

ARCHAEOLOGICAL SURVEY REPORT

MISSION ROAD BICYCLE AND PEDESTRIAN IMPROVEMENTS PROJECT

COLMA, SAN MATEO COUNTY, CALIFORNIA

CALTRANS DISTRICT 4

FEDERAL AID NO. CML-5264 (006)

Prepared by: E. Timothy Jones September 12, 2019
E. Timothy Jones, M.A., RPA 15531 Date
Consultant Archaeologist
LSA
157 Park Place, Point Richmond, California 94801

Reviewed by: Kelli Alahan October 1, 2019
Kelli Alahan Date
Caltrans PQS, PI—Prehistoric Archaeology
Caltrans District 4, Office of Local Assistance
111 Grand Avenue, Oakland, California 94612

Approved by: T. Holstein 1 October 2019
Tom Holstein Date
District 4 Environmental Branch Chief
Caltrans District 4
111 Grand Avenue, Oakland, California 94612

USGS 7.5-minute topographic quadrangle: San Francisco South, Calif.
Acreage: 5.48 acres

CONFIDENTIAL

This report contains confidential cultural resources location information; report distribution should be restricted to those with a need to know. Cultural resources are nonrenewable and their scientific, cultural, and aesthetic values can be significantly impaired by disturbance. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the locations of cultural resources should be kept confidential. The legal authority to restrict cultural resources information is in Section 304 of the National Historic Preservation Act of 1966, as amended.

September 2019

SUMMARY OF FINDINGS

The Town of Colma, in conjunction with the California Department of Transportation and the Federal Highway Administration, propose to construct bicycle and safety improvements along 4,500 feet of Mission Road in Colma, San Mateo County (Appendix A: Figures 1-3). The proposed project would use federal funding assistance (Federal-Aid number CML-5264 (006)) and is, therefore, subject to the requirements of Section 106 of the National Historic Preservation Act.

This Archaeological Survey Report (ASR) has been prepared to address the California Department of Transportation's compliance with Section 106 as this relates to the identification of archaeological historic properties in the Area of Potential Effects for the undertaking (Appendix A: Figure 3a-3d). This ASR documents identification tasks, consisting of background research; outreach and consultation with Native American tribes; and an archaeological pedestrian survey.

Ground visibility in the APE at the time of the archaeological survey was generally poor due to existing roads, sidewalks, and landscaping obscuring the native ground surface. Unpaved surfaces were present in and adjacent to the APE—including an unpaved walkway, the proposed staging area, and an adjacent construction site—and these locations were closely inspected for archaeological materials. No archaeological cultural resources were identified in the APE during the pedestrian survey; two previous archaeological pedestrian surveys of the APE (Chavez 1977; Shoup et al. 2017), and Geoprobe excavations and archaeological monitoring at the northern end of the APE (Clark 2002, 2003) did not identify archaeological cultural resources.

The mapped surface geology of the APE consists of Holocene alluvial (Qal) and Pleistocene Colma Formation (Qc) deposits, which are mapped in the northern and southern halves of the APE, respectively (Bonilla 1998). Although Holocene alluvium is generally sensitive for buried precontact archaeological deposits, Geoprobe excavations and extensive archaeological monitoring conducted from the northern terminus of the current APE, where Holocene alluvium is mapped, to A Street in Daly City identified no archaeological deposits (Clark 2002, 2003).

Mission Road has functioned as a thoroughfare since the middle 19th century. While it is possible that isolated or sparse historic materials could occur within fill soil of the road's prism, it is unlikely that significant historic-period archaeological deposits, including hollow-filled features or sheet scatters, would occur within the project footprint.

For the reasons noted above, and the undertaking's limited ground disturbance, the project is unlikely to affect archaeological historic properties. The level of identification documented in this ASR is commensurate with the project's limited scope (36 CFR 800.4(b)(1)).

It is Caltrans' policy to avoid cultural resources whenever possible. Further investigations may be needed if the site[s] cannot be avoided by the project. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the project changes to include areas not previously surveyed.

TABLE OF CONTENTS

SUMMARY OF FINDINGS	i
TABLE OF CONTENTS	ii
1.0 INTRODUCTION	1
2.0 PROJECT LOCATION AND DESCRIPTION	2
2.1 Project Location	2
2.2 Project Description.....	2
3.0 SOURCES CONSULTED	4
3.1 Records Search	4
3.2 Literature and Map Review.....	6
3.3 Other Sources Consulted	7
3.4 Native American Consultation	7
4.0 BACKGROUND.....	10
4.1 Environment.....	10
4.2 Precontact Archaeology	11
4.3 Ethnography	12
4.4 History	13
5.0 FIELD METHODS	15
6.0 STUDY FINDINGS AND CONCLUSIONS	16
7.0 REFERENCES CITED	17

TABLE

Table A: Summary of Previous Archaeological Identification Efforts in the APE	5
Table B: Native American Consultation Summary	8

APPENDICES

A: FIGURES

B: NATIVE AMERICAN CONSULTATION CORRESPONDENCE

C: SURVEY PHOTOGRAPHS

D: NORTHWEST INFORMATION CENTER INVOICE AND BILLING WORKSHEET

1.0 INTRODUCTION

The Town of Colma (Town), in coordination with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), proposes to construct bicycle and safety improvements with green infrastructure along Mission Road in Colma, San Mateo County (Appendix A: Figures 1-2). This Archaeological Survey Report (ASR) was prepared for the undertaking and documents efforts to identify archaeological historic properties within the Area of Potential Effects (APE), as depicted on Figure 3 (Appendix A). All studies prepared for this undertaking were carried out in a manner consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the January 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* (Section 106 PA).

Qualified cultural resource management staff completed the background and identification tasks described in this ASR. E. Timothy Jones, M.A., prepared this ASR and conducted the pedestrian survey of the archaeological APE on May 14, 2019, the coverage of which is indicated on Figure 5 (Appendix A). Mr. Jones has 18 years' experience in northern and central California archaeology. Mr. Jones has a Master of Arts Degree in Cultural Resource Management from Sonoma State University, is Registered Professional Archaeologist 15531, and meets the Secretary of the Interior's *Professional Qualifications Standards* for Archeology.

2.0 PROJECT LOCATION AND DESCRIPTION

2.1 PROJECT LOCATION

The proposed project is in Colma within Mission Road right of way, between the intersection of this thoroughfare with El Camino Real/State Route 82 and Lawndale Boulevard to the north and south, respectively. Adjacent uses to the APE are a historic-period cemetery (Holy Cross Catholic Cemetery) to the east and various commercial and residential uses to the west. The project location is depicted on the attached portion of the U.S. Geological Survey *San Francisco South, Calif.*, map within unsectioned land of the Mexican-era *Buri* Rancho (Appendix A: Figure 2).

2.2 PROJECT DESCRIPTION

The Town—in cooperation with Caltrans District 4 Office of Local Assistance and using funding from Federal-Aid number CML-5264 (006)—would construct bicycle and safety improvements along 4,500 feet of Mission Road. Proposed improvements would address safety concerns expressed by the community and improve accessibility of pedestrian and bicycle facilities in compliance with the San Mateo County Comprehensive Bicycle and Pedestrian Plan and the Town's Circulation Plan, including Complete Streets and Green Infrastructure Policies.

The proposed project would implement safety-related improvements for pedestrians, bicyclists, and vehicles along Mission Road. Proposed improvements would not affect any known archaeological historic properties in the APE. (*See Section 3.2.1 for a discussion regarding the potential for unrecorded subsurface archaeological deposits in the APE.*) These improvements would include:

- Relocation and reconstruction of the existing curb, gutter, sidewalks, non-ADA compliant ramps, and driveway approaches. Existing sidewalks, curb and gutter, and driveway approaches along the west side of Mission Road would be relocated to the east in order to widen the sidewalk. On-street parking along these portions of the roadway would be eliminated except near the south end of the project. Curb ramps at all three entrances to Holy Cross Cemetery would be reconstructed to be ADA-compliant.
- Installation of sidewalks to provide continuous safe, and accessible pedestrian routes. New 5-foot-wide concrete sidewalks would be constructed to fill gaps in the existing sidewalk in order to provide continuous sidewalk on both sides of Mission Road.
- Extension of existing Class II bicycle lanes in the northbound direction. From the south entrance of the Holy Cross cemetery to the Lawndale Boulevard intersection, the sidewalk on the east side of Mission Road would be relocated to the east in order to accommodate a Class II bicycle lane in the northbound direction.
- Construction of bulbouts and high-visibility crosswalks with rectangular rapid flashing beacons (RRFBs). Three mid-block, high visibility crosswalks are proposed to provide safer pedestrian and bicycle crossings along the roadway. Proposed high-visibility crosswalks would replace three existing crosswalks, which would be removed. Proposed crosswalks would have rectangular

rapid flashing beacons to alert drivers when pedestrians cross the roadway. Pedestrians would activate the system using an ADA-compliant push button device.

- Installation of energy-efficient street lights. Approximately 23 new street lights would be installed at regular intervals along the east side of Mission Road.
- Construction of landscape planters/bioretenion areas with storm pipes and inlets for drainage and stormwater treatment purposes. Bioretention areas would be installed at three locations along the east side of the road and one location along the west side of the road. These features would remove pollutants and contaminants from storm water runoff prior to discharge into the Town's storm drain system. Bioretention areas would include 18 inches of engineered soil that provides a high percolation rate, as well as a suitable soil matrix for landscape planting. Soil would be placed atop 12 inches of Class II permeable rock per Caltrans specifications.

All work would occur within the existing roadway right of way. No permanent right of way acquisition would be required; however, temporary construction easements would be needed to conform the new driveway approaches to existing driveways within the private properties.

2.2.1 Area of Potential Effects

In accordance with Stipulations VI.B.8 and VIII.A of the Section 106 PA, the archaeological APE for the project was established in consultation between the Town and Caltrans Professionally Qualified Staff (PQS), Douglas Bright, Environmental Planner with Caltrans District 4. The APE was prepared in accordance with Attachment 3 of the Section 106 PA, which addresses delineation of the APE. Attachment 3 in turn refers to the standards at 36 CFR Part 800.16(d), which defines an APE as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.

The archaeological APE encompasses 5.48 acres (Appendix A: Figure 3). As is typical, the archaeological APE for the project is based on the project's limits of direct impacts, which includes all areas that could be subject to ground-disturbing activities. Ground disturbance associated with the project would involve the use of mechanical equipment, including a grader, backhoe, and compactor. All project staging would be located on a portion of property (APN 010-182-190) adjacent to proposed improvements within the Mission Road right of way. The depths of project ground disturbance (i.e., the "vertical APE") are approximately 1 to 2 feet for the majority of project improvements, including sidewalk, curb and gutter, and driveway approaches. Bioretention, street lights, and rapid flashing beacon excavations will extend to approximately 4 feet below surface.

