textured pavement can be used in crosswalks or in intersections as an aesthetic enhancement. Because of its texture, it may also calm traffic by slowing vehicles before they cross an intersection. It can also make crosswalks more visible. Textured pavement can be made of brick or, alternatively, both concrete and asphalt can be stamped to look like brick or stone. At controlled locations, standard crosswalk striping should be provided in addition to the textured pavement. A smooth, non-slip surface is preferable.

TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-1. Adequate Crossing Times *Image Source: Fehr & Peers*	The 2012 California MUTCD requires a walking speed of 3.5 feet per second be assumed to determine crossing times as a default minimum (4.0 feet per second was previously the guidance). A speed slower than 3.5 feet per second can be used where slower pedestrians routinely use the crosswalk, such as locations near schools, hospitals, or senior centers.

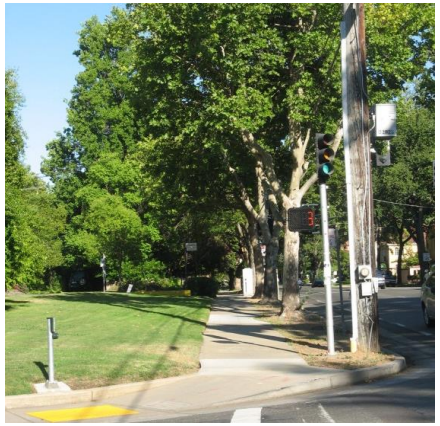
TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-2. Pedestrian Countdown Signal  *Image Source: Fehr & Peers*	Pedestrian countdown signals give pedestrians "Walk" and "Don't Walk" signals with a second-by-second countdown for each phase. Research suggests that pedestrians are more likely to obey the "Don't Walk" signal when delivered using a countdown signal. The device has been shown to enhance safety for all road users. The 2012 California MUTCD requires that all new pedestrian signals be countdown signals.

TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-3. Pedestrian Signals and Push Buttons *Image Source: Fehr & Peers*	Mounting push buttons for different crosswalks on one pole can be confusing for blind pedestrians. Push buttons should be separated by ten feet and placed within five feet of each curb ramp, one per crosswalk. At long crosswalks (≥60 feet) with a median refuge island, push buttons can be placed in the median for pedestrians who may not be able to cross the entire crosswalk in one cycle length. In areas with high pedestrian volumes, eliminating pedestrian push buttons and providing a pedestrian phase in every cycle, can enhance walkability (and signal compliance).

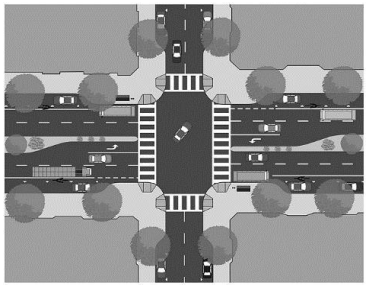
TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-4. Short Cycle Lengths  *Image Source: Institute of Transportation Engineers*	Long cycle lengths at signalized intersections result in long pedestrian wait times to cross a street. By shortening an intersection's cycle length, pedestrians do not have to wait as long to cross after pushing the button to request a "Walk" signal.

TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-5. Protected Left-Turns *Image Source: Fehr & Peers*	Where permitted left-turns are allowed, denoted by a "Left Turn Yield on Green" sign, left-turning vehicles can conflict with pedestrians in the crosswalk. By making the left-turn protected, so that it is allowed only with a green arrow, the "Walk" signal at a crosswalk occurs at the same time that through- and right-turning vehicles in the same direction receive a green light. This reduces the risk of left-turning vehicle conflicts with the opposing crosswalk; since left-turns typically occur at a higher speed than right-turns, collisions of increased severity can be avoided by protecting left-turns.

TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-6. Accessible Pedestrian Signals *Image Source: Fehr & Peers*	Accessible pedestrian signals (APS) and detectors provide information, such as "Walk" indications and direction of crossing, in non-visual formats to improve accessibility for blind pedestrians. Audible options for accessible pedestrian signals include audible tones and speech messages. Vibrotactile push-buttons are effective options that alleviate the impacts of noise created by audible pedestrian signals. They are also accessible to deaf pedestrians. APS should always be provided when two push buttons are located on one pole and where persons with disabilities are expected frequently at a crossing. At other locations, APS is currently a best practice, but is expected to become a requirement when the proposed rulemaking of the *Public Rights of Way Accessibility Guidelines* (PROWAG) is finalized.

TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-7. Pedestrian Recall *Image Source: Fehr & Peers*	Pedestrian recall gives pedestrians a "Walk" signal at every cycle. No push-button or detection is necessary since a "Walk" signal will always be given. Pedestrian recalls are useful in areas with high levels of pedestrian activity. They demonstrate that an intersection is meant to serve both vehicles and pedestrians. In general, pedestrian recall should be used if pedestrians actuate a "Walk" signal 75 percent of the time during three or more hours per day. Recall can be used 24-hours a day or during peak hours for pedestrians (in which case push buttons should continue to be provided).
7-8. No Right Turn on Red *Image Source: FHWA*	When attempting to turn right on red, motorists must look left to see if the road is clear; motorists often do not look right before turning and may not see pedestrians to their right. Restricting right turns on red can reduce conflicts between vehicles and pedestrians. "Blank out" turn restriction signs (see 11-9 below) are more effective than conventional "No Right Turn on Red" signs. "No Right Turn on Red" signs that specify time-of-day restrictions or "When Pedestrians are Present" are confusing to motorists and are often disregarded.

TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-9. Blank-Out Turn Restriction LED Sign *Image Source: Fehr & Peers*	The ubiquity of conventional turn restriction signs, usually for no right turn on red, contributes to their disregard by motorists. Blank out turn restriction signs activate only when the specified movement is prohibited. The LED sign is also very visible.

TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-10. Animated Eyes *Image Source: Fehr & Peers*	Animated eyes pedestrian signals feature eyes that move from side to side when a "Walk" signal is given. The signals remind pedestrians to look for turning vehicles before proceeding into the crosswalk. Research has indicated that animated eyes pedestrian signals reduce conflicts between vehicles and pedestrians.

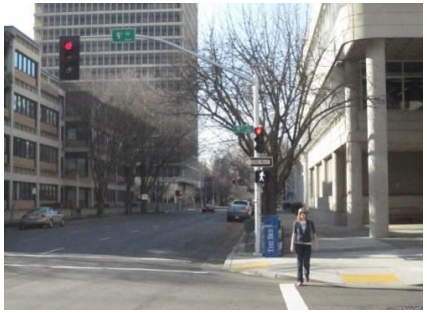
TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-11. Leading Pedestrian Interval (LPI)  *Image Source: Fehr & Peers*	A leading pedestrian interval (LPI) advances the "Walk" signal for a few seconds while through-vehicles continue to receive a red indication. By allowing pedestrians to get a head start into the crosswalk, it can reduce conflicts between pedestrians and turning vehicles. The 2012 California MUTCD recommends that LPIs be at least three seconds in duration. Right-turn on red restrictions may be needed with LPIs are installed in locations with lower pedestrian volumes.

TABLE D-17: CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES	
Treatment	**Description**
7-12. Push Button for Extended Crossing Time *Image Source: FHWA*	Some pedestrians may need extra time to safely cross a street. Traffic signals can be retrofitted to provide pedestrians with increased crossing time by extending the duration of a pushbutton press.

Source: Fehr & Peers, 2014.

Appendix SH-A: Benchmarking Table

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Coordination with Health Agencies Involving non-traditional partners such as public health agencies, pediatricians, etc., in the planning or design of pedestrian facilities may create opportunities to be more proactive with pedestrian safety, identify pedestrian safety challenges and education venues, and secure funding. Additionally, under-reporting of pedestrian-vehicle collisions could be a problem that may be partially mitigated by involving the medical community in pedestrian safety planning.[1]	Key Strength	Live Healthy Napa County, a coalition of local community stakeholders for improving health in Napa County, recently completed the Napa County Community Health Improvement Plan (CHIP) in February 2014. The document proposes a plan to address health issues through new policies and health promotion strategies, including transportation policies that encourage walking and biking. In St. Helena, health agencies are involved in the development review process, but there is no special involvement for pedestrian facilities. Live Healthy Napa County completed the first ever Napa County Community Obesity Prevention Plan (Jan. 2015)[2], which addresses the need to increase active transportation options countywide.	• Seek opportunities to meet goals in the CHIP related to active transportation, such as improving the built environment by ensuring all necessary sidewalk repairs are included in the city's Capital Improvement Program (CIP), and including additional pedestrian infrastructure projects in the program. Consider a trip and fall monitoring program and/or incorporating public comment from the recommended online comment form under *Public Involvement* below. • Continue to involve health agencies in the development review process, especially related to active transportation improvements. • Ensure consistency with the CHIP by seeking partnership opportunities between health agencies and Safe Routes to School to expand the reach of education and promotion of walking.

[1] Sciortino, S., Vassar, M., Radetsky, M. and M. Knudson, "San Francisco Pedestrian Injury Surveillance: Mapping, Underreporting, and Injury Severity in Police and Hospital Records," *Accident Analysis and Prevention*, Volume 37, Issue 6, November 2005, Pages 1102-1113

[2] http://www.livehealthynapacounty.org/uploads/5/1/4/4/51449431/napa_county_community_obesity_prevention_plan_(final).pdf

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Complete Streets Policy Routine Accommodations or Complete Streets Policies accommodate all modes of travel and travelers of all ages and abilities.	Key Strength	The City of St. Helena has a Complete Streets Policy resolution which follows the template provided by MTC. The next update to the General Plan will incorporate Complete Streets policies and principles; however, it has yet to be adopted. For implementation of the Complete Streets policy, designs of projects affecting the transportation system must be reviewed by the Active Transportation Committee for consistency with the Vine Trail plans and the Countywide Bicycle Plan. Routine data collection is also required to evaluate how well all users are being served by the transportation network. Commercial and residential development projects are required to include sidewalks and the city additionally requests ADA-compliant driveway designs during development review.	• Consider opportunities for Complete Streets, specifically pedestrian pathways and/or sidewalks, during restriping, repaving, new roadway construction, and utility installation projects. • Develop a checklist for project review to ensure routine application of the Complete Streets policy. • Consider maintaining a GIS database of data collected as part of the policy evaluation, to include pedestrian volumes collected in this plan.
Newspaper Rack Ordinance Newspaper racks may obstruct walkways and reduce accessibility and pedestrian visibility when ordinances are not in place. A Newspaper Rack Ordinance improves the pedestrian realm by reducing clutter and organizing sidewalk zones and may detail size, location, and maintenance requirements.	Key Strength	St. Helena has an ordinance which requires the placement and maintenance of a newsrack not to interfere with building access or reduce the pedestrian travel way to less than six feet.	

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Street Tree Ordinance Street trees enhance the pedestrian environment by providing shade and a buffer from vehicles. Street trees may also enhance property values, especially in residential neighborhoods. However, street trees, when improperly selected, planted, or maintained, may cause damage to adjacent public infrastructure and/or utilities.	Key Strength	The St. Helena Tree Committee developed the Master Street Tree List, a guide that organizes trees into categories depending on the recommended street type (large commercial, major in-town streets, and small neighborhood streets). The guide includes a list of undesirable trees, in accordance with the city's street tree ordinance, which lists trees that cannot be planted without proper root-control barriers due to their potential to cause damage to sidewalks. According to the St. Helena tree ordinance, property owners are responsible for repairing sidewalk damage by trees fronting their property, while the city takes responsibility for trimming and maintaining trees on Main Street.	
Speed Limits and Speed Surveys Pedestrian fatality rates increase exponentially with vehicle speed. Thus, reducing vehicle speeds in pedestrian zones may be one of the most important strategies for enhancing pedestrian safety.	Key Strength	Engineering speed studies are prepared every 5 years in St. Helena, in accordance with state law. The city does use reduced speed limits of 15 mph in school zones as needed. De facto speed limits are 25 miles per hour.	• Proactively consider pedestrian volumes when setting speed limits, and consider traffic calming in pedestrian zones where speed surveys suggest traffic speeds are too high. • Ensure design standards in pedestrian areas do not contribute to a routine need for traffic calming.
Bicycle Parking Ordinance Bicyclists become pedestrians after parking their bicycles. Safe and convenient bicycle parking is essential for encouraging bicycle travel (especially in-lieu of vehicle travel).	Enhancement	The city of St. Helena includes the option to require bicycle parking in its municipal code for any use which must provide 10 or more vehicular spaces.	• Consider modifying the bicycle parking ordinance to distinguish and provide for both long-term and short-term bicycle parking. Include requirements for rack placement to ensure a convenient location and adequate pedestrian clearances.

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Collision Reporting Identifying and responding to collision patterns on a regular basis is an important reactive approach to pedestrian safety (which may be combined with proactive measures).	Enhancement	According to collision history between 2003 and 2012, St. Helena has the highest number of collisions countywide besides the City of Napa. Collision locations and contributing factors are reviewed by city staff when there is a call for grant funding to identify candidate improvement projects.	• Geo-coding (mapping) and comprehensive monitoring using Crossroads software would allow for more proactive pedestrian safety projects and best practices such as collision typing for countermeasure selection. GIS efforts may be funded through an Office of Traffic Safety grant. • Sufficient pedestrian volume data could be used to prioritize collision locations based on collision rates (collisions/daily pedestrian volume). This could lead to a proactive approach to identify treatments and program funding. Volunteers can collect pedestrian volumes and other data at collision locations.
Public Involvement Responding to public concerns through public feedback mechanisms represents a more proactive and inclusive approach to pedestrian safety compared to a conventional approach of reacting to pedestrian collisions. Advisory committees serve as important sounding boards for new policies, programs, and practices. A citizens' pedestrian advisory committee is also a key component of proactive public involvement for identifying pedestrian safety issues and opportunities.	Enhancement	The City of St. Helena does not have a formal online feedback process, but residents may call the Planning or Public Works office for specific complaints and concerns. The city has an Active Transportation Committee with 5 members and 2 alternates. They are not linked directly to the ATAC for NVTA, which has a separate representative from St. Helena.	• Add a page to the city's website dedicated to receiving public input regarding transportation issues and a subsection for pedestrian topics. This category or subcategory may allow residents to file comments or complaints for traffic control devices or dangerous conditions. • Designate time during the ATC meetings to address countywide issues and opportunities with the representative on the NVTA ATAC. Alternatively, a new position could be created on the city's ATC to be assumed by the NVTA ATAC representative to ensure collaboration and input on countywide pedestrian topics.
Transportation Demand Management Transportation Demand Management (TDM) programs encourage multi-modal travel by incentivizing non-auto options. As new development occurs, TDM programs can be expanded, formalized, and strengthened.	Enhancement	Employers of 50 or more full-time workers in the Bay Area are required to provide commuter benefits to their employees through the Bay Area Commuter Benefits Program, to comply with California SB 1339. The Program includes benefit options like transit passes, employer-provided shuttles, and vanpool subsidies.	• Consider implementing a "park-once" strategy downtown and along Main Street. • Develop a policy that supports the "Car Free" tourism program of the Napa Valley Destination Council and NVTA, which provides information to visitors so they can plan a trip without relying solely on a car.

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Design and Development Standards Design policies and development standards can improve the pedestrian walking experience, encourage walking, enhance economic vitality, and offer funding opportunities for pedestrian improvements.	Enhancement	The typical street cross-section in the General Plan is 2 lanes with a center two-way left turn lane, a pedestrian friendly design. Building orientation and setback requirements are included in the city's zoning ordinance.	• Incorporate elements of the design guidelines presented in this plan as part of the development review process. • Develop a Streetscape Master Plan for the city.
Historical Preservation Historic walking routes, such as the famous Freedom Trail in Boston, encourage walking and enhance economic vitality.	Enhancement	Numerous historical sites throughout the city are listed in the Master Historical Resources List, but pedestrian access is not addressed. The St. Helena municipal code includes a Historic Preservation Overlay District but does not address pedestrians.	• Develop a map to showcase natural or local sites of interest, and link key sites on the Master Historical Resources List, including a possible walking route between the sites. Maps of the tour route and historic documentation materials could be made available online and wayfinding signs, maps, and plaques could also be provided throughout the city.

Pedestrian Safety Education Program
Education is a critical element for a complete and balanced approach to improving pedestrian safety. Education campaigns may target pedestrians of all ages.
	Enhancement	In accordance with policies in the Napa Bike Plan and the General Plan, NVTA is planning to pursue grant funding through the California Office of Traffic Safety (OTS) for a media safety campaign for motorists. The campaign will use Pittsburgh's Drive With Care campaign for inspiration, which characterizes bicyclists and pedestrians as our firefighters, doctors, and neighbors and uses the slogan "someone you care about rides a bike". The OTS will release a call for projects around November 2015 for their 2017 funding cycle.	• Coordinate with NVTA on pursuing a media safety campaign, and consider the following methods to distribute the campaign in St. Helena:
			  ○ Include advertisements on buses and bus shelters, through SRTS and in-school curriculum, public service announcements, and/or brochures distributed by law enforcement, among many other strategies
			  ○ Pedestrian safety brochures could be distributed to the public independent of the media campaign to promote walking to community events.

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Safe Routes to Schools Safe-Routes-to-School (SRTS) programs encourage children to safely walk or bicycle to school. The programs are important both for increasing physical activity (and reducing childhood obesity) and for reducing morning traffic associated with school drop-off. Funding for educational programs and/or infrastructure projects is available at the state and federal levels.	Enhancement	The Napa County Office of Education (NCOE) currently administers a Safe Routes To School (SRTS) Program across the county, and has hosted events such as Walk and Roll to School Day, where students compete for the Golden Sneaker Trophy, awarded to classrooms with the best participation. A Safe Walking education presentation is offered to elementary schools countywide for students in grades K-3. Brochures are handed out during this program as well as at staff meetings, PTA/parent meetings, community health fairs, and farmers markets. Parent presentations include a review of pedestrian laws and ordinances. While program leaders have a goal of reaching every interested school by the end of the grant term in 2016, reaching all schools on a weekly or yearly basis has been difficult due to understaffing and scarcity of volunteers	• Pursue SRTS grant funding for pedestrian infrastructure projects. • Seek partners to form school-specific committees of community agencies, parents, advocates, City staff, community health representatives, and other stakeholders to administer SRTS programs at each school. Hold regular meetings to maintain stakeholder involvement. • Use distances from schools from parent survey results to determine feasibility of rolling out Walking School Bus program for St. Helena Elementary School. • Coordinate with NVTA to seek additional funding for SRTS.
Open Space Requirements Residents typically rate open space as among a jurisdiction's key assets and needs. Open space may encourage walking, especially for recreational trips.	Enhancement	The St. Helena municipal code includes an Open Space District - designated areas associated with stream corridors in the city - but does not provide specific pedestrian accommodations for this area.	• Consider requiring provisions for pedestrian safety and accessibility as part of the Open Space District.
Economic Vitality Improving pedestrian safety and walkability can enhance economic vitality. Similarly, enhancing economic vitality through innovative funding options such as Business Improvement Districts (BIDs), parking management, and facade improvement programs can lead to more active pedestrian areas and encourage walking.	Enhancement	St. Helena does not have a BID or a façade improvement program. A parking impact overlay zone does reduce off-street parking requirements in the central business district, which helps to preserve the pedestrian orientation of the street frontage and create a "park-once" environment.	• Consider establishing Business Improvement Districts that can fund streetscape and pedestrian improvements. • Consider way-finding strategies downtown to reinforce the "park-once" environment while managing parking spillover into residential areas.

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Sidewalk or Street Furniture Ordinance Street furniture encourages walking by accommodating pedestrians with benches to rest along the route or wait for transit; trash receptacles to maintain a clean environment; street trees for shade, etc. Uniform street furniture requirements also enhance the design of the pedestrian realm and may improve economic vitality.	Opportunity	St. Helena has no specific street furniture ordinance, but sidewalk dining is allowed with a permit in the zoning code. A four feet clear path of travel must be maintained.	• Consider adopting a Street Furniture Ordinance to include guidance for the design of transit stops and locations for additional street furniture amenities, other than those associated with transit stops, as appropriate.
Inventory of Pedestrian Facilities A GIS-based sidewalk inventory enables project identification and prioritization, as well as project coordination with new development, roadway resurfacing, etc.	Opportunity	The city does not have a GIS inventory of sidewalks or other pedestrian facilities, although trails and pathways are shown graphically in the St. Helena Bicycle Master Plan. Sidewalks are included in the city's Capital Improvement Program and has budgeted approximately $17,000/year for the last 3 years for sidewalk repairs, although not all of it was spent.	• This plan has developed a GIS-based inventory of sidewalks, curb ramps, crosswalks, and paths citywide. This facility inventory could be expanded to include informal pathways and potential pedestrian opportunity areas in the city. • Consider implementing a trip and fall monitoring program and/or mapping public comment from the recommended comment form to ensure all necessary sidewalk repairs are included in the city's Capital Improvement Program (CIP).
Walking Audit Program Walking audits provide an interactive opportunity to receive feedback from key stakeholders about the study area as well as discuss potential solutions and their feasibility.	Opportunity	St. Helena has not conducted pedestrian walking audits before this plan.	• Conduct regular walking audits as part of a citywide safety program for pedestrians. This effort could complement a "trip and fall" program or health-oriented programs within the city, as well as distribution of the media campaign NVTA is pursuing.

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Pedestrian Volumes Pedestrian volume data is important for prioritizing projects, developing collision rates, and determining appropriate pedestrian infrastructure.	Opportunity	The city of St. Helena does not collect pedestrian volumes as a matter of routine.	• Use collected volumes in this plan to identify pedestrian nodes in the next update to the General Plan. • Routinely collect pedestrian and bicycle volumes by requiring them to be conducted in conjunction with all traffic studies and manual intersection turning movement counts. • Geo-code existing and future pedestrian volume data with GIS software along with other data such as pedestrian control devices and collisions to analyze data for trends or hotspots related to pedestrian safety.
ADA Improvements Compliance with the Americans with Disability Act (ADA) guidelines is important not only to enhance community accessibility, but also to improve walking conditions for all pedestrians. An ADA Transition Plan sets forth the process for bringing public facilities into compliance with ADA regulations.	Opportunity	Standard drawings for the city of St. Helena include minimum sidewalk widths of 4 feet and curb ramps that include grooving details or a rougher surface than the surrounding sidewalk, which help users detect the presence of the ramp and to provide a non-slip surface. City standards also include a detail for sidewalk obstruction transitions. Curb return standards show curb ramps to be located at the center of the curb return and the city does not have a detail for directional curb ramps.	• Seek funding opportunities for ADA deficiency areas identified as part of this plan. • Conduct ADA field surveys of additional priority corridors listed in this plan to add to a city-maintained GIS database. • Consider adopting a City Standard for directional curb ramps and implement the design where practical. • Review and revise standard drawings to align with PROWAG recommendations. • Consider adopting an ADA Transition Plan to track ADA improvements and create a plan for future priorities and enhancements.

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Identifying Crossing Barriers Crossing barriers such as railroads, freeways, and major arterials may discourage or even prevent pedestrian access. Additionally, crossing barriers are often associated with vehicle-pedestrian collisions. Identifying barriers and developing alternative methods of crossing or improving designated crossings, as well as preventing new barriers, is essential for improving walkability and pedestrian safety.	Opportunity	Crossing barriers in St. Helena include the highway, which coincides with Main Street, the Wine Train tracks, and several creeks. The city does not maintain an inventory of pedestrian crossing barriers, and many existing crossings do not have pedestrian facilities.	• Identify and create a comprehensive inventory of pedestrian barriers, along with appropriate remedies or projects.

Pedestrian-Oriented Traffic Warrants / Traffic Control Devices
Providing all-way stop or signal control at an intersection may improve pedestrian safety by reducing speeds and controlling pedestrian-vehicle conflicts. The MUTCD defines warrants for installing signals and stop signs.
 	
The 2014 California *Manual of Uniform Traffic Control Devices* (MUTCD) requires the installation of countdown pedestrian signals for all crosswalks at new or modified signals where the pedestrian interval is more than 7 seconds.
 	
Leading Pedestrian Intervals (LPIs) can reduce conflicts between turning vehicles and pedestrians by providing pedestrians with a "head start" signal timing before vehicles on the parallel street are allowed to proceed through an intersection.
	Opportunity	The City of St. Helena uses MUTCD warrants for signals and stop signs.
		
		All traffic signals are along Main Street/Highway 29 and are operated by Caltrans. No lead pedestrian intervals (LPIs) or pedestrian countdown timers are installed.
			• Coordinate with Caltrans to install pedestrian countdown timers at signals along Main Street and evaluate need for LPIs in areas of high pedestrian activity.
			• Consider using city-specific, pedestrian-friendly stop sign warrants for locations where pedestrian safety is a concern. Best practices for stop-sign warrant application include:
			  ○ Requiring a collision history of three instead of five years based on routine underreporting
			  ○ Reducing traffic volume thresholds based on latent demand
			  ○ Providing consideration for school children, pedestrians and traffic speeds
			• Expand the GIS-based inventory to include pedestrian-related markings and traffic signals with pedestrian facilities.

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Crosswalk Design Guidelines A formal policy for crosswalk installation, removal, and enhancement provides transparency in decision-making and creates a consistent application of treatments citywide.	Opportunity	The City of St. Helena does not have a formal crosswalk policy, and many uncontrolled crosswalks exist on Main Street and Pope Street.	• Consider adopting a crosswalk policy as part of this plan that reflects best practices and recent research to include criteria for appropriate locations to install crosswalk enhancements such as flashing beacons, advanced yield markings, or in-roadway pedestrian signs. • Include criteria in the crosswalk policy for identifying, installing, and enhancing crossings where strong desire lines exist, especially across Main Street. • Using the proposed crosswalk policy, conduct audits of the adequacy of current crosswalks.
Law Enforcement Enforcement of pedestrian right-of-way laws and speed limits is an important complement to engineering treatments and education programs.	Opportunity	Law enforcement is usually only involved in the planning and development process when a bar is under consideration. To date, law enforcement has not tracked pedestrian-involved collision trends to relate them to enforcement efforts. NVTA is interested in training CHP officers to implement pedestrian education outreach efforts to motorists countywide.	• Identify training opportunities for officers in St. Helena on pedestrian safety enforcement principles and education outreach efforts. • Consider designating traffic safety officers who conduct pedestrian related enforcement activities, such as monitoring school circulation activity. • Implement sustained pedestrian safety enforcement efforts and involve the media. Coordinate with NVTA on the media safety campaign that NVTA is pursuing, as an opportunity for education by distributing pedestrian safety pamphlets in-lieu of, or in addition to, citations. • Consider tracking pedestrian-involved collisions aligned with enforcement efforts to analyze trends.

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Traffic Calming Programs Traffic Calming Programs and policies set forth a systematic and consistent approach for addressing neighborhood requests and approvals, as well as standard treatments and criteria.	Opportunity	The City of St. Helena does not have a Traffic Calming Program; however, the General Plan does not allow four lane roads. The high school is concerned with cut-through traffic from Main Street. Although the highest vehicle volumes in the city are on Main Street, traffic is congested, providing a form of traffic calming on the corridor.	• Consider adopting a Traffic Calming program for pedestrian concerns that arise from residents in St. Helena. • Coordinate with the high school to evaluate traffic calming measures along the school frontage.
General Plan Planning principles contained in a city's General Plan can provide an important policy context for developing pedestrian-oriented, walkable areas. Transit-oriented development, higher densities, and mixed uses are important planning tools for pedestrian-oriented areas. A city's General Plan is also a key opportunity to establish the framework for pedestrian orientation. The Circulation Element of the Plan typically assigns roadway typologies, which can include a layered network approach with prioritized corridors for transit, pedestrian, bicycle, and auto travel.	Opportunity	Density in St. Helena is concentrated downtown, with very few high-density areas and no mixed use zones. Although mixed-use is proposed in the Central Business and Service Commercial Districts for the General Plan update, it is not yet adopted. Parking policies include a parking impact overlay district, located generally within the central business district, which allows lower off-street parking requirements for buildings built before February 1980. Any new property in this district can pay an in-lieu fee. Senior Housing is allowed reduced off-street parking requirements. The primary pedestrian node in St. Helena is Main Street. While the current General Plan does not focus on accommodating pedestrians, the pending update to the General Plan will.	• Establish transit and auto-vehicle policies in the General Plan that are pedestrian-friendly and support a balanced multi-modal transportation network. • Identify pedestrian nodes in future updates to the General Plan. • Develop roadway typologies in the next update to the General Plan to identify any prioritized corridors for pedestrians.

ST. HELENA PROGRAMS, POLICIES, AND PRACTICES BENCHMARKING ANALYSIS			
Plans, Policies, & Programs	**Benchmark**	**St. Helena Current Practice**	**Best Practice Examples**
Coordination with Emergency Response and Transit Providers Emergency response vehicles require special roadway design considerations that sometimes conflict with bicycle and pedestrian treatments. For example, while pedestrians benefit from reduced speeds of smaller curb radii, larger vehicles such as fire trucks and buses have more difficulty performing the turn within the smaller space. These conflicts require consensus building between the city and the respective departments.	Opportunity	There is little coordination between transit planning and pedestrian planning in St. Helena, and emergency responders are involved in the development review process but not specifically in pedestrian projects.	• Seek opportunities for technical collaboration and funding with first responders and transit providers for pedestrian improvements. • Consider pilot testing programs for transit and emergency response and a more active involvement in project review for small projects and not just development projects. • Explore ways to implement a Safe Routes to Transit Program that prioritizes bike and pedestrian access to transit connection points and transit centers.
Institutional Coordination Institutional issues for pedestrian planning/design may refer to adopted or informal impediments. This may be policies, practices, funding issues or even stakeholders that make it challenging to improve walking in St. Helena. Institutional coordination associated with multiple agencies is necessary because of non-local control of right-of-way and differing policies regarding pedestrian accommodation.	Opportunity	Caltrans has jurisdiction over Main Street in St. Helena, which is one of St. Helena's busiest pedestrian corridors and coincides with downtown. Several signals on Main Street do not include pedestrian countdown heads and several uncontrolled crosswalks exist across the corridor. Coordination with Caltrans is necessary due to the potential difference in policies regarding pedestrian accommodation, although recent policies within Caltrans now require the agency to consider multimodal needs.	• Proactively seek opportunities to collaborate with Caltrans to improve pedestrian safety along and across Main Street.

Appendix SH-B: Existing Pedestrian Policies

The City of St. Helena has adopted policies as part of its General Plan in support of walking. Most such policies appear in the Circulation Element of the General Plan. Additional supportive policies appear in the Land Use, Community Design, and the Parks and Recreation Elements. These policies typically express support for making walking safer, more convenient and more pleasant.

St. Helena General Plan

Land Use and Growth Management Element (2010 Draft)

- Policy 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. (Page 2-34)
- Policy 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. (Page 2-35)

Circulation Element (2010 Draft)

- Policy CR1.1 – Promote a connected street network within the City to provide better internal automobile bicycle and pedestrian connections for residents. Where new streets are constructed, ensure they connect to dead-end roads and other streets to create a flexible network for residents. (Page 5-29)
- Policy CR1.5 – Avoid mitigation measures that negatively impact the walking and bicycling environment and encourage driving, such as roadway and intersection widenings. (Page 5-29)
- Policy CR1.9 – Promote a walking and bicycling environment that is comfortable and convenient. Ensure that all St. Helena streets have no more than a single through-automobile lane in each direction, plus a single left-hand turning lane where appropriate, even if this requirement increases vehicle travel times. Allow exceptions if an extra lane would reduce the possibility of collisions. (Page 5-30)
- Action CR1.A – Use the street typologies as defined in the Circulation Element as a basis for improving and managing streets. Improve vehicle, pedestrian and bicycle facilities on streets based on this system. (Page 5-31)
- Action CR1.C – Identify streets that should become “more complete,” through consideration of transit priorities, sidewalk gap closures, new bikeways and vehicle traffic calming measures. (Page 5-31)
- Action CR1.J – Ensure that any new land use development provides a continuous path of travel for walking and bicycling from the development site to the center of downtown and other key destinations, as

determined by the City. Determine appropriate bicycle and pedestrian routes based on street typologies and the proposed bicycle and pedestrian network. If a path of travel is not continuous, require development to construct improvements and/or contribute to the transportation mitigation fee program. (Page 5-32)

- Policy CR2.1 – Create a comprehensive bicycle and pedestrian network that enhances neighborhood connectivity. Develop the system as shown in Figure 5.3 to expand and improve the pedestrian and bikeway system. (Page 5-34)
- Policy CR2.2 – Promote walking and bicycling as safe and convenient modes of transportation. (Page 5-34)
- Policy CR2.3 – Ensure secure, accessible and convenient bicycle parking facilities throughout St. Helena, including downtown, commercial areas, schools and parks. (Page 5-34)
- Policy CR2.6 – Encourage walking and bicycling trips to St. Helena schools. (Page 5-34)
- Action CR2.A – Develop and adopt a citywide bicycle and pedestrian master plan to improve bicycle and pedestrian safety, and to encourage community members to walk and bike more often. Build on St. Helena's existing partnership with the Napa Valley Transportation Authority (NVTA) to ensure that the City's master plan is consistent with countywide transportation planning efforts. (Also see the following elements: Open Space and Conservation, Topic Area 2; and Parks and Recreation, Topic Area 6) (Page 5-35)
- Action CR2.B – Develop guidelines for the design, construction and maintenance of bicycle and pedestrian paths in St. Helena. Coordinate the guidelines with Napa County or regional trail connections. (Page 5-35)
- Action CR2.C – Develop and adopt an ordinance that requires any new development and re-use projects to provide bicycle and pedestrian improvements and amenities. (Page 5-35)
- Action CR2.D – Identify and pursue funding opportunities for bicycle projects on the local, state and federal levels. Update the existing and proposed bicycle system every five years, as required by Caltrans to qualify for Bicycle Transportation Account funds. (Page 5-35)
- Action CR2.K – Consider the feasibility of a citywide bike sharing program for municipal and/or public use. (Page 5-36)
- Policy CR3.6 – Support development of the bikeway and pedestrian networks to provide a convenient opportunity for at least 20 percent of commuters to get to work by walking or bicycling. (Page 5-38)
- Action CR3.C – Regularly monitor progress toward increasing the number of residents and workers walking, biking and using public transit, in order to achieve the mode split targets outlined in Table 5.5. (Page 5-39)
- Policy CR4.5 – Improve traffic safety and encourage walking and bicycling trips to St. Helena schools through a Safe Routes to School program. (Page 5-40)
- Policy CR6.1 – Prioritize and implement improvements to the circulation system, including street extensions, bicycle and pedestrian improvements, and expanded transit service. (Page 5-44)

- Policy 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. (Page 5-44)
- Action CR6.A – Prioritize and construct all new streets, paths and trails (identified in Section E: St. Helena's Circulation and Mobility Future) when adequate funding is secured and concurrent with any new, adjacent developments. (Page 5-45)
- Action CR6.B – Update the existing St. Helena Traffic Mitigation Fee program to provide funding for all new streets and trails included in the Circulation Element, in order to ensure new streets and trails are constructed in a timely manner. (Page 5-45)

Community Design Element (2010 Draft)

- Action CD2.C – Install attractive and well-designed community amenities such as public restrooms, drinking fountains, benches, bicycle racks and trash and recycling containers in commercial districts. Ensure that community amenities are designed and installed to complement surrounding businesses and support the pedestrian-orientation of the street. (Page 7-19)
- Policy CD3.4 – Ensure safe bicycle and pedestrian-friendly character on all residential streets. Consider retrofitting existing wide residential streets, such as Starr Avenue, with landscaped medians, wide sidewalks and adjacent Class I pedestrian and bicycle trails. (Page 7-22)
- Action CD3.F – Establish residential street guidelines that ensure a safe environment for families and children. Encourage traffic calming, street trees, wide sidewalks, and Class I or II bike lanes. (Page 7-24)
- Policy CD4.4 – Integrate bicycle and pedestrian trails adjacent to open spaces to enhance connectivity throughout the City and the region. (Also see the Parks and Recreation Element, Topic Area 6) (Page 7-26)
- Policy CD6.1 – Ensure a connected street system that maximizes pedestrian and bicycle connectivity. (Page 7-29)
- Policy CD6.2 – Promote the inclusion of bicycle and pedestrian trails and bicycle lanes throughout the City, as well as connections to regional trail systems, such as the Napa Valley Vine Trail. (Also see the Parks and Recreation and Circulation elements for additional policies and implementing actions relating to bicycle and pedestrian trails and amenities.) (Page 7-29)
- Policy CD6.3 – Require streetscape design that maximizes bicycle and pedestrian usage by providing safe and well-lit streets. (Page 7-29)
- Action CD6.A – Use the City's grid street pattern as the template for any future developing areas. Ensure that new streets logically extend existing street and infrastructure; facilitate the safe and efficient flow of pedestrian, bicycle and vehicular traffic; enhance and frame views of the hills and surrounding agricultural lands; and incorporate appropriate traffic calming features to support and complement the neighborhood environment. (Page 7-30)

Parks and Recreation Element (2010 Draft)

