

Memorandum

*Serious drought.
Help Save Water!*

To: MATTHEW PALMER
Associate Environmental Planner
Caltrans D6 Environmental Planning Branch

Date: November 9, 2015

File: 05-1C670
05-1200-0194
05-SCR-17, PM 0.1/0.4
Pasatiempo Widening

From: Alexandra Bevk *AB*
Principal Architectural Historian
Caltrans District 5

Subject: **Section 106 Complete for Pasatiempo Shoulder Widening Project in Santa Cruz County, California**

Caltrans District 5 is proposing a shoulder widening and earth stabilization project along a less than half-mile section of the southbound roadside of State Route 17 (SR 17) in Santa Cruz County just north of the City of Santa Cruz, within the postmiles 0.1/0.4. The project would construct either a soldier pile wall or a soil nail wall, widen shoulders, and make additional improvements on SR 17. These proposed activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required from four adjacent parcels for permanent construction easements.

The attached *Historic Property Survey Report for the Pasatiempo Widening Project, Highway 17, Santa Cruz County, California* documents that the requirements of 36 CFR 800 have been fulfilled, in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA).

A Historic Property Survey Report (HPSR) for the project was completed in October 2015 (Carr and Haydu 2015). Identification efforts for the Pasatiempo Widening Project resulted in the evaluation of two historic-period buildings within the APE. Both evaluated resources in the APE – the 13 South Circle Drive (Map Reference No. 1) and 15 South Circle Drive (Map Reference No. 2) – do not appear to meet the criteria for listing in the NRHP or CRHR because they lack historical significance. Pursuant to Stipulation VIII.C of the PA, Caltrans requested concurrence from SHPO on October 6, 2015 that the following resources are not eligible:

Address / Location	City	Year Built	CHR Status Code	Map Reference No.
13 South Circle Drive (APN 060-271-005)	Santa Cruz	1939	6Z	1
15 South Circle Drive (APN 060-271-006)	Santa Cruz	1957	6Z	2

Caltrans District 5 received concurrence on the non-eligible determinations on November 5, 2015 (Attachment 2). As assigned by FHWA pursuant to U.S.C. 326, Caltrans has determined a **Finding of No Historic Properties Affected**, according to Section 106 PA Stipulation IX.A and 36 CFR 800.4(d)(1), is appropriate, and no further studies are warranted.

In the event cultural material is encountered during construction, work shall cease until a qualified archaeologist can assess the unanticipated discovery in accordance with the Programmatic Agreement, and the Caltrans Environmental Planning Branch shall be notified immediately.

Attachment:

- (1) *Historic Property Survey Report for the Pasatiempo Widening Project, Highway 17, Santa Cruz County, California, 05-SCR-17 PM 0.01/0/4; EA 05-1C670 / ID 05-1200-0194, October 2015.* (Carr and Haydu, 2015)
- (2) SHPO concurrence dated November 5, 2015

c: Cultural Resource Files, 05-SCR-17 PM 0.1/0.4
Krista Kiaha, Heritage Resource Coordinator

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



November 5, 2015

Reply To: FHWA_2015_1007_001

Krista Kiaha
Chief, Central Coast Specialist Branch
Heritage Resource Coordinator
Caltrans District 5
50 Higuera Street
San Luis Obispo, CA 93401-5415

Re: Determinations of Eligibility for the Proposed Pasatiempo Shoulder Project, Santa Cruz County, CA

Dear Ms. Kiaha:

Thank you for consulting with me about the subject undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

Caltrans is proposing a shoulder widening and earth stabilization project along a less than half-mile section of the southbound roadside of State Route 17 in Santa Cruz County just north of Santa Cruz, within the postmiles 0.1/0.4. The project would construct either a soldier pile wall or a soil nail wall, widen shoulders, and make additional improvements on SR 17. These proposed activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required from four adjacent parcels for permanent construction easements.

Consultation and identification efforts for the project resulted in the identification of two properties within the APE. Caltrans has determined that the following properties are not eligible for the National Register of Historic Places either individually or as part of a potential historic district (NRHP):

- 13 South Circle Drive, Santa Cruz, CA
- 15 South Circle Drive, Santa Cruz, CA

Based on my review of the submitted documentation I concur with the foregoing determinations.

If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014.

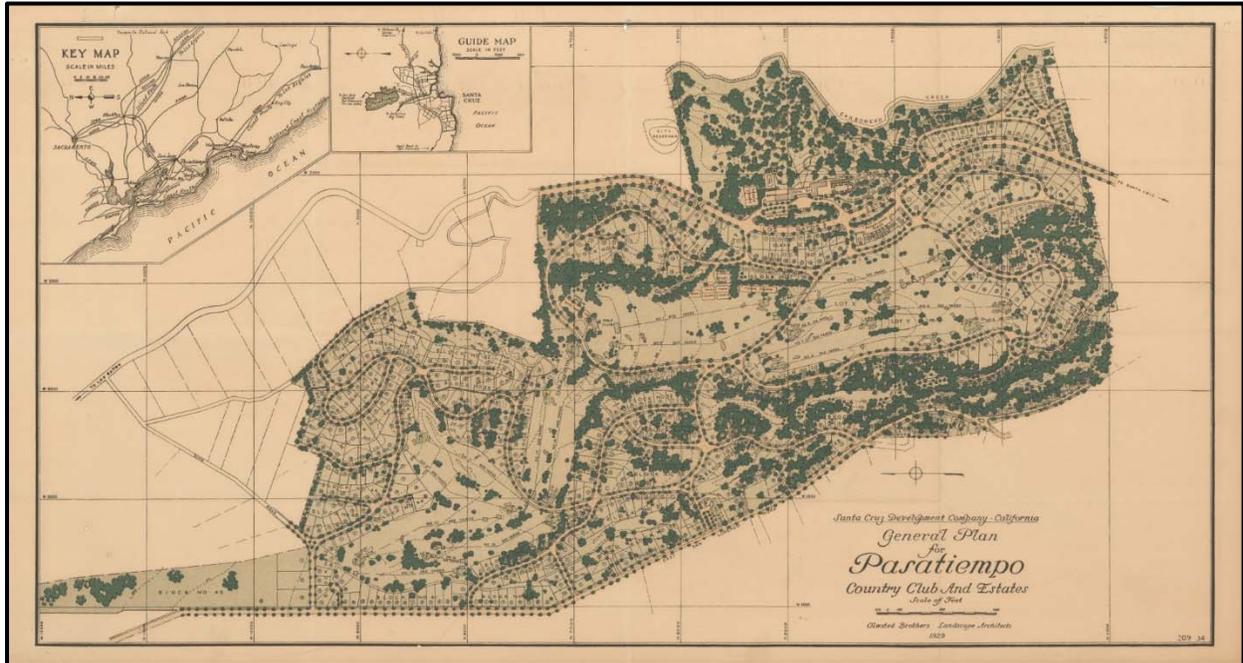
Sincerely,

A handwritten signature in blue ink, appearing to read "Julianne Polanco".

Julianne Polanco
State Historic Preservation Officer

HISTORIC PROPERTY SURVEY REPORT
PASATIEMPO WIDENING PROJECT
Highway 17, Santa Cruz County, California

05-SCR-17-PM 0.1/0.4
EA 1C670K / ID 05-1200-0194



prepared for:

KRISTA M. KIAHA
Chief, Central Coast Specialist Branch
Heritage Resources Coordinator
Department of Transportation, District 5
50 Higuera Street, San Luis Obispo, CA

prepared by:

PAULA JUELKE CARR
PQS Principal Architectural Historian
Central Coast Specialist Branch
Department of Transportation, District 5
50 Higuera Street, San Luis Obispo, CA

OCTOBER 2015

HISTORIC PROPERTY SURVEY REPORT**1. UNDERTAKING DESCRIPTION AND LOCATION**

District	County	Route	Post Miles	Unit	E-FIS Project Number	Phase
05	SCR	17	0.1/0.4	1401	E-FIS 05-1200-0194 EA 05-1C670	0

Project Description:

The California Department of Transportation (Caltrans) proposes to construct either a soldier pile wall or a soil nail wall, widen shoulders, and make additional improvements on State Route 17 in Santa Cruz County between post miles 0.1 and 0.4, just north of Santa Cruz city limits (Attachment A, Figures 1 and 2). These proposed activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required from four adjacent parcels for permanent construction easements.

The nature of the project and the involvement of federal funds require compliance with Section 106 of the National Historic Preservation Act of 1966 (36 CFR 800, revised 2004) and require public agencies to consider the effects of projects on historic properties. Compliance with Section 106 is being carried out in accordance with the with the January 1, 2014, *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (the PA).

2. AREA OF POTENTIAL EFFECTS

In accordance with Section 106 Programmatic Agreement Stipulation VIII.A, the Area of Potential Effects (APE) for the project was established in consultation with Krista M. Kiaha, Heritage Resources Coordinator and Central Coast Specialist Branch Chief; Paula Juelke Carr, PQS Principal Architectural Historian; and Project Manager Luis Duazo on October 5, 2015. The APE maps is Figure 2 of Attachment in this Historic Property Survey Report.

The archaeological APE is coterminous with the limits of the project Area of Direct Impact, including the limits of the permanent construction easements, staging areas, and equipment storage areas. The architectural APE includes the archaeological APE and also the full extent of both parcels occupied by historic-period residences (Attachment A, Figure 2, Map Reference Numbers 1 and 2).

3. CONSULTING PARTIES / PUBLIC PARTICIPATION

HISTORIC PROPERTY SURVEY REPORT**X** Local Government

- Santa Cruz County Planning Department, Historic Resources Commission. Letter sent July 21, 2015 (see Attachment C). An email response was received from Annie Murphy, Santa Cruz County Planning staff liaison to the Historic Resources Commission on August 27, stating that the letter would be presented at the regularly scheduled August 31 Commission meeting. Ms. Murphy responded on September 22, 2015 that the HRC did not have any comments regarding the proposed project. Ms. Murphy also sent, as an email attachment, a copy of the 1986 Pasatiempo historic resources inventory forms, as well as the 1993 addendum.

X Native American Tribes, Groups and Individuals

- AB52 consultation. Letters sent July 14, 2015 (see Attachment C for list of recipients). No responses received to date.

X Local Historical Society / Historic Preservation Group

- Santa Cruz Museum of Art and History. Letter sent July 21, 2015 (See Attachment C). No response received to date, but previous email exchanges were made in connection with research on historic context (including photographs of Pasatiempo in the museum's collection).

X Other

- Pasatiempo Homeowners Association, Board of Trustees. Letter sent July 21, 2015 (see Attachment C). No response received to date, but previous email exchanges were made in connection with research on historic context, including a request for information on any Pasatiempo archives. I was referred to Susan Lehmann for information about Pasatiempo history.
- Susan Lehmann, Santa Cruz historian and former Pasatiempo Home Owners' Association president, generously took the time to discuss the South Circle Drive residential area and Pasatiempo as a whole.

4. SUMMARY OF IDENTIFICATION EFFORTS**X** National Register of Historic Places**X** California Points of Historical Interest**X** California Register of Historical Resources**X** Caltrans Cultural Resources Database (CCRD)**X** California Inventory of Historic Resources**X** California Historical Landmarks**X** Other Sources consulted

- Santa Cruz County Assessor historic building records, March 9 and July 13, 2015 (residential building records)
- UC Santa Cruz, McHenry Library, Special Collections, July 2015 (Olmsted Brothers map)
- UC Berkeley, Environmental Design Archives (Wurster Collections)
- Santa Cruz Museum of Art and History (Pasatiempo/Wurster collections)

HISTORIC PROPERTY SURVEY REPORT**X** Results:Archaeology

A (Negative) Historic Property Survey Report was prepared by Caltrans in 2003 in connection with an earlier version of the proposed project with negative results for archaeology (Negative ASR, State Route 1/17 Merge Lanes, Santa Cruz County, CA SCR1/17-15.3/17.6 and 0.0/0.81 [Hunter:2001]). Additionally, based on the APE's landform and level of prior disturbance which consist of a road cut within steep slopes, there is a low sensitivity for intact, buried archaeological resources. The entire APE of the current project was covered by the previous study.

Architectural History

All four of the parcels intersected by the new Caltrans right-of-way limits are located on South Circle Drive in the gated community of Pasatiempo, and all are immediately upslope from the proposed Area of Direct Impact. Two parcels are exempt from evaluation as examples of Property Types 2 and 4 per Attachment 4 of the Section 106 PA.

The remaining two parcels – APN 060-271-005 at 13 South Circle Drive, and APN 060-271-006 at 15 South Circle Drive – are occupied by historic-period residences and are included within the project architectural Area of Potential Effects (Attachment A, Figure 2, Map Reference Nos. 1 and 2, respectively). These resources have been evaluated in conformity with Section 106 PA. They have also been evaluated in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA), using the criteria set forth in Section 5024.1 of the California Public Resources Code.

Neither of the two historic-period residences in the architectural APE has been determined eligible for listing in the National Register of Historic Places. Similarly, neither meets the criteria for listing in the California Register of Historical Resources, and neither constitutes a historical resource for the purposes of CEQA.

5. PROPERTIES IDENTIFIED

X Paula Juelke Carr, Caltrans architectural historian, who meets the Professionally Qualified Staff Standards in Section 106 Programmatic Agreement Attachment 1 as a Principal Architectural Historian, has determined that the only other properties present within the APE meet the criteria for Section 106 Programmatic Agreement Attachment 4 (**Properties Exempt from Evaluation**).

- 17 South Circle Drive, Pasatiempo, Santa Cruz County - APN 060-271-013
- 19 South Circle Drive, Pasatiempo, Santa Cruz County - APN 060-271-012

X The following cultural resources within the APE are **not eligible for inclusion** in the National Register of Historic Places:

HISTORIC PROPERTY SURVEY REPORT

- 13 South Circle Drive, Pasatiempo, Santa Cruz County - APN 060-271-005 (Attachment A, Figure 2, Map Ref. No. 1)
- 15 South Circle Drive, Pasatiempo, Santa Cruz County - APN 060-271-006 (Attachment A, Figure 2, Map Ref. No. 2)

The following resources are **not significant resources under CEQA**:

- 13 South Circle Drive, Pasatiempo, Santa Cruz County - APN 060-271-005 (Attachment A, Figure 2, Map Ref. No. 1)
- 15 South Circle Drive, Pasatiempo, Santa Cruz County - APN 060-271-006 (Attachment A, Figure 2, Map Ref. No. 2)

6. HPSR to District File

Not applicable.

7. HPSR to SHPO

Caltrans has determined there are properties within the APE that were evaluated as a result of the project and are **not eligible for inclusion** in the National Register of Historic Places; see Section 5. Under Section 106 Programmatic Agreement Stipulation VIII.C.6, Caltrans requests SHPO's concurrence in this determination.

Caltrans, pursuant to Section 106 Programmatic Agreement Stipulation IX.A, has determined a **Finding of No Historic Properties Affected** is appropriate for this undertaking and is notifying SHPO of this determination.

8. HPSR to CSO

Not applicable.

9. Findings for State-Owned Properties

Findings to District File

Not applicable; there are no Caltrans-owned cultural resources within the APE.

Findings to SHPO

Not applicable.

Findings to CSO

HISTORIC PROPERTY SURVEY REPORT Not applicable.**10. CEQA Considerations**

Caltrans PQS staff determined that there are resources in the project area that were evaluated as a result of this project and do not meet National Register of Historic Places or California Register of Historical Resources criteria, as outlined in CEQA Guidelines 15064.5(a), and are not historical resources for purposes of CEQA; see Section 5.

11. List of Attached Documentation

Project Vicinity, Location, and APE Maps: **Attachment A, Figures 1-2**

Historical Resources Evaluation Report (HRER): **Attachment B**

- Paula Juelke Carr, *Historical Resources Evaluation Report, Pasatiempo Widening Project, Highway 17, Santa Cruz County, California, 05-SCR-17 PM 0.01/0/4; EA 05-1C670 / ID 05-1200-0194*, August 2015.

Other

- Correspondence and Consultation: **Attachment C**

12. HPSR Preparation and Caltrans Approval

Prepared by:


Paula Carr, PQS Principal Architectural Historian

10.5.15
Date


Damon Haydu, Caltrans Archaeologist

10/5/2015
Date

Reviewed for approval by:


Alexandra Bevk, PQS Principal Architectural Historian

10.5.15
Date

Approved by:


Chief, Central Coast Specialist Branch

10/6/15
Date

District 5 EBC:

Attachment A:

Figure 1 (Project Vicinity and Location)

Figure 2 (Architectural Area of Potential Effects)

Figure 1 - Project Location and Vicinity
Pasatiempo Shoulder Widening Project
Highway 17, PM 0.1/0.4, Santa Cruz County
EA 05-1C670/ID 05-1200-0194

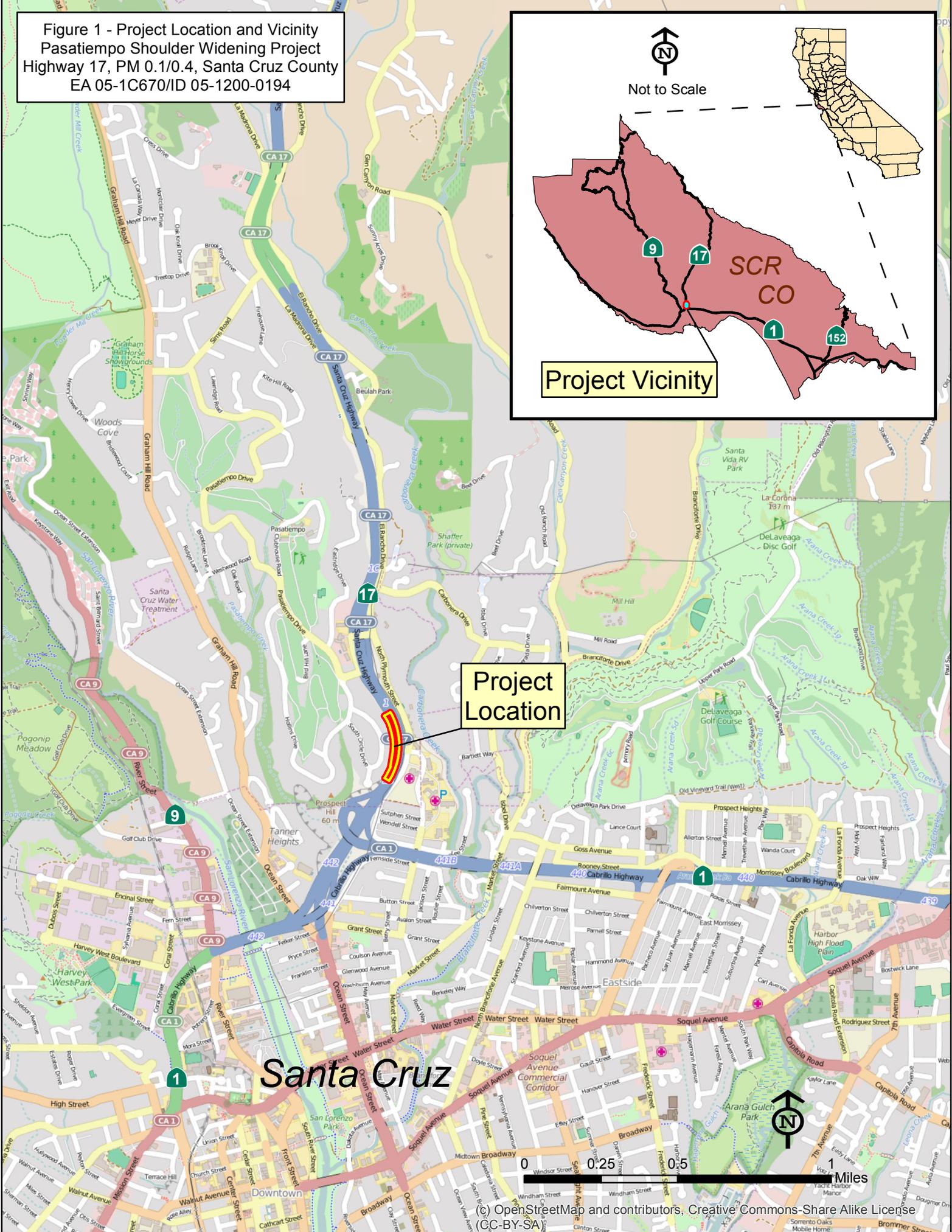
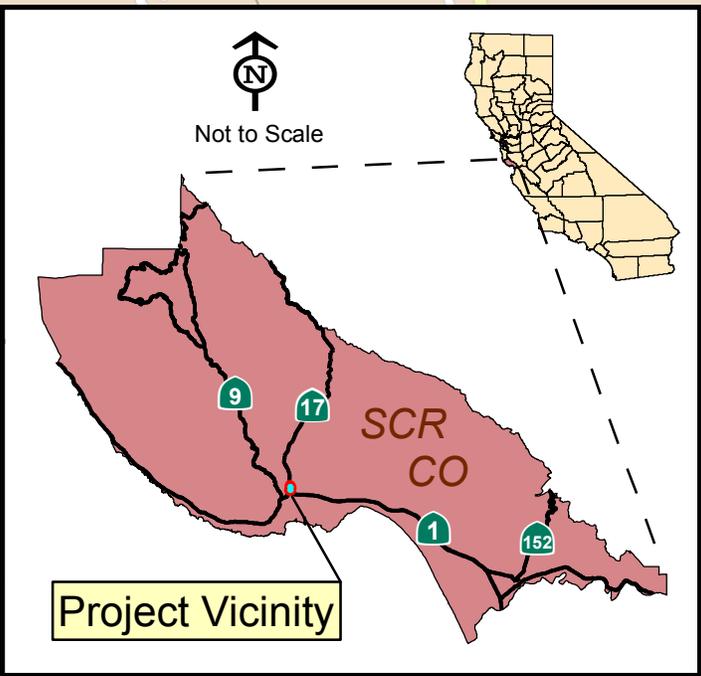


Figure 2 - Area of Potential Effects
Pasatiempo Shoulder Widening Project
Highway 17, PM 0.1/0.4, Santa Cruz County
EA 05-1C670/ID 05-1200-0194

Krista Vialto 10/5/15
District 5 Heritage Resources Coordinator Date
[Signature] 10/5/15
Caltrans Project Manager Date



South Circle Drive

17

1

2

--- Architectural APE
— Archaeological APE/Area of Direct Impact
— Approximate Parcel Boundaries
Map Reference Number

0 25 50 100
Feet

↑
N

August 7, 2015

Attachment B: Historical Resources Evaluation Report (HRER)

- Paula Juelke Carr, *Historical Resources Evaluation Report, Pasatiempo Widening Project, Highway 17, Santa Cruz County, California, 05-SCR-17 PM 0.01/0/4; EA 05-1C670 / ID 05-1200-0194*, August 2015.

Attachment C: Correspondence

PASATIEMPO INTERESTED PARTIES

The following were contacted (letters went out on July 21, 2015):

Mary McPherson, President, Board of Trustees
Pasatiempo Homeowners Association
20 Clubhouse Road
Pasatiempo, CA 95060

Santa Cruz Museum of Art and History
705 Front Street
Santa Cruz, CA 95060
(831) 429-1964, ext. 7019
Marla Novo

Historic Resources Commission
Santa Cruz County Planning Department
701 Ocean Street, Room 400
Santa Cruz, CA 95060
(831) 454-3111
pln001@co.santa-cruz.ca.us
Annie Murphy

Susan Lehmann
28 Clubhouse Road
Santa Cruz, CA 95060
Phone: (831) 459-7619

Daniel P. Gregory

The following proposed contacts were not consulted: there were no Wurster- or other architect-designed residences in the APE:

~~Architects Association of Santa Cruz County
PO Box 7462
Santa Cruz, CA 95061
(831) 460-2999~~

~~American Institute of Architects Monterey Bay
PO Box 310
Monterey, CA 93942
831-372-6527
BethAnn Skamser, Executive Director~~

Environmental Design Archives
College of Environmental Design
~~230 Wurster Hall #1820~~
University of California, Berkeley
~~Berkeley, CA 94720-1820~~
~~(510) 642-5124~~

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3233
TTY 711

<http://www.dot.ca.gov/dist05/>



*Serious drought
Help save water!*

July 21, 2015

File: Pasatiempo Shoulder Widening
05-SCR-17-PM 0.1/0.4
EA: 05-1C670/ ID 0512000194

Mary McPherson, President, Board of Trustees
Pasatiempo Homeowners Association
20 Clubhouse Road
Pasatiempo, CA 95060

Dear Ms. McPherson:

I am writing to seek comments from the Pasatiempo Homeowners Association Board of Trustees concerning a proposed California Department of Transportation (Caltrans) project along a segment of Highway 17 in the vicinity of Pasatiempo. The proposed project seeks to construct a soil nail wall and widen shoulders to improve stopping sight distance on Highway 17 between post mile 0.1 and post mile 0.4, just north of Santa Cruz city limits (please see the enclosed map of the project area). Preliminary design suggests that construction activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required for permanent construction easements.

The project area is immediately downslope from several residences on South Circle Drive (Pasatiempo Estates Subdivision 2, Tract 8, platted on September 12, 1936). In accordance with Section 106 of the National Historic Preservation Act, Caltrans will be conducting architectural studies on historic-period built-environment resources (in this instance, on two pre-1970 residences) within the architectural Area of Potential Effects to determine whether either or both may be eligible for listing in the National Register of Historic Places. If eligible resources are present, we will also evaluate whether the project may have any adverse indirect effects on historical significance (no residences will be directly affected). The historical context we are preparing will address the development of Pasatiempo in general, as well as the specific architectural design and construction history of the individual resources within the South Circle Drive study area.

As Pasatiempo is a gated community, I would also like to ask clearance to enter so that I may take street-side photographs of 13 South Circle Drive and 15 South Circle Drive and make a few general notes about construction materials and style. I will not need to step onto the properties or disturb the residents. I assure you that this process has nothing to do with property values, building codes, or assessments; rather, it is standard procedure for conducting Caltrans built-environment studies in order to determine whether a particular property may be eligible for listing in the National Register for its architectural or historical merits.

Mary McPherson, President, Board of Trustees
Pasatiempo Homeowners Association
Page 2
July 21, 2015

The information I would be gathering during my proposed brief visit – together with the other forms of documentary evidence I've already gathered from secondary sources, county records, newspaper accounts, and the like – will make it possible for me to complete my architectural evaluations. I'm hoping to be able to make my visit on either this coming Monday afternoon, July 27, or on the following Monday afternoon, August 3.

Thank you for your assistance. I would be happy to answer questions you might have about my proposed architectural survey; my contact information is provided below. For general questions about the shoulder widening, soil nail wall, or other project- or construction-related activities, I would like to refer you to the Project Manager, Luis Duazo, at luis.duazo@dot.ca.gov or at (805) 542-4678.

Sincerely,

PAULA JUELKE CARR
Associate Environmental Planner (Architectural History)
(805) 542-4659
paula.carr@dot.ca.gov
Enclosure: preliminary project mapping

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3233
TTY 711

<http://www.dot.ca.gov/dist05/>



*Serious drought
Help save water!*

July 21, 2015

File: Pasatiempo Shoulder Widening
05-SCR-17-PM 0.1/0.4
EA: 05-1C670/ ID 0512000194

Nina Simon, Executive Director
Santa Cruz Museum of Art & History
705 Front Street
Santa Cruz, CA 95060

Dear Ms. Simon:

I am writing to seek your comments on a proposed California Department of Transportation (Caltrans) project along a segment of Highway 17 in the vicinity of Pasatiempo, the residential community and golf course developed in the late 1920s and 1930s by Marion Hollins (1892-1944). The proposed project seeks to construct a soil nail wall and widen shoulders to improve stopping sight distance on Highway 17 between post mile 0.1 and post mile 0.4, just north of Santa Cruz city limits (please see the enclosed map of the project area). Preliminary design suggests that construction activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required for permanent construction easements.

The project area is immediately downslope from several residences on South Circle Drive, a portion of Pasatiempo Estates Subdivision 2, Tract 8, platted on September 12, 1936. In accordance with Section 106 of the National Historic Preservation Act, Caltrans will be conducting architectural studies on historic-period built-environment resources (in this instance, two pre-1970 residences) within the architectural Area of Potential Effects to determine whether either or both may be eligible for listing in the National Register of Historic Places. If eligible resources are present, we will also evaluate whether the project may have any adverse indirect effects on historical significance (no residences will be directly affected). The historical context we are preparing will address the development of Pasatiempo in general, as well as the specific architectural design and construction history of the individual resources within the South Circle Drive study area. Thank you for your assistance.

Sincerely,

PAULA JUELKE CARR
Associate Environmental Planner (Architectural History)
(805) 542-4659
paula.carr@dot.ca.gov
Enclosure: preliminary project mapping

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3233
TTY 711

<http://www.dot.ca.gov/dist05/>



*Serious drought
Help save water!*

July 21, 2015

File: Pasatiempo Shoulder Widening
05-SCR-17-PM 0.1/0.4
EA: 05-1C670/ ID 0512000194

Annie Murphy, Historic Resources Commission
Santa Cruz County Planning Department
701 Ocean Street
Santa Cruz, CA 95060

Dear Ms. Murphy:

I am writing to seek the Historic Resources Commission's comments on a proposed California Department of Transportation (Caltrans) project along a segment of Highway 17 in the vicinity of Pasatiempo, the residential community and golf course developed in the late 1920s and 1930s by Marion Hollins (1892-1944). The proposed project seeks to construct a soil nail wall and widen shoulders to improve stopping sight distance on Highway 17 between post mile 0.1 and post mile 0.4, just north of Santa Cruz city limits (please see the enclosed map of the project area). Preliminary design suggests that construction activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required for permanent construction easements.

The project area is immediately downslope from several residences on South Circle Drive, a portion of Pasatiempo Estates Subdivision 2, Tract 8, platted on September 12, 1936. In accordance with Section 106 of the National Historic Preservation Act, Caltrans will be conducting architectural studies on historic-period built-environment resources (in this instance, two pre-1970 residences) within the architectural Area of Potential Effects to determine whether either or both may be eligible for listing in the National Register of Historic Places. If eligible resources are present, we will also evaluate whether the project may have any adverse indirect effects on historical significance (no residences will be directly affected). The historical context we are preparing will address the development of Pasatiempo in general, as well as the specific architectural design and construction history of the individual resources within the South Circle Drive study area. Thank you for your assistance.

Sincerely,

PAULA JUELKE CARR
Associate Environmental Planner (Architectural History)
(805) 542-4659
paula.carr@dot.ca.gov
Enclosure: preliminary project mapping

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3233
TTY 711

<http://www.dot.ca.gov/dist05/>



*Serious drought
Help save water!*

July 21, 2015

File: Pasatiempo Shoulder Widening
05-SCR-17-PM 0.1/0.4
EA: 05-1C670/ ID 0512000194

Susan Lehmann
28 Clubhouse Road
Pasatiempo, CA 95060

Dear Ms. Lehmann:

I am writing to seek your comments concerning a proposed California Department of Transportation (Caltrans) project along a segment of Highway 17 in the vicinity of Pasatiempo. The proposed project seeks to construct a soil nail wall and widen shoulders to improve stopping sight distance on Highway 17 between post mile 0.1 and post mile 0.4, just north of Santa Cruz city limits (please see the enclosed map of the project area). Preliminary design suggests that construction activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required for permanent construction easements.

The project area is immediately downslope from several residences on South Circle Drive (Pasatiempo Estates Subdivision 2, Tract 8, platted on September 12, 1936). In accordance with Section 106 of the National Historic Preservation Act, Caltrans will be conducting architectural studies on historic-period built-environment resources (in this instance, on two pre-1970 residences) within the architectural Area of Potential Effects to determine whether either or both may be eligible for listing in the National Register of Historic Places. If eligible resources are present, we will also evaluate whether the project may have any adverse indirect effects on historical significance (no residences will be directly affected). The historical context we are preparing will address the development of Pasatiempo in general, as well as the specific architectural design and construction history of the individual resources within the South Circle Drive study area. Thank you for your assistance.

Sincerely,

PAULA JUELKE CARR
Associate Environmental Planner (Architectural History)
(805) 542-4659
paula.carr@dot.ca.gov
Enclosure: preliminary project mapping

July 21, 2015

Dear Susan,

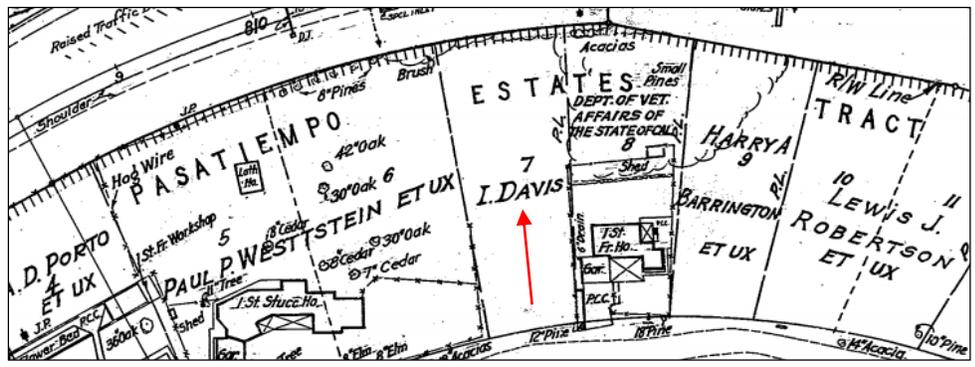
In addition to sending you the formal request for comment, I wanted to thank you again for reassuring me about Wurster and the former Lease-Palma residence. Ironically, in the short time that's elapsed since I talked to you, the project design has reverted to an earlier iteration that puts the proposed minor construction easements farther north, completely avoiding the Lease-Palma parcel.

The two pre-1970 residences I'm looking at (now!) are those at 13 South Circle Drive (the former Paul P. Wittstein residence built by C. M. Doane in 1939) and 15 South Circle Drive (the property was owned by I. Davis in 1958, but it seems to me that the residence was probably built for Haldane Graham that same year).

You may find the enclosed images of interest. The first two are from Division of Highways as-built mapping from 1958. Then there's a 1940 aerial that shows the highway corridor before all of the 1950s-era widening. The 1936 Tract 8 subdivision map and the aerial, compared with the current Assessor map, certainly document the loss of entire South Circle Drive parcels and large parts of others to make way for the off-ramp. I've also found the June 6, 1955, *Santa Cruz Sentinel* notice of the public sale of the "house and garage at 37 South Circle Drive," the former John J. Johnson residence, which were slated to be moved from State right of way by August 1.

Again, thank you for taking the time to talk with me about my "Wurtser" quandary. Wishing you all the best,

Paula Juelke Carr
615 Lawrence Drive
San Luis Obispo, CA 93401
(805) 541-1201
carrehibits@att.net



1958 Division of Highways as-built mapping, 1958.



1940

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3778
FAX (805) 549-3233
TTY 711

<http://www.dot.ca.gov/dist05/>



*Serious drought
Help save water!*

July 15, 2015

05-SCR-17-PM 0.14/0.4
Pasatiempo Soil Nail Wall
Project ID: 05-1200-0194
EA: 05-1C670

Ann Marie Sayers, Chairperson
Indian Canyon Nation
1 Indian Canyon Road
Hollister, CA 95023

RE: Consultation for Shoulder Widening along Highway 17 in Santa Cruz, Santa Cruz County

Dear Ms. Sayers:

I would like to inform you about an upcoming project on Highway 17 in Santa Cruz. Caltrans, in cooperation with the Federal Highway Administration, proposes to widen shoulders and install a soil nail wall in the Pasatiempo area. Please find mapping enclosed with this letter that shows the location of the project.

Project Description:

The proposed project seeks to construct a soil nail wall and widen shoulders to improve stopping sight distance on State Route 17 in Santa Cruz County. The proposed activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation.