3.0 SOURCES CONSULTED

Background research was done to obtain information on archaeological cultural resources within the APE and to determine the potential for such resources. The background research consisted of an archival records search, a literature review, and consultation with local Native American tribes.

3.1 Records Search

Archaeologist E. Timothy Jones conducted a records search at the Northwest Information Center (NWIC) on November 29, 2018 (NWIC File Number 18-1039, see Appendix D). The NWIC, an affiliate of the State of California Office of Historic Preservation (OHP), is the official State repository of cultural resource records and reports for San Mateo County.

The records search consisted of a review of cultural resource reports completed of the APE and archeological cultural resources recorded within 0.25-mile. The records search also included a review of the following State inventories:

- *California Inventory of Historic Resources* (California Office of Historic Preservation 1976);
- *Five Views: An Ethnic Historic Site Survey for California* (California Office of Historic Preservation 1988);
- *California Points of Historical Interest* (California Office of Historic Preservation 2019);
- *California Historical Landmarks* (California Office of Historic Preservation 2019); and
- *Directory of Properties in the Historic Property Data File* (California Office of Historic Preservation 2012).¹

3.1.1 Results

The records search did not identify any previously recorded archaeological cultural resources within the APE or the 0.25-mile search radius.

The closest recorded archaeological site is P-41-000409 (CA-SMA-299), located approximately 0.6 miles downstream Colma Creek from the southern end of the APE. When CA-SMA-299 was first recorded in 1989 it consisted of “occasional patches of shell and fire-cracked rock” along Colma Creek (Bocek 1989), although a survey and auger excavations at the site’s location in 1994 did not identify archaeological materials (Rice 1994).

Six previous cultural resource studies have been conducted of the APE (Chavez 1977; Clark 2002, 2003; Shoup et al. 2017; Shoup and Brack 1994a, 1994b), the locations of which are shown on Figure 4 (Appendix A). These surveys were done to address Section 106 and California Environmental Quality Act (CEQA) review requirements. Two of these previous studies (Shoup and Brack 1994a,

¹ The *Directory* includes the listings of the National Register of Historic Places, National Historic Landmarks, the California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest.

1994b) are historical resource inventories and evaluations that do not include identification efforts for archaeological historic properties, and these studies are not discussed further in this ASR.

Table A: Summary of Previous Archaeological Identification Efforts in the APE

Author (Date) / NWIC File No.	Identification Tasks	Results
Chavez (1977) / S-3043	Pedestrian survey of APE	Negative
Clark (2002) / S-24907	Subsurface Geoprobe testing at northern end of APE	Negative
Clark (2003) / S-26406	Archaeological monitoring at northern end of APE	Negative
Shoup et al. (2017) / S-49340	Pedestrian survey of APE	Negative

Source: Northwest Information Center, California Historical Resources Information System

Archaeologist David Chavez completed the first archaeological study of the APE in 1977. Chavez's study included a survey of two proposed wastewater infrastructure pipeline alignments, including within Mission Road right of way. Chavez's survey inspected "all vacant and accessible terrain adjacent to the pipeline corridors" (Chavez 1977:4). No archaeological cultural resources were identified, and Chavez (1977:6) concluded that the proposed project would have no adverse effects on any known cultural Resources.

Subsequent to Chavez's study, archaeologist Matthew Clark conducted subsurface excavations and archaeological monitoring for the Colma Creek Flood Control Project (Clark 2002, 2003). That project, which included the installation of box culverts and connecting pipeline between 2 m and 4.4 m below existing roadway and medians, extended from just south of the El Camino Real/ Mission Road intersection in the current APE northward to A Street in Daly City. Clark's subsurface excavations consisted of 14, 2-inch diameter Geoprobe excavations to variable depths of 4 to 8 feet below surface. One of the Geoprobe excavations ("soil probe #1") was done near the northern terminus of the current APE. That excavation identified a "laminae of dark clayey sand in a mottled sand matrix between 122 and 144 cm below current surface, and medium brown sandy clay between 244 and 366 cm" (Clark 2002:11). No radiocarbon assays were done as part of Clark's (2002) study, and therefore, the chronostratigraphy of underlying deposits was not indicated. No archaeological deposits were identified by Clark's subsurface excavations.

Due to the potential for buried archaeological deposits within the Colma Flood Control Project APE, Clark (2003) completed archaeological monitoring of project open trench construction, including at the northern terminus of the current APE. The archaeological monitoring—which lasted six months, the duration of project construction—identified no archaeological deposits within approximately 2 km of open trench construction. The subsurface stratigraphy observed during project trenching consisted of layers of Colma sand (an older landform that predates human occupation of the region) underlying modern fill, with occasional very thin lenses (< 10 cm) of darker soils eroded from nearby sources between Colma sands and fill (Clark 2003:5).

More recently, archaeologist Daniel Shoup (Shoup et al. 2017) completed an archaeological survey for the Daly City Wastewater Improvement Project, which included construction of wastewater pipeline and infrastructure between Daly City and Colma. That survey included inspection of visible ground surfaces adjacent to the proposed pipeline and identified no archaeological cultural

resources in the current APE. Shoup recommended an accidental discovery mitigation for the project, and the project's CEQA Initial Study requires work stoppage in the event that archaeological deposits or human remains are identified during construction (SMB Environmental, Inc. 2017).

3.2 Literature and Map Review

Publications, maps, and websites for archaeological, ethnographic, and environmental information about the APE and its vicinity were reviewed. The purpose of this review was to determine the general potential for unrecorded archaeological deposits—including buried deposits—within the APE.

3.2.1 Results

3.2.1.1 Geologic Map and Literature Review

The mapped surface soils in the APE consist of "Urban Land" and "Urban Land-Orthents" (Natural Resources Conservation Service 2019), indicating soils that have been affected by modern or historical filling and disturbance. These soils overlie Holocene alluvial (Qal) and Pleistocene Colma Formation (Qc) deposits (Bonilla 1998). The Holocene alluvial deposits are mostly comprised of sand and silt, but locally can contain clay, gravel, or boulders. These alluvial deposits are mapped at the northern half of the APE, roughly north of the gated entrance to the Holy Cross Cemetery on the east side of Mission Road. Colma Formation surface deposits are mapped at the southern half of the APE. Schlocker (1974:71) notes that the Colma Formation consists mostly of stream, colluvial, and eolian deposits, and at lower elevations may consist of moderately well-sorted sands. Geoarchaeological investigations have characterized the Colma Formation as an undulating surface with a well-developed surface soil (Anthropological Studies Center 2013:41).

Based on previous archaeological monitoring at the northern extent of the APE near its intersection with El Camino Real (Clark 2003), layers of Colma Formation sand underlying fill are at the location of mapped Holocene alluvial deposits (Bonilla 1998). This may indicate that the geologic surface mapping at this location may be in error, or younger landforms have been truncated or removed by previous construction. Due to its age, Colma Formation deposits would not overlie buried precontact archaeological deposits. The surface of the Colma Formation has variable potential to contain precontact archaeological deposits due to the timing of its burial, which spans the Late Pleistocene to Middle Holocene (Anthropological Studies Center 2013:41).

3.2.1.2 Historical Map Review

Sanborn Fire Insurance maps do not provide coverage of the APE or vicinity, indicating that physical development was too sparse to warrant inspection by the insurance industry in the late 19th and early 20th centuries.

The U.S. Geological Survey (USGS) and U.S. Coast and Geodetic Survey "T-sheet" maps reviewed indicate Mission Road has functioned as a transportation corridor for well over a century. The general alignment of Mission Road is depicted on the 1867 T-sheet. By 1896, Holy Cross Cemetery and occasional buildings are depicted along the road's frontage on the USGS topographic map. Subsequent editions of USGS topographic maps published during the first half of the 20th century indicate only minor adjustments to the road's alignment.

Mission Road has functioned as a travel corridor since the historic period, and numerous improvements have been done to the road during its existence. While it is possible that isolated or sparse historic materials could occur within fill soil of the road's prism, it is unlikely that significant historic-period archaeological deposits, including hollow-filled features or sheet scatters associated with residential, agricultural, or commercial uses would exist within the project footprint.

3.3 OTHER SOURCES CONSULTED

On December 4, 2018, the NAHC was contacted via email to request a search of that agency's Sacred Lands File of the project vicinity and to obtain a list of local Native American tribes that should be contacted for additional information. The NAHC is a State agency that maintains the Sacred Lands File, an official list of sites that are of cultural and religious importance to California Native American tribes.

Ms. Gayle Totton, NAHC Associate Governmental Program Analyst, responded via a letter dated December 5, 2018, that a search of the *"Sacred Lands File was completed for the area of potential effect (APE)...with negative results."* The NAHC also provided a list of seven local tribal representatives that may have information or concerns regarding potential historic properties in the APE (Appendix B).

3.4 NATIVE AMERICAN CONSULTATION

All seven tribal representatives identified by the NAHC were initially contacted regarding the project on May 13, 2019. This outreach was done to solicit information or concerns regarding the proposed project with respect to the undertaking's potential to adversely affect historic properties and to identify those tribes that may request consultation with Caltrans or FHWA, consistent with 36 CFR 800.2 and Stipulation IV of the Section 106 PA. Initial outreach was done via a letter that included a brief project description, a summary of the NWIC and NAHC search results, and figures showing the project location and APE (Appendix B). Follow-up contacts were made on June 3, 2019, with all tribes that had not responded to the initial request for input. Representatives from two tribes, the Amah Mutsun Tribal Band and the Ohlone Indian Tribe, provided input regarding the project, and their responses are included below.

Table B summarizes Native American consultation efforts completed to date for the project. Consultation correspondence is attached to this ASR under Appendix B.

3.4.1 Amah Mutsun Tribal Band

On June 3, 2019, Edward Ketchum, historian with the Amah Mutsun Tribal Band, responded via email that *"This project is outside of our tribal sphere of interest. In the past I recommended that these requests be forwarded to Muwekma Tribe. However, recently it has come to the attention of our tribal group that there are interested descendants of the Ramuytush of the San Francisco Peninsula. Our tribe has not determined who best represents this area. Therefore, I'll simply respond that we have no specific information for the site."* Mr. Ketchum provided no additional information or recommendations in his response.