- Action 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. (Page 12-15)
- Action PR4.C – Identify locations to accommodate active recreational uses to meet citywide needs. Potential locations include: (Page 12-21)
    - Bicycle and pedestrian trails, interpretive areas, trail heads, and comfort stations along York and Sulphur creeks and the Napa River; and
    - A community park at the City-owned Lower Reservoir area.
- Policy PR6.1 – Promote walking and bicycling as safe and convenient modes of transportation. (Page 12-26)
- Policy PR6.2 – Develop a comprehensive network of bicycle and pedestrian trails to enhance bicycle and pedestrian connectivity throughout the City and the region. (Also see the Community Design Element, Topic Area 4) (Page 12-26)
- Policy PR6.3 – Promote the inclusion of bicycle and pedestrian trails, and bicycle lanes throughout the City, as well as connections to regional trail systems, such as the Napa Valley Vine Trail. (Page 12-26)
- Action PR6.A – Develop and adopt a citywide bicycle and pedestrian master plan to improve bicycle and pedestrian safety, and to encourage community members to walk and bike more often. Build on St. Helena's existing partnership with the Napa Valley Transportation Authority (NVTA) to ensure that the City's master plan is consistent with countywide transportation planning efforts. (Also see the following elements: Circulation, Topic Area 2; Open Space and Conservation, Topic Area 2) (Page 12-27)
- Action PR6.B – Develop guidelines for the design, construction and maintenance of bicycle and pedestrian trails in St. Helena. Include guidelines for installing context-sensitive and solar lighting, and mitigating noise impacts from the trails. Include guidelines for wayfinding and interpretive exhibits that use signs, art and other visual clues to enhance users' experiences. Highlight the rich history of the City and provide education and information for users. Coordinate the guidelines with Napa County or regional trail connections. (Page 12-27)
- Action PR6.C – Develop and adopt an ordinance that requires new development and redevelopment projects to provide bicycle and pedestrian improvements and amenities. (Page 12-27)
- Action PR6.E – Coordinate with countywide efforts to establish regional trail systems through the City limits. (Page 12-28)

St. Helena Bicycle Plan

In addition to the Policies listed in the County Bicycle Plan, the St. Helena Bicycle Plan includes the following City-specific policies:

Countywide Bicycle Network Policies

- SH-1.a: Develop and adopt a citywide bicycle and pedestrian master plan to improve bicycle and pedestrian safety, and to encourage community members to walk and bike more often. Build on St. Helena's existing partnership with the Napa Valley Transportation Authority (NVTA) to ensure that the City's master plan is consistent with countywide transportation planning efforts. **(CR2.A)** (page 15)
- SH-1.b: Create a comprehensive bicycle and pedestrian network that enhances neighborhood connectivity. Develop the system consistent with the network identified in the City's General Plan Circulation Element to expand and improve the pedestrian and bikeway system. **(CR2.1)** (page 15)
- SH-1.c: Increase the City's share of walking, bicycling, transit and carpooling trips, in accordance with NVTA 2035 goals. As a major part of this effort, the City will continue to develop and maintain a safe and integrated bicycle and pedestrian system throughout St. Helena for people of all ages and abilities. (page 15)
- SH-1.d: Provide a complete bicycle and pedestrian network between residential areas, downtown and other major activity centers identified by the City. (page 15)
- SH-1.e: Reduce transportation-based GHG emissions from City-controlled sources by employing the following strategies: Complete the City's bicycle and pedestrian network, which will increase transportation choices in the City and reduce the demand for vehicle travel. **(CR1.8)** (page 15)
- SH-1.f: Work with Caltrans to ensure regional coordination and manage congestion on SR 29. **(CR 1.L)** (page 15)
- SH-1.g: Ensure convenient public access between developed areas and stream corridors by providing access at frequent intervals. **(OS2.4)** (page 15)

Design Policies

- SH-2.a Provide complete streets that balance the diverse needs of users of the public right-of-way, in accordance with the California Complete Streets Act of 2008. **(CR1.2)** (page 16)
- SH-2.b: Develop guidelines for the design, construction and maintenance of bicycle and pedestrian paths in St. Helena. Coordinate the guidelines with Napa County or regional trail connections. **(CR2.B)** (page 16)

Multimodal Integration Policies

- SH-3.a Continue to support NVTA in the provision of convenient transit, including regional and local service. Support more frequent and reliable transit service between communities to reduce the number of people traveling to or from St. Helena to work by private vehicle. Promote and encourage use of the St. Helena Vine Shuttle. **(CR1.6)** (page 17)

Safety and Security Policies

- SH-5.a: Ensure adequate maintenance of transportation facilities such as streets and multi-use paths, Emphasize safety considerations, impacts on non-automobile modes of travel and overall impact on long-term resource needs as maintenance priorities,. **(CR4.1)** (page 18)
- SH-5.b: Ensure safety on residential neighborhood streets to promote walking and bicycling and preserve neighborhood livability. **(CR4.2)** (page 19)
- SH-5.c: Continue efforts to calm traffic, and minimize traffic volumes and speeds in residential areas. **(CR4.3)** (page 19)
- SH-5.d: Improve traffic safety and encourage walking and bicycling trips to St. Helena schools through a Safe Routes to School program. **(CR4.5)** (page 19)

Land Use Policies

- SH-6.a: Develop and adopt an ordinance that requires any new development and re-use projects to provide bicycle and pedestrian improvements and amenities. **(CR2.C)** (page 19)
- SH-6.b: Obtain easements or title to land along Sulphur Creek, York Creek, and the Napa River. **(PR6.D)** (page 19)
- SH-6.c: Preserve open space for recreational uses, including a bicycle and pedestrian trail system along creek corridors when compatible with riparian vegetation and wildlife habitat. Where possible, integrate stream corridors with trails and other recreational open space, provided that the vegetation, habitat value and water quality is not significantly impacted. **(OS2.3)** (page 19)

Education and Promotion Policies

- SH-7.a: Promote walking and bicycling as safe and convenient modes of transportation. **(CR2.2)** (page 20)
- SH-7.b: Encourage walking and bicycling trips to St. Helena schools. **(CR2.6)** (page 20)
- SH-7.c Provide incentives and encourage existing major employers to develop and implement transportation demand management (TDM) programs to increase the number of people who bike and walk to work and reduce peak-period trip generation. **(CR3.1)** (page 20)
- SH-7.d Work with the wine and hospitality industries to manage congestion and create and promote car-free tourism services. **(CR3.4)** (page 20)

Planning Policies

- SH-8.a Use performance measures that consider all road users to determine transportation impacts of new development. **(CR1.4)** (page 21)
- SH-8.b Avoid mitigation measures that negatively impact the walking and bicycling environment and encourage driving, such as roadway and intersection widenings. **(CR1.5)** (page 21)

- SH-8.c Establish a multimodal transportation impact fee program to finance and implement project mitigations that help achieve GHG reduction goals. As part of the impact fee program, require new development to manage citywide travel demand and finance and construct all off-site circulation improvements necessary to reduce the severity of cumulative transportation impacts to all modes of travel. **(CR1.11)** (page 21)
- SH-8.d Identify streets that should become "more complete," through consideration of transit priorities, sidewalk gap closures, new bikeways and vehicle traffic calming measures. **(CR1.C)** (page 21)
- SH-8.e Ensure that any new land use development provides a continuous path of travel for walking and bicycling from the development site to the center of downtown and other key destinations, as determined by the City. Determine appropriate bicycle and pedestrian routes based on street typologies and the proposed bicycle and pedestrian network. If a path of travel is not continuous, require development to construct improvements and/or contribute to the transportation mitigation fee program. **(CR1.J)** (page 21)
- SH-8.f Regularly monitor progress toward increasing the number of residents and workers walking, biking and using public transit, in order to achieve the mode split targets outlined in the General Plan. **(CR3.C)** (page 21)
- SH-8.g Prioritize and implement improvements to the circulation system, including street extensions, bicycle and pedestrian improvements, and expanded transit service. **(CR6.1)** (page 21)
- SH-8.i Require concurrent infrastructure development for any new development projects that have impacts on the circulation system, including streets, paths, trails, sidewalks and public transit. **(CR6.2)** (page 22)

Maintenance Policies

- SH-9.a Develop a maintenance and operations plan for the City's trail network. Provide a high level of service to users by preventing deterioration, encroachment of vegetation, vandalism and crime. Consider including an Adopt-a-Trail program, and invite local businesses to participate in trail maintenance. Include a funding program to support the plan. **(PR6.F)** (page 22)

Funding Policies

- SH-10.a Pursue appropriate funding for the development of a balanced transportation system. **(CR1.3)** (page 22)
- SH-10.b Fund transportation improvements through a citywide, multimodal transportation mitigation fee program. The mitigation fee program will emphasize transportation improvements that reduce citywide automobile trips, including completing the bicycle and pedestrian network, implementing transportation demand and systems management strategies, and improving traffic signal coordination on SR 29. Ensure that fees are proportional to a development's contribution to changes in net new automobile trips and change in travel time along SR 29. **(CR1.K)** (page 23)
- SH-10.d Pursue state and federal grant opportunities to fund a Safe Routes to School program. **(CR2.J)** (page 23)

Appendix SH-C: Detailed Project List and Prioritization

ST. HELENA PEDESTRIAN IMPROVEMENT LIST				
ID	**Roadway**	**Limits or Intersection**	**Recommendations**	**Infrastructure Category**
TIER ZERO (FUNDED OR CONSTRUCTED PROJECTS)				
T0-1 Additions to Planned Projects	Main Street	Main Street at Grayson Avenue (Intersection)	• Marked crosswalks on all legs, advanced limit lines, and curb extensions with directional ramps on northwest and southwest corners as part of signal design	Crossing treatments ADA ramps
T0-2 Mitchell Drive Sidewalk	Mitchell Drive	Oak Avenue to St. James Court	• Sidewalk on the north side of the street	Sidewalk
TIER ONE				
SH-1 RLS Middle School Sidewalk and Hunt Avenue Improvements	Hillview Place, Spring Mountain Road, and Elmhurst Avenue	Robert Louis Stevenson Middle School	• Sidewalk segments adjacent to RLS Middle School per ATP application	Sidewalk
	Hunt Avenue	Monte Vista Avenue to June Lane	• Sidewalk gap closure	Sidewalks
		Hunt Avenue at Edwards Street and Hunt Avenue at June Lane	• Curb ramp upgrades	ADA Ramps
		Between Grove Court and June Lane	• Bicycle and pedestrian connection from Hunt Avenue to northern terminus of Adams Street • Enhanced midblock crosswalk on Hunt Avenue with curb extensions, high visibility striping and signage	Crossing treatments Pathway
SH-2 Downtown Pedestrian Improvements (No. 35 2015 CTP	Main Street	Spring Street to Adams Street	• Sidewalk upgrades, pedestrian lighting, pedestrian furniture and landscaping	Maintenance Sidewalks Place making
		Spring Street to Adams Street	• Traffic calming (such as bulb outs)	Traffic calming

ST. HELENA PEDESTRIAN IMPROVEMENT LIST				
ID	**Roadway**	**Limits or Intersection**	**Recommendations**	**Infrastructure Category**
Constrained Project)		**Recommended additions to CTP project**		
		Main Street at Pine Street (Intersection)	• Curb extensions on all four corners with directional curb ramps • High visibility crosswalk on south leg with advanced signage	Crossing treatments ADA ramps
			• Tree trimming on southwest corner	Maintenance
		Main Street at Adams Street (Intersection)	• Curb extensions on all four corners with directional ramps	Crossing treatments ADA ramps
			• Tree trimming on southwest corner	Maintenance
		Main Street at Hunt Avenue (Intersection)	• Marked crosswalk relocation from north leg to south leg • 6' median refuge • Curb extensions at crosswalk with directional curb ramps	Crossing treatments ADA ramps
			• Pedestrian wayfinding for Telegraph Alley	Wayfinding
		Main Street at Spring Street (Intersection)	• Relocate marked crosswalk from south leg to north leg • 6' median refuge • Curb extensions at marked crosswalk with directional curb ramps	Crossing treatments ADA ramps
		Entire corridor	• Raised median with restriped travel lanes to accommodate Class II bike lanes and maintain parking	Traffic calming
			• Study to consider beautification / improvements to downtown alley ways and pedestrian paseos	Wayfinding Place making
SH-3 Sulphur Creek Class I Multi-Use Pathway (No. 36 2015 CTP Project)	Sulphur Creek	Sulphur Springs Avenue to Napa River	• Class I Multi-Use Path	Pathway

ST. HELENA PEDESTRIAN IMPROVEMENT LIST				
ID	**Roadway**	**Limits or Intersection**	**Recommendations**	**Infrastructure Category**
SH-4 Napa River Class I Multi-Use Pathway (No. 37 2015 CTP Project)	Napa River	South City Limit to North City Limit	• Class I Multi-Use Path (River Trail)	Pathway
SH-5 SHUSD Main Street Frontage Sidewalk	Main Street	Grayson Avenue to Dowdell Lane	• Sidewalk on west side of street	Sidewalk
SH-6 Downtown Operations Study	Main Street	Pine Street to Mitchell Drive	• Study considerations: synchronizing signals, peak recall ped phase, countdown signal heads, protected left turns/lead pedestrian intervals/pedestrian scrambles, slower walking speeds	Signal timing/operations
		Main Street at Pope Street (Intersection)	• Feasibility study of roundabout or eliminating NB left turn at Mitchell Drive and redirecting traffic to Spring Street	Signal timing/operations
SH-9 Main Street ADA Improvements	Main Street	Spring Street to Pope Street	• ADA driveways	ADA
		Dowdell Lane to El Bonita Avenue	• ADA Decomposed Granite pathway along vineyard frontage on west side of street	Pathway
		Main Street at El Bonita Avenue (Intersection)	• Sidewalk repair at northwest corner	Maintenance
		St Helena Chamber of Commerce	• Detectable warning strip at back edge of sidewalk	ADA
TIER TWO				
SH-7 Main Street Business Frontage Improvements	Main Street	Main Street at Pope Street (Intersection)	• Kiosks, mini shops or pocket park along edge of Sunshine Foods parking lot	Place making
		Gott's	• Parking lot driveway closure south of bridge with sidewalk widening or landscaping	Sidewalk
			• Pedestrian and vehicle wayfinding to Gott's • Landscaping plan for property	Wayfinding Place making

ST. HELENA PEDESTRIAN IMPROVEMENT LIST				
ID	**Roadway**	**Limits or Intersection**	**Recommendations**	**Infrastructure Category**
SH-8 Main Street SRTS Improvements	Main Street	Main Street at Charter Oak Avenue	• Marked crosswalk relocation from north to south leg • 6' refuge island • Rectangular Rapid Flashing Beacons in median and sidewalk • Curb extension or reduced radius on southeast corner	Crossing improvements ADA ramps
			• Curb extension with directional ramp on south side of Charter Oak Avenue east of train tracks • Marked crosswalk with advanced stop bar	
		Main Street at Vidovich Lane (Intersection)	• Marked crosswalk relocation from on west leg to align with sidewalk along Main Street • Advanced stop bar • Reduced radius on northwest corner with directional ramps	
SH-10 Main Street / Dowdell Transit Access Improvements	Main Street	Main Street at Dowdell Lane (Intersection)	• Ramp removal and sidewalk widening at existing bus stop • Bus stop relocation to Grayson Avenue at future signal	ADA Sidewalks Crossing improvements
SH-11 South St Helena / Unincorporated Connection		El Bonita Avenue to Inglewood Avenue	• Sidewalk on west side of street or enhanced crosswalk on south leg of intersection at El Bonita Avenue to be coordinated with Vine Trail	Sidewalks Crossing improvements
SH-12 Sulphur Creek Crossing	Sulphur Creek	Southern terminus of Oak Avenue to Grayson Avenue	• Study to develop feasibility of pedestrian crossing	Crossing improvements
Note: Tier One improvements are intended to be implemented within 5 years, Tier Two within 7-15 years, or opportunistically.				

Based on feedback from NVTA TAC, improvements were evaluated based on the criteria below using a binary approach for ranking. Each improvement was ranked first based on the number of criteria it met, and second according to whether or not it had local support. Results are shown in the final table below.

PRIORITIZATION CRITERIA	
Criterion	**Data Set / Metric**
Local support	• CTP Project • Critical location identified by staff / public
Safety	• Collision "Hot Spot" Location • Highway Interchange Location • Traffic Calming
Transit	• Within ½ mile of a transit stop • Within a ¼ mile of a transit stop
Connection	• Sidewalk gap closure • Trail connection
Schools	• Within ½ mile of a school • Within ¼ mile of a school
Cost	• Low Cost Level (Signing and Striping)

EVALUATION RESULTS									
Project	Local support	Safety	Transit		Connection	Schools		Low Cost	Number of Criteria Met
			Half Mile	Quarter Mile		Half Mile	Quarter Mile		
TIER ONE									
SH-9	✓	✓	✓	✓	✓	✓	✓		7
SH-1	✓[1]	✓	✓	✓	✓	✓	✓		7
SH-2	✓	✓	✓	✓		✓	✓		6
SH-3	✓		✓	✓	✓	✓	✓		6
SH-4	✓		✓	✓	✓	✓	✓		6
SH-5	✓		✓	✓	✓	✓	✓		6
SH-6	✓	✓	✓	✓		✓	✓		6
TIER TWO									
SH-10	✓		✓	✓		✓	✓		5
SH-11	✓		✓	✓	✓	✓			5
SH-7		✓	✓	✓		✓	✓		5
SH-8		✓	✓	✓		✓	✓		5

1. The RLS Middle School Sidewalk and Hunt Avenue Improvements were identified as a result of meetings with residents (separate from this Plan) and was supported by the City's ATC and City Council.

Appendix SH-D: Cost Estimates

ST HELENA TIER ONE PROJECT COST ESTIMATES			
Project ID	**Project Name**	**Project Elements**	**Cost1**
SH-1	RLS Middle School Sidewalk and Hunt Avenue Improvements	New sidewalk, midblock crosswalk, curb ramp upgrades and Class I multi-use pathway connection	$399,000[2]
			Total: $399,000
SH-2	Downtown Pedestrian Improvements (No. 35 2015 CTP Project)	CTP cost (sidewalk upgrades, pedestrian lighting, pedestrian furniture, landscaping and traffic calming Spring to Adams St)	$700,000[3]
		Recommended Additions to CTP project	
		4 curb extensions at Main/Pine (with directional curb ramps)	$223,400[4]
		High visibility crosswalk at Main/Pine	$6,200
		Advanced crosswalk signage at Main/Pine	$5,400
		Raised median	$379,500[5]
		Removal of TWLTL striping	$41,400
			Total: $1,355,900
SH-5	SHUSD Main Street Frontage Sidewalk	Sidewalk	$184,300[4]
			Total: $184,300
SH-6	Downtown Operations Study	Signal operations study	$10,000
		Feasibility study for roundabout	$40,000[6]
		Intersection signal timing study	$3,000

[1] Cost includes contingencies for traffic control (5%), construction management (10%), mobilization (5%), contingency (20%), design (15%) and environmental (10%).
[2] Source: Total Project Cost Estimate, St. Helena New Sidewalk Construction Project, ATP Cycle 2 Application Form, 2015
[3] Source: Napa Countywide Transportation Plan, 2015
[4] Cost includes contingencies for drainage and utility contingency (40%)
[5] Cost assumes median width of 3 feet, and includes utility contingency (10%)
[6] Includes conceptual geometric layout and operations for 5+ legs

ST HELENA TIER ONE PROJECT COST ESTIMATES			
Project ID	**Project Name**	**Project Elements**	**Cost1**
			Total: $53,000
SH-9	Main Street ADA Improvements	Replace driveways	$66,000
		DG path (west side of street, Dowdell Lane to El Bonita Ave)	$39,600
		Sidewalk replacement (northwest corner of Main/El Bonita)	$20,100[4]
		Detectable warning strip (back edge of sidewalk in front of Chamber of Commerce)	$12,000[7]
			Total: $137,700

[4] Cost includes contingencies for drainage and utility contingency (40%)
[7] Source: Caltrans Contract Cost Database, http://sv08data.dot.ca.gov/contractcost/

Appendix SH-E: Plan Adoption Resolution

Plan Adoption Resolution will be inserted after this cover sheet

Napa Valley Transportation Authority

Napa Countywide Pedestrian Plan

Final Initial Study – Mitigated Negative Declaration

rincon

July 2016

Environmental Scientists Planners Engineers

Napa Countywide Pedestrian Plan

Final
Initial Study – Mitigated Negative Declaration

Prepared by:

Napa Valley Transportation Authority
625 Burnell Street
Napa, California 94559
Contact: Danielle Schmitz, Planning Manager
707-259-5968

Prepared with the assistance of:

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July 2016

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Appendix A Response to Comments
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INITIAL STUDY

1. **Project Title:** Napa Countywide Pedestrian Plan

2. **Lead Agency Name and Address:**

   Napa Valley Transportation Authority
   625 Burnell Street
   Napa, California 94559

3. **Contact Person and Phone Number:** Danielle Schmitz, Planning Manager, 707-259-5968

4. **Project Location:** Countywide, Napa County (see Figure 1)

5. **Project Sponsor's Name and Address:** Same as Lead Agency

6. **General Plan Designation:** N/A, Countywide

7. **Zoning:** N/A, Countywide

8. **Description of Project:**

   The proposed Napa Countywide Pedestrian Plan (NCPP or "Plan") is intended to provide a pedestrian network that is well connected, safe, and enjoyable for Napa County residents and visitors of all levels of mobility. This Plan aims to increase the number of pedestrian trips countywide and to set the groundwork for a shift in travel mode choice such that non-motorized options are widely available, accessible, and convenient. Through implementation of this Plan and future updates, all Napa County residents, regardless of age or income level, should have easy walking access to their community and the services and amenities that it offers.

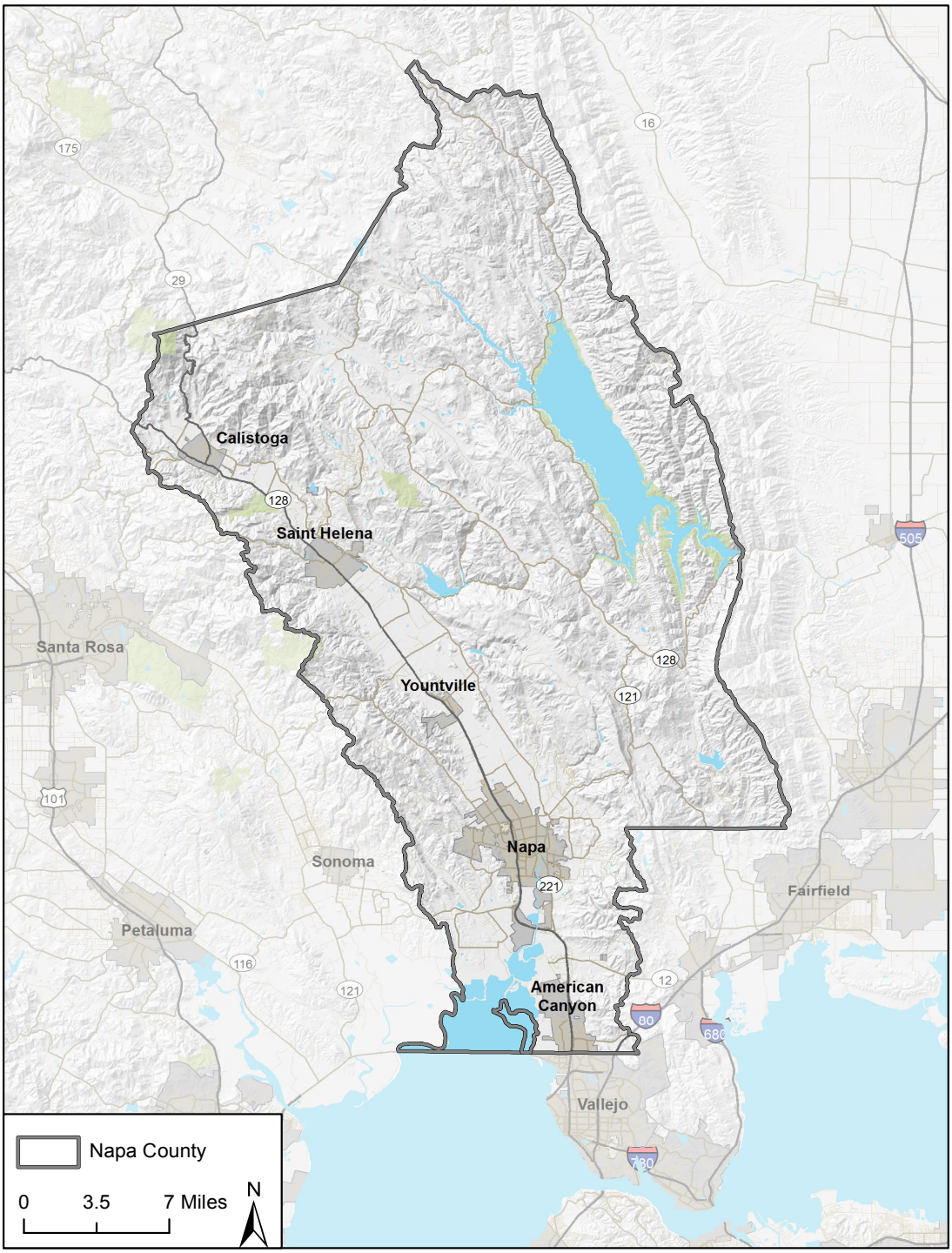
   The Plan has policies, programs, and development standards to make walking in Napa County safe, comfortable, convenient and enjoyable for all pedestrians. It strives to improve accessibility for the disabled but does not intend to replace existing ADA Transition Plans. The following are the goals of the Plan:

   Goal 1: Provide a connected network of pedestrian sidewalks, trails, and pathways in the County and its jurisdictions that are safe and accessible to a variety of users and that foster community interactions

   Goal 2: Encourage a multimodal transportation system

   Goal 3: Obtain funding for pedestrian projects

   Goal 4: Encourage and educate residents about walking and enforce safe interactions between pedestrians and motorists.



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Regional Location Figure 1

In combination with the Napa Countywide Bicycle Plan adopted by the lead agency in 2012, the NCPP would comprise a complete active transportation plan for Napa County.

The NCPP also assembles a priority project list and an implementation plan for these projects. The priority project list was compiled based on results of the walking audits conducted for the Plan; projects recommended through related planning efforts, such as the Countywide Transportation Plan; and conversations with staff and stakeholders and through stakeholder meetings regarding other local priorities.

Table 1 lists the individual priority projects, sorted by jurisdiction, as presented in Section 8 (Description of Project) of the NCPP. The geographic extent of these projects is restricted to western Napa County, and is generally oriented between the City of Calistoga in the north and the City of American Canyon in the south. Proposed projects are located in individual jurisdictions including: 1) Calistoga; 2) St. Helena; 3) Yountville; 4) Napa; and 5) American Canyon, as well as some unincorporated areas of the County along State Route 29. Figures 2a through 2g show the location of each project by jurisdiction. The NCPP addresses various types of proposed projects including sidewalks, crosswalk enhancements, roadway widening for multi-modal facilities, roadway extensions, multi-use trails, pedestrian safety improvements, bridges, and overpasses.

Table 1
Proposed Pedestrian Improvement Projects

Project ID	Project Name	Location	Description
City of Calistoga Pedestrian Improvements			
City Program	Sidewalk Gap Closure and Maintenance	City-wide	Sidewalk maintenance, rehabilitation and expansion
T0-1[1]	Berry Street Bridge Replacement	Berry Street at Washington Street	Intersection alignment and crosswalk enhancements
C-1	Pedestrian Safety Improvements SR 29 & Cedar Street	SR 29 (Lincoln Avenue) at Cedar Street	Crosswalk enhancements
C-2	Pedestrian Safety Improvements SR 29 & Brannan Street	SR 29 (Lincoln Avenue) at Brannan Street	Feasibility study for roundabout or flashing beacons and curb ramp location modifications
C-3	Washington Street Complete Streets	Washington Street: Lincoln Avenue to N. Oak Street, at Gerard Street and at Lincoln Avenue	Complete Streets enhancements, crosswalk enhancements and signal modifications
C-4	PSA Recommendations South of Downtown	Foothill Boulevard: Pine Street to Elm Street, Lincoln Avenue at Foothill Boulevard, and Lincoln Avenue at Myrtle Street	Sidewalks , roundabout feasibility study, crosswalk enhancements, and trail improvements
C-5	PSA Recommendations within Downtown Core	Lincoln Avenue: Fair Way to Cedar Street	Mid-block crosswalk enhancements and greenery or art for pedestrian paseo
C-6	PSA Recommendations at Fair Way	Lincoln Avenue at Fair Way	Signal modifications, crosswalk enhancements, and vehicle circulation modifications
C-7	PSA Recommendations North of Downtown	Lincoln Avenue at Wappo Avenue	Crosswalk enhancements

Table 1
Proposed Pedestrian Improvement Projects

Project ID	Project Name	Location	Description
C-8	PSA Recommendations South of Downtown	Berry Street at Cedar Street	Crosswalk enhancements
C-9	Lake Street Traffic Calming	Lake Street, Washington Street to Lake County Highway	Traffic calming study
C-10	Lake Street Sidewalk Gap Closure	Lake Street: Washington Street to Lake County Highway	Sidewalks
C-11	Grant Street Safe Routes To School Improvements	Grant Street: Lake Street to Stevenson Street, Grant Street at Arch Way, and Grant Street at Stevenson Street	Traffic calming and safety enhancements, crosswalk enhancements, and intersection alignment
C-12	Grant Street and Wappo Avenue Pathway	Grant Street and Wappo Avenue; East of Stevenson Street	Pathway feasibility study
C-13	Stevenson Street Safe Routes to School Improvements	SR 29 (Lincoln Avenue) at Stevenson Street	Intersection alignment, crosswalk enhancements, and traffic calming improvements
City of St. Helena Pedestrian Improvements			
City Program	Sidewalk Gap Closure and Maintenance	Citywide	Sidewalk maintenance, rehabilitation and expansion to include 29 miles of Citywide sidewalk gap closure
T0-1	Additions to Planned Projects	Main Street at Grayson Avenue	Marked crosswalks on all legs with crosswalk enhancements and directional curb ramps for west leg crosswalk
T0-2	Mitchell Drive Sidewalk	Mitchell Drive, Oak Avenue to St. James Court	Sidewalk on the north side of the street
SH-1	RLS Middle School Sidewalk and Hunt Avenue Improvements	Hillview Place, Spring Mountain Road, Elmhurst Avenue at RLS Middle School; Hunt Avenue, Monte Vista Avenue to June Lane; Hunt Avenue at Edwards Street, Hunt Avenue at June Lane; Hunt Avenue, Grove Court to June Lane	Sidewalks, curb ramp upgrades, and Class I pathway and enhanced mid-block crosswalk
SH-2	Downtown Pedestrian Improvements	Main Street, Spring Street to Adams Street; and Main Street at Pine Street, Adams Street, Hunt Avenue, and Spring Street.	Raised median for entire Main Street Corridor, sidewalk upgrades and streetscape improvements, traffic calming (such as bulb outs), crosswalk enhancements and tree trimming, enhanced marked crosswalk, pedestrian wayfinding, and recommended study for beautification/ improvements to alley ways and pedestrian paseos

Table 1
Proposed Pedestrian Improvement Projects

Project ID	Project Name	Location	Description
SH-3	Sulphur Creek Class I Multi-Use Pathway	Sulphur Springs Avenue to Napa River	Class I Multi-Use Path
SH-4	Napa River Class I Multi-Use Pathway	Napa River from south city Limit to north city Limit	Class I Multi-Use Path
SH-5	SHUSD Main Street Frontage Sidewalk	Main Street, Grayson Street to Dowdell Lane	Sidewalk
SH-6	Downtown Operations Study	Main Street, Pine Street to Mitchell Drive; Main Street at Pope Street	Signal coordination study and assessment of pedestrian signal timing improvements, and roundabout feasibility study to include analysis of circulation modifications as alternative
SH-7	Main Street Business Frontage Improvements	Main Street at Pope Street, Main Street at Gott's	Sidewalk activation considerations, driveway closure, wayfinding, and landscape improvements
SH-8	Main Street SRTS Improvements	Main Street at Charter Oak Avenue, Main Street at Vidovich Lane	Enhanced marked crosswalk with flashing beacons, crosswalk enhancements, and enhanced marked crosswalk
SH-9	Main Street ADA Improvements	Main Street, Spring Street to Pop Street; Main Street, Dowdell Lane to El Bonita Avenue; Main Street at El Bonita Avenue, and; Main Street at St Helena Chamber of Commerce	ADA driveways, DG[2] pathway, sidewalk repair, and detectable warning strip along sidewalk
SH-10	Main Street/ Dowdell Transit Access Improvements	Main Street at Dowdell Lane	Bus stop relocation
SH-11	South St Helena/ Unincorporated Connection	Main Street at El Bonita Avenue to Inglewood Avenue	Sidewalk or enhanced marked crosswalk for Vine Trail connection
SH-12	Sulphur Creek Crossing	Southern terminus of Oak Avenue to Grayson Avenue over Sulphur Creek	Feasibility study for pedestrian crossing
Town of Yountville Pedestrian Improvements			
T0-1	RH Gallery Funded Improvements	Washington Street at Pedroni Street	Sidewalk and crosswalk enhancements, bus stop relocation
T0-2	Washington/Webber Intersection Improvements	Washington Street at Webber Avenue	Sidewalk, crosswalk enhancements
T0-3	Finnell Road Improvements	Finnell Road: Vista Drive to Heritage Way, at Heritage Way	Sidewalk, marked crosswalk
T0-4	Yountville Park Improvements	Yountville Park	Accessibility upgrades
T0-5	Townwide Crosswalk Signage	Townwide	Change in crosswalk signage

Table 1
Proposed Pedestrian Improvement Projects

Project ID	Project Name	Location	Description
T0-6	Yountville Crossroads Complete Streets Project	Yountville Cross Road: Yount Street to Stags View Lane	Sidewalk and sharrow markings, wayfinding study
T0-7	Vine Trail Improvements	Washington Street at Madison Street, California Drive at SR 29 northbound ramps, and Washington Street at Webber Avenue	Wayfinding, marked crosswalk
Y-1	Washington Park ADA Improvements	Washington Park Subdivision: Yountville Cross Road to Forrester Lane	ADA
Y-2	Yountville Park Improvements	Washington Street at Lincoln Avenue	Near term: relocated stop sign control, striping, and marked crosswalk. Long term: feasibility study for curb extensions.
Y-3	Washington Intersection Improvements	Washington Street at Humboldt Street, Yount Street, Mulberry Street, and Oak Circle.	Striped bus platform for vehicle channelization, crosswalk enhancements, and study for future enhancements
Y-4	Business Frontage Improvements	Washington Street at Creek Street; Humboldt Street to Buchon Bakery; Hope and Grace Winery[3]; Vintage Estate Parking Access at Washington Street[3]	Enhanced marked crosswalk, study for future enhancements
Y-5	Finnell Road Intersection Improvements	Finnell Road at Yount Street, Yountville Town Hall, Vista Drive	Review for potential pedestrian crossing enhancements
Y-6	Madison Street Wayfinding	Madison Street: Washington Street to Yount Street	Wayfinding study
City of Napa Pedestrian Improvements			
City Program	Sidewalk Gap Closure and Maintenance	Citywide	Sidewalk maintenance, rehabilitation, and expansion
N-1	Imola Corridor Bicycle and Pedestrian Improvements	Imola Avenue from Foster Road to eastern city limits	Sidewalks and bicycle facilities
N-2	SR 29 Bike & Pedestrian Undercrossing	North bank of Napa Creek, under SR 29	Bicycle and pedestrian Undercrossing
N-3	First Street Roundabouts (West Side)	First Street at Freeway Drive and at SR 29 southbound ramps	Roundabouts
N-4	Browns Valley Road Complete Streets	Browns Valley Road from Westview Drive to McCormick Lane	Widening to provide sidewalks and bike lanes

Table 1
Proposed Pedestrian Improvement Projects

Project ID	Project Name	Location	Description
N-5	5-Way Intersection Modification	Silverado Trail at 3rd Street/ Coombsville Road/ East Avenue	Intersection alignment and crossing enhancements
N-6	Main Street Sidewalk Widening	Main Street from 1st to 3rd Street	Sidewalk widening, signal timing improvements for crossings
N-7	Linda Vista Bridge and Extension	Linda Vista Avenue from southern terminus of Linda Vista to Robinson Lane	New Bridge over Redwood Creek and extension
N-8	South Terrace Bridge and Extension	Terrace Drive from southern terminus of Terrace Drive to northern terminus of South Terrace Drive	New bridge over Cayetano Creek and extension
N-9	Solano Bridge and Extension	Solano Avenue from southern terminus of Solano Avenue to First Street	New bridge over Napa Creek and extension
N-10	Salvador Avenue Complete Streets	Salvador Avenue from SR 29 to Jefferson Street	Widening to provide sidewalks and bike lanes
N-11	Pueblo Avenue Overpass	Pueblo Avenue from West Pueblo Avenue to Pueblo Avenue	Pueblo Avenue overpass
N-12	Overpass at Trower Avenue	Trower Avenue at SR 29	Grade separation improvements
N-13	Salvador Creek Class I Trail	Adjacent to Salvador Creek, Maher Street to Big Ranch Road	Class I multi-use path
N-14	Oxbow Preserve Pedestrian Bridge	Napa River, River Trail to Oxbow Preserve	Pedestrian bridge
N-15	Oxbow District Pedestrian Bridge	Napa River, River Trail to Third Street	Pedestrian bridge
N-16	Laurel Street Sidewalk	Laurel Street from Laurel Manor to Laurel Park	Sidewalks
N-17	Sierra Avenue Sidewalks	Sierra Avenue from SR 29 to Jefferson Street	Sidewalks
N-18	Foster Road Sidewalk	Foster Road adjacent to Snow Elementary School	Sidewalks
N-19	Terrace Drive Sidewalks	Terrace Drive	Sidewalks
N-20	First and Second Street Roundabouts	California Boulevard at First Street and at Second Street; First Street at SR 29 NB on/off ramps	Roundabouts
N-21	Shetler Avenue Sidewalks	Shetler Avenue, corridor wide	Sidewalk gap closure