Consultation:

A request was sent to the Native American Heritage Commission for a sacred lands search. The results of the search failed to indicate the presence of Native American cultural resources in each project area. However, we are aware that the lack of recorded resources does not mean that they are absent. We would like to ask you and other members of your community to consult with us on this culvert replacement project. Your ideas and knowledge are important, and we look forward to working with you on this project. Please pass this information along to members of your group and let me know if any other individuals would like to be contacted.

Please consider this letter and preliminary project information as the initiation of Section 106 consultation pursuant to the National Historic Preservation Act and formal notification of a proposed project as required under the California Environmental Quality Act, specifically AB 52 (Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014). If you would like to consult with Caltrans on this project then please respond in writing within 30 days and provide us with a designated lead contact person for this project (per PRC 21080.3.1(d)).

If you have any questions or concerns about this project, please feel free to contact me at (805) 549-3778 or project archaeologist Damon Haydu at (805) 542-4799.

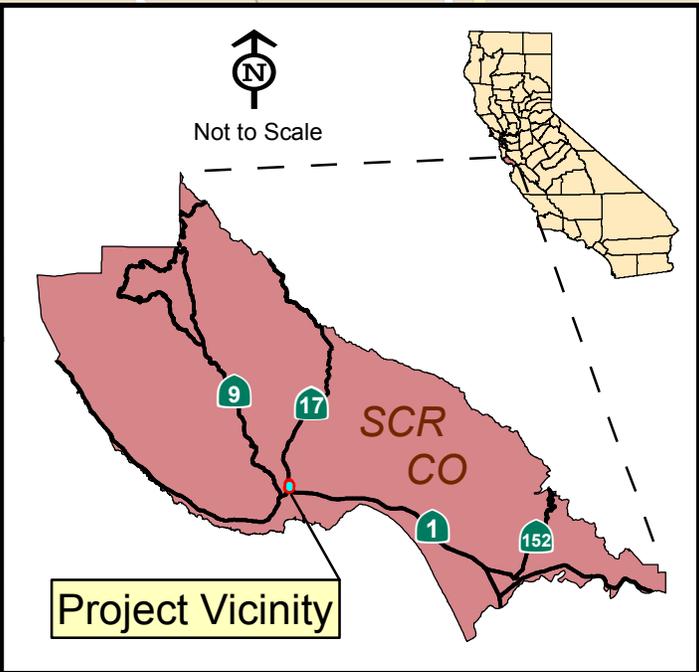
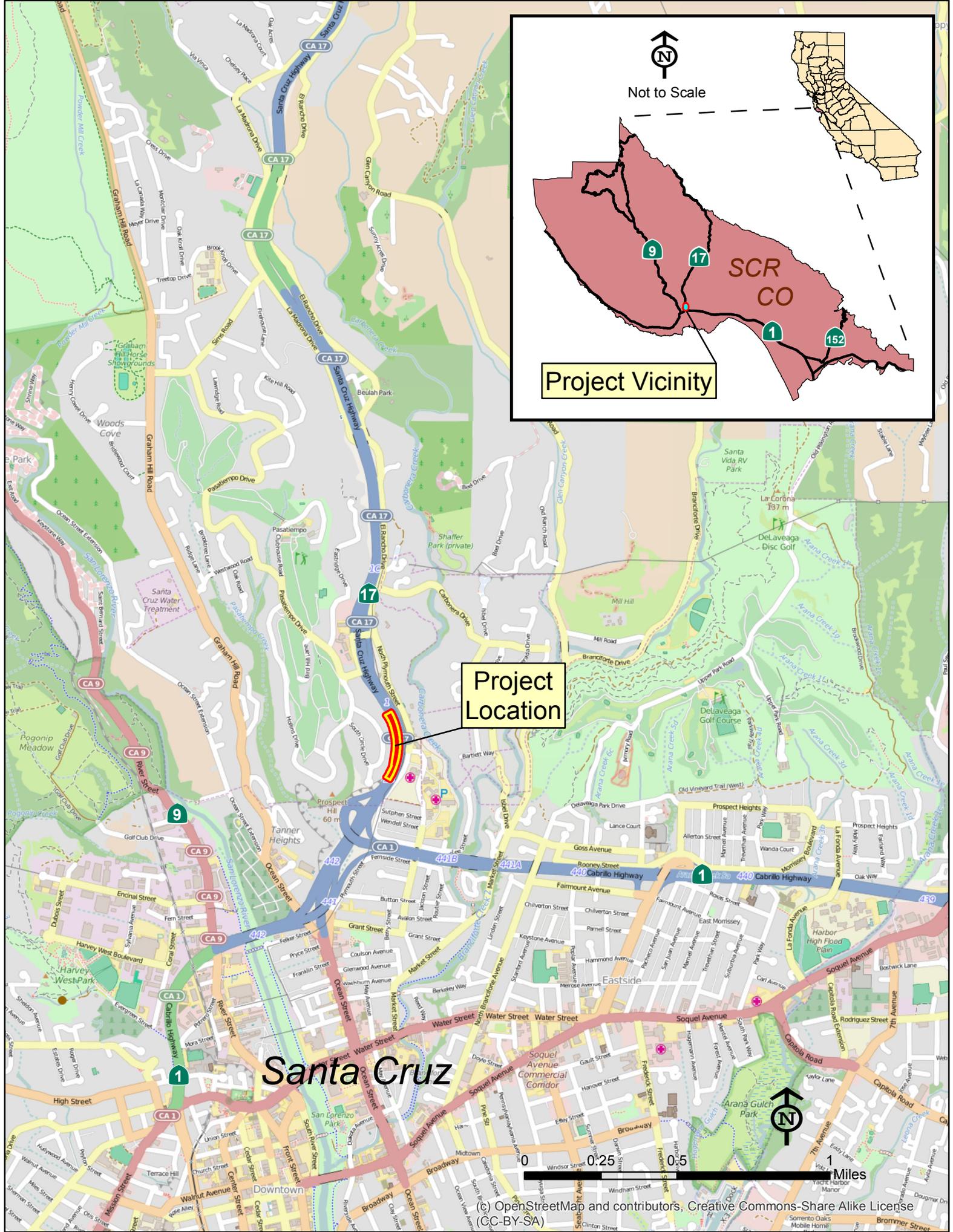
Sincerely,

Terry Joslin
Caltrans District 5 Native American Coordinator
Terry.Joslin@dot.ca.gov

Enclosure (1): Project Location Mapping

Submittal with Attachments:

- Ann Marie Sayers
- Jakki Kehl
- Ramona Garibay
- Louise Miranda-Ramirez
- Christianne Arias
- Pauline Martinez-Arias
- Valentin Lopez
- Tony Cerda
- Irene Zwierlein
- Edward Ketchum
- Jean-Marie Feyling
- Joseph Mondragon
- Melvin Ketchum III



Project Location

Project Vicinity

Santa Cruz

0 0.25 0.5 1 Miles

(c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)

Pasatiempo Shoulder Widening SCR-17-PM 0.1/0.4, EA 05-1C670

-  Existing right-of-way
-  Proposed wall
-  New permanent easement
-  Approx. parcel boundaries



0 25 50 100
Feet

July 21, 2015

South Circle Drive

17



HISTORICAL RESOURCES EVALUATION REPORT
PASATIEMPO WIDENING PROJECT
Highway 17, Santa Cruz County, California

05-SCR-17-PM 0.1/0.4
EA 1C670K / ID 05-1200-0194



prepared for:

KRISTA M. KIAHA
Chief, Central Coast Specialist Branch
Heritage Resources Coordinator
Department of Transportation, District 5
50 Higuera Street, San Luis Obispo, CA 93401

reviewed by:

ALEXANDRA BEVK
PQS Principal Architectural Historian
Central Coast Specialist Branch
Department of Transportation, District 5
50 Higuera Street, San Luis Obispo, CA 93401

prepared by:

PAULA JUELKE CARR
PQS Principal Architectural Historian
Central Coast Specialist Branch
Department of Transportation, District 5
50 Higuera Street, San Luis Obispo, CA 93401

OCTOBER 2015

SUMMARY OF FINDINGS

The California Department of Transportation (Caltrans) proposes to construct a soil nail wall, soldier pile wall, or similar structure; widen shoulders; and make additional improvements on State Route 17 in Santa Cruz County between post miles 0.14 and 0.4, just north of Santa Cruz city limits (Figures 1 and 2). These proposed activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required from four adjacent parcels for construction easements.

All four of these parcels, located on South Circle Drive in the gated community of Pasatiempo, are immediately upslope from the proposed Area of Direct Impact. Two of the four parcels are occupied by historic-period residences and are included within the project architectural Area of Potential Effects (Figure 3, Map Reference Nos. 1 and 2).

These resources have been evaluated in conformity with the January 1, 20014, *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (the Section 106 PA). They have also been evaluated in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA), using the criteria set forth in Section 5024.1 of the California Public Resources Code.

This Historical Resources Evaluation Report presents the results of the evaluations. Neither of the two historic-period residences in the architectural APE has been determined eligible for listing in the National Register of Historic Places. Similarly, neither meets the criteria for listing in the California Register of Historical Resources, and neither constitutes a historical resource for the purposes of CEQA.

Map Reference No.	Address	APN	Date	Status Code
1	13 South Circle Drive	060-270-005	1939	6Z
2	15 South Circle Drive	060-270-006	1957	6Z

TABLE OF CONTENTS

SUMMARY OF FINDINGS	i
1. PROJECT DESCRIPTION	1
2. METHODOLOGY	1
3. HISTORICAL OVERVIEW	2
3.1 Rancho La Carbonera	2
3.2 Kerr-Billing Mansion	3
3.3 Santa Cruz Development Company	4
3.4 Pasatiempo and Marion Hollins	5
3.4.1 Golf Course	5
3.4.2 General Plan	7
3.4.3 Clubhouse, Caddy House, and Residential Lots	7
3.4.4 The Pasatiempo Style	9
3.5 Post-War Pasatiempo	11
3.5.1 Myron Crawford. Hall	11
3.5.2 Marketing Pasatiempo	11
3.6 South Circle Drive and Highway 17	15
3.6.1 South Circle Drive: Pasatiempo	15
3.6.2 Highway 17: The Los Gatos Highway	18
4. DESCRIPTION OF HISTORIC-PERIOD RESOURCES IN THE ARCHITECTURAL APE	22
5. EVALUATION OF HISTORIC-PERIOD RESOURCES IN THE ARCHITECTURAL APE	25
5.1 Evaluation of Potential for Pasatiempo Estates Historic District	25
5.2 Evaluation of Individual Resources	27
5.3 Conclusions	27
6. REFERENCES	29

TABLES

Table 1. Study Population Parcels	1
Table 2. Construction Sequence of Residences in the Architectural APE	17
Table 3. Historic-Period Resources in the Project Architectural Area of Potential Effects Determined Not Eligible for the National Register of Historic Places; Determined Not to Meet the Eligibility Criteria for the California Register of Historical Resources; and That Are Not Historical Resources for the Purposes of CEQA	28

FIGURES

Figure 1. Project Vicinity and Location (see Attachment A)	
Figure 2. Architectural Area of Potential Effects (see Attachment A)	
Figure 3. Location of Bocle’s adobe home, c1870	2
Figure 4. Kerr tract on Rancho Carbonero, 1891	3
Figure 5. William Kerr’s mansion, the later site of the Pasatiempo Inn	4
Figure 6. Olmsted Brothers, <i>General Plan for Pasatiempo Country Club and Estates</i> , 1929	6
Figure 7. Extent of Pasatiempo Estates Subdivision No. 1, 1932	9
Figure 8. Pasatiempo advertisement, <i>Santa Cruz Evening News</i> , October 2, 1936	13
Figure 9. Full-page <i>Santa Cruz Sentinel</i> Ad: Santa Cruz District Developers, 1939	14
Figure 10. Detail of Olmsted Brothers, <i>General Plan</i> , 1929	16
Figure 11. Tract No. 8, Subdivision No. 2 of Pasatiempo Estates, 1936	17
Figure 12. Santa Cruz Development Company (Pasatiempo) segments of the 1930-31 Highway 17 realignment, from 1931 as-built map (Sheet 3), Contract No. 44661	18
Figure 13. Santa Cruz Development Company (Pasatiempo) segments of the 1930-31 Highway 17 realignment, from 1931 as-built map (Sheet 4), Contract No. 44661	19
Figure 14. Aerial photograph of project area, 1940	20
Figure 15. “Workmen stand on overpass as camera views bypass route looking toward Pasatiempo. Note huge cuts in hillside,” <i>Santa Cruz Sentinel</i> , July 1, 1956	21
Figure 16. Detail from original 1936 Pasatiempo Estates Subdivision No. 2, Tract 8 map	22
Figure 17. Detail from current Santa Cruz County Assessor map (Sheet 60-28)	22
Figure 18. Wettstein residence, 13 South Circle Drive, constructed 1939	23
Figure 19. Wettstein residence, from 1958 as-built map (Sheet 15), Contract No. 60-4TC3	24
Figure 20. Graham residence, 15 South Circle Drive, constructed 1957	24
Figure 21. Graham residential lot, from 1958 as-built map (Sheet 15), Contract No. 60-4TC3	27

ATTACHMENTS

Attachment A:

Figure 1 (Project Vicinity and Location)

Figure 2 (Architectural Area of Potential Effects)

Attachment B: Department of Parks and Recreation (DPR) Forms 523

Attachment C: Correspondence

1. PROJECT DESCRIPTION

The proposed project will construct a soil nail wall, soldier pile wall, or similar structure, and widen shoulders to improve stopping sight distance on State Route 17 between post mile 0.14 and post mile 0.4, in an unincorporated area of Santa Cruz County just north of the Santa Cruz city limits (Attachment A, Figure 1). Proposed activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way for construction easements is required from four adjacent parcels.

2. METHODOLOGY

All four of the parcels affected by construction easements are located on South Circle Drive and are part of the current gated community of Pasatiempo – a residential community, golf course and country club originally developed in the late 1920s and 1930s by noted athlete and socialite Marion Hollins (1892-1944).

Preliminary research included a review of pertinent secondary literature, contemporary Santa Cruz newspaper articles (accessed via www.newspapers.com), and the right-of-way maps, as-built maps, and construction documents available in the Caltrans District 5 archives, or through Caltrans online databases. The architectural APE was delineated in accordance with Attachment 3 of the Section PA and includes two parcels occupied by historic-period residences (Attachment A, Figure 2, Map Reference Nos. 1 and 2). Following Caltrans protocol to account for sufficient lead time before construction, “historic- period resources” include all built-environmental resources 45 years or older – that is, constructed in 1970 or earlier. The two parcels requiring evaluation for National Register eligibility are shown in Table 1.

Table 1. Study Population Parcels within the Project Architectural Area of Potential Effects

Map Ref. No.	Address	APN	Date
1	13 South Circle Drive	060-270-005	1939
2	15 South Circle Drive	060-270-006	1957

The Santa Cruz Museum of Art and History was contacted by email on March 13, 2015, for information about a collection of 61 Pasatiempo photographs. Collections Archivist Marla Novo replied on March 16. Christina Marino, Reference Archivist for the UC Berkeley Environmental Design Archives, was contacted by email on April 16, 2015, for information about William Wurster; her response was received on April 7. The Pasatiempo Home Owners Association was contacted by telephone on June 30, 2015, to find out whether the association maintained an archives. Martha Andersen referred to Susan Lehmann on July, 1015. Additional parcel-specific information was received from the Santa Cruz County Assessor.

3. HISTORICAL OVERVIEW

3.1 Rancho La Carbonera

The project area is located in the foothills of the Santa Cruz Mountains above Santa Cruz, within the former boundaries of Rancho La Carbonera, a 2,225-acre land grant given to English sailor William Buckle (1803-c1859) by Governor Juan B. Alvarado in 1838.¹ Buckle, a naturalized Mexican citizen who had married into a local *Californio* family, established a sawmill on the rancho. In 1852, Buckle filed a claim for his rancho with the Public Land Commission; the rancho grant was finally patented in 1873, more than a decade after his death, although it is likely that the property had already been partitioned into lots and sold off piecemeal by his various heirs.

The location of his family’s adobe house is indicated on US government survey mapping dated c1870, clearly within the rancho boundaries, as well as within the boundaries of “Lot No. 39.”² “Bocle’s H[ous]e” is shown on the west bank of Zayante Creek, at the junction of two wagon roads running due north through adjacent canyons (Figure 3).

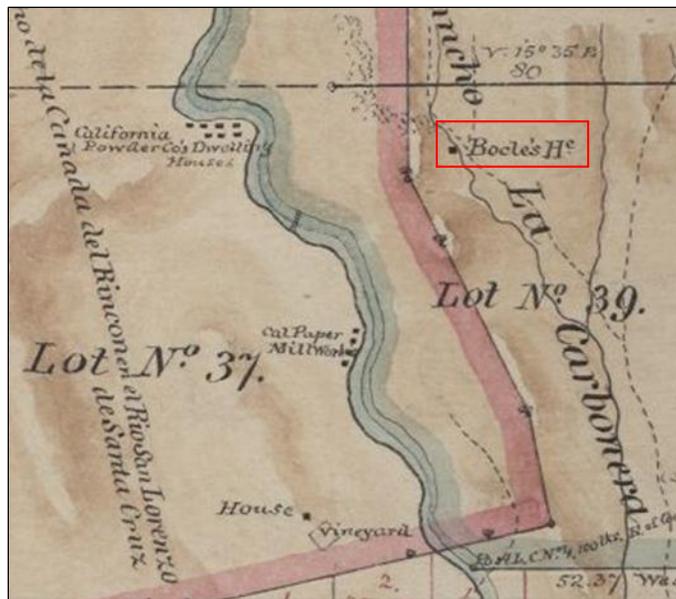


Figure 3. The location of Bocle’s adobe house, on Zayante Creek near the junction of two wagon roads, is indicated on this c1870 map (red box).

¹ Buckle was better known by the Spanish version of his name, Guillermo Bocle; he also used the alias William Thompson).

² The 1870 map (Bureau of Land Management, General Land Office survey map of Township 11 South, Range 2 West, Mount Diablo Base & Meridian) postdates the 1864 founding of the California Powder Works, on the banks of the San Lorenzo River to the west, and predates W. W. Elliott & Co.’s 1879 comment (*Santa Cruz County, California*, 1879, p. 8) that, in early times, Buckle “had a house, buildings and corrals near where the road from Mr. Peyton’s house strikes the Zayante Creek road, and the country all around was covered with cattle.” The site location is associated with the 16th fairway of the Pasatiempo Golf Course.

3.2 Kerr-Billing Mansion

By 1880 Lot No. 39 was certainly in the hands of William Kerr, who built a fine, high-style Queen Anne residence there in 1888-89 (Figures 4 and 5).³ On February 28, 1889, the *Santa Cruz Surf* reported that Kerr had opened a granite quarry; it is certainly possible that some of the quarried granite was used in construction on site.⁴



Figure 4. Kerr tract on Rancho Carbonero, 1891. “Scott’s Valley Road” was the precursor of modern Highway 17.

³ The Kerr mansion was designed by Daniel A. Damkroeger (c1856-1931), who practiced briefly but prolifically in the Santa Cruz area from 1887 to about 1892 (John Leighton Chase, *The Sidewalk Companion to Santa Cruz Architecture*, Museum of Art and History, Santa Cruz, 2005: 299, 306-307). *Santa Cruz Surf* newspaper articles reported when the house was “approaching completion,” on October 1, 1888, and described it as the “now-complete William Kerr house” on May 1, 1889.

⁴ *Santa Cruz Surf*, February 28, 1889, p. 3.

The 1891 official map of Santa Cruz County indicates that Kerr was still the owner of the property, but his tenure did not last long. Kerr died in 1898 or early 1899, and the executors of his estate sold the mansion and surrounding acreage to Frederick William Billing.⁵ Billing retained the property until his death in 1914, when the property passed to his widow, Wilhelmina Billing, and daughter, Mrs. Bertha Coope.⁶ In August 1927 Mrs. Coope and her daughter, Mrs. Ethel Coope Mackenzie Gordon, sold the property to a syndicate of “New York and San Francisco millionaires” headed by Marion Hollins.⁷ This syndicate soon incorporated as the Santa Cruz Development Company.



Figure 5. William Kerr’s mansion was sold by the executors of his estate to Frederick William Billing in 1899. The residence later served the Santa Cruz Development Company, and the Pasatiempo Inn was later built on the site.

3.3 Santa Cruz Development Company

The Articles of Incorporation for the Santa Cruz Development Company were filed in February 1928. Directors included William A. Boekel, Herva C. Boekl, Jessie S. Naskin, F. W. Cecil Baker (a wealthy banker friend of Marion Hollins’s father who provided the bulk of the financing), Mrs. Shewan, Gil Brown, Robert Howes, and F. H. Bickerton.⁸ A *Santa Cruz Evening News* story reported in April 1929 that the “huge development planned by Marion Hollins” was rapidly taking shape. The Billing mansion, used by the company as “quarters for the caretaker, and office for the company’s representatives,” was slated for demolition: “As soon as the [golf] course and

⁵ Santa Cruz Public Library Website, “Old Soldiers: Santa Cruz County Civil War Veterans”; W. C. Casey, <http://williamkerrhouse.blogspot.com/>; the real estate transaction was reported in the *Santa Cruz Evening Sentinel*, August 18, 1899, p. 3.

⁶ *Santa Cruz Evening News*, July 23, 1914, p. 1; August 6, 1915, p. 5.

⁷ *Santa Cruz Evening News*, August 2, 1927, p. 1.

⁸ *Santa Cruz Evening News*, February 24, 1928.

clubhouse are fairly well along, the present building on the estate near the main highway, is to be torn down.”⁹

3.4 Pasatiempo and Marion Hollins

Santa Cruz Development Company may have been the name at the top of the letterhead, but Pasatiempo is indelibly linked to Marion Hollins (1893-1944), a charismatic Long Island socialite and extremely gifted athlete who excelled in the world of women’s golf, tennis, polo, and auto racing. Born into a wealthy family, Hollins eventually became a multi-millionaire in her own right through timely investment in oil exploration in California’s Kettleman Hills.

The oil strike was still in the future, however, when Hollins embarked on her dream of creating a real estate development combining a world-class golf course, bridle paths, and house sites of varying sizes and characters. With the financial means provided by F. W. Cecil Baker, Hollins purchased 570 acres of the former Billing Tract of Rancho La Carbonera and chose the name *Pasatiempo* to honor the property’s romantic California rancho past (the melted adobe remnants of William Buckle’s house were in fact still visible on what was to become the 16th fairway of the new Pasatiempo golf course).

3.4.1 Golf Course

Hollins’s first order of business after setting her sights on the Billing Tract in 1927 was to hire the best golf course designer she could find – and she secured none other than Dr. Alister MacKenzie to accomplish her goal. Hollins was deeply committed to the ideal of altering the terrain and landscape as little as possible. No oak trees, in particular, could be removed or relocated without her express permission. MacKenzie shared her appreciation for the natural topography of the property, and quickly set to work to produce drawings of the central element of Pasatiempo.

In November 1928, the *Santa Cruz Evening News* reported on the “grading of the new championship golf course which is to be laid out by Hunter and MacKenzie, famous golf architects,” noting that mule teams and graders were at work “just west of the old Billings home.”¹⁰ The first nine holes were ready for seeding by February 1929, and all eighteen were expected to be ready for play in August.”¹¹ Day-to-day-oversight of the construction project appears to have been carried out by F. H. Bickerton, a director of the Santa Cruz Development Company.¹² The golf course opened to great fanfare on September 8, 1929, just weeks before the Stock Market Crash in October.

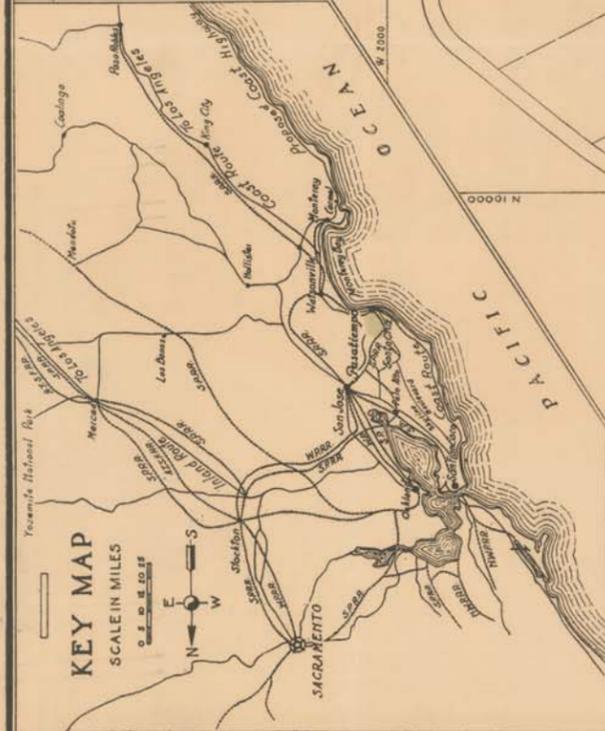
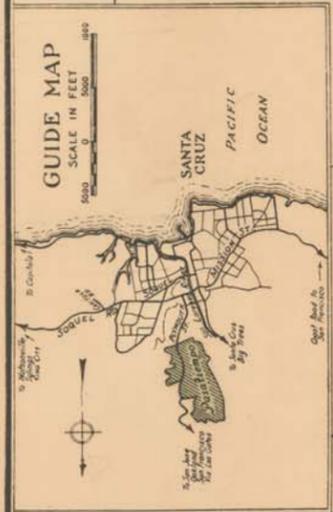
⁹ *Santa Cruz Evening News* April 17, 1929, p. 8; November 13, 1928, p. 1. In fact, in 1934 the Billing mansion was remodeled by W. D. Alexander for a restaurant and tavern; *Santa Cruz Evening News*, June 30, 1935, pp. 3, 5.

¹⁰ *Santa Cruz Evening News*, November 13, 1928, p. 1.

¹¹ *Santa Cruz Evening News*, February 20, 1929, p. 2.

¹² *Santa Cruz Evening News*, April 17, 1929, p. 8.

Figure 6 (on following page). Olmsted Brothers, *General Plan for Pasatiempo Country Club and Estates*, prepared for the Santa Cruz Development Company, 1929 (courtesy of UC Santa Cruz McHenry Library Special Collections).



Santa Cruz Development Company - California
General Plan
 for
Paratiempo
 Country Club And Estates
 Scale of Feet

Olmsted Brothers Landscape Architects
 1929

3.4.2 General Plan

MacKenzie's golf course, at the heart of Pasatiempo, had to accommodate a deep ravine. When Hollins hired the eminent Boston landscape architectural firm, Olmsted Brothers, to draw up the general plan for the Pasatiempo Country Club and Estates, they had to take into consideration not only the terrain but the golf course – a combination that yielded “gracefully curving roads and some odd-shaped house lots.”¹³ The Olmsteds' sprawling design (Figure 6), completed in 1929, concentrated on the west side of the Los Gatos Highway (now Highway 17), but also included residential tracts and public buildings between the highway and Carbonera Creek to the east. In April 1929, a *Santa Cruz Evening News* article noted that “Private properties will be laid out along the upper edges of the canyon, as well as along the other side of the road, and because of the varying types of land found on the estate, householders will be enabled to choose the kind of homesite which suits them, from a bare, wind-swept knoll to a densely wooded property in the heart of a grove of majestic redwood trees.”¹⁴

3.4.3 Clubhouse, Caddy House, and Residential Lots

Having already engaged the services of Olmsted Brothers for the 1929 master design, and those of Dr. Alister MacKenzie for the golf course design, Hollins went on to hire renowned architects for the next phase of construction. A key part of Hollins' plan was to ensure architectural harmony with the landscape:

The first board of directors for Pasatiempo included Marion Hollins, Robert Howes, F. H. Bickerton, and William Boekel. The directors, assisted by several architects, formed a “jury” which was to pass judgment on all proposed building plans. It was decided that the clubhouse and the homes that were to be built would be of a simple, early-California style, consistent with the natural beauty of the surrounding hills.¹⁵

At the end of October 1929, in an edition that surely must have included updates on the worsening Wall Street situation, the *Santa Cruz Evening News* announced that “The first 100 lots of the subdivision have been staked out and are to be available for purchase shortly. . . . These are located around the first nine holes. The tract is 600 acres, 130 of which go to make up the golf course. Part of the tract which borders on the Los Gatos highway will not be put up for sale for some time to come” (Figure 7).¹⁶ In December 1929, as the nation teetered on the abyss of the Great Depression, the Santa Cruz County Board of Supervisors accepted the plat map for Pasatiempo Estates Subdivision No. 1, and Hollins announced the availability of 81 quarter-acre building lots.¹⁷ County Surveyor Lloyd Bowman subsequently surveyed the Pasatiempo property in September 1930 and created an amended plat map for the subdivision, formally filed on February 19, 1931.¹⁸

¹³ Margaret Koch, *The Pasatiempo Story*, Los Gatos: Pasatiempo, Inc., 1990, p. 41.

¹⁴ *Santa Cruz Evening News*, April 17, 1929, p. 8.

¹⁵ Koch, p. 41. Koch noted that “Pasatiempo is perhaps the first residential development in Santa Cruz County to have an architectural jury which was required to pass judgment on all proposed building plans.”

¹⁶ *Santa Cruz Evening News*, October 31, 1929, p. 1.

¹⁷ *Santa Cruz Evening News*, December 9, 1929, p. 7.

¹⁸ *Amended Map, Pasatiempo Estates, [Subdivision] Number One, being a part of the Carbonero [sic] Rancho, Santa Cruz Co., California*, surveyed by Lloyd Bowman, County Surveyor, September 1930, scale: 1”=100’, 4 sheets. Sheet 1 gives the names of the Directors of the Santa Cruz Development Company: Marion Hollins, President; William A.

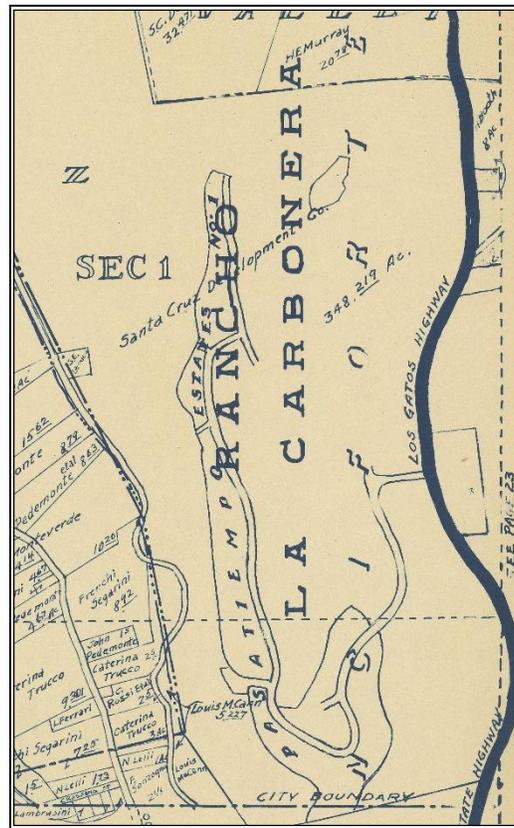


Figure 7. Extent of Pasatiempo Estates Subdivision No. 1, as documented by Santa Cruz County Map, 1932. The Los Gatos Highway is modern Highway 17. The first subdivision was located at a distance from the current project area.

3.4.4 The Pasatiempo Style

The concept of indoor-outdoor living that Hollins embraced set an architectural style – the Pasatiempo Style – that was expressed deliberately in the first structures to be built. Although Hollins was interested in commemorating the rancho past, the architects avoided sheer mimicry of red-tiled California missions, opting instead for clean, uncluttered lines, minimal ornament, and wood shingle roofs. The results brought Pasatiempo national recognition, including six American Institute of Architects and *House Beautiful* awards.

Two architects in particular, William W. Wurster and Clarence A. Tantau, were responsible for establishing the architectural tone of Pasatiempo. Their first architectural products – a clubhouse, caddy house, and the residence of business manager Robert A. Howes – were the only structures built in 1930. The following year saw only the construction of Wurster-designed residences for Marion Hollins, golf course designer Alister MacKenzie, and landscape architect Thomas Church, each of whom had an obvious personal stake in the outcome of the development. Wurster also

Boekel, Secretary; Robert A. Howes and Margaret Paris Howes; Thomas D. Church and Elizabeth R. Church; Alister MacKenzie and Hilda MacKenzie; Bruce L. Sharpe, Trustee; and Ed Daubenbis, Trustee.

designed summer residences for San Francisco pharmacist Edwin Berry (1931, but not built until 1935) and for Hollins's niece (1932). Although these projects provided an architectural template of sorts, they are also indicative of the economic and real estate climate that would dog Pasatiempo throughout the 1930s and beyond.

In 1933, Wurster received commissions for additional residences, including those of Mrs. Cooper Fleming, a San Francisco society leader and frequent guest at Pasatiempo, and Laurance I. Scott (completed in 1935). The following year, Wurster designed homes for Sally Field and Vincent Butler. The year 1935 saw a modest revival of building activity. Wurster designed a home for Oliver Lombardi, and Clarence Tantau designed the second, larger Pasatiempo clubhouse. In 1936 a house designed by Wurster was built on speculation by the Pasatiempo Estates Company.

Also in 1936, the plat for Tract No. 8 of Subdivision No. 2 of Pasatiempo Estates (the South Circle Drive tract) was filed. In March 1937 the Santa Cruz Development Company and the Pasatiempo Country Club, Ltd., merged; the surviving corporation – the Santa Cruz Development Company – changed its name to the Pasatiempo Estates Company, with Hollins as President and Boekel as Secretary. Subdivision No. 2 was described in mid-1937 as “nearly sold out,” and a third subdivision “around the second nine of the golf course” was in the works, with grading under way.¹⁹ Rather than reining in expenditures, Hollins kept embarking on new projects, letting contracts for building guest cottages, a swimming pool, and badminton courts. To make matters worse, at the end of 1937, Hollins was severely injured in an auto accident that kept her sidelined in bed for the next five months. The Company was deeply in debt, and Hollins's own personal fortune was gone. By the end of 1938, Pasatiempo Estates was up for sale.

The new owners, William H. Howard and Duncan H. Davis, were San Francisco real estate men who hoped to capitalize on the “early completion of the new Santa Cruz highway south of Saratoga” and a corresponding “demand for summer homes,” although they diplomatically noted that “Pasatiempo is substantially a development for the people living in Santa Cruz...” Hollins and her old friend Baker (who had continued to lend her great sums of money to keep Pasatiempo afloat) were to retain an interest in Pasatiempo, and Hollins was to “give her active help in developing and selling the Estates properties as well as in directing the club activities,” but Howard and Duncan were clearly in control.²⁰ Hollins announced her departure from the Pasatiempo Country Club and Estates Company in late 1940 and moved out of her home near the golf course and back to Monterey.

Howard and Duncan soon became disenchanted with their investment and sold their interest in the property to Howard's uncle, Philip Lansdale. Pasatiempo subsequently entered a turbulent year of administrative upheaval and partial closures. Lansdale repeatedly tried to sell the property to the home owners and threatened to take drastic measures, including subdividing the golf course for more residential lots, in order to salvage his financial investment. The stalemate finally ended when thirty-three homeowners organized the Pasatiempo Golf Club and purchased the golf course.

¹⁹ *Santa Cruz Evening News*, June 10, 1937, p. 18; June 21, 1937, p. 1; September 19, 1937, p. 1.

²⁰ “S.F. Men Take Big Pasatiempo Slice,” *Santa Cruz Evening News*, December 30, 1938, p. 1.

William Wurster went on to design at least five more residential properties in Pasatiempo before moving on to other commissions and architectural interests in the 1940s. Marion Hollins died in Pacific Grove on August 27, 1944.