Table B: Native American Consultation Summary

Tribe/Organization Contact	Affiliation	Response(s)
Environmental and Cultural Department 1550 Harbor Blvd., Rm. 100, West Sacramento, CA 95691 (916) 373-3710	NAHC	<i>"Sacred Lands File was completed for the area of potential effect (APE)...with negative results" (12/5/2018)</i>
Tony Cerda, Chairperson 244 E. 1st Street, Pomona, CA 91766 (909) 524-8041 (Cell); (909) 629-6081 rumsen@aol.com	Costanoan Rumsen Carmel Tribe	None
Irenne Zwielerin, Chairperson 789 Canada Road, Woodside, CA 94062 (650) 851-7489 (Cell) amahmutsuntribal@gmail.com	Amah Mutsun Tribal Band of San Juan Bautista	None
Edward Ketchum 35867 Yosemite Avenue, Davis, CA 95616 aerieways@aol.com	Amah Mutsun Tribal Band	<i>"...we have no specific information for the site." (6/3/2019)</i>
Charlene Nijmeh, Chairperson 20885 Redwood Road, Ste. 232, Castro Valley, CA 94546 (408) 464-2892 cnijmeh@muwekma.org	Muwerkma Ohlone Indian Tribe of the SF Bay Area	None
Andrew Galvan PO Box 3388, Fremont, CA 94539 (510) 882-0527 (cell) chochenyo@aol.com	The Ohlone Indian Tribe	<i>"Would you kindly provide me with a copy of the Phase I Literature Search and Report once it is completed? I know the San Bruno Shellmound is on the other side of the hill from the back side of Holy Cross Cemetery on Mission Road. Additionally, please provide me with a copy of the response sent to you from the Native American Heritage Commission, including all attachments, specifically the contact list for this particular project." (5/13/2019)</i> <i>"I would concur with your recommendations as provided on page 15 of the draft of the ASR." (6/10/2019)</i>
Ann Marie Sayers, Chairperson PO Box 28, Hollister, CA 95024 (831) 637-4238 ams@indiancanyon.org	Indian Canyon Mutsun Band of Costanoan	None
Valentin Lopez, Chairperson PO Box 5272, Galt, CA 95632 (916) 743-5833 vlopez@amahmutsun.org	Amah Mutsun Tribal Band	None

3.4.2 The Ohlone Indian Tribe

On May 13, 2019, Andy Galvan with the Ohlone Indian Tribe responded via email to the letter sent to him earlier that day: *"would you kindly provide me with a copy of the Phase I Literature Search and Report once it is completed? I know the San Bruno Shellmound is on the other side of the hill from the back side of Holy Cross Cemetery on Mission Road. Additionally, please provide me with a copy of the response sent to you from the Native American Heritage Commission, including all attachments, specifically the contact list for this particular project."*

On May 14, 2019, the NWIC results and NAHC response letter were sent to Mr. Galvan via the Hightail file sharing application, and a draft copy of this ASR was sent to Mr. Galvan via email on June 4, 2019.

On June 10, 2019, Mr. Galvan responded via email that *"I would concur with your recommendations as provided on page 15 of the draft of the ASR."* He also requested to be notified regarding any changes to the proposed project.

4.0 BACKGROUND

The project's environmental and cultural settings are briefly described below to characterize the broader context for archaeological sites and history of the region.

4.1 ENVIRONMENT

The APE is situated on the San Francisco Peninsula, which separates San Francisco Bay from the Pacific Ocean. Two distinct groups of rock comprise this peninsula, bedrock and surficial deposits, both of which differ greatly in age and composition. Colma is east of the San Andreas Fault where the basement rocks consist of the Franciscan Formation San Francisco Bay Block (Sloan 2006:173-174). The San Francisco Bay Block is exposed east and north of Colma at San Bruno Mountain and includes interbedded sandstone, graywacke, and shale. South of San Bruno Mountain, San Francisco Bay Block geology includes greenstone, chert, metamorphic rocks, and serpentinite. Chert, in particular, was an important local toolstone for tribes, and it is found at precontact archaeological sites throughout the San Francisco Peninsula. Surface deposits within the APE and immediate vicinity include poorly consolidated sand deposited 80,000 to 125,000 years ago in a narrow seaway that extended across the San Francisco Peninsula (Sloan 2006:183). Known as the Colma Formation, these older Pleistocene deposits are overlain by artificial fill and Holocene alluvium along Colma Creek (Bonilla 1998). Holocene age landforms may contain buried surfaces (paleosols) that were available for human habitation during the precontact period, and therefore, can be sensitive for buried archaeological deposits.

Colma Creek is west of, and roughly parallel to, the APE. The creek's headwaters are at San Bruno Mountain to the north, and it flows southeasterly through Colma until it empties into San Francisco Bay, just north of San Francisco International Airport. The Colma Creek watershed drains an approximately 16.6-square-mile area, including the slopes of San Bruno Mountain to the north and east, foothills of the Santa Cruz Mountain Range to the west and the Colma floodplain situated between these uplands. Much of Colma Creek, including the section adjacent to the APE, has been channelized and restricted to underground culverts to facilitate flood control and urbanization. Precontact archaeological deposits along the eastern San Francisco Peninsula tend to be situated adjacent to drainages, especially near where these drainages empty into the bay and surrounding tidal marshlands. Although no evidence of precontact human settlement has been identified along Colma Creek near the APE, this creek along with the nearby bayshore environment would have focused precontact settlement in this region, as evidenced by recorded archaeological sites elsewhere along this creek and near the bayshore.

The native vegetation of the Colma area consisted of coastal prairie-scrub mosaic (Küchler 1977). Coastal prairie-scrub is characterized by low to moderate-sized shrubs. Although no species is typical of all coastal scrub stands, common species include oatgrass (*Danthonia californica*), red fescue (*Festuca rubra*), and coyotebush (*Baccharis pilularis*). The surrounding uplands consisted of mixed hardwood forest, which is characterized by low to medium-tall, broad-leaved evergreen forest with an admixture of deciduous broad-leaved and needle-leaved trees. Mixed hardwood forest species include madrone (*Arbutus menziesii*), coast live oak (*Quercus agrifolia*), and canyon oak (*Quercus chrysolepis*).

As evidenced in the botanical and faunal assemblages from nearby precontact archaeological sites, the native vegetation of the San Francisco Peninsula as well as nearby bay and marine habitats supported several economically important species. Abundant terrestrial foods included acorns from multiple oak species and other nuts, berries, small seeds, black-tailed deer (*Odocoileus hemionus*), rabbit (*Sylvilagus* sp.), and tule elk (*Cervus nannodes*). Marine and littoral species collected and hunted include California hornshell (*Cerithidea californica*), oyster (*Ostrea lurida*), bay mussel (*Mytilus edulis*), clams (*Macoma nasuta* and *Saxidomus nuttalli*), barnacle (*Balanus* sp.), sea otter (*Zalopus californicus*), sturgeon (*Ancipenser* sp.), bat ray (*Myliobatis* sp.), and smelt (*Atherinidae* sp.).

4.2 PRECONTACT ARCHAEOLOGY

The Archaic-Emergent cultural sequence developed by Fredrickson (1974) is commonly used to interpret the precontact occupation of the San Francisco Bay Area. Fredrickson's cultural sequence has been updated (Milliken et al. 2007), however, to account for more recent radiocarbon and archaeological data informing the timing and nature of Native Californian occupation prior to Euro-American contact. The updated sequence—briefly summarized below—consists of the Early Holocene/Lower Archaic Period (8000-3500 cal BC), the Early Period/Middle Archaic (3500-500 cal BC), Lower Middle Period/Initial Upper Archaic (500 cal BC-AD cal 430), Upper Middle Period/Late Upper Archaic (cal AD 430-1050), and the Initial Late Period/Lower Emergent (cal AD 1050 to 1550).

The Early Holocene is characterized by “a generalized mobile forager pattern” as indicated by assemblages containing milling slabs and hand stones and large wide-stemmed and leaf-shaped projectile points (Milliken et al. 2007:114). Early Holocene archaeological sites are rare, with the scarcity of these sites likely attributable to population and geomorphic reasons. These reasons include (1) low population density and a mobile foraging adaptation, which would have been less likely to result in an archaeological trace; (2) burial of these ancient deposits beneath several feet alluvial and colluvial sediments; and (3) inundation of Early Holocene surfaces due to sea level rise. Early Holocene deposits have been identified at a few scattered locations in central California. The closest evidence for Early Holocene occupation to the APE is from CA-SCL-178 north of Morgan Hill, where rabbit bones from a burned earth feature identified 450 cm below the surface yielded a radiocarbon date of 9430 cal BP (Fitzgerald and Porcasi 2003).

Although local variations occur, the Early Period is generally marked by increased sedentism, regional trade, and symbolic integration. Locally, the Early Period is sometimes referred to as the “Early Bay Complex,” which Stanford University archaeologist Bert Gerow identified at CA-SMA-77 in East Palo Alto. At the time of Gerow's analysis (Gerow 1968, 1974), CA-SMA-77 was one of the earliest known occupations of the Bay Area, and included a mortuary complex and assemblage that was distinct from coeval sites previously discovered in the Delta region of central California. Since Gerow's study, other Early Period sites have been identified in the Bay Area, including at CA-SMA-40, a nearby bayshore shellmound in South San Francisco, where radiocarbon data indicates occupation to circa 5100 B.P. (Clark 1998:158). Generally, Early Period assemblages indicate a transition from a forager adaption to semi-sedentism, as observed in the archaeological record of bayshore shellmounds with the presence of mortars and pestles and a burial complex with ornamental grave associations (Hylkema 2002:243; Milliken et al. 2007:115). Trade and symbolic

integration is evidenced by stylistically distinct marine shell ornaments, including rectangular *Olivella* and *Haliotis* shell ornaments (Elsasser 1978:38).

Symbolic integration systems and technology evolved during the Lower Middle Period. At the onset of the Middle Period—referred to as the Early-Middle Transition (EMT)—rectangular shell beads, markers of the Early Period, are replaced in the archaeological record with stylistically new beads, including split-beveled and saucer *Olivella*. Other artifacts were also introduced during this period, including barbless fish spears, elk femur spatula, tubes, whistles, and bone basketry awls (Elsasser 1978:39). Culturally distinct traits—most notably a mortuary complex that included extended burial posture—appears by the Upper Middle Period, suggesting migration of a new population. This new population, known as the Meganos Aspect, migrated from the San Joaquin Delta to most of the East Bay’s interior valleys and northern Santa Clara Valley beginning during the EMT and climaxed during the Upper Middle Period circa cal AD 1000 (Bennyhoff 1994).

The Initial Late Period represents the ethnographically documented cultures present at the time of European contact. This period is marked in part by increased sedentism; resource intensification, including increased use of small seeds and nuts to support growing populations; status ascription and social stratification observed in burial practices; and the emergence of the Kuksu Cult, a ceremonial system that unified several language groups in Central California at the time of European contact. In the southern San Francisco Bay area, Late Period components are characterized by assemblages that include serrated projectile points; mixed assemblages of rectangular sequin, square saddle, and split-punched *Olivella* shell beads; circular edge-incised and banjo-shaped *Haliotis* pendants; well-shaped mortars and pestles, including “flower pot” types; bone and antler harpoons; polished stone tobacco pipes with flanged mouthpieces, and ground and polished “charmstones” that included piled forms found in pre-Late Period contexts and new forms with tapered proximal ends (Hylkema 2002:247, 249).