Table 1
Proposed Pedestrian Improvement Projects

Project ID	Project Name	Location	Description
N-22	Second Street Bulbouts	Second Street at Franklin Street and at School Street	Curb extensions
N-23	Railroad Crossing Upgrades	Citywide	Concrete panels with flangeway fillers
N-24[4]	Redwood Road Corridor Improvements	Redwood Road from Linda Vista Avenue to Solano Avenue	Road diet feasibility assessment, sidewalk or walkway
N-25[4]	Redwood Road Intersection Improvements	Redwood Road: at Linda Vista Avenue, Dover Street, Carol Drive, and Solano Avenue	Crosswalk enhancements, signal timing
N-26[4]	Redwood Road Transit Improvements	Redwood Center Shopping	Bus shelter
N-27[4]	Jefferson Street Intersection Improvements	Jefferson Street: at B Street; Calistoga Avenue; Clay Street; 1st Street: 2nd Street: 3rd Street; Oak Street; Laurel Street; Fuller Way; Pine Street; Elm Street; Old Sonoma Road	Crosswalk enhancements, sidewalk, signal timing,
N-28[4]	Jefferson Street Corridor Improvements	Jefferson Street: B Street to Old Sonoma Road, and Elm Street to Ash Street	Pedestrian-scale lighting and sidewalk
City of American Canyon Pedestrian Improvements			
AC-1	Eucalyptus Drive/Theresa Avenue Intersection, Complete Streets	Eucalyptus Drive at Theresa Avenue	Roundabout
AC-2	SR 29 Traffic Calming and James Road Sidewalks	James Road: Donaldson Way to American Canyon Road	Sidewalks
AC-3	Donaldson Way Improvements	Donaldson Way: SR 29 to James Road, James Road to Andrew Road, at Andrew Road, Carolyn Drive to Andrew Road	Tree trimming, marked crosswalks, sidewalks
AC-4	Safe Routes to School Improvements	Donaldson Way at Elliott Drive, Benton Way at Chaucer Lane	Roundabout and relocated bus stop, crosswalk enhancements
AC-5	Elliott Drive Traffic Calming	Elliott Drive: Donaldson Way to Crawford Way, at Crawford Way, at Larkspur Street, Larkspur Street to American Canyon Road	Neck downs with bicycle access, signage, traffic circle with enhanced crosswalk, traffic circle, and raised median with restriping and relocated bus stop

Table 1
Proposed Pedestrian Improvement Projects

Project ID	Project Name	Location	Description
AC-6	American Canyon Road Improvements	American Canyon Road at Elliott Drive, west of Elliott Drive	Near term: curb extensions, median refuge, crosswalk Long term: feasibility study to convert part of roadway to linear park
AC-7	SR-29 Pedestrian Crossings	SR 29 at American Canyon Road and Rio Del Mar	Grade-separated pedestrian crossings
AC-8	SR 29 Gateway	SR 29: American Canyon Road to Napa Junction Road, at Donaldson Way	Pathway, median refuges, marked crosswalks, feasibility study for reduced curb radii, curb ramps
AC-9	Vine Trail Railroad Crossing	SR 29 at Paoli Loop Road	Grade-separated Vine Trail crossing
AC-10	Pedestrian/Bicycle Railroad Crossing	Railroad tracks east of SR 29 near proposed "Town Center"	Grade-separated pedestrian/bicycle crossing
AC-11	Danrose / Kimberly Crossing Improvements	Danrose Drive at Kimberly Drive	Feasibility study for reduced crossing distances
AC-12	Commerce Boulevard Extension	Commerce Boulevard: Eucalyptus Drive to southern terminus of Commerce Boulevard	Multi-use path
AC-13	Newell Open Space Pathway	Newell Creek: Newell Open Space entrance at Newell Drive through Newell Open Space	River to Ridge multi-use path connection
AC-14	River to Ridge Trail	Eucalyptus Drive, Rio Del Mar, South Napa Junction Road, Newell Drive	Multi-use path from Theresa Avenue to Newell Drive, bike lanes west of Theresa Avenue
AC-15	Walsh Creek Neighborhood Pathway	Walsh Creek: Cartagena Way to Via Bellagio	Multi-use path and pedestrian bridge
Unincorporated County Pedestrian Improvements			
County Program	Sidewalk Gap Closure and Maintenance	Countywide	Sidewalk maintenance, rehabilitation, and expansion
T0-1	Howell Mountain Elementary School Advance Warning Signage	White Cottage Road north of Howell Mountain Elementary School	Advance warning signage and pavement markings
UNC-1	College Ave Multi-Use Path	College Avenue: White Cottage Road to Fire Station	Off-street pathway
UNC-2	Pathway Treatments Access to School	White Cottage Road: at College Avenue, Howell Mountain Elementary School to College Avenue, at Toyon Street	Crosswalk enhancements, enhanced marked crosswalk Near term: buffer along shoulder Long term: pedestrian pathway

Table 1
Proposed Pedestrian Improvement Projects

Project ID	Project Name	Location	Description
UNC-3	Howell Mountain School Improvements	White Cottage Road at Howell Elementary School	Marked crosswalk with sidewalk extension and ADA path, marked crosswalk removals
UNC-4	Advance Traffic Calming for Howell Mountain Elementary School	White Cottage Road north of Howell Mountain Elementary School	Speed feedback signs and rumble strips
UNC-5	PUC South Gateway Treatments	Howell Mountain Road at Bishops Place, at Cold Springs	Speed feedback sign, crosswalk enhancements, feasibility study for roundabout or Pedestrian Hybrid Beacon
UNC-6	PUC Corridor Improvements	Howell Mountain Road: Cold Springs to Angwin Avenue	Pathway, lighting, sidewalk
UNC-7	PUC Crossing Improvements	Howell Mountain Road: at La Jota Drive, Angwin Avenue, PUC Driveway, and Brookside Drive	ADA access path, crosswalk enhancements and additional marked crosswalks, relocated crosswalk and pathway (at Angwin Ave.)
UNC-8	Howell Mountain Road	Howell Mountain Road at College	Near term: enhanced marked crosswalks, driveway closure Long term: feasibility study for roundabout
UNC-9	Angwin Trail Improvements	Howell Mountain Road: College to Clark Way	Medium term: off-street path with trail crossing Long term: formalized hiking trail
UNC-10	Howell Mountain Road Traffic Calming	Howell Mountain Road: College to Clark Way	Lane width reduction and speed feedback signs

1. Project IDs beginning with "TO-" indicate projects that have already been funded or constructed.
2. DG = decomposed granite.
3. These improvements in Yountville are located on private property and would be completed by business owners rather than the Town.
4. These City of Napa projects do not represent planned improvements but rather potential enhancements to roadways walked during the May 2015 walking audits.
Note: An enhanced crosswalk includes additional safety treatments such as curb extensions, reduced curb radii, or pedestrian refuge islands. These enhancements are recommended to address safety concerns such as higher speed or volume roadways, wider roadways, and roadways where motorists are less likely to yield to pedestrians.

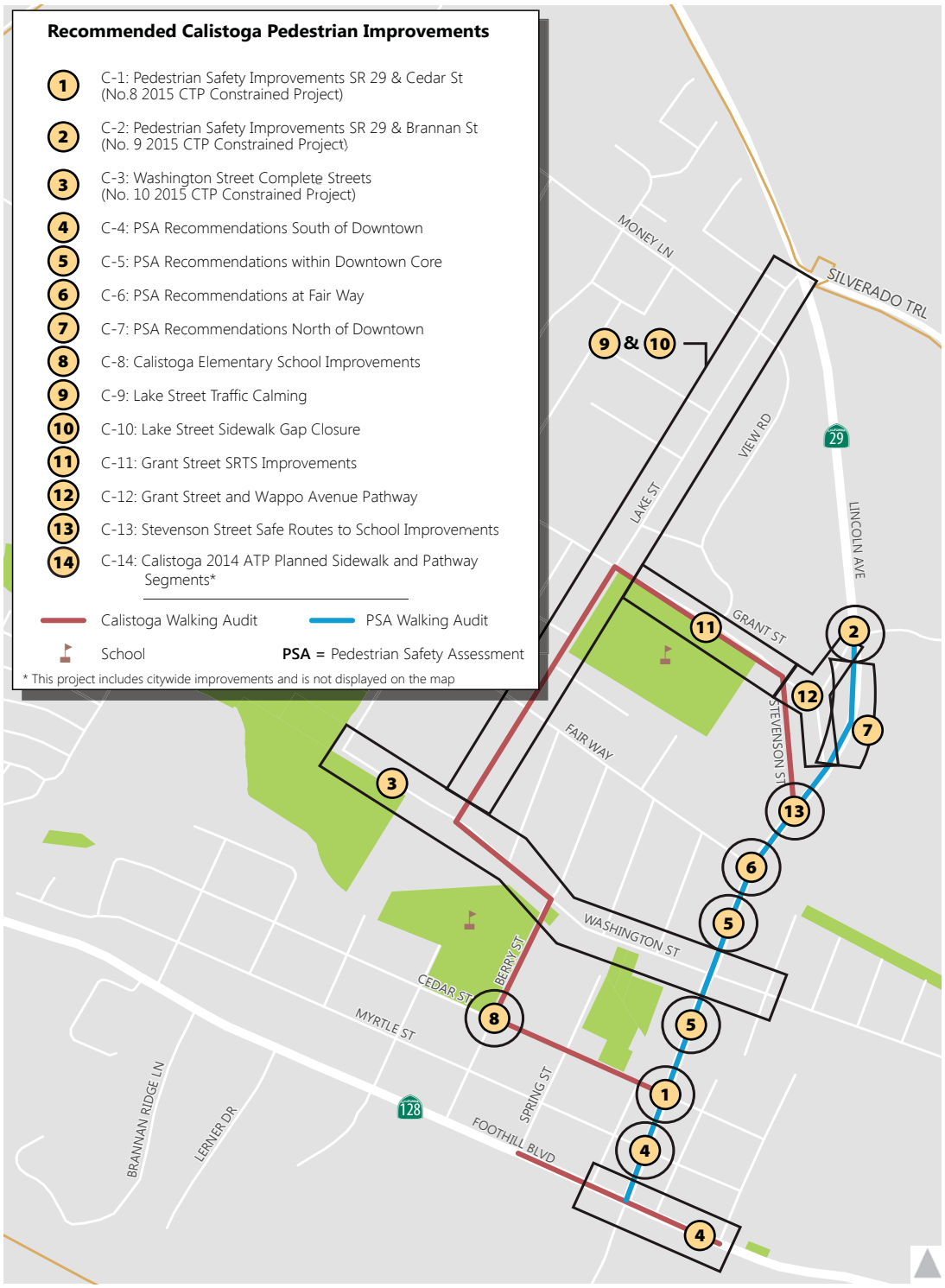
Adoption of the proposed Plan, in itself, would not directly involve the construction of pedestrian improvements listed in Table 1, but would facilitate the future development of such improvements. Thus, this Initial Study evaluates the environmental impacts associated with the Plan at a programmatic level, and provides programmatic-level mitigation measures. All future pedestrian projects forwarded as implementing actions of the Plan will be compared with the Plan program and programmatic mitigation measures while also providing additional detail with the anticipated benefit of construction drawings and scheduling information.

9. **Surrounding Land Uses and Setting:** Countywide

10. Other Public Agencies Whose Approval is Required: The Plan was circulated for comments to these participating local jurisdictions: Napa County, the City of Calistoga, the City of St. Helena, the Town of Yountville, the City of Napa, and the City of American Canyon. Depending on the location of individual projects identified in the NCPP, future approvals for these projects would have to be completed by one or more of the following agencies:

- Cities of:
  - Calistoga
  - St. Helena
  - Napa
  - American Canyon
- Town of Yountville
- County of Napa
- California Department of Transportation (Caltrans)

In addition, individual projects that would involve work in sovereign State lands under the jurisdiction of the California State Lands Commission, including pedestrian bridges spanning the Napa River, would require the approval of leases from this public agency.



Source: Fehr & Peers, 2016

Calistoga Project Locations

Figure 2a

Source: Fehr & Peers, 2016

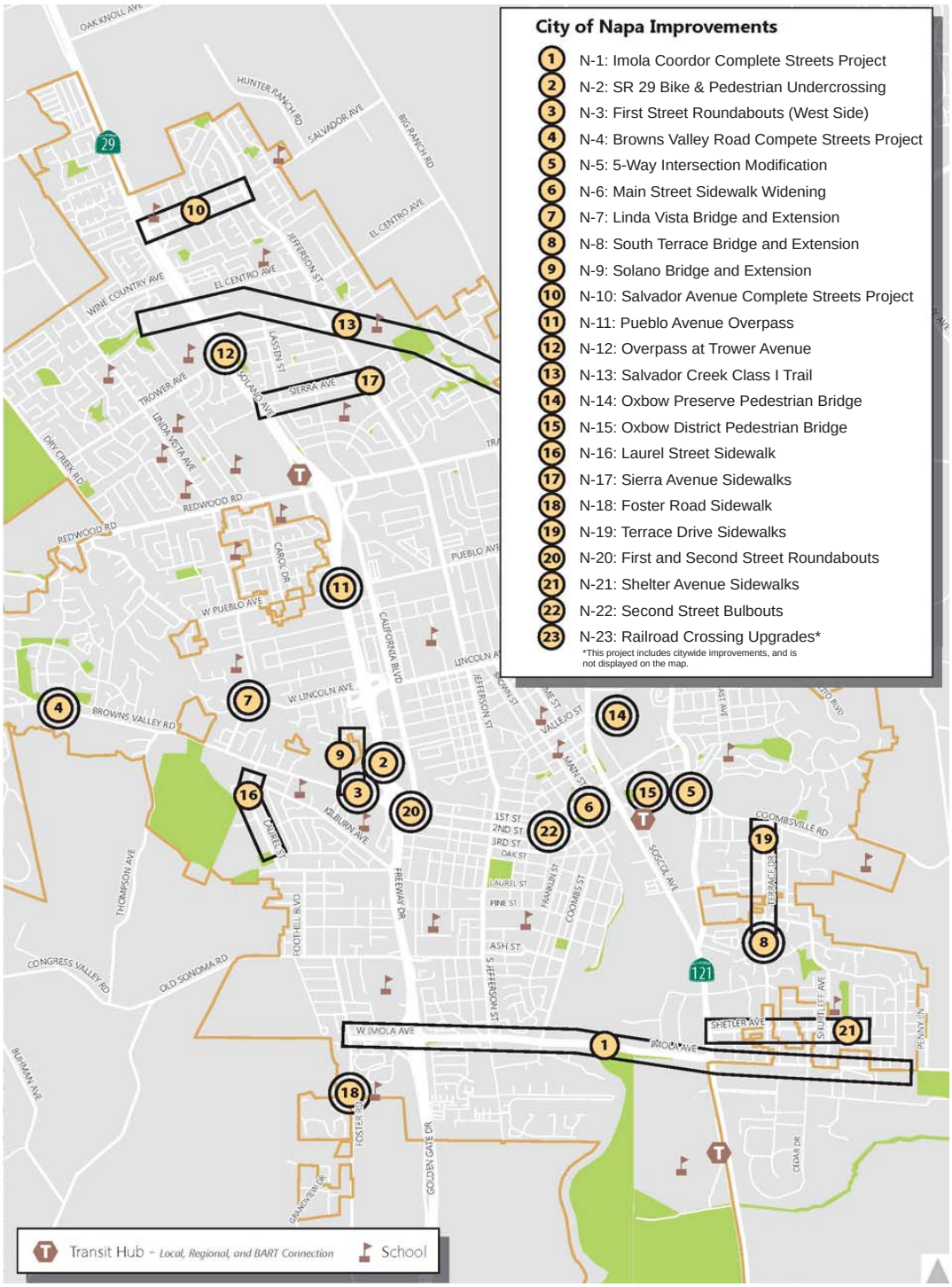
St. Helena Project Locations

Figure 2b

Source: Fehr & Peers, 2016

Yountville Project Locations

Figure 2c



Source: Fehr & Peers, 2016

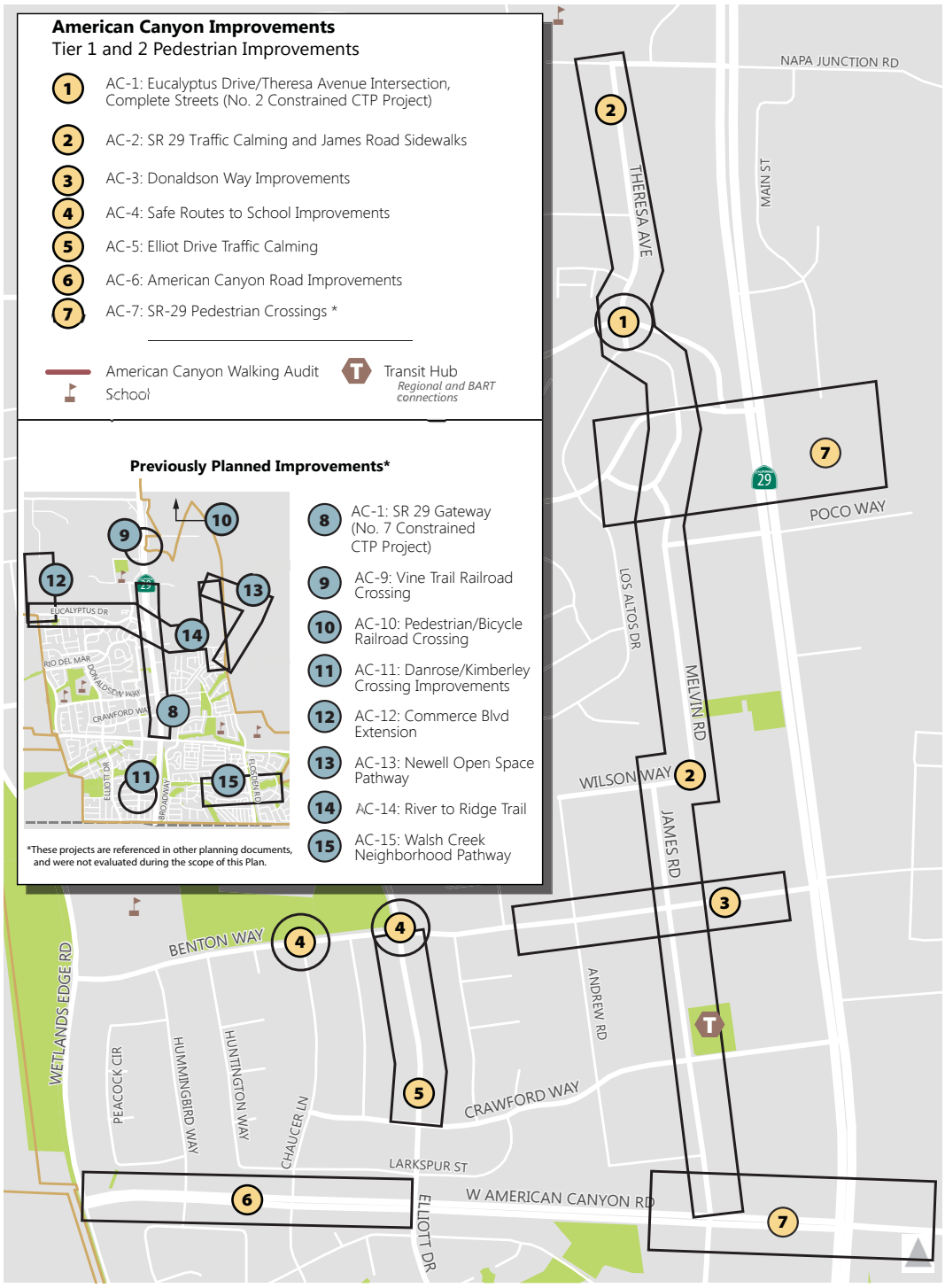
City of Napa Project Locations

Figure 2d

City of Napa Walk Audit Potential Enhancement Locations

Figure 2e

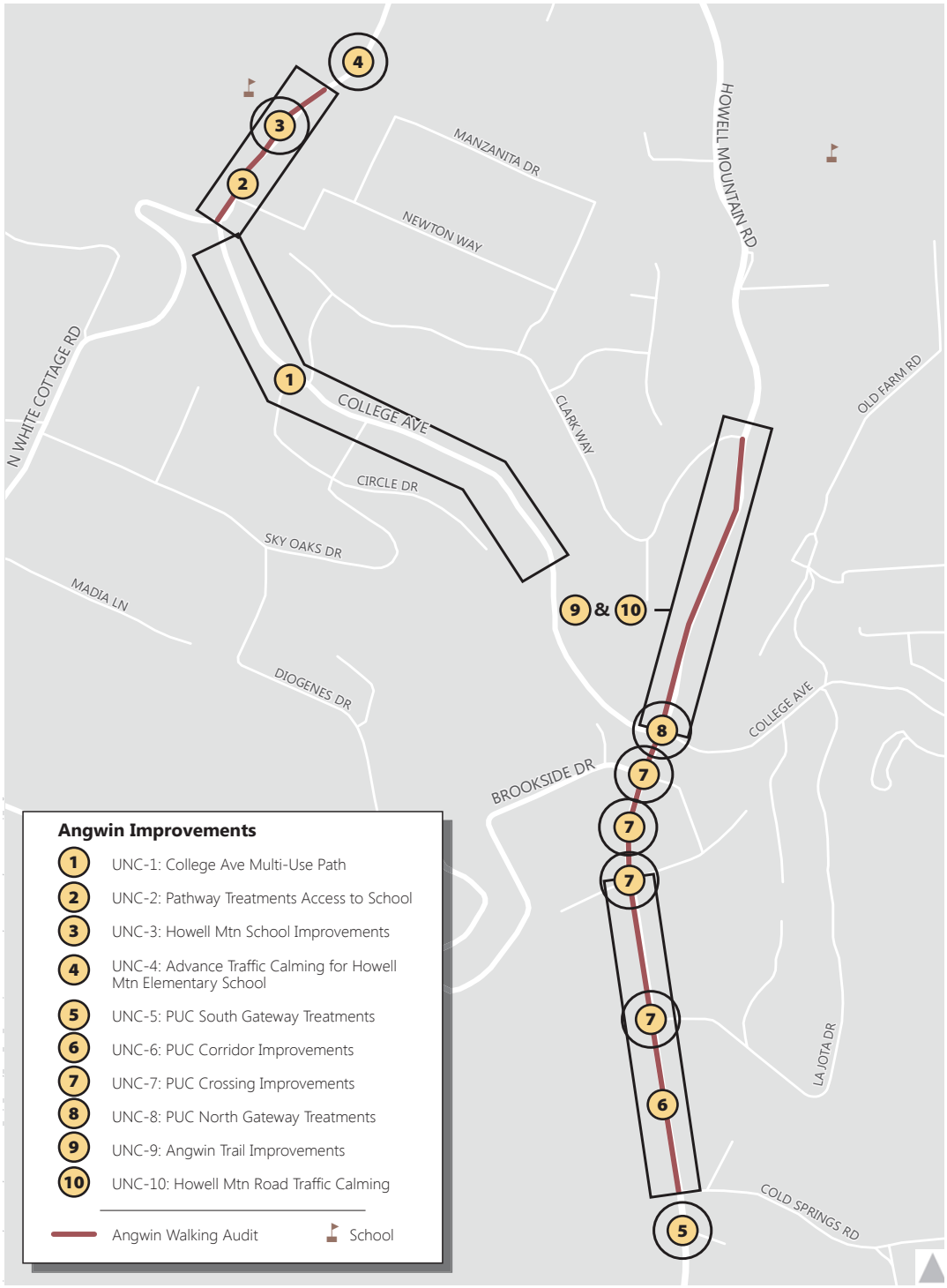
Source: Fehrs & Peers, 2016.



City of American Canyon
Project Locations

Figure 2f

Source: Fehrs & Peers, 2016.



Unincorporated County Project Locations

Figure 2g

Source: Fehr & Peers, 2016

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigation Incorporated" as indicated by the checklist on the following pages.

■ Aesthetics	☐ Agriculture and Forest Resources	■ Air Quality
■ Biological Resources	■ Cultural Resources	■ Geology/Soils
☐ Greenhouse Gas Emissions	■ Hazards & 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

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 potential 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.

Signature

7/7/2016
Date

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS				
-- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	■	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	■	☐	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	■	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	■	☐

Napa County has a predominantly rural character, with scenic driving corridors that provide views of vineyards, architecturally unique wineries, and natural landscapes (Napa County, 2008). While no designated State scenic highways occur in Napa County, three roadways are eligible for designation as State scenic highways (Caltrans, 2016):

- State Route (SR) 29 between Trancas Street in the City of Napa and SR 20 near Upper
- Lake and
- SR 121 from SR 221 near Napa State Hospital to near Trancas Street in the City of Napa
- SR 221 from SR 29 at Suscol Road to SR 121 in the City of Napa

As shown in Figure CC-3 of the Napa County General Plan, the County has also designated approximately 280 miles of scenic roadways (Napa County, 2008). In the vicinity of the proposed pedestrian improvements, these roadways include:

- SR 29
- SR 121
- Silverado Trail
- Howell Mountain Road
- Yountville Cross Road

The City of Napa has designated SR 29, SR 121, and SR 221 as scenic corridors (Napa, 2015). In addition, the Calistoga General Plan (2003) has designated the following roadways as scenic corridors:

- Silverado Trail and SR 29, up-valley of Silverado Trail
- SR 128/29 up- and down-valley of Lincoln Avenue
- Tubbs Lane
- Lincoln Avenue
- Foothill Boulevard
- Petrified Forest Road

In Calistoga, scenic vistas and corridors identify the city's unique setting among the fields and orchards of Napa Valley edged by hills and dramatic ridgelines (Calistoga, 2003). Yountville has a scenic built environment and view corridors from the town toward surrounding vineyards and mountains (Yountville, 2001). In St. Helena, the hillsides of the Napa Valley visually contain the valley provide orientation, while vineyards and older residential buildings establish the residential nature of the town (St. Helena, 1993). The St. Helena General Plan seeks to retain views of these resources. Scenic resources in the city of American Canyon include the rolling foothills each of the city, riparian corridors, Oat Hill, the Napa River to the west, and the abandoned Basalt plant (American Canyon, 1994).

Figures 3a through 3c show photographs of existing conditions at the sites of representative projects listed in the NCPP, including in Calistoga and St. Helena (Figure 3a), Yountville and American Canyon (Figure 3b), and the City of Napa (Figure 3c).

a) The pedestrian improvements listed in the NCPP would affect several designated and eligible scenic roadways in Napa County. Table 2 lists these projects and their visual effects on scenic roadways.

Table 2
Project Impacts on Scenic Vistas

Project ID	Location	Project Description	Description of Potential Impact
C-5	Calistoga	PSA Recommendations within Downtown Core	Greenery or art improvements on SR 29
N-11	Napa	Pueblo Avenue Overpass	Obstruction of scenic views from SR 29
N-12	Napa	Overpass at Trower Avenue	Obstruction of scenic views from SR 29
N-14	Napa	Oxbow Preserve Pedestrian Bridge	Effect on scenic views
N-15	Napa	Oxbow District Pedestrian Bridge	Effect on scenic views
SH-2	St. Helena	Downtown Pedestrian Improvements	Streetscape improvements to SR 29
SH-3	St. Helena	Sulphur Creek Class I Multi-Use Pathway	Loss of trees near SR 29
SH-7	St. Helena	Main Street Business Frontage Improvements	Place-making improvements on SR 29
UNC-6	Angwin	PUC Corridor Improvements	Pathway improving access to Howell Mountain Road
UNC-9	Angwin	Angwin Trail Improvements	Pathway improving access to Howell Mountain Road

As shown in Table 2, the proposed pedestrian projects would have mixed effects on scenic views. In the city of Napa, new overpasses of SR 29, a County-designated scenic roadway, would obstruct views from the roadway of hills lining the Napa Valley. (Photo 6 in Figure 3c

Photo 1: Calistoga's Berry Street bridge over the Napa River, which is proposed for replacement, looking northeast.

Photo 2: Main Street in downtown St. Helena, looking north from Spring Street, where streetscape improvements are proposed.

Calistoga and St. Helena Site Photographs Figure 3a

Photo 3: Washington Street at Lincoln Avenue in Yountville, where traffic calming crossing treatments are proposed, looking northwest.

Photo 4: Newell Creek in American Canyon, where a new trail is proposed, looking northeast from Newell Drive.

Yountville and American Canyon Site Photographs Figure 3b

Photo 5: The southern terminus of Linda Vista Avenue in the City of Napa, where an extension and bridge over Redwood Creek are proposed, looking south.

Photo 6: The intersection of State Route 29 and Trower Avenue in the City of Napa, where an overpass is proposed, looking north.

City of Napa Site Photographs Figure 3c

shows existing hillside views at an intersection of SR 29 where an overpass is proposed.) However, SR 29 is urbanized and does not afford highly scenic views in this area, relative to those available from rural sections of the highway. Two new pedestrian bridges over the Napa River in the Oxbow District also would obstruct views of the river from urban areas, yet would expand pedestrian access to this scenic resource. In St. Helena, construction of a trail along Sulphur Creek could entail the removal of riparian trees and shrubs visible from SR 29.

On balance, however, the pedestrian projects would improve the visual quality of scenic roadways and expand non-motorized access to scenic vistas. Place-making improvements are proposed on SR 29 in the historic downtowns of Calistoga and St. Helena. Photo 2 in Figure 3a shows the existing Main Street corridor in downtown St. Helena, where projects would improve the streetscape. In Angwin, new pathways would provide safe pedestrian access to Howell Mountain Road, a County-designated scenic roadway. Therefore, the NCPP would have a less than significant impact on scenic vistas.

LESS THAN SIGNIFICANT IMPACT

b) The proposed pedestrian improvements would not occur on a designated State scenic highway and would not affect any rock outcroppings identified as visual resources. While pedestrian projects would occur on downtown streets next to historic buildings in St. Helena and Calistoga, these projects would only involve minor modifications to streetscapes in the visual setting of historic buildings. However, the construction of trails, bridges, and over/undercrossings in several jurisdictions would require the removal of mature trees that may represent scenic resources. For example, the proposed Sulphur Creek pathway in St. Helena, the Berry Street bridge replacement in Calistoga, and the Walsh Creek neighborhood pathway in American Canyon may involve the loss of mature riparian trees. Impacts would be potentially significant.

Mitigation Measures

Implementation of Mitigation Measure BIO-7 (Tree Protection), as discussed in Section IV, *Biological Resources*, would require the replacement of protected trees at a minimum ratio of 2:1, to be installed on-site or at an approved off-site location. With the maturation of replacement trees, impacts on visual resources from the loss of trees would be reduced to a less than significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

c) Individual pedestrian projects listed in the NCPP would adversely affect the visual character of communities in Napa County by removing vegetation or obstructing views. Other projects, however, would improve the visual quality of downtown cores. Table 3 lists the projects that would affect visual character and quality and summarizes their potential impacts.

Table 3
Project Impacts on Visual Character and Quality

Project ID	Location	Project Description	Description of Potential Impact
T0-1	Calistoga	Berry Street Bridge Replacement	Loss of vegetation
C-5	Calistoga	PSA Recommendations within Downtown Core	Improved visual quality from greenery or art in pedestrian paseo
SH-2	St. Helena	Downtown Pedestrian Improvements	Improved visual quality from streetscape improvements and median
SH-3	St. Helena	Sulphur Creek Class I Multi-Use Pathway	Loss of riparian vegetation
SH-4	St. Helena	Napa River Class I Multi-Use Pathway	Loss of riparian vegetation
SH-7	St. Helena	Main Street Business Frontage Improvements	Improved visual quality from landscaping
N-2	Napa	SR 29/Bike & Pedestrian Undercrossing	Loss of riparian vegetation
N-7	Napa	Linda Vista Bridge and Extension	Loss of mature trees and riparian vegetation
N-8	Napa	South Terrace Bridge and Extension	Loss of riparian vegetation
N-9	Napa	Solano Bridge and Extension	Loss of riparian vegetation
N-10	Napa	Salvador Avenue Complete Streets Project (widening)	Potential loss of roadside trees
N-11	Napa	Pueblo Avenue Overpass	Intensification of urban character
N-12	Napa	Overpass at Trower Avenue	Intensification of urban character
N-13	Napa	Salvador Creek Class I Trail	Loss of riparian vegetation
AC-13	American Canyon	Newell Open Space Pathway	Loss of riparian vegetation
AC-14	American Canyon	River to Ridge Trail	Loss of vegetation
AC-15	American Canyon	Walsh Creek Neighborhood Pathway	Loss of riparian vegetation
UNC-9	Angwin	Angwin Trail Improvements	Loss of trees
UNC-1	Angwin	College Ave Multi-Use Path	Loss of trees

As shown in Table 3, projects in Calistoga and St. Helena would improve the visual quality of main streets in these cities by installing landscaping, art, or other streetscape features. Several other projects would adversely affect the visual character of communities. The proposed overpasses of SR 29 in the city of Napa would obstruct hillside views and intensify the scale of urban development. As shown by Photo 6 in Figure 3c, the intersection of SR 29 and Trower Avenue, where an overpass is proposed, now offers partially obstructed views of hillsides in the background. Construction of multi-use trail and bridge projects also would involve the loss of trees, shrubs, and riparian vegetation. For example, Photo 1 in Figure 3a shows existing trees overhanging the Berry Street Bridge over the Napa River in Calistoga, where a new bridge is proposed, and Photo 4 in Figure 3b shows existing riparian vegetation near the proposed Newell Open Space Pathway in American Canyon. The majority of projects listed in the NCPP would involve minor physical changes, such as new sidewalks and crosswalk striping, in existing urbanized/suburban settings, which would not substantially affect visual character. Impacts on visual character from the loss of vegetation and construction of overpasses would be potentially significant.

Mitigation Measures

As discussed above, implementation of Mitigation Measure BIO-7 (Tree Protection) would require the replacement of protected trees at a minimum ratio of 2:1, to be installed on-site or at an approved off-site location. With the maturation of replacement trees, impacts on visual character from the loss of trees would be reduced to a less than significant level. Mitigation Measure AES-1 would be required to reduce aesthetic impacts from the introduction of overpasses, to the extent feasible.

> **AES-1 Overpass Treatments.** Proposed overpasses of SR 29 listed in the NCPP shall include design treatments to improve their appearance from the perspective of roadway users on SR 29. Design treatments may include, but are not limited to, artistic treatments and use of materials that correspond to the topography or natural features of the Napa Valley or display the history of the area.

With the implementation of these measures, impacts on visual character would be reduced to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

d) Two projects listed in the NCPP would involve the installation of pedestrian-scale lighting: the Jefferson Street corridor improvements in the city of Napa and PUC corridor improvements in Angwin. Pedestrian-scale lighting is intended to improve pedestrian visibility and the perception of safety and comfort while walking. The Best Practices Toolkit in Appendix D of the NCPP states that the desire for starlit sky views in rural areas could require tradeoffs in the level of lighting. For example, rural areas could install fewer light fixtures, lower-wattage lights, or downward-directed lights in the pedestrian environment to preserve nighttime sky views. Flashing beacons at pedestrian crossings, such as at the intersection of SR 29 and Cedar Street in Calistoga, also would increase lighting levels in communities. However, new pedestrian-scale and crossing lights in specific locations would not substantially increase nighttime lighting levels in Napa County.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:				
a) Convert Prime Farmland, Unique Farmland, 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?	☐	☐	■	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	■
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))?	☐	☐	☐	■
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
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?	☐	☐	■	☐

a, e) The proposed pedestrian projects would be constructed within existing road Rights-of-Way (ROW), adjacent to ROWs, or within urban communities away from farmland. No projects would occur within actively cultivated farmland. Although individual multi-use trail projects in open space areas could potentially be located on Important Farmland, such areas are set aside for open space use and not for agricultural cultivation. Furthermore, any loss of arable land would be minimal because of the linear nature of trail projects. Therefore, impacts from the loss of Important Farmland or conversion of farmland would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b-d) It is not anticipated that any Williamson Act contracted land would be needed for any listed improvements. Napa County's Agricultural Preservation (Williamson Act) and Land Use Goal 5 is to plan for recreational uses (includes trails) in locations that are compatible with agriculture and Recreation and Open Space Policy ROS-16 encourages recreational uses on lands designated for agriculture. Although proposed bridges across streams and multi-use trails in riparian corridors would require the loss of trees on a local scale, the NCPP would not adversely affect forestry resources including forest land or timberland. The proposed projects would not result in the loss or conversion of forest land or result in the conversion of farmland to a non-agricultural use.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless 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?	☐	☐	■	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	■	☐	☐
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)?	☐	■	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	■	☐

a) To be consistent with an air quality management plan (AQMP), a project must conform to the local General Plan and must not result in or contribute to an exceedance of the local jurisdiction's forecasted future population. A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. Population growth would lead to increased vehicle use, energy consumption, and associated air pollutant emissions. As discussed in Section XIII, *Population and Housing*, implementation of the NCPP would not involve the construction of infrastructure that could induce substantial population growth such as new or increased capacity sewer or water lines, or the construction of new streets and roads. While the proposed pedestrian improvements would make the area more attractive to tourists, this would not be a substantial growth-inducing effect in Napa County. Therefore, the Plan would not result in or contribute to an exceedance of Napa County's forecasted population and would be consistent with the 2010 Multi-Pollutant Clean Air Plan adopted by the Bay Area Air Quality Management District (BAAQMD) in September 2010.