3.5 Post-War Pasatiempo

3.5.1 Myron Crawford Hall

The post-World War II era ushered in a new era of prosperity. Pasatiempo Estates property manager Myron Crawford Hall (1897-1990) began an active campaign to sell lots. Hall had begun his career in the mid-1920s as an organizer of sports tournaments, entertainment and events for the Santa Cruz Seaside Company and Del Monte Properties. In the 1930s he managed a series of non-profit organizations, including the California Mission Trails Association, the Pajaro Valley Chamber of Commerce, and the Santa Cruz Chamber of Commerce. In 1942 Hall began his long real estate career, opening an office in Pasatiempo. His efforts undoubtedly had much to do with the residential development of South Circle Drive during the 1950s.²¹ By 1956 the *Santa Cruz Sentinel* was running a large advertisement for the Pasatiempo Clubhouse and Golf Course, offering beautiful views, good food, cocktails, and booking for banquets and dances in the Redwood Room.²²

3.5.2 Marketing Pasatiempo

Varying marketing strategies can be distinguished in the newspaper accounts and brochures produced between the late 1920s and 1970s. The first glimmerings of Pasatiempo were announced in the *Santa Cruz Evening News* in August 1927 – “Exclusive Colony is Planned” – a day after the syndicate headed by Marion Hollins agreed to purchase the 540-acre Billing tract and the adjoining 63-acre W. B. Parsons tract.²³ The newspaper ran an editorial the following day, endorsing the developers’ “announced plans of selling off the property to a wealthy clientele, the construction of a high-class hotel and the laying out of a private golf course. . . .The plan as outlined by the purchasers is the only plan that will bring the wealthy class to this part of California in any great numbers. Wealthy people colonize delightfully. They live exclusively and play exclusively. They want the best of and pay high for it.”²⁴

Given Hollins’ devotion to, and status in, the golf world, and given her earlier successes in developing the Woman’s National Golf and Tennis Club on Long Island and Cypress Point in Monterey, it is hardly surprising that the golf course proposed for Pasatiempo would be the primary draw. The *Santa Cruz Evening News* was firmly behind the plan:

The truth of the matter is that the business interests of this city have got to learn to like golf and golf clubs and golf players, and everything connected with golf, and have got to make a study of how best to advance the interests of this almost

²¹ Koch, *Pasatiempo Story*, pp. 49, 66-68.

²² *Santa Cruz Sentinel*, March 16, 1956, p. 12.

²³ *Santa Cruz Evening News*, August 2, 1927, p. 1.

²⁴ *Santa Cruz Evening News*, August 3, 1927, p. 3.

universal pastime, or the importance of Santa Cruz as a resort city of the first class will be seriously curtailed.²⁵

At first, it was announced that membership in the Pasatiempo Golf Course and Country Club would confer a proprietary interest in the golf course; a year later it was clarified that, “With each tract sold will go a proprietary interest in the golf course.”²⁶ It was understood that the course was primarily intended for residents and their guests.

The collapse of Wall Street changed everything. Although in 1928 Marion Hollins could report that “quite a few people in the New York area have already signed tentative contracts for the purchase of villa sites on the property,” after October 1929 the developers had to work hard to make residential lot sales of any kind. The first homes, in fact, were built for individuals intimately associated with the Pasatiempo development: investor Marion Hollins, golf course designer Alister MacKenzie, landscape architect Thomas D. Church, and business manager Robert A. Howes. A sparse scattering of homes greeted prospective buyers, but the golf course was already the scene of continual activity.

It is fair to say that, for Hollins and the other investors, Pasatiempo was a losing proposition from the start. In her bid to have “only the best,” Hollins ran through her entire Depression-era fortune – \$2.5 million – in less than a decade. She constantly initiated lavish new plans for stables, tennis courts, a polo field and swimming pool, while juggling house guests, parties, golfing events, and other expensive enthusiasms. A few house guests and golfers did at least purchase lots, but not many went on to build on them. Articles appearing in the *Santa Cruz Evening Sentinel* during the mid-1930s have a hollow, desperate quality in their descriptions of the “encouraging recent developments” taking place at Pasatiempo, as though a last ditch effort was underway to make a success of it:

Several residential sites on the country club property have recently gone into the hands of new owners. . . with one of the heaviest influxes of socially prominent visitors in several years having been evidenced during the past several weeks.

New houses were described as “palatial,” the polo field was being renovated, and “record crowds” had enjoyed golfing, tennis and riding at Pasatiempo.²⁷ But while the sale of building lots appears to have continued, actual house construction lagged throughout the Depression years, and the marketing rhetoric shifted to a new tack. In 1936, for example, Pasatiempo lots were advertised as approved for Federal Housing Authority loans (Figure 8), and in 1937, a four-column spread in

²⁵ *Santa Cruz Evening News*, April 7, 1928, p. 3.

²⁶ *Santa Cruz Evening News*, June 18, 1928, p. 1; September 5, 1929, p. 17.

²⁷ *Santa Cruz Evening News*, September 4, 1935, p. 1. Seven weeks later, the paper reported that the “deal for the sale of the tract to Miss Hollins, representing a syndicate of wealthy New Yorkers, was definitely consummated this morning,” although it would “probably be three months before the deeds are passed,” *Santa Cruz Evening News*, October 25, 1927, p. 1.

the *Santa Cruz Evening News* extolled Pasatiempo as a place where the cost of a home was within the means of any home builder:

An attractive home is not necessarily an expensive one; a simple dwelling erected with good architectural lines conforming with a beautiful natural background may be as desirable as a pretentious one whose cost runs into high figures. This is the theory on which Miss Marion Hollins is steadily building up Pasatiempo as a place of beautiful residences on the highlands overlooking the city of Santa Cruz and the blue waters of Monterey Bay...Residents of Santa Cruz, many of them of moderate means, have investigated Pasatiempo and have found it possible to live in places of their own, in the club community, near to the heart of the city in point of time, but far from it when they end their day's work and go to a place of their own in the hills.²⁸



Figure 8. Pasatiempo advertisement, *Santa Cruz Evening News*, October 2, 1936, p. 18.

Also in 1937, a group called the Santa Cruz District Developers – a loosely affiliated organization of financiers, builders and property owners – embarked on a two-year campaign that targeted several audiences (Figure 9). Initially, the group hoped to boost the amount of construction work “during the normally dull winter months, but has been found to have boosted residence construction the year ‘round.” Central Valley residents from

²⁸ *Santa Cruz Evening News*, June 10, 1937, p. 18.

The Pasatiempo Estates Company made a point of stressing that each new subdivision (the second was “nearly sold out” and a third was under way) would incorporate the concept that Pasatiempo was “primarily a place for enjoyment,” which was expressed not only in easy access to an 18-hole golf course, two tennis courts and polo field, but also in “the possession of an attractive home. Each one is a private residence in the true meaning of the term, with the privacy which comes of ample grounds and lack of crowding.”

To make sure that the housing stock was appropriate to Pasatiempo, the Company imposed building restrictions and required architectural design review of building plans, “not only as to the lines of the building itself, but as to their harmonious conformity with their surroundings and location.” The layout of each subdivision, followed the “natural outlines of woodland and hill. The roads, wherever it is practical, are country lanes, lined with low split-rail fences. Native trees and shrubs, when it is necessary to remove them, are preserved and their use encouraged by individual home owners.”³⁰ Lots could not be further subdivided, but they could be consolidated to create larger parcels. The building covenants specified the permissible uses for a lot:

. . . not more than one single family dwelling house, having but one kitchen and intended for one family alone shall be placed, erected or permitted to remain; however, a single cottage for guests, or a single cottage for the servants and the family of the servants of the occupants of said dwelling house, and a garage for not more than four cars (a stable where hereinafter permitted . . .), and garden structures may be erected.³¹

The exclusive community of landed gentry envisioned by Hollins, with residences that included living quarters for servants and nearby stables for polo ponies, was never achieved. Pasatiempo residents tended to be (as they are today) very well off, but the householders nonetheless worked for a living. Homeowners of the 1930s included local physicians and dentists, bankers, insurance and real estate men, state and county employees, building contractors and engineers, salesmen, and owners of retail businesses. Judging from the local press, they and their families were deeply involved in an annual round of charitable and social activities associated with fraternal organizations, sororities, church groups, sporting events, bridal and baby showers, political fundraisers, fashion shows, home tours and the like.

3.6 South Circle Drive and Highway 17

3.6.1 South Circle Drive: Pasatiempo Estates Subdivision No. 2, Tract No. 8

The South Circle Drive tract incorporates portions of Rancho la Carbonera that lie within the projected lines of Sections 1 and 12 of Township 11 South, Range 2 West; and Section 6 and 7 of Township 11 South, Range 1 West, Mount Diablo Base & Meridian. The future tract is clearly

³⁰ *Santa Cruz Evening News*, June 10, 1937, p. 18.

³¹ Covenants for the Pasatiempo Homeowners Association, as accessed on: <http://uhl.com/disclosures/23%20Hollins%20Dr%20-%20Pasatiempo%20Basic%20Restrictions%20Letter.pdf>.

recognizable as Block No. 10 of the *General Plan for the Pasatiempo Country Club and Estates*, completed by the Olmsted Brothers in 1929 (Figure 10). Of particular relevance in understanding the original intent of the tract's development is the *General Plan's* incorporation of the highway corridor as a seamless part of the internal traffic circulation. In 1928, of course, the Los Gatos Highway was a rural two-lane affair, amenable to such a design scheme. The proximity of the highway was seen as an advantage – allowing residents to enjoy country living within a short drive of just a mile or two from downtown Santa Cruz. Pasatiempo Estates clearly embraced the highway, with another two residential streets laid out between the subject parcels of Block No. 10 and Carbonera Creek. Dense groves of oaks and other native vegetation figure prominently on the Olmsted Brothers plan, along with additional introduced landscaping consisting of paired trees planted at regular intervals along both the highway and the country club roads.

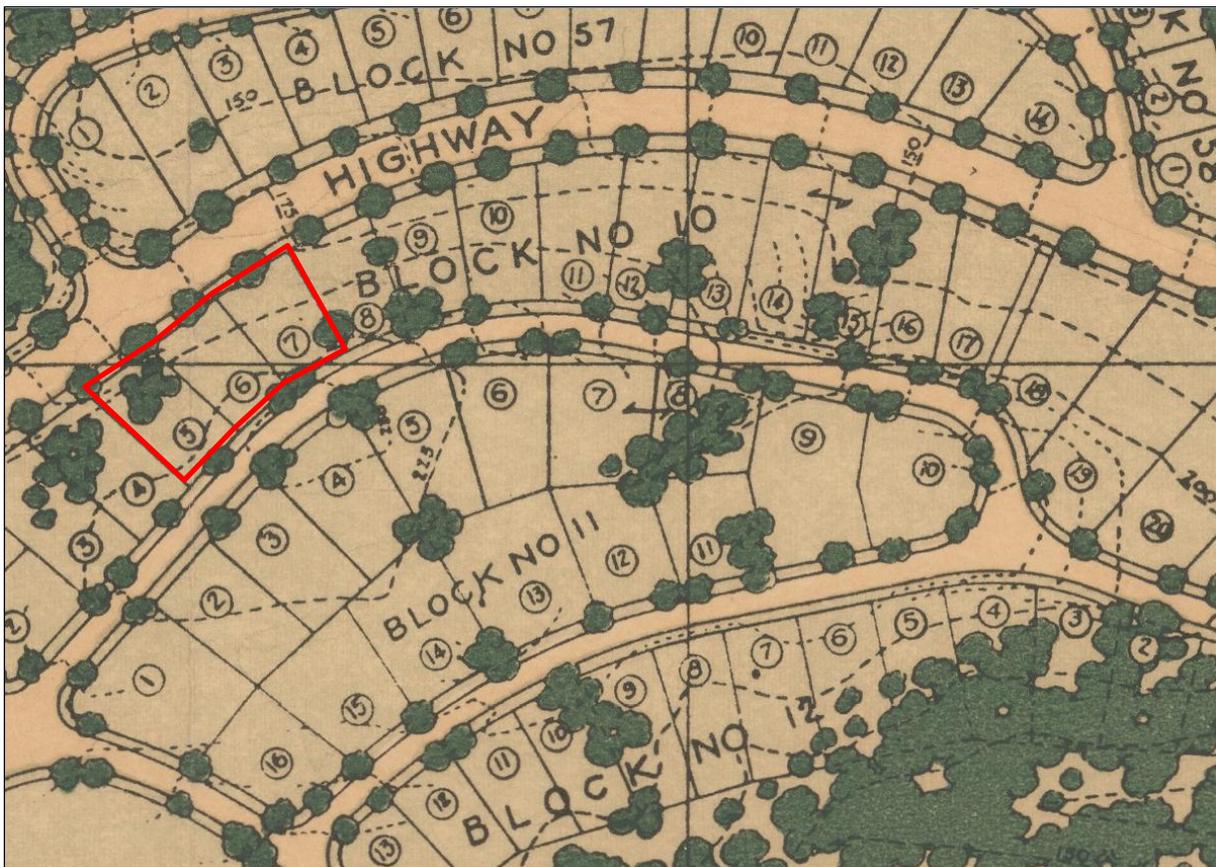


Figure 10. Detail of Olmsted Brothers, *General Plan*, 1929. The red polygon indicates the location of residences included in the current project architectural APE.

The official plat map of the South Circle Drive parcels (Tract No. 8 of Pasatiempo Estates Subdivision No. 2) was filed with the County of Santa Cruz on September 12, 1936, five years after the map for Subdivision No. 1 was filed. The residential parcels of Block No. 10 (including the Study Population) were apparently laid out in 1936 (Figure 11); parcels lying inside the loop

of South Circle Drive appear to have been laid out in February 1940, as part of Subdivision No. 2, Tract No. 41.³²

Subdivision No. 2 was described in mid-1937 as “nearly sold out.”³³ The lots may very well have been sold, but home construction didn’t always follow. Vacant lots were still being offered for sale on South Circle Drive at least into the 1960s.³⁴ In several cases, however, adjacent lots were consolidated to create a larger building parcel; in the architectural APE, Lots 5 and 6 of Tract 8 were consolidated for this purpose (Map Reference No. 1). Table 2 shows the order of construction for the highway-bordering residences on the east side of South Circle Drive.

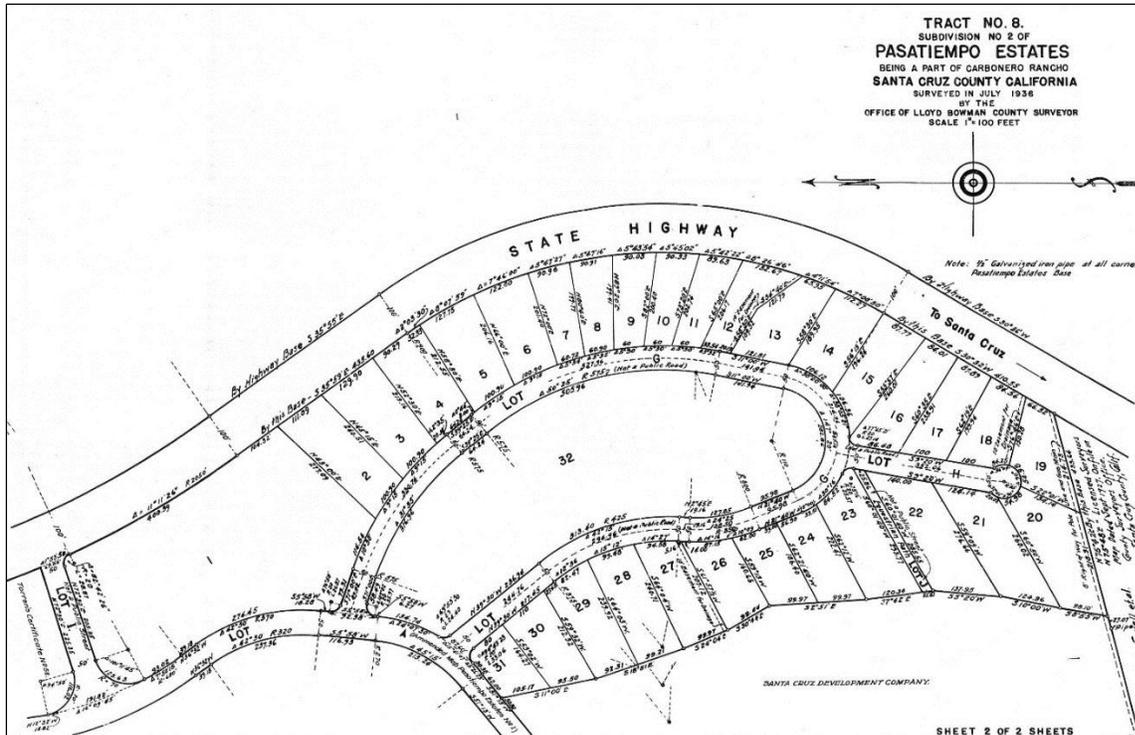


Figure 11. Tract 8, Subdivision No. 2 of Pasatiempo Estates, 1936.

Table 2. Construction Sequence of Residences on the Highway (East) Side of South Circle Drive

Address	Date	Tract 8
33 South Circle Drive	1937	Lot 17
13 South Circle Drive	1939*	Lots 5 and 6
17 South Circle Drive	1939**	Lot 8
27 South Circle Drive	1949	Lots 13 and 14
11 South Circle Drive	1950	Lot 4
31 South Circle Drive	1950	Lots 15 and 16
21 South Circle Drive	1956	Lots 10 and 11

³² Santa Cruz County *Maps Book* 26, pp. 8, 37.

³³ *Santa Cruz Evening News*, June 10, 1937, p. 18.

³⁴ *Santa Cruz Sentinel*, August 4, 1955, p. 9; June 28, 1961, p. 15; January 23, 1962, p. 12; April 19, 1964, p. 33.

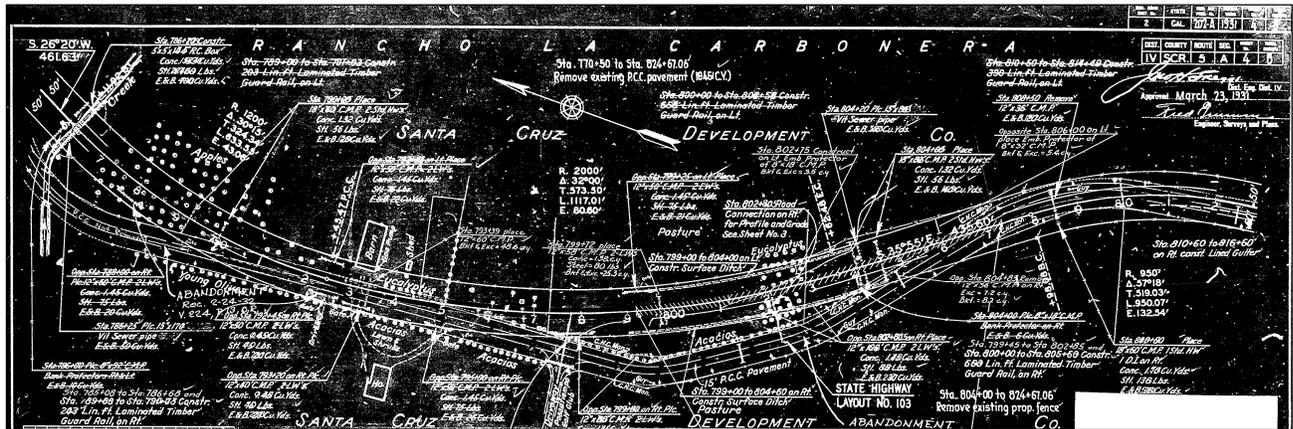


Figure 13. Santa Cruz Development Company (Pasatiempo) segment of the 1930-31 Highway 17 realignment, from California Division of Highways as-builts map (Sheet 4), Contract No. 44661.

Further improvements were in the offing for the 3.9-mile section from Pasatiempo (roughly the vicinity of the current Pasatiempo Road Overcrossing) north to Scotts Valley. Rights of way were secured by the end of 1935, clearing and grubbing commenced in March 1936, and a steam shovel and tractor plows were at work a month later.³⁸ In October 1936, the *Santa Cruz Sentinel* noted that additional widening was also occurring near Pasatiempo (in the current project area):

One more month, weather permitting, will see the completion of the Pasatiempo-Scotts Valley realignment unit of the Santa Cruz-Los Gatos highway. . . . The portion of the unit between the [Santa Cruz] city limits and Pasatiempo is also being widened. This will virtually be a four lane thoroughfare, with a three lane paved portion and eight foot shoulders on either side. This work is now in course of construction, in addition to the Scotts-Valley-Pasatiempo unit of construction.³⁹

An aerial photograph taken in 1940 shows the highway improvements completed in the 1930s, as well as the relatively sparse residential housing completed at Pasatiempo by the end of the period of significance. The South Circle Drive neighborhood is clearly visible, with only three residences at the top of the slope above the highway (Figure 14).

³⁸ *Santa Cruz Evening News*, April 29, 1935, p. 1; September 5, 1935, p. 1; November 24, 1935, p. 1; March 20, 1936, p. 1; April 29, 1936, p. 7.

³⁹ *Santa Cruz Sentinel*, October 8, 1936, p. 1.



Figure 14. Aerial photograph of project area, 1940 (source: UC Santa Cruz Map Library digital collections). The newly built residences on Lots 5 and 6 at 13 South Circle Drive (upper), on Lot 8 at 17 South Circle Drive, and on Lots 15 and 16 at 33 South Circle Drive (lower) are clearly visible. Note also the sparseness of the vegetation near Highway 17.

Although the seamless interconnectedness between Pasatiempo’s streets and the adjacent tree-lined rural highway – as envisioned in the 1929 Olmsted *General Plan* – had not materialized, no actual inroads appear to have been made in Pasatiempo through the 1940s. In the early 1950s, however, the further widening of Highway 17 required acquisition of right of way. In December 1953, for example, as part of securing future access to the highway (soon to become an expressway with limited access), Pasatiempo homeowners gave Monterey County 271 feet of their private entrance driveway to allow construction of a channelized entrance and exit to and from the expressway.⁴⁰

Actual highway construction required more drastic measures that directly affected the South Circle Drive neighborhood. Division of Highways District IV right-of-way files for the project are no longer extant, but as-built maps and newspaper accounts reveal the extent of additional right of way required (Figure 15). In March 1955, the *Santa Cruz Sentinel* noted that “Preliminary work has been commenced on the improvement of a six-mile section of Highway 17 north of Santa Cruz. While funds have not yet been allocated for the construction of this project, acquisition of right of way will proceed as soon as needs have been determined.”⁴¹ Shortly thereafter the *Santa*

⁴⁰ *Santa Cruz Sentinel*, December 16, 1953. This access reportedly could not be provided if the land remained in private ownership.

⁴¹ *Santa Cruz Sentinel*, March 18, 1955, p. 1.

Cruz Sentinel published a notice of the public sale of the “house and garage at 37 South Circle Drive,” which were slated to be moved from State right of way by August 1.⁴² Before the end of the month a Superior Court judge had signed an order granting the State Division of Highways “immediate possession of six parcels of property in Pasatiempo estates.”⁴³ Although the exact location of these parcels is not specified, a comparison of the 1936 map for Tract No. 8 with modern Assessor maps reveals the extent of modification to the South Circle Drive neighborhood: Lot 16 lost perhaps one-eighth of its acreage; Lot 17 lost almost half of its acreage; Lot 18 lost nearly all of its acreage; and Lots 19 and 20 were completely obliterated to make way for highway widening (Figures 16 and 17). Much smaller right-of-way takes were required from Lots 8 through 13.



Figure 15. “Workmen stand on overpass as camera views bypass route looking toward Pasatiempo. Note huge cuts in hillside,” *Santa Cruz Sentinel*, July 1, 1956.

Continuing highway work included construction of an overpass entrance to Pasatiempo in 1959, to eliminate an at-grade left turn from the highway (“a vital safety project”).⁴⁴ By mid-November 1959, portions of the new four-lane expressway were open to traffic, though temporarily diverting both northbound and southbound motorists to the new road section in order to finish upgrades to the older section: “[northbound] motorists leaving Santa Cruz for Pasatiempo or the Pasatiempo Inn will use a short section of the new freeway, then take a right turn onto the ramp for the Pasatiempo overpass to reach Pasatiempo. [Northbound] motorists leaving Pasatiempo for Los Gatos will also use the overpass and take the new onramp from the overpass to the new section of freeway. From Pasatiempo to Santa Cruz, [southbound] motorists will use the old highway.”⁴⁵ The *Santa Cruz Sentinel* announced in June 1960 that the “3.3 miles of expressway between city limits and Glen Canyon Road on the Los Gatos highway were completed [this week] by Fredrickson and Watson company. . . .”⁴⁶

⁴² *Santa Cruz Sentinel*, June 6, 1955, p. 9. This was the house formerly owned by Mr. and Mrs. John J. Johnson; it probably occupied Lot 19 on the 1936 map for Tract 8 (Figure X).

⁴³ *Santa Cruz Sentinel*, June 24, 1955, p. 5.

⁴⁴ *Santa Cruz Sentinel*, June 24, 1960, p. 21.

⁴⁵ *Santa Cruz Sentinel*, March 5, 1959, p. 1; November 15, 1959, p. 1.

⁴⁶ *Santa Cruz Sentinel*, June 24, 1960, p. 21.

In May 1993, Caltrans District 4 architectural historian Andrew Hope prepared both a Historic Architecture Survey Report and a Historic Property Survey Report for the Route 1/Route 17 Interchange Improvement project, on Route 1 from the Morrissey Boulevard Overcrossing to east of River Street, and on Route 17 from Ocean Street to the Pasatiempo Overcrossing.⁴⁷ The proposed project did not go forward to construction, but the final environmental document (Negative Declaration and Finding of No Significant Impact) did note that no cultural resources would be affected. In June 2001, A Historic Property Survey Report was prepared by Caltrans architectural historian Robert C. Pavlik for the Santa Cruz 1/17 Merge Lanes Project, which included 2 miles along Route 1 and not quite 1 mile from Santa Cruz to the Pasatiempo Overcrossing.⁴⁸ The architectural APE for the Highway 17 portion of the project was limited to the existing Caltrans right of way, and no adjacent Pasatiempo properties were evaluated.

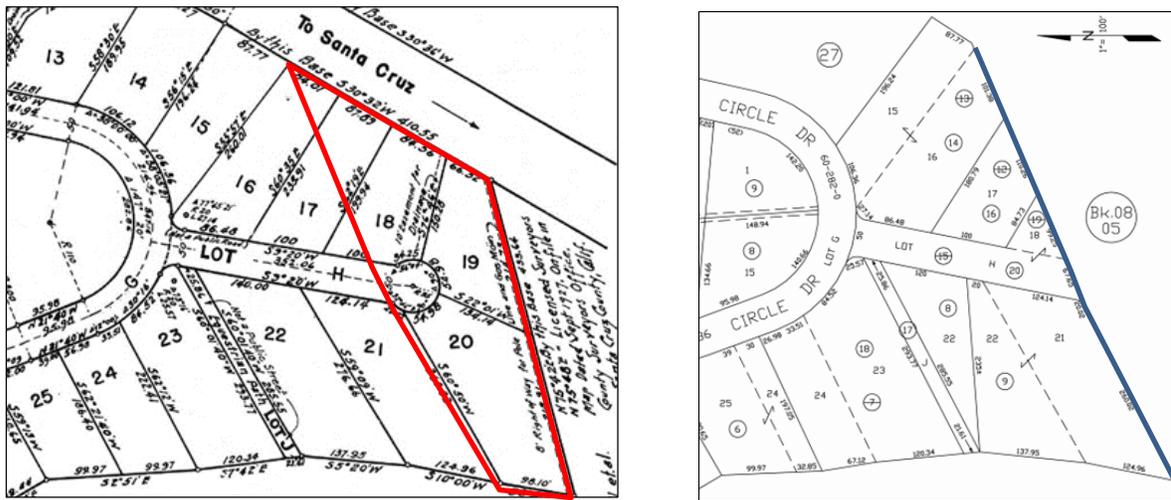


Figure 16 (left). Detail from original 1936 Pasatiempo Estates Subdivision No. 2, Tract 8 map documents that the tract once extended farther to the south. Portions of Lots 16-18 and all of Lots 19-20 of the South Circle Drive neighborhood were lost to make way for highway widening during the 1950s (red polygon).

Figure 17 (right). Detail from current Santa Cruz County Assessor map (Sheet 60-28) shows the remaining parcel configurations (Note: parcels north of Lot 15 are not missing; they are shown on Assessor map Sheet 60-27).

4. DESCRIPTION OF HISTORIC-PERIOD RESOURCES IN THE ARCHITECTURAL APE

The architectural APE, delineated in accordance with Attachment 3 of the Section 106 PA, includes two parcels (Figure 3, Map Reference Nos. 1 and 2). Each of these parcels is intersected by the proposed new State right of way boundary, which will be broader than the existing right of way to accommodate construction easements. Both parcels are located on the east side of South Circle Drive within the gated community of Pasatiempo; each is occupied by a residence

⁴⁷ Caltrans Expenditure Authorization 04235-129080.

⁴⁸ Caltrans Expenditure Authorization 05-129101.

constructed before 1970. The two properties are briefly described here, but they are also covered in greater detail in the accompanying Department of Parks and Recreation (DPR) 523 Forms (see Attachment A). Descriptions are based on a combination of Division of Highways as-built mapping, Santa Cruz newspaper accounts, residential building records from the Santa Cruz County Assessor, and building permits from the Santa Cruz County Planning Department.

Map Reference No. 1: Wettstein Residence, 13 South Circle Drive (APN 060-270-005), 1939



Figure 18. Wettstein residence, 13 South Circle Drive, constructed 1939 (Photo: Carr, 8-3-2015).

The 2,155-square-foot residence was constructed by local Santa Cruz building contractor C. M. Doane in 1939 as a rambling one-story, ranch-style, single-family home with an irregular floor plan of standard-grade frame construction on a concrete foundation (Figure 18). Exterior walls are clad in a mixture of surface treatments, including sections of painted wooden shingles, painted rustic brick, and stucco. Windows are primarily pairs of 4-over-4, double-hung; two broad bay windows were added by the Wettsteins at the south and northwest elevations at an unknown date. The irregular roof line has intersecting hipped planes, clad in a high-relief cementitious product (the original roof was wood shake). Two low chimneys/vents pierce the roofline just behind the ridge and toward each end of the roof. The attached garage, with sliding doors, is located at the front left of the house. The dominant feature of the residence's main elevation is a deep veranda protected by the broad overhanging roof, supported at this location on chamfered posts. Both the house and driveway are accessed by a wide driveway of concrete aggregate, flanked on one side by a slumpstone wall. A dense hedge of medium height and a mature oak tree in the front yard and the tall trees rising up behind the house are the main landscape elements visible from the street.

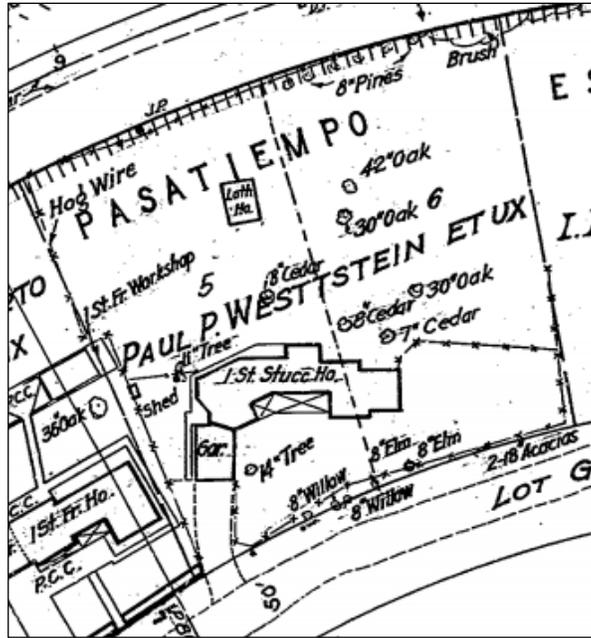


Figure 19. Detail of Wettstein residence as depicted on 1958 California Division of Highways as-built mapping, Sheet 15 of 131, Contract No. 60-4TC3.

Map Reference No. 2: Graham Residence, 15 South Circle Drive (APN 060-270-006), 1957



Figure 20. Graham residence, 15 South Circle Drive, constructed 1958 (Photo: Carr, 8-3-2015).

The 1,058-square-foot, one-story, single-family residence built at 15 South Circle Drive in 1957, is of frame construction on a concrete foundation, with a combination of stucco and T-111 board and batten siding (Figure 20). Windows are a mixture of aluminum casement and fixed single-lite. The hipped roof has medium eaves and is clad with composition shingles. The attached garage is located at the front left of the house, accessed by an asphalt driveway. In 1969, an existing deck was enclosed as part of the living area, and a new deck was constructed, adding another 286 square feet to the rear of the house.

5. EVALUATION OF HISTORIC-PERIOD RESOURCES IN THE ARCHITECTURAL APE

Although a complete evaluation of all the residential and recreational buildings, landscape elements, road circulation, and other features that comprise Pasatiempo Estates and Country Club is well beyond the scope of the current project, the possibility of a Pasatiempo Historical District was nevertheless considered as part of the evaluation of the two historic-period properties (Map Reference Nos. 1 and 2). The historic context developed in this Historical Resources Evaluation Report demonstrates that the period of significance for such a district would correspond to the decade from 1927 through 1938, when Marion Hollins was indisputably the driving force in the development of the property, when the Olmsted Brothers' *General Plan* provided the development's blueprint, and when luminaries such as Alistair Mackenzie, William Wurster and Clarence Tantau were deeply involved in the outcome. The sale of Pasatiempo in December 1938 marked the end of Hollins's direct control of the property's future. In reality, Pasatiempo would ultimately be developed over the course of several decades, under a variety of management approaches. The solid core of the development remains the golf course, the handful of early architect-designed houses, and the rolling wooded landscape with winding roads. These elements may very well prove to contribute to an as-yet-undesignated historic district, but there is no historical basis for proposing a historic district coterminous with the outer boundaries of the modern-day gated community.

5.1 Evaluation of Individual Resources

Map Reference No. 1: Wettstein House, 13 South Circle Drive (APN 060-270-005), 1939

The house at 13 South Circle Drive was originally built for Paul Peter Wettstein (1890-1978) and his wife, Olive Ramona Sutton Wettstein (1893-1975), who continued to reside on the property for the rest of their lives. In partnership with Rupert I. Lease, who lived down the street at 31 South Circle Drive, Wettstein was co-owner of Lease & Wettstein, a downtown Santa Cruz grocery store, from 1923, when they acquired it from Charles D. Hinkle, until January 1, 1946, when they sold it to Dick McHugh and Ernest Bianchi.

The Wettstein residence, constructed on combined Lots 5 and 6 of Tract 8 in 1939, was one of the first homes built on South Circle Drive (Figure 14). In April of that year, the *Santa Cruz Evening News* reported that "Work on the new home of Paul Wettstein in the new highway subdivision started yesterday." The following month the newspaper noted that experienced local builder "Contractor C. M. Doane is making good progress on the new Paul Wettstein home at Pasatiempo." Construction continued through July, and early in August the Wettstein family moved from Bay Street in Santa Cruz into their new home, a residence "modern in every way," and sited "on a knoll, beautifully situated with outlook over city, hills, mountains, forests and bay."⁴⁹

Built just at the end of Marion Hollins's involvement with Pasatiempo, the residence is not associated with the earliest subdivision, although it was among the first to be built in the new

⁴⁹ *Santa Cruz Evening News*, April 1, 1939, p. 2; May 19, 1939, p. 4; July 29, 1939, p. 2; August 9, 1939, p. 3.

“highway subdivision.” The house is well documented as the work of the Santa Cruz building contractor C. M. Doane, who had already been in business for more than twenty years when he began work on the Wettstein residence. No architect is known to have been associated with the property. Wettstein was a well-known local businessman, but his professional life is associated with the downtown grocery store location, rather than his residence.