4.3 ETHNOGRAPHY

Colma is within the ancestral territory of the Costanoan, also commonly referred to as Ohlone. Ohlone territory consisted of the area from the southern edge of the Carquinez Strait to a portion of the Big Sur and Salinas rivers south of Monterey Bay, to approximately 50 miles inland from the coast (Levy 1978).

Ohlone is a sub-family of the Utian language group, which includes Miwokan languages spoken by tribes in the North Bay, Clear Lake Basin, and the Consumnes, Mokelumne, and lower Sacramento River drainages of the Central Valley and western Sierra foothills. Linguists have identified six Ohlone languages (Milliken et al. 2009:35). San Francisco Bay Costanoan was spoken by Ohlone of the Peninsula, East Bay, and South Bay, with the Ramaytush dialect spoken by tribes on the San Francisco Peninsula.

The Ohlone lived in “tribelets” or village communities, which were autonomous political units that occupied a distinct territory (Kroeber 1955). These communities generally consisted of one main village occupied year-round and a series of smaller hamlets and resource gathering and processing locations occupied intermittently or seasonally. Tribe population ranged between 50 and 500 persons and was largely determined by the carrying capacity of a tribe’s territory. At the time of

Euro-American contact, the *Urebure* tribe occupied territory that included present-day Colma (Milliken 1995:258-259).

Ohlone groups employed a gender-based division of labor to hunt and gather food. Women gathered and processed a variety of nuts, seeds, and berries (Levy 1978:491). Important food staples included acorns gathered from different oak species; nuts from the buckeye tree; hazelnuts; grassland and plant seeds from buttercup, chia, redmaids, tarweed, and grey pine; wild strawberries, elderberries, madrone berries; and wild grapes. The diet was supplemented with hunting and gathering numerous creek, shore, and terrestrial species (Levy 1978:491-492; Margolin 1978:40). Small creeks in the hills were fished for trout, while groups with access to bay and estuarine resources acquired shellfish, waterfowl, salmon, sturgeon, and lamprey eels. Larger terrestrial mammals (e.g., grizzly bear, Roosevelt elk, and black tailed deer) were hunted with the bow and arrow while communal drives and nets were used to capture smaller game (e.g., rabbits, mice, and rats). In addition to being a source of food, some larger mammals had ceremonial and religious importance, as evidenced by ceremonial burials of elk, coyotes, wolves, and bears in the archaeological record (Cambra et al. 1996; Pastron and Bellifemine 1999).

Resources were distributed via trade networks between the Ohlone and neighboring groups (Davis 1961:19). Ohlone traded abalone, mussels, salt, *Olivella* shells, and bows to the Sierra Miwok and Yokuts groups to the east. Pinon nuts obtained from the Yokuts are the only ethnographically documented import of Ohlone groups, although undoubtedly other significant economic items, including obsidian used for tools, were imported as well. Relations with neighboring groups were also established and maintained through exogamy. Mission records, for example, indicate that as much as 80 percent of *Urebure* married a spouse from a surrounding tribe (Milliken et al. 2009:66).

By the late 18th century, Spanish exploration and settlement of the Bay Area had dramatically transformed Ohlone culture. Spanish settlers moved into northern California and established the mission system. Mission records indicate that all *Urebure* were baptized during the first wave of baptisms at Mission Dolores in San Francisco, between 1777 and 1786 (Milliken 2009:99). Following the secularization of the missions in 1834, many Ohlone worked as manual laborers on ranchos (Levy 1978:486).

4.4 HISTORY²

The European Settlement that began in the 1850s established Colma as an important agricultural epicenter. The earliest settlers established farms and ranches, many of which were self-sustaining. Among the first to settle the area were Irish immigrants who cultivated potatoes throughout the 1850s up until 1877, with many of the larger operations employing Chinese laborers. The relatively short-lived potato industry ended when blight attacked the potato crop and killed all the potatoes before they were harvested. Many of the Irish left Colma after the failure of the potato industry and sold off their lands to other immigrants. The next wave of immigrant farmers came between 1908-1942, many of whom were of Italian descent. These immigrants produced cabbage, Brussels sprouts, artichokes, beets, turnips and carrots. It was largely in part to the newly immigrated Italians that the

² This section is adapted in part from the *Historical Resources Element, Town of Colma General Plan* (Town of Colma 2015).

agriculture, floriculture and livestock industries flourished. A historic district, the Frank Lagomarsino Vegetable Farm, is within the project's architectural APE and consists of six former farmhouses associated with Colma's early Italian immigrants (Appendix A: Figure 3d, MR #20-23).

Historically, Mission Road and adjacent railroads have served as an important thoroughfare for the region. In the mid/late 1850s, when Colma was served by the Overland Stagecoach route that connected San Francisco to San Jose, commercial activity developed at the intersections of Mission Road (now El Camino Real) and San Pedro Road. The "School House Station" railroad depot was constructed in 1863 also near this intersection, which served the San Francisco and San Jose Railroad, or, what later became the Southern Pacific Railroad.

As a result of Colma's role as a crossroads and waypoint, saloons and roadhouses had a strong presence early on as some of the first commercial businesses. In 1890, six of Colma's twenty businesses were saloons and by 1915, 15 of the 49 businesses were saloons. Many of the saloons and eateries were located along Mission Road. One notable early building was the Brooks and Carey Saloon, established in 1883. Sold in 1929, the saloon is today known as "Molloy's" and is within the project's architectural APE (Appendix A: Figure 3b, MR #13a).

Today, Colma is probably best known its cemeteries, two of which are in the architectural APE: Holy Cross and Cypress Lawn (Appendix A: Figure 3a, MR #1-2). The earliest cemetery developed in Colma was Holy Cross, constructed on a former potato patch in 1887. Holy Cross was followed by six more cemeteries established in Colma during the 19th century, including Cypress Lawn, all clustered on either side of Mission Road (now El Camino Real and Mission Road to the south) with the eastern portions reaching Hillside Boulevard and those on the west abutting Junipero Serra Boulevard. These cemeteries were established as nearby San Francisco moved to redevelop cemeteries in that city to accommodate land speculators and politicians. Over several years burials were moved from San Francisco's cemeteries further and further to the outskirts of town, some being exhumed and re-buried up to three times. Many would find their final resting place eight miles outside San Francisco in the town of Colma.

In 1912 the San Francisco Board of Supervisors declared intent to evict all cemeteries in their jurisdiction, and by January 1914, they had sent removal notices to all cemeteries stating that the cemeteries were "a public nuisance and a menace and detriment to health and welfare of City dwellers." Subsequent legal battles delayed the removals. Between 1937 and 1941, all remaining graves were relocated to Colma.

5.0 FIELD METHODS

Archaeologist E. Timothy Jones surveyed the APE on May 14, 2019. Overall, ground visibility in the APE was generally poor due to existing roads, sidewalks, and landscaping obscuring the native ground surface. Unpaved surfaces were present in the APE—including an unpaved walkway and the proposed staging area—and these locations were closely inspected for archaeological materials. Although outside of the archaeological APE, a construction site on APN 011-370-220 (“Veteran’s Village”) immediately adjacent to the APE, included recently excavated and exposed soil which was inspected for archaeological materials and midden soil from the public right of way. A map showing the archaeological survey coverage is included in Appendix A (Figure 5). Representative photographs of survey conditions in the APE are included in Appendix C.

No archaeological cultural resources were identified in the APE.

6.0 STUDY FINDINGS AND CONCLUSIONS

No archaeological cultural resources were identified as a result of this study. Outreach and consultation with local Ohlone tribal representatives did not identify project-specific information or concerns. The Ohlone Indian Tribe did indicate that they concur with the recommendations of this draft ASR.

The project's potential to adversely affect unrecorded archaeological historic properties is limited. Pleistocene Colma formation deposits are mapped at the southern half of the APE, and due to the antiquity of this formation, buried precontact archaeological deposits would not occur in this formation. Holocene alluvium is mapped at the northern half of the APE, and there is a general potential to identify buried precontact archaeological deposits in this landform. This potential, however, appears limited in the APE since previous Geoprobe excavations and archaeological monitoring within an area along Colma Creek in Holocene alluvium did not encounter archaeological deposits.

While deep excavations would occur at proposed bioretention areas, street lights, and rapid flashing beacons to an approximate depth of 4 feet below surface, these deeper disturbances would be localized. The majority of project excavation is limited to within 2 feet of the surface. Based on the limited excavation, therefore, the undertaking is unlikely to affect historic properties, and the level of identification documented in this ASR is commensurate with the project's limited scope (36 CFR Section 800.4(b)(1)).

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

7.0 REFERENCES CITED

Anthropological Studies Center

- 2013 *Archaeological Research Design and Treatment Plan for the 5M Project, San Francisco, California*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.

Bocek, Barbara

- 1989 California Department of Parks and Recreation Archaeological Site Record for P-41-000409/CA-SMA-299. On file, Northwest Information Center, Sonoma State University, Rohnert Park, California.

Bonilla, M.G.

- 1998 *Preliminary Geologic Map of the San Francisco South 7.5' Quadrangle and Part of the Hunters Point 7.5' Quadrangle, San Francisco Bay Area, California*. U.S. Geological Survey, Washington, D.C.

California Department of Transportation (Caltrans)

- 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*. California Department of Transportation, Sacramento.

California Office of Historic Preservation

- 1976 *California Inventory of Historic Resources*. California Department of Parks and Recreation, Sacramento.
- 1988 *Five Views: An Ethnic Sites Survey for California*. California Department of Parks and Recreation, Sacramento.
- 2012 Directory of Properties in the Historic Property Data File, April 5. California Office of Historic Preservation, Sacramento.
- 2019 California Historical Resources. Electronic document, <http://ohp.parks.ca.gov/ListedResources/?view=county&criteria=1>, accessed January 2, 2019.

Cambra, Rosemary, Alan Leventhal, Laura Jones, Julia Hammett, Les Field and Norma Sanchez

- 1996 *Archaeological Investigations at Kaphan Umux (Three Wolves) Site, CA-SCL-732: A Middle Period Prehistoric Cemetery on Coyote Creek in Southern San Jose, Santa Clara County, California*. Ohlone Families Consulting Services, San Jose.

Chavez, David

- 1977 *Cultural Resources Evaluation of the Colma Wastewater Collection System, Town of Colma, San Mateo County, California*. David Chavez Consulting Archaeologist, Mill Valley, California.

Clark, Matthew R.