LESS THAN SIGNIFICANT IMPACT

b, c) The Plan area is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The BAAQMD region is currently in non-attainment of state and national ozone standards and national ambient air quality standards for particulate matter. Emissions of ozone precursors and particulate matter during construction of the proposed pedestrian projects could potentially contribute to an existing air quality violation. Because the proposed projects would not contribute to urban growth or generate additional vehicle trips, they would not introduce new long-term sources of air pollutants into the BAAQMD region; in fact, pedestrian improvements could encourage people to substitute walking for driving, incrementally reducing emissions associated with motor vehicle use.

The construction of pedestrian projects would generate temporary emissions from three primary sources: the operation of construction vehicles (e.g., scrapers, loaders, and dump trucks); ground disturbance during clearing and grading, creating fugitive dust; and the application of asphalt, paint, or other oil-based substances. The extent of daily emissions, particularly reactive organic gases (ROGs) and nitrogen oxide (NO_X) emissions, generated by construction equipment would depend on the quantity of equipment used and the hours of operation for each project. The extent of fugitive dust ($PM_{2.5}$ and PM_{10}) emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials offsite is necessary. The amount of ROG emissions generated by paints and oil-based substances such as asphalt depends upon the type and amount of material utilized.

Although the BAAQMD's *California Environmental Quality Act Air Quality Guidelines* from 2010 have no plan-level significance thresholds for air pollutant emissions, they do include the following project-level thresholds for construction emissions:

- 54 pounds per day of ROG;
- 54 pounds per day of NOx;
- 82 pounds per day of PM10 (exhaust only); and
- 54 pounds per day of PM2.5 (exhaust only).

If individual pedestrian projects generated construction emissions in excess of these thresholds, they would have significant impacts on a project-level basis.

The installation of minor roadway improvements such as sidewalks, crosswalks, and wayfinding signs are not expected to generate significant short-term emissions impacts. However, other proposed pedestrian projects such as Class I multi-use trails, new bridges, and roundabouts could involve more substantial grading and paving, resulting in greater emissions. The precise quantity of emissions would need to be determined at the time of proposed construction of a given pedestrian project. Although any individual improvement or project may not generate significant short-term emissions, it is possible that several projects would be under construction simultaneously, generating cumulative construction emissions that would impact air quality. However, by implementing the BAAQMD's recommended mitigation measures for individual projects, the resulting impacts would be reduced. Impacts would be significant but mitigable.

Mitigation Measures

Adherence to the BAAQMD's recommended mitigation measures would reduce potentially significant short-term emissions during construction of the proposed pedestrian projects.

AQ-1 Construction Emissions Measures. All pedestrian projects listed in the NCPP shall comply with the following mitigation measures to reduce emissions of air pollutants.

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 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 visible emissions evaluator.
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 Mitigation Measure AQ-1 would reduce air quality impacts from construction activity to a less than significant level. The Plan would then not contribute substantially to an air quality violation or result in a cumulatively considerable increase of any criteria pollutant.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

d) Proposed pedestrian improvements adjacent to roadways could temporarily expose users of these facilities to carbon monoxide and other pollutants from motor vehicle exhaust; however, users would only be exposed to air pollutants for brief periods while using pedestrian facilities and are not considered sensitive receptors. The pedestrian projects would not generate operational pollutants that would expose adjacent sensitive receptors such as homes, hospitals, and schools to substantial pollutant concentrations. Furthermore, the NCPP is intended to facilitate additional pedestrian travel and would reduce vehicle miles traveled in Napa County, thereby incrementally reducing the exposure of sensitive receptors to pollutant concentrations from motor vehicles. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e) During construction of the proposed pedestrian projects, the use of construction equipment would have the potential to create minor odors. However, construction activities would be temporary and would not involve materials or activities that are a potential source of significant odors. They would not result in the creation of objectionable odors affecting a substantial number of people. Furthermore, pedestrians would not be exposed to any objectionable odors from construction because pedestrian facilities would be closed to the public when under construction. Therefore, the impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless 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 Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES				
-- Would the project:				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
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?	☐	■	☐	☐
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?	☐	■	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	■	☐	☐
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?	☐	☐	☐	■

The majority of projects listed in the NCPP would be located within the limits of existing roads, sidewalks and trails or other previously disturbed areas; however, some projects such as new bridges and trails, or widening of existing features (sidewalks, trials and roads) adjacent to undisturbed areas could be expected to include previously undisturbed areas within individual project footprints.

As described in the Napa County General Plan (updated 2013), Napa County comprises a diverse range of vegetation communities that include oak woodlands, grasslands, mixed serpentine chaparral, mixed willow riparian forests and redwood forests. Napa Valley also supports several types of wetland and aquatic habitats including marshlands, vernal pools, rivers, creeks and associated tributaries. Many of these wetland areas include associated riparian areas that functions as critical habitat for special-status species and as wildlife

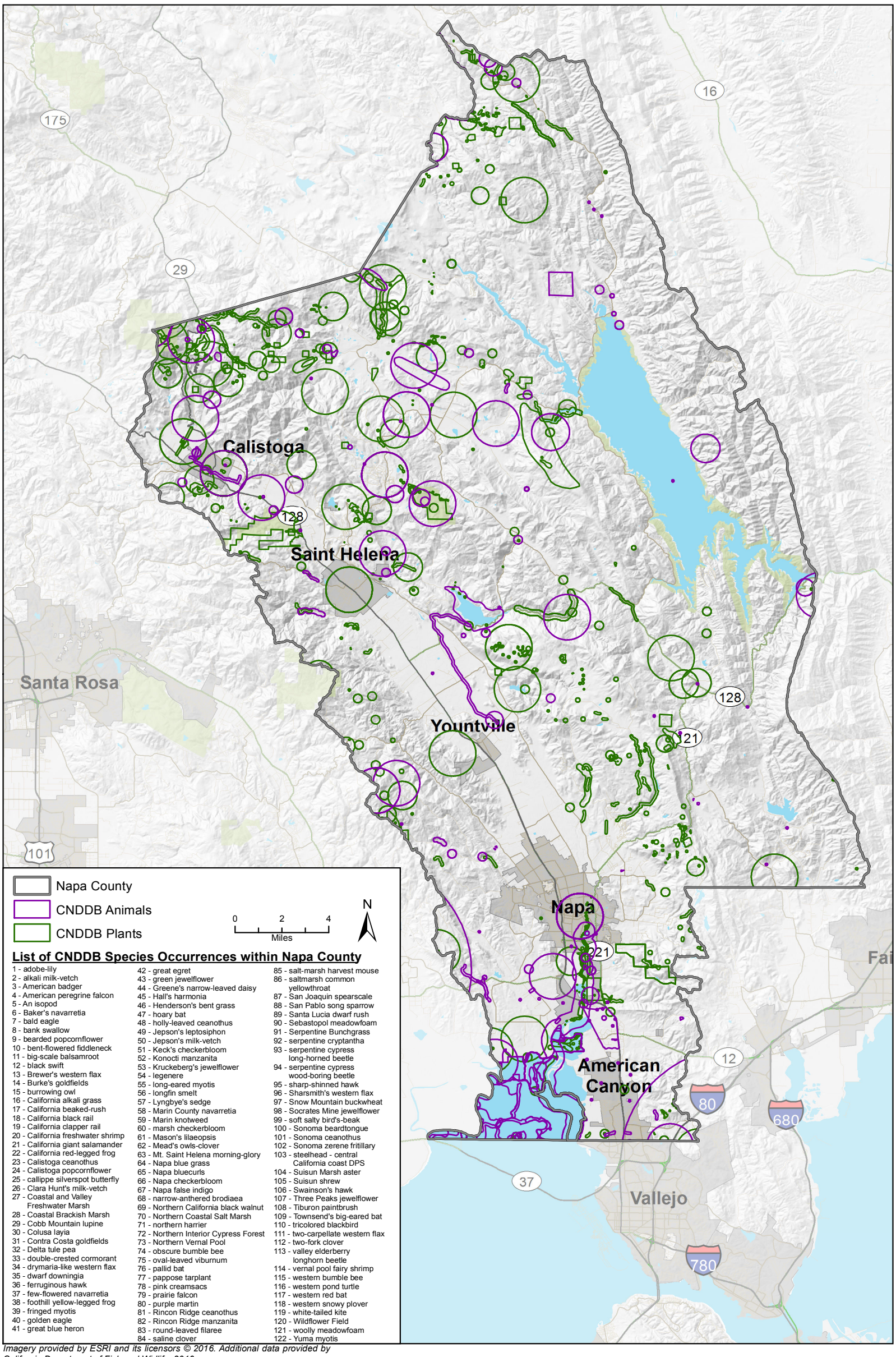
movement corridors. The Napa County General Plan notes that approximately 114 special-status plant species have been observed in the County. Napa County contains approximately 167,450 acres of oak woodlands (comprising 33 percent of the county) and has the highest density of oak woodlands in the state.

Napa County is home to many wildlife species, including a large number of rare, threatened, and endangered species. The Napa County General Plan identified 24 special-status wildlife species in the County; however, a current review of the records contained within the California Natural Diversity Database (CNDDB) (queried in April 2015) documented a total of 53 special-status species with occurrence records in Napa County, including 14 federal and/or state listed species. Records of all CNDDB plant and animal occurrences within Napa County are shown on Figure 4. The coniferous forests of the northwest County provide homes for the threatened northern spotted owl, and the baylands of the southern County are home to over 130 species of birds, including the endangered Ridgway's rail. The rivers, creeks, and streams of Napa's watersheds provide habitat for many species of plants, fish, invertebrates, and amphibians, including the threatened California red-legged frog. Birds protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (FCG) can be expected to nest in a wide range of habitats including previously disturbed ruderal areas (including medians and road shoulders) and within areas of maintained ornamental vegetation (lawns, gardens, parks and trails).

Historically, the Napa Valley was comprised of the vegetation communities described above, but the valley experienced extensive conversion of lowland habitats into agricultural and grazing lands prior to the 1900s, and urbanization further reduced the extent of existing native habitats. Many species are locally rare or no longer occur in portions of the Napa Valley region due to agricultural and urban development within the County.

Approach to Impacts Analysis. This programmatic evaluation of the NCPP does not include specific project-level details of construction activity. As such, a precise, project-level analysis of the specific impacts of individual new pedestrian projects on special-status species is not possible. Therefore, the following impact analyses provide an accounting of the biological resources known to occur within the County and for which the development of the individual pedestrian improvements listed in the NCPP (see Table 1) could result in direct or indirect impacts. Although the NCPP is a planning document and thus would not in itself cause physical environmental changes, adoption of the NCPP would facilitate physical impacts from the development of listed pedestrian projects.

a) A variety of special-status species could be encountered at the locations of proposed projects evaluated under the NCPP. The types of projects covered under this programmatic evaluation (as described in *Section 8. Description of Project* of the plan) could result in direct and indirect impacts to sensitive biological resources including special-status species. The majority of the proposed projects covered under this programmatic evaluation would be located within existing paved and previously constructed or disturbed right-of-ways. If all construction work, staging, parking and associated activity is fully contained within previously developed areas, the projects would be unlikely to modify or otherwise impact sensitive species habitat and are, therefore, unlikely to result in significant impacts to federal or state listed species or other special-status species; however, migratory birds covered under the MBTA and the FGC can be



List of CNDDB Species Occurrences within Napa County

1 - adobe-lily
2 - alkali milk-vetch
3 - American badger
4 - American peregrine falcon
5 - An isopod
6 - Baker's navarretia
7 - bald eagle
8 - bank swallow
9 - bearded popcornflower
10 - bent-flowered fiddleneck
11 - big-scale balsamroot
12 - black swift
13 - Brewer's western flax
14 - Burke's goldfields
15 - burrowing owl
16 - California alkali grass
17 - California beaked-rush
18 - California black rail
19 - California clapper rail
20 - California freshwater shrimp
21 - California giant salamander
22 - California red-legged frog
23 - Calistoga ceanothus
24 - Calistoga popcornflower
25 - callippe silverspot butterfly
26 - Clara Hunt's milk-vetch
27 - Coastal and Valley Freshwater Marsh
28 - Coastal Brackish Marsh
29 - Cobb Mountain lupine
30 - Colusa layia
31 - Contra Costa goldfields
32 - Delta tule pea
33 - double-crested cormorant
34 - drymaria-like western flax
35 - dwarf downingia
36 - ferruginous hawk
37 - few-flowered navarretia
38 - foothill yellow-legged frog
39 - fringed myotis
40 - golden eagle
41 - great blue heron
42 - great egret
43 - green jewelflower
44 - Greene's narrow-leaved daisy
45 - Hall's harmonia
46 - Henderson's bent grass
47 - hoary bat
48 - holly-leaved ceanothus
49 - Jepson's leptosiphon
50 - Jepson's milk-vetch
51 - Keck's checkerbloom
52 - Konocti manzanita
53 - Kruckeberg's jewelflower
54 - legenere
55 - long-eared myotis
56 - longfin smelt
57 - Lyngbye's sedge
58 - Marin County navarretia
59 - Marin knotweed
60 - marsh checkerbloom
61 - Mason's lilaeopsis
62 - Mead's owls-clover
63 - Mt. Saint Helena morning-glory
64 - Napa blue grass
65 - Napa bluecurls
66 - Napa checkerbloom
67 - Napa false indigo
68 - narrow-anthered brodiaea
69 - Northern California black walnut
70 - Northern Coastal Salt Marsh
71 - northern harrier
72 - Northern Interior Cypress Forest
73 - Northern Vernal Pool
74 - obscure bumble bee
75 - oval-leaved viburnum
76 - pallid bat
77 - pappose tarplant
78 - pink creamsacs
79 - prairie falcon
80 - purple martin
81 - Rincon Ridge ceanothus
82 - Rincon Ridge manzanita
83 - round-leaved filaree
84 - saline clover
85 - salt-marsh harvest mouse
86 - saltmarsh common yellowthroat
87 - San Joaquin spearscale
88 - San Pablo song sparrow
89 - Santa Lucia dwarf rush
90 - Sebastopol meadowfoam
91 - Serpentine Bunchgrass
92 - serpentine cryptantha
93 - serpentine cypress long-horned beetle
94 - serpentine cypress wood-boring beetle
95 - sharp-shinned hawk
96 - Sharsmith's western flax
97 - Snow Mountain buckwheat
98 - Socrates Mine jewelflower
99 - soft salty bird's-beak
100 - Sonoma beardtongue
101 - Sonoma ceanothus
102 - Sonoma zerene fritillary
103 - steelhead - central California coast DPS
104 - Suisun Marsh aster
105 - Suisun shrew
106 - Swainson's hawk
107 - Three Peaks jewelflower
108 - Tiburon paintbrush
109 - Townsend's big-eared bat
110 - tricolored blackbird
111 - two-carpellate western flax
112 - two-fork clover
113 - valley elderberry longhorn beetle
114 - vernal pool fairy shrimp
115 - western bumble bee
116 - western pond turtle
117 - western red bat
118 - western snowy plover
119 - white-tailed kite
120 - Wildflower Field
121 - woolly meadowfoam
122 - Yuma myotis

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California Natural Diversity Database Occurrences

Figure 4

expected to nest within and adjacent to a wide range of disturbed areas, including existing trails, road medians, road and sidewalk shoulders, ornamental vegetation and ruderal areas. Construction noise and activity in previously disturbed areas could result in direct impacts to special-status species in adjacent natural habitat.

Any projects that would involve new development, such as new trails, roadway extensions or widenings, and bridges, and that would extend into previously undisturbed areas would have the potential to temporarily or permanently disturb or remove natural habitat. In particular, new bridge development at stream crossings has the potential to directly impact riparian and aquatic habitat and could direct special-status species such as California red-legged frog and/or steelhead known to occur in these areas. Any disturbance to natural and undisturbed habitat has the potential to directly impact special-status species.

Thus, it is not possible to assure complete avoidance of all special-status species, and potentially significant impacts could occur. Construction and maintenance activities for individual NCPP projects could result in a substantial reduction in local population size, lowered reproductive success, or habitat fragmentation of special-status plant and wildlife species. Significant impacts on special-status wildlife species associated with the NCPP may be a result of:

- Increased mortality caused by higher usage on new or widened roads, bridges and trails
- Direct mortality from the collapse of underground burrows, resulting from soil compaction
- Direct mortality resulting from the movement of equipment and vehicles through an individual NCPP improvement project area
- Direct mortality resulting from removal of trees with active bird nests
- Direct mortality or loss of suitable habitat resulting from the trimming or removal of obligate host plants
- Direct mortality resulting from fill of wetlands features
- Loss of breeding and foraging habitat resulting from the filling of seasonal or perennial wetlands
- Loss of breeding, foraging, and refuge habitat resulting from the permanent removal of riparian vegetation
- Loss of suitable habitat for vernal pool invertebrates resulting from the destruction or degradation of vernal pools or seasonal wetlands
- Abandoned eggs or young and subsequent nest failure for special-status nesting birds, including raptors, and other non-special-status migratory birds resulting from construction-related noises
- Loss or disturbance of rookeries and other colonial nests
- Loss of migration corridors resulting from the construction of permanent structures or features
- Other currently unidentified project-related activity that could impact special-status species

Mitigation Measures

Individual project consistency with the applicable County and City policies as well as adopted federal and state regulations that protect special-status species, including their habitat and

movement corridors, would ensure that appropriate design measures, including avoidance, if appropriate, are incorporated into the design of each NCPP project. In addition, individual projects with the potential to result in significant impacts would be required to undergo project-specific CEQA review at the time when they are designed and proposed. However, mitigation measures BIO-1 and BIO-2 would be required to ensure compliance with applicable regulations. These measures would require assessment of biological resources at a project-specific level, mitigation of impacts to special-status species, and protection of such species during construction. The individual project sponsor of NCCP projects shall implement the following mitigation measure for the proposed pedestrian improvements identified in Table 1.

BIO-1 Biological Resources Screening and Assessment. Prior to final design approval of individual projects involving ground disturbance of natural habitat and/or vegetation trimming and/or removal of vegetation, the implementing agency shall have a qualified biologist conduct a field reconnaissance and biological analysis of the environmental limits of the project to identify biological constraints and potential impacts to sensitive biological resources from the project, including potential impacts to special-status plants, animals, and their habitats, as well as protected natural communities including wetland and terrestrial communities and protected trees. For those projects for which ground disturbance would not affect natural habitat (i.e., work is limited to paved, ruderal, or developed areas only), a desktop analysis to identify any biological constraints for the project may be sufficient. The qualified biologist shall determine, based on the nature of construction activities, if a field reconnaissance is necessary for such projects to completely assess biological constraints. For all individual projects that are located within the jurisdiction of the California State Lands Commission, a biological analysis and field reconnaissance survey shall be conducted to comprehensively inventory biological resources.

If the biologist identifies protected biological resources within the limits of and/or potentially adversely affected by the project, the implementing agency shall first prepare alternative designs that seek to avoid and/or minimize impacts to the biological resources. If the project cannot be designed without complete avoidance, the implementing agency shall have the qualified biologist identify the specific impacts to special-status species, develop project-specific avoidance and mitigation procedures to be followed to reduce biological impacts to a less than significant level, identify any state or federal listed species that would necessitate coordination with the appropriate regulatory agency (i.e., USFWS, NMFS, CDFW, USACE) to obtain regulatory permits, and implement project-specific avoidance and mitigation measures prior to and during any construction activities.

Mitigation actions that may be required should impacts to special-status species be identified include:

- Pre-construction surveys to identify the presence of special-status species within and adjacent to work areas
- Worker Environmental Awareness Program training for all construction personnel
- Complete avoidance of special-status species where and if possible. Avoidance measures may include:
    - Delimiting and flagging of special-status species avoidance buffer areas (Environmentally Sensitive Areas or ESAs)
    - Monitoring of construction activity near ESAs
    - Installation of special-status species exclusion fencing
- Relocation of special-status species out of work areas (with applicable permits and authorizations as necessary)
- Restoration of temporarily disturbed special-status species' habitat
- Compensatory mitigation for impacts to special-status species habitat at a minimum ratio appropriate for extent and quality of permanently disturbed habitat. Mitigation ratios may vary from 1:1 to 5:1.

BIO-2 Construction Best Management Practices. Based on the results of the project-specific impact analysis required by Mitigation Measure BIO-1, and the extent of potential impacts to special-status species, one or more of the following construction Best Management Practices (BMPs) as recommended by a qualified biologist shall be incorporated into all grading and construction plans:

- A 20 mile-per-hour speed limit shall be designated in all construction areas
- All vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas, and clearing of vegetation for vehicle access shall be avoided to the greatest extent feasible
- The number of access routes, number, and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the goal of the project
- Equipment washout and fueling areas shall be located within the limits of grading at a minimum of 100 feet from waters, wetlands, or other sensitive resources as identified by a qualified biologist. Washout areas shall be designed to fully contain polluted water and materials for subsequent removal from the site
- Daily construction work schedules shall be limited to daylight hours only [consistent with local noise ordinances]
- Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition
- Drip pans shall be placed under all stationary vehicles and mechanical equipment

- All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week
- No pets are permitted on project site during construction

Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce potential impacts to special-status species to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

b) Naturally occurring plant communities in California are primarily identified in the *List of Vegetation Alliances and Associations (Natural Communities List)* (CDFW, 2010). This document provides comprehensive lists of officially recognized plant communities occurring in Napa County and the State of California. In this document, each plant community is assigned a conservation status rank (also known as "Rare Rank"), which is used to determine the sensitivity of the plant community. Plant communities with global or state status ranks of GI through G3, or S1 through S3, respectively, are considered sensitive, and are referred to as "natural communities of special concern." Plant communities are classified based on plant species composition and abundance, as well as the underlying abiotic conditions of the stand, such as slope, aspect, or soil type.

The Napa Valley supports a unique combination of valley and foothill habitats. Regionally, the NCPP encompasses a portion of Napa Valley that has the potential to support four natural communities of special concern: Coastal and Valley Freshwater Marsh, Serpentine Bunchgrass, Northern Vernal Pool and Coastal Brackish Marsh. Project components are not planned in or near areas containing natural communities of special concern; therefore, development of projects evaluated under the NCPP is not anticipated to impact any natural communities of special concern.

Riparian habitat occurs along several rivers and creeks in the region and may be impacted by the development of individual projects, especially new bridges over streams and riparian multi-use trails. Riparian habitat associated with Waters of the State or Waters of the U.S. falls under the jurisdiction of the California Department of Fish and Wildlife (CDFW) and Regional Water Quality Control Board (RWQCB). Direct impacts to riparian habitat would typically require authorization from CDFW under Section 1600, through issuance of a Lake and Streambed Alteration Agreement (LSAA) and/or from RWQCB under the Porter-Cologne Water Quality Control Act, through issuance of a Waste Discharge Requirements (WDRs) permit. Therefore, impacts on riparian habitat would be potentially significant.

Mitigation Measures

Mitigation measures BIO-3 through BIO-5 would be required, on a project-specific level, to delineate sensitive aquatic environments, to design or modify the project to avoid direct and indirect impacts on these areas, and to ensure no net loss of habitat.

BIO-3 Vegetation Mapping/Jurisdictional Delineation. Prior to approval of any individual project involving ground disturbance, the implementing agency shall retain a qualified biologist to perform an assessment of the

project area to identify riparian and other sensitive natural communities (e.g., wetlands). If wetlands are present the qualified biologist shall perform a wetland delineation following the 1987 Army Corps of Engineers Wetlands Delineation Manual and any applicable regional supplements to the Delineation Manual. The wetland delineation shall be submitted to the USACE for verification.

BIO-4 Riparian or Other Sensitive Natural Communities. If riparian or other sensitive natural communities are found within the project limits, the implementing agency shall design or modify the project to avoid direct and indirect impacts on these habitats, if feasible. Additionally, the implementing agency shall minimize the loss of riparian vegetation by trimming rather than removal where feasible.
Prior to construction, the implementing agency shall install orange construction barrier fencing to identify environmentally sensitive areas around the riparian area (50 feet from edge) and other sensitive natural communities (50 feet from edge), or as defined by the agency with regulatory authority over the resource(s). The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The fencing shall be installed before construction activities are initiated and shall be maintained throughout the construction period. The following paragraph shall be included in the construction specifications:

The Contractor's attention is directed to the areas designated as "environmentally sensitive areas." These areas are protected, and no entry by the Contractor for any purpose will be allowed unless specifically authorized in writing by lead agency overseeing the pedestrian improvement project. The Contractor will take measures to ensure that the Contractor's forces do not enter or disturb these areas, including giving written notice to employees and subcontractors.

Temporary fences around the environmentally sensitive areas shall be installed as the first order of work. Temporary fences shall be furnished, constructed, maintained, and removed as shown on the plans, as specified in the special provisions, and as directed by the project engineer. The fencing shall be commercial-quality woven polypropylene, orange in color, and at least 4 feet high (Tensor Polygrid or equivalent). The fencing shall be tightly strung on posts with maximum 10-foot spacing.

Immediately upon completion of construction activities, the contractor shall stabilize exposed soil/slopes. On highly erodible soils/slopes, the contractor shall use a non-vegetative material that binds the soil initially and breaks down within a few years. If more aggressive erosion control treatments are needed, geotextile mats, excelsior blankets, or other soil

stabilization products shall be used. All stabilization efforts should include habitat restoration efforts.

BIO-5 **Compensatory Mitigation.** If riparian and/or other sensitive natural communities are disturbed as part of an individual project, the implementing agency shall compensate for the disturbance to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state, federal, and/or local agencies as part of the permitting process for the project. Unless determined otherwise by the regulatory/permitting agency, the compensation shall be at a minimum ratio of 2 acres restored, created, and/or preserved for every 1 acre disturbed. Compensation may comprise on-site restoration/creation, off - site restoration, preservation, or mitigation credits (or a combination of these elements). The implementing agency shall develop and implement a restoration and monitoring plan that describes how the habitat shall be created and monitored over a minimum period of time.

Implementation of mitigation measures BIO-3 through BIO-5 would reduce the level of impacts on sensitive habitats to less than significant.

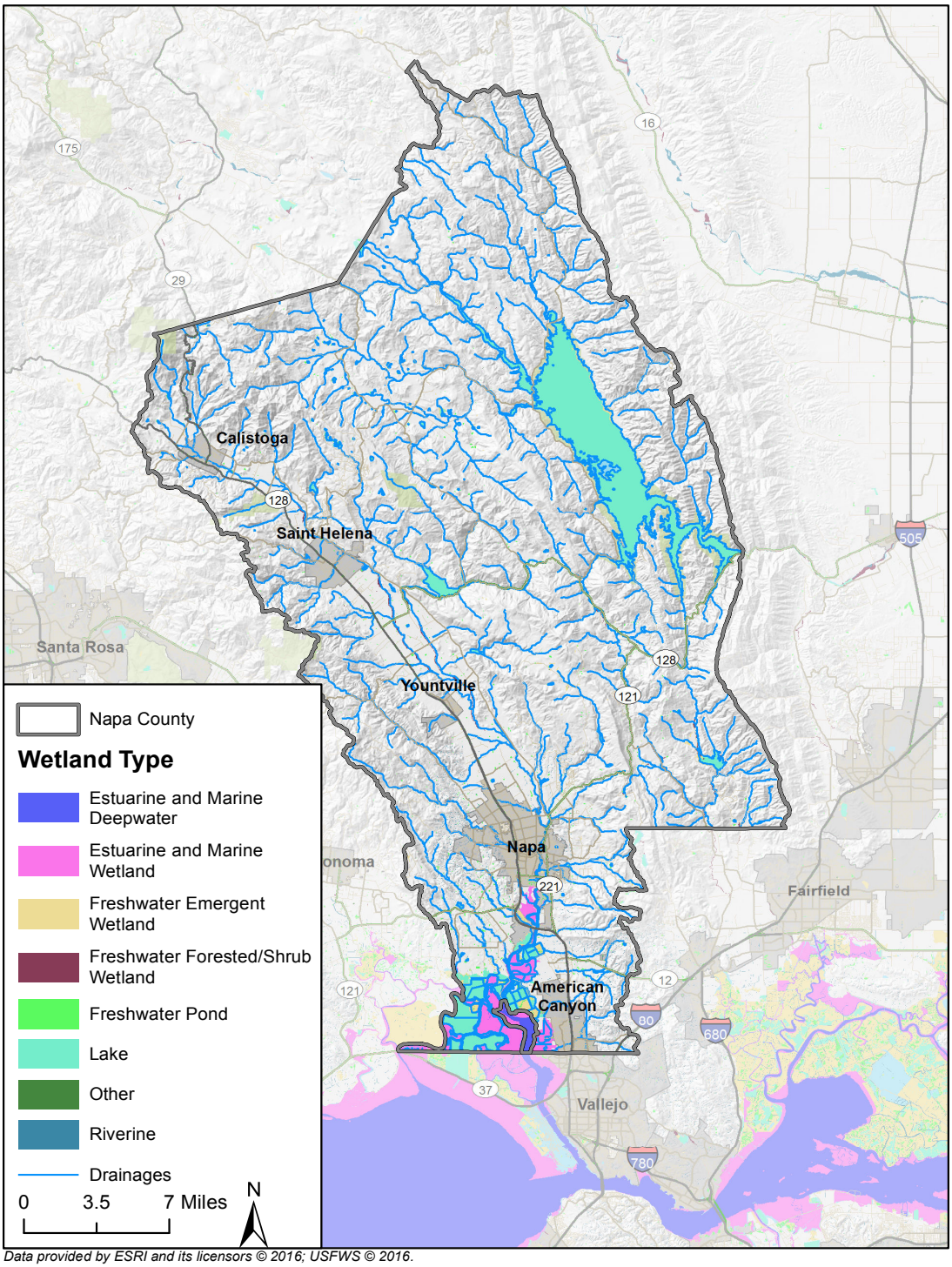
POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

c) Individual pedestrian projects listed in the NCPP may be located in or adjacent to the Napa River and several creeks and drainages, which are shown in Figure 5. The Plan has the potential to impact federal and state Jurisdictional Waters under Sections 401 and 404 of the Clean Water Act and Sections 1600-1616 of the FGC. Several new bridges across drainages are planned as part of the NCPP in the City of Napa and one each in the cities of Calistoga and American Canyon. Bridge construction has the potential to impact state or federally regulated aquatic resources in several ways including disturbances to the hydrologic structure, increased siltation, and modifications to bed and bank.

A formal Jurisdictional Delineation would be required to support Clean Water Act and Sections 1600-1616 permitting for bridge sites or other projects that could directly impact U.S. Army Corps of Engineers (USACE), CDFW, or RWQCB jurisdictional areas. If it is determined that resources will be impacted, the appropriate permits under Sections 401 and 404 of the Clean Water Act and Sections 1600-1616 of the FGC would be required. Impacts to riparian and aquatic resources would require mitigation to offset construction impacts. Therefore, impacts would be potentially significant.

Mitigation Measures

Mitigation measures BIO-3 through BIO-5 would be required, as discussed above, to delineate wetlands, to design or modify the project to avoid direct and indirect impacts on these areas, and to ensure no net loss of wetland habitat. Implementation of these measures would reduce the level of impact to less than significant.



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National Wetlands Inventory Categories and Drainages within Napa County

Figure 5

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

d) Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

Napa County has three primary wildlife movement corridors. These generally run north-south and connect habitat in the Western Mountains, Napa River, and the Blue Ridge-Berryessa Natural Area. In the region, east-west corridors generally follow riparian corridors, primarily along tributaries to the Napa River. The proposed NCPP is not anticipated to impact wildlife movement in areas of paved and disturbed right-of-ways. However, certain individual pedestrian projects listed in the NCPP would bisect Napa County creeks or bisect areas of natural habitat. Impacts to movement of terrestrial and aquatic would be temporary and limited to specific activities including: installation of temporary fencing, night lighting, construction noise, bridge construction activities and the presence of construction personnel during working hours. Most potential impacts to wildlife movement are expected to be temporary; however, new roads and trails have the potential to establish new barriers to wildlife movement, and bridge work could affect aquatic wildlife movement if project construction results in permanent changes to the aquatic feature. Impacts to wildlife movement corridors would be potentially significant.

Mitigation Measures

Mitigation Measure BIO-6 would be required to incorporate design measures into individual projects to protect wildlife movement corridors.

BIO-6 Wildlife Movement Design Measures. Prior to design approval of individual projects that contain movement habitat, the implementing agency shall incorporate economically viable design measures, as applicable and necessary, to allow wildlife or fish to move through any project area, and allow breeding (in particular aquatic breeding of fish and amphibians) both during construction activities and post-construction. Design measures shall be developed on a project-by-project basis and reviewed by a qualified biologist and appropriate regulatory agencies (i.e., USFWS, NMFS, CDFW) to ensure their efficacy. Such measures may include appropriately spaced breaks in a center barrier, or other measures that are designed to allow wildlife to move through the project corridor. If the project cannot be designed with these design measures (e.g., due to traffic safety) the implementing agency shall coordinate with the appropriate regulatory agency to obtain regulatory permits (if required) and implement alternative project-specific mitigation prior to any construction activities. Mitigation may include one or more of the following options:

- Wildlife friendly fencing design
- Lighting designs to minimize disturbance to wildlife
- Wildlife crossings
- Restoration within wildlife movement corridor areas
- Limits on work allowed within aquatic features during spawning (fish) or breeding (amphibian) season
- Protection of known spawning and amphibian breeding areas

Implementation of measure BIO-6 where wildlife movement may be impaired by development of individual projects would reduce impacts to less than significant.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

e) Napa County has several countywide ordinances to protect biological resources (Napa County Code chapters 12.44-12.45) primarily through the regulation and protection of floodplain and riparian habitats. Local city ordinances provide specific local guidance for the protection of aquatic/riparian resources as well as tree trimming and removal guidelines. Plan implementation would be consistent with County level ordinances.

In addition, incorporated cities in Napa County have individual municipal codes protecting biological resources including tree preservation standards including the protection of native oaks (*Quercus spp*.) Any individual projects involving tree trimming or removal would require permits from each individual city jurisdiction. Table 3 in Section I, *Aesthetics*, listed a range of individual projects that could involve the loss of trees. New bridges crossing streams and multi-use trails in riparian areas would have the greatest potential to affect protected trees. Municipal codes for the cities of Calistoga, Yountville, St. Helena, Napa, and American Canyon also require a permit for any impacts to watercourses and riparian vegetation. Similar impacts are regulated under the Clean Water Act, Porter-Cologne Water Quality Control Act and FGC. For any project elements with the potential to impact water resources defined within municipal code, the project sponsor would seek a permit from the local jurisdiction.

Therefore, impacts from conflicts with local policies and ordinances protecting biological resources, including trees, watercourses, and riparian vegetation, would be potentially significant.

Mitigation Measures

Implementation of mitigation measures BIO-3 through BIO-5 would help to ensure consistency with local ordinances to protect watercourses and riparian habitat. These measures, as discussed above, would require individual projects listed in the NCPP to delineate sensitive aquatic environments, to design or modify the project to avoid direct and indirect impacts on these areas, and to ensure no net loss of habitat.

In addition, Mitigation Measure BIO-7 would be required to minimize impacts to trees protected by local jurisdictions.

BIO-7 Tree Protection. If the biological resources screening and assessment required by Mitigation Measure BIO-1 determines that construction may impact trees protected by local agencies, the project sponsor shall procure all necessary tree removal permits. A tree protection and replacement plan shall be developed by a certified arborist as appropriate. The plan shall include, but would not be limited to, an inventory of trees to within the construction site, setbacks from trees and protective fencing, restrictions regarding grading and paving near trees, direction regarding pruning and digging within the root zone of trees, and requirements for replacement and maintenance of trees. If protected trees will be removed, replacement tree plantings of like species in accordance with local agency standards, but at a minimum ratio of 2:1 (trees planted to trees impacted), shall be installed on-site or at an approved off-site location and a restoration and monitoring program shall be developed and implemented for a minimum of seven years or until stasis has been determined by certified arborist. If a protected tree shall be encroached upon but not removed, a certified arborist shall be present to oversee all trimming of roots and branches.

Implementation of mitigation measures BIO-3 through BIO-5 and BIO-7 would reduce potential impacts from conflicts with local ordinances protecting biological resources to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

f) There are no existing landscape-level Habitat Conservation Plans or Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans within Napa County. Thus, implementation of the Plan would not conflict with any such plans.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless 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 historical resource as defined in §15064.5?	☐	☐	☐	■
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	■	☐	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES				
-- Would the project:				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	■	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	■	☐	☐

a) Based on a review of known historic resources listed by the Napa County Historical Society, the pedestrian projects listed in the NCPP would not directly affect any such resources in Napa County (Napa County Historical Society, 2015). Individual projects adjacent to historic properties would involve construction within public road rights-of-way and would not directly affect any historic structures. The proposed streetscape improvements would result in minor changes to the setting of historic resources and may in fact improve the visual quality of their settings. Furthermore, the projects would improve multi-modal access to historic structures, increasing public access to and appreciation of these resources. The NCPP would not cause a substantial adverse change in the significance of historic resources.