The Wettstein residence lacks important connections with the formative years of Pasatiempo under Hollins’s management, and is not the work of a significant architect or master builder. Built in 1939, just after the end of Marion Hollins’ direct association with Pasatiempo, the house is more characteristic of the late 1930s expansion of sales to a more general clientele, as exemplified by the Santa Cruz District Developers’ campaign of 1937-1939. The Wettsteins were similar in importance to many other local business owners and do not represent significant individuals in the economic history of Santa Cruz.

The Wettstein residence, therefore, is determined not eligible for listing in the National Register of Historic Places. Similarly, it does not meet the criteria for listing in the California Register of Historical Resources and is not a historical resource for the purposes of CEQA.

Map Reference No. 2: Graham Residence, 15 South Circle Drive (APN 060-270-006), 1957

Although the parcel (Lot 7 of Tract 8) is shown as the property of I. Davis on Sheet 15 of the 1958 Division of Highways as-built mapping (Figure 21), it is probable that Haldane C. Graham (1899-1980) and his wife Adele Emma Graham (1901-1983) built the original 1,058-square foot residence. Their surname is the first listed on Assessor building records – which also document a building permit dated April 7, 1957, and 1958 as the first tax appraisal year. A 1960 newspaper article gives Haldane Graham’s address as 15 South Circle Street, and Santa Cruz city directories for 1963 and 1967 confirm it. The Grahams owned a liquor store, the Grog Shop, in downtown Santa Cruz. In 1970 their son Courtney P. Graham (1928-2011) and his new wife, Nancy, moved into the home (the senior Grahams were still residing in Pasatiempo, but had moved to 65 Hollins Drive). A former Air Force pilot and intelligence officer, Courtney Graham co-founded Pacific Plantronics (now Plantronics, Inc.) in Santa Cruz in 1961.⁵⁰

The Graham residence was constructed rather late in the post-war building revival in Pasatiempo and therefore lacks any association with the development’s period of significance. No documentation has been found to suggest that the house was designed by a significant architect or master builder. Assessor records document a modest-sized house of standard construction, enlarged in 1969 to its current floor plan, presumably in preparation for the Grahamses’ son and new wife to move in. Like the Wettsteins, the Grahams owned a downtown Santa Cruz business, but did not contribute significantly to the economic development of the area.

⁵⁰ *Santa Cruz Sentinel*, November 13, 1950, p. 7; January 9, 1970, p. 7; July 14, 2011. The identity of I. Davis has not yet been determined.

The Graham residence, therefore, is determined not eligible for listing in the National Register of Historic Places. Similarly, it does not meet the criteria for listing in the California Register of Historical Resources and is not a historical resource for the purposes of CEQA.

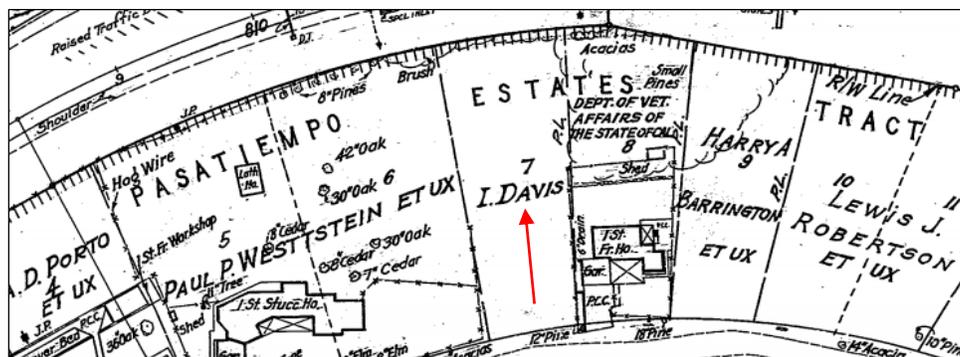


Figure 21. Although Lot 7 was previously owned by I. Davis, the Graham family probably built the 1958 residence; this detail is from 1958 California Division of Highways as-built mapping, Sheet 15 of 131, Contract No. 60-4TC3.

5.2 Potential for Pasatiempo Estates Historic District

Although a complete evaluation of Pasatiempo as a potential historic district is beyond the scope of the current project, the possibility of such a district was duly considered for this evaluation, as well as the possibility of the subject parcels being contributors to a larger resource.

5.3 Conclusions

The potential for a Pasatiempo Estates Historic District appears to be limited to the golf course and the handful of architect-designed (or otherwise Pasatiempo-commissioned) residences, country club buildings, and other facilities built during the period of significance, 1927-1938, when the Pasatiempo development was firmly guided by Marion Hollins’s vision. Other, later, architect-designed residences may eventually be found to be National Register-eligible, but would not be significant for any association with Pasatiempo.

Neither of the two historic-period resources in the project Area of Potential Effects has previously been determined eligible for listing in the National Register of Historic Places. Similarly, none of these resources has previously been determined to meet the criteria for listing in the California Register of Historical Resources, or constitutes a historical resource for the purposes of the California Environmental Quality Act.

Although both residences are part of the Pasatiempo Estates and Country Club initially laid out in the late 1920s and early 1930s, neither represents a significant element of that combined residential and recreational development. The Wettstein residence was built in 1939, just after the end of Marion Hollins’ direct association with Pasatiempo, and is more characteristic of the late 1930s expansion of sales to a more general clientele.

Both of the properties within the architectural Area of Potential Effects have been evaluated in conformity with the January 1, 2014, *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (the Section 106 PA). They have also been evaluated in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA), using the criteria set forth in Section 5024.1 of the California Public Resources Code.

Neither of the resources is owned by the State of California or requires evaluation under the provisions of the [date] *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code Section 5024 and Governor’s Executive Order W-26-92*.

Table 3. Historic-Period Resources in the Project Architectural Area of Potential Effects Determined Not Eligible for the National Register of Historic Places; Determined Not to Meet the Eligibility Criteria for the California Register of Historical Resources; and That Are Not Historical Resources for the Purposes of CEQA.

Map Reference No.	Address	APN	Date	Status Code
1	13 South Circle Drive	060-270-005	1939	6Z
2	15 South Circle Drive	060-270-006	1957	6Z

6. REFERENCES

Anonymous

1979 "A Dream Comes True: Pasatiempo Golf Course Marks Its 50th Anniversary, September 2, 1929-September 2, 1979." *Santa Cruz Sentinel*, September 2, 1979.

Beal, Richard A.

1991 *Highway 17: The Road to Santa Cruz*. The Pacific Group, Aptos, California.

Bowman, Lloyd

1930 *Amended Map, Pasatiempo Estates, [Subdivision] Number One, being a part of the Carbonero Rancho, Santa Cruz Co., California*, surveyed by Lloyd Bowman, County Surveyor, September 1930, scale: 1"=100', 4 sheets.

Chase, John Leighton

2005 *The Sidewalk Companion to Santa Cruz Architecture*. Museum of Art & History, Santa Cruz, California, 3rd edition.

Elliott, Wallace W., & Co.

1879 *Santa Cruz County, California. Illustrations descriptive of its scenery, fine residences, public buildings, manufactories, hotels, farm scenes, business houses, schools, churches, mines, mills, etc. From original drawings by artists of the highest ability. With historical sketch of the county.* [1997 facsimile edition by The Museum of Art and History at The McPherson Center.]

Inventory of the William W. Wurster/Wurster, Bernardi & Emmons Collection, 1922-1974

1976 Environmental Design Archives, College of Environmental Design, University of California, Berkeley. Collection number: 1976-2.

Koch, Margaret.

1990 *The Pasatiempo Story*, Los Gatos, California: Pasatiempo, Inc.

1973 *Santa Cruz County: Parade of the Past*, Fresno: Valley Publishers.

Lehmann, Susan.

2015 Personal communication, via telephone, July and August, 2015.

Lempres Brostrom, Caitlin, and Richard C. Peters

2011 *The Houses of William Wurster: Frames for Living*, New York: Princeton Architectural Press.

Olmsted Brothers

1929 *General Plan for Pasatiempo Country Club and Estates*. Olmsted Brothers Landscape Architects, Santa Cruz Development Company, California. [Map of golf course, lots, hotel site, tennis courts and trees.]. UC Santa Cruz Library Special Collections

1929 *Pasatiempo Gold Club and Estates* [Map of lots, buildings, trees]

Outerbridge, David

1998 *Champion in a Man's World: The Biography of Marion Hollins*, Chelsea, Michigan: Sleeping Bear Press.

Pasatiempo Golf Club

1996 *Pasatiempo Golf Club: A Photographic Catalog*. Part 1: Marion Hollins; Part 2: The original golf course.

[Pasatiempo Estates]

c1950 *Pasatiempo* [brochure]

n.d. *Pasatiempo Country Club and Estates* [brochure].

Pasatiempo Homeowners Association

n.d. [Covenants], accessed on: <http://uhl.com/disclosures/23%20Hollins%20Dr%20-%20Pasatiempo%20Basic%20Restrictions%20Letter.pdf>.

Santa Cruz Evening News, accessed via <http://www.newspapers.com/>.

Var.

Santa Cruz Sentinel, accessed via <http://www.newspapers.com/>.

Var.

Santa Cruz Surf, accessed via <http://www.newspapers.com/>.

Var.

State of California. Department of Public Works. Division of Highways.

1931 *Plan and Profile of State Highway in Santa Cruz County, between 1 mile north of Santa Cruz and Santa Cruz*.

Treib, Marc, ed.

1999 *An Everyday Modernism: The Houses of William Wurster*
Berkeley: University of California Press

Vroom, Jerry

1973 *The Elegant Dream: A History of Pasatiempo*.

Welch, Laurel

2001 *Historic Architectural Survey Report for State Routes 1/17 Merge Lanes, Santa Cruz County, 05-SCR-1/17, P.M. 15.3/7.6 and PM 0.0/0.8, KP 24.6/28.3 and KP 0.0/1.2, 05-129101*, prepared for California Department of Transportation District 5, San Luis Obispo, May 2001.

Attachment A:

Figure 1 (Project Vicinity and Location)

Figure 2 (Architectural Area of Potential Effects)

Figure 1 - Project Location and Vicinity
Pasatiempo Shoulder Widening Project
Highway 17, PM 0.1/0.4, Santa Cruz County
EA 05-1C670/ID 05-1200-0194

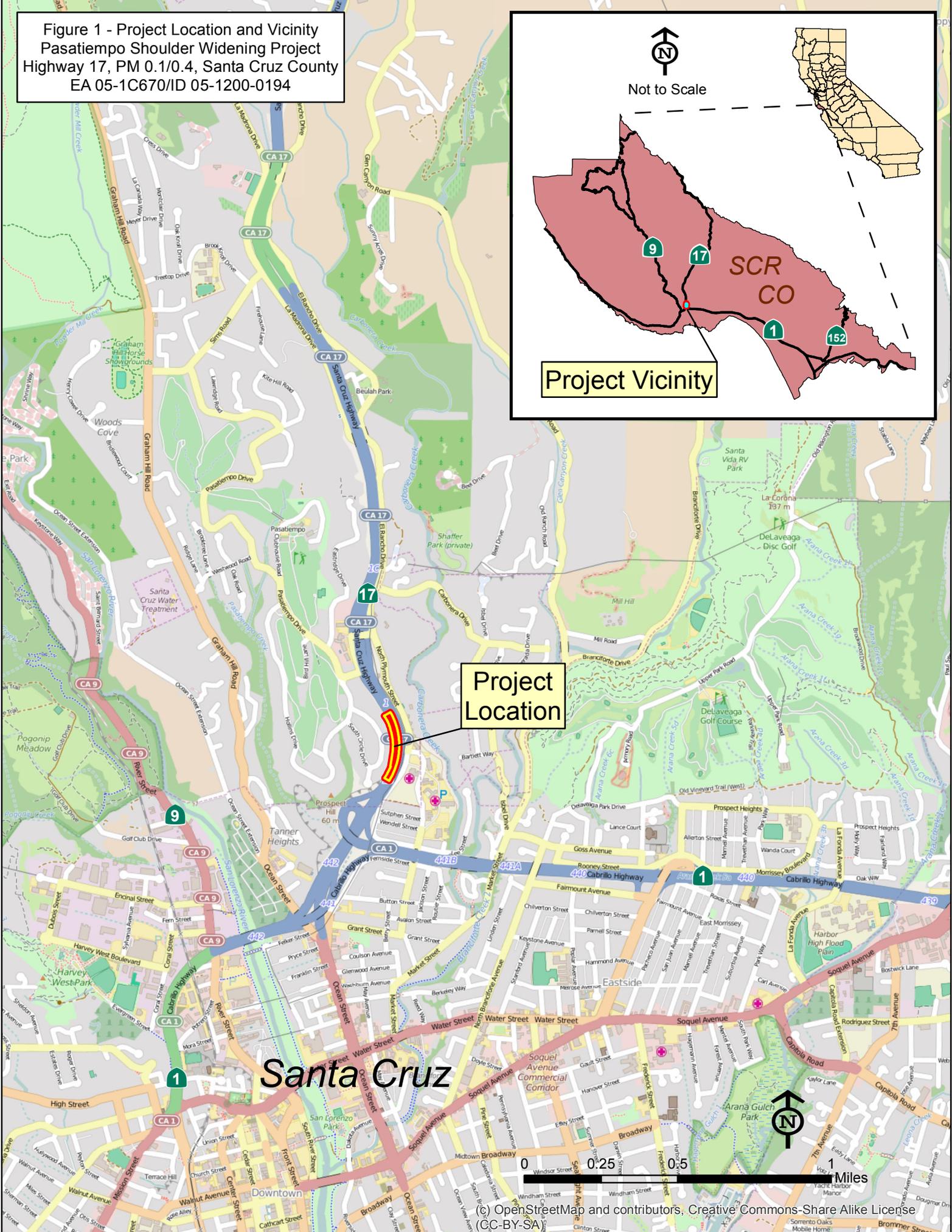
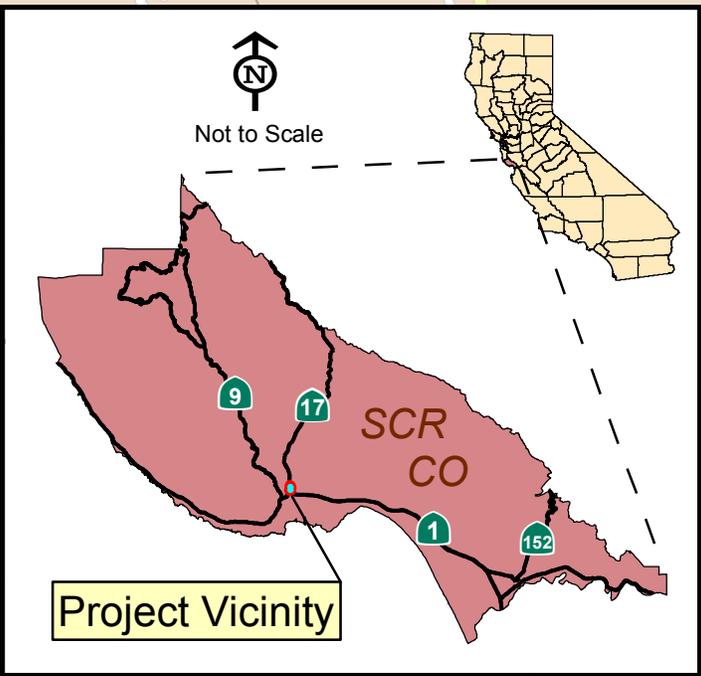


Figure 2 - Area of Potential Effects
Pasatiempo Shoulder Widening Project
Highway 17, PM 0.1/0.4, Santa Cruz County
EA 05-1C670/ID 05-1200-0194

Krista Vialto

10/5/15

District 5 Heritage Resources Coordinator

Date

Ken D...

10/5/15

Caltrans Project Manager

Date



--- Architectural APE
--- Archaeological APE/Area of Direct Impact
--- Approximate Parcel Boundaries
Map Reference Number

0 25 50 100
Feet

↑
N
↓

August 7, 2015

Attachment B: Department of Parks and Recreation (DPR) Forms 523

- 13 South Circle Drive, Pasatiempo, Santa Cruz County - APN 060-271-005 (Map Ref. No. 1)
- 15 South Circle Drive, Pasatiempo, Santa Cruz County - APN 060-271-006 (Map Ref. No. 2)

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 5

*Resource Name or #: 13 South Circle Drive, Pasatiempo

P1. Other Identifier: Wettstein Residence; Pasatiempo Subdivision No. 2, Tract No. 8, Lots 5 and 6

* **P2. Location:** Not for Publication Unrestricted *a. **County:** Santa Cruz

* **USGS Quad(s):** Santa Cruz (1954)

c. Address: 13 South Circle Drive, Pasatiempo / Santa Cruz 95060

d. UTM:

e. Other Locational Data:

Santa Cruz County Assessor Parcel Number 060-270-006

* **P3a. Description:**

The 2,155-square-foot residence occupies two lots totaling 1.06 acres. The ranch-style house is a rambling, one-story, single-family residence, with an irregular floor plan, roughly linear, but with angles and several offsets. The house is of standard frame construction on a concrete foundation. A rectangular garage is attached at the northeast corner. The residence has a mixture of exterior wall surface treatments: the garage and the adjacent house wall have painted shingle siding; the house wall on the veranda is of painted rustic brick; and the remainder of the principal elevation is coated with stucco. The house has a medium-pitch roofline, made up of numerous intersecting roof planes, and medium eaves. The original wood shingle roof has been replaced with a high-relief cementitious product, including ridge caps. There is a low brick chimney behind the roof ridge on the south end; a similar feature (which may be a vent, rather than a chimney) appears on the north end. The dominant feature on the main elevation is a broad veranda sheltered by a deep porch overhand supported by chamfered wooden posts. Windows on the front elevation are all pairs of 4-over-4 double-hung, flanked by wooden shutters. The front door, which opens into a breezeway, is a wide Dutch door. The double garage has two sliding doors. The front yard of the residence is dominated by a large oak tree and a dense hedge of medium height. The garage and house are accessed via an aggregate concrete driveway, flanked on one side by a painted slumpstone wall.

* **P3b. Resource Attributes:** HP02 (Single family property)

* **P4. Resources Present:** Building Structure Object Site District Element of District Other (isolates, etc.)



* **P5b. Description of Photo:**

Front entrance, camera facing west; Carr photo 8/3/2015

* **P6. Date Constructed/Age & Sources:**

Historic Prehistoric Both
1939; local newspaper, Assessor records

* **P7. Owner and Address:**

William L. Lawrie & Beverly B. Lawrie, PO Box 337, Capitola, CA 95010

* **P8. Recorded by:**

Paula J. Carr, PQS Principal Architectural Historian, Caltrans D5, 50 Higuera Street, San Luis Obispo, CA 93401

* **P9. Date Recorded:** 8/3/2015

* **P10. Survey Type:**

Intensive

* **P11. Citation:** Paula Juelke Carr, Historical Resources Evaluation Report, Pasatiempo Shoulder Widening, Highway 17, Santa Cruz County, California, 05-SCR-17-PM 0.1/0.4, EA 1C670/ID 05-1200-0194, August 2015.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 2 of 5

*Resource Name or #: 13 South Circle Drive, Pasatiempo

- * Attachments: None Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 3 of 5

*NRHP Status Code: 6Z

*Resource Name or #: 13 South Circle Drive, Pasatiempo

B1. Historic Name: Wettstein Residence

B2. Common Name:

B3. Original Use: Single-family residence

B4. Present Use: Single-family residence

* **B5. Architectural Style:** Ranch

* **B6. Construction History:**

Built in March-August 1939

* **B7. Moved?** No Yes Unknown

Date:

Original Location:

* **B8. Related Features:**

B9a. Architect: Unknown

B9b. Builder: C. M. Doane (Santa Cruz)

* **B10. Significance: Theme** N/A

Area: N/A

Period of Significance: N/A

Property Type: N/A

Applicable Criteria: N/a

The house at 13 South Circle Drive was originally built for Paul Peter Wettstein (1890-1978) and his wife, Olive Ramona Wettstein (1893-1975), who resided on the property for the rest of their lives. The Wittstein residence, constructed in 1939 on combined lots 5 and 6 or Pasatiempo Subdivision No. 2, Tract No. 8, was one of the first homes built on South Circle Drive. On April 1, 1939, the Santa Cruz Evening News reported that "Work on the new home of Paul Wettstein in the new highway subdivision started yesterday." The following month the newspaper noted that the experienced local builder "Contractor C. M. Doane is making good progress on the new Paul Wettstein home at Pasatiempo." Construction continued through July, and early in August 1939 the Wettstein family moved from Bay Street in Santa Cruz into their new home, a residence "modern in every way," and sited "on a knoll, beautifully situated with outlook over city, hills, mountains, forests and bay."

Along with Rupert I. Lease, who lived down the street at 31 South Circle Drive, Wettstein was co-owner of the Santa Cruz grocery store Lease & Wettstein. They bought the store from Charles D. Hinkle in 1923 and sold it to Dick McHugh and Ernest Bianchi on January 1, 1946.

B11. Additional Resource Attributes:

* **B12. References:**

Santa Cruz Evening News; California Division of Highways as-built mapping, 1958 (Contract 60-4TC3); Santa Cruz County Assessor residential building records

B13. Remarks:

* **B14. Evaluator:** Paula Juelke Carr, PQS Principal Architectural Historian, Caltrans D5, San Luis Obispo

* **Date of Evaluation:** 8/5/2015

(This space reserved for official comments.)



B10. Significance:

Built just at the end of Marion Hollins's involvement with Pasatiempo, the residence is not associated with the earliest subdivision, although it was among the first to be built in the new "highway subdivision." The house is well documented as the work of the Santa Cruz building contractor C. M. Doane, who had already been in business for more than twenty years when he began work on the Wettstein residence. No architect is known to have been associated with the property. Wettstein was a well-known local businessman, but his professional life is associated with the downtown grocery store location, rather than his residence.

The Wettstein residence lacks important connections with the formative years of Pasatiempo under Hollins's management, and is not the work of a significant architect or master builder. The Wettsteins were similar in importance to many other local business owners and do not represent significant individuals in the economic history of Santa Cruz.

The Wettstein residence, therefore, is determined not eligible for listing in the National Register of Historic Places. Similarly, it does not meet the criteria for listing in the California Register of Historical Resources and is not a historical resource for the purposes of CEQA.



Photo 2. View of principal elevation, camera facing southwest. Carr photo 8/3/2015.



Photo 3. Paired 4-over-4 double-hung windows at south (stuccoed) end of main elevation. Carr photo 8/3/2015.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 4

*Resource Name or #: 15 South Circle Drive, Pasatiempo

P1. Other Identifier: Graham Residence; Pasatiempo Subdivision No. 2, Tract No. 8, Lot 7

* **P2. Location:** Not for Publication Unrestricted *a. **County:** Santa Cruz

* **USGS Quad(s):** Santa Cruz (1954)

c. Address: 15 South Circle Drive, Pasatiempo / Santa Cruz 95060

d. UTM:

e. Other Locational Data:

Santa Cruz County Assessor Parcel Number 060-270-006

* **P3a. Description:**

The 1,344-square foot, one-story, single-family residence is located on a 0.35-acre parcel. The house is rectangular in plan, with a square, double garage attached off the northeast corner. The house and garage are of standard-grade frame construction; the house has a raised concrete foundation. House walls are stuccoed; the garage has vertical T-111 siding. Front windows are casement, flanking a fixed lite of the same dimension; decorative shutters flank the casement windows; side and rear windows are a mixture of fixed and operable lites. The medium-height hipped roof has composition shingles (replacing original wood shingles), deep eaves with exposed rafter tails, fascia, and gutters. A low brick chimney pierces the roofline on the north side. There is a small recessed entrance at center front of the main elevation, with a single raised-panel door. A side door on the south side opens onto a deck. A side door on the north side leads to a wooden stairway to ground level. The house and garage are accessed via a short asphalt driveway. Brick steps and raised brick planters extend out from the entrance across the front of the house and beyond, supporting a low plywood fence. The house originally was a 1,058-square-foot residence with a wooden deck extending out from the southwest corner. In 1969, the deck was enclosed as part of the living area, and a new deck was constructed at the rear of the house, at a lower level, accessed by stairs.

* **P3b. Resource Attributes:** HP02 (Single family property)

* **P4. Resources Present:** Building Structure Object Site District Element of District Other (isolates, etc.)



* **P5b. Description of Photo:**

View of residence from street, camera facing west; photographed 8/3/2015

* **P6. Date Constructed/Age & Sources:**

Historic Prehistoric Both
1957; Assessor records

* **P7. Owner and Address:**

William L. Lawrie & Beverly B. Lawrie, PO
Box 337, Capitola CA 95010

* **P8. Recorded by:**

Paula J. Carr, PQS Principal Architectural
Historian, Caltrans D5,

* **P9. Date Recorded:** 8/3/2015

* **P10. Survey Type:**

Intensive

* **P11. Citation:** Paula Juelke Carr, Historical Resources Evaluation Report, Pasatiempo Shoulder Widening, Highway 17, Santa Cruz County, California, 05-SCR-17 PM 0.1/0.4), EA 1C670/ ID 05-1200-0194, August 2015.

* **Attachments:** None Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 4

*NRHP Status Code: 6Z

*Resource Name or #: 15 South Circle Drive, Pasatiempo

B1. Historic Name:

B2. Common Name: Graham Residence

B3. Original Use: Single-family residence

B4. Present Use: Single-family residence (vacant)

* **B5. Architectural Style:** Minimal ranch

* **B6. Construction History:**

Built in 1957; 286-foot addition in 1969 (deck converted to living space, new deck added); wood shingle roof replaced with composition shingles.

* **B7. Moved?** No Yes Unknown **Date:**

Original Location:

* **B8. Related Features:**

B9a. Architect: Unknown

B9b. Builder: Unknown

* **B10. Significance: Theme** N/A

Area: N/A

Period of Significance: N/A

Property Type: N/A

Applicable Criteria: N/A

Although the subject parcel is shown as the property of I. Davis on 1958 Division of Highways mapping (Contract 60-4TC3), it is more likely that Haldane C. Graham (1899-1980) and his wife Adele Emma Graham (1901-1983) built the residence. A 1960 newspaper article gives Graham's address as 15 South Circle Street, and Santa Cruz city directories for 1963 and 1967 confirm it. The Grahams owned a liquor store, the Grog Shop, in downtown Santa Cruz.

In 1970 their son Courtney P. Graham (1928-2011) and his new wife, Nancy, moved into the house (the senior Grahams were still residing in Pasatiempo but had moved to 65 Hollins Drive). A former Air Force pilot and intelligence officer, Courtney Graham co-founded Pacific Plantronics (now Plantronics, Inc.) in Santa Cruz in 1961.

The residence at 15 South Circle Drive is a very modest (and altered) example of its type and has no documented associations with any distinguished architect or master builder. None of the Grahams were unusually important business owners in the Santa Cruz area.

The subject property has been determined not eligible for listing in the National Register of Historic Places. Similarly the property does not meet the eligibility criteria for listing in the California Register of Historical Resources and does not constitute a historical resource for the purposes of CEQA.

B11. Additional Resource Attributes:

* **B12. References:**

Santa Cruz Sentinel, November 13, 1950, p. 7; January 9, 1970, p. 7; July 14, 2011; Santa Cruz County Assessor residential building record

B13. Remarks:

* **B14. Evaluator:** Paula J. Carr, PQS Principal Architectural Historian, Caltrans D5, San Luis Obispo

* **Date of Evaluation:** 8/3/2015

(This space reserved for official comments.)





Photo 2. View of principal elevation, camera facing northeast. Carr photo 8/3/2015.



Photo 3. Window detail on main elevation. Carr photo 8/3/2015.



Photo 4. West end of main elevation. Carr photo 8/3/2015.



Photo 5. North elevation, camera facing southeast. Carr photo 8/3/2015.

Attachment C: Correspondence

PASATIEMPO INTERESTED PARTIES

The following were contacted (letters went out on July 21, 2015):

Mary McPherson, President, Board of Trustees
Pasatiempo Homeowners Association
20 Clubhouse Road
Pasatiempo, CA 95060

Santa Cruz Museum of Art and History
705 Front Street
Santa Cruz, CA 95060
(831) 429-1964, ext. 7019
Marla Novo

Historic Resources Commission
Santa Cruz County Planning Department
701 Ocean Street, Room 400
Santa Cruz, CA 95060
(831) 454-3111
pln001@co.santa-cruz.ca.us
Annie Murphy

Susan Lehmann
28 Clubhouse Road
Santa Cruz, CA 95060
Phone: (831) 459-7619

Daniel P. Gregory

The following proposed contacts were not consulted: there were no Wurster- or other architect-designed residences in the APE:

~~Architects Association of Santa Cruz County
PO Box 7462
Santa Cruz, CA 95061
(831) 460-2999~~

~~American Institute of Architects Monterey Bay
PO Box 310
Monterey, CA 93942
831-372-6527
BethAnn Skamsler, Executive Director~~

Environmental Design Archives
College of Environmental Design
~~230 Wurster Hall #1820~~
University of California, Berkeley
~~Berkeley, CA 94720-1820~~
~~(510) 642-5124~~

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3233
TTY 711

<http://www.dot.ca.gov/dist05/>



*Serious drought
Help save water!*

July 21, 2015

File: Pasatiempo Shoulder Widening
05-SCR-17-PM 0.1/0.4
EA: 05-1C670/ ID 0512000194

Mary McPherson, President, Board of Trustees
Pasatiempo Homeowners Association
20 Clubhouse Road
Pasatiempo, CA 95060

Dear Ms. McPherson:

I am writing to seek comments from the Pasatiempo Homeowners Association Board of Trustees concerning a proposed California Department of Transportation (Caltrans) project along a segment of Highway 17 in the vicinity of Pasatiempo. The proposed project seeks to construct a soil nail wall and widen shoulders to improve stopping sight distance on Highway 17 between post mile 0.1 and post mile 0.4, just north of Santa Cruz city limits (please see the enclosed map of the project area). Preliminary design suggests that construction activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required for permanent construction easements.

The project area is immediately downslope from several residences on South Circle Drive (Pasatiempo Estates Subdivision 2, Tract 8, platted on September 12, 1936). In accordance with Section 106 of the National Historic Preservation Act, Caltrans will be conducting architectural studies on historic-period built-environment resources (in this instance, on two pre-1970 residences) within the architectural Area of Potential Effects to determine whether either or both may be eligible for listing in the National Register of Historic Places. If eligible resources are present, we will also evaluate whether the project may have any adverse indirect effects on historical significance (no residences will be directly affected). The historical context we are preparing will address the development of Pasatiempo in general, as well as the specific architectural design and construction history of the individual resources within the South Circle Drive study area.

As Pasatiempo is a gated community, I would also like to ask clearance to enter so that I may take street-side photographs of 13 South Circle Drive and 15 South Circle Drive and make a few general notes about construction materials and style. I will not need to step onto the properties or disturb the residents. I assure you that this process has nothing to do with property values, building codes, or assessments; rather, it is standard procedure for conducting Caltrans built-environment studies in order to determine whether a particular property may be eligible for listing in the National Register for its architectural or historical merits.

Mary McPherson, President, Board of Trustees
Pasatiempo Homeowners Association
Page 2
July 21, 2015

The information I would be gathering during my proposed brief visit – together with the other forms of documentary evidence I've already gathered from secondary sources, county records, newspaper accounts, and the like – will make it possible for me to complete my architectural evaluations. I'm hoping to be able to make my visit on either this coming Monday afternoon, July 27, or on the following Monday afternoon, August 3.

Thank you for your assistance. I would be happy to answer questions you might have about my proposed architectural survey; my contact information is provided below. For general questions about the shoulder widening, soil nail wall, or other project- or construction-related activities, I would like to refer you to the Project Manager, Luis Duazo, at luis.duazo@dot.ca.gov or at (805) 542-4678.

Sincerely,

PAULA JUELKE CARR
Associate Environmental Planner (Architectural History)
(805) 542-4659
paula.carr@dot.ca.gov
Enclosure: preliminary project mapping

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3233
TTY 711

<http://www.dot.ca.gov/dist05/>



*Serious drought
Help save water!*

July 21, 2015

File: Pasatiempo Shoulder Widening
05-SCR-17-PM 0.1/0.4
EA: 05-1C670/ ID 0512000194

Nina Simon, Executive Director
Santa Cruz Museum of Art & History
705 Front Street
Santa Cruz, CA 95060

Dear Ms. Simon:

I am writing to seek your comments on a proposed California Department of Transportation (Caltrans) project along a segment of Highway 17 in the vicinity of Pasatiempo, the residential community and golf course developed in the late 1920s and 1930s by Marion Hollins (1892-1944). The proposed project seeks to construct a soil nail wall and widen shoulders to improve stopping sight distance on Highway 17 between post mile 0.1 and post mile 0.4, just north of Santa Cruz city limits (please see the enclosed map of the project area). Preliminary design suggests that construction activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required for permanent construction easements.

The project area is immediately downslope from several residences on South Circle Drive, a portion of Pasatiempo Estates Subdivision 2, Tract 8, platted on September 12, 1936. In accordance with Section 106 of the National Historic Preservation Act, Caltrans will be conducting architectural studies on historic-period built-environment resources (in this instance, two pre-1970 residences) within the architectural Area of Potential Effects to determine whether either or both may be eligible for listing in the National Register of Historic Places. If eligible resources are present, we will also evaluate whether the project may have any adverse indirect effects on historical significance (no residences will be directly affected). The historical context we are preparing will address the development of Pasatiempo in general, as well as the specific architectural design and construction history of the individual resources within the South Circle Drive study area. Thank you for your assistance.

Sincerely,

PAULA JUELKE CARR
Associate Environmental Planner (Architectural History)
(805) 542-4659
paula.carr@dot.ca.gov
Enclosure: preliminary project mapping

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3233
TTY 711

<http://www.dot.ca.gov/dist05/>



*Serious drought
Help save water!*

July 21, 2015

File: Pasatiempo Shoulder Widening
05-SCR-17-PM 0.1/0.4
EA: 05-1C670/ ID 0512000194

Annie Murphy, Historic Resources Commission
Santa Cruz County Planning Department
701 Ocean Street
Santa Cruz, CA 95060

Dear Ms. Murphy:

I am writing to seek the Historic Resources Commission's comments on a proposed California Department of Transportation (Caltrans) project along a segment of Highway 17 in the vicinity of Pasatiempo, the residential community and golf course developed in the late 1920s and 1930s by Marion Hollins (1892-1944). The proposed project seeks to construct a soil nail wall and widen shoulders to improve stopping sight distance on Highway 17 between post mile 0.1 and post mile 0.4, just north of Santa Cruz city limits (please see the enclosed map of the project area). Preliminary design suggests that construction activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required for permanent construction easements.

The project area is immediately downslope from several residences on South Circle Drive, a portion of Pasatiempo Estates Subdivision 2, Tract 8, platted on September 12, 1936. In accordance with Section 106 of the National Historic Preservation Act, Caltrans will be conducting architectural studies on historic-period built-environment resources (in this instance, two pre-1970 residences) within the architectural Area of Potential Effects to determine whether either or both may be eligible for listing in the National Register of Historic Places. If eligible resources are present, we will also evaluate whether the project may have any adverse indirect effects on historical significance (no residences will be directly affected). The historical context we are preparing will address the development of Pasatiempo in general, as well as the specific architectural design and construction history of the individual resources within the South Circle Drive study area. Thank you for your assistance.