- 1998 *Evaluative Archaeological Investigations at the San Bruno Mountain Mound Site, CA-SMA-40, South San Francisco, California*. Holman & Associates Archaeological Consultants, San Francisco.
- 2002 *Colma Creek Flood Control Project Archaeological Monitoring Plan*. Holman and Associates Archaeological Consultants, San Francisco.
- 2003 *Colma Creek Flood Control Project Final Report of Archaeological Monitoring*. Holman and Associates Archaeological Consultants, San Francisco.

Gobalet, Kenneth W., Peter D. Schulz, Thomas A. Wake and Nelson Siefkin

- 2004 Archaeological Perspectives on Native American Fisheries of California, with Emphasis on Steelhead and Salmon. *Transactions of the American Fisheries Society* 133(4):801-833.

Hylkema, Mark G.

- 2002 Tidal Marsh, Oak Woodlands, and Cultural Florescence in the Southern San Francisco Bay Region. In *Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by J. M. Erlandson and T. L. Jones, pp. 233-262. Cotsen Institute of Archaeology, University of California, Los Angeles.

Kroeber, Alfred L.

- 1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Washington, D.C.
- 1955 Nature of the Land-Holding Group. *Ethnohistory* 2:303-314.

Küchler, A. W.

- 1977 *Natural Vegetation of California*. University of Kansas, Lawrence.

Milliken, Randall

- 1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area, 1769-1810*. Ballena Press Anthropological Papers. Ballena Press, Menlo Park, California.

Milliken, Randall, Lawrence H. Shoup and Beverly R. Ortiz

- 2009 *Ohlone/Costanoan Indians of the San Francisco Peninsula and their Neighbors, Yesterday and Today*. Archaeological and Historical Consultants, Oakland, California.

Milliken, Randall, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Thomas M. Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottsfield, Donna Gillette, Viviana Bellifemine, Eric Strother, Robert Cartier and David A. Fredrickson

- 2007 Punctuated Culture Change in the San Francisco Bay Area. In *California Prehistory: Colonization, Culture, and Complexity*, edited by T. L. Jones and K. A. Klar, pp. 99-123. AltaMira Press, Lanham, Maryland.

Natural Resources Conservation Service

- 2019 Web Soil Survey, <http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>, accessed February 8, 2019.

Pastron, Allen G. and Viviana Bellifemine (editors)

1999 *Archaeological Investigations at CA-SCL-674: The Rubino Site, City of San Jose, Santa Clara County, California. Final Report, Volume I.* Coyote Press, Salinas, California.

Rice, Carolyn

1994 California Department of Parks and Recreation Archaeological Site Record for P-41-000409/CA-SMA-299. On file, Northwest Information Center, Sonoma State University, Rohnert Park, California.

Schlocker, Julius

1974 *Geology of the San Francisco North Quadrangle, California.* Geological Survey Professional Paper No. 782. U.S. Department of the Interior, Washington, D.C.

Shoup, Daniel, and Mark Brack

1994a *A Historic Resources Evaluation Report of Seven Colma Cemeteries, Colma, California.* Archaeological Historical Consultants, Oakland.

1994b *Historic Architectural Survey Technical Report.* Archaeological Historical Consultants, Oakland.

Shoup, Daniel, Shannon Guenther, and Kim Wong

2017 *Cultural Resources Survey Report, Daly City Wastewater Improvement Project, San Mateo County, California.* Archaeological/Historical Consultants, Oakland.

SMB Environmental, Inc.

2017 *Daly City Expanded Tertiary Recycled Water Project. Public Draft, Initial Study/Mitigated Negative Declaration.* SMB Environmental, Roseville, California.

Town of Colma

2015 Draft Historical Resources Element, Town of Colma General Plan. Electronic document, <https://www.colma.ca.gov/documents/draft-historic-resources-element/>, accessed June 3, 2019.

U.S. Coast Survey

1867 *Map Showing the Approaches to San Francisco, California.* U.S. Coast Survey Sheet T-1067. U.S. Coast Survey, Washington, D.C.

1899 *Ingleside to Calera Valley, California.* U.S. Coast Survey Sheet T-2483. U.S. Coast Survey, Washington, D.C.

U.S. Geological Survey

1896 *California San Mateo Sheet.* 15-minute topographic quadrangle. U.S. Geological Survey, Washington, D.C.

1915 *California San Mateo Quadrangle.* 15-minute topographic quadrangle. U.S. Geological Survey, Washington, D.C.

1947 San Francisco South Quadrangle, California. 7.5-minute topographic quadrangle. U.S. Geological Survey, Washington, D.C.

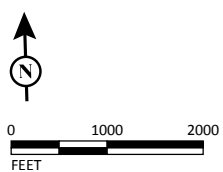
APPENDIX A

FIGURES

- Figure 1: Study Vicinity
- Figure 2: Study Location
- Figure 3: Area of Potential Effects
- Figure 4: Previous Cultural Resource Studies
- Figure 5: Archaeological Survey Coverage



FIGURE 1



SOURCE: National Geographic (c) 2018; Esri World Street Map (c) 2018.

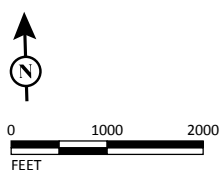
I:\COL1801\GIS\Maps\Cultural\Report\Figure 1_Study Vicinity.mxd (5/15/2019)

*Mission Road Bicycle and
Pedestrian Improvements Project
Colma, San Mateo County, California
Federal Aid No. CML-5264 (006)*

Study Vicinity



FIGURE 2



SOURCE: USGS 7.5-minute Topo Quad - San Francisco South, Calif. (1980).

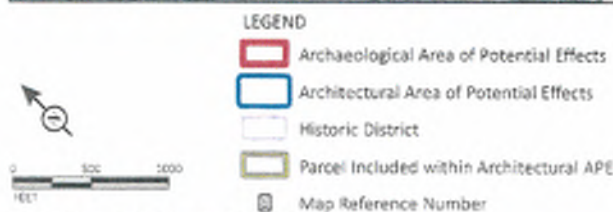
I:\COL1801\GIS\Maps\Cultural\Report\Figure 2_Study Location.mxd (5/15/2019)

Mission Road Bicycle and
Pedestrian Improvements Project
Colma, San Mateo County, California
Federal Aid No. CML-5264 (006)

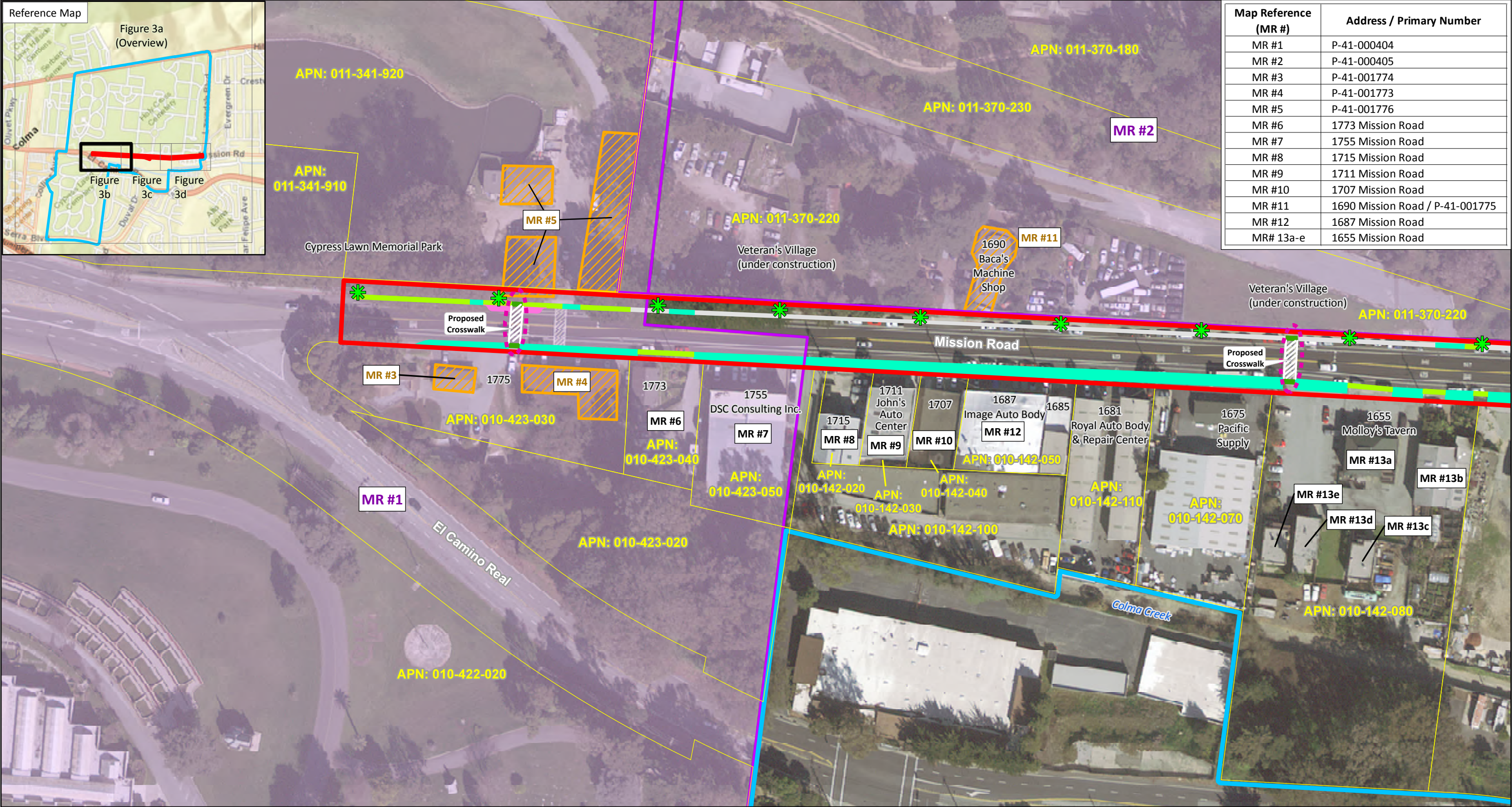
Study Location



FIGURE 3a



Mission Road Bicycle and
 Pedestrian Improvements Project
 Colma, San Mateo County, California
 Federal Aid No. CML-5264 (006)
 Area of Potential Effects



Map Reference (MR #)	Address / Primary Number
MR #1	P-41-000404
MR #2	P-41-000405
MR #3	P-41-001774
MR #4	P-41-001773
MR #5	P-41-001776
MR #6	1773 Mission Road
MR #7	1755 Mission Road
MR #8	1715 Mission Road
MR #9	1711 Mission Road
MR #10	1707 Mission Road
MR #11	1690 Mission Road / P-41-001775
MR #12	1687 Mission Road
MR# 13a-e	1655 Mission Road