NO IMPACT
b, d) Pedestrian projects listed in the NCPP that would require ground disturbance for grading, underground drainage, or wiring could adversely affect archaeological resources or human remains. Although most projects would occur in highly disturbed urban areas where ground disturbance is unlikely to encounter intact archaeological resources or human remains, unanticipated cultural resources could be affected. Disturbance of such resources during construction could expose them to potential vandalism, displace them from their original context, or impair their integrity. Impacts to archaeological resources and human remains would be potentially significant unless mitigation is incorporated.

Mitigation Measures

In order to protect archeological resources, the following mitigation measures would apply for projects that would disturb native (e.g., non-fill) soils.

CR-1 **Study of Archaeological Resources.** The sponsor of a pedestrian project listed in the NCPP that involves earth disturbance below the existing road base or on previously undisturbed ground, the installation of pole signage or lighting, or construction of permanent above-ground structures or roadways shall ensure that the following elements are included in the project's individual environmental review to protect archaeological resources:

1) A map defining the Area of Potential Effects (APE) shall be prepared for improvements which involve earth disturbance, the installation of pole signage or lighting, or construction of permanent above-ground structures. This map shall indicate the areas of primary and secondary disturbance associated with construction and operation of the facility and shall help in determining whether known archeological, paleontological or historical resources are located within the impact zone.

2) A preliminary study of each project area, as defined in the APE, shall be completed to determine whether or not the project area has been studied under an earlier investigation, and to determine the impacts of the previous project.

3) If the results of the preliminary studies indicate additional studies are necessary, field studies and/or other documentary research shall be developed and completed (Phase I studies). For projects that involve work in State waters under the jurisdiction of the California State Lands Commission, documentary research shall include contacting the Commission to obtain its records of significant submerged archaeological sites or historic or cultural resources (i.e., resources that have remained in State waters for more than 50 years). Negative results would result in no additional studies for the project area.

4) Based on positive results of the Phase I studies, an evaluation of identified resources shall be completed to determine the potential eligibility/ significance of the resources (Phase II studies).

5) Phase III mitigation studies shall be coordinated with the Office of Historic Preservation, as the research design would require review and approval from the OHP. In the case of prehistoric or Native American related resources, the Native American Heritage Commission and/or local representatives of the Native American population shall be contacted for input and permitted to respond to the testing/mitigation programs.

CR-2 **Archaeological Monitoring.** If development of the proposed improvement requires the presence of an archaeological, Native American, or paleontological monitor, the project sponsor shall ensure that a Native American monitor, certified archaeologist, and/or certified paleontologist, as applicable, monitors the grading and/or other initial ground-altering activities. If cultural resource remains are encountered during construction or land modification, the construction manager shall ensure that all ground disturbance activities are stopped, and the qualified archaeologist shall assess the nature, extent, and potential significance of

any cultural remains. The schedule and extent of the monitoring shall depend on the grading schedule and/or extent of the ground alterations. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual project permitting.

CR-3 **Cultural Material Recovery.** The project sponsor shall ensure that materials recovered over the course of any given improvement are adequately cleaned, labeled, and curated at a recognized repository. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual project permitting. The relocation and final disposition of cultural resources recovered on State lands under the jurisdiction of the California State Lands Commission shall be approved by the Commission.

CR-4 **Avoidance and Mitigation of Cultural Resources.** The project sponsor shall ensure that mitigation for potential impacts to significant cultural resources includes one or more of the following:

- Realignment of the project right-of-way (avoidance, the most preferable method)
- Capping of the site and leaving it undisturbed
- Addressing structural remains with respect to NRHP guidelines (Phase III studies)
- Relocating structures per NRHP guidelines
- Creation of interpretative facilities, and/or
- Development of measures to prevent vandalism.

This can be accomplished through placement of conditions on the project by the local jurisdiction during individual project permitting.

CR-5 **Discovery of Human Remains.** If human remains are found during earth-disturbing activities for a project listed in the NCPP, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner shall be notified immediately. If the human remains are determined to be prehistoric, the coroner shall notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

c) Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, diagnostically important, or are common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and processes, or which could improve our understanding of paleochronology, paleoecology, paleophylogeography, or depositional histories. Evaluating the potential for impacts to paleontological resources from project development involves three distinct steps: 1) identify the geologic units that occur (i.e., are mapped at the surface or may be directly underlying mapped units) within the study area; 2) determine the paleontological sensitivity of mapped or underlying geologic units within the study area; and 3) determine if projects that may be developed within the study area have the potential to disturb paleontologically sensitive geologic units.

Geologic Setting. The Napa Valley, the main central valley of Napa County, developed from faulting and folding generated by transpression and rotation along the Pacific-North American plate margin (Graymer et al., 2007). All of the NCPP projects are located within the Napa Valley. This valley is a northwest-southeast trending structural trough bounded by the Mayacamas Mountains to the west and north and the Vaca Mountains to the east. The trough itself is dominated by the Napa River and its tributaries, and has been an alluvial sediment catchment basin for at least the last 12 million years (Graymer et al., 2007).

All of the NCPP project areas, except those located within Angwin, are underlain by mapped units of Holocene and late Pleistocene alluvial sediments (gravel, sand, and silt) and/or artificial fill (Bezore et al., 2002; Bezore et al., 2005; Clahan et al., 2004; Clahan et al., 2005; Delattre and Gutierrez, 2013; Graymer et al., 2007). Angwin lies atop mainly Miocene to Pliocene volcanics (Graymer, 2007).

Paleontological Sensitivity. The Society of Vertebrate Paleontology (SVP) (2010) describes sedimentary rock units as having a high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. Significant paleontological resources are fossils or assemblages of fossils, which are unique, unusual, rare, uncommon, or diagnostically or stratigraphically important, and those which add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally. While these standards were specifically written to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines. The paleontological sensitivity of proposed project sites is based on the following SVP (2010) categories:

I. *High Potential (sensitivity)* – Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations that contain significant nonrenewable paleontological resources anywhere in their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils,

large or small, vertebrate, invertebrate, or botanical; and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas that contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.

II. *Low Potential (sensitivity)* – Sedimentary rock units that are potentially fossiliferous, but have not yielded fossils in the past, or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic, phylogenetic species and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potential for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations. However, as excavation for construction proceeds, it is possible that significant and unanticipated paleontological resources might be encountered and require a change of classification from Low to High Potential and, thus, require monitoring and mitigation if the resources are found to be significant.

III. *Undetermined Potential (sensitivity)* – Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.

IV. *No Potential* – Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

Throughout the Napa Valley (and river-associated plains and basin of Napa County), Pleistocene-aged sediments directly underlie Holocene-aged surface deposits at shallow depths (i.e., greater than 5 feet; Graymer et al., 2007). Pleistocene-aged alluvium has an extensive record of abundant and diverse vertebrate fauna throughout California (Agenbroad, 2003; Bell et al., 2004; Jefferson, 1988, 1991; Merriam, 1911; Reynolds et al., 1991; Savage et al., 1954; Scott and Cox, 2008; Springer et al., 2009; Wilkerson et al., 2011; Winters, 1954); however, even though no vertebrate fossils have been recorded from Pleistocene sediments in Napa County, those sediments are always considered to have high paleontological sensitivity wherever they occur.

Paleontological Impact Analysis. The NCPP would provide for various types of development actions including sidewalk widening, cross walk improvements, roadway improvements, trail improvements, pedestrian safety improvements, open space pathways, bridge improvements, and development of new bridges, roads, overpasses, trails, sidewalks and other crossings. The majority of projects would be located within the limits of existing roads, sidewalks and trails or other previously disturbed areas and would cause little or no disturbance of previously undisturbed geologic units and so would have no impacts to paleontological resources. However, projects such as new bridges and trails may involve ground disturbance in previously undisturbed areas depending on individual project

footprints. Overall, ground disturbance associated with construction of proposed projects has very low potential to directly disturb geologic units with high paleontological sensitivity at shallow depths (i.e., less than or equal to 5 feet). Nonetheless, development actions involving more extensive ground disturbance that would exceed more than five feet in depth may disturb geologic units with potentially high paleontological sensitivity. Impacts to paleontological resources resulting from ground disturbing construction activity of this nature could include damage or destruction of fossils, or loss of geologic context for fossils, and would be considered a significant impact without mitigation.

Mitigation Measures

The following mitigation measures shall be implemented for individual projects where ground disturbance is expected to exceed more than five feet in depth, to reduce potential impacts to a less than significant level.

CR-6 **Project Plan Review.** A qualified paleontologist shall review all project plans where ground disturbance is expected to exceed more than five feet in depth to determine if paleontologically sensitive units could be impacted. If it is determined that no paleontologically sensitive units could be impacted, then specific project impacts shall be deemed less than significant and no further mitigation would be required. If it is determined that paleontologically sensitive unit could be impacted, then the subsequent mitigation measures provided here shall be followed as a minimum standard.

CR-7 **Paleontological Mitigation Plan.** A qualified paleontologist shall prepare a Paleontological Mitigation Plan (PMP) designed to outline the procedures and protocol for conducting paleontological monitoring and mitigation. The PMP shall be supervised by a qualified paleontologist. A qualified paleontologist (Principal Paleontologist) is defined by the SVP (SVP 2010). Monitoring shall be conducted by a qualified paleontological monitor as defined by the SVP (SVP 2010). The PMP shall address the following procedures and protocols:

- Timing and duration of monitoring
- Procedures for work stoppage and fossil collection
- The type and extent of data that should be collected with any recovered fossils
- Identify an appropriate curatorial institution
- Identify the minimum qualifications for qualified paleontologists and paleontological monitors
- Identify the conditions under which modifications to the monitoring schedule can be implemented
- Details to be included in the final monitoring report.

CR-8 **Paleontological WEAP.** Prior to the start of construction, construction personnel shall be informed on the appearance of fossils and the

procedures for notifying paleontological staff should fossils be discovered by construction staff.

CR-9 **Paleontological Monitoring and Salvage**. Any excavations exceeding five feet in depth shall be monitored on a full-time basis by a qualified paleontological monitor until at least 50 percent of the grading or excavation is completed. After 50 percent of the grading or excavation is complete, if it can be demonstrated that the level of monitoring should be reduced, the Principal Paleontologist may amend the monitoring and mitigation schedule. Ground disturbing activity that does not exceed five feet in depth in young alluvium would not require paleontological monitoring.

If fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them. Typically fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist shall have the authority to temporarily direct, divert, or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.

Once salvaged, fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology), along with all pertinent field notes, photos, data, and maps.

Upon completion of ground disturbing activity (and curation of fossils if necessary) the qualified paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated.

Implementation of mitigation measures CR-6 through CR-9 would reduce impacts to paleontological resources to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VI. 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?	☐	■	☐	☐
ii) Strong seismic ground shaking?	☐	■	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	■	☐	☐
iv) Landslides?	☐	■	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	■
d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	■	☐
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?	☐	☐	☐	■

a.i, a.ii) The proposed pedestrian projects listed in the NCPP would be located in the northern San Francisco Bay Area, a region of intense seismic activity. Two types of seismic faults exist in Napa County, normal faults where two parts of the earth's surface pass by each other and thrust faults where one part of the earth's surface moves over another. As shown in Figure 6, four faults of concern occur in Napa County: Jericho Valley, Knoxville (Hunting Creek Fault Zone), Mount George, and Cutting Wharf (Green Valley Fault Zone).[1] The Cutting Wharf fault

[1] Figure SAF-1 in the Napa County General Plan (Earthquake Faults) identifies the Alquist-Priolo Earthquake Fault Zones in Napa County under different names: Hunting Creek and Green Valley.

cuts on northwest-southeast axis through the center of American Canyon. Proposed bridges and over/undercrossings in American Canyon potentially could be constructed atop this fault and could expose pedestrians and bicyclists to safety risks from fault rupture. These projects include grade-separated crossings of SR 29 at American Canyon Road, Rio Del Mar, and Paoli Loop Road, a grade-separated pedestrian/bicycle crossing of railroad tracks east of SR 29, and a pedestrian bridge on the Walsh Creek Neighborhood Pathway. Impacts from fault rupture would be potentially significant.

Figure 7 shows the relative magnitude of groundshaking expected in Napa County. Strong groundshaking at any of the project sites could result from a rupture of local faults in Napa County, as well as of any of the major Bay Area regional earthquake faults (Napa County, General Plan EIR, 2007). Such strong ground shaking motion could damage elevated or other structures such as bridges and over/under crossings listed in the NCPP. Projects requiring bridges and over/under crossings would require further technical studies and further environmental review to ensure structural integrity in the event of strong groundshaking. Impacts from groundshaking would be potentially significant

Mitigation Measures

Compliance with mitigation measures G-1 and G-2 would reduce potential impacts from fault rupture and seismically induced ground shaking to a less than significant level.

G-1 **Fault Rupture Zones.** Bridge and over/under-crossing projects listed in the NCPP shall be placed in areas outside of fault rupture zones whenever feasible, in accordance with State and local provisions. If avoidance is not possible, detailed geologic and seismic studies must be conducted to locate active or potentially active fault traces. Structures shall then be placed outside of an appropriate setback distance as determined by a qualified engineer.

G-2 **Earthquake Stability.** If a bridge or over/under-crossing project listed in the NCPP is located in a zone of high potential groundshaking intensity, the project sponsor shall ensure that the structure is designed and constructed to the latest geotechnical standards. In most cases, this will necessitate site-specific geologic and soils engineering investigations conducted by a qualified geotechnical expert. Any investigations shall comply with the California Geological Survey's *Guidelines for Evaluating and Mitigating Seismic Hazards in California.*

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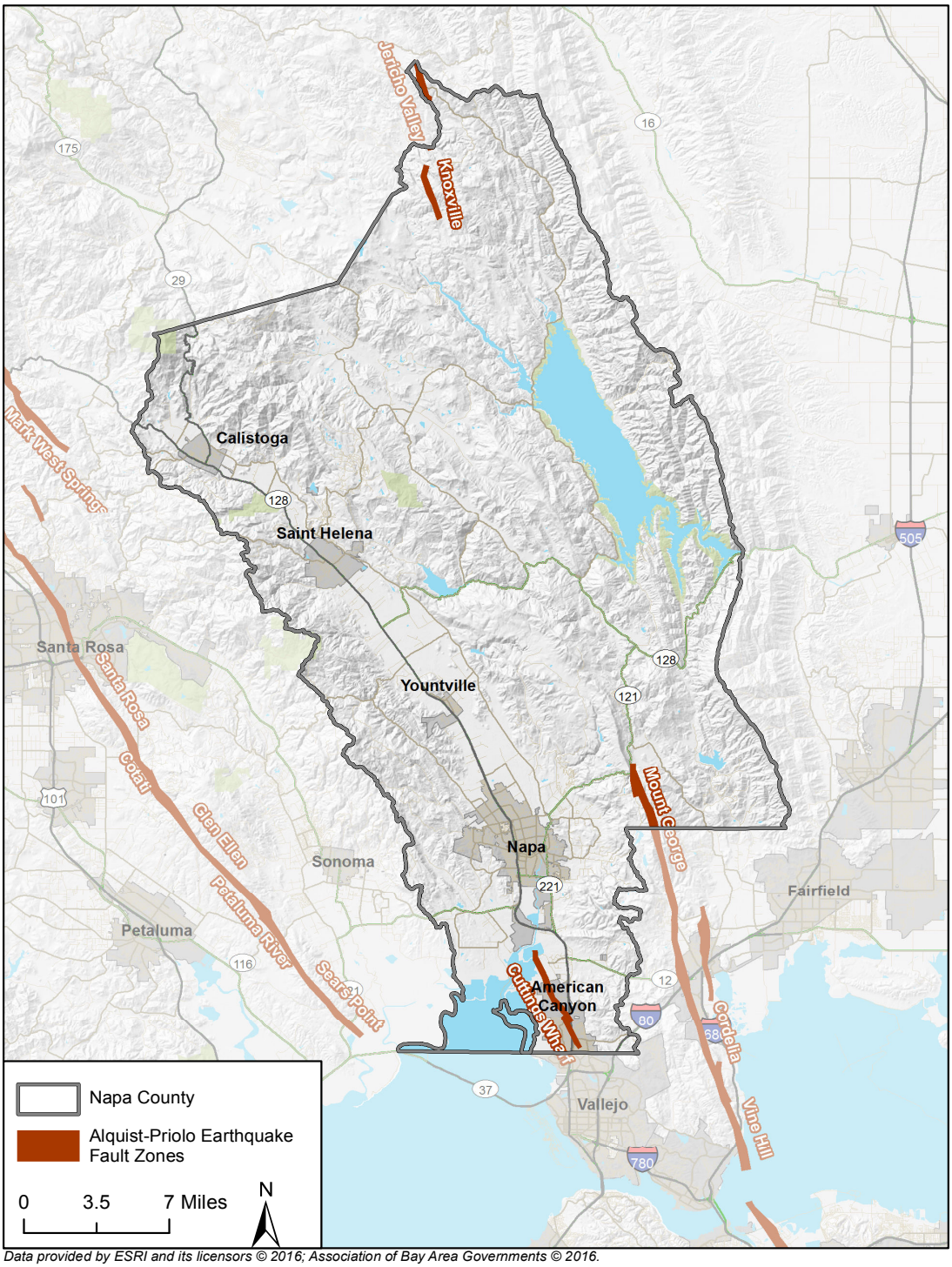
a.iii, a.iv) Liquefaction, which is primarily associated with unconsolidated, saturated materials, is most common in areas of sand and silt or on reclaimed lands. In areas underlain by unconsolidated sediments, ground failure and differential settlement could result from a severe earthquake, damaging paved surfaces and elevated structures. The Association of Bay Area Governments (ABAG) has produced liquefaction hazard maps, which show areas of susceptibility to liquefaction. On those maps, areas in the vicinity of San Pablo Bay and along the lower and middle reaches of the Napa River are shown as having liquefaction potential



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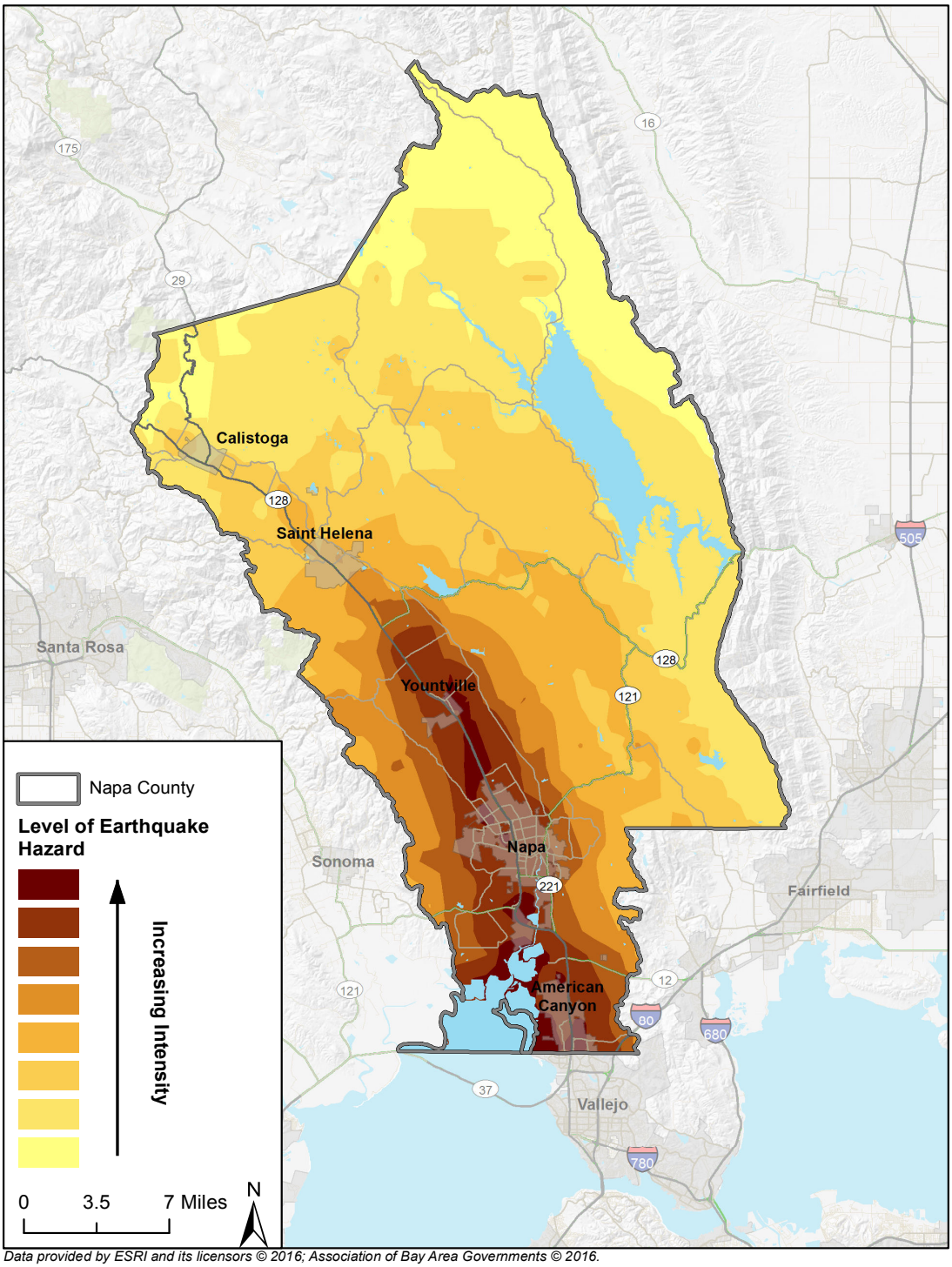
Earthquake Fault Zones

Figure 6



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Earthquake Shaking Potential

Figure 7

(ABAG, 2015). Liquefaction potential is highest in areas underlain by poorly engineered Bay fills, Bay mud, and unconsolidated alluvium. In areas underlain by consolidated bedrock, seismic hazards include small rock falls and possibly landslides that could harm pedestrian users and damage the improvements listed in the NCPP. Generally, projects requiring bridges or over/under crossings would require further technical studies and further environmental review. Impacts from seismic-related ground failure and landslides would be potentially significant.

Mitigation Measures

Mitigation measures G-3 and G-4 would be required to minimize risks to public safety and structural integrity from seismic-related ground failure and landslides.

G-3 **Liquefaction Resilience.** If a bridge and over/under-crossing project is located in an area of moderate to high liquefaction potential, the project sponsor shall ensure that these structures are designed based upon appropriate geology, soils, and earthquake engineering studies to be completed by a qualified engineer. The facility must be designed to CBC standards. Possible design measures include deep foundations, removal of liquefiable materials, and dewatering.

G-4 **Slope Stabilization.** If a bridge and over/under-crossing project requires cut slopes over 20 feet in height or is located in areas of bedded or jointed bedrock, the project sponsor shall ensure that specific slope stabilization studies are conducted, as determined by a qualified engineer. Possible stabilization methods include buttresses, retaining walls and soldier piles.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

b, c) The sidewalk and crosswalk improvements listed in the NCPP that would be constructed within existing paved right-of-ways are unlikely to cause substantial soil erosion or loss of topsoil. However, projects located in hilly and mountainous areas such as Angwin, where pedestrian improvements could require hillside cut and fill, bridge and over/under-crossing projects, and off-street pathway projects could cause substantial erosion and sedimentation. In addition, soil erosion could occur during earth-disturbing activities associated with construction of the proposed projects. Although the preparation of erosion control plans in accordance with applicable local ordinances would be required, additional erosion control measures may be necessary to minimize the risk of erosion. Impacts would be potentially significant.

Mitigation Measures

For projects involving the disturbance of at least one acre, Mitigation Measure W-1 would require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) to prevent impacts on stormwater quality, including best management practices to control erosion and sedimentation during and following construction. Implementation of this mitigation measure would reduce impacts from erosion and sedimentation to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

d) In areas underlain by expansive soils as found in portions of southern and central Napa Valley, high shrink/swell soil movement can disrupt or damage paved surfaces as well as the foundations of public access facility structures such as bridges or over/under crossings. The sidewalk and crosswalk improvements and other facilities that would be constructed within existing paved right-of-ways are unlikely to experience substantial shrink-swell from soil movement. However, site-specific geotechnical investigations would be required, especially for projects involving construction of bridges and over/under-crossings where expansive soils could pose a public safety and structural hazard. Impacts would be potentially significant.

Mitigation Measures

Mitigation Measure G-5 would be required to reduce potential hazards from expansive soils.

> **G-5** **Expansive Soils.** If a pedestrian project listed in the NCPP is located in an area of highly expansive soils, the project sponsor shall ensure that a site-specific geotechnical investigation is conducted by a qualified engineer. The investigation shall identify hazardous conditions and recommend appropriate design factors to minimize hazards. Such measures could include concrete slabs on grade with increased steel reinforcement, removal of highly expansive material and replacement with non-expansive import fill material, or chemical treatment with hydrated lime to reduce the expansion characteristics of the soils.

With implementation of this mitigation measure, expansive soils would be remediated on a site-specific basis, and potential impacts would be reduced to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

e) None of the proposed projects involve the construction of septic tanks or alternative waste water disposal systems.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS				
-- Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

a) Construction activities associated with the proposed pedestrian network projects would generate temporary short-term greenhouse gas (GHG) emissions, primarily due to truck trips and operating construction equipment, while the pedestrian projects would reduce long-term emissions. Construction-related emissions are speculative at this programmatic level of analysis because such emissions depend on the characteristics of individual pedestrian projects. During construction, site preparation and grading typically emit the greatest amount of GHG emissions, due to the use of grading equipment and soil hauling. The precise construction timing and construction equipment for individual projects is not specifically known at this time. However, the BAAQMD's *California Environmental Quality Act Air Quality Guidelines* from 2010 have no significance thresholds for construction-related GHG emissions. When individual projects listed in the Plan are proposed in the future, the lead agency for environmental review would be required to evaluate them based on an appropriate threshold for construction-related emissions, such the threshold of 1,100 metric tons CO_2e/year used by Napa County.

Any short-term construction impacts would be offset by the long-term reduction of GHG emissions after the pedestrian improvements are built, by facilitating biking and walking as substitute modes of travel for driving motorized vehicles. The Plan would help reduce vehicle miles traveled by creating bike paths, sidewalks, and pedestrian paths. In addition, reducing the number of vehicles on the road would incrementally reduce traffic congestion and thereby reduce GHG emissions from vehicle delay. Therefore, impacts from the generation of GHG emissions would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b) The proposed Pedestrian Plan would not conflict with any applicable plan, policy, or regulation adopted in Napa County for the purpose of reducing GHG emissions. As discussed above, the proposed pedestrian projects would reduce motor vehicle traffic and thus decrease long-term GHG emissions.

One of the goals of AB 32 is to reduce statewide GHG emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels, the same requirement as under S-3-05). The California Air Resources Board (ARB)'s Scoping Plan outlines the main State strategies for reducing GHGs to meet the 2020 deadline and encourages local governments to similarly implement these strategies to meet the 2020 targeted emissions level. The Plan would help reduce vehicle miles traveled by creating pedestrian and bicycle facilities, thereby reducing GHG emissions and contributing to strategies of the ARB Scoping Plan.

There is currently no adopted countywide Climate Action Plan for unincorporated Napa County. As of February 2016, the Napa County Department of Planning, Building, and Environmental Services held a public outreach meeting to receive comments for the draft GHG inventory, the first step in preparing a CAP for the unincorporated County. The following plans and policies are in place for incorporated municipalities:

- The City of Napa's Sustainability Plan (2012)
- City of Calistoga Climate Action Plan (2014)
- City of American Canyon Energy Efficiency Climate Action Plan (2012)

These plans do not specify a specific greenhouse gas emissions limit or goal. However, the plans lay out several goals which indirectly relate to greenhouse gas emissions reductions including energy efficiency, waste reduction, and transportation. The Plan would comply with these goals. For instance, the proposed pedestrian improvements in Calistoga would be consistent with Objective T-1 in the City's CAP to "promote a walking- and bicycling-friendly community," as a means of encouraging less personal vehicle use (Calistoga, 2014).
Because the Plan would be consistent with applicable GHG reduction strategies in Napa County, impacts from conflicts with any GHG reduction plan would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. 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?	☐	☐	■	☐
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?	☐	☐	■	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	☐	■	☐	☐
d) Be located on a site which is included on a list of hazardous material 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?	☐	■	☐	☐
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?	☐	☐	■	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
-- Would the project:				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	■	☐

a, b) None of the proposed pedestrian improvements would involve the transport, use, or disposal of hazardous materials other than the routine use of construction-related chemicals (e.g, fuel and engine fluids for equipment, paint, and asphalt) and would not create conditions which could lead to the release of hazardous substances. Users of the pedestrian improvements would be subject to a very small risk of exposure to upset and accident conditions from the release of hazardous materials being transported on adjacent roadways. However, this is not a reasonably foreseeable risk to pedestrians and bicyclists.

LESS THAN SIGNIFICANT IMPACT

c) Planned pedestrian improvements in the NCPP include Safe Routes to School and other projects located within one-quarter mile of schools. Ground disturbance for new sidewalks, bridges, and other improvements near schools could expose students and staff to emissions of fugitive dust; however, implementation of Mitigation Measure AQ-1 would apply the BAAQMD's recommended measures to minimize fugitive dust emissions. The projects also would not involve hazardous emissions or handling of hazardous materials beyond the routine temporary use of fuel and engine fluids for construction equipment and the application of materials like asphalt and paints. Therefore, potential impacts to schools would be mitigable to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

d) According to databases of hazardous material sites maintained by the California Department of Toxic Substances Control (EnviroStor) and the California State Water Resources Control Board (GeoTracker), approximately 85 sites occur in various locations within Napa County. Many of these sites are at gas stations or agricultural/industrial/energy facilities that would not be affected by the placement of surface improvements. Trail, sidewalk, crosswalk and other pedestrian improvements that involve the disturbance of soil at or near these hazardous materials sites could potentially expose people and the environment

to hazardous substances. Therefore, impacts would be potentially significant. In order to mitigate this impact to a less than significant level, Mitigation Measure HAZ-1 shall be implemented.

Mitigation Measures

Mitigation Measure HAZ-1 would be required to identify listed hazardous material sites on and near planned pedestrian improvements located near hazardous materials releases, to mitigate for hazardous contaminants where necessary.

HAZ-1 **Hazardous Material Sites Investigation and Remediation.** Prior to construction of any pedestrian improvement that requires ground disturbance, the project sponsor shall consult lists of hazardous material sites maintained by the California Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB). Where a proposed improvement is located near an identified site, follow up Phase I, and as appropriate, Phase II hazardous waste site investigations shall be completed, and any contaminants shall be remediated to concentrations below applicable screening-level thresholds for human health. No disturbance of contaminated soil shall be permitted unless an approved site cleanup and remediation plan has been implemented for the identified hazardous waste sites.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

e) Pedestrians using the proposed facility improvements could potentially be exposed to safety hazards and temporary and intermittent excessive noise levels. Some proposed improvements are located within safety zones identified in the Airport Land Use Compatibility Plans of the Napa County Airport near the cities of Napa and American Canyon and of Angwin-Parrett Field in Angwin. These plans establish policies and guidelines for land use compatibility to local jurisdictions affected by airport activities. It is anticipated that none of the proposed pedestrian improvement projects, due to their limited height and population density, would be in conflict with either airport compatibility plan. The Napa County Airport Land Use Commission (ALUC) has the authority to review local plans for consistency with the Airport Land Use Compatibility Plan. Projects within the vicinity of Napa Airport facilities would be reviewed for consistency with the Napa County Airport Land Use Compatibility Plan by the Napa County Airport Land Use Commission, and projects may be realigned or subject to additional review if necessary in order to avoid airport land use conflicts (Napa County Airport Land Use Commission, 1999). This established process would reduce potential impacts to a less-than-significant level.

LESS THAN SIGNIFICANT IMPACT

f) Private airstrips in Napa County include Lake Berryessa Seaplane Base, Moskowite Airport, River Meadow Farm Heliport, and Pope Valley Airport (Napa County, 2007). However, no projects listed in the NCPP are located within two miles of these private airstrips. Therefore, implementation of the Plan would not result in a new safety hazard from proximity to airstrips.

NO IMPACT

g) The proposed pedestrian improvements would augment the existing circulation system, giving people better multi-modal options to escape from a hazard. Therefore, the proposed projects would not impair the implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan.

NO IMPACT

h) The risk of wildland fires is high throughout much of rural Napa County. Areas mapped as having High and Very High Fire Hazard Severity are located outside the urbanized areas generally in the northern half of the County along ridgelines including the Western Mountains, Eastern Mountains, Angwin, and Livermore Ranch (Napa County, General Plan, Figure SAF-2, 2008). The creation of new pedestrian routes could place users in the vicinity of areas prone to wildland fires, especially in Angwin. However, new off-street pedestrian pathways in Angwin would be adjacent to roads or within already developed sites and would not provide access to rural areas with high quantities of flammable vegetation. In addition, the County has an existing "Napa Firewise" program that educates residents on the dangers of wildland fires and provides strategies landowners can take to reduce the threat of fires on their property (Napa Firewise, 2015). The continuation of this program would reduce fire hazards to a less-than-significant level.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	■	☐	☐
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 or 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)?	☐	☐	■	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY				
-- Would the project:				
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?	☐	■	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including 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?	☐	☐	■	☐
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?	☐	■	☐	☐
f) Otherwise substantially degrade water quality?	☐	■	☐	☐
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?	☐	☐	☐	■
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	■	☐	☐
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?	☐	☐	■	☐
j) Result in inundation by seiche, tsunami, or mudflow?	☐	☐	■	☐

a, e, f) Planned pedestrian improvements that would be constructed within existing paved rights-of-way (e.g., sidewalks, crosswalks, and roundabouts) are unlikely to cause substantial stormwater runoff or violate water quality standards. However, ground disturbance associated with construction of projects outside existing paved rights-of-way, especially grading and vegetation removal for new bridges over streams, may generate more substantial erosion and sedimentation in waterways. In addition, converting pervious surfaces into paved pedestrian

facilities could increase the amount of runoff from urban areas. Erosion control measures, in compliance with the U.S. Environmental Protection Agency's National Pollution Discharge Elimination System (NPDES) program, would be necessary to minimize adverse effects on water quality. Impacts would be potentially significant.

Mitigation Measures

Mitigation measures W-1 and W-2 would be required to minimize water quality impacts from stormwater runoff and erosion by complying with NPDES permitting requirements.

W-1 **Stormwater Pollution Prevent Plan.** For a pedestrian project that would disturb at least one acre, a Stormwater Pollution Prevention Plan (SWPPP) shall be developed prior to the initiation of grading and implemented for all construction activity on the project site. The SWPPP shall include specific BMPs to control the discharge of material from the site and into the creeks and local storm drains. BMP methods may include, but would not be limited to, the use of temporary retention basins, straw bales, sand bagging, mulching, erosion control blankets and soil stabilizers.

W-2 **Percolation Basins and Traps.** The sponsor of a widening or roadway extension project shall ensure that the improvement directs runoff into subsurface percolation basins and traps which would allow for the removal of urban pollutants, fertilizers, pesticides, and other chemicals.

With implementation of a SWPPP for projects involving ground disturbance on at least one acre and runoff control measures for widening and roadway extension projects, water quality impacts would be reduced to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

b) The proposed pedestrian projects would incrementally increase the area of impervious surface in Napa County by roadway extensions, new bridges, sidewalks, and other pedestrian improvements. However, this modest increase in impervious surface would not substantially interfere with groundwater recharge. Most pedestrian and other facilities would be constructed within existing paved right- of-ways and other projects would have minimal impermeable surface areas and the runoff from those surfaces would be captured for recharge. Furthermore, as discussed in Section XVII, *Utilities and Service Systems*, water demand for landscaping would be minimal. Therefore, the Plan would not result in the depletion of groundwater supplies or interference with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.

LESS THAN SIGNIFICANT IMPACT

c, d, h) The construction of new bridges across streams in the cities of Calistoga, Napa, and American Canyon could potentially alter drainage patterns, causing erosion and sedimentation or localized flooding. Bridges also may be constructed within 100-year floodplains. Furthermore, sea level rise will expand the affected acreage of 100-year floodplains along the

tidal lower Napa River and could increase the severity of floods in this area. Unless properly designed and engineered, new bridges have the potential to block flood flows, divert floodwaters out of creeks and waterway channels, and expose roadway users to flooding. Impacts would be potentially significant.

Mitigation Measures

Implementation of Mitigation Measure W-1 would reduce erosion and sedimentation impacts through the use of BMPs to control the discharge of material from project sites into the creeks. In addition, Mitigation Measure W-3 would be required to prevent substantial alteration of drainages and flooding from bridge projects.

> **W-3** **Structures Within Drainages.** Prior to the final design of any structure such as a bridge that is placed within or over the flow line of a waterway, or crosses over a creek, and where the structure has the potential to block or impede flood flows and alter hydrologic conditions, the project sponsor shall complete a detailed hydraulic analysis of the site and structure. This analysis shall: 1) verify that the project is incompliance with local floodplain management ordinances and related General Plan policies regarding flood protection and protection of creek resources, and 2) determine the appropriate sizing, geometry, and elevations of the structures so as not to impact creek hydrology and flood flow conditions. The hydraulic analysis and design recommendations shall require review and approvals of the local jurisdiction's Engineer and Flood Plain Manager. In addition, bank stabilization and erosion control measures shall be implemented along creek crossings, as determined by a qualified engineer.