Sincerely,

PAULA JUELKE CARR
Associate Environmental Planner (Architectural History)
(805) 542-4659
paula.carr@dot.ca.gov
Enclosure: preliminary project mapping

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3233
TTY 711

<http://www.dot.ca.gov/dist05/>



*Serious drought
Help save water!*

July 21, 2015

File: Pasatiempo Shoulder Widening
05-SCR-17-PM 0.1/0.4
EA: 05-1C670/ ID 0512000194

Susan Lehmann
28 Clubhouse Road
Pasatiempo, CA 95060

Dear Ms. Lehmann:

I am writing to seek your comments concerning a proposed California Department of Transportation (Caltrans) project along a segment of Highway 17 in the vicinity of Pasatiempo. The proposed project seeks to construct a soil nail wall and widen shoulders to improve stopping sight distance on Highway 17 between post mile 0.1 and post mile 0.4, just north of Santa Cruz city limits (please see the enclosed map of the project area). Preliminary design suggests that construction activities will include work off the paved roadway; trenching, grading and other ground disturbance, including drainage work or alterations; and the removal of trees and other vegetation. Additional right of way is required for permanent construction easements.

The project area is immediately downslope from several residences on South Circle Drive (Pasatiempo Estates Subdivision 2, Tract 8, platted on September 12, 1936). In accordance with Section 106 of the National Historic Preservation Act, Caltrans will be conducting architectural studies on historic-period built-environment resources (in this instance, on two pre-1970 residences) within the architectural Area of Potential Effects to determine whether either or both may be eligible for listing in the National Register of Historic Places. If eligible resources are present, we will also evaluate whether the project may have any adverse indirect effects on historical significance (no residences will be directly affected). The historical context we are preparing will address the development of Pasatiempo in general, as well as the specific architectural design and construction history of the individual resources within the South Circle Drive study area. Thank you for your assistance.

Sincerely,

PAULA JUELKE CARR
Associate Environmental Planner (Architectural History)
(805) 542-4659
paula.carr@dot.ca.gov
Enclosure: preliminary project mapping

July 21, 2015

Dear Susan,

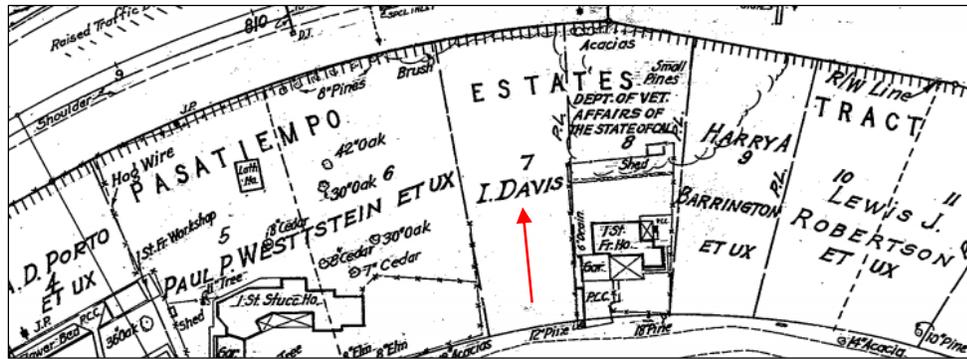
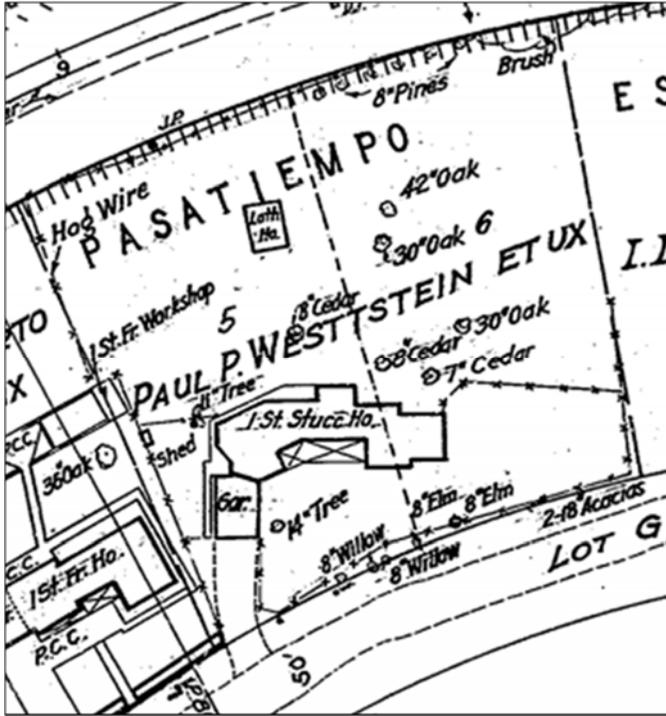
In addition to sending you the formal request for comment, I wanted to thank you again for reassuring me about Wurster and the former Lease-Palma residence. Ironically, in the short time that's elapsed since I talked to you, the project design has reverted to an earlier iteration that puts the proposed minor construction easements farther north, completely avoiding the Lease-Palma parcel.

The two pre-1970 residences I'm looking at (now!) are those at 13 South Circle Drive (the former Paul P. Wittstein residence built by C. M. Doane in 1939) and 15 South Circle Drive (the property was owned by I. Davis in 1958, but it seems to me that the residence was probably built for Haldane Graham that same year).

You may find the enclosed images of interest. The first two are from Division of Highways as-built mapping from 1958. Then there's a 1940 aerial that shows the highway corridor before all of the 1950s-era widening. The 1936 Tract 8 subdivision map and the aerial, compared with the current Assessor map, certainly document the loss of entire South Circle Drive parcels and large parts of others to make way for the off-ramp. I've also found the June 6, 1955, *Santa Cruz Sentinel* notice of the public sale of the "house and garage at 37 South Circle Drive," the former John J. Johnson residence, which were slated to be moved from State right of way by August 1.

Again, thank you for taking the time to talk with me about my "Wurtser" quandary. Wishing you all the best,

Paula Juelke Carr
615 Lawrence Drive
San Luis Obispo, CA 93401
(805) 541-1201
carrehibits@att.net



1958 Division of Highways as-built mapping, 1958.



1940

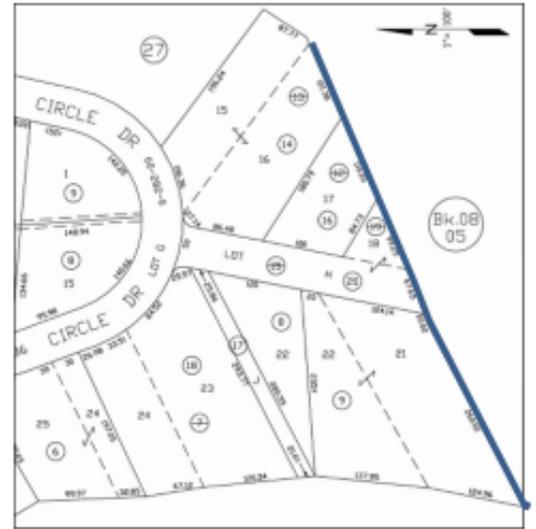
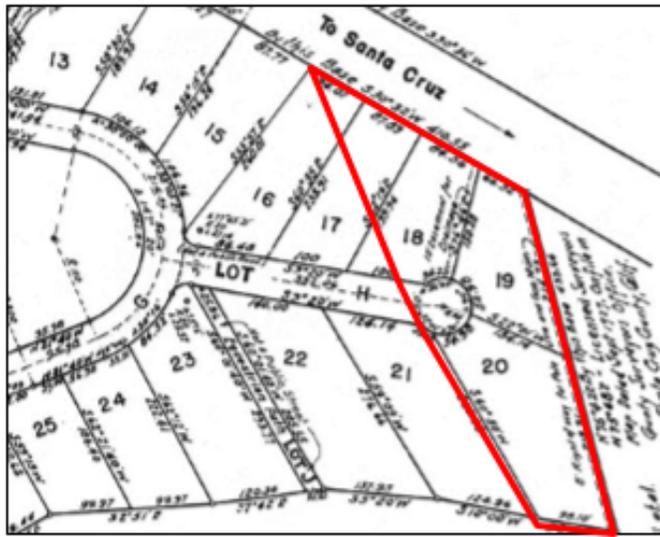


Figure 16 (left). Detail from original 1936 Pasatiempo Estates Subdivision No. 2, Tract 8 map documents that the tract once extended farther to the south. Portions of Lots 16-18 and all of Lots 19-20 of the South Circle Drive neighborhood were lost to make way for highway widening during the 1950s (red polygon). **Figure 17** (right). Detail from current Santa Cruz County Assessor map (Sheet 60-28) shows the remaining parcel configurations (Note: parcels north of Lot 15 are not missing; they are shown on Assessor map Sheet 60-27).

Natural Environment Study

(Minimal Impacts)

State Route 17
Santa Cruz County

05-SCR-17 -PM 0.1/0.4

05-1C670/0512000194

August 2015

STATE OF CALIFORNIA
Department of Transportation

Prepared By: Robb Tibstra Date: 9-2-15

Robb Tibstra
Associate Environmental Planner (Natural Resources)
805-549-3095
Environmental Planning
District 5 – San Luis Obispo

Recommended for Approval By: Paul Andreano Date: 8/27/15

Paul Andreano
Associate Environmental Planner (Natural Resources)
805-542-4688
Environmental Planning
District 5 – San Luis Obispo

Approved By: Larry E. Bonner Date: 9-2-15

Larry Bonner
Senior Environmental Planner
805-549-3337
Environmental Planning
District 5 – San Luis Obispo

1. Summary

California Department of Transportation (Caltrans) is proposing a safety project on State Route (SR) 17 from PM 0.1 to 0.4 in Santa Cruz County. The project proposes to improve sight distance in the southbound lanes by widening the shoulder, which is anticipated to reduce the number of rear-end collisions on SR-17 just before the onramp to southbound SR-1. A soldier pile wall approximately 770 feet in length will be constructed 10 feet from the existing edge of pavement and will run parallel to SR-17. An existing hillslope in the location of the wall will be cut and trees located in the wall's footprint will be removed, as well as trees located upslope of the wall within areas needed for construction access. Native oak woodland habitat will be restored by replacing removed oaks and removing non-native trees.

Studies conducted for this project included a site visit and reviews of aerial photos, Caltrans GIS data, the California Natural Diversity Database (CNDDDB), and the California Native Plant Society (CNPS) inventory. There is limited potential for the project to impact roosting/nesting birds and bats; therefore, avoidance and minimization measures would be implemented. No federal or state-listed species, species of concern, critical habitats, or wetland resources would be impacted by this project as described. The FESA Section 7 determination is that there will be no effect to any of the species on the USFWS species list. A small jurisdictional stream exists at the southern end of the wall and would require 1600, 404, and 401 permits from regulatory agencies; however, impacts would be considered minimal due to the lack of perennial stream flow, small size of the stream, and relatively small area of impact due to project activities.

2. Introduction

This Natural Environment Study (minimal impacts)(NESMI) provides technical information and reviews the project to assess its effects on special status species. This NESMI has been prepared to provide information for the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) environmental review processes, with Caltrans regulation, policy, and guidance.

2.1 Project Location

This project is located in Santa Cruz County on SR-17 from the southbound exit ramp at post mile (PM) 0.1 to SR-1 to the entrance ramp from Pasatiempo Drive (PM 0.4; Figure 1). Work will occur on the west side of SR-17, between the traveled roadway and the residential area along Circle Drive in the Pasatiempo Estates (Figures 1 and 2).



Figure 1. General Project Location.

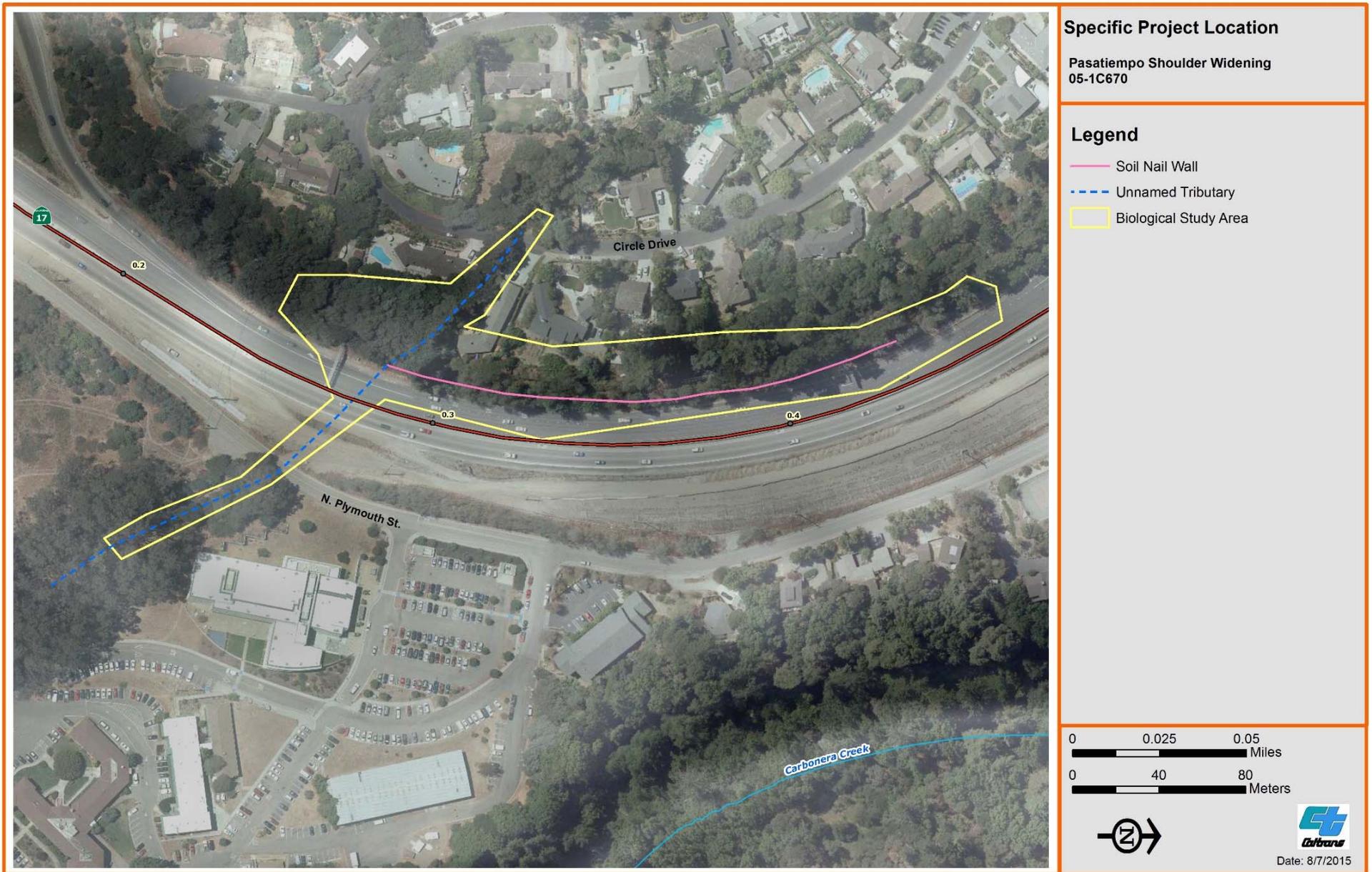


Figure 2. Project Location Detail.

2.2 Project Description

The project proposes to widen the outside shoulder to 10 feet and to construct an approximately 750-foot long soldier pile wall and an approximately 35-foot long retaining wall, both parallel to SR-17. The project will result in improved stopping sight distance at 55 mph on southbound SR-17. Access for construction of the wall will be located from Circle Drive, located above the project area. (Figure 2). The wall is necessary due to the vegetated, steep cut slope that exists near the edge of the traveled way on the inside of the curve that limits sight distance. Portions of the slope will be excavated to allow for the increased width of 10 feet (see typical cross sections and project plans, Appendix A).

The vegetation that exists within the footprint of the wall and directly above it, where construction access will occur, will be removed for construction and project access. The southern end of the wall will begin where a jurisdictional stream enters a 24-inch culvert, and will be constructed as a retaining wall that increases the width of the road just downstream of the inlet of the culvert (see Appendix A). The retaining wall will be located downstream of the culvert and thus will not impede flow to the culvert. The northern end of the retaining wall will transition to the soldier pile wall as the influence of the stream on the local topography wanes and the hillslope intrudes toward the edge of the traveled way. Appendix A shows typical cross sections of the soldier pile wall, and the cross section of the retaining wall.

3. Study Methods

A Biological Scoping Report was produced on April 12, 2013 and provided the initial screening of biological resources for this report. That report included a record search of the California Natural Diversity Database (CNDDDB) on March 6, 2013. An updated desk survey was conducted on June 2, 2015 and July 17, 2015 during which the project area was reviewed using a U.S. Fish and Wildlife Service list of candidate, threatened and endangered species, and ArcMap GIS utilizing various layers, including the CNDDDB. A site visit was conducted June 24, 2015 to document plant species and observe the general habitat. Photographs taken during the site visit are included in Appendix F, and Appendix D includes a list of plant species observed.

4. Environmental Setting

The Project sits at 150 feet (46 meters) in elevation, is located entirely within the northeast quarter of the “Santa Cruz” USGS 7.5 Minute Quadrangle, and is immediately north of the City of Santa Cruz.

The Biological Study Area (BSA) is defined as the area that may be directly, indirectly, temporarily, or permanently impacted by construction and construction-related activities. Appendix B includes a map of the BSA for the project, and depicts the Area of Project Impact (API), which is defined as the area in which project activities will occur and result in direct impacts, including ground disturbance and tree removal. The API is located within the Caltrans right-of-way (ROW) along the inside lane of southbound SR-17. The API extends laterally to the west up the steep cut slope and beyond the ROW to the boundaries of the residential homes that border the project area (Figure 2 and Appendix B). The API is located between a strip of land approximately ¼ mile wide between SR-17 to the east and a housing development to the west. A small, intermittent stream runs along the southern border of the proposed retaining wall (Appendix B).

The BSA has been defined to include the general context of habitat and biological species potentially in the area, and includes areas beyond the limits of the API to account for the potential for annual plant species to appear in different locations year-to-year, and to assess potential impacts to the stream upstream and downstream of the project area. Construction of the project will be implemented by working from the natural ground above the location of the proposed wall to minimize disturbance to traffic in this area.

4.1. Description of the Existing Biological and Physical Conditions

The land within the BSA sits on old coastal terraces composed of soils formed in alluvium and classified as Watsonville loam, thick surface, 15 to 30 percent slope (UC Davis 2015). The first-order stream is located at the southern boundary of the proposed retaining wall and runs southeasterly from the housing development located upstream to an existing, 24 inch reinforced concrete pipe that conveys the stream under SR-17 and outlets on the east side of North Plymouth Street (Figure 2 and Appendix B). The channel and associated riparian vegetation continue a short distance to the southeast, where it disappears and apparently becomes subterranean at the complex of Santa Cruz County government buildings and at some point it apparently outlets and flows into Carbonara Creek to the east. During the June 24, 2015 site visit, the channel was observed where it meets Circle Drive upstream, at the API, and at the outlet downstream of North Plymouth Street. Shortly downstream of the outlet, the channel becomes difficult to discern as it appears to spread out within a *Eucalyptus* grove that is populated with homeless encampments and does not show signs of recent streamflow. The watershed above the culvert is approximately 5 acres in size and occupies a relatively small portion of the 4,532-acre Carbonara Creek watershed near its downstream confluence with the Branciforte Creek watershed. It likely only flows during significant rain events and is considered “flashy”, and much of this sub-watershed area drains urbanized landscapes.

The vegetation within the BSA is composed of primarily non-native, ruderal species. The habitat within the BSA is considered “Developed, Low Intensity” (GAP 2011). Within 0.25 miles of the BSA, there are patches of “California Coastal Redwood Forest” interspersed with “California Coastal Live Oak Woodland and Savannah” and “Southern California Coastal Scrub” (GAP 2011). Historically, the natural landscape within the BSA likely supported these plant communities. Several coast live oaks (*Quercus agrifolia*) occur within the BSA, but the area is dominated by non-native species, including the most abundant tree species in the BSA, the invasive silver wattle (*Acacia dealbata*; Appendix D). Many species of non-native, ornamental plants occur in the area due to the project site’s proximity to an urban neighborhood. In addition to the nearby housing development, the BSA is adjacent to a very busy section of SR-17 that results in relatively high ambient noise and potential disturbance from humans, decreasing the potential for the presence of those special status animal species that require larger patches of suitable habitat or are more sensitive to disturbance.

4.2. Regional Species and Habitats of Concern

“Regional species” and “habitats of concern,” as used within this NESMI, are terms synonymous with “special-status” or “sensitive” species and habitats. Special-status species include taxa that are 1) federally or state listed as endangered, threatened, or rare; 2) candidates for federal or state listing as endangered, threatened or rare; 3) proposed for federal or state listing as endangered, threatened, or rare; or, 4) considered special concern species by the federal government (i.e., former U.S. Fish and Wildlife Service Federal Species of Concern) and the California Department of Fish and Wildlife (CDFW; i.e., Species of Special Concern) (Caltrans 2000), or those that appear on the CNDDDB Special Animals List (CDFW 2015). Sensitive species also include taxa afforded protection or considered sensitive under various laws (e.g., NEPA, CEQA, Migratory Bird Treaty Act) or under sections of the California Fish and Game Code (e.g., nesting birds), and those taxa recognized as locally important or sensitive by the CNPS (Tibor 2001, CNPS 2015) or the scientific community. Sensitive natural communities/habitats include those that are regulated or considered sensitive by federal, state, and/or local agencies or NEPA/CEQA. The known occurrences of sensitive species have been inventoried and mapped, to varying degrees of accuracy, by the CNDDDB (2015).

For this project, a query of the CNDDDB was performed for a 3-mile radius around the project location, covering portions of the following USGS 7.5 Minute Quadrangles: Santa Cruz, Felton, Soquel, and Laurel (Appendix C).

4.3 Regional Plant Species of Concern

Appendix E includes the CNDDDB and USFWS species lists of protected plants documented within a 3-mile radius of the project location. Table 1 documents the names and legal status of each of these special-status plant taxa, as well as a general description of the habitat requirements for each, and whether suitable habitat is present (P) or absent (A) in the project limits. The rationale section summarizes the potential for each to occur within the project limits or be affected by the project.

There are no CNDDDB records of rare plants within the BSA. The June 24, 2015 site visit documented the ruderal and highly disturbed nature of the site, and the plant species that did occur on site were dominated by non-native, invasive taxa (Appendix D). Those native species that occurred on site (six out of thirty-three taxa) were sparsely distributed within the BSA and are not considered rare throughout their range. No rare plant species were documented on-site and are not expected to occur. With the removal of the non-native species within the API that dominate the landscape, the area is expected to provide improved habitat for native species, provided native species are planted as replacement for the removed non-natives, and that they are established before non-natives re-colonize.

Table 1. Potential Special-Status Plant Species Within the BSA.

Common Name	Scientific Name	Status Federal / State / CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale ¹
Plants					
bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	-- / -- / 1B.2	Annual herb; occurs in coastal bluff scrub, cismontane woodland, valley and foothill grassland; Flowers March-June at 30-680 m	A	No suitable habitat in the BSA; not observed during floristic survey.
Anderson's manzanita	<i>Arctostaphylos andersonii</i>	-- / -- / 1B.2	Perennial evergreen shrub; occurs in broadleaf upland forest, chaparral, scrub, North Coast coniferous forest/openings, edges. Flowers November-May at 60-760 meters.	A	No <i>Arctostaphylos</i> species detected within the BSA during surveys. Project sits below the known elevational limits of the species.
Schreiber's manzanita	<i>Arctostaphylos glutinosa</i>	-- / -- / 1B.2	Perennial evergreen shrub, occurs in chaparral and closed-cone pine forest; Flowers March – April at 210-770 meters	A	No <i>Arctostaphylos</i> species detected within the BSA during surveys. Project sits below the known elevational limits of the species.
Bonny Doon manzanita	<i>Arctostaphylos silvicola</i>	-- / -- / 1B.2	Perennial evergreen shrub; occurs on inland marine sands in closed-cone coniferous forest, chaparral, and lower montane coniferous forest. Flowers February-March at 120-600 meters	A	No <i>Arctostaphylos</i> species detected within the BSA during surveys. Project sits below the known elevational limits of the species.
marsh sandwort	<i>Arenaria paludicola</i>	FE / SE / 1B.1	Perennial stoloniferous herb; occurs in freshwater or brackish marshes and swamps/sandy areas and openings. Flowers May-August at 3-170 meters	A	No wetland habitat exists in the BSA; not observed during appropriately timed floristic survey. Effects determination is the project will have no effect to marsh sandwort.
Scotts Valley spineflower	<i>Chorizanthe robusta</i> var. <i>hartwegii</i>	FE, CH / -- / 1B.1	Annual herb; occurs in meadows and seeps on sandy soils, and valley and foothill grassland on mudstone and Purisima outcrops. Flowers April to July at 230-245 meters.	A	No suitable habitat in the BSA, not observed during appropriately timed floristic surveys. The BSA sits below the known elevational limits of the species. Effects determination is the project will have no effect on Scotts Valley spineflower.
robust spineflower	<i>Chorizanthe robusta</i> var. <i>robusta</i>	FE, CH / -- / 1B.1	Annual herb; occurs in maritime chaparral, cismontane woodland (openings), coastal dunes, coastal scrub/sandy or gravelly areas. Flowers April-September at 3-300 meters.	A	No suitable woodland openings occur in the BSA, not observed during appropriately timed floristic survey. Effects determination is the project will have no effect to robust spineflower.

Common Name	Scientific Name	Status Federal / State / CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale ¹
San Francisco collinsia	<i>Collinsia multicolor</i>	-- / -- / 1B.2	Annual herb; occurs in closed-cone coniferous forest, and coastal scrub; sometimes on serpentinite soils; Flowers March to May at 30-250 meters	A	No suitable habitat occurs in the BSA.
Santa Cruz tarplant	<i>Holocarpha macradenia</i>	FT, CH / SE / 1B.1	Annual herb; occurs in coastal prairie, coastal scrub, valley and foothill grassland, often on clay or sandy areas. Flowers June to October at 10-220 meters.	A	No suitable habitat in BSA. Densely wooded area not likely to support species. Not observed during floristic survey. Effects determination is the project will have no effect to Santa Cruz tarplant.
arcuate bush mallow	<i>Malacothamnus arcuatus</i>	-- / -- / 1B.2	Perennial evergreen shrub; occurs in chaparral and cismontane woodland Flowers April-September at 15-355 meters	P	Shrub not observed in BSA during appropriately timed floristic survey.
marsh microseris	<i>Microseris paludosa</i>	-- / -- / 1B.2	Perennial herb; occurs in closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and moist grassland. Flowers April to July at 5-300 meters.	P	Species not observed in BSA during appropriately timed floristic survey.
woodland woolly threads	<i>Monolopia gracilens</i>	-- / -- / 1B.2	Annual herb; occurs in broadleaf upland forest (openings), chaparral (openings), cismontane woodland, North Coast coniferous forest (openings), and valley and foothill grassland/serpentinite. Flowers February-July at 100-1,200 meters.	A	Densely wooded area not likely to support species, not observed during appropriately timed floristic surveys. The Project sits below the known elevational limits of the species.
white-rayed pentachaeta	<i>Pentachaeta bellidiflora</i>	FE / SE / 1B.1	Annual herb; occurs in cismontane woodland and valley and foothill grassland, often on serpentinite soils. Flowers March to May at 35-620 meters.	A	Serpentine soils do not exist in BSA; not observed during floristic survey. Effects determination is the project will have no effect to white-rayed pentachaeta.
white-flowered rein orchid	<i>Piperia candida</i>	-- / -- / 1B.2	Perennial herb; occurs in broadleaf upland forest, lower montane coniferous forest, and North Coast coniferous forest Flowers May-September at 30-1,310 meters	A	No suitable habitat in the BSA, not observed during appropriately timed floristic survey.
San Francisco popcorn-flower	<i>Plagiobothrys diffusus</i>	-- / SE / 1B.1	Annual herb; occurs in coastal prairie and valley and foothill grassland. Flowers March to June at 60-360 meters.	A	No coastal prairie or grassland habitat exists in the BSA, not observed during appropriately timed floristic survey.

Common Name	Scientific Name	Status Federal / State / CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale ¹
Scotts Valley polygonum	<i>Polygonum hickmanii</i>	FE / SC / 1B.1	Annual herb; occurs in valley and foothill grassland (mudstone and sandstone) with a thin soil layer; vernal moist due to runoff. Flowers May to August at 210-250 meters.	A	No suitable habitat in the BSA, not observed during appropriately timed floristic survey. The Project sits below the known elevational limits of the species. Effects determination is the project will have no effect to Scotts Valley polygonum.
pine rose	<i>Rosa pinetorum</i>	-- / -- / 1B.2	Perennial shrub; occurs in closed-cone coniferous forest Flowers May-July at 2-300 meters	A	No suitable habitat in the BSA, not observed during appropriately timed floristic survey.
maple-leaved checkerbloom	<i>Sidalcea malachroides</i>	-- / -- / 4.2	Perennial herb; occurs in broadleaf upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, and riparian woodland, often in disturbed areas Flowers March-August at 2-730 meters	P	Not observed during appropriately timed floristic survey.
Santa Cruz clover	<i>Trifolium buckwestiorum</i>	-- / -- / 1B.1	Annual herb; occurs in broadleaf upland forests, cismontane woodland, coastal prairie/gravelly areas and margins Flowers April to October at 105-610 meters.	A	No suitable habitat in the BSA, not observed during appropriately timed floristic survey. The Project sits below the known elevational limits of the species.

Common Name	Scientific Name	<u>Status</u> Federal / State / CNPS Status	General Habitat Description	Habitat Present/ Absent	Rationale ¹
<p>¹ No further studies unless recommended.</p> <p>Status Codes:</p> <p><i>Federal</i> FE = Federal Endangered, FT = Federal Threatened, CH = Critical Habitat designated</p> <p><i>State</i> SE = State Endangered, ST = State Threatened, SR = State Rare</p> <p><i>California Native Plant Society (CNPS)</i> List 1A = Presumed extinct in California, List 1B = rare, threatened, or endangered in California and elsewhere, List 2 = rare, threatened, or endangered in California, but more common elsewhere, List 4 = limited distribution (Watch List)</p> <p><i>Threat Code</i> .1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat), .2 = Fairly endangered in California (20-80% occurrences threatened), .3 = Not very endangered in California (<20% of occurrences threatened or no current threats known)</p> <p><i>Habitat: Present/Absent</i> Absent [A] means no suitable habitat is present. Present [P] means suitable habitat is present.</p>					

4.4 Regional Animal Species of Concern

Appendix E lists the CNDDDB and USFWS species lists of protected animal species documented within a 3-mile radius of the project location or with potential to occur. The names and legal status of each of the special-status animal taxa most likely to occur are included in Table 2, along with a general description of the habitat requirements for each, and whether suitable habitat is present (P) or absent (A) in the project limits.

There are no CNDDDB records of sensitive animal species within the BSA. Due to the relatively small API being located between a housing development and a busy highway, any species utilizing the area would necessarily be well-accustomed to relatively high levels of human disturbance and ambient noise. The trees in the BSA were mostly non-native, younger, and smaller live trees with fewer cavities than would exist in older stands. No nesting birds were documented during the June 24, 2015 site visit, although surveys were difficult due to the high traffic and ambient noise and private property limiting access to the highway side of the API. It is possible that birds or bats could utilize the trees in the API for nesting or roosting, even though there exists higher quality habitat nearby and outside of the BSA.

Table 2. Potential Special-Status Animal Species in the BSA.

Common Name	Scientific Name	Status Federal / State / CDFG	General Habitat Description	Habitat Present/ Absent	Rationale ¹
Invertebrates					
Ohlone tiger beetle	<i>Cicindela ohlone</i>	FE / -- / --	Remnant native grasslands with California oatgrass and purple needlegrass in Santa Cruz County. Substrate is poorly-drained clay or sandy clay soil over bedrock of Santa Cruz mudstone.	A	No native grassland habitat exists in the BSA. California oatgrass and purple needlegrass not observed in BSA during floristic survey. Effects determination is the project will have no effect on the Ohlone tiger beetle.
monarch butterfly	<i>Danaus plexippus</i>	-- / -- / SA	Coastal eucalyptus and Monterey cypress stands.	A	No <i>Eucalyptus</i> or <i>Hesperocyparis</i> trees observed within the BSA; no mature stands or known wintering sites occur in the BSA.
Mount Hermon (=barbate) June beetle	<i>Polyphylla barbata</i>	-- / -- / SA	Known only from sand hills in vicinity of Mt. Hermon, Santa Cruz County.	A	Project is not located within the known locations for this species.
Zayante band-winged grasshopper	<i>Trimerotropis infantilis</i>	FE / -- / --	Isolated sandstone deposits in the Santa Cruz Mountains (the Zayante Sand Hills ecosystem) mostly on sand parkland habitat but also in areas with well-developed ground cover and in sparse chaparral with grass.	A	No sandstone formations within the BSA; no suitable habitat present for the species. Effects determination is the project will have no effect on the Zayante band-winged grasshopper.
Fish					
tidewater goby	<i>Eucyclogobius newberryi</i>	FE, CH / -- / SSC	Brackish shallow lagoons and lower stream reaches where water is fairly still, but not stagnant.	A	No suitable aquatic habitat in the BSA. The project will have no effect on the tidewater goby.
coho salmon – central California coast ESU	<i>Oncorhynchus kisutch</i>	FE, CH / SE / SSC	Federal listing refers to populations between Punta Gorda and San Lorenzo River. State listing refers to populations south of Punta Gorda. Requires beds of loose, silt-free, coarse gravel for spawning. cover, cool water, and sufficient dissolved oxygen.	A	No suitable aquatic habitat in the BSA. Effects determination is the project will have no effect on the coho salmon – central California coast ESU.
steelhead - central California coast DPS	<i>Oncorhynchus mykiss</i>	FT, CH / -- / SSC	Distinct population segment (DPS) occurs from Russian River, South to Soquel Creek and to, but not including, the Pajaro River. Also occurs in San Francisco and San Pablo Bay basins.	A	No suitable aquatic habitat in the BSA. Effects determination is the project will have no effect on steelhead – central California coast DPS.

Common Name	Scientific Name	Status Federal / State / CDFG	General Habitat Description	Habitat Present/ Absent	Rationale ¹
Amphibians					
California red-legged frog	<i>Rana draytonii</i>	FT, CH / -- / SSC	Aquatic habitats with little or no flow, presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails.	A	No suitable aquatic habitat in the BSA. Surface water not present during surveys, and channel of unnamed tributary lacks potential pool habitat within the BSA. Marginal upland habitat present but presence unlikely due to dispersal distance and barriers from nearby aquatic sites. Effects determination is the project will have no effect on the CRLF.
Reptiles					
San Francisco garter snake	<i>Thamnophis sirtalis tetrataenia</i>	FE / SE / FP	Utilizes a wide variety of habitats, preferring grasslands or wetlands near ponds, marshes and sloughs. May overwinter in upland areas away from water.	A	Project outside of known range; No suitable habitat in the BSA. Effects determination is the project will have no effect on the San Francisco garter snake.
western pond turtle	<i>Emys marmorata</i>	-- / -- / SSC	Quiet waters of ponds, lakes, streams, and marshes. Typically in the deepest parts with an abundance of basking sites.	A	No suitable aquatic habitat in the BSA. Marginal upland habitat present but presence unlikely due to dispersal distance and barriers from nearby aquatic sites.
Birds					
tricolored blackbird	<i>Agelaius tricolor</i>	-- / SE / SSC	Open water, tall and dense cattails or tules. Large nesting colonies near cropland and insect base.	A	No suitable aquatic or wetland habitat in the BSA.
great blue heron	<i>Ardea herodias</i>	-- / -- / SA	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, and wet meadows.	A	No suitable aquatic, wetland, or likely roosting habitat in the BSA, not observed during site survey.
burrowing owl	<i>Athene cucularia</i>	-- / -- / SSC	Burrows in open dry grassland, agricultural and rangelands, and desert habitats; often associated with ground burrowing rodents.	A	No suitable grasslands or burrows in the BSA.
marbled murrelet	<i>Brachyramphus marmoratus</i>	FT / SE / --	Feeds near-shore; nests along coast from Half Moon Bay to Santa Cruz in old growth redwood forests, up to 6 miles inland, often in Douglas-fir.	A	No old growth stands of redwoods or Douglas-fir in the BSA. Effects determination is the project will have no effect on marbled murrelet.