LEGEND

Architectural Area of Potential Effects

Archaeological Area of Potential Effects

Existing Sidewalk to Remain

Parcel Included within Architectural APE

Proposed Project

5' Concrete Sidewalk

Driveway or Driveway Approach

New Curb Ramp

Bioretention Area

Cultural Resources

Historic District

Adjacent District Element

Proposed Rectangular Rapid Flashing Beacon at Proposed Crosswalk

Proposed Streetlight

FIGURE 3b

Mission Road Bicycle and Pedestrian Improvements Project
Colma, San Mateo County, California
Federal Aid No. CML-5264 (006)
Area of Potential Effects



Map Reference (MR #)	Address / Primary Number
MR #2	P-41-000405
MR# 13a-e	1655 Mission Road
MR #14	1700 El Camino Real
MR #15	2110 Hillside Blvd. / P-41-001780
MR #16	1545 Mission Road / P-41-001779
MR #17	1545 Mission Road / P-41-001791
MR #18	1539 Mission Road / P-41-001815
MR #19	2110 Hillside Drive / P-41-001799
MR #20	1455 Mission Road / P-41-001803

0 50 100
FEET

LEGEND

- Architectural Area of Potential Effects
- Archaeological Area of Potential Effects
- Existing Sidewalk to Remain
- Parcel Included within Architectural APE
- Equipment Staging Area

Proposed Project

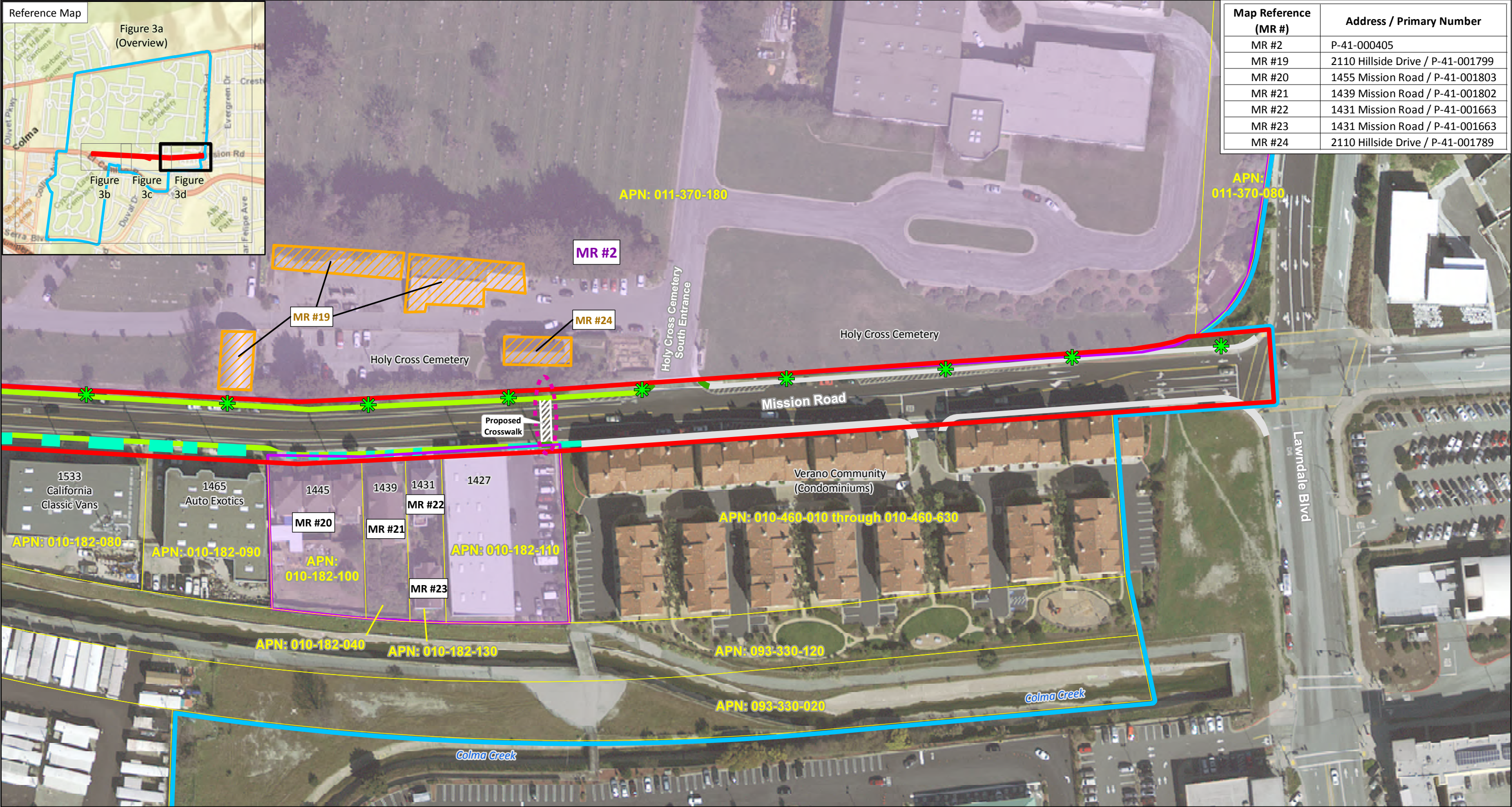
- 5' Concrete Sidewalk
- Driveway or Driveway Approach
- New Curb Ramp
- Bioretention Area

Cultural Resources

- Historic District
- Adjacent District Element
- Proposed Rectangular Rapid Flashing Beacon at Proposed Crosswalk
- Proposed Streetlight

FIGURE 3c

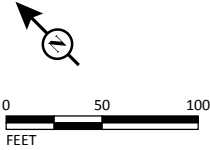
Mission Road Bicycle and Pedestrian Improvements Project
Colma, San Mateo County, California
Federal Aid No. CML-5264 (006)
Area of Potential Effects

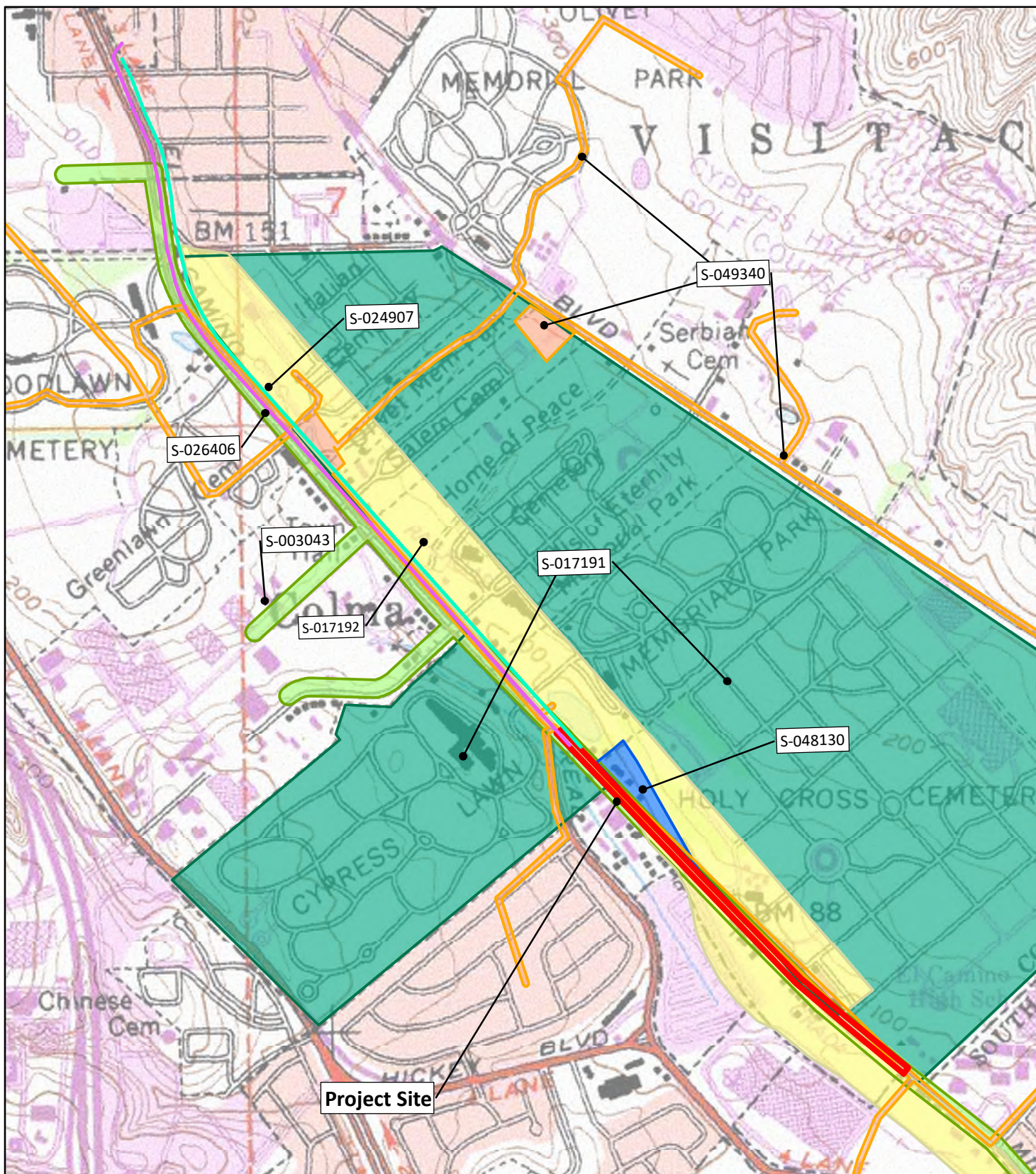


Map Reference (MR #)	Address / Primary Number
MR #2	P-41-000405
MR #19	2110 Hillside Drive / P-41-001799
MR #20	1455 Mission Road / P-41-001803
MR #21	1439 Mission Road / P-41-001802
MR #22	1431 Mission Road / P-41-001663
MR #23	1431 Mission Road / P-41-001663
MR #24	2110 Hillside Drive / P-41-001789

FIGURE 3d

Mission Road Bicycle and Pedestrian Improvements Project
Colma, San Mateo County, California
Federal Aid No. CML-5264 (006)
Area of Potential Effects





LSA

LEGEND

Project Site

Previous Cultural Study Areas

— S-024907

— S-026406

— S-003043

— S-017191

— S-017192

— S-048130

— S-049340

FIGURE 4

*Mission Road Pedestrian and Bicycle
Improvement Project
Town of Colma, San Mateo County, California
Previous Cultural Studies*

SOURCE: USGS 7.5-minute Topo Quad - San Francisco South, Calif. (1980); NWIC (11/2018).