These measures would reduce hydrologic impacts from new bridges to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

g) No housing is proposed as part of this Plan nor would it cause the placement of housing within a 100-year flood hazard area.

NO IMPACT

i) The proposed pedestrian projects would not expose people or structures to a significant risk of loss, injury, or death involving flooding due to failure of a dam or levee because they would not involve the placement of structures for occupancy of people in a flood-prone area. While localized flooding may occur in the event of a levee break, the County and cities would rely on their existing emergency notification, response warning, and bikeway/trail evacuation procedures if floodwaters reach areas with pedestrian facilities. Furthermore, dams are routinely inspected and monitored for compliance with seismic safety standards.

LESS THAN SIGNIFICANT IMPACT

j) According to ABAG's mapping of tsunami inundations areas for emergency planning, the shoreline of the lower Napa River near American Canyon is vulnerable to tsunamis. However, the proposed pedestrian improvements are located at higher ground and are not within the mapped tsunami inundation area. The projects also are not located near a large standing body of water that may be subject to a seiche, or standing wave. In addition, the Napa County Office of Emergency Services would rely on its existing system of emergency notification developed for multi-hazard response to warn trail users and close trail segments as necessary.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. LAND USE AND PLANNING				
-- Would the project:				
a) Physically divide an established community?	☐	☐	☐	■
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?	☐	☐	■	☐
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■

a) The purpose of the proposed projects listed in the NCPP is to increase connectivity within and between communities by improving pedestrian access. Therefore, the Plan would not divide an established community, but rather enhance its connectivity.

NO IMPACT

b) The NCPP was developed in coordination with applicable land use plans for the County and cities and towns within the County, and all projects within the Plan would be consistent with and comply with those local plans and ordinances in place to avoid or mitigate an environmental effect. The Plan is also consistent with the following objectives in ABAG's Plan Bay Area (2013):

> *Target #1: Reduce per-capita CO_2 emissions from cars and light-duty trucks by 15 percent.*
> *Target #4: Reduce by 50 percent the number of injuries and fatalities from all collisions (including bike and pedestrian).*

Target #5: Increase the average daily time walking or biking per person for transportation by 70 percent (for an average of 15 minutes per person per day) – public health
Target #9a: Increase non-auto mode share by 10 percentage points (to 26 percent of trips).
Target #9b: Decrease automobile vehicle miles traveled (VMT) per capita by 10 percent.

As discussed in Section VII, *Greenhouse Gases*, the NCPP would facilitate a reduction in long-term GHG emissions by encouraging people to substitute walking and bicycling for driving motor vehicles. By constructing enhanced crosswalks, bulbouts, sidewalks, and other pedestrian safety features, the projects listed in the NCPP would reduce injuries and fatalities from all collisions. The Plan would also further public health goals of increasing physical activity through walking. In addition, the projects listed in the NCPP were planned in coordination with local jurisdictions and would be consistent with their adopted circulation elements. Therefore, the NCPP would be consistent with applicable local and regional plans and policies.

LESS THAN SIGNIFICANT IMPACT

c) There are no existing landscape-level Habitat Conservation Plans or Natural Community Conservation Plans within Napa County. Thus, implementation of the NCPP would not conflict with any such plans.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. 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?	☐	☐	☐	■
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?	☐	☐	☐	■

a)-b) According to the Napa County General Plan, there are currently four active mines (rock quarries) in Napa County, two of which are not presently being mined but only serve as mineral storage areas. These quarries produce construction materials. The only substantial mine currently in operation in Napa County is Napa Quarry (Napa County WICC, 2016). The size and location of the proposed pedestrian projects within or adjacent to urban areas would preclude them from having an impact on the recovery of future resources at these mining sites.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. 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?	☐	■	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c) A substantial permanent increase in ambient noise levels 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, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	■	☐
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?	☐	☐	■	☐

a, d) Construction of the proposed pedestrian projects has the potential to create excessive levels of noise on a temporary basis. Equipment operating during the construction of individual projects would temporarily increase noise in the immediate vicinity of construction sites. As shown in Table 4, average noise levels associated with using heavy equipment at construction sites can range from about 76 to 89 dBA at 50 feet from the source, depending upon the types of equipment in operation at any given time and the phase of construction. The highest noise levels generally occur during excavation and foundation development, which involve using such equipment as backhoes, bulldozers, shovels, and front-end loaders.

Table 4
Typical Construction Noise Levels (in dBA)

Equipment	Typical Level 25 Feet from the Source	Typical Level 50 Feet from the Source	Typical Level 100 Feet from the Source	Typical Level 200 Feet from the Source	Typical Level 800 Feet from the Source
Air Compressor	87	81	75	69	57
Backhoe	86	80	74	68	56
Concrete Mixer	91	85	79	73	61
Grader	91	85	79	73	61
Paver	95	89	83	77	65
Saw	82	76	70	64	52
Scraper	95	89	83	77	65
Truck	94	88	82	76	64

Source: Typical noise level 50 feet from the source was taken from FTA, May 2006. Noise levels at 25 feet, 100 feet, 200 feet, and 800 feet were extrapolated using a 6 dBA attenuation rate for the doubling of distance. Noise levels are measured in Leq for the expected duration that each piece of equipment is expected to operate. Each noise level assumes the piece of equipment is operating at full power for the expected duration to complete the construction activity. The duration varies widely between each piece of equipment. Noise levels also depend on the model and year of the equipment used. The noise levels assume simultaneous construction activities associated with the respective phase of construction and equipment being used.

Noise levels from point sources such as construction sites typically attenuate at a rate of about 6 dBA per doubling of distance. Therefore, only areas within 800 feet of construction sites would be expected to be exposed to noise levels over 65 dBA. Sensitive receptors such as residences located within this distance of construction sites may be subject to excessive noise. Each of the local jurisdictions having authority over individual projects has adopted noise control regulations that control construction noise levels, including allowable hours of construction activity during the week.

Users of the proposed pedestrian network may be exposed to noise from vehicles on adjacent streets and roads. However, the noise levels that the users would be exposed to would be temporary and intermittent and therefore not exceed standards in any applicable general plan or noise ordinance.

Mitigation Measures.

Local noise ordinance requirements would apply to construction activity associated with the proposed pedestrian projects. In addition, the following mitigation measures are required:

N-1 **Noise Reduction Measures Near Residences.** Sponsors of pedestrian projects shall ensure that, where residences or other noise sensitive uses are located within 800 feet of construction sites, appropriate measures shall be implemented to ensure consistency with local noise ordinance requirements relating to construction. Specific techniques may include, but are not limited to, restrictions on construction timing, use of sound blankets on construction equipment, and the use of temporary walls and noise barriers to block and deflect noise.

N-2 Noise Control on Equipment. Project sponsors shall ensure that equipment and trucks used for project construction utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).

N-3 Impact Equipment. Project sponsors shall ensure that impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction be hydraulically or electrically powered wherever feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, use of an exhaust muffler on the compressed air exhaust can lower noise levels from the exhaust by up to about 10 dBA. When feasible, external jackets on the impact equipment can achieve a reduction of 5 dBA. Whenever feasible, use quieter procedures, such as drilling rather than impact equipment operation.

N-4 Stationary Noise Sources. Locate stationary noise sources as far from sensitive receptors as possible. Stationary noise sources that must be located near existing receptors will be adequately muffled.

With implementation of local noise control requirements and proposed mitigation, impacts would be reduced to a less than significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

b) Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the United States.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (Federal Transit Administration, 2006). A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. In terms of ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB would damage fragile buildings and levels in excess of 95 VdB would damage extremely fragile historic buildings. Construction-related vibration has the potential to damage structures, cause cosmetic damage (e.g., crack plaster), or disrupt the operation of vibration-sensitive equipment. Vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities. Heavy construction operations can cause substantial vibration near the source. As shown in Table 5, the highest impact caused by equipment such as pile drivers used in bridge construction can generate vibrations of up to 106 Vdb at a distance of 50 feet. Similar to construction noise, vibration levels would be variable depending on the type of construction project and related equipment use. In general, pedestrian improvement projects would be unlikely to generate substantial vibration. The majority of proposed projects would involve installation of sidewalks or painting crosswalks.

Typical project construction activities, such as the use of jackhammers, other high-power or vibratory tools, and tracked equipment, may also generate substantial vibration in the immediate vicinity, typically within 15 feet of the equipment. Through the use of scheduling controls, typical construction activities would be restricted to daytime hours with least potential to affect nearby properties. Furthermore, according to Table 5, typical vibration levels would not exceed 100 Vdb at distances of 50 feet or greater from the source, which is the FTA threshold at which groundborne vibration levels may damage buildings. Thus, perceptible vibration can be kept to a minimum and not result in human annoyance or structural damage.

Table 5
Vibration Levels for Construction Equipment

Equipment		Approximate VdB		
		25 Feet	50 Feet	100 Feet
Pile Driver (impact)	Upper range	112	106	100
	Typical	104	98	92
Pile Driver (sonic)	Upper range	105	99	93
	Typical	93	87	81
Hoe Ram		87	78	69
Large Bulldozer		87	78	69
Loaded Trucks		86	77	68
Jackhammer		79	70	61
Small Bulldozer		58	48	39

Source: FTA, Transit Noise and Vibration Assessment, May 2006.

LESS THAN SIGNIFICANT IMPACT

c) Operation of the proposed pedestrian projects could generate temporary, intermittent noise from human conversations and the use of bicycles near sensitive residential uses. However, these noise sources would not substantially increase ambient noise levels relative to existing roadway traffic. The substitution of motor vehicle trips for pedestrian and bicyclist trips on improvements listed in the NCPP also would incrementally reduce traffic noise. Therefore, impacts from permanent increases in noise would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e-f) Some proposed pedestrian projects in the city of American Canyon would be located within two miles of Napa County Airport, while projects in the unincorporated community of Angwin would be within two miles of Angwin-Parrett Field, a public use airport. However, users of proposed pedestrian facilities in these areas would only be exposed to temporary and intermittent operational noise generated from the airports. Therefore, airport-related noise impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. 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)?	☐	☐	☐	■
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

a)-c) Implementation of the NCPP would not involve the construction of infrastructure that could induce substantial population growth such as new or increased capacity sewer or water lines, or the construction of new streets and roads. The proposed pedestrian improvements would serve existing populations and would not displace any housing or people requiring the construction of replacement housing elsewhere. While these local improvements would make the area more attractive to tourists, this would not be a substantial growth-inducing effect in Napa County.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:				
i) Fire protection?	☐	☐	■	☐

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
ii) Police protection?	☐	☐	■	☐
iii) Schools?	☐	☐	☐	■
iv) Parks?	☐	☐	☐	■
v) Other public facilities?	☐	☐	☐	■

a.i, a.ii) The proposed multi-use trails listed in the NCPP would provide public access to areas that are not currently accessible and could require expanded police and fire protection service. The trail facilities would also increase access for use by police and fire providers into areas with poor existing access. However, the proposed projects would be located in urban areas that are already served by police and fire protection and not substantially increase demand for these public services above existing levels.

LESS THAN SIGNIFICANT IMPACT

a.iii) The NCPP plans for pedestrian improvements and would not facilitate construction of residences or places of employment that would increase the population of school-age children in Napa County. Certain pedestrian projects, however, would provide safer public access to existing school facilities. These projects include the Berry Street Bridge Replacement project next to Calistoga Elementary School; Safe Routes to Schools improvements in Calistoga, St. Helena, and American Canyon; the RLS Middle School Sidewalk improvements in St. Helena; and several traffic calming and accessibility projects near schools in Angwin. Because the NCPP would not increase demand for school facilities, no impact would occur.

NO IMPACT

a.iv) The NCPP would not facilitate construction of residences or places of employment that would increase the population that demands park facilities in Napa County. However, it would improve public access to existing parks. Projects listed in the NCPP would complete pedestrian connections to Yountville Park, install sidewalks on Laurel Street near Laurel Park in the City of Napa, and improve trails in the Newell Open Space Preserve in American Canyon. A proposed feasibility study to construct a linear park on American Canyon Road west of Elliot Drive could lead to a future expansion of parkland in American Canyon; if construction of this linear park is proposed in the future, environmental review for the project would be conducted at that time. Therefore, the NCPP would not have an adverse environmental impact from the construction of parks.

NO IMPACT

a.v) As discussed above, the NCPP would not facilitate an increase in population in Napa County. Therefore, it would not increase demand for other public services such as libraries.

NO IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. RECREATION				
a) Would the project 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?	☐	☐	■	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	■	☐	☐

a) The Plan would increase the use of neighborhood, regional parks, and other recreational facilities because the proposed pedestrian improvements would improve access to those facilities. For instance, a new pedestrian bridge over the Napa River would provide greater access to the Oxbow Preserve in the City of Napa, the Newell Open Space Pathway would improve multi-use access to the Newell Open Space Preserve in the City of American Canyon, and upgrades to Yountville Park would improve access to persons with disabilities. However, the increase in usage is not anticipated to significantly accelerate or cause the physical deterioration of those parks and facilities such that repair or expansion would be required. In fact, the projects could prevent physical deterioration of such facilities: the Newell Open Space Pathway would replace an interim trail along Newell Creek that has not been designed to accommodate substantial public use.

LESS THAN SIGNIFICANT IMPACT

b) Certain pedestrian improvements proposed in the NCPP, including multi-use trails and bikeways, would serve as new recreational facilities. The construction of these recreational facilities could have adverse environmental impacts. As discussed in Section III, *Air Quality*, fugitive dust emissions during construction would be potentially significant. As discussion in Section IV, *Biological Resources*, impacts to special-status species, nesting birds, protected trees, wetlands, and wildlife movement during construction would be potentially significant. Section V, *Cultural Resources*, notes that impacts to archaeological resources and human remains from ground disturbance could be significant. As discussed in Section VI, *Geology and Soils*, new bridges and over/under-crossings could be subject to unstable conditions. Section VIII, *Hazards and Hazardous Materials*, also indicates that soil disturbance could expose people to hazardous contaminants. Lastly, Section IX, *Hydrology and Water Resources*, finds that erosion,

sedimentation, and drainage impacts would be potentially significant. Mitigation measures in these respective sections would reduce potential environmental impacts to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC				
-- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing a measure 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?	☐	☐	☐	■
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?	☐	☐	☐	■
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?	☐	☐	☐	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	■	☐
e) Result in inadequate emergency access?	☐	☐	■	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	☐	■

a, b, f) The NCPP has been developed in coordination with local and countywide transportation plans taking into consideration multiple modes of transportation including public transit, bikeways, and pedestrian facilities. The purpose of the Plan is to improve pedestrian access

countywide, increasing the number of pedestrian trips laying the groundwork for a shift in travel mode choice such that non-motorized options are widely available, accessible, and convenient. The proposed improvements would increase the active transportation options locally, encouraging pedestrian and bicycle use. This would be consistent with a goal in the Countywide Transportation Plan, Vision 2040, to increase by 10% mode share from single-occupancy vehicles to transit, walking, and bicycling by 2035. Therefore, the NCPP would further applicable plans to promote multimodal transportation.

In addition, the NCPP would not conflict with policies to maintain adequate circulation for motor vehicles. The Napa County General Plan has a policy (Cir-13) to "provide a roadway system that maintains current roadway capacities in most locations and is both safe and efficient in terms of providing local access." Policy CIR-16 seeks "to maintain an adequate level of service on roads and at intersections". The projects listed in the NCPP, by their nature, would have little to no impact on the LOS of any roadway within Napa County or the cities within. While increased pedestrian activity on crosswalks could incrementally increase travel times for motorized vehicles having to wait for additional pedestrians to cross, this increase would be negligible and potentially offset by the reduction of local vehicle trips from people choosing to use active transportation modes due to the facility improvements. The pedestrian improvements, including marked crosswalks, flashing beacons, and bulbouts, also have the potential to reduce crossing times at crosswalks, especially for disabled and elderly users. Overall, it is anticipated that these improvements would encourage a multimodal transportation system (NCPP Goal 2) that would improve performance measures based on a multi-modal level of service (NCPP Policy 2A).

NO IMPACT

c) Given the nature and scope of the pedestrian improvements listed in the NCPP, they would not result in any changes to air traffic patterns.

NO IMPACT

d, e) The goal of the NCPP is to provide pedestrian facilities that are safe and accessible to a variety of users. Pursuant to Policy 2A in the Plan, individual project designs would have to conform to local, County, State, and national standards and manuals, as applicable, regarding safety, proper design, emergency access, and construction. These standards require proper emergency access as part of the design and through construction of projects. Adherence to Policy 2A and these required design and construction standards would reduce these impacts related to design hazards and emergency access to less than significant.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
-- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	■
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?	☐	■	☐	☐
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?	☐	☐	☐	■
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	■	☐	☐
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?	☐	☐	☐	■
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	■	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	■	☐

a, e) The proposed pedestrian improvements would not generate wastewater at any restrooms or septic systems. Therefore, the NCPP would not increase demand for wastewater treatment, contribute to an exceedance of wastewater requirements, or require service by a wastewater treatment provider.

NO IMPACT

b, d) Napa County derives about 85 percent of its water supply from ground and surface water in the Napa River watershed, while the remaining 15 percent is imported from the State Water Project for the cities of Napa, American Canyon, and Calistoga (Napa County Watershed Information & Conservation Council, 2011). Water demand throughout the County is projected

to outpace supply by the year 2050 if actions to increase conservation, expand recycled water sources, pursue conjunctive uses and locate out-of-basin sources are not pursued.

During the construction of individual pedestrian improvements listed in the NCPP, water may be required on a temporary basis to wet down disturbed areas and minimize emissions of fugitive dust. Proposed streetscape improvements with landscaping in downtown Calistoga and St. Helena also could require irrigation. Because of projected long-term water scarcity in the County, impacts on water supplies would be potentially significant without the use of drought-tolerant plants in landscaping.

Mitigation Measures

Mitigation Measure U-1 would be required to ensure that individual projects listed in the NCPP conserve water supplies by planting drought-tolerant species in streetscape improvements.

> **U-1** **Drought-Tolerant Landscaping.** The sponsor of a project listed in the NCPP that involves landscaping shall ensure that low water use landscaping (i.e., drought-tolerant plants and drip irrigation) is installed. When feasible, plant species native to habitats in Napa County shall be used.

Implementation of this measure would minimize water demand by proposed pedestrian projects, thereby reducing impacts on water supplies to a less-than-significant level.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

c) The proposed pedestrian improvements would not substantially increase the amount of impervious surface in Napa County, thereby increasing the flow of stormwater runoff entering storm water drainage facilities. As discussed in Section IX, *Hydrology and Water Quality*, implementation of Mitigation Measure HYDRO-1 would require that proposed pedestrian improvements incorporate stormwater management techniques such as bioswales and bioretention structures as necessary to maintain pre-project hydrologic conditions and treat runoff. Therefore, additional storm water drainage facilities would not be needed.

NO IMPACT

f, g) The proposed pedestrian improvements would not lead to a permanent increase in solid waste generated in Napa County. During construction, waste would be limited to debris from the removal of existing pavement or subsurface material. Most individual projects involve surface treatments like the painting of crosswalks and extension of sidewalks, the construction of which would not generate solid waste. Furthermore, operation of the proposed projects would not involve the use of trash cans or the generation of solid waste for disposal at a landfill.

LESS THAN SIGNIFICANT IMPACT

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, 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?	☐	■	☐	☐
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)?	☐	■	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	■	☐	☐

a) As discussed in Section IV, *Biological Resources*, construction of the pedestrian projects listed in the NCPP has the potential to reduce the habitat of special-status species and obstruct wildlife movement corridors. However, these impacts would be reduced to a less-than-significant level with implementation of Mitigation Measure BIO-1 to assess biological resources at a project-specific level and mitigate impacts to special-status species; Mitigation Measure BIO-2 to protect such species during construction; and Mitigation Measure BIO-6 to incorporate design measures that preserve wildlife corridors. As discussed in Section V, *Cultural Resources*, potential impacts on buried cultural resources during construction would be less than significant with implementation of mitigation measures CR-1 through CR-9 to protect potential archaeological resources, fossils, and human remains. Therefore, impacts would be potentially significant unless mitigation is incorporated.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

b) Cumulative impacts are generally considered in analyses of air quality, noise, and traffic. As discussed in Section III, *Air Quality*, impacts on air quality would be reduced to a less-than-significant level with implementation of Mitigation Measure AQ-1 for individual projects to follow the BAAQMD's recommended measures to cut particulate emissions. These measures

would minimize the Plan's effect on regional attainment of air quality standards for particulate matter. As discussed in Section XII, *Noise*, temporary noise generated by construction of pedestrian improvements would be potentially significant. However, individual projects would not be expected to generate cumulative noise impacts during construction because they would be separated geographically and generally constructed at different times. Furthermore, mitigation measures N-1 through N-4 would reduce noise exposure from construction equipment to the extent feasible. As discussed in Section XVI, *Transportation/Traffic*, the Plan would improve performance measures based on a multi-modal level of service and would not degrade traffic conditions. Therefore, the project's contribution to cumulative impacts would be potentially considerable unless mitigation is incorporated.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

c) The Plan is intended to improve physical conditions for pedestrians in Napa County and would have a beneficial overall effect on people. However, as discussed above, air quality and noise impacts would be potentially significant unless mitigation is incorporated to reduce particulate emissions and construction noise. As discussed in Section VI, *Geology and Soils*, impacts to human safety from the construction of pedestrian improvements in areas subject to fault rupture, groundshaking, liquefaction, unstable slopes, and expansive soils would be potentially significant. Site-specific geotechnical investigations would reduce these impacts to a less-than-significant level. As discussed in Section VIII, *Hazards and Hazardous Materials*, ground disturbance for individual projects could expose people to soil-based contaminants, but impacts would be reduced to a less-than-significant level by investigating and remediating any hazardous material sites. As discussed in Section XVII, *Utilities and Service Systems*, water supply impacts would be potentially significant unless Mitigation Measure U-1 is implemented to use drought-tolerant landscaping. Lastly, as noted in Section I, *Aesthetics*, the Plan would have a potentially significant impact on visual character unless Mitigation Measure AES-1 is implemented to minimize the visual disruption caused by new overpasses.

POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED

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Appendix A

Response to Comments

APPENDIX A

Response to Comments on the Draft Initial Study-Mitigated Negative Declaration

This appendix contains the written comments received in response to the Draft Initial Study-Mitigated Negative Declaration (IS-MND). The Draft IS-MND was circulated for a period of 30 days, beginning on May 24, 2016 and concluding on June 22, 2016. Each comment letter pertaining to the IS-MND that was received by the Napa Valley Transportation Authority has been included within this section. Responses to the comments have been prepared to address the environmental concerns raised by the commenters and to indicate where and how the IS-MND addresses these environmental issues. Each letter is presented first, with the responses following.

The Napa Valley Transportation Authority received three written comment letters on the Draft IS-MND, to which it has elected to prepare formal responses, although not required by CEQA:

	Commenter	Page #
1.	Karenina (Karen) Relucio	A-2
2.	Cy R. Oggins, California State Lands Commission	A-4
3.	Patricia Maurice, Caltrans	A-23

The comment letters and the Napa Valley Transportation Authority's responses follow. Each comment letter has been numbered sequentially and each separate issue raised by the commenter, if more than one, is also numbered.

Letter 1

From: Relucio, Karenina (Karen)
Sent: Tuesday, June 14, 2016 4:27:18 PM
To: Schmitz, Danielle
Subject: Initial Study and Mitigated Negative Declaration for Pedestrian Plan

Hi Danielle,

It was great to meet you at MTC/ABAG Plan Bay Area 2040. I had a chance to review this document and had one comment. On page 73, bottom of page,

XIV. PUBLIC SERVICES
a)
i) Fire protection? – two boxes in the same line are checked (potentially significant unless mitigation incorporated and less than significant impact)

1.1

I had one more question as I had missed the opportunity to look at the 300 plus page pedestrian plan – I assume public comment is closed for this one, correct?

1.2

Thanks!
Karen

Karen Relucio, MD
Health Officer
Deputy Director—Public Health
Napa County Health and Human Services Agency
Phone: (707)253-4566
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Letter 1

COMMENTER: Karenina (Karen) Relucio

DATE: June 14, 2016

RESPONSE:

Response 1.1

The commenter notes that on page 73 of the Draft IS-MND, both the Potentially Significant Unless Mitigation Incorporated and Less than Significant Impact boxes are checked for the issue of fire protection. This error has been corrected in the Final IS-MND, so that only the Less than Significant Impact box is checked.

Response 1.2

The commenter asks if the period for public comment is closed for the project. In response to this question, the commenter has been informed that public comments would be accepted until June 23.

STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

CALIFORNIA STATE LANDS COMMISSION
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Letter 2

Established in 1938

June 22, 2016

File Ref: SCH # 2016052072

Ms. Danielle Schmitz
Napa Valley Transportation Authority
625 Burnell Street
Napa, CA 94559

Subject: Draft Mitigated Negative Declaration (MND) for Napa Countywide Pedestrian Plan, Napa County

Dear Ms. Schmitz:

The California State Lands Commission (Commission) staff has reviewed the subject Draft MND for the Napa Countywide Pedestrian Plan (Project), which is being prepared by the Napa Valley Transportation Authority (NVTA). The NVTA is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Commission is a trustee agency for projects that could directly or indirectly affect sovereign lands and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on sovereign lands, the Commission will act as a responsible agency. 2.1

CSLC Jurisdiction and Public Trust Lands

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c), 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership

extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

After review of the information contained in the Draft MND, Commission staff has determined the following.

1. The bed of the Napa River, over which a portion of the Project (two pedestrian bridges) will extend, includes State-owned sovereign land. Therefore, a lease for the use of sovereign land will be required from the Commission for the two pedestrian bridges encroaching over State-owned lands.

2. The information provided in the Draft MND is insufficient to determine the State's interest at the other proposed Project locations and if leases will be required.

Staff requests that the project proponent for each proposed pedestrian improvement project, identified in Table 1 of the Draft MND (hereafter referred to as Table 1), contact Marlene Schroeder, Public Land Management Specialist (see contact information below), for further information on the location and extent of the Commission's jurisdiction, application requirements, and to determine whether each proposed Project location requires a lease.

Project Description

The NVTA proposes to approve the Napa Countywide Pedestrian Plan as a planning document to meet the agency's objectives and needs as follows.

- To provide a pedestrian network that is well connected, safe, and enjoyable for Napa County residents and visitors of all levels of mobility by implementing policies, programs, and development standards.
- To increase the number of pedestrian trips countywide and shift travel mode choice to non-motorized options.
- To assemble a priority project list and an implementation plan for the listed projects.

2.2

From the Project Description, Commission staff understands that the Project would include the following components (delineated within the list of priority projects found in Table 1).

- Enhancements. Street enhancements; crosswalk and sidewalk enhancements; intersection alignments; street and sidewalk rehabilitation and maintenance; trail improvements; other activities to enrich existing pedestrian access.
- New construction. Sidewalks; Class 1 pathways including six Multi-Use Paths; curb ramps; a bicycle/pedestrian undercrossing; roundabouts; new bridges over Redwood Creek, Cayetano Creek, and Napa Creek; a new overpass; two

pedestrian bridges over the Napa River; crossings for pedestrians and bicycles; off-street pathways; ADA access paths; and a formalized hiking trail.

Environmental Review

Commission staff requests that the NVTA consider the following comments on the Project's Draft MND.

1. Type of CEQA document: Commission staff believes that a Program Environmental Impact Report (PEIR), not a Draft MND, is the appropriate CEQA document for the analysis of environmental impacts associated with the proposed project (see State CEQA Guidelines, § 15168). Specifically, (1) the NVTA has listed a discrete set of projects in identified geographic areas (Table 1) and states that analysis for several environmental impacts is not possible at this time, but that the future projects may have a potentially significant impact, (2) the NVTA's conclusions regarding the level of significance for many environmental impacts are not adequately supported in the Draft MND with studies, facts, or a focused review on the project areas for the listed projects in Table 1; and (3) mitigation measures provided for potential impacts appear to be unenforceable, deferred, or insufficient to reduce impacts to a less-than-significant level. A PEIR would be the most appropriate analysis to include this general review as well as any standards and mitigations to which the future projects must adhere. As part of a PEIR, the NVTA can develop a mitigation program that includes a description of the mitigation strategies that will be reviewed, along with performance standards that will ensure adequate mitigation measures are implemented (per State CEQA Guidelines § 15126.4, subd. (a)(2), mitigation measures may be incorporated into plans that provide a legal or policy framework for later project approvals). Including the mitigation measures in a PEIR would allow such measures to be considered by each agency that subsequently acts on a project identified within that programmatic document. 2.3

2. Public Agency Approvals: Project proponents will be required to obtain a lease from the Commission for at least two projects identified in Table 1. Accordingly, please include the Commission among the list of agencies with discretion to grant future approvals for Project activities. Specific information on the Commission's jurisdiction is provided above. 2.4

3. Public Access (see detailed comments under Recreation below): Promotion of public access to and use of California's navigable waters is a mandate of the California Constitution (art. 10, § 4), a condition of statehood in the Act of Admission (vol. 9, Statutes at Large, p. 452), and a responsibility of State agencies pursuant to the Public Trust Doctrine. The State Legislature has provided for a process to be followed regarding promoting access at bridge sites in California Streets and Highways Code section 1809, pursuant to which Commission staff requests that the NVTA, during the design hearing process and prior to Commission consideration of approval of a bridge project, prepare a report on the feasibility of providing public access to the Napa River, for recreational purposes, and determine if such public access will be provided. 2.5

4. Deferral of Studies: CEQA requires a lead agency to disclose and analyze all that it feasibly can in order to ensure informed decision-making. The future studies identified in the analysis and mitigation measures for Biological Resources and Cultural Resources would provide critical information related to the potential for, and significance of, environmental effects resulting from the pedestrian projects listed in Table 1. Unless conducting these analyses is truly infeasible at this time, which the NVTA does not state is the case, Commission staff recommends that the studies be conducted and the CEQA document revised and potentially recirculated to provide an opportunity for full public disclosure and review. Without such analyses, meaningful Commission staff review of the impacts and adequacy of mitigation is precluded, which may result in the need for additional information to be submitted with a lease application. If previously undisclosed or more severe impacts are identified, the NVTA (or agency acting on a listed project in Table 1) could be subject to additional review requirements under State CEQA Guidelines section 15162. 2.6

Air Quality

5. Existing non-attainment: The Project area, which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), is currently in non-attainment for ozone and particulate matter. The Draft MND: (1) notes that the construction projects from Table 1 will be a source of short-term emissions that depend on project-specific factors; (2) provides BAAQMD daily thresholds for construction emissions and notes that if any one project, or several projects cumulatively, exceed these thresholds then the impacts on air quality would be potentially significant; and (3) identifies, as mitigation for these impacts, BAAQMD recommended mitigation measures. The measures provided, however, do not appear to prescribe specific, enforceable measures that would address BAAQMD's daily thresholds for construction emissions. The Draft MND also does not discuss how future projects will ensure that their construction emissions impacts remain at less-than-significant levels. The final CEQA document should clarify how, in the absence of any land use emissions computer modeling (i.e., CalEEMod), it can be determined that the projects in Table 1 will both individually and cumulatively have a less-than-significant impact on Napa County's existing non-attainment for ozone and particulate matter. 2.7

Biological Resources

6. Deferred analysis: The Draft MND states that new bridge development, in particular, has the potential to directly impact riparian and aquatic habitat and to impact special-status species (i.e., California red-legged frog and steelhead). However, the CEQA document provides only general information as to the types of species that may be found throughout the county, and also states that the Project does not include specific project-level details of activity, and therefore a project-specific evaluation of impacts on special-status species will not be performed. The NVTA then concludes that it is not possible to ensure complete avoidance and that potentially significant impacts to biological resources could occur. As a result, the Draft MND appears to defer the analysis of how future specific projects will ensure that their impacts remain at less-than-significant levels to a later date. Each future project–if 2.8

determined to have the potential to result in significant impacts–would undergo CEQA review, and would be required to implement individual measures to lessen significant impacts to biological resources.

As mitigation for these impacts, the Draft MND identifies mitigation measures BIO-1, BIO-2, and BIO-6, none of which is a specific, enforceable obligation or formula containing "performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way" (State CEQA Guidelines, § 15126.4, subd. (a)). For example, BIO-1, related to biological resources screening and assessment, appears to defer the formulation and analysis of specific measures to a qualified biologist, who will conduct a field reconnaissance and/or desktop analysis to identify protected biological resources. At that point, the implementing agency will attempt to (1) provide design alternatives that avoid or minimize the impact, (2) coordinate with regulatory agencies responsible for special-status species permitting and develop project-specific mitigation measures, and (3) implement those measures. In addition, mitigation measure BIO-6 requires future projects to incorporate "economically viable" design measures to ensure that bridge work does not significantly impact aquatic wildlife movement. If design features are not incorporated into the project design, BIO-6 then requires coordination with regulatory agencies and implementation of project-specific mitigation measures. These measures thus defer the formulation and analysis of specific measures to future biological review in coordination with future project CEQA analyses and coordination with regulatory agencies.

Finally, there is no language in these measures to ensure all impacts to special-status species are reduced to a less-than-significant level. The final CEQA document should either provide specific, stand-alone measures and analyze their effectiveness in reducing potential effects, or should clearly state that those impacts and any required mitigation would be disclosed and analyzed in a subsequent tiered document.

7. Biological resource assessment: Commission staff notes that the California Department of Fish and Wildlife has indicated that it cannot and does not portray desktop assessment methods, (i.e., the California Natural Diversity Database), as an exhaustive and comprehensive inventory of all rare species and natural communities statewide. Field verification for the presence or absence of sensitive species will always be an important obligation on the part of the lead agency in the project-specific context. Therefore, the final CEQA document should revise BIO-1 to require desktop analysis (to obtain a potential species list) *and* field reconnaissance prior to determining whether a listed project in Table 1 will impact biological resources. 2.9

8. Best Management Practices (BMPs): Mitigation measure BIO-2 incorporates general construction BMPs as a requirement for all future project grading and construction plans. While these are a discrete set of enforceable measures, the Draft MND fails to explain how the BMPs reduce the impact on biological resources to a less-than-significant level. 2.10

Cultural Resources

9. Submerged Resources: The final CEQA document should evaluate potential impacts to submerged cultural resources in the Project area. If excavation or other disturbance is required in the Napa River channel for bridge construction, then the Project may impact unknown archaeological sites and historic or cultural resources. Commission staff suggests the NVTA conduct a pre-construction record search for such resources near the Project area, or include a more thorough discussion about how such resources would be identified and avoided, to the extent feasible, during project-level review. Further, Commission staff requests that the NVTA contact Assistant Chief Counsel Pam Griggs (see contact information below) to obtain Commission records for the Project site. Note that any submerged archaeological site or submerged historic or cultural resource that has remained in State waters for more than 50 years is presumed to be significant. Commission staff recommends the NVTA reflect this in the final document and add a mitigation measure requiring that in the event cultural resources are discovered during any construction activities, Project personnel shall halt all activities in the immediate area and notify a qualified archaeologist to determine the appropriate course of action. 2.11

10. Title to Resources: The final CEQA document should also mention that the title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in submerged lands of California is vested in the State and under the jurisdiction of the Commission (Pub. Resources Code, § 6313). Commission staff requests that the city or county approving a project listed in Table 1 consult with Assistant Chief Counsel Pam Griggs (see contact information below) should any cultural resources on state lands be discovered during construction. In addition, Commission staff requests that the following statement be included in final CEQA document's Mitigation and Monitoring Plan: "The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the Commission." 2.12

11. Cultural Resource Investigations: The Draft MND (pages 47-49) describes a process to investigate project areas for cultural or historic resources, including the potential to conduct Phase I, II, and III studies. In addition, mitigation measure CR-3 contemplates recovery and curation of located materials. Please be advised that studies proposed on lands under the Commission's jurisdiction require a permit from the Commission, and that no resources or artifacts may be removed from their existing location(s) on sovereign land without Commission approval. 2.13

12. Tribal Cultural Resources: The Draft MND explains that most of the projects listed in Table 1 would occur in highly disturbed areas and thus would have a low probability of encountering cultural resources. However, the document acknowledges that unanticipated cultural resources could be disturbed during construction, and that impacts to such resources (which could include tribal cultural resources) would be potentially significant. The NVTA then provides mitigation measures CR-1 through CR-5 to reduce these impacts to a less-than-significant level. CR-1 requires Area of Potential Effect (Area) determinations for projects listed in Table 1, potential Phase I 2.14

and Phase II studies based upon the results of historic review for each Area, and contact with the Native American Heritage Commission (NAHC) or local tribal representatives if there will be a Phase III mitigation study for a particular project.

The Draft MND does not contain any information, however, as to how the NVTA has complied with the CEQA provisions added by Assembly Bill (AB) 52 (Gatto, Stats. 2014, Ch. 532), which applies to all CEQA projects initiated after July 1, 2015.[1] These provisions include both requirements for lead agency consultation with California Native American Tribes and consideration of effects on tribal cultural resources (as defined in Pub. Resources Code, § 21074). Even if no tribe has submitted a notification request for the Project area covered by the Draft MND, the NVTA is required to: contact the NAHC to obtain a general list of interested tribes for the Project area; include the results of this inquiry within the Draft MND; and disclose and analyze potentially significant effects to tribal cultural resources, and to avoid impacts, when feasible. Since the Draft MND does not disclose if outreach to interested tribes has occurred and does not document their response, it may fail to support the determination that measures CR-1 through CR-5 adequately mitigate potentially significant impacts to tribal cultural resources.