Common Name	Scientific Name	<u>Status</u> Federal / State / CDFG	General Habitat Description	Habitat Present/ Absent	Rationale ¹
western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT, CH / -- / SSC	Sandy marine and estuarine shores.	A	BSA not near sand marine or estuarine shores. Effects determination is the project will have no effect on western snowy plover.
least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, CH / SE /-	Summer resident of southern California in low riparian habitats near water or in dry river bottoms, below 2,000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willows, coyote brush, or mesquite.	A	No suitable riparian habitat within the BSA. Effects determination is the project will have no effect on least Bell's vireo.
Mammals					
hoary bat	<i>Lasiurus cinereus</i>	-- / -- / SA	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees.	P	Potential for roosts in trees in BSA present but habitat is marginal due to proximity to human disturbance and lack of adequate forest openings and riparian habitat for foraging. Recommend pre-construction surveys to determine presence and whether or not buffers or timing restrictions are necessary.
American badger	<i>Taxidea taxus</i>	-- / -- / SSC	Drier open stages of shrub, forest, and herbaceous habitats, with friable soils; needs sufficient food and open, uncultivated ground; digs burrows.	A	No suitable habitat in BSA, which consists of densely wooded area.

Common Name	Scientific Name	<u>Status</u> Federal / State / CDFG	General Habitat Description	Habitat Present/ Absent	Rationale ¹
<p>¹ No further studies unless recommended.</p> <p>Status Codes:</p> <p><i>Federal</i> FE = Federal Endangered, FT = Federal Threatened, FC = Federal Candidate, FD = Federal Delisted, CH = Critical Habitat designated, BGEPA = Protected by Federal Bald and Golden Eagle Protection Act, MBTA = Protected by Federal Migratory Bird Treaty Act</p> <p><i>State</i> SE = State Endangered, ST = State Threatened, SD = State Delisted, FP = Fully Protected</p> <p><i>California Department of Fish and Game</i> SSC = California Species of Special Concern, WL = DFG Watch List species, SA = Included on CNDDDB Special Animals List, CDFG Section 3503 = Protected by CDFG Code Section 3503</p> <p><i>Habitat: Presence/Absence</i> Absent [A] means no suitable habitat is present. Present [P] means suitable habitat is present.</p>					

5. Project Impacts

The primary biological concern for this project is the removal of the 49 native coast live oaks (*Quercus agrifolia*), although 40 of these are less than twelve inches DBH (Table 3). Because the oaks in this API are small and crowded with non-native species, the relative impact to various species associated with coast live oaks is considered minimal, provided they are replaced by replanting in the BSA or immediate vicinity. The project will incur a temporary loss of existing oak habitat during removal and subsequent establishment of replacement plantings, but if maintained properly the API has the potential to be restored to a condition of higher habitat quality than before the project, since non-native *Acacia* will be removed as part of the project.

Table 3. Species and number of trees by size class to be removed within the API.

Species	Diameter at Breast Height (DBH)					Total
	4-6"	7-12"	13-18"	19-24"	>24"	
<i>Acacia dealbata</i>	4	27	6	13	4	54
<i>Quercus agrifolia</i>	9	31	2	3	4	49
<i>Pinus radiata</i>				1	2	3
"Other"			2			2
Total	13	58	10	17	10	108

The removal of any vegetation, including non-native species, could directly impact active bird nests, eggs, or young residing in nests, and/or roosting bats and thus, avoidance and minimization measures are included for these species. Indirect impacts, such as noise and disturbance associated with construction, could also occur when working adjacent to active nests or roosting bats, although any species utilizing this area are necessarily more accustomed to noise disturbance due to the location within a highly disturbed setting and an extremely busy section of highway.

Pre-construction surveys for bats and nesting birds will be required within the project API. If pre-construction surveys locate nesting birds or roosting bats, it will be necessary to establish buffers and protection via establishment of Environmentally Sensitive Areas (ESAs) until the

species are determined to move from the area. Because the habitat within the BSA is dominated by younger-aged trees, those species of bats that utilize crevices or cavities for roosting are considered unlikely to occur. The hoary bat (*Lasiurus cinereus*) is a species that utilizes tree foliage in its roosts, and typically occurs in solitary rather than communal roosts. They are more likely to be found in maternal roosts further inland, and in winter roosts near the coast from October through February. Avoidance and minimization measures will include surveying for birds and bats in the API prior to construction, specifically in the trees to be removed, to ensure such species are not directly impacted. If they are located, it may be necessary to delay or modify activities until the species vacates the area.

The jurisdictional stream is ephemeral, highly impacted by human disturbance both upstream and downstream of the API, and does not appear to support any sensitive species. Provided standard best management practices are employed to minimize erosion and sedimentation, no impacts to the stream are anticipated downstream of the API. The area where the wall will impact the stream is adjacent to the culvert inlet, which is situated at the bottom of the highway fill slope as it intersects the channel (Appendix A). Permanent impacts to jurisdictional areas are estimated to be a maximum of 0.01 acres, and temporary impacts to jurisdictional areas are estimated to be 0.03 acres.

Because of a lack of suitable habitat and/or no observations during appropriately-timed floristic survey, the FESA Section 7 effects determination is that the proposed project will have no effect on the following federally listed plant taxa included in Table 1: marsh sandwort (*Arenaria paludicola*), Scott's Valley spineflower (*Chorizanthe robusta* var. *hartwegii*), robust spineflower (*C. r.* var. *robusta*), Santa Cruz tarplant (*Holocarpha macradenia*), white-rayed pentachaeta (*Pentachaeta bellidiflora*), and Scott's Valley polygonum (*Polygonum hickmanii*). There will be no impacts to federally designated critical habitat for any of these federally listed plant taxa.

Because of a lack of suitable habitat, the FESA Section 7 effects determination is that the proposed project will have no effect on the following federally listed animal taxa included in Table 2: Ohlone tiger beetle (*Cicindela ohlone*), Zayante band-winged grasshopper (*Trimerotropis infantilis*), tidewater goby (*Eucyclogobius newberryi*), coho salmon—central California coast ESU (*Oncorhynchus kisutch*), steelhead—central California coast DPS (*O. mykiss*), California red-legged frog (*Rana draytonii*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), tricolored blackbird (*Agelaius tricolor*), and marbled murrelet (*Brachyramphus marmoratus*). There will be no impacts to federally designated critical habitat for any of these federally listed animal taxa.

6. Avoidance and Minimization Measures

The following avoidance and minimization measures are proposed to ensure that biological resources are not impacted:

1. In order to avoid impacts to nesting birds, a pre-activity survey shall be conducted by a Caltrans biologist, no more than two weeks prior to vegetation disturbance if vegetation disturbance is scheduled to occur between February 15 and September 1. Please contact District 5 Biologist, Robb Tibstra (805-549-3095) to schedule any necessary nesting bird surveys.
2. Active bird nests shall not be disturbed, and eggs or young birds covered by the MBTA and California Fish and Game Code shall not be killed, destroyed, injured, or harassed at any time. If active bird nests are found during required pre-construction surveys, readily visible exclusion zones where construction activity must be avoided shall be established by the District Biologist (e.g., using ESA fencing, stakes and flagging, etc.) until it is determined that young birds have fledged (i.e., left the nest site and no longer reliant on parental care).
3. To avoid impacts to roosting bats, a pre-construction survey shall be conducted by a Caltrans biologist, no more than two weeks prior to vegetation disturbance. If bats are found roosting during required preconstruction surveys, readily visible exclusion zones where construction activity must be avoided shall be established by the District Biologist (e.g., using ESA fencing, stakes and flagging, etc.) until either 1) it is determined that the bats have left the area, or 2) a bat exclusion plan is implemented.
4. Any restoration and revegetation work associated with temporary impacts should be done using California endemic plants appropriate for the location.
5. Effects to downstream habitat shall be avoided with the use of erosion and sedimentation Best Management Practices (BMPs) following Caltrans' standards and guidance (Caltrans 2003).
6. To minimize the loss of and replace the trees removed, Coast live oaks (*Quercus agrifolia*) should be replanted within the BSA at a minimum ratio of 2:1 (replaced:lost) and at a density suitable for the species.

7. Permits Required

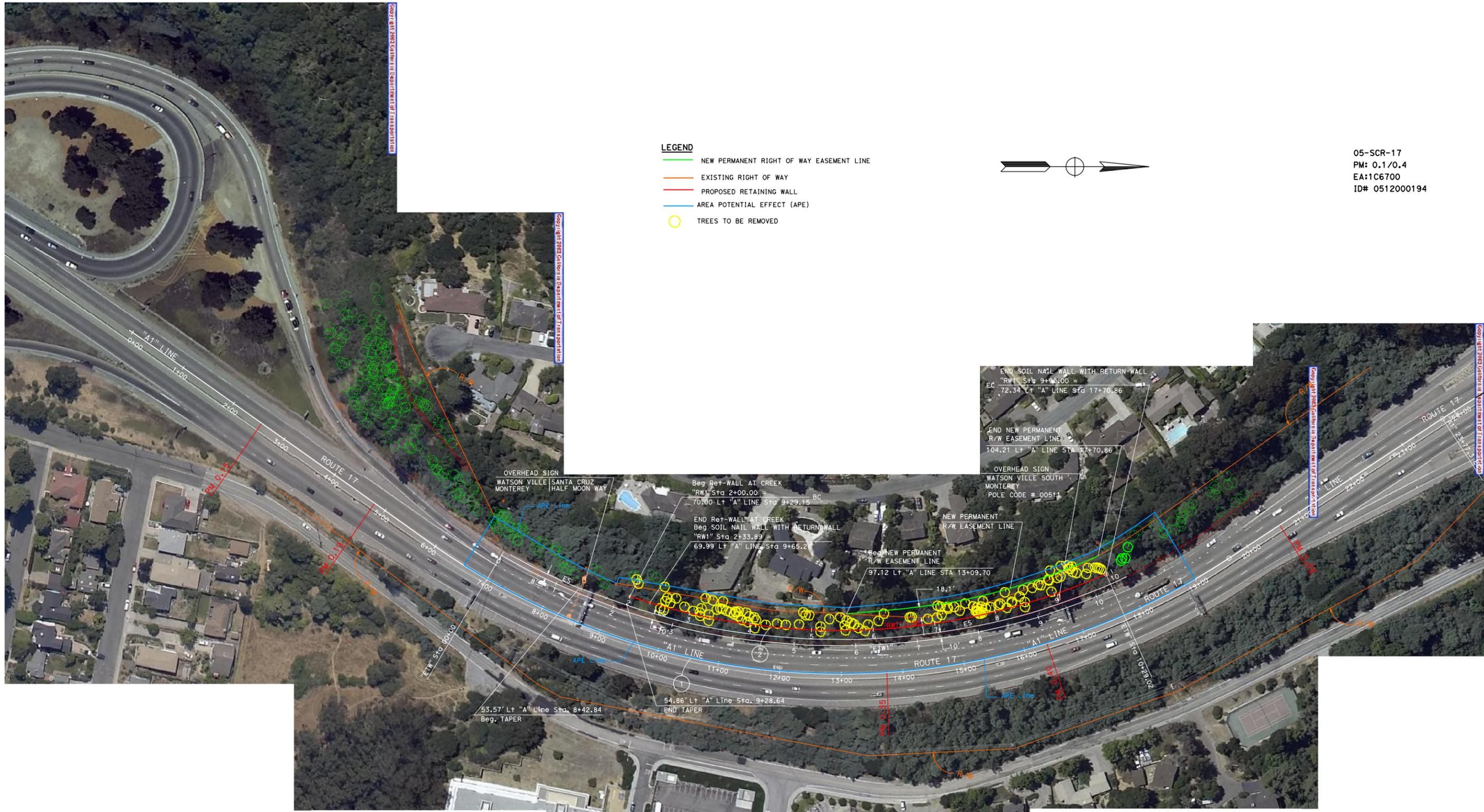
The project will include elements that will require alteration within the bed, bank, or channel of the unnamed tributary located at the southern end of the retaining wall (Appendix B). Therefore, it will be necessary to obtain a 1602 Streambed Alteration Agreement from the CDFW. The work will also require obtaining coverage from a Nationwide permit for compliance with Section 404 of the Clean Water Act from the US Army Corps of Engineers, and a related Section 401 Water Quality Certification from the Regional Water Quality Control Board. No other permits or regulatory approvals are anticipated to be necessary.

8. References

- California Department of Fish and Wildlife (CDFW). Natural Diversity Database. July 2015. Special Animals List. Periodic Publication. 51 pp.
- California Natural Diversity Data Base (CNDDB). 2015. Rarefind data output for portions of the Santa Cruz, Felton, Soquel, and Laurel, California USGS 7.5-minute quadrangles. California Department of Fish and Wildlife. Sacramento, California.
- California Department of Transportation (Caltrans). 2000. Environmental Handbook Volume 3. Biological Resources. Environmental Program, Biological Studies Branch.
- California Department of Transportation (Caltrans). 2003. Guidance for temporary soil stabilization. Online:
www.dot.ca.gov/hq/construc/stormwater/tempsoilstabilizationguide.pdf
- California Native Plant Society (CNPS). 2015. California Native Plant Society online inventory of rare and endangered plants. Online: <http://www.rareplants.cnps.org/>. Site visited June 2015.
- Tibor, D.P. 2001. California Native Plant Society's Inventory of rare and endangered plants of California. August 2001 / Sixth edition. 387 pp.
- UC Davis, 2015. California Soil Resource Lab. Online soil survey access to USDA-NCSS detailed soil survey data (SSURGO). Online:
http://casoilresource.lawr.ucdavis.edu/soil_web/ssurgo.php

APPENDIX A

Project Plans and Typical Cross Sections



- LEGEND**
- NEW PERMANENT RIGHT OF WAY EASEMENT LINE
 - EXISTING RIGHT OF WAY
 - PROPOSED RETAINING WALL
 - AREA POTENTIAL EFFECT (APE)
 - TREES TO BE REMOVED



05-SCR-17
 PM: 0.1/0.4
 EA:1C6700
 ID# 0512000194

CURVE DATA

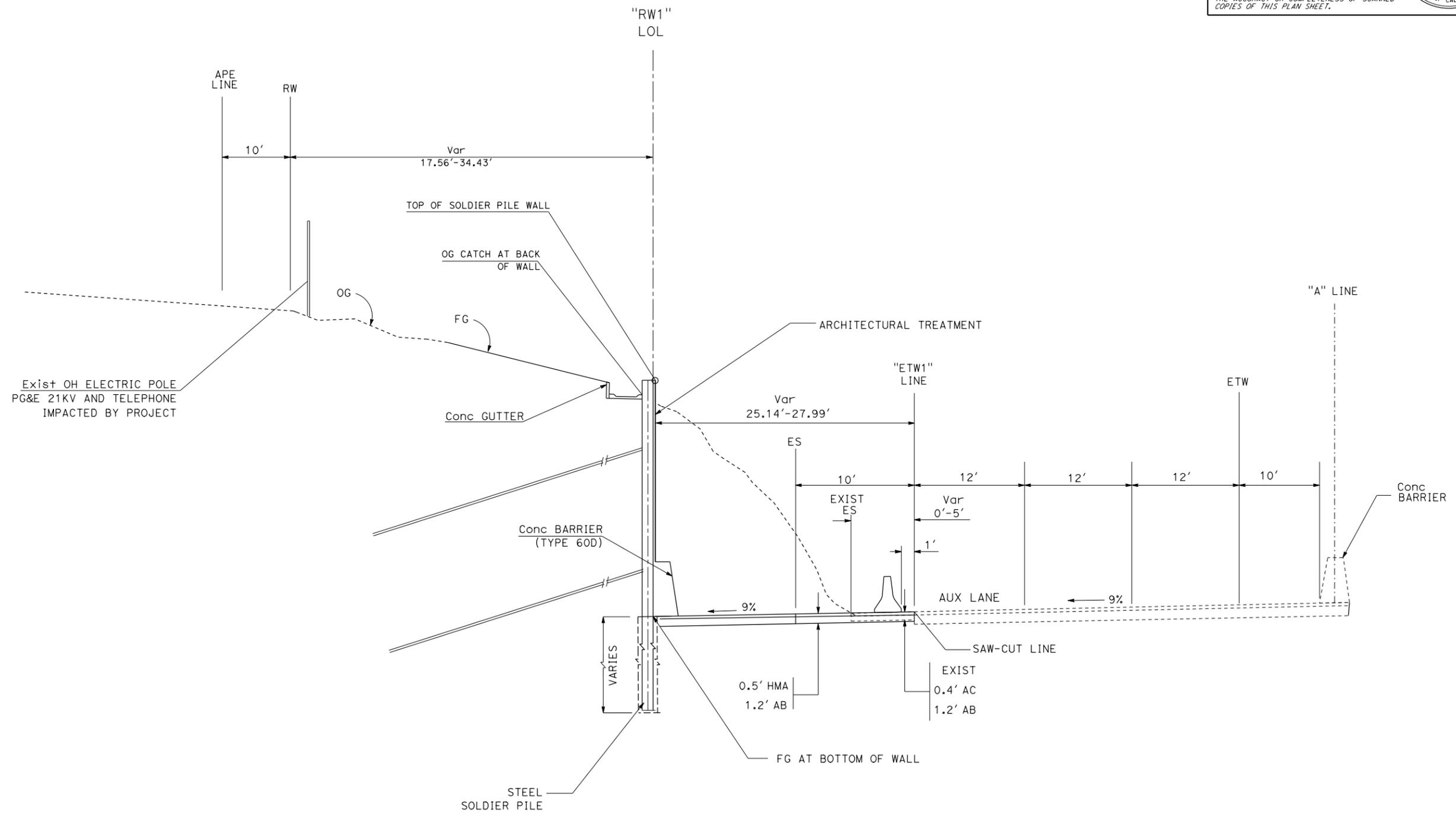
No.	@	R	Δ	T	L
1		1150'	67°59'09"	775.48'	1364.57'
2		1070'	43°45'39"	429.71'	817.23'

ENVIRONMENTAL PLAN
 SCALE 1"=50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	0.1/0.4		
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE					
					
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					

NOTES:

1. DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.



ROUTE 17
SOUTHBOUND
"RW1" STA 2+33.89 TO STA 9+90.00

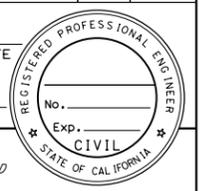
TYPICAL CROSS SECTIONS
NO SCALE
X-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 06 - DESIGN
 FUNCTIONAL SUPERVISOR: STEVE J McDONALD
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 AZIZ SABERI
 PETROS DEMOZ
 REVISED BY: [blank]
 DATE REVISED: [blank]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SCR	17	0.1/0.4		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

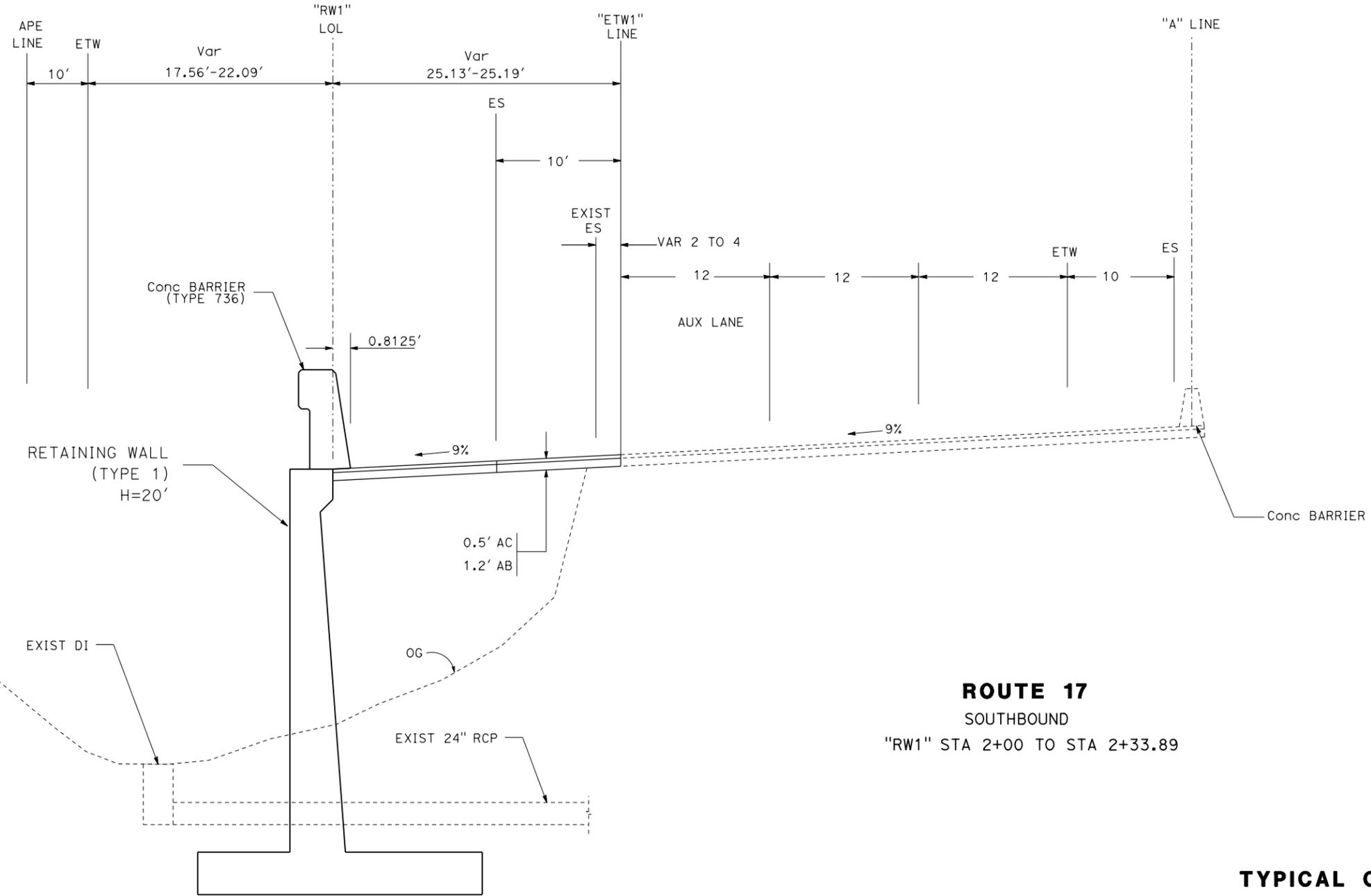


THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

- DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 06 - DESIGN
 FUNCTIONAL SUPERVISOR STEVE McDONALD
 CALCULATED/DESIGNED BY CHECKED BY
 AZIZ SABERI
 REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.



ROUTE 17
 SOUTHBOUND
 "RW1" STA 2+00 TO STA 2+33.89

TYPICAL CROSS SECTIONS
 NO SCALE
X-1

LAST REVISION: 06-29-15 DATE PLOTTED => 06-JUL-2015 TIME PLOTTED => 10:03

APPENDIX B

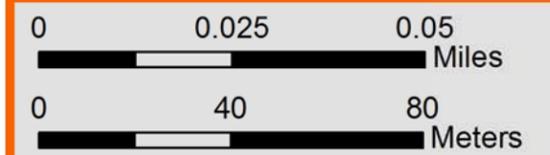
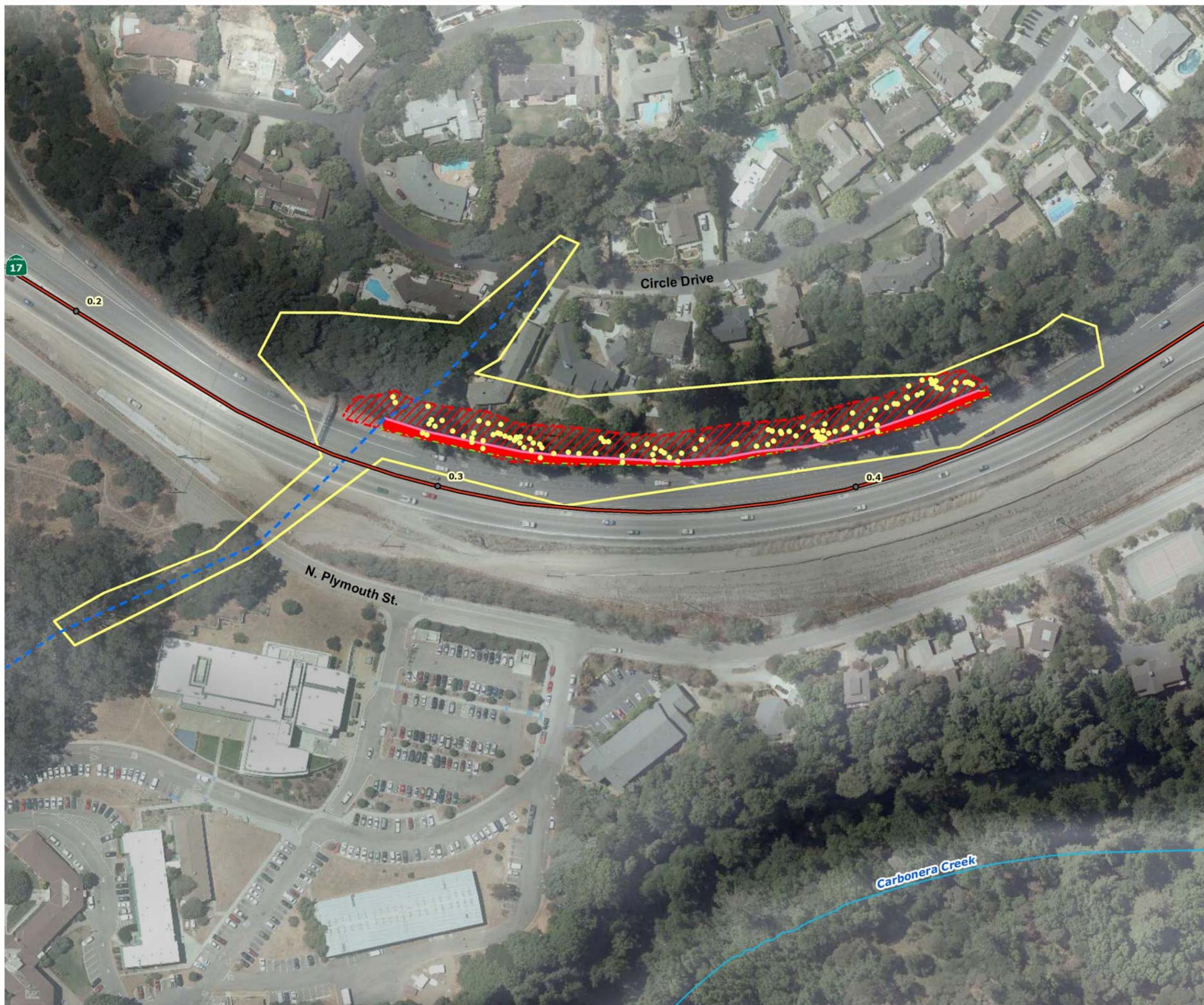
Biological Study Area (BSA)

Biological Study Area

Pasatiempo Shoulder Widening
05-1C670

Legend

- Soil Nail Wall
- Unnamed Tributary
- Biological Study Area
- Area of Potential Impact (0.859 acres)
- Permanent Impact Area (0.158 acres)
- Trees to be Removed



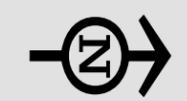
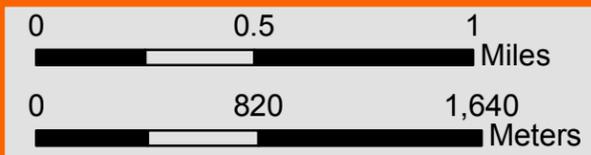
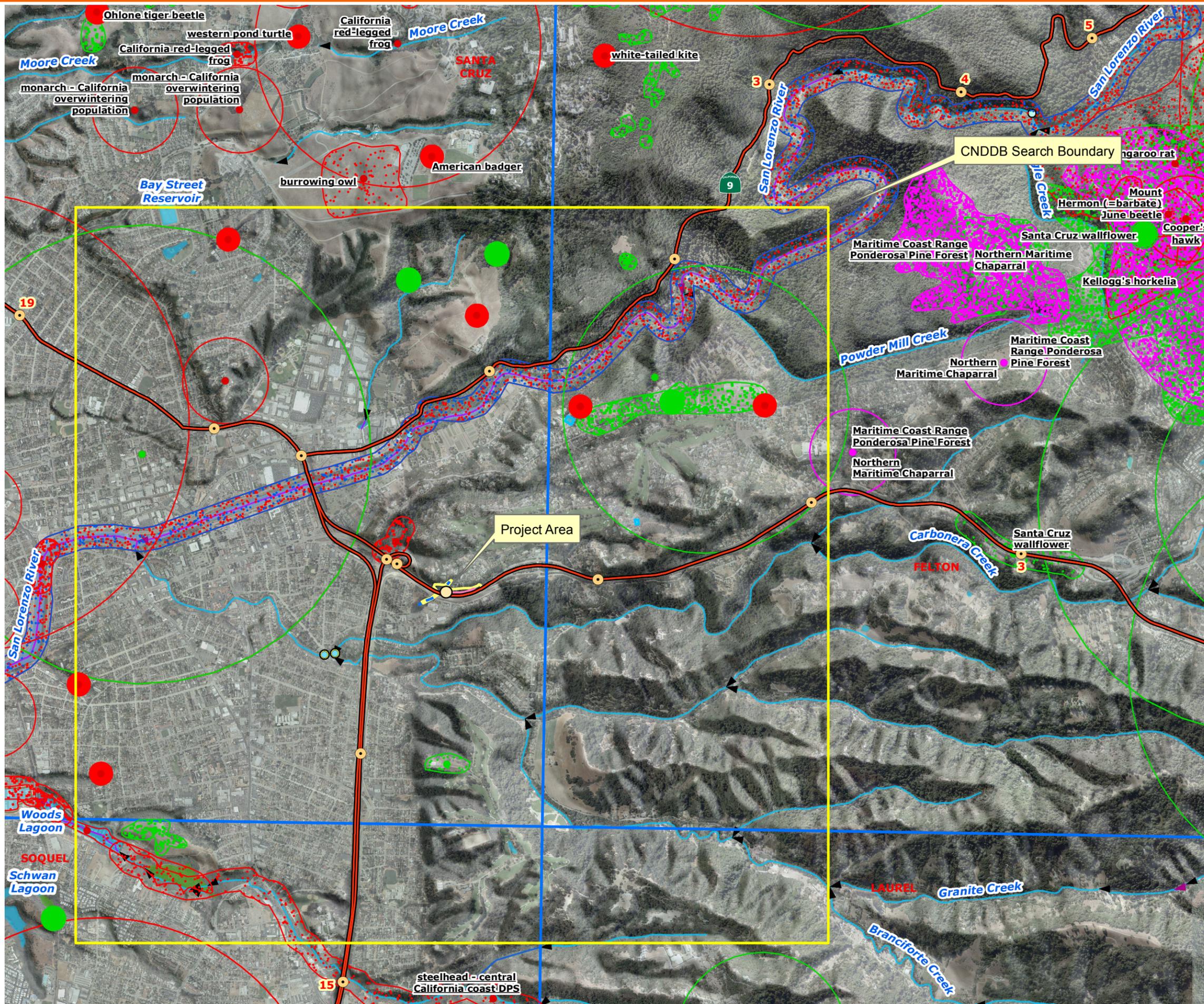
Date: 8/6/2015

APPENDIX C

CNDDDB Search Area Map

CNDDDB Search Area

Pasatiempo Shoulder Widening
05-1C670



Date: 9/2/2015

APPENDIX D

Plant Species Observed in BSA during 24 June 2015 Survey

Scientific Name	Common Name	Family	Origin
<i>Acacia dealbata</i>	silver wattle	Fabaceae	Non-native
<i>Avena barbata</i>	slender wild oat	Poaceae	Non-native
<i>Brassica nigra</i>	black mustard	Brassicaceae	Non-native
<i>Briza maxima</i>	rattlesnake grass	Poaceae	Non-native
<i>Bromus diandrus</i>	ripgut brome	Poaceae	Non-native
<i>Campsis radicans</i>	trumpet creeper vine	Bignoniaceae	Non-native
<i>Carduus pycnocephalus</i>	Italian thistle	Asteraceae	Non-native
<i>Conium maculatum</i>	poison hemlock	Apiaceae	Non-native
<i>Cortaderia jubata</i>	pampas grass	Poaceae	Non-native
<i>Cotoneaster lacteus</i>	milkflower cotoneaster	Rosaceae	Non-native
<i>Delairea odorata</i>	cape ivy	Asteraceae	Non-native
<i>Ehrharta calycina</i>	perennial veldt grass	Poaceae	Non-native
<i>Equisetum laevigatum</i>	horsetail	Equisetaceae	Native
<i>Eucalyptus globulus</i>	blue gum	Myrtaceae	Non-native
<i>Fescuta perennis</i>	Italian ryegrass	Poaceae	Non-native
<i>Genista monspessulana</i>	French broom	Fabaceae	Non-native
<i>Geranium sp.</i>	unknown	Geraniaceae	Unk
<i>Hedera helix</i>	English ivy	Araliaceae	Non-native
<i>Hordeum murinum</i>	foxtail barley	Poaceae	Non-native
<i>Malva parviflora</i>	cheeseweed	Malvaceae	non-native
<i>Nerium oleander</i>	oleander	Apocynaceae	Non-native
<i>Oxalis pes-caprae</i>	sourgrass	Oxalidaceae	Non-native
<i>Pinus radiata</i>	Monterey pine	Pinaceae	Native
<i>Plantago coronopus</i>	cutleaf plantain	Plantaginaceae	non-native
<i>Polypogon monspeliensis</i>	rabbitsfoot grass	Poaceae	Non-native
<i>Pseudotsuga menziesii</i>	Douglas fir	Pinaceae	Native
<i>Quercus agrifolia</i>	coast live oak	Fagaceae	Native
<i>Rubus armeniacus</i>	Himalyan blackberry	Rosaceae	Non-native
<i>Sonchus oleraceus</i>	common sow thistle	Asteraceae	non-native
<i>Torilis arvensis</i>	tall sock-destroyer	Apiaceae	Non-native
<i>Toxicodendron diversilobum</i>	poison oak	Anacardiaceae	Native
<i>Umbellularia californica</i>	California bay	Lauraceae	Native
<i>Zantedeschia aethiopica</i>	callalily	Araceae	Non-native

APPENDIX E

CNDDDB and USFWS Species Lists for Search Area



Selected Elements by Common Name

California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SC
Anderson's manzanita <i>Arctostaphylos andersonii</i>	PDERI04030	None	None	G2	S2	1B.2
bank swallow <i>Riparia riparia</i>	ABPAU08010	None	Threatened	G5	S2	
Bonny Doon manzanita <i>Arctostaphylos silvicola</i>	PDERI041F0	None	None	G1	S1	1B.2
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SC
California red-legged frog <i>Rana draytonii</i>	AAABH01022	Threatened	None	G2G3	S2S3	SC
coho salmon - central California coast ESU <i>Oncorhynchus kisutch</i>	AFCHA02034	Endangered	Endangered	G4	S2?	
great blue heron <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
hoary bat <i>Lasiurus cinereus</i>	AMACC05030	None	None	G5	S4	
maple-leaved checkerbloom <i>Sidalcea malachroides</i>	PDMAL110E0	None	None	G3	S3	4.2
Maritime Coast Range Ponderosa Pine Forest <i>Maritime Coast Range Ponderosa Pine Forest</i>	CTT84132CA	None	None	G1	S1.1	
marsh microseris <i>Microseris paludosa</i>	PDAST6E0D0	None	None	G2	S2	1B.2
mimic tryonia (=California brackishwater snail) <i>Tryonia imitator</i>	IMGASJ7040	None	None	G2	S2	
moestan blister beetle <i>Lytta moesta</i>	IICOL4C020	None	None	G2	S2	
monarch - California overwintering population <i>Danaus plexippus pop. 1</i>	IILEPP2012	None	None	G4T2T3	S2S3	
Mount Hermon (=barbata) June beetle <i>Polyphylla barbata</i>	IICOL68030	Endangered	None	G1	S1	
North Central Coast Drainage Sacramento <i>North Central Coast Drainage Sacramento Sucker/Roach River</i>	CARA2623CA	None	None	GNR	SNR	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Northern Maritime Chaparral <i>Northern Maritime Chaparral</i>	CTT37C10CA	None	None	G1	S1.2	
Ohlone tiger beetle <i>Cicindela ohlone</i>	IICOL026L0	Endangered	None	G1	S1	
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G5	S3	SC
robust spineflower <i>Chorizanthe robusta var. robusta</i>	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
San Francisco popcornflower <i>Plagiobothrys diffusus</i>	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
Santa Cruz clover <i>Trifolium buckwestiorum</i>	PDFAB402W0	None	None	G2	S2	1B.1
Santa Cruz tarplant <i>Holocarpha macradenia</i>	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
steelhead - central California coast DPS <i>Oncorhynchus mykiss irideus</i>	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
tidewater goby <i>Eucyclogobius newberryi</i>	AFCQN04010	Endangered	None	G3	S2S3	SC
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	Candidate Threatened	G3G4	S2	SC
white-rayed pentachaeta <i>Pentachaeta bellidiflora</i>	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
woodland woollythreads <i>Monolopia gracilens</i>	PDAST6G010	None	None	G2G3	S2S3	1B.2
Zayante band-winged grasshopper <i>Trimerotropis infantilis</i>	IIORT36030	Endangered	None	G1	S1	

Record Count: 30

Pasatiempo Shoulder Widening--05-1C670

IPaC Trust Resource Report

Generated July 17, 2015 10:53 AM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

Pasatiempo Shoulder
Widening--05-1C670

PROJECT CODE

EBHWP-WXY4Z-BK3IY-BNAB4-IPWALE

LOCATION

Santa Cruz County, California

DESCRIPTION

Improve site distance by constructing a
soil nail wall to widen shoulder



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Ventura Fish And Wildlife Office

2493 Portola Road, Suite B

Ventura, CA 93003-7726

(805) 644-1766

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under [Section 7](#) of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an Official Species List from the regulatory documents section.