I:\COL1801\GIS\Maps\Cultural\Figure X_Previous Cultural Studies.mxd (12/11/2018)



FIGURE 5A

LEGEND

- Archaeological Area of Potential Effects
- Parcel
- Survey Coverage
- Area of Recent Ground Disturbance Visually Inspected from Right of Way.



0 100 200
FEET

SOURCE: USGS Orthoimagery (2015).

I:\COL1801\GIS\Maps\Cultural\ASR\Figure 5_Survey Coverage Map.mxd (9/11/2019)

Mission Road Bicycle and
Pedestrian Improvements Project
Colma, San Mateo County, California
Federal Aid No. CML-5264 (006)
Survey Coverage Map

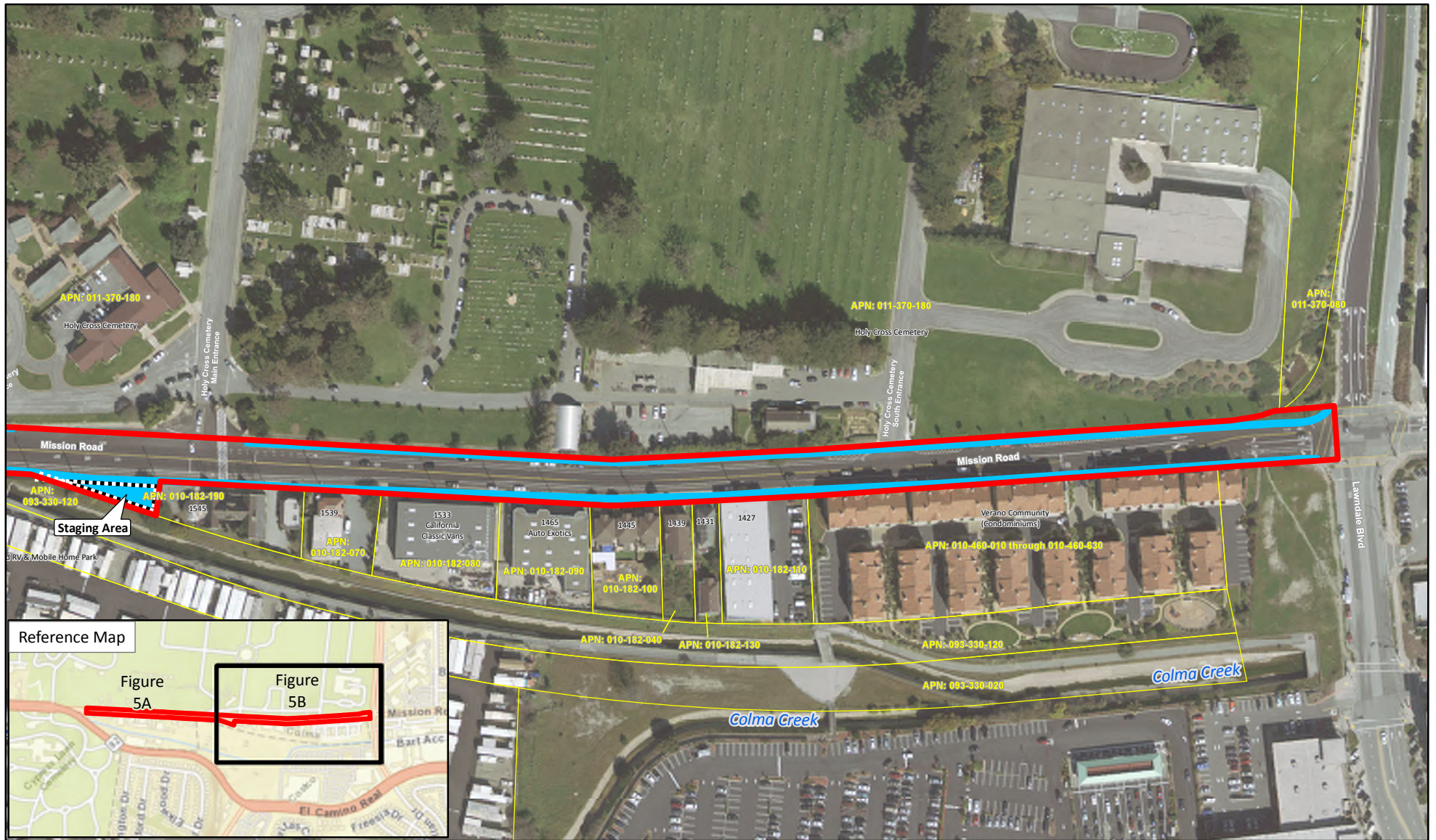


FIGURE 5B

LEGEND

- Archaeological Area of Potential Effects
- Parcel
- Survey Coverage
- Area of Recent Ground Disturbance Visually Inspected from Right of Way.



0 100 200
FEET

SOURCE: USGS Orthoimagery (2015).

I:\COL1801\GIS\Maps\Cultural\ASR\Figure 5_Survey Coverage Map.mxd (9/11/2019)

*Mission Road Bicycle and
Pedestrian Improvements Project
Colma, San Mateo County, California
Federal Aid No. CML-5264 (006)*

Survey Coverage Map

APPENDIX B

NATIVE AMERICAN CONSULTATION CORRESPONDENCE

(Note: Sample consultation letter attached. All tribes identified by the NAHC were contacted)



CARLSBAD
FRESNO
IRVINE
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

May 13, 2019

Andrew Galvan
The Ohlone Indian Tribe
P.O. Box 3388
Fremont, CA 94539

Subject: Tribal outreach for the proposed Mission Road Bicycle and Pedestrian Improvements Project, Colma, San Mateo County

Dear Mr. Galvan:

The Town of Colma—in cooperation with Caltrans District 4 Office of Local Assistance—propose to construct the Mission Road Bicycle and Pedestrian Improvements Project (“project”) along an approximately 4,500-foot-long section of Mission Road in Colma (Figures 1-2a). The project would construct bicycle and safety improvements, including (1) relocation and reconstruction of the existing curb, gutter, sidewalks, non-ADA compliant ramps, and driveway approaches; (2) installation of sidewalks; (3) extension of existing Class II bicycle lanes in the northbound direction; (4) construction of bulb-outs and high-visibility crosswalks with rectangular rapid flashing beacons; (5) installation of energy-efficient street lights; and (6) construction of landscape planters/bioretention areas with storm pipes and inlets. The proposed project would use federal funding assistance and is, therefore, subject to the requirements of Section 106 of the National Historic Preservation Act.

LSA is preparing an Archaeological Survey Report for the proposed project to determine the presence of, or potential for, cultural resources in the Area of Potential Effects (APE). The archaeological APE for the project is shown on the attached Figure 2a. Cultural resources records searches conducted at the Northwest Information Center at Sonoma State University and a review of the Sacred Lands File at the Native American Heritage Commission did not identify recorded Native American cultural resources within or adjacent to the archaeological APE. Previous cultural resource surveys and archaeological monitoring have been conducted of the archaeological APE, none of which have identified archaeological cultural resources in the APE.

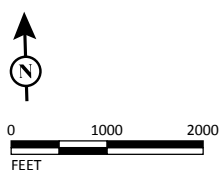
Please notify us if you have any information or concerns regarding cultural resources within the APE. To reach us, please contact me at the address or phone number below or via email (tim.jones@lsa.net). We look forward to hearing from you. Thank you.

Sincerely,

E. Timothy Jones, M.A., RPA
Archaeologist / Cultural Resources Manager



FIGURE 1

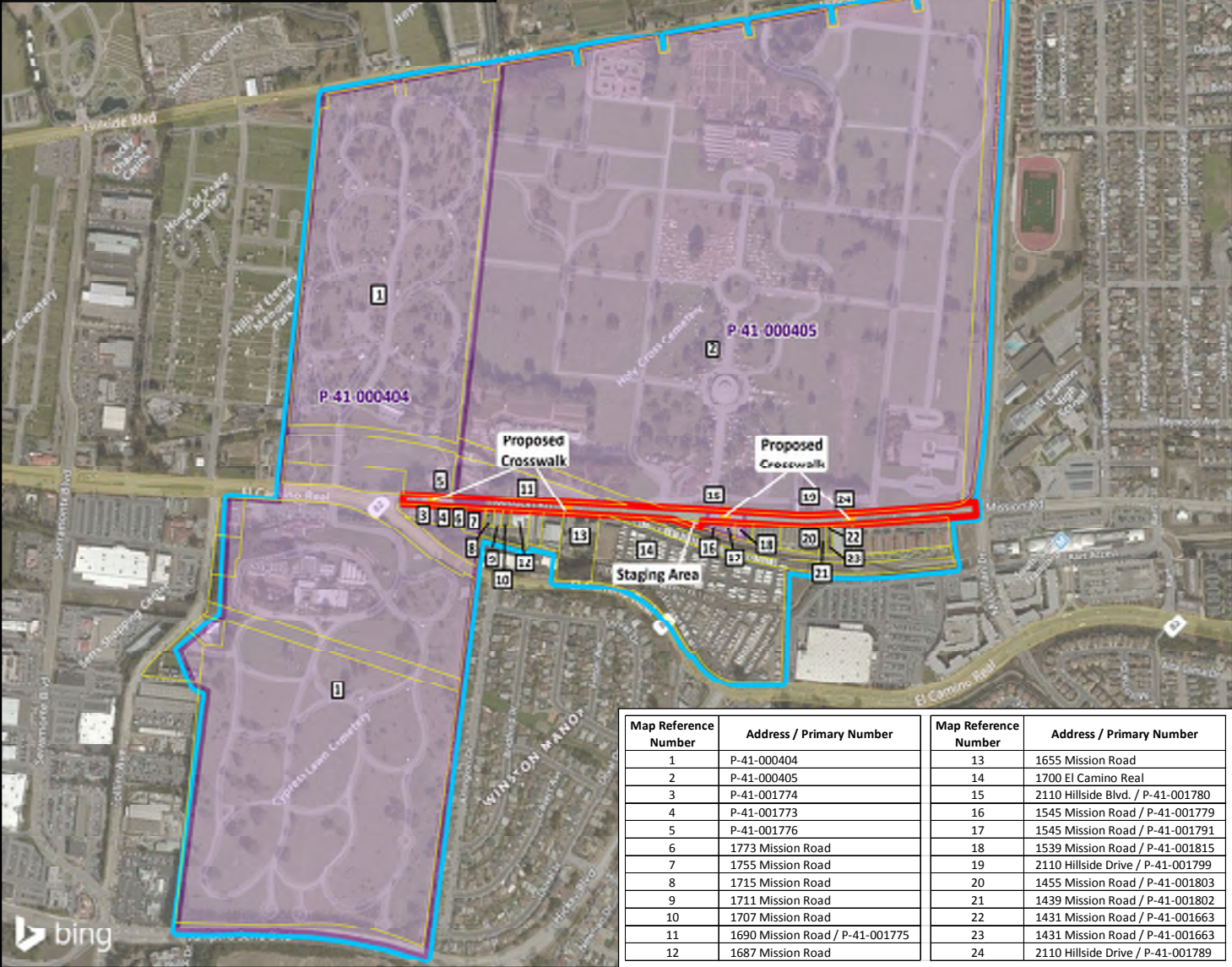


SOURCE: National Geographic (c) 2018; Esri World Street Map (c) 2018.