Climate Change and Sea-Level Rise

13. Greenhouse Gases (GHGs): A GHG emissions analysis consistent with the California Global Warming Solutions Act (AB 32) and required by the State CEQA Guidelines should be included in the Draft MND. The Draft MND states that construction-related emissions are speculative for a programmatic level of analysis, and that information is not currently available regarding the precise construction timing and equipment. The analysis concludes by indicating that the 2010 BAAQMD CEQA Guidelines have no threshold for construction-related GHG emissions, and that any short-term construction impacts would be offset by the long-term reduction of GHG emissions due to improved, accessible non-motorized pathways and transportation networks. The document concludes with a determination of less than significant. However, depending on the scope and timing of the individual pedestrian projects, Commission staff notes that there could be a potential for a significant impact resulting from GHG emissions on either an individual or cumulative basis. Finally, the Draft MND does not provide supporting evidence to document the positive impact that pedestrian and bicycle networks will have on the County's overall GHG emissions. 2.15

The final CEQA document should provide a level of significance determination that can then be used by all the projects in Table 1, consistent with BAAQMD guidance that lead agencies should determine appropriate air quality thresholds to use for each project they review.[2] Commission staff recommends that the NVTA review Napa County's analysis determining a level of significance for construction-related

[1] Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 added to CEQA pursuant to AB 52 (Gatto, Stats. 2014, Ch. 532)

[2] See www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa.

GHG emissions; such analysis identified and modeled construction- and operation-related emissions, and indicated which type of emissions would exceed the identified threshold of significance. The County independently concluded that because their project was located within the BAAQMD's jurisdiction, the threshold of 1,100 MT CO_2e/year was an acceptable threshold for CEQA significance with regards to GHG emissions.[3]

14. Sea-Level Rise: A tremendous amount of State-owned lands and resources under the Commission's jurisdiction will be impacted by rising sea levels. With this in mind, the NVTA should consider discussing in the final CEQA document if and how various project components might be affected by sea-level rise and whether "resilient" designs have been incorporated. The Napa River and its surroundings are generally in a low-lying, flood-prone area that will be affected by rising sea levels. Additionally, because of their nature and location, these lands and resources are already vulnerable to a range of natural events, such as storms. As individual projects are designed and evaluated, attention should be given to sea-level rise projections to ensure the structures' designs are sufficient to ensure function, safety, and protection of the environment over the expected life of the structure. For bridges, this could include the location and design of the anchors/footings, height of the span, design or use of bank stabilization, etc. Note that the State of California released the final "Safeguarding California: Reducing Climate Risk, an Update to the 2009 California Climate Adaptation Strategy" (Safeguarding Plan) on July 31, 2014, to provide policy guidance for state decision-makers as part of continuing efforts to prepare for climate risks. The Safeguarding Plan sets forth "actions needed" to safeguard ocean and coastal ecosystems and resources as part of its policy recommendations for state decision-makers. 2.16

In addition, Governor Brown issued Executive Order B-30-15 in April 2015, which directs state government to fully implement the Safeguarding Plan and factor in climate change preparedness in planning and decision making. Please note that when considering lease applications, Commission staff will (1) request information from applicants concerning the potential effects of sea-level rise on their proposed projects, (2) if applicable, require applicants to indicate how they plan to address sea-level rise and what adaptation strategies are planned during the projected life of their projects, and (3) where appropriate, recommend project modifications that would eliminate or reduce potentially adverse impacts from sea-level rise, including adverse impacts on public access.

Recreation

15. Public Access: The final CEQA document should: (1) describe the potential for the projects in Table 1 to affect recreational uses and public access to the subject waterway, as applicable and if information is available regarding project implementation and construction schedules; (2) discuss the recreational uses and access points in the Project vicinity, whether and to what extent these uses would be 2.17

[3] Napa County Jail Project Final EIR. State Clearinghouse # 2013012072. Page 3.4-9.

facilitated or disrupted by the projects listed in Table 1, and what, if any, measures could be implemented to reduce any potential negative impacts; and (3) identify any safety measures the NVTA or relevant city or Napa County will put in place to ensure public safety for recreational activities. Measures could include a public notice and future project area signage provided in advance, notifying the public of any disruptions or creation of alternate access points or use areas.

As noted above, the California Streets and Highways Code (see §§ 84.5, 991, and 1809) requires full consideration of, and a report on, the feasibility of providing public access to the subject waterway for public recreational purposes be provided during the design hearing process. Planning for preparation of the report should occur during the earliest stages of individual project planning, and the report should be used to support the environmental impact analysis of the Table 1 project's CEQA document. The report should consider the following:

- An assessment of public access needs at the project location (for projects listed in Table 1), in addition to a benefit analysis of public access alternatives, not alternatives to access
- A description of existing public access points and facilities in the vicinity, including the existing condition of these resources and entity responsible for maintenance
- An assessment of existing constraints and hazards that could make on-site public access infeasible
- A feasibility assessment of proposed on-site public access infrastructure, such as construction of trails, stairs, parking areas, trash cans, restrooms, etc.
- If on-site public access is infeasible, a feasibility assessment of alternatives, such as improving existing public access in the project vicinity or creating new public access points that could provide a means to access the subject waterway within the project vicinity
- Environmental impacts of providing public access
- A conclusion on the feasibility of providing public access.

Thank you for the opportunity to comment on the Draft MND for the Project. As a responsible and trustee agency, the Commission will need to rely on the final CEQA document for the issuance of any new lease as specified above and, therefore, we request that you consider our comments prior to adoption or certification of the CEQA document.

Please send copies of future Project-related documents, including electronic copies of the final CEQA document, Mitigation Monitoring and Reporting Program (MMRP), Statement of Findings (if applicable), Notice of Determination (NOD), and any reports associated with future individual projects, including reports prepared pursuant to the California Streets and Highways Code, when they become available, and refer questions concerning environmental review to Alexandra Borack, Environmental Scientist, at (916) 574-2399 or via e-mail at alexandra.borack@slc.ca.gov. For questions concerning archaeological or historic resources under Commission 2.18

jurisdiction, please contact Assistant Chief Counsel Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Marlene Schroeder, Public Land Management Specialist, at (916) 574-2320, or via email at Marlene.Schroeder@slc.ca.gov.

Sincerely,

Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
A. Borack, CSLC
M. Schroeder, CSLC
P. Griggs, CSLC
J. Garrett, CSLC

Letter 2

COMMENTER: Cy R. Oggins, Chief, Division of Environmental Planning and Management, California State Lands Trust

DATE: June 22, 2016

RESPONSE:

Response 2.1

The commenter notes that the California State Lands Commission (Commission) is a trustee agency because the Plan could directly or indirectly affect sovereign lands and their accompanying Public Trust resources or uses. In addition, the commenter states that the Commission is a responsible agency because projects listed in the Plan would involve work on sovereign lands. Sovereign State lands over which the Commission has jurisdiction include all tidelands and submerged lands and beds of navigable lakes and waterways. The commenter finds that two pedestrian bridge projects listed in the Plan that would span the Napa River would require a lease from the Commission for the use of sovereign land. This comment is acknowledged. The Final IS-MND has been amended on page 11, as follows, to note that future approvals for these projects would require the approval of leases from this public agency:

> In addition, individual projects that would involve work in sovereign State lands under the jurisdiction of the California State Lands Commission, including pedestrian bridges spanning the Napa River, would require the approval of leases from this public agency.

The commenter also requests that the project proponent for each pedestrian improvement listed in the Plan contact the Commission to determine whether each project would require a lease. While this comment about leasing requirements does not address the environmental impacts analyzed in the Draft IS-MND, its incorporation herein informs project proponents identified in this document of the importance of working with the Commission on individual facilities projects identified in this Plan.

Response 2.2

The commenter summarizes the objectives and types of pedestrian improvements listed in the Plan. This comment does not question or address the Draft IS-MND analysis but is noted.

Response 2.3

The commenter states that a Program Environmental Impact Report (PEIR), rather than an IS-MND, is the appropriate CEQA document for the proposed Plan for three reasons: 1) the Draft IS-MND finds that analysis of several environmental impacts is not possible at this time and that future projects may have a potentially significant impact; 2) impact determinations are not adequately supported with studies, facts, or focused review on project areas; and 3) mitigation measures appear to be unenforceable, deferred, or insufficient. The commenter adds that a PEIR would be the most appropriate document for a general review of environmental impacts and mitigation measures to which future projects must adhere.

However, the Draft IS-MND serves the same purposes as a PEIR, providing a programmatic review of environmental impacts and mitigation measures that apply to projects listed in the Plan. Where the IS-MND finds the future projects may have a potentially significant impact on the environment, it provides enforceable mitigation measures with clear performance standards to ensure that such impacts are reduced to a less than significant level on a project-by-project basis. The IS-MND also includes a level of supporting detail appropriate to a programmatic environmental document for a countywide plan; for programmatic review, it is not feasible to conduct a focused project-level analysis at the location of each project site. Nonetheless, mitigation measures in the IS-MND have been worded to ensure that focused project-level analysis is provided when necessary for listed projects.

To clarify the purpose and limits of the IS-MND's programmatic analysis, the following statement has been added to page 10 of the Final IS-MND:

> Adoption of the proposed Plan, in itself, would not directly involve the construction of pedestrian improvements listed in Table 1, but would facilitate the future development of such improvements. Thus, this Initial Study evaluates the environmental impacts associated with the Plan at a programmatic level, and provides programmatic-level mitigation measures. All future pedestrian projects forwarded as implementing actions of the Plan will be compared with the Plan program and programmatic mitigation measures while also providing additional detail with the anticipated benefit of construction drawings and scheduling information.

Response 2.4

The commenter requests that the Commission be included among the list of agencies with discretion to grant future project approvals. Please refer to Response 2.1.

Response 2.5

The commenter requests that prior to the design hearing process and the Commission's consideration of approval of a bridge project, the lead agency prepare a report on the feasibility of providing public access to the Napa River for recreational purposes. While this comment does not address the environmental impacts analyzed in the Draft IS-MND, its incorporation herein informs project proponents identified in this document of the importance of preparing the requested feasibility report.

Response 2.6

The commenter recommends that studies of biological and cultural resources be conducted at this time, unless infeasible, rather than deferred to a later time. Additionally, the commenter recommends that the IS-MND potentially be recirculated with this information to provide an opportunity for full public disclosure and review. The commenter finds that without the benefit of such resource studies, Commission staff cannot conduct a meaningful review of impacts and the adequacy of mitigation measures. However, as discussed in Section IV, *Biological Resources*,

of the Draft IS-MND, "a precise, project-level analysis of the specific impacts of individual new pedestrian projects on special-status species is not possible" at this time because the Plan does not include "specific project-level details of construction activity." For this reason, the Draft IS-MND also analyzes impacts to cultural resources at a programmatic level. To conduct a programmatic analysis of biological impacts, the Draft IS-MND includes a review of the California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB) to locate occurrences of special-status species and judge the potential for projects to affect these species, and a review of the U.S. Fish and Wildlife Service's National Wetlands Inventory to locate drainages and riparian areas of concern. In addition, Mitigation Measure BIO-1 would require a screening and assessment of biological resources for all individual projects with the potential to affect such resources and would require avoidance or mitigation of impacts to reduce them to a less than significant level. Furthermore, mitigation measures CR-1 through CR-5 would require the study of cultural resources for projects that would have potential impacts, and avoidance or mitigation of such resources. Thus, the IS-MND incorporates prescriptive mitigation measures for future pedestrian projects, with clear requirements and performance standards.

In addition, the commenter notes that subsequent environmental review may be required under *CEQA Guidelines* Section 15162 if previously undisclosed or more severe impacts are identified. The commenter is correct that subsequent environmental review may be required if new information arises that would cause a new significant impact or substantially increase the severity of a previously identified significant impact. This information can be determined on a case-by-case basis based on required subsequent review of future pedestrian projects facilitated by the Plan. No significant unmitigable affects are anticipated at this time, however.

<u>Response 2.7</u>

The commenter notes that the project area is currently in non-attainment for ozone and particulate matter and that short-term emissions of projects listed in the Plan would contribute to air pollution. However, the commenter states that mitigation measures in the Draft IS-MND do not appear to prescribe specific, enforceable measures that would reduce emissions to below the Bay Area Air Quality Management District's (BAAQMD's) daily thresholds for construction emissions. The commenter requests clarification of how individual and cumulative ozone and particulate impacts would be less than significant without the benefit of quantitative modeling.

Please refer to Response 2.3 for a discussion of the purpose and limits of a programmatic environmental analysis. To reduce air quality impacts at a programmatic level, Mitigation Measure AQ-1 requires that all listed projects comply with the BAAQMD's recommended measures to reduce emissions during construction. Furthermore, page 31 of the Draft IS-MND acknowledges that "pedestrian projects such as Class I multi-use trails, new bridges, and roundabouts could involve more substantial grading and paving, resulting in greater emissions." As noted by the Draft IS-MND, the precise quantity of such emissions would need to be determined at the time of proposed construction. Mitigation Measure AQ-1 does not preclude the development of additional measures to reduce air quality impacts on a project-by-project basis, if quantitative analysis determines that stronger measures are necessary to reduce emissions below BAAQMD thresholds. In addition, the Draft IS-MND was circulated to the

California Air Resources Board for review of its air quality analysis, and the agency did not submit any comments on the environmental document.

Response 2.8

The commenter finds that the Draft IS-MND appears to defer the analysis of impacts to biological resources to CEQA review on a project-by-project basis at a later date. Further, the commenter states that mitigation measures BIO-1, BIO-2, and BIO-2 do not provide a "specific, enforceable obligation or formula" with performance standards to reduce impacts to a less than significant level. The commenter notes, for example, that Mitigation Measure BIO-1 appears to defer analysis to a qualified biologist, while BIO-6 requires future coordination with regulatory agencies. Please refer to Response 2.3 for a discussion of the purpose and limits of a programmatic environmental analysis. In a programmatic CEQA analysis, it is appropriate for mitigation measures to require future project-level study of biological resources by a qualified biologist, as well as consultation with resources agencies if such study indicates potential impacts to sensitive resources. These requirements and the menu of mitigation actions listed in measures BIO-1, BIO-2, and BIO-6 provide performance standards for the implementing agency to ensure that potential impacts are reduced to a less than significant level.

Response 2.9

The commenter notes that the California Department of Fish and Wildlife does not consider desktop assessment methods (i.e., the California Natural Diversity Database) as an "exhaustive and comprehensive inventory" of sensitive species. Therefore, the commenter requests that Mitigation Measure BIO-1 be revised to require desktop analysis and field reconnaissance prior to determining project-level impacts. On pages 39 and 40 of the Final IS-MND, this measure has been amended to clarify when field reconnaissance would be required:

> **BIO-1 Biological Resources Screening and Assessment.** Prior to final design approval of individual projects involving ground disturbance of natural habitat and/or vegetation trimming and/or removal of vegetation, the implementing agency shall have a qualified biologist conduct a field reconnaissance and~~/or~~ biological~~desktop~~ analysis of the environmental limits of the project ~~in an effort~~ to identify ~~any~~ biological constraints ~~for~~ and potential impacts to sensitive biological resources from the project, including potential impacts to special-status plants, animals, and their habitats, as well as protected natural communities including wetland and terrestrial communities and protected trees. For those projects for which ground disturbance would not affect natural habitat (i.e., work is limited to paved, ruderal, or developed areas only), a desktop analysis to identify any biological constraints for the project may be sufficient. The qualified biologist shall determine, based on the nature of construction activities, if a field reconnaissance is necessary for such projects to completely assess biological constraints. For all individual projects that are located within the jurisdiction of the California State Lands Commission, a biological analysis and field reconnaissance survey shall be conducted to comprehensively inventory biological resources.

> If the biologist identifies protected biological resources within the limits of and/or potentially adversely affected by the project, the implementing agency shall first prepare alternative designs that seek to avoid and/or minimize impacts to the biological resources. If the project cannot be designed without complete avoidance, the implementing agency shall have the qualified biologist identify the specific impacts to special-status species, develop project-specific avoidance and mitigation procedures to be followed to reduce biological impacts to a less than significant level, identify any state or federal listed species that would necessitate coordination with the appropriate regulatory agency (i.e., USFWS, NMFS, CDFW, USACE) to obtain regulatory permits, and implement project-specific avoidance and mitigation measures prior to and during any construction activities…

As stated in the revised measure, field reconnaissance of biological resources would be required for all projects under the Commission's jurisdiction.

Response 2.10

The commenter states that the Draft IS-MND fails to explain how Mitigation Measure BIO-2's best management practices (BMPs) for construction would reduce biological impacts to a less than significant level. As discussed above, this and other mitigation measures have an appropriate level of specificity for a programmatic environmental review. Nonetheless, to further ensure that construction impacts are reduced to a less than significant level, BIO-2 has been amended on page 40 of the Final IS-MND to require compliance with BMPs recommended by a qualified biologist:

> **BIO-2 Construction Best Management Practices.** Based on the results of the project-specific impact analysis required by Mitigation Measure BIO-1, and the extent of potential impacts to special-status species, one or more of the following construction Best Management Practices (BMPs) as recommended by a qualified biologist shall be incorporated into all grading and construction plans…

Response 2.11

The commenter requests that the Final IS-MND include a pre-construction record search for submerged cultural resources, in order to evaluate potential impacts from disturbance in the Napa River channel for bridge construction. It is beyond the scope of a programmatic environmental analysis of a countywide plan to provide a project-level record search for cultural resources. However, Mitigation Measure CR-1 would require appropriate documentation of known cultural resources for pedestrian projects that involve earth disturbance below the existing road base or on previously undisturbed ground, the installation of pole signage or lighting, or construction of permanent above-ground structures or roadways.

The commenter also requests that the Napa Valley Transportation Authority contact the Commission to obtain its records for the project area. Any submerged archaeological site or historic or cultural resource that has remained in State waters for more than 50 years is presumed to be significant, the commenter notes. In the Final IS-MND, Mitigation Measure CR-1 has been amended to acknowledge this information:

> **CR-1 Study of Archaeological Resources.** The sponsor of a pedestrian project listed in the NCPP that involves earth disturbance below the existing road base or on previously undisturbed ground, the installation of pole signage or lighting, or construction of permanent above-ground structures or roadways shall ensure that the following elements are included in the project's individual environmental review to protect archaeological resources:
>
> 1) A map defining the Area of Potential Effects (APE) shall be prepared for improvements which involve earth disturbance, the installation of pole signage or lighting, or construction of permanent above-ground structures. This map shall indicate the areas of primary and secondary disturbance associated with construction and operation of the facility and shall help in determining whether known archeological, paleontological or historical resources are located within the impact zone.
>
> 2) A preliminary study of each project area, as defined in the APE, shall be completed to determine whether or not the project area has been studied under an earlier investigation, and to determine the impacts of the previous project.
>
> 3) If the results of the preliminary studies indicate additional studies are necessary, field studies and/or other documentary research shall be developed and completed (Phase I studies). <u>For projects that involve work in State waters under the jurisdiction of the California State Lands Commission, documentary research shall include contacting the Commission to obtain its records of significant submerged archaeological sites or historic or cultural resources (i.e., resources that have remained in State waters for more than 50 years).</u> Negative results would result in no additional studies for the project area…

In addition, the commenter recommends that the Final IS-MND add a mitigation measure requiring stoppage of construction and notification of a qualified archaeologist in the event that cultural resources are discovered during construction. Mitigation Measure CR-2 has been amended as follows to incorporate this recommendation:

> **CR-2 Archaeological Monitoring.** If development of the proposed improvement requires the presence of an archaeological, Native American, or paleontological monitor, the project sponsor shall ensure

that a Native American monitor, certified archaeologist, and/or certified paleontologist, as applicable, monitors the grading and/or other initial ground-altering activities. If cultural resource remains are encountered during construction or land modification, the construction manager shall ensure that all ground disturbance activities are stopped, and the qualified archaeologist shall assess the nature, extent, and potential significance of any cultural remains. The schedule and extent of the monitoring shall depend on the grading schedule and/or extent of the ground alterations. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual project permitting.

Response 2.12

The commenter requests that the Final IS-MND note that the Commission has title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in submerged lands. The commenter requests that the implementing agency for projects listed in the Plan consult with the Commission should any cultural resources on State lands be discovered during construction. In addition, the commenter requests that the following statement be included in the Final IS-MND's Mitigation and Monitoring Plan: "The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the Commission." In the Final IS-MND, Mitigation Measure CR-3 (Cultural Resource Recovery) has been amended as follows to include this statement:

CR-3 **Cultural Material Recovery.** The project sponsor shall ensure that materials recovered over the course of any given improvement are adequately cleaned, labeled, and curated at a recognized repository. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual project permitting. The relocation and final disposition of cultural resources recovered on State lands under the jurisdiction of the California State Lands Commission shall be approved by the Commission.

Response 2.13

With regard to Mitigation Measure CR-3 in the Draft IS-MND, the commenter advises that cultural studies proposed on lands under the Commission's jurisdiction would require a permit from the agency. The commenter adds that no resources or artifacts may be removed from their existing location(s) on sovereign land without Commission approval. As shown in Response 2.12, Mitigation Measure CR-3 has been amended to require Commission approval for relocation of cultural material under the Commission's jurisdiction.

Response 2.14

The commenter states that the Draft IS-MND do not address compliance with CEQA provisions added by Assembly Bill (AB) 52. These requirements include contacting the Native American

Heritage Commission to obtain a general list of interested tribes for a project site, discussing the results of this inquiry in the CEQA document, and disclosing and analyzing potentially significant impacts to tribal cultural resources. However, as noted above, the Draft IS-MND is a programmatic environmental document for a countywide plan. No individual pedestrian projects involving ground disturbance are proposed at this time. AB 52 would not strictly require tribal consultation until the local implementing agency for an individual pedestrian project listed in the Plan formally proposes the project. Furthermore, the Draft IS-MND was circulated for review to the Native American Heritage Commission, which did not submit any comments on the environmental document.

Response 2.15

The commenter requests that the IS-MND include an analysis of greenhouse gas (GHG) emissions consistent with AB 32 and the *CEQA Guidelines*. Specifically, the commenter finds that, depending on the scope and timing of individual projects listed in the Plan, GHG emissions from construction could be significant on an individual or cumulative basis. The commenter recommends that the Final IS-MND use an appropriate air quality threshold, such as Napa County's threshold of 1,100 metric tons CO_2e/year. Page 62 of the Final IS-MND has been amended to note that future environmental review of listed projects would be evaluated based on an appropriate threshold:

> The precise construction timing and construction equipment for individual projects is not specifically known at this time. However, the BAAQMD's *California Environmental Quality Act Air Quality Guidelines* from 2010 have no significance thresholds for construction-related GHG emissions. When individual projects listed in the Plan are proposed in the future, the lead agency for environmental review would be required to evaluate them based on an appropriate threshold for construction-related emissions, such the threshold of 1,100 metric tons CO_2e/year used by Napa County.

In addition, the commenter states that the Draft IS-MND does not provide supporting evidence to document the beneficial effect that pedestrian and bicycle improvements would have on the County's overall GHG emissions. However, Section VII, *Greenhouse Gas Emissions*, of the Draft IS-MND explains that these improvements would facilitate biking and walking, thereby reducing vehicle miles traveled and vehicle delay. These effects would reduce GHG emissions from transportation. Furthermore, the Draft IS-MND was circulated to the California Air Resources Board for review of its GHG analysis, and the agency did not submit any comments on the environmental document.

Response 2.16

The commenter requests that the Final IS-MND consider the effects of sea level rise on projects in the Napa River and its surroundings. Section IX, *Hydrology and Water Quality*, of the Final IS-MND has been amended as follows to discuss the contribution of sea level rise to flooding impacts:

> The construction of new bridges across streams in the cities of Calistoga, Napa, and American Canyon could potentially alter drainage patterns, causing erosion and sedimentation or localized flooding. Bridges also may be constructed within 100-year floodplains. Furthermore, sea level rise will expand the affected acreage of 100-year floodplains along the tidal lower Napa River and could increase the severity of floods in this area. Unless properly designed and engineered, ~~these facilitiies~~new bridges have the potential to block flood flows, divert floodwaters out of creeks and waterway channels, and expose roadway users to flooding. Impacts would be potentially significant.

Furthermore, future environmental review of individual bridges spanning the Napa River would ensure that these facilities be designed for resilience to safety hazards from sea level rise.

The commenter also notes the Commission's requirements when considering lease applications. These requirements are noted and will be forwarded to decision-makers for their consideration when individual projects listed in the Plan are proposed.

Response 2.17

The commenter requests that the Final IS-MND discuss the potential for effects on recreational uses and public access to waterways, recreational uses and access points in the project vicinity, and any measure to reduce potential adverse impacts. The California Streets and Highways Code, the commenter notes, requires a study of the feasibility of providing public access to waterways for public recreational purposes during the design hearing process. As discussed in Section XV, *Recreation*, of the Draft IS-MND, the Plan would by its nature improve recreational access to public lands. The increase in usage of recreational facilities is not anticipated to significantly accelerate or cause the physical deterioration of those parks and facilities such that repair or expansion would be required. Design consistent with code requirements would be addressed at the time when individual bridge projects are proposed.

Response 2.18

The commenter requests that the Commission receive electronic copies of future Plan-related documents and any reports associated with future individual projects. Upon completion, the Final IS-MND and Mitigation Monitoring and Reporting Program will be made available for public viewing at this website: http://www.nvta.ca.gov/countywide-pedestrian-master-plan. The request about future reports on individual projects will be forwarded to decision-makers for their consideration.

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
FAX (510) 286-5559
TTY 711
www.dot.ca.gov

Serious Drought. Help save water!

Letter 3

June 22, 2016

NAPVAR015
NAP-VAR-PM VAR
SCH#: 2016052072

Ms. Danielle Schmitz
Planning Manager
Napa Valley Transportation Authority
625 Burnell Street
Napa, CA 94559

Napa Countywide Pedestrian Plan – Draft Initial Study / Mitigated Negative Declaration

Dear Ms. Schmitz:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Napa Countywide Pedestrian Plan (NCPP) project. The new Caltrans mission, vision, and goals signal a modernization of our approach to California's transportation system, in which we seek to reduce statewide vehicle miles traveled (VMT) by 15 percent by 2020 and increase non-auto modes of active transportation. Caltrans plans to increase non-auto mode shares by 2020 through tripling bicycle, and doubling pedestrian and transit trips. These targets also support the Metropolitan Transportation Commission's (MTC) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which promotes the increase of non-auto mode shares by ten percentage points and a decrease in automobile VMT per capita by ten percent. The following comments are based on the draft initial study and mitigated negative declaration.

Project Understanding
The proposed NCPP would provide a well-connected, safe, and enjoyable pedestrian network for residents of and visitors to Napa County, inclusive of all ages and levels of income and mobility. The NCPP aims to increase the number of pedestrian trips countywide and to set the groundwork for a shift in travel mode choice such that non-auto options are widely available, accessible, and convenient. While inclusive of all levels of mobility, the NCPP does not intend to replace existing ADA Transition Plans.

The NCPP covers the entire county and includes four grade separated pedestrian overcrossings over State Route 29 (SR 29); two in the City of American Canyon and two in the City of Napa.

Lead Agency
As the Lead Agency, the Napa Valley Transportation Authority (the Authority) is responsible for all project mitigation, including any needed improvements to State highways. The project's fair ↓ 3.1

share contribution, financing, scheduling, implementation responsibilities, and Lead Agency monitoring should be fully discussed for all proposed mitigation measures. This information should also be presented in the Mitigation Monitoring and Reporting Plan of the environmental document, a draft of which should be provided for our review.

Pedestrian Overcrossings

Please provide a visual simulation of how the proposed pedestrian overcrossings will impact the aesthetics of SR 29 from the perspective of roadway users. Since SR 29 is eligible for designation as a scenic highway throughout Napa County, a visual representation of the aesthetic impacts of the NPCC and its mitigation should be included in the initial study. The draft initial study finds that aesthetic impacts of the proposed pedestrian overcrossings would be mitigated through design treatments, as described in Mitigation Measure AES-1. We request that the Authority provide photos that demonstrate the artistic treatments that include, but are not limited to, mimicking the topography of the Napa Valley or displaying the history of the area. 3.2

Please also provide an explanation or evaluation as to how the Authority determined that pedestrian overcrossings were the preferred option for crossing SR 29 in the Cities of American Canyon and Napa. At other locations discussed in the NCPP, improvements include safety improvements for at-grade crossings such as traffic calming, road diets, and enhanced crosswalks. It is not clear how overcrossings were selected as the improvement for SR 29. 3.3

Project Design

All proposed new traffic control devices on the State Transportation Network must meet warrants per the California Manual on Uniform Traffic Control Devices (MUTCD). To access the latest version of the MUTCD, please visit: 3.4

http://www.dot.ca.gov/hq/traffops/engineering/mutcd/ca_mutcd2014rev1.htm

All facilities with the State right-of-way (ROW) must be designed per Caltrans design standards. For more information, please refer to:

http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm

Encroachment Permit

Please be advised that any work or traffic control that encroaches onto the State ROW requires an encroachment permit that is issued by Caltrans. Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the following address: 3.5

David Salladay, District Office Chief
Office of Permits, MS 5E
California Department of Transportation, District 4
P.O. Box 23660
Oakland, CA 94623-0660

See the following website for more information:

http://www.dot.ca.gov/hq/traffops/developserv/permits

Should you have any questions regarding this letter, please contact Jesse Schofield at 510-286-5562 or jesse.schofield@dot.ca.gov.

Sincerely,

PATRICIA MAURICE
District Branch Chief
Local Development - Intergovernmental Review

c: State Clearinghouse

Letter 3

COMMENTER: Patricia Maurice, District 4 Branch Chief, Local Development – Intergovernmental Review, Caltrans

DATE: June 22, 2016

RESPONSE:

Response 3.1

The commenter requests that all mitigation measures in the IS-MND discuss the Plan's fair share contribution, financing, scheduling, implementation responsibilities, and lead agency monitoring. These topics will be considered as part of environmental review of individual projects listed in the Plan, when they are proposed in the future. The Draft IS-MND provides a programmatic review of the Plan's overall traffic impacts, determining that the listed pedestrian projects would improve multi-modal circulation as a whole.

The commenter also requests that a draft of the Mitigation Monitoring and Reporting Plan (MMRP) be provided for Caltrans review. Because traffic impacts would be less than significant at a programmatic level, the IS-MND does not include any mitigation measures for this issue area. However, the MMRP is included in Appendix B and will be shared with public agencies, as part of the Final IS-MND, 10 days prior to adoption of the Plan.

Response 3.2

Because SR 29 is eligible for designation as a scenic highway throughout Napa County, the commenter requests that the IS-MND include a visual simulation showing how the proposed pedestrian overcrossings of this highway would affect aesthetics from the perspective of road users. In addition, the commenter requests photos that demonstrate the artistic treatments required by Mitigation Measure AES-1 for overpasses of SR 29. Please note that the IS-MND provides a programmatic analysis of environmental impacts for future pedestrian improvements; the design treatments required by Mitigation Measure AES-1 would be applied when individual overpasses of SR 29 are proposed. At that time, project-level environmental review would ensure proper implementation of this measure.

Response 3.3

The commenter asks how the Napa Valley Transportation Authority selected pedestrian overcrossings of SR 29 as the preferred option in the cities of American Canyon and Napa, given that the Plan lists at-grade crossing improvements in other areas. These overcrossings, while listed in the Plan, were selected by local jurisdictions. The City of American Canyon's Circulation Element lists three grade-separated pedestrian crossings of SR 29 as major circulation improvements. The City of Napa decided on pedestrian overcrossings of SR 29 for ease of construction and cost effectiveness in providing needed east-west pedestrian connections in the central part of the city. In addition, the proposed overpasses in American Canyon and the Pueblo Avenue Overpass in the City of Napa were previously listed projects in the Napa Countywide Transportation Plan.

Response 3.4

The commenter notes that all new traffic control devices on the State Transportation Network must meet warrants per the California Manual on Uniform Traffic Control Devices. While this comment does not address environmental impacts analyzed in the Draft IS-MND, it will be forwarded to decision-makers for the consideration in the future design of improvements listed in the Plan.

Response 3.5

The commenter advises that any work or traffic control that encroaches onto the State right-of-way would require an encroachment permit from Caltrans. Consistent with this comment, Page 10 of the Draft IS-MND acknowledges that Caltrans approval would be required for certain projects listed in the Plan.

Appendix B

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

The Final Initial Study-Mitigated Negative Declaration identifies the mitigation measures that will be implemented to reduce the impacts associated with the Napa Countywide Pedestrian Plan (Plan) to a less-than-significant level. The California Environmental Quality Act (CEQA) requires a public agency to adopt a monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to proposed development. As stated in section 21081.6(a)(1) of the Public Resources Code:

> *... the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment*.

Section 21081.6 also provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, must be defined as part of adopting a mitigated negative declaration.

The mitigation monitoring table lists those mitigation measures that may be included as conditions of approval for the project. To ensure that the mitigation measures are properly implemented, a monitoring program has been devised which identifies the timing and responsibility for monitoring each measure. The lead agencies for individual projects listed in the Plan will have the responsibility for implementing the measures. These agencies include the cities of Calistoga, St. Helena, Napa, and American Canyon; the Town of Yountville; and the County of Napa. They will have the primary responsibility for monitoring and reporting on the implementation of the mitigation measures.

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration Mitigation Monitoring and Reporting Plan							
Mitigation Measure		**Action Required**	**When Monitoring to Occur**	**Responsible Agency or Party**	**Verification of Completion**		
					Initial	**Date**	**Comments**
AESTHETICS							
AES-1	**Overpass Treatments.** Proposed overpasses of SR 29 listed in the NCPP shall include design treatments to improve their appearance from the perspective of roadway users on SR 29. Design treatments may include, but are not limited to, artistic treatments and use of materials that correspond to the topography or natural features of the Napa Valley or display the history of the area.	Place conditions of approval on the project to ensure that design treatments minimize aesthetic impacts of overpasses	During individual design review	The facility project proponent lead agency			
AIR QUALITY							
AQ-1	**Construction Emissions Measures.** All pedestrian projects listed in the NCPP shall comply with the following mitigation measures to reduce emissions of air pollutants. 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 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	Construction plans shall show BAAQMD's recommended measures; the individual project lead agency shall ensure implementation	Prior to issuance of grading permits; periodically during construction	The facility project proponent lead agency and on-site construction manager			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
	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 visible emissions evaluator. 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.						
BIOLOGICAL RESOURCES							
BIO-1	**Biological Resources Screening and Assessment.** Prior to final design approval of individual projects involving ground disturbance of natural habitat and/or vegetation trimming and/or removal of vegetation, the implementing agency shall have a qualified biologist conduct a field reconnaissance and biological analysis of the environmental limits of the project to identify biological constraints and potential impacts to sensitive biological resources from the project, including potential impacts to special-status plants, animals, and their habitats, as well as protected natural communities including wetland and terrestrial communities and protected trees. For those projects for which ground disturbance would not affect	Projects shall conduct a preliminary biological resource screening; if determined the project has potential to impact biological resources, the individual project lead agency shall	Prior to construction	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
	natural habitat (i.e., work is limited to paved, ruderal, or developed areas only), a desktop analysis to identify any biological constraints for the project may be sufficient. The qualified biologist shall determine, based on the nature of construction activities, if a field reconnaissance is necessary for such projects to completely assess biological constraints. For all individual projects that are located within the jurisdiction of the California State Lands Commission, a biological analysis and field reconnaissance survey shall be conducted to comprehensively inventory biological resources. If the biologist identifies protected biological resources within the limits of and/or potentially adversely affected by the project, the implementing agency shall first prepare alternative designs that seek to avoid and/or minimize impacts to the biological resources. If the project cannot be designed without complete avoidance, the implementing agency shall have the qualified biologist identify the specific impacts to special-status species, develop project-specific avoidance and mitigation procedures to be followed to reduce biological impacts to a less than significant level, identify any state or federal listed species that would necessitate coordination with the appropriate regulatory agency (i.e., USFWS, NMFS, CDFW, USACE) to obtain regulatory permits, and implement project-specific avoidance and mitigation measures prior to and during any construction activities. Mitigation actions that may be required should impacts to special-status species be identified include: • Pre-construction surveys to identify the presence of special-status species within and adjacent to work areas • Worker Environmental Awareness Program training for all construction personnel	avoid, minimize, or mitigate impacts					

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
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	• Complete avoidance of special-status species where and if possible. Avoidance measures may include:
	  ○ Delimiting and flagging of special-status species avoidance buffer areas (Environmentally Sensitive Areas or ESAs)
	  ○ Monitoring of construction activity near ESAs
	  ○ Installation of special-status species exclusion fencing
	• Relocation of special-status species out of work areas (with applicable permits and authorizations as necessary)
	• Restoration of temporarily disturbed special-status species' habitat
	• Compensatory mitigation for impacts to special-status species habitat at a minimum ratio appropriate for extent and quality of permanently disturbed habitat. Mitigation ratios may vary from 1:1 to 5:1.						