Amphibians

California Red-legged Frog *Rana draytonii*

Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=D02D>

California Tiger Salamander *Ambystoma californiense*

Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=D01T>

Birds

California Least Tern *Sterna antillarum browni* **Endangered**

CRITICAL HABITAT

No **critical habitat** has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B03X>

Least Bell's Vireo *Vireo bellii pusillus* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B067>

Marbled Murrelet *Brachyramphus marmoratus* **Threatened**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B08C>

Southwestern Willow Flycatcher *Empidonax traillii extimus* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B094>

Western Snowy Plover *Charadrius alexandrinus nivosus* **Threatened**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B07C>

Fishes

Tidewater Goby *Eucyclogobius newberryi* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E071>

Flowering Plants

Marsh Sandwort *Arenaria paludicola* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q25H>

Santa Cruz Tarplant *Holocarpha macradenia* **Threatened**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q0ZL>

Scotts Valley Polygonum *Polygonum hickmanii* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q3HV>

Scotts Valley Spineflower *Chorizanthe robusta* var. *hartwegii* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q3IB>

White-rayed Pentachaeta *Pentachaeta bellidiflora* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q2F3>

Insects

Ohlone Tiger Beetle *Cicindela ohlone* **Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I0OW>

Zayante Band-winged Grasshopper *Trimerotropis infantilis* **Endangered**

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=I0OY>

Mammals

Southern Sea Otter *Enhydra lutris nereis* **Threatened**

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0A7>

Reptiles

San Francisco Garter Snake *Thamnophis sirtalis tetrataenia*

Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=C002>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

Allen's Hummingbird <i>Selasphorus sasin</i> Season: Breeding	Bird of conservation concern
Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008	Bird of conservation concern
Bell's Sparrow <i>Amphispiza belli</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HE	Bird of conservation concern
Black Oystercatcher <i>Haematopus bachmani</i> Year-round	Bird of conservation concern
Black Swift <i>Cypseloides niger</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FW	Bird of conservation concern
Burrowing Owl <i>Athene cunicularia</i> Year-round	Bird of conservation concern
Costa's Hummingbird <i>Calypte costae</i> Season: Breeding	Bird of conservation concern
Flammulated Owl <i>Otus flammeolus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DK	Bird of conservation concern
Fox Sparrow <i>Passerella iliaca</i> Season: Wintering	Bird of conservation concern
Lawrence's Goldfinch <i>Carduelis lawrencei</i> Season: Breeding	Bird of conservation concern
Lesser Yellowlegs <i>Tringa flavipes</i> Season: Wintering	Bird of conservation concern
Loggerhead Shrike <i>Lanius ludovicianus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FY	Bird of conservation concern
Long-billed Curlew <i>Numenius americanus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B06S	Bird of conservation concern

Marbled Godwit <i>Limosa fedoa</i> Season: Wintering	Bird of conservation concern
Nuttall's Woodpecker <i>Picoides nuttallii</i> Year-round	Bird of conservation concern
Oak Titmouse <i>Baeolophus inornatus</i> Year-round	Bird of conservation concern
Olive-sided Flycatcher <i>Contopus cooperi</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0AN	Bird of conservation concern
Peregrine Falcon <i>Falco peregrinus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FU	Bird of conservation concern
Short-billed Dowitcher <i>Limnodromus griseus</i> Season: Wintering	Bird of conservation concern
Short-eared Owl <i>Asio flammeus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HD	Bird of conservation concern
Tricolored Blackbird <i>Agelaius tricolor</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B06P	Bird of conservation concern
Whimbrel <i>Numenius phaeopus</i> Season: Wintering	Bird of conservation concern
Yellow Warbler <i>dendroica petechia ssp. brewsteri</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FN	Bird of conservation concern
Red Knot <i>Calidris canutus ssp. roselaari</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0G6	Bird of conservation concern

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Wetland data is unavailable at this time.

APPENDIX F

Representative Site Photos



Photo 1. Representative photo of project area. The soldier pile wall will be installed 10 feet off the traveled way to the right in the photograph.



Photo 2. Densely vegetated habitat at northern end of project, dominated by *Acacia dealbata* and actively maintained within the ROW.



Photo 3. The non-native, invasive silver wattle (*Acacia dealbata*) that dominates the landscape in the BSA.



Photo 4. Looking to the west from across the highway at the stream. The blue line shows the approximate path of flow, the red lines show the bank locations. The retaining wall will begin here continue to the right of the photograph.



Photo 5. Jurisdictional stream just downstream of the outlet on Plymouth Street, outside of the API. The blue line shows the flow path along the sandy-bottom channel.



Photo 6. The *Eucalyptus* grove within the stream, downstream of Plymouth Street, outside of the API. The channel became difficult to discern here.

Memorandum

*Flex your power!
Be energy efficient!*

To: MATTHEW PALMER
Environmental Planning

Date: August 26, 2015

File: 05-1C6700
0512000194
05-SCr-17- 0.1/0.4
Tie-Back Retaining Wall

From: ISAAC LEYVA
District 5 Environmental Engineering

Subject: Response to Request for PID/Environmental Document/Certification Dated July 9, 2015.

Initial Site Assessment (ISA)

A field review was conducted for the project to construct a tie-back retaining wall between post miles 0.1 and 0.4 along south bound cut slope on highway 17 in Santa Cruz County. A set of very preliminary project plans were reviewed. There are no hazardous waste sites or businesses commonly associated with hazardous waste generation nearby that would have a potential for impacting this type of project. Following is a discussion regarding typical hazardous waste issues that could affect this project.

Aerially deposited lead (ADL) – ADL may be an issue on this project. The excavation of the soil to construct the retaining wall may contain ADL. However, lead concentrations from a previous project nearby may be used to manage the soil based on reported lead levels. Therefore a task order to investigate lead concentrations may or may not be necessary.

Naturally occurring asbestos (NOA) - NOA will not be an issue on this project since NOA does not occur in the project area.

Asbestos containing materials (ACM), lead containing paint (LCP) - The project does not impact any structures or facilities that would warrant an asbestos containing material or lead containing paint inspection so ACM and LCP will not be issues for this project.

Treated wood waste (TWW) – TWW includes posts for metal beam guard railing, thrie beam barrier, piles, or roadside signs. If TWW will be removed and disposed of, then include SSP 14-11.09 for proper management of TWW. TWW is presumed to be a hazardous waste and must be managed in accordance with the Alternative Management

Standards (AMS) which among other things permits disposal of presumed hazardous waste TWW at specific non-hazardous waste landfills. Since TWW is presumed to be a hazardous waste, Caltrans is charged a Hazardous Waste Generator Fee by the State Board of Equalization (BOE). Include in the project contingency fund the approximate amount of funds that will be needed for Board of Equalization Generator Fee. The Office Engineer has set up a BEEs item, 066915 - "BOE TWW Generation Fee" for holding of funds until Caltrans is billed by the BOE. These fees are paid by the Caltrans Resident Engineer from the project contingency funds the year after the TWW is generated.

I have attached a table to estimate the tonnage of TWW that will be generated which includes the 2013 Generator Fees to use for cost estimation purposes. For more information go to:

http://env.dot.ca.gov/haz_waste/haz_sp_provisions/docs/GUIDANCE%20FOR%202014-11-09%2010-10-2013.doc

Yellow thermoplastic or traffic stripe – If yellow stripe or thermoplastic is going to be removed it will need to be managed differently depending on its age and the way it will be removed. Some of the yellow traffic stripe in this segment of highway 101 may be newer yellow stripe that does not contain lead. The SSP's for any recent projects that placed yellow stripe on this portion of highway 101 should be reviewed to verify that lead free yellow stripe was used. If this can be verified, that it will be appropriate to include SSP 15-2.02C (2) that requires preparation of a lead compliance plan but does not require the stripe debris to be disposed of as a hazardous waste.

If it cannot be determined if lead free yellow stripe was used or if some of the alignment has older yellow paint that the lead content cannot be determined then SSP 14-11.07 must be included to collect the residue and determine if it needs to be disposed of as a hazardous waste. If the stripe is going to be removed as part of a cold plane or grinding operation where the stripe is being removed with the asphalt concrete, then use SSP 15-1.03B. Regardless of which SSP is included, a bid item will need to be included for a lead compliance plan. Use \$2,000.00 for the bid cost estimate.

The issues identified in this document are not considered as mitigation under CEQA. These issues are routine construction issues that are handled in the construction contract through inclusion of standard special provisions. This project can proceed with very little risk of impacts due to unanticipated hazardous waste or other contamination related issues.

This determination is based on the information provided in the request dated July 9, 2015. Please submit a supplemental request for a hazardous waste assessment to cover the changes in the project if there is a change in the nature or scope of the project.

SCr 17 Tie- Back Wall

05-1C6700

August 26, 2015

Page 3.

If you have any questions or comments, please contact Isaac Leyva at 549-3487.

c:

Krista Kiaha - Environmental Planning (by email only)

Petros Demoz - Design (by email only)

Luis Duazo - Project Management (by email only)

VISUAL IMPACT ASSESSMENT

SHOULDER WIDENING SAFETY PROJECT

Santa Cruz County California

Route 17

Postmiles 0.1 to 0.4

EA 05-1C6700 [PI 05 12000194]

November 2015

California Department of Transportation
Landscape Architecture
District Five



This page intentionally left blank

This technical support document prepared under the direction of:

ROBERT G. CARR



LICENSED LANDSCAPE ARCHITECT



TABLE OF CONTENTS

Visual Impact Assessment



Contents

1.1	INTRODUCTION	1
1.2	PROJECT DESCRIPTION.....	3
1.2.1	Project Proposal	3
1.3	EXISTING VISUAL ENVIRONMENT	4
1.3.1	Project Setting.....	4
1.4	ANALYSIS METHODOLOGY.....	6
1.4.1	VISUAL RESOURCE CHANGE	7
1.4.2	VIEWER SENSITIVITY AND RESPONSE.....	8
1.4.3	OBSERVER VIEWPOINTS	10
1.5	PHOTO-SIMULATIONS.....	12
1.6	VISUAL IMPACT ASSESSMENT	12
1.7	SUMMARY OF PROJECT IMPACTS.....	18
1.7.1	PROJECT IMPACTS	18
1.7.2	Visual Impacts during Project Construction.....	19
1.7.3	Cumulative Impacts	19
1.8	RECOMMENDED MEASURES TO REDUCE VISUAL IMPACTS.....	20

LIST OF TABLES AND FIGURES

Visual Impact Assessment



Tables

Table 1 – Visual Resource Change Ratings (VC) and Corresponding Narrative Descriptions 7

Figures

Figure 1 – Project Location Map..... 2
Figure 2 – Visual Impact Assessment Process Concept Diagram..... 7
Figure 3 – Observer Viewpoint Location Map 11

VISUAL IMPACT ASSESSMENT of the proposed SHOULDER WIDENING PROJECT

Route 17 Santa Cruz County

PM 0.1 to 0.4 - EA 05-1c6700 [PI 05 12000194]

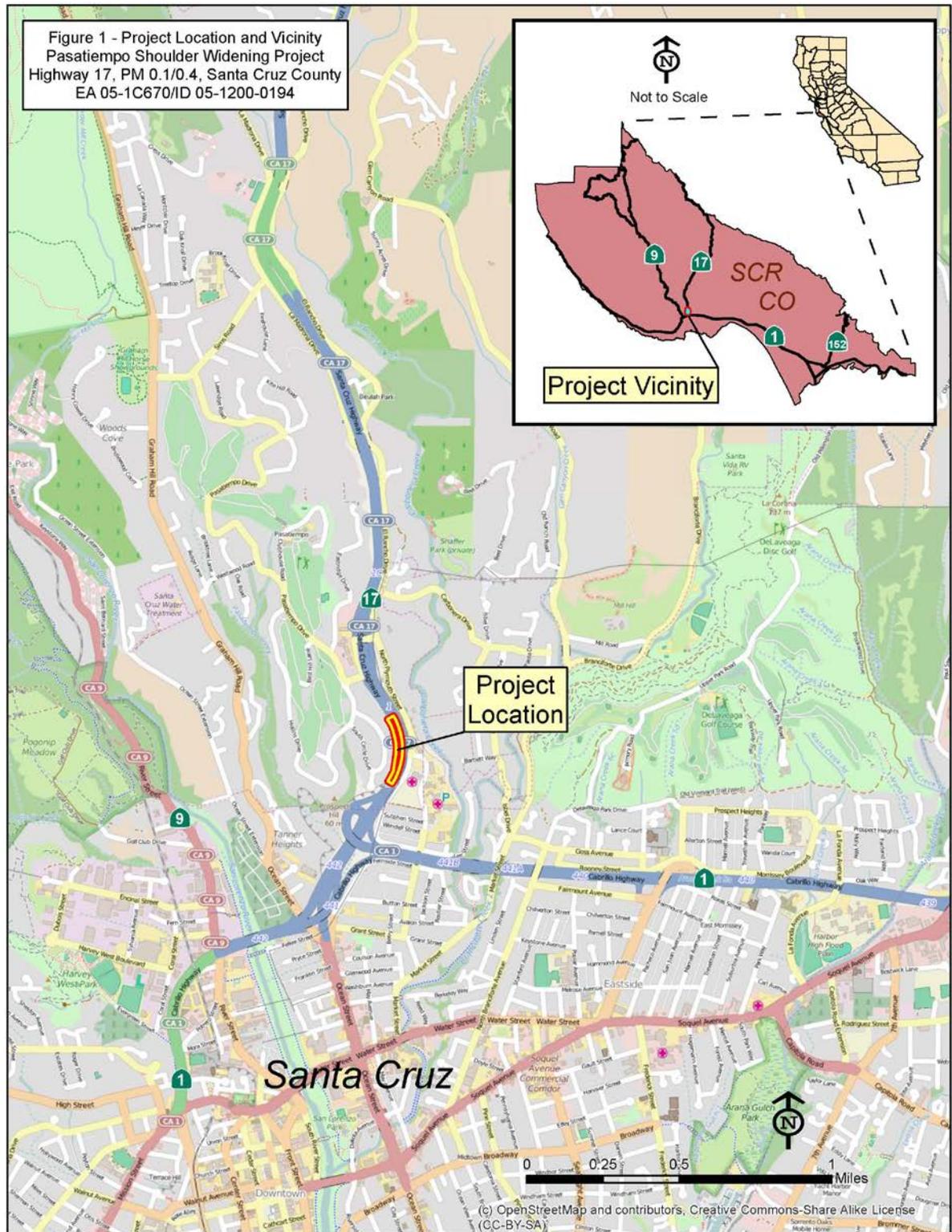
1.1 INTRODUCTION

The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 U.S.C. 4331[b][2]). To further emphasize this point, the Federal Highway Administration in its implementation of NEPA (23 U.S.C. 109[h]) directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values. This Visual Impact Assessment was prepared using a process developed by the Federal Highway Administration (FHWA) in conjunction with the American Society of Landscape Architects. This process for assessing visual impacts satisfies the requirements of the National Environmental Policy Act (NEPA).

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of aesthetic, natural, scenic and historic environmental qualities” (CA Public Resources Code Section 21001[b]). This report analyzes and discloses potential project affects consistent with the California Environmental Quality Act (CEQA) definitions and guidelines.

The intent of this visual impact assessment is to substantiate findings presented in the environmental document by acting as a technical support document. This assessment defines the visual environment of the project area, quantifies the visual resources of the project area, and identifies viewer response to those resources. The study assesses the resource change that would be introduced by the project and the corresponding viewer response to that change. This perceived change, along with the project’s consistency with national, state and local visual resource policy is used to determine the degree of potential impacts.

Figure 1 – Project Location Map



1.2 PROJECT DESCRIPTION

1.2.1 Project Proposal

The purpose of the project is to reduce the number and severity of collisions at this location of State Route 17. Sight distance is limited due to the steep cut slope near the edge of travelled way on the inside of the curve, and there is a higher than expected collision rate due to poor stopping sight distance. There is a pattern of vehicles coming upon congestion too fast and, after evasive action hitting the existing cut slope or median barrier, often on a wet surface. In addition, rear end collisions have occurred.

In order to address this important safety issue, this project proposes to widen the outside shoulder to 10 feet to improve stopping sight distance. To accommodate this widened shoulder, the hill adjacent to the southbound lanes would be excavated and a retaining wall would be constructed.

The build options propose to move the cut slope out of the sight line by constructing a retaining wall with a concrete barrier at the bottom. At the southern end of the project an existing gully would require an approximately 40 foot long downslope retaining wall with a concrete barrier. The area between the edge of traveled way on the auxiliary lane and the wall would be paved, which includes a 10-ft. shoulder. The paved area would be as wide as 25 feet.

Three retaining wall options are proposed. Each of the wall options would be approximately the same size, approximately 750 feet long and varying in height from approximately 5 to 20 feet. Aesthetic treatment such as texturing and/or coloring would be included with each of the wall options and based on input from the community. The determination of wall type would be based in part on geotechnical information gathered during the design phase of the project. The retaining wall options are as follows:

Design Option 1 - Soil Nail Wall

This design option proposes to construct a soil nail wall as a retaining wall for the cut slope area between Sta. 2+33.89 to Sta. 9+90.00. Drainage work would include replacement of existing drainage inlets and installing additional inlets in front of the wall connected to a concrete trunk line that drains into an existing inlet. Most of the work would be performed in the State right of way, but permanent construction easements would be required for the soil nails at certain locations.

Although both soil nail and soldier pile walls use top-down construction methods, soil nail wall construction does not require machinery/equipment on the top. Workers with some hand tools would be needed to grade or as recommended to install an anchored wire mesh drapery above the wall to stabilize the shallow surficial failures and slumps to prevent material from reaching the

highway. The area of impact on the vegetation and trees from the face of the soil nail wall would be 5-ft. to 7-ft. Drainage gutter and cable railing would not be required on top of the wall, but a shotcrete apron may be necessary. In front of the soil nail wall on the highway side, drainage inlets and a reinforced concrete pipe trunk line would be constructed that drains into an existing cross drainage culvert.

Design Option 2 - Soldier Pile Wall

This design option proposes to construct a soldier pile as a retaining wall for the cut slope area. Drainage work would include a gutter, risers and inlets at the back of the wall and replacement of existing drainage inlets and installing additional inlets in front of the wall.

Soldier pile walls require a top-down construction method. The area of impact on vegetation and trees beyond the face of the soldier pile wall is assumed to be 25 to 30 feet, because there would be drilling machinery and other equipment required for construction on the top of the cut slope. This disturbed area would be available for revegetation after construction. On top of the soldier pile wall, a parapet with cable railing as well as a gutter would be required.

Design Option 3 – Poured-In-Place Concrete (Type 1) Wall

This design option proposes to construct a poured-in-place concrete retaining wall for the cut slope area. Caltrans standards refer to this type wall as a “Type 1” wall. Drainage work would include a gutter, risers and inlets at the back of the wall and replacement of existing drainage inlets and installing additional inlets in front of the wall.

This type of wall uses bottom up construction method. The area of impact on vegetation and trees would be at least 25 to 30 feet beyond the face of the wall because of the need for shoring in areas where excavation backslope would not be feasible. On top of the retaining wall, a parapet with cable railing as well as a gutter would be required.

1.3 EXISTING VISUAL ENVIRONMENT

1.3.1 Project Setting

State Route 17 through the project area is a four-lane conventional highway with 12 foot wide lanes. The highway facility in the vicinity of the project includes concrete median barrier as well as metal beam guardrail at various locations along the north and southbound road shoulders. Route 17 in Santa Cruz County serves local and interregional traffic which primarily includes recreational, commuters, as well as commercial users. State Route 17 is designated as Eligible in the State Scenic Highway system.

Visual Character

The region is part of coastal terrace and western slopes of the coastal mountain range northeast of the city of Santa Cruz. The Highway 17 corridor generally traverses a north-south route from the coastline over the mountains to the Santa Clara Valley inland. The landform of the region is characterized by slopes and ravines forming a series of ridgelines and valleys as the hills rise from the Pacific Ocean. In general, the regional topography supports a mostly curvilinear roadway which produces views for the highway traveler ranging from close-in views of roadside slopes to mid-range hillside views and wide open panoramas.

The project site is located adjacent to the City of Santa Cruz in an area of varied topography, with the nearby hillsides rising well above the roadside in certain areas, and dropping below the highway at other locations. Throughout the region, vegetation is a primary component of overall visual character. In the project area, the vegetative cover is mixed evergreen forest, primarily with mature pine, fir, oak and redwood trees, and an associated understory. The size and density of the existing vegetation, in combination with its proximity to the road, generally blocks long-range views to and from the highway throughout much of the area. In many areas, views from the road are limited to a distance of approximately 50 to 200 feet because of intervening vegetation.

Along this section of Highway 17 approaching the city, the primary evidence of development is the roadway itself and scattered residential and commercial buildings beyond the roadside. In addition to the actual roadway surface, visible highway elements include concrete median and roadside barrier, metal barriers, occasional retaining walls, cut slopes, signage, call boxes and markers, as well as the vehicular traffic itself. Overhead utility poles and wires also contribute to the view along the corridor. A few existing retaining walls can be seen along Highway 17, most of which are the soil nail type, with the appearance of faux-rock slopes. In this section of Route 17 built development has a moderate visual presence in the landscape. The project is located in a transitional area between the more developed urban setting of Santa Cruz city and the less developed landscape to the north. Throughout much of this section of the highway, the scale and frequency of structures and other built amenities are such that although visible, they don't dominate the views when seen in the context of the overall landscape. Existing dense vegetation and varied topography preclude much of the potential views of off-highway development throughout the project area.

Several residences occupy the ridge west of and above the project site. The Pasatiempo Golf Course is also located in this area west of the project. In the project vicinity the slopes between the Pasatiempo development and Highway 17 are densely populated with redwood, coast live oak, cypress, douglas fir, acacia, and other trees. On the adjacent residential parcels, mature ornamental landscaping is prevalent.

The quality of the existing visual environment through the project area is moderately high. The undulating topography and dense trees along the adjacent landscape create an attractive setting for the highway. The project site contributes to the generally lush roadside of the Route 17 corridor, and helps establish a vegetated character as well as a gateway aesthetic for the City of Santa Cruz and the coastal communities. South of the project area the built environment becomes more visually dominant. The Highway 1/17 “Fish hook” interchange is just south of the project site, and a masonry soundwall can be seen lining Highway 17 southeast of the project.

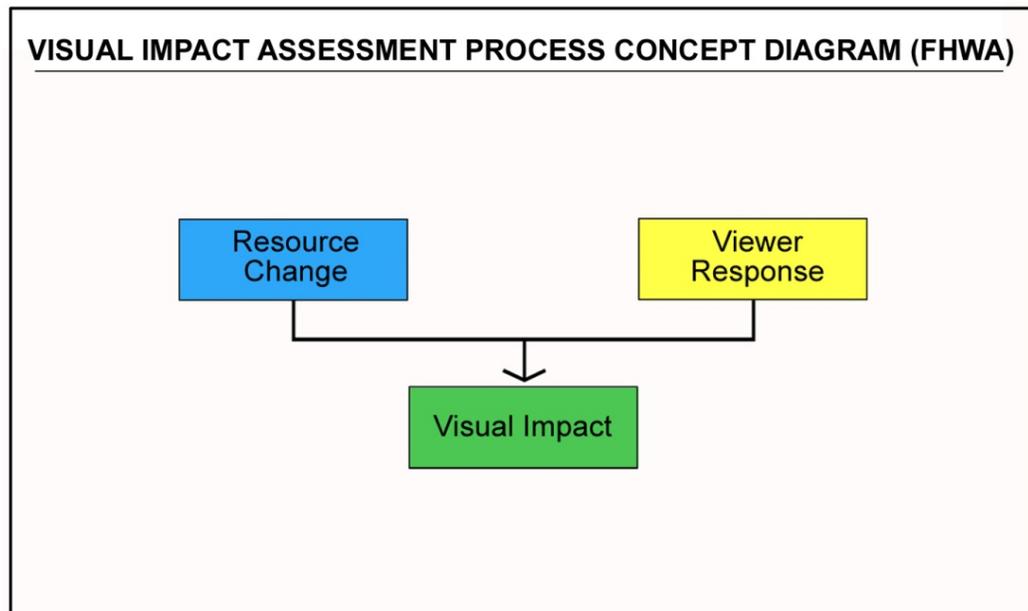
Landscape Assessment Units

To provide a framework for understanding and disclosing the potential visual effects of highway project alternatives, the FHWA visual methodology recommends the regional landscape be divided into analysis sub-units. Landscape Assessment Units are not based on jurisdictional boundaries such as city or county limits, but rather are based on distinct areas or zones which have certain common visual characteristics. Landscape Assessment Units or “Units” divide the project into manageable segments that may share visual attributes, potential project affects, and if necessary, impact reduction strategies. The visual resources of Landscape Assessment Units can be assessed, compared; and assigned priorities for planning, siting, and design decisions.

The general landform and vegetative cover throughout the project limits are visually consistent, and no atypical visual features are present, and it is expected that most casual observers would perceive the project limits as being somewhat homogeneous throughout its length. As a result, this report analyzes the project setting as one single landscape unit.

1.4 ANALYSIS METHODOLOGY

This study employs an analysis model developed by the Federal Highway Administration (FHWA) in conjunction with the American Society of Landscape Architects. The major components of this process include establishing the visual environment of the project, assessing the visual resources of the project area, and identifying viewer response to those resources. Those components define the existing or baseline conditions. Resource change introduced by the project and the associated viewer response is then assessed, providing a basis for determination of potential visual impacts. Visual impact is a function of assessing the extent of physical change (resource change), and comparing that with the degree of viewer sensitivity (viewer response). A generalized visual impact assessment process is illustrated in the following diagram.

Figure 2. Visual Impact Assessment Process Concept Diagram

1.4.1 VISUAL RESOURCE CHANGE

The physical changes caused by the project manifest themselves in mainly terms of form, line, color and texture, as well as the associated relational aspects of scale, dominance, diversity and continuity. These inherent physical attributes are visually experienced as an integrated whole, defining the perceived visual character of the landscape. How these attributes relate to one another and their setting is assessed in part by analyzing what is defined in the FHWA methodology guidance as the view's *vividness, intactness and unity*. These three visual rating criteria are described as follows:

Vividness is the visual power or memorability of the landscape components as they combine in striking and distinctive visual patterns.

Intactness is the visual integrity of the landscape and its freedom from non-typical encroaching elements. If all of the various elements of a landscape seem to "belong" together, there will be a high level of intactness.

Unity is the visual harmony of the landscape considered as a whole. Unity represents the degree to which potentially diverse visual elements maintain a coherent visual pattern.

In order to assess the degree of resource change caused by the project, the FHWA method recommends a numerical rating process which compares the visual quality in terms of vividness, intactness and unity (described above), of both the existing and proposed conditions for each project alternative and option under consideration. Separate Resource Change (RC) evaluations were conducted from each of the two representative Observer Viewpoints. A numerical rating between 1

and 7 was assigned for the visual quality of existing conditions from each viewpoint, with 1 having the lowest value and 7 the highest. Photo simulations were then prepared illustrating the likely appearance of each view after project construction. After a combination of field reviews and photo simulation study, numerical ratings were then assigned to each of these “proposed” views. The numerical difference, if any, between the existing and proposed conditions quantifies the degree of resource change which may occur as a result of the proposed project. Table 1 below illustrates a range of visual resource change ratings and the corresponding narrative descriptions of the ratings:

Table 1 – Visual Resource Change Ratings (VC) and Corresponding Narrative Descriptions

	Negative Visual Resource Change						Positive Visual Resource Change				
Visual Resource Change Rating (RC)	5.0	-4.0	-3.0	-2.0	-1.0	0	1.0	2.0	3.0	4.0	5.0
Equivalent Narrative Rating	High	Moderately High	Moderate	Moderately Low	Low	No Change	Low	Moderately Low	Moderate	Moderately High	High

The Resource Change (RC) evaluation determines which specific criteria contribute most to the existing quality of each view, and if change would occur to that criteria as a result of the project. If a numerical change in visual criteria was identified, this change was analyzed for its potential effect on the existing visual quality.

Ultimately, the degree of resource change (as determined by the Resource Change evaluation) must be combined with the anticipated viewer response in order to understand and determine potential levels of visual impact.

1.4.2 VIEWER SENSITIVITY AND RESPONSE

To understand and predict viewer response to the appearance of a highway project, we must know something about the viewers who may see the project and the aspects of the visual environment to which they are likely to respond. We can differentiate major viewer groups by physical factors that modify perception. For highway projects, we begin with the basic distinction of the views from the road, and the views of the road, as well as the physical location of each viewer group, the number of people in each group, and the duration of their view. The receptivity of different viewer groups to the visual environment is not equal. This variable receptivity is defined as *viewer sensitivity* and is strongly related to visual preference. It modifies visual experience directly by means of viewer

activity and awareness; indirectly, sensitivity modifies experience by means of values, opinions, and preconceptions.

Viewer response assumptions include consideration of viewing proximity, duration of views, activity while viewing, and overall viewing context. Local values based on visual preferences, historical associations, and community aspirations and goals are also important indices of predicting viewer sensitivity and response to change.

Local policy indicators

Public policy concerning the established visual character of the regional landscape are important factors in assessing the baseline values ascribed to the setting. These community-based goals serve as an essential tool for predicting the likely reaction that changes resulting from the proposed project would evoke from the viewing public. The project is entirely within the County of Santa Cruz. Scenic resource goals and policies are contained in the General Plan as follows:

General Plan Conservation and Open Space Element

Visual Resources

5.10.3 Protection of Public Vistas

Protect significant public vistas as described in policy 5.10.2 from all publicly used roads and vista points by minimizing disruption of landform and aesthetic character caused by grading operations, timber harvests, utility wires and poles, signs, inappropriate landscaping and structure design. Provide necessary landscaping to screen development which is unavoidably sited within these vistas.

Scenic Roads

5.10.10 Designation of Scenic Roads

The following roads and highways are valued for their vistas. The public vistas from these roads shall be afforded the highest level of protection:

- Route 17- from Route 1 to Santa Clara County.

Viewer groups

Two general viewer groups were considered for the evaluation of viewer response; those with views from the road and those with views of the road. The awareness of visual resources by these viewer

groups is expected to vary with their specific activity. Tourists, which comprise a moderate number of viewers on Highway 17, generally have a high awareness of the visual resources around them, yet are anticipated to be less sensitive to specific changes in that environment. Local residents are generally the most sensitive to aesthetic changes due to their familiarity as well as their personal investment in the area. Commuters are often familiar with an area however the repetitive nature of the activity reduces awareness of the visual experience. In general, highway users in motor vehicles will perceive the area as a cumulative sequence of views and may not focus on specific roadway features. Pedestrians and bicyclists can be very aware of their visual surroundings because of the duration of views, slower pace and viewing proximity.

Viewers from the road are comprised of the Highway 17 user. The viewers along this segment of the highway are primarily in motor vehicles, and pedestrian and bicycle activity along the highway are not commonly seen. Highway 17 provides for a variety of local, regional and state-wide uses. Commuters, freight movement and commercial vehicles, tourism, and recreational travelers are part of the group experiencing the area from the highway. According to 2014 traffic counts, an average of more than 70,000 vehicles pass in front of the project location on Highway 17 each day.

Viewers to the road are made of all those who can see the project or any of its components from off-highway locations. In general the existing topography and well-vegetated surrounding landscape preclude views to the project site from the surrounding roadways and other public areas. One exception is the Pasatiempo overcrossing over Route 17. From this elevated location viewers on the overpass would see the southernmost portion of the project at a viewing distance of approximately 1,000 feet to the north.

Viewer Sensitivity and Response Ratings

Based on its high visibility immediately adjacent to the highway at a community gateway, along with the substantial number of potential viewers, the project site is considered to have a high degree of visual exposure to the public. Although Highway 17 is identified as a local “Scenic Road” in the Santa Cruz County General Plan, no designated “Visual Resource Areas” as shown on the General Plan Scenic Areas Map are near or visible from the project limits. As a result, this report applies a numerical Viewer Response Rating of 5 (moderately-high) throughout the project’s length.

1.4.3 OBSERVER VIEWPOINTS

Consistent with the FHWA guidance, a representative Observer Viewpoint (OV), was selected which best illustrates the visual character and changes resulting from implementation of the project. The location of the Observer Viewpoint is on Highway 17 approximately mid-way along the project’s length and is shown on Figure 3 below:

Figure 3 – Observer Viewpoint Location Map



1.5 PHOTO-SIMULATIONS

Photo-simulations are provided to increase public disclosure and to aid in the visual impact assessment evaluations. The simulations included in this report are general representations of the type and scale of the wall options proposed as part of the project. The actual heights and shapes of the wall options may vary slightly from what is shown in the simulations, based on additional geotechnical information gathered during the design and construction phases of the project. In addition, the specific aesthetic wall treatments shown in the simulations are preliminary recommendations, and the final treatments would be based on input from the community.

1.6 VISUAL IMPACT ASSESSMENT

The following section contains the numerical ratings assigned to the existing and proposed views as seen from the Observer Viewpoint (OV), along with a brief explanation of the rating numbers. A photograph of the existing conditions along with photo-simulations of each of the Project Options is included to provide a basis for understanding the visual changes proposed by the project.