I:\COL1801\GIS\Maps\Cultural\Figure 1_Project Vicinity Map.mxd (11/30/2018)

*Mission Road Pedestrian and Bicycle
Improvement Project
Town of Colma, San Mateo County, California
Project Vicinity Map*

MISSION ROAD BICYCLE AND PEDESTRIAN IMPROVEMENTS PROJECT		
FEDERAL AID #: CML-5264 (006)		
STATE: CA	COUNTY: SAN MATEO	CITY: COLMA
Caltrans District 4 PQS Principal Investigator, Prehistoric Archaeology		Date
Marco Militante, Caltrans District 4 Local Assistance Engineer		Date
Abdulkader Hashem, Town Project Manager Local Agency Project Engineer		Date



05001000

FEET

1

Map Reference Number

Archaeological Area of Potential Effects

Architectural Area of Potential Effects

Historic District

Parcel Included within Architectural APE

Mission Road Bicycle and
 Pedestrian Improvements Project
 Colma, San Mateo County, California
 Federal Aid No. CML-5264 (006)
 Area of Potential Effects

From: [andrew galvan](#)
To: [Tim Jones](#)
Subject: Re: Request for Tribal Input: Colma Mission Road Project
Date: Monday, June 10, 2019 8:38:52 AM

Hi Tim,

I would concur with your recommendations as provided on page 15 of the draft of the ASR for the Colma Mission Road Project.

Please do keep me in the loop if anything changes for this porject,

**Andrew Galvan
The Ohlone Indian Tribe**

-----Original Message-----

From: Tim Jones <Tim.Jones@lsa.net>
To: Andrew Galvan <chochenyo@aol.com>
Sent: Tue, Jun 4, 2019 2:06 pm
Subject: RE: Request for Tribal Input: Colma Mission Road Project

Hi Andy,

Per your request, I've attached a draft of the ASR for the Colma Mission Road Project for your review. Please let me know if you have any comments or recommendations that you want included in the report.

I've also attached a copy of the NAHC response. Previously, I sent you the Phase I Literature Search (NWIC) results via my Hightail account. Please let me know if you would like for me to resend that. Thank you for your time.

Best,

Tim J.

E. Timothy Jones | Associate/Cultural Resource Manager

LSA | 157 Park Place

Point Richmond, CA 94801

510-236-6810 Tel

[Website](#)

From: andrew galvan <chochenyo@aol.com>
Sent: Monday, May 13, 2019 10:17 PM
To: Tim Jones <Tim.Jones@lsa.net>
Subject: Re: Request for Tribal Input: Colma Mission Road Project

Hi Tim,

Could you and would you kindly provide me with a copy of the Phase I Literature Search and Report once it is completed? I know the San Bruno Shellmound is on the other side of the hill from the back side of Holy Cross Cemetery on Mission Road.

Additionally, please provide me with a copy of the response sent to you from the Native American Heritage Commission, including all attachments, specifically the contact list for this particular project.

Thank you,

Andrew Galvan

An Ohlone Man

-----Original Message-----

From: Tim Jones <Tim.Jones@lsa.net>
To: Andrew Galvan <chochenyo@aol.com>
Sent: Mon, May 13, 2019 2:51 pm
Subject: Request for Tribal Input: Colma Mission Road Project

Hello Andy,

Attached is a request for tribal input for the Mission Road Bicycle and Pedestrian Improvements Project ("project") in Colma, San Mateo County, as shown on the attached Project Location and Area of Potential Effects (APE) figures. The project would include various curb, gutter, sidewalk, driveway, bicycle path, and crosswalk improvements along a section of Mission Road in Colma. The project would use federal funds and is subject to Section 106 of the National Historic Preservation Act.

LSA is preparing an Archaeological Survey Report (ASR) for Caltrans review for the proposed project to determine the presence of, or potential for, cultural resources in the APE. Background research and field surveys of the APE have not identified archaeological cultural resources in the APE. (Resources identified on the attached APE map are architectural resources associated with the historic period Holy Cross and Cypress Lawn Cemeteries.)

Could you please notify us if you have any information or concerns regarding cultural resources within the APE? Or, if you have no information or comment on the project, could you let me know at your convenience. Thank you for your time.

Tim J.

E. Timothy Jones | Associate/Cultural Resource Manager

LSA | 157 Park Place

Point Richmond, CA 94801

510-236-6810 Tel

[Website](#)

From: [Aerieways](#)
To: [Tim Jones](#)
Subject: Re: Request for Tribal Input: Colma Mission Road Project
Date: Monday, June 3, 2019 8:30:24 PM

Hello Tim,

This project is outside of our tribal sphere of interest. In the past I recommended that these requests be forwarded to Muwekma Tribe. However, recently it has come to the attention of our tribal group that there are interested descendants of the Ramuytush of the San Francisco Peninsula. Our tribe has not determined who best represents this area. Therefore, I'll simply respond that we have no specific information for the site.

Ed Ketchum
Amah Mutsun Tribal Band
Historian

-----Original Message-----

From: Tim Jones <Tim.Jones@lsa.net>
To: aerieways@aol.com <aerieways@aol.com>
Sent: Mon, Jun 3, 2019 10:06 am
Subject: RE: Request for Tribal Input: Colma Mission Road Project

Hello Mr. Ketchum,

I wanted to follow-up on my previous request from May 13, 2019, regarding the Colma Mission Road (project) in Colma. Does the tribe have any information, concerns, or project recommendations that you would like for me to include in our study for the project? Thank you for your time.

Tim J.

E. Timothy Jones | Associate/Cultural Resource Manager
LSA | 157 Park Place
Point Richmond, CA 94801

510-236-6810 Tel
[Website](#)

From: Tim Jones
Sent: Monday, May 13, 2019 2:55 PM
To: aerieways@aol.com
Subject: Request for Tribal Input: Colma Mission Road Project

Hello Mr. Ketchum,

Attached is a request for tribal input for the Mission Road Bicycle and Pedestrian Improvements Project ("project") in Colma, San Mateo County, as shown on the attached Project Location and Area of Potential Effects (APE) figures. The project would include

various curb, gutter, sidewalk, driveway, bicycle path, and crosswalk improvements along a section of Mission Road in Colma. The project would use federal funds and is subject to Section 106 of the National Historic Preservation Act.

LSA is preparing an Archaeological Survey Report (ASR) for Caltrans review for the proposed project to determine the presence of, or potential for, cultural resources in the APE. Background research and field surveys of the APE have not identified archaeological cultural resources in the APE. (Resources identified on the attached APE map are architectural resources associated with the historic period Holy Cross and Cypress Lawn Cemeteries.)

Could you please notify us if you have any information or concerns regarding cultural resources within the APE? Or, if you have no information or comment on the project, could you let me know at your convenience. Thank you for your time.

Tim J.

E. Timothy Jones | Associate/Cultural Resource Manager

[LSA](#) | 157 Park Place

Point Richmond, CA 94801

510-236-6810 Tel

[Website](#)

APPENDIX C

SURVEY PHOTOGRAPHS



A) Unpaved walkway in APE on east side of Mission Road, view to the north



B) Project staging area at west side of Mission Road, view to the south



C) View of southern, paved portion of APE; view to the south



D) "Veteran's Village" under construction adjacent to APE on east side of Mission Road; view to the north

APPENDIX D

NORTHWEST INFORMATION CENTER INVOICE AND BILLING WORKSHEET



Page 1 of 1
Invoice No. 0000025105
Invoice Date 12/11/2018
Account No. 1000107
Payment Terms Net 30

Due Date 01/10/2019
Total Amount Due \$1,199.65

Bill To LSA ASSOCIATES INC
20 EXECUTIVE PARK STE 200
IRVINE CA 92614

Questions regarding this invoice can be directed to Billing Department at 707/664-3151

Line No.	Description	Identifier	Amount
----------	-------------	------------	--------

Note: Northwest Information Center

1			1,199.65
---	--	--	----------

IN HOUSE
Records search
File # 18-1039
Project Name: Mission Road Project (COL1801)

----- Please return this portion of invoice with payment -----

Total Amount Due: \$1,199.65

Please include the following on the check:

Account No. 1000107

Invoice No. 0000025105

Make Check Payable to:

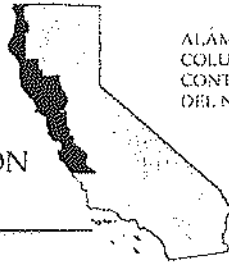
Sonoma State University

Attn: Cashiers

1801 East Cotati Avenue

Rohnert Park, CA 94928-3609

CALIFORNIA
HISTORICAL
RESOURCES
INFORMATION
SYSTEM



ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE

HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO

SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

NWIC Billing Worksheet

IC File Number: 18-1039

Client Name: Timothy Jones Phone: (510) 236-6810
Affiliation: LSA Associates, Inc. Email: Tim.Jones@lsa-assoc.com
Proj Name/Number: Mission Road Project (COL1801)

Date Request Rec'd: 11/29/2018

Date of Response: 11/22/2018

Check In: 9:36:00 AM	Check Out: 10:21:00 AM	Check In:	Check Out:
In-person Time:	Hour(s): 0.75	\$	100.00
Staff Time:	Hour(s): 1	\$	150.00
Shape Files:	Number: 65	\$	780.00
Custom Map Features:	Number:	\$	0.00
Digital Database Record:	Number of Row(s):	\$	0.00
Quads:	Number:	\$	0.00
Address-mapped Flat Fee:		\$	0.00
Hard Copy (Xerox/Computer) Pages:	Page(s):	\$	0.00
Labor Charge:	Hour(s):	\$	0.00
PDF Pages:	Page(s): 1131	\$	169.65
PDF Flat Fee:		\$	0.00
Other: CHRIS Data Request		\$	0.00
		Subtotal	\$ 1199.65
Multi-Day Start:		Multi-Day End:	\$ 0.00

Rapid response surcharge of 50% of total cost: \$ 0.00

Total: \$ 1199.65

Information Center Staff: Dana Marty
Sonoma State University Customer ID: 1000107
Sonoma State University Invoice No.: 0000025105
CHRIS Access and Use Agreement No.: 125

This is not an invoice. Sonoma State University will send separate invoice.