BIO-2	**Construction Best Management Practices.** Based on the results of the project-specific impact analysis required by Mitigation Measure BIO-1, and the extent of potential impacts to special-status species, one or more of the following construction Best Management Practices (BMPs) as recommended by a qualified biologist shall be incorporated into all grading and construction plans: • A 20 mile-per-hour speed limit shall be designated in all construction areas • All vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas, and clearing of vegetation for vehicle access	Incorporate into all grading and construction plans BMPs to minimize impacts to biological resources	Prior to issuance of grading permits	The facility project proponent lead agency and on-site construction manager			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration Mitigation Monitoring and Reporting Plan							
Mitigation Measure		**Action Required**	**When Monitoring to Occur**	**Responsible Agency or Party**	**Verification of Completion**		
					Initial	**Date**	**Comments**
	shall be avoided to the greatest extent feasible • The number of access routes, number, and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the goal of the project • Equipment washout and fueling areas shall be located within the limits of grading at a minimum of 100 feet from waters, wetlands, or other sensitive resources as identified by a qualified biologist. Washout areas shall be designed to fully contain polluted water and materials for subsequent removal from the site • Daily construction work schedules shall be limited to daylight hours only [consistent with local noise ordinances] • Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition • Drip pans shall be placed under all stationary vehicles and mechanical equipment • All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week • No pets are permitted on project site during construction						
BIO-3	**Vegetation Mapping/Jurisdictional Delineation.** Prior to approval of any individual project involving ground disturbance, the implementing agency shall retain a qualified biologist to perform an assessment of the project area to identify riparian and other sensitive natural communities (e.g., wetlands). If wetlands are present the qualified biologist shall perform a wetland delineation following the 1987 Army Corps of Engineers Wetlands Delineation Manual and any	If applicable, assess sensitive natural communities and perform wetland delineation	During individual environmental review	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
	applicable regional supplements to the Delineation Manual. The wetland delineation shall be submitted to the USACE for verification.						
BIO-4	**Riparian or Other Sensitive Natural Communities.** If riparian or other sensitive natural communities are found within the project limits, the implementing agency shall design or modify the project to avoid direct and indirect impacts on these habitats, if feasible. Additionally, the implementing agency shall minimize the loss of riparian vegetation by trimming rather than removal where feasible. Prior to construction, the implementing agency shall install orange construction barrier fencing to identify environmentally sensitive areas around the riparian area (50 feet from edge) and other sensitive natural communities (50 feet from edge), or as defined by the agency with regulatory authority over the resource(s). The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The fencing shall be installed before construction activities are initiated and shall be maintained throughout the construction period. The following paragraph shall be included in the construction specifications: The Contractor's attention is directed to the areas designated as "environmentally sensitive areas." These areas are protected, and no entry by the Contractor for any purpose will be allowed unless specifically authorized in writing by lead agency overseeing the pedestrian improvement project. The Contractor will take measures to ensure that the Contractor's forces do not enter or disturb these areas, including giving written notice to employees and subcontractors. Temporary fences around the environmentally sensitive areas shall be installed as the first order of work. Temporary fences shall be furnished, constructed, maintained, and removed as	If applicable, redesign project to avoid impacting sensitive natural communities; install temporary fencing to protect such areas from construction activity; stabilize exposed soil/ slopes.	During individual environmental review	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
	shown on the plans, as specified in the special provisions, and as directed by the project engineer. The fencing shall be commercial-quality woven polypropylene, orange in color, and at least 4 feet high (Tensor Polygrid or equivalent). The fencing shall be tightly strung on posts with maximum 10-foot spacing. Immediately upon completion of construction activities, the contractor shall stabilize exposed soil/slopes. On highly erodible soils/slopes, the contractor shall use a non-vegetative material that binds the soil initially and breaks down within a few years. If more aggressive erosion control treatments are needed, geotextile mats, excelsior blankets, or other soil stabilization products shall be used. All stabilization efforts should include habitat restoration efforts.						
BIO-5	**Compensatory Mitigation.** If riparian and/or other sensitive natural communities are disturbed as part of an individual project, the implementing agency shall compensate for the disturbance to ensure no net loss of habitat functions and values. Compensation ratios shall be based on site-specific information and determined through coordination with state, federal, and/or local agencies as part of the permitting process for the project. Unless determined otherwise by the regulatory/permitting agency, the compensation shall be at a minimum ratio of 2 acres restored, created, and/or preserved for every 1 acre disturbed. Compensation may comprise on-site restoration/creation, off -site restoration, preservation, or mitigation credits (or a combination of these elements). The implementing agency shall develop and implement a restoration and monitoring plan that describes how the habitat shall be created and monitored over a minimum period of time.	If applicable, project plans shall include project-specific measures to mitigate impacts at a minimum ratio of 2:1 and a restoration plan shall be prepared meeting all requirements	During individual environmental review	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
BIO-6	**Wildlife Movement Design Measures.** Prior to design approval of individual projects that contain movement habitat, the implementing agency shall incorporate economically viable design measures, as applicable and necessary, to allow wildlife or fish to move through any project area, and allow breeding (in particular aquatic breeding of fish and amphibians) both during construction activities and post-construction. Design measures shall be developed on a project-by-project basis and reviewed by a qualified biologist and appropriate regulatory agencies (i.e., USFWS, NMFS, CDFW) to ensure their efficacy. Such measures may include appropriately spaced breaks in a center barrier, or other measures that are designed to allow wildlife to move through the project corridor. If the project cannot be designed with these design measures (e.g., due to traffic safety) the implementing agency shall coordinate with the appropriate regulatory agency to obtain regulatory permits (if required) and implement alternative project-specific mitigation prior to any construction activities. Mitigation may include one or more of the following options: • Wildlife friendly fencing design • Lighting designs to minimize disturbance to wildlife • Wildlife crossings • Restoration within wildlife movement corridor areas • Limits on work allowed within aquatic features during spawning (fish) or breeding (amphibian) season • Protection of known spawning and amphibian breeding areas	If applicable, project plans shall include project-specific measures to avoid and minimize impacts to wildlife movement corridors	During individual environmental review	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
BIO-7	**Tree Protection.** If the biological resources screening and assessment required by Mitigation Measure BIO-1 determines that construction may impact trees protected by local agencies, the project sponsor shall procure all necessary tree removal permits. A tree protection and replacement plan shall be developed by a certified arborist as appropriate. The plan shall include, but would not be limited to, an inventory of trees to within the construction site, setbacks from trees and protective fencing, restrictions regarding grading and paving near trees, direction regarding pruning and digging within the root zone of trees, and requirements for replacement and maintenance of trees. If protected trees will be removed, replacement tree plantings of like species in accordance with local agency standards, but at a minimum ratio of 2:1 (trees planted to trees impacted), shall be installed on-site or at an approved off-site location and a restoration and monitoring program shall be developed and implemented for a minimum of seven years or until stasis has been determined by certified arborist. If a protected tree shall be encroached upon but not removed, a certified arborist shall be present to oversee all trimming of roots and branches.	If applicable, tree removal permits shall be acquired; a tree protection and replacement plan shall be developed with requirements; and replacement planting/restoration shall be monitored until stasis is achieved	Review plan prior to construction activities. Review restoration annually for minimum of seven years or until stasis is achieved.	The facility project proponent lead agency			
CULTURAL RESOURCES							
CR-1	**Study of Archaeological Resources.** The sponsor of a pedestrian project listed in the NCPP that involves earth disturbance below the existing road base or on previously undisturbed ground, the installation of pole signage or lighting, or construction of permanent above-ground structures or roadways shall ensure that the following elements are included in the project's individual environmental review to protect archaeological resources:	If applicable, place conditions of approval on the project to ensure the study of archaeological resources	Apply conditions during individual project permitting	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
	1) A map defining the Area of Potential Effects (APE) shall be prepared for improvements which involve earth disturbance, the installation of pole signage or lighting, or construction of permanent above-ground structures. This map shall indicate the areas of primary and secondary disturbance associated with construction and operation of the facility and shall help in determining whether known archeological, paleontological or historical resources are located within the impact zone. 2) A preliminary study of each project area, as defined in the APE, shall be completed to determine whether or not the project area has been studied under an earlier investigation, and to determine the impacts of the previous project. 3) If the results of the preliminary studies indicate additional studies are necessary, field studies and/or other documentary research shall be developed and completed (Phase I studies). For projects that involve work in State waters under the jurisdiction of the California State Lands Commission, documentary research shall include contacting the Commission to obtain its records of significant submerged archaeological sites or historic or cultural resources (i.e., resources that have remained in State waters for more than 50 years). Negative results would result in no additional studies for the project area. 4) Based on positive results of the Phase I studies, an evaluation of identified resources shall be completed to determine the potential eligibility/ significance of the resources (Phase II studies). 5) Phase III mitigation studies shall be coordinated with the Office of Historic Preservation, as the research						

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration Mitigation Monitoring and Reporting Plan							
Mitigation Measure		**Action Required**	**When Monitoring to Occur**	**Responsible Agency or Party**	**Verification of Completion**		
					Initial	**Date**	**Comments**
	design would require review and approval from the OHP. In the case of prehistoric or Native American related resources, the Native American Heritage Commission and/or local representatives of the Native American population shall be contacted for input and permitted to respond to the testing/mitigation programs.						
CR-2	**Archaeological Monitoring.** If development of the proposed improvement requires the presence of an archaeological, Native American, or paleontological monitor, the project sponsor shall ensure that a Native American monitor, certified archaeologist, and/or certified paleontologist, as applicable, monitors the grading and/or other initial ground-altering activities. If cultural resource remains are encountered during construction or land modification, the construction manager shall ensure that all ground disturbance activities are stopped, and the qualified archaeologist shall assess the nature, extent, and potential significance of any cultural remains. The schedule and extent of the monitoring shall depend on the grading schedule and/or extent of the ground alterations. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual project permitting.	If applicable, place conditions of approval on the project to ensure that a Native American monitor or certified archaeologist/ paleontologist monitors the grading and/or other ground altering activities if required	Apply conditions during individual project permitting; monitoring will depend on the schedule and extent of the monitoring will depend on the grading schedule and/or extent of the ground alterations	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration Mitigation Monitoring and Reporting Plan							
Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
CR-3	**Cultural Material Recovery.** The project sponsor shall ensure that materials recovered over the course of any given improvement are adequately cleaned, labeled, and curated at a recognized repository. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual project permitting. The relocation and final disposition of cultural resources recovered on State lands under the jurisdiction of the California State Lands Commission shall be approved by the Commission.	If applicable, place conditions of approval on project to ensure that materials recovered are adequately cleaned, labeled, and curated at a recognized repository.	During individual project permitting	The facility project proponent lead agency			
CR-4	**Avoidance and Mitigation of Cultural Resources.** The project sponsor shall ensure that mitigation for potential impacts to significant cultural resources includes one or more of the following: • Realignment of the project right-of-way (avoidance, the most preferable method) • Capping of the site and leaving it undisturbed • Addressing structural remains with respect to NRHP guidelines (Phase III studies) • Relocating structures per NRHP guidelines • Creation of interpretative facilities, and/or • Development of measures to prevent vandalism. This can be accomplished through placement of conditions on the project by the local jurisdiction during individual project permitting.	If applicable, place applicable conditions of approval on project to ensure mitigation for potential impacts includes requirements.	During individual project permitting	The facility project proponent lead agency			
CR-5	**Discovery of Human Remains.** If human remains are found during earth-disturbing activities for a project listed in the NCPP, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County coroner has made a determination of origin and	If applicable, place conditions of approval on project to ensure avoidance of	During individual project permitting	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
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	disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner shall be notified immediately. If the human remains are determined to be prehistoric, the coroner shall notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	disturbance of human remains and notification County Coroner and NAHC					
CR-6	**Project Plan Review.** A qualified paleontologist shall review all project plans where ground disturbance is expected to exceed more than five feet in depth to determine if paleontologically sensitive units could be impacted. If it is determined that no paleontologically sensitive units could be impacted, then specific project impacts shall be deemed less than significant and no further mitigation would be required. If it is determined that paleontologically sensitive unit could be impacted, then the subsequent mitigation measures provided here shall be followed as a minimum standard.	If applicable, place conditions of approval on project for a qualified paleontologist to review project plans	During individual project permitting	The facility project proponent lead agency			
CR-7	**Paleontological Mitigation Plan.** A qualified paleontologist shall prepare a Paleontological Mitigation Plan (PMP) designed to outline the procedures and protocol for conducting paleontological monitoring and mitigation. The PMP shall be supervised by a qualified paleontologist. A qualified paleontologist (Principal Paleontologist) is defined by the SVP (SVP 2010). Monitoring shall be conducted by a qualified paleontological monitor as defined by the SVP (SVP 2010). The PMP shall address the following procedures and protocols: • Timing and duration of monitoring • Procedures for work stoppage and fossil collection • The type and extent of data that should be collected	If applicable, place conditions of approval on project to ensure preparation of a PMP	During individual project permitting	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
	with any recovered fossils • Identify an appropriate curatorial institution • Identify the minimum qualifications for qualified paleontologists and paleontological monitors • Identify the conditions under which modifications to the monitoring schedule can be implemented • Details to be included in the final monitoring report.						
CR-8	**Paleontological WEAP.** Prior to the start of construction, construction personnel shall be informed on the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.	If applicable, place conditions of approval on project to ensure that construction personnel are informed of procedures to protect paleontological resources	During individual project permitting	The facility project proponent lead agency			
CR-9	**Paleontological Monitoring and Salvage.** Any excavations exceeding five feet in depth shall be monitored on a full-time basis by a qualified paleontological monitor until at least 50 percent of the grading or excavation is completed. After 50 percent of the grading or excavation is complete, if it can be demonstrated that the level of monitoring should be reduced, the Principal Paleontologist may amend the monitoring and mitigation schedule. Ground disturbing activity that does not exceed five feet in depth in young alluvium would not require paleontological monitoring. If fossils are discovered, the qualified paleontologist (or paleontological monitor) shall recover them. Typically fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases larger fossils	If applicable, place conditions of approval on project to ensure grading activities are monitored, fossils recovered and identified, and a monitoring report prepared	During individual project permitting	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration Mitigation Monitoring and Reporting Plan							
Mitigation Measure		**Action Required**	**When Monitoring to Occur**	**Responsible Agency or Party**	**Verification of Completion**		
					Initial	**Date**	**Comments**
	(such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. In this case the paleontologist shall have the authority to temporarily direct, divert, or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner. Once salvaged, fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology), along with all pertinent field notes, photos, data, and maps. Upon completion of ground disturbing activity (and curation of fossils if necessary) the qualified paleontologist shall prepare a final mitigation and monitoring report outlining the results of the mitigation and monitoring program. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated.						
GEOLOGY AND SOILS							
G-1	**Fault Rupture Zones.** Bridge and over/under-crossing projects listed in the NCPP shall be placed in areas outside of fault rupture zones whenever feasible, in accordance with State and local provisions. If avoidance is not possible, detailed geologic and seismic studies must be conducted to locate active or potentially active fault traces. Structures shall then be placed outside of an appropriate setback distance as determined by a qualified engineer.	Place conditions of approval on applicable projects to ensure structures are placed outside fault rupture zones	During individual environmental review	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
G-2	**Earthquake Stability.** If a bridge or over/under-crossing project listed in the NCPP is located in a zone of high potential groundshaking intensity, the project sponsor shall ensure that the structure is designed and constructed to the latest geotechnical standards. In most cases, this will necessitate site-specific geologic and soils engineering investigations conducted by a qualified geotechnical expert. Any investigations shall comply with the California Geological Survey's *Guidelines for Evaluating and Mitigating Seismic Hazards in California.*	Place conditions of approval on applicable projects to ensure structures are designed to withstand earthquakes	During individual environmental review	The facility project proponent lead agency			
G-3	**Liquefaction Resilience.** If a bridge and over/under-crossing project is located in an area of moderate to high liquefaction potential, the project sponsor shall ensure that these structures are designed based upon appropriate geology, soils, and earthquake engineering studies to be completed by a qualified engineer. The facility must be designed to CBC standards. Possible design measures include deep foundations, removal of liquefiable materials, and dewatering.	Place conditions of approval on applicable projects to ensure structures are resilient to liquefaction	During individual environmental review	The facility project proponent lead agency			
G-4	**Slope Stabilization.** If a bridge and over/under-crossing project requires cut slopes over 20 feet in height or is located in areas of bedded or jointed bedrock, the project sponsor shall ensure that specific slope stabilization studies are conducted, as determined by a qualified engineer. Possible stabilization methods include buttresses, retaining walls and soldier piles.	Place conditions of approval on applicable projects to ensure slope stabilization studies are conducted and slopes are stabilized	During individual environmental review	The facility project proponent lead agency			
G-5	**Expansive Soils.** If a pedestrian project listed in the NCPP is located in an area of highly expansive soils, the project sponsor shall ensure that a site-specific geotechnical investigation is conducted by a qualified engineer. The investigation shall	Place conditions of approval on applicable projects to minimize	During individual environmental	The facility project proponent			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
	identify hazardous conditions and recommend appropriate design factors to minimize hazards. Such measures could include concrete slabs on grade with increased steel reinforcement, removal of highly expansive material and replacement with non-expansive import fill material, or chemical treatment with hydrated lime to reduce the expansion characteristics of the soils.	hazards from expansive soils	review	lead agency			
HAZARDS AND HAZARDOUS MATERIALS							
HAZ-1	**Hazardous Material Sites Investigation and Remediation.** Prior to construction of any pedestrian improvement that requires ground disturbance, the project sponsor shall consult lists of hazardous material sites maintained by the California Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB). Where a proposed improvement is located near an identified site, follow up Phase I, and as appropriate, Phase II hazardous waste site investigations shall be completed, and any contaminants shall be remediated to concentrations below applicable screening-level thresholds for human health. No disturbance of contaminated soil shall be permitted unless an approved site cleanup and remediation plan has been implemented for the identified hazardous waste sites.	Place conditions of approval on applicable projects to investigate and, if necessary, remediate hazardous material sites	During individual environmental review	The facility project proponent lead agency			
HYDROLOGY AND WATER QUALITY							
W-1	**Stormwater Pollution Prevent Plan.** For a pedestrian project that would disturb at least one acre, a Stormwater Pollution Prevention Plan (SWPPP) shall be developed prior to the initiation of grading and implemented for all construction activity on the project site. The SWPPP shall include specific BMPs to control the discharge of material from the site and into the creeks and local storm drains. BMP methods may include, but	If applicable, develop a SWPPP to minimize stormwater impacts	Prior to issuance of grading permit	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
	would not be limited to, the use of temporary retention basins, straw bales, sand bagging, mulching, erosion control blankets and soil stabilizers.						
W-2	**Percolation Basins and Traps.** The sponsor of a widening or roadway extension project shall ensure that the improvement directs runoff into subsurface percolation basins and traps which would allow for the removal of urban pollutants, fertilizers, pesticides, and other chemicals.	If applicable, direct runoff into subsurface percolation basins and traps	During individual environmental review	The facility project proponent lead agency			
W-3	**Structures Within Drainages.** Prior to the final design of any structure such as a bridge that is placed within or over the flow line of a waterway, or crosses over a creek, and where the structure has the potential to block or impede flood flows and alter hydrologic conditions, the project sponsor shall complete a detailed hydraulic analysis of the site and structure. This analysis shall: 1) verify that the project is incompliance with local floodplain management ordinances and related General Plan policies regarding flood protection and protection of creek resources, and 2) determine the appropriate sizing, geometry, and elevations of the structures so as not to impact creek hydrology and flood flow conditions. The hydraulic analysis and design recommendations shall require review and approvals of the local jurisdiction's Engineer and Flood Plain Manager. In addition, bank stabilization and erosion control measures shall be implemented along creek crossings, as determined by a qualified engineer.	If applicable, complete a detailed hydraulic analysis of site and structure, and implement bank stabilization and erosion control measures along creek crossings	During individual environmental review	The facility project proponent lead agency			
NOISE							
N-1	**Noise Reduction Measures Near Residences.** Sponsors of pedestrian projects shall ensure that, where residences or other noise sensitive uses are located within 800 feet of construction sites, appropriate measures shall be implemented	Place mitigation measures or conditions of approval on	During individual environmental review	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration

Mitigation Monitoring and Reporting Plan

Mitigation Measure		Action Required	When Monitoring to Occur	Responsible Agency or Party	Verification of Completion		
					Initial	Date	Comments
	to ensure consistency with local noise ordinance requirements relating to construction. Specific techniques may include, but are not limited to, restrictions on construction timing, use of sound blankets on construction equipment, and the use of temporary walls and noise barriers to block and deflect noise.	applicable projects for noise reduction consistent with local noise ordinance requirements					
N-2	**Noise Control on Equipment.** Project sponsors shall ensure that equipment and trucks used for project construction utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).	Ensure that equipment and trucks use best available noise control techniques	During individual environmental review	The facility project proponent lead agency			
N-3	**Impact Equipment.** Project sponsors shall ensure that impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction be hydraulically or electrically powered wherever feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, use of an exhaust muffler on the compressed air exhaust can lower noise levels from the exhaust by up to about 10 dBA. When feasible, external jackets on the impact equipment can achieve a reduction of 5 dBA. Whenever feasible, use quieter procedures, such as drilling rather than impact equipment operation.	Ensure that equipment is hydraulically or electrically powered; that an exhaust muffler is used; that external jackets on impact equipment is used; or quieter procedures are used, when feasible and applicable	During individual environmental review	The facility project proponent lead agency			
N-4	**Stationary Noise Sources.** Locate stationary noise sources as far from sensitive receptors as possible. Stationary noise sources that must be located near existing receptors will be adequately muffled.	Ensure that stationary noise sources are located away from sensitive receptors or muffled	During individual environmental review	The facility project proponent lead agency			

Napa Countywide Pedestrian Plan Final Initial Study-Mitigated Negative Declaration Mitigation Monitoring and Reporting Plan							
Mitigation Measure		**Action Required**	**When Monitoring to Occur**	**Responsible Agency or Party**	**Verification of Completion**		
					Initial	**Date**	**Comments**
UTILITIES AND SERVICE SYSTEMS							
U-1	**Drought-Tolerant Landscaping.** The sponsor of a project listed in the NCPP that involves landscaping shall ensure that low water use landscaping (i.e., drought-tolerant plants and drip irrigation) is installed. When feasible, plant species native to habitats in Napa County shall be used.	Ensure planting of low water use landscaping and, when feasible, plant species native to habitats in Napa County	During individual environmental review	The facility project proponent lead agency			

PLANNING DEPARTMENT ADMINISTRATIVE APPROVALS

DATE	ADDRESS	WORK APPROVED
12-12-16	1679 Kearny Street	Building permit: new roof, replaced windows and doors, minor materials changes, and interior remodel. No square footage increase.
1-12-17	1380 Main St.	Window and door for new tenant space.
1-27-17	875 Hunt Ave.	Exterior trellis, gate, and barbeque.
2-3-17	2470 Spring Mtn. Rd.	Gate and fence.
3-9-17	1576 Vorhees Circle	Replacement trellis.
3-14-17	1126 Adams Street	Replacement trellis at office building.

CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION PC2017-013

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ST. HELENA DENYING DESIGN REVIEW AND A USE PERMIT FOR 2555 MAIN STREET AND DENYING A DEMOLITION PERMIT, DESIGN REVIEW, USE PERMIT, AND VARIANCES FOR 830 PRATT AVENUE IN THE CITY OF ST.HELENA, CALIFORNIA

PROPERTY OWNER: CULINARY INSTITUTE OF AMERICA **APN:** 009-010-024 and 009-131-003

Recitals

1. **Whereas,** the Culinary Institute of America submitted an application for Design Review and Use Permit approval to expand student enrollment to 300 students, introduce storage cave, and three modular storage units at the Greystone Campus at 2555 Main Street (APN.009-131-003); and
2. **Whereas,** the Culinary Institute of America also submitted an application for a Demolition Permit, Design Review, Use Permit, and Variances to expand the student housing at the Vineyard Lodge Housing Site at 830 Pratt Avenue (APN. 009-010-024); and
3. **Whereas,** the entitlements requested for the Greystone property (2555 Main Street) and the Vineyard Lodge Housing Site (830 Pratt Avenue) are effectively intertwined and viewed as one project under CEQA such that the approval or disapproval of entitlements related to one property could necessarily apply to the other.
4. **Whereas,** 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 December 9, 2016 until January 23, 2017; and
5. **Whereas**, 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
6. **Whereas,** the Planning Commission of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on February 21, 2017, which was continued to a date certain, March 7, 2017. At this meeting, the Planning Commission determined the project was incompatible with the required findings needed to approve the project, and directed staff to prepare a resolution for denial, for review and action on March 21, 2017.
7. **Whereas**, the Planning Commission, after reviewing project materials, and considering written evidence and the testimony submitted at the February 21, 2017 and March 7, 2017, meetings and on March 21, 2017, Planning Commission Hearing, voted to deny

the applications in their entirety and without prejudice, and directed staff to prepare a resolution with findings memorializing and explaining the Planning Commission's decision.

Resolution

Now, therefore be it resolved that the Planning Commission hereby denies the requested Use Permit and Design Review for 2555 Main Street, and denies the Demolition Permit, Design Review, Use Permit, and Variances for 830 Pratt Avenue without prejudice and on the basis of the following findings:

1. The Planning Commission relied upon and hereby incorporates by reference all of the documents to which this Resolution refers, and the associated staff report(s), City files for this matter, correspondence, presentations and other materials, including statements made in the review and deliberation on the project. The Planning Commission further hereby incorporates by reference the recitals set forth above.
2. Pursuant to Section 15270 of the CEQA Guidelines, CEQA does not apply to a project which a public agency rejects or disapproves.
3. Design Review. The Planning Commission has considered the findings identified in St. Helena Municipal Code ("SHMC") Section 17.164.030 required to support approval of a Design Review Permit and hereby finds that the project applicant does not meet all of the required findings in that:

   A.The proposed Vineyard Lodge Housing development project would not be consistent with applicable General Plan policies given that its scale and massing is not found to be sympathetic or complementary to historic and distinctive neighborhoods of the City, nor does it sufficiently retain the rural small town quality and character of St. Helena.

   B.The form and massing of the Vineyard Lodge Building's would not be compatible with the immediate environment of the site in that the height, massing and square footage exhibited by the proposed dormitory buildings were incompatible with the residential buildings and general character of the immediate vicinity.

   C.The Vineyard Lodge Housing design does not promote harmonious transition in scale and character in areas between different designated land uses in that the proposed dormitory building on Pratt Avenue exhibits a scale and density significantly greater than that of the surrounding area and is not compatible with the surrounding character.

4. Use Permit. The Planning Commission has considered the findings identified in SHMC Section 17.168.050 required to support approval of a Use Permit and hereby finds that the project does not meet all of the required findings in that:

   A.The proposed Vineyard Lodge Housing use would generate levels of noise that adversely affect the health, safety, or welfare of neighboring properties or uses, given the significant increase in the number of on-site residents.

B.The proposed Vineyard Lodge Housing use would make excessive demands on the provision of public services including, sewer capacity and vehicular circulation, based on the existing design and odor issues associated with the Crinella Pump Station and the proposed reductions in the setback from the roadway.

C.The proposed Vineyard Lodge Housing use would not be compatible with surrounding land uses and would conflict with the purpose established for the district within which it would be located given its location outside of the urban limit line, deviation from the agricultural and residential character of surrounding land uses and the lack of compliance with the required setback and parking requirements of said Districts and location.

D.The parking plan submitted by the applicant does not demonstrate adequate off-street parking at the Vineyard Lodge Housing Site as needed to accommodate the long term parking needs of residents, guests and events proposed to occur at the project site, as a component of the proposed dormitory land use.

5. To the extent not expressly stated above, the Planning Commission hereby incorporates herein, and adopts herein as its findings, the statements and comments for denial made by the members of the Planning Commission during the public hearing and deliberations on the project.

I HEREBY CERTIFY that the foregoing demolition permit, design review, and use permit for 2555 Main Street, and the foregoing demolition permit, design review, variances, and use permit for 830 Pratt Avenue were duly and regularly denied by the Planning Commission of the City of St. Helena without prejudice and at a regular meeting of said Planning Commission held on March 21, 2017, by the following roll call vote:

AYES: Commissioner Parker, Kistner, Knudsen and Monnette
NOES: None
ABSENT: None
ABSTAIN: Sweeney

APPROVED:

Grace Kistner
Chair, Planning Commission

ATTEST:

Noah Housh
Planning Director

Tentative Planning Commission Agenda
Updated: April 6, 2017

CURRENT AND PENDING MATTERS

Anticipated April/May Planning Commission (PC) and City Council (CC):
1. PL17-017-995 Vintage Ave. UP for Crush Fitness-April 18, 2017 PC Lilly Bianco
2. PL17-014 1000 Pratt Ave, DR for Beringer Winery Production Modifications April 18, 2017 Lilly Bianco
3. PL17-012 1230 Allyn Avenue DR for Addition to Existing Home, April 18, 2017 PC Aaron Hecock
4. Zoning Code Update to Address Changes in State Law-Second Dwelling Units-Noah Housh-PC May 2, 2017
5. Zoning Code Update to address changes in State Law-Recreational Marijuana-In Process-Noah Housh CC-April 28, 2017
6. PL17-011 2140 Dean York DR for Bathroom Addition, April 18, 2017 PC Aaron Hecock
7. Napa Countywide Pedestrian Plan PC Review and Recommendation April 18, 2017 Erica Ahmann-Smithies
8. PL17-025 2555 Main St Appeal of DR and UP Denial-Under Review May 9, 2017 CC Date-Lilly Bianco
9. PL16-090 2000 Main St Beringer Winery Design Review-Under Review, May 2, 2017 PC Date-Lilly Bianco
10.
Active/Pending Projects
1. TSM 2010-40 Vacant Parcel-2010-40 Hunter Subdivision and EIR-Noah Housh
2. PL14-041 741 McCorkle-Tentative Map and Use Permit-Under Review-Aaron Hecock
3. PL15-049 837 Signorelli Cir-Garage-DR Exemption-Pending Resubmittal-Aaron Hecock
4. PL16-025 661 Main St LLA-Frozen by Applicant-Noah Housh
5. PL16-018 & -094 420 Lafata (Previously 890 Dowdell Ln)-Custom Crush Facility-UP and Design Review- Resubmittal Under Review-Noah Housh
6. PL16-048 576 Pope St-DR for new SFD-Frozen by Applicant
7. PL14-10 1701 Madrona-Final Map and Tentative Map Extension-Frozen by Applicant
8. PL16-058 1111 Main St-DR and Master UP for Commercial Land Uses-Under Review-Aaron Hecock
9. PL16-074 Money Way Bathrooms-Aaron Hecock/Tobias Barr
10. PL16-012 633 Main St-UP to convert existing SFD into 2-room Hotel-Frozen by Applicant-Noah Housh
11. PL16-043 830 Pratt Ave CIA DR, Variance and CUP for Dormitory Expansion-PC Review date Feb 21, 2017-Lilly Bianco-Denied by PC; Appealed to CC 05-09-17 Anticipated PH
12. PL16-081 thru -083 1003 Charter Oak Subdivision and 2 SFDs-Aaron Hecock
13. PL16-090 2000 Main St Beringer Winery Design Review-Lilly Bianco
14. PL16-089 1919 Main St Las Alcobas Signs-Aaron Hecock
15. PL16-093 2600 Sulphur Springs Admin Determination Side Setback-Noah Housh
16. PL16-095 1827 Vineyard Ave Demo and DR SFD – Aaron Hecock
17. PL16-096 800 Crane Ave DR Exemption for Equipment Install-Under Review Noah

Housh
18. PL16-097-563 Main Admin Determination Oak Ave Extension Noah Housh
19. PL17-004 1380 Main # 102 Use Permit for Retail Store-Aaron Hecock
20. PL17-005 1380 Main #103 Use Permit for Retail Store-Aaron Hecock
21. PL17-006 1000 Mills Ln Farmstead Hotel-Aaron Hecock
22. PL17-007 1178 Hudson Design Review Aaron Hecock
23. PL17-009 1380 Main St Sign Permit-Under Review Aaron Hecock
24. PL17-010 609 McCorkle DR for Pool House Aaron Hecock
25. PL17-011 2140 Dean York DR for Bathroom Addition Aaron Hecock
26. PL17-012 1230 Allyn Avenue DR for Addition to Existing Home Aaron Hecock
27. PL17-013 1915 Main St DR for Bridge-Lilly Bianco
28. PL17-014 1000 Pratt Ave, DR for Beringer Winery Production Modifications April 18, 2017 Lilly Bianco
29. PL17-015 1136 Main TPM Extension
30. PL17-016 1136 Main St Sign Permit
31. PL17-017 995 Vintage Ave, Suite 100 Use Permit
32. PL17-018 1050 Charter Oak Sign Permit
33. PL17-019 1734 Scott St DR for Home and Second Unit Remodel-Lilly Bianco
34. PL17-020 1727 Scott St DR & Demolition for New SFD and Second Unit-Lilly Bianco
35. PL17-021 1764 Spring St New Short Term Rental-Aaron Hecock
36. PL17-022 1351 Main St Use Permit Amendment-
37. PL17-023 1237 Main St New Short Term Rental Renewal
38. PL17-024 1830 Main St Remodel and Addition to a Historic Home-Lilly Bianco
39. PL17-025 2555 Main St Appeal of DR and UP Denial
40. General Plan Update EIR-In Process-Noah Housh
41. General Plan Update-In Process-Noah Housh
42. Zoning Code Update to address changes in State Law-Second Dwelling Units-In Process-Noah Housh
PC/CC Assignments Currently Under Review by Staff:
1. General Plan Update and General Plan EIR-On Going
2. Manage RFP Responses and Candidate Selection-On Going
3. Short-Term Rental Ordinance Update Implementation and Enforcement
4. Demolition Permit Review
5. Code Enforcement Policy and Procedures Update-On Going
6. PG&E Parking Lot Negotiation-On Going
7. Development Review Process Discussion Item (PC Assigned Feb. 2017)

Pending PC/CC Assignments for Planning Department
1. Initiate Creation and Implementation of Design Guidelines
2. Comprehensive Zoning Code Update-Following General Plan Adoption
3. F.A.R. Review-To be conducted with Zoning Code Update
4. Council Goal Setting
5. Noise Ordinance Review (CC Assigned 3/28/17)
6. OTSH Concept for Affordable Housing on Railroad Property (CC Assigned 3/28/17)
7. Pre-Application/Concept Design Review Meeting prior to Submittal (CC Assigned 3/28/17)
Other Items of Interest to Planning Commission
1. Food Truck Ordinance
2. Update Daycare Zoning Regs-Consistent with State Law
3. Pools-Drought Policy Changes. Phase 1?
4. Plan Improvements, Additional Requirements, Application Checklist
5. Limit on Demolition Permits
6. General Plan & EIR 45-day Public Review
7. Water Update/Report from PW
8. Hunter EIR 45-day Public Review and Project Review
Required Items and Issues of Interest to Staff
1. Calderon Settlement Agreement Implementation and Monitoring-On Going
2. Design Guidelines-TBD
3. PW & Planning - Ordinance to Amend Municipal Code Related to Exterior Fire Sprinklers
5. Temporary Use Permit-Create Process-Ordinance and ZC Amendments
6. Cell Towers Ordinance-Update Current Code -State and Fed Laws
7. Growth Management Code Language Update and Annual Review (Sept)
8. Fee Study-Pending
9. Review and Comment-Draft Tree Ordinance
10. AB 52 CEQA Process Implementation-Native American Consultation-On Going
12. Code Enforcement-On Going
Recent Actions
1. 684 McCorkle OTSH-8 Unit Affordable Multi-Family-UP, Design Review, Demo and T-Map-Under Review-Approved November 15, 2016
2. 632 McCorkle-8-Unit Multi-Family Residential-Design Review and Demolition-PC Approved 12-6-16; Appealed to CC; Appeal Denied January 24, 2017
3. Building and Fire Code Update - Ordinance to Amend Municipal Code-CC Approved Nov. 2017
4. 574 Pope St-DR, UP & T-Map-Withdrawn
6. Design Review Submittal Requirements-PC Discussion

7. 1210 Greyson-Davies Winery Signs-PC Approved Sept. 20, 2016-Appealed to CC, Appeal Denied December 2016
8. PL16-087 1234 Adams Street Wine Tasting PC Approved 12-20-16; Appealed to CC-Appeal Supported 1-24-17,
10. PL16-086 1367 Main St Woodhouse Bar-B-Q Use Permit Feb 7, 2017
11. PL16-084 1425 Oak Ave DR Playground Shade at Montessori Pre School- Feb 7, 2017
12. 1045 Pratt-DR for new SFD- Feb. 7, 2017
13. PL16-080 1405 Adams St New SFD w/ Attached Garage –Feb 7, 2017
14. 1105 Turley Flats Affordability and Loan Agreements- CC Approved Jan. 31, 2017
15. PL16-099 1475 Main Rianda House New Sign-Feb 7, 2017
16. PL16-058 1111 Main St-DR and Master UP for Commercial Land Uses-Under Review-Aaron Hecock
17. PL16-042 2555 Main St CIA DR, Variance and CUP for Educational Expansion-PC Review date Feb 21, 2017-Lilly Bianco-Denied; Appealed to CC
18. PL16-043 830 Pratt Ave CIA DR, Variance and CUP for Dormitory Expansion-PC Review date Feb 21, 2017-Lilly Bianco-Denied; Appealed to CC