Consistent with the process shown in Figure 2, the following section analyzes the project in terms of the numerical difference in physical change (Visual Quality Evaluation rating) combined with the expected sensitivities and responses of potential viewer groups (Viewer Response rating). The Visual Quality Evaluation rating is combined with the Viewer Response rating, with the results providing the basis for understanding and determining the type and extent of potential visual impacts.

OBSERVER VIEWPOINT – From Highway 17 looking across the highway to the project.**Existing Condition**

The view of the existing slope is considered to be of moderately high baseline visual quality. The well-vegetated character of the slope is somewhat moderated by occasional pockets of eroded soil and glimpses of overhead utilities. Overall the project site contributes to the vegetated character of the Highway 17 corridor valued in local planning policy. The vividness or memorability rating is moderate since views of well-vegetated slopes such as this are relatively common along Route 17 and throughout the region. The visual intactness is moderately high since few non-typical visual features are present, and no particularly contrasting or uncharacteristic elements are seen. The unity rating is slightly above average because although many aspects of the view are harmonious, elements such as the roadway, high volume of vehicle traffic, signage, and overhead utilities detract somewhat from the scene.

Proposed Condition – Design Option 1 – Soil Nail Wall



Note: The specific aesthetic treatment shown in the photo-simulation is a preliminary recommendation only. The actual aesthetic treatment would be developed in collaboration with the community.

The project would remove all of the existing vegetation from the lower and mid-sections of the slope. Above the wall, all existing vegetation approximately 5 to 7 feet behind the face of the wall would be removed. A small slope above the wall would be covered with wire mesh and erosion control seeding. Existing trees and other vegetation between the wire mesh area and the adjacent neighborhood would be saved.

Design Option 1 proposes a soil nail type wall, which would include the application of shotcrete on the wall face. Shotcrete does not use form liners typical of other concrete wall types. Instead it is sprayed on the wall face and hand-sculpted into the desired aesthetic appearance. This type of concrete application lends itself to a more organic-appearing surface treatment such as the faux-rock slope shown in the photo-simulation above. Because this Design Option has no drainage gutter behind the wall, no safety cable railing would be required along the top of wall.

The project would create a noticeable change in visual character. The loss of mature vegetation and introduction of a large built wall structure would add to the urban character of the area. This change in character would however be somewhat off-set by the aesthetic treatment of the wall face. If designed and constructed properly, the faux-rock treatment would help minimize the built characteristics of the wall and maintain a somewhat natural (although less vegetated) appearance for the site. The wider highway shoulders and wall placement would create a more open spatial character and larger-scale highway facility through the project location.

In terms of the Visual Quality Evaluation rating, implementation of Design Option 1 would result in a slight decrease of the vividness, or memorability rating. The proposed wall would be more visually dominant than the current vegetated slope, and its large scale would be somewhat inconsistent with the other walls along the corridor, as well as the generally vegetated character of

the route. The visual intactness of this design option would be reduced slightly because of the large scale of the wall and its highly visible location. Although retaining walls are part of the overall roadside environment along Highway 17, the project wall would be more noticeable and uncharacteristic than the others due to its larger size and location near a primary entrance to the city. This increased noticeability would also reduce the effectiveness of potential project features intended to visually blend the project with its surroundings. The visual unity of the project would also be reduced to some degree by introducing new geometric forms onto the previously vegetated hillside.

Resource Change (RC) Evaluation		DESIGN OPTION 1 – SOIL NAIL WALL		
	Vividness (V)	Intactness (I)	Unity (U)	(=V+I+U/3)
Existing Condition	3.5	6.0	5.5	5.0
Proposed Condition	3.3	5.0	4.2	4.2
Visual Quality Difference =				-0.8

Viewer Response (VR) Rating	
Viewer Response (VR)	5.0

Visual Impact Rating for Design Option 1				
Resource Change (RC)				-0.8
Viewer Response (VR)				5.0
Visual Impact (See note below) = $[(\text{Absolute value of RC}) + \text{VR}] / 2$, with plus or minus sign applied to the resulting numeral depending on whether the resource change (RC) was positive or negative.				-2.9

Proposed Condition – Design Options 2 & 3– Soldier Pile Wall & Cast-in-Place Wall



Note: The specific aesthetic treatment shown in the photo-simulation is a preliminary recommendation only. The actual aesthetic treatment would be developed in collaboration with the community.

Design Options 2 and 3 would remove all of the existing vegetation from the lower and mid-sections of the slope. In addition, above the wall all existing vegetation approximately 25 to 30 feet behind the face of the wall would be removed. Existing trees and other vegetation within the adjacent neighborhood would be saved.

The aesthetic treatment for the wall-face of Design Options 1 and 2 would be created by using a formliner, which is somewhat similar to a mold into which concrete is poured. This method of aesthetic application lends itself to more detailed, architectural designs such as placed-stone, brick patterns or other built-looking designs. Because these design options would include a drainage gutter behind the wall, safety cable railing would be required along the top of wall.

Design Options 2 and 3 would cause a noticeable change in visual character. Similar to Design Option 1, the loss of mature vegetation and introduction of a large built wall structure would add to the urban character of the area. This change in character would be somewhat off-set by the aesthetic treatment of the wall face, however the inherently more formal look of these wall types would appear as intentionally constructed roadside elements, rather than naturally-occurring cut slopes.

Tree removal associated with Design Options 2 and 3 would be more noticeable than with Design Option 1. Loss of vegetative screening would open-up partial views from the highway to some of the residences in the adjacent neighborhood along West Circle Drive. The existing utility poles and overhead lines would become more visible from highway viewpoints. The wider highway

shoulders and wall placement would create a more open spatial character and larger-scale highway facility through the project location.

Implementation of Design Option 2 or Design Option 3 would result in a minor reduction of the vividness rating. This is because although the proposed wall would be more memorable than the current vegetated slope, many viewers may not consider the change to be a positive one. The large scale of the wall and more formal aesthetic appearance would be distinct from the other walls along the corridor. Although retaining walls are part of the overall roadside environment along Highway 17, the visual intactness rating would be reduced because of the project wall would be more noticeable than the others, due to its larger size and location along a primary entrance to the city. This increased noticeability would also reduce the effectiveness of potential project features intended to visually blend the project with its surroundings. The visual unity of the setting would also be reduced by introducing new geometric forms onto the hillside, removal of mature trees, and greater visibility of overhead utilities.

Resource Change (RC) Evaluation:		DESIGN OPTIONS 2&3 – SOLDIER PILE & POURED-IN PLACE WALLS		
	Vividness (V)	Intactness (I)	Unity (U)	(=V+I+U/3)
Existing Condition	3.5	6.0	5.5	5.0
Proposed Condition	3.2	4.7	3.9	3.9
Visual Quality Difference =				-1.1

Viewer Response (VR) Rating	
Viewer Response (VR)	5.0

Visual Impact Rating for Design Options 2 & 3				
Resource Change (RC)				-1.1
Viewer Response (VR)				5.0
Visual Impact (See note below) = [(Absolute value of RC) + VR] / 2, with plus or minus sign applied to the resulting numeral depending on whether the resource change (RC) was positive or negative.				-3.0

1.7 SUMMARY OF PROJECT IMPACTS

1.7.1 PROJECT IMPACTS

The existing visual quality of the highway corridor through the project area is moderately high, based primarily on the topographic variety and the well-vegetated hillsides. The project site contributes to the scenic quality and vegetated appearance of the corridor due to its mature trees and their proximity to the roadway. This view quality is somewhat compromised by the highway facility itself and associated traffic, overhead utilities, as well as occasional hillside erosion along the roadside.

Based on the its high visibility adjacent to the highway, at a primary entrance to the City of Santa Cruz, along with the high number of potential viewers, the project site is considered to have a moderately high degree of public exposure and visual sensitivity.

Each of the three project Design Options would remove the majority of vegetation from the slope, excavate into the hillside, widen the paved shoulder, and construct an approximately 750 foot long concrete retaining wall. Accordingly, each of the Design Options would result in a substantial visual change for the area. The fundamental change from a well-vegetated roadside slope to a built structure would increase the urban appearance of this section of the highway and the surrounding area.

Design Option 1 would construct a soil nail type wall, which would likely include a shotcrete face sculpted to look like a natural rock cliff. This option would cause the removal of trees from an area approximately 5 to 7 feet behind the top of the wall. Option 1 would not require a drainage gutter above the wall and would therefore not need a safety cable railing attached to the top of the wall.

The Visual Quality Evaluation identifies moderate visual impacts associated with Design Option 1, based primarily on the alteration of visual character, urbanizing effect of the wall, and loss of vegetation. Soil nail walls of this type are seen elsewhere along Highway 17 as well as along other highways in the region. The faux-rock appearance of the wall would help the site retain some of its natural appearance, and would be consistent with other walls along the route. Even so, because of its larger size and close viewing proximity, many viewers would recognize the wall as being engineered and not natural.

Design Options 2 and 3 propose different types of wall construction, but the aesthetic treatment for each would be created by using a formliner mold. This type process is most effective in creating aesthetic patterns such as placed-stone, brick, or architectural patterns. Due to construction

methods, Design Options 2 and 3 would remove all trees of trees from an area approximately 25 to 30 feet behind the top of the wall, which is substantially more than required with Design Option 1.

The Visual Quality Ratings for Design Options 2 and 3 show a somewhat greater visual impact than would occur with Design Option 1, due primarily to the greater amount of tree removal. Additional factors that reduce the visual quality rating for Design Options 2 and 3 include the increased visual clutter caused by the required safety cable railing, and the greater visibility of utility poles and wires. The aesthetic treatment of Design Options 2 and 3 would likely replicate a built-type wall such as stacked stone of some sort. A wall such as this would not be consistent with the more natural-appearing faux-rock cliff walls seen elsewhere along Highway 17. However given the project's proximity to the urban development of Santa Cruz, this type of built appearance would not necessarily appear out of visual context.

1.7.2 Visual Impacts during Project Construction

During project construction, vehicles, equipment and other elements would be visible at and near the project work site. Temporary storage of construction materials and equipment would also be seen in the area. In addition, required safety devices such as signage, orange cones, orange fencing and other devices would be present. Workers would be visible throughout the construction phase. Views of stopped and slowed vehicle queues on the highway may also increase due to construction operations.

Equipment, vehicles, materials, workers, safety devices and related activities would not be unexpected visual elements at a typical construction site. With this understanding, viewers may have a greater acceptance of the temporary visual disruption caused by the project. This reduced viewer sensitivity would result in minimal visual impacts during project construction.

1.7.3 Cumulative Impacts

A number of highway projects have been constructed along Route 17 in recent years. Curve corrections, shoulder widening, retaining walls, guardrail and other roadside safety projects have become visible along the corridor. In the project vicinity, two important highway projects are currently in the planning or design phase. Immediately to the south of this project, a safety improvement project is proposed along the southbound off-ramp to Highway 1. That project would realign the off-ramp and construct an approximately 200 to 400 foot long retaining wall. Approximately 0.3 mile north of the project, a highway sediment-control project is currently being designed which would fix drainage systems, repair erosion, and cause the permanent removal of the majority of vegetation along an approximately one-half mile of highway roadside.

The shoulder widening project, when seen in the visual context of these other projects would contribute to a cumulative alteration of the vegetated character of the Highway 17 corridor approaching the City of Santa Cruz. The visual change would be noticeable, however would likely not be unexpected to many viewers, since the visual context of the vicinity is transitional, from the vegetated, less-developed inland areas to the urban land uses of Santa Cruz and the coastal communities. In addition, revegetation, aesthetic wall treatments, and other appropriate avoidance and mitigation measures would help reduce the cumulative urbanizing effect to the corridor.

1.8 RECOMMENDED MEASURES TO REDUCE VISUAL IMPACTS

The following measures would reduce the project's potential visual impact as seen from Highway 17 and the surrounding area:

Common measures to be applied to all Design Options:

1. The top of the retaining wall shall generally follow the natural contours of the land, and shall not be stepped to achieve elevation changes.
2. The retaining wall shall be battered to reduce its perceived scale as seen from adjacent viewpoints.
3. Aesthetic treatment shall be applied to above-roadway retaining walls, and to the safety shape barrier.
4. The local communities shall be involved in determining retaining wall aesthetics. Wall aesthetics shall be discussed with both the County of Santa Cruz and the City of Santa Cruz.
5. Any required construction access roads, staging areas, or other disturbed areas shall be re-graded if necessary to match their pre-construction contours.
6. The maximum number of trees horticulturally possible shall be replanted in the disturbed area above the retaining wall.
7. Shrubs shall be planted between the new trees.
8. The revegetation planting shall include a temporary irrigation system to promote vegetative establishment.
9. The revegetation planting shall include a minimum three year plant establishment contract.

In addition to the common measures listed above the following measures shall apply to Design Option 1:

10. Wire mesh drapery above the retaining wall shall be colored to match the adjacent natural ground.
11. Native shrub seed shall be applied to the wire mesh area above the retaining wall.
12. If additional shotcrete is required on the slope above the retaining wall, it shall be sculpted and colored to match the adjacent natural ground.

In addition to the common measures listed above, the following measures shall apply to Design Option 2 and Design Option 3:

13. The concrete drainage gutter behind the retaining wall shall be colored to match the adjacent natural ground.
14. All personnel safety rail shall follow the gradual contour of the wall top and shall not be stepped in order to achieve elevation changes.
15. All safety cable rail posts and cables shall be darkened.

M e m o r a n d u m

To: Aziz Saberi
Design Engineer
Branch S, Central Region

Date: November 19, 2015

File No.: 05-SCr-17- PM 0.1/0.4
Tie-Back Wall Shoulder
Widening
05-1C6700
Project #0512000194

From: **DEPARTMENT OF TRANSPORTATION/District 5**
Office of Environmental Management
Environmental Engineering
Isaac Leyva

Subject: **PALEONTOLOGY REVIEW- UPDATED**

Environmental Engineering has reviewed a proposed project to construct a Tie-Back wall and widen shoulders. Originally, the proposed project included a soil nail wall, however the project scope has changed requiring an updated paleontological review.

The project is located along the State Route 17 north of the City of Santa Cruz in Santa Cruz County.

Regulation of, or impacts to paleontological resources are included in much of the same legislation that covers archaeological resources. Some of the authorities cited for preservation of paleontological resources are:

-**The Antiquities Act of 1906**- requires permission for collecting ‘objects of antiquity’ on public lands.

-**The National Environmental Policy Act (NEPA)** requires protection of environmental resources when a project is built on public lands.

-**The California Environmental Quality Act (CEQA)** requires selection of the most feasible alignment with the least potential for damaging the environment.

-**Public Resource Code 5097.5** requires permission from the regulating agency to “excavate upon, remove, destroy, injure or deface...” paleontological or archaeological remains on public land. Section 5097 also makes provisions for a site survey by State Parks and Recreation Department if it is suspected that there are fossils on a proposed project.

Fossils (especially vertebrate fossils) recovered in situ by qualified paleontologists give us our only information about the history and changing environments of the land we now inhabit.

These formations are shown as having a **low** potential for encountering sensitive paleontological resources in Paleontological Sensitivity Mapping Project published by Caltrans and California State University Fresno in June 2000.

FORMATION	LITHIOLOGY	SENSITIVITY	PM INTERVAL
Marine terrace deposits	Alluvium deposited on wave cut	Low	0.0/0.8

According to the portion of the USGS Geologic Map of California, Santa Cruz Sheet, the lithology found within the limits of the project is largely terrace deposits.

If however, any fossiliferous remains are found during construction operations, **it is required** that construction be halted in the immediate vicinity of the discovery, until the District Archaeologist or District Paleontology Coordinator have the opportunity to review the site. Contact telephone numbers are: District Archaeologist, Krista Kiaha (805) 542-4799, or District Paleontology Coordinator, Isaac Leyva (805) 549-3487. Remediation may include removal, preparation and curation of any significant remains.

IVL/ivl
Matthew Palmer – CR Planner

H:\WP\Paleont\Scrm\cabpleo.doc

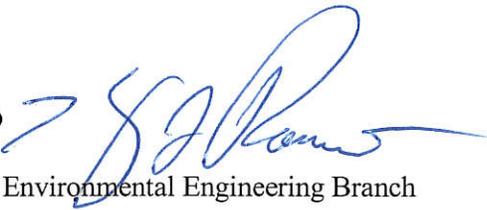
Memorandum

*Serious drought.
Help save water!*

To: Matthew Palmer
Associate Environmental Planner
Central Region Special Projects Branch

October 16, 2015

File: 05-1C6700
SCR-17 PM 0.1/0.4
EA- 05- 1C6700
Project ID 0512000194

From: Ken Romero 
Branch Chief
Central Region Environmental Engineering Branch

Subject: **AIR, NOISE AND WATER REPORT FOR SAFETY PROJECT ON STATE ROUTE 17 IN SANTA CRUZ COUNTY.**

An air, noise and water study for the subject project was conducted by review of Photolog, maps, and data bases to assess potential environmental impacts.

Project Description

This Draft Project Report (DPR) proposes to improve the safety of southbound Route 17 (SR-17) in Santa Cruz County from the southbound exit ramp to Route 1 (SR-1), PM 0.1 to the entrance ramp from Pasatiempo Drive, PM 0.4. Due to the higher than average collision rate, the project proposes to construct a retaining wall and widen outside shoulder to 10-ft in order to improve stopping sight distance.

Build Alternatives

Design Option 1 - Soil Nail Wall

This design option proposes to construct a soil nail wall as a retaining wall for the cut slope area between "RW1" Sta 2+33.89 to Sta 9+90.00. Drainage work will include replacement of existing drainage inlets and installing additional inlets in front of the wall connected to a 24" RCP trunk line that drains into an existing inlet in a gully at "RW1" Sta 2+15. Most of the work will be performed in the state right of way, but permanent construction easements will be required for the soil nails from "RW1" Sta 2+50 to Sta 6+50.

Design Option 2 - Soldier Pile Wall

This design option proposes to construct a soldier pile as a retaining wall for the cut slope area. Drainage work will include a gutter, risers & inlets at the back of the wall and replacement of existing drainage inlets and installing additional inlets in front of the wall, all connected to a 24" RCP trunk line that drains into an existing inlet in a gully at "RW1" Sta 2+15. Most of the work will be performed in the state right of way, but permanent R/W acquisition will be required from "RW1" Sta 5+50 to Sta 9+90

Design Option 3 - Type 1 Retaining Wall

This design option proposes to construct a Type 1 retaining wall for the cut slope area. Drainage work will include a gutter, risers & inlets at the back of the wall and replacement of existing drainage inlets and installing additional inlets in front of the wall, all connected to a 24" RCP trunk line that drains into an existing inlet in a gully at "RW1" Sta 2+15. Most of the work will be performed in the state right of way, but permanent R/W acquisition will be required from "RW1" Sta 5+50 to Sta 9+90.

The build alternatives propose to move the cut slope out of the sight line by constructing a retaining wall with a concrete barrier Type 60D at the bottom. In the area where there is a gully between "RW1" Sta 2+00 to Sta 2+33.89, Type 1 Retaining Wall with a concrete barrier Type 736 is proposed. The area between the edge of traveled way on the auxiliary lane and the wall will be paved, which includes a 10-ft shoulder. The paved area would be as wide as 25 feet. These build alternatives would provide standard stopping sight distance for a design speed of 55 mph. Rubberized Hot Mix Asphalt will not be used on this project due to the small quantity of asphalt required. No nonstandard features are proposed.

No-Build Alternative

The No-build Alternative would not make any improvements to the existing facility except for routine maintenance, and would not address any elements of the project's purpose and need.

Potential impacts to air, noise and water quality associated with the project are described below.

Air Quality

The proposed project is located within the North Central Coast Air Basin in Santa Cruz County. Table 1, shows the Santa Cruz County's Attainment Status for O₃, CO, PM, NO₂, SO₂, and H₂S.

Table 1

Constituent	Federal Classification	State Classification
PM ₁₀	Unclassified	Nonattainment
PM _{2.5}	Unclassified/Attainment	Attainment
Ozone	Unclassified/Attainment	Nonattainment
SO ₂	Unclassified	Attainment
H ₂ S	No Federal Standard	Attainment
NO ₂	Unclassified	Attainment
CO	Unclassified/Attainment	Unclassifiedt

According to 40 CFR Section 93.126 Table 2, this project falls under the category of "Shoulder improvements" program, and is exempt from the requirement that a conformity determination be made. Such projects may proceed toward implementation even in the absence of a conforming transportation plan and Transportation Improvement Program (TIP). This project does not interfere with the implementation of the Traffic Control Measures (TCMs).

During construction, the proposed project will generate air pollutants. The exhaust from construction equipment contains hydrocarbons, oxides of nitrogen, carbon monoxide, suspended particulate matter, and odors. However, the largest percentage of pollutants would be windblown dust generated during demolition, hauling, and various other activities. The impacts of these activities would vary each day as construction progresses. Dust and odors during construction could cause occasional annoyance and complaints from residence near the right of way lane.

Caltrans Standard Specifications pertaining to dust control and dust palliative requirement is a required part of all construction contracts and should effectively reduce and control emission impacts during construction. The provisions of Caltrans Standard Specifications, Section 14-9.01 "Air Pollution Control" and Section 14-9.02 "Dust Control" require the contractor to comply with the applicable Air Pollution Control District's rules, ordinances, and regulations.

In view of the above information, it is our opinion that no further investigation concerning air quality is required.

Noise

Transportation projects subject to Caltrans' Traffic Noise Analysis Protocol are projects defined as Type I projects in Section 23 Code of Federal Regulations §772. This section of the federal regulations describes a Type I project as: "A proposed federal or federal-aid highway project for the construction of a highway on a new location, or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment, or increase the number of through-traffic lanes." This project will neither increase the existing traffic capacity nor alter the location of the highway.

Environmental Consequences

The proposed project is not considered as a Type 1 Project, as it will not construct a highway on a new location or significantly change the alignment of the existing highway, the project is not subject to Caltrans' Traffic Noise Analysis Protocol. The project has the potential of having short-term noise impacts due to intermittent construction activities. No long-term noise impacts are anticipated.

Construction Noise

Construction Noise Impacts

Noise due to project construction will be intermittent and the intensity of it will vary. The degree of construction noise impacts may vary for different areas of the project site and depending on the construction activities. Long-term noise exposure descriptors are difficult to quantify due to the intermittent nature of construction noise. Highway construction is accomplished in several different phases. These phases and their estimated overall noise levels at the right-of-way can be characterized by the information in Table 2.

Table 2 Typical Construction Noise

Construction Phase	Leq(h), dBA	
	15 meters (50 feet) from Centerline	30 meters (100 feet) from Centerline
Clearing and Grubbing	86	83
Earthwork	88	85
Foundation	85	82
Base Preparation	88	85
Paving	89	86

Construction noise impacts can be assessed by comparing the existing noise levels with the expected noise levels produced by various construction activities. More detailed construction noise levels cannot be calculated at this time because some of the necessary data, such as the type of equipment, effective usage factor, and number of each equipment type, are not yet available.

According to the above information no adverse noise impacts from construction are anticipated because construction noise activities would be temporary and would be conducted in accordance with Caltrans Standard Specifications Section 14-8.02.

The following measures should be implemented in order to minimize noise and vibration disturbances during periods of construction:

Equipment Noise Control

- Use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).
- Utilize construction methods or equipment that will provide the lowest level of noise and ground vibration impact such as alternative low-noise pile installation methods.
- Turn off idling equipment.
- Temporary noise barriers should be used and relocated, as needed, to protect sensitive receptors against excessive noise from construction activities. Noise barriers can be made of heavy plywood, or moveable insulated sound blankets.

Administrative Measures

- Implement a construction noise and/or vibration monitoring program in order to limit the impacts.
- Limit construction activities to daytime hours, if possible. If nighttime construction is absolutely necessary, obtain the proper permits.
- Keep noise levels relatively uniform and avoid impulsive noises.
- Maintain good public relations with the community to minimize objections to the unavoidable construction impacts. Provide frequent activity updates of all construction activities.

A combination of mitigation techniques with equipment noise control and administrative measures can be selected to provide the most effective means to minimize effects of the construction activity impacts. Application of these mitigation measures will reduce construction related noise impacts; however, a temporary increase in noise and vibration may still occur.

The project would not be considered a Type 1 project and with the implementation of temporary construction noise mitigation measures, additional noise investigation in accordance with Caltrans' Traffic Noise Analysis Protocol is not required.

Water Quality

The project site is located in the Big Basin Hydrologic Unit, Hydrologic area Santa Cruz 304.12. There are no water bodies within the project limits. San Lorenzo River and Carbonera Creek are in the vicinity of the project. Both of these two water bodies are listed on the EPAs 303 (d) list as being impaired (San Lorenzo River – pathogens, Carbonera Creek – pathogens, nutrients, sedimentation/siltation).

The project would involve minor ground disturbance activities and has the potential of impacting short-term water quality in the area. No long-term water quality impacts are anticipated.

All short-term water quality impacts need to be addressed in the Design and Construction phase of the project. In order to address any potential impacts, Best Management Practices (BMPs) need to be selected and implemented in accordance with the Project Planning and Design Guide. The contractor, as required in Caltrans Standard Specification Section 13.1, must address all potential water quality impacts that may occur during construction.

Any potential impact (erosion, accidental spills of hazardous material and disruption of natural drainage patterns) must be addressed, eliminated or minimized to the maximum extent practicable during the design and construction by incorporating the appropriate permanent and temporary BMPs into the project. Before project initiation, the Caltrans' Stormwater Unit should be consulted to identify the appropriate management practices for all stormwater concerns. If the potential water quality impacts are correctly identified and mitigated by BMPs, it is unlikely that the proposed project will have any adverse effect on surface or groundwater quality. If the project disturbs one acre or more of soil, the following is required:

- A Notification of Intention (NOI) is to be submitted to the appropriate Regional Water Quality Control Board at least 30 days prior to the start of construction.

- A Stormwater Pollution Prevention Plan (SWPPP) is to be prepared and implemented during construction to the satisfaction of the Resident Engineer.
- A Notice of Termination (NOT) shall be submitted to the Regional Board upon completion of construction and site stabilization. A project will be considered complete when the criteria for final stabilization in the Construction General Permit is met.

If the project disturbs less than one acre of soil, a Water Pollution Control Program needs to be prepared by the contractor in accordance with Caltrans 2010 Standard Specification Section 13.1 – Water Pollution.

By incorporating proper and accepted engineering practices and BMPs, the proposed project will not produce significant impacts to water quality during construction or its operation.

In view of the proposed project, it is our opinion that no further investigation concerning water quality is needed to proceed with the project. In the event that the scope of work changes, please request additional investigation for this project

Questions and concerns about this report should be directed to Rajeev Dwivedi Engineering Geologist at (559) 445-6218.

Transportation Air Quality Conformity Findings Checklist

Project Name:	SR 17 Safety Project	
Dist-Co-Rte-PM:	05-SCR-17-0.1/0.4	EA: 05-1C6700
Federal-Aid No.:		
Document Type:	<input type="checkbox"/> 23 USC 326 CE <input type="checkbox"/> 23 USC 327 CE <input type="checkbox"/> EA <input type="checkbox"/> EIS	
<p>Step 1. Is the project located in a nonattainment or maintenance area for ozone, nitrogen dioxide, carbon monoxide (CO), PM2.5, or PM10 per EPA's <u>Green Book</u> listing of non-attainment areas?</p> <input type="checkbox"/> If no, go to Step 17. Transportation conformity does not apply to the project. <input checked="" type="checkbox"/> If yes, go to Step 2.		
<p>Step 2. Is the project exempt from conformity per <u>40 CFR 93.126</u> or <u>40 CFR 93.128</u></p> <input type="checkbox"/> If yes, go to Step 17. The project is exempt from all project-level conformity requirements (40 CFR 93.126 or 128) (check one box below and identify the project type, if applicable). <input checked="" type="checkbox"/> 40 CFR 93.126 Project type: <u>Shoulder Improvements</u> <input type="checkbox"/> 40 CFR 93.128 <input type="checkbox"/> If no, go to Step 3.		
<p>Step 3. Is the project exempt from regional conformity per <u>40 CFR 93.127</u></p> <input type="checkbox"/> If yes, go to Step 8. The project is exempt from regional conformity requirements (40 CFR 93.127) (identify the project type). Project type: <u> </u> <input type="checkbox"/> If no, go to Step 4.		
<p>Step 4. Is the project located in a region with a currently conforming RTP and TIP?</p> <input type="checkbox"/> If yes, the project is included in a currently conforming RTP and TIP per 40 CFR 93.115. The project's design and scope have not changed significantly from what was assumed in RTP conformity analysis (40 CFR 93.115[b]) Go to Step 8. <input type="checkbox"/> If no and the project is located in an isolated rural area, go to Step 5. <input type="checkbox"/> If no and the project is not located in an isolated rural area, STOP and do not proceed until a conforming RTP and TIP are adopted.		
<p>Step 5. For isolated rural areas, is the project regionally significant per 40 CFR 93.101, based on review by Interagency Consultation?</p> <input type="checkbox"/> If yes, go to Step 6. <input type="checkbox"/> If no, go to Step 8. The project, located in an isolated rural area, is not regionally significant and does not require a regional emissions analysis (40 CFR 93.101 and 93.109[I]).		
<p>Step 6. Is the project included in another regional conformity analysis that meets the isolated rural area analysis requirements per 40 CFR 93.109, including Interagency Consultation and public involvement?</p> <input type="checkbox"/> If yes, go to Step 8. The project, located in an isolated rural area, has met its regional analysis requirements through inclusion in a previously-approved regional conformity analysis that meets current requirements (40 CFR 93.109[I]). <input type="checkbox"/> If no, go to Step 7.		
<p>Step 7. The project, located in an isolated rural area, requires a separate regional emissions analysis.</p> <input type="checkbox"/> Regional emissions analysis for regionally significant project, located in an isolated rural area, is complete. Regional conformity analysis was conducted that includes the project and reasonably foreseeable regionally significant projects for at least 20 years. Interagency Consultation and public participation were conducted. Based on the analysis, the interim or emission budget conformity tests applicable to the area are met (40 CFR 93.109[I] and 95.105).¹ Go to Step 8.		
<p>Step 8. Is the project located in a CO nonattainment or maintenance area?</p> <input type="checkbox"/> If no, go to Step 9. CO conformity analysis is not required. <input type="checkbox"/> If yes, hot-spot analysis requirements for CO per the CO Protocol (or per EPA's modeling guidance, CAL3QHCR can be used with EMFAC emission factors²) have been met. Project will not cause or contribute to a new localized CO violation (40 CFR 93.116 and 93.123)³. Go to Step 9.		

¹ The analysis must support this conclusion before going to the next step.

² Use of the CO Protocol is strongly recommended due to its use of screening methods to minimize the need for modeling. When modeling is needed, the Protocol simplifies the modeling approach. Use of CAL3QHCR must follow U.S. EPA's latest CO hot spot guidance, using EMFAC instead of MOVES; see: <http://www.epa.gov/otaq/stateresources/transconf/projectlevel-hotspot.htm#co-hotspot>.

³ As of October 1, 2007, there are no CO nonattainment areas in California. Therefore, the requirements to not worsen existing violations and to reduce/eliminate existing violations do not apply.

<p>Step 9. Is the project located in a PM10 and/or a PM2.5 nonattainment or maintenance area?</p> <input type="checkbox"/> If no, go to Step 13. PM2.5/PM10 conformity analysis is not required.
<input type="checkbox"/> If yes, go to Step 10.
<p>Step 10. Is the project considered to be a Project of Air Quality Concern (POAQC), as described in EPA's <u>Transportation Conformity Guidance</u> for PM 10 and PM 2.5?</p> <input type="checkbox"/> If no, the project is not a project of concern for PM10 and/or PM2.5 hot-spot analysis based on 40 CFR 93.116 and 93.123 and EPA's Hot-Spot Analysis Guidance. Interagency Consultation concurred with this determination on _____. Go to Step 12.
<input type="checkbox"/> If yes, go to Step 11.
<p>Step 11. The project is a POAQC.</p> <input type="checkbox"/> The project is a project of concern for PM10 and/or PM2.5 hot-spot analysis based on 40 CFR 93.116 and 93.123, and EPA's Hot-Spot Guidance. Interagency Consultation concurred with this determination on _____. Detailed PM hot-spot analysis, consistent with 40 CFR 93.116 and 93.123 and EPA's Hot-Spot Guidance, shows that the project would not cause or contribute to, or worsen, any new localized violation of PM10 and/or PM2.5 standards. Go to Step 12.
<p>Step 12. Does the approved PM SIP include any PM10 and/or PM2.5 control measures that apply to the project, and has a written commitment been made as part of the air quality analysis to implement the identified SIP control measures? [(Control measures can be found in the applicable Federal Register notice at: http://www.epa.gov/otaq/stateresources/transconf/reg9sips.htm#ca.)]</p> <input type="checkbox"/> If yes, a written commitment is made to implement the identified SIP control measures for PM10 and/or PM2.5 through construction or operation of this project (40 CFR 93.117). Go to Step 14.
<input type="checkbox"/> If no, go to Step 13.
<p>Step 13a. Have project-level mitigation or control measures for CO, PM10, and/or PM2.5, included as part of the project's design concept and scope, been identified as a condition of the RTP or TIP conformity determination? AND/OR</p> <p>Step 13b. Are project-level mitigation or control measures for CO, PM10, and/or PM2.5 included in the project's NEPA document?</p> <p>AND</p> <p>Step 13c (applies only if Step 13a and/or 13b are answered "yes"). Has a written commitment been made as part of the air quality analysis to implement the identified measures?</p> <input type="checkbox"/> If yes to 13a and/or 13b and 13c, a written commitment is made to implement the identified mitigation or control measures for CO, PM10, and/or PM2.5 through construction or operation of this project. These mitigation or control measures are identified in the project's NEPA document and/or as conditions of the RTP or TIP conformity determination ¹ (40 CFR 93.125(a)). Go to Step 14.
<input type="checkbox"/> If no, go to Step 14
<p>Step 14. Does the project qualify for a 771.117(c)(22) or 771.117(c)(23) Categorical Exclusion pursuant to 23 USC 326 and is an Air Quality Conformity Analysis required to document any analysis required by Steps 1 through 13 of this form?⁴</p> <input type="checkbox"/> If yes, then Caltrans prepares the Air Quality Conformity Analysis and makes the conformity determination. No FHWA involvement is required. See the <u>AQCA Annotated Outline</u> . Go to Step 17.
<input type="checkbox"/> If no, go to Step 15.
<p>Step 15. Does the project qualify for any other Categorical Exclusion pursuant to 23 USC 326 (but NOT 771.117(c)(22) or 771.117(c)(23))?</p> <input type="checkbox"/> If yes, then no FHWA involvement is required and Caltrans makes the conformity determination through its signature on the CE form. An Air Quality Conformity Analysis (AQCA) is not needed. Go to Step 17.
<input type="checkbox"/> If no, go to Step 16.
<p>Step 16. Does the project require preparation of a Categorical Exclusion, EA, or EIS pursuant to 23 USC 327?</p> <input type="checkbox"/> If yes, then Caltrans submits a conformity determination to FHWA for FHWA's conformity determination. An AQCA is needed. See the <u>AQCA Annotated Outline</u> . <p>Date of FHWA air quality conformity determination: _____</p> <p>Go to Step 17.</p>
<p>Step 17. STOP as all air quality conformity requirements have been met.</p>
<p>Signature: <u>Rajeev S. Dwivedi</u></p> <p>Printed Name: <u>Rajeev L. Dwivedi</u> Date: <u>Oct 16-2015</u></p> <p>Title: <u>Engineering Geologist</u></p>

⁴ Please note that for ALL projects the project file must include evidence that one of the three following situation applies: 1) Conformity does not apply to the project area; or 2) The project is exempt from all conformity analysis requirements; or 3) The project is subject to project-level conformity analysis (and possibly regional conformity analysis) and meets the criteria for a conformity determination. The project file must include all supporting documentation and this checklist.