CULTURAL RESOURCE TECHNICAL REPORT
for the
Power Santa Clara Valley Project
Santa Clara County, California

Lead Agency:

California Public Utilities Commission
300 Capitol Mall
Sacramento, CA 95814

Prepared by:

Douglas W. Mengers, M.A., RPA, DPPH
Director of Cultural Resources

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and

Stephen Harvey, M.A., RPA
Senior Archaeologist

and

Christine Lambert, B.A.
Staff Archaeologist

PanGIS, Inc.
8555 Aero Dr, #200
San Diego, CA 92123
(619) 218-9724

Project Proponent:

LS Power Grid California, LLC (LSPGC)
5000 Hopyard Road, Suite 480
Pleasanton, CA 94588

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National Archaeological Data Base Information

Author:	Douglas Mengers, M.A., RPA, DPPH Stephen Harvey, M.A., RPA Christine Lambert, B.A
Firm:	PanGIS, Inc.
Client/Project Proponent:	LS Power Grid California, LLC (LSPGC)
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Management Summary

This Cultural Resources Technical Report documents the methods and results of background research and surface survey conducted to comply with California Environmental Quality Act (CEQA) Guidelines in association with the Power Santa Clara Valley Project (Project) in Santa Clara County, California.

Background research included a record search review, historic map review, Sacred Lands File (SLF) search, and Native American tribal outreach. The record search identified 18 previously recorded resources that intersect with the Proposed Project area, including two listed resources and two resources determined eligible for listing (one of which has since been destroyed). The SLF search was positive for resources within the search area. Responses to outreach were received from the Tamien Nation, The Ohlone Indian Tribe, and the Amah Mutsun Tribal Band, who each provided information about Tribal resources in the Proposed Project area.

No unrecorded cultural resources were encountered during the surface survey, conducted on September 12-14 and November 8, 2023, and February 24 and March 27 through 28, 2024. Six previously recorded cultural resources were updated during the surface survey. The Survey Area was confined to those portions of the Proposed Project area where access was available, including the proposed northern HVDC substation site (Skyline terminal), the proposed southern HVDC substation site (Grove terminal), the 320 kV transmission line limits of construction (LOC), the 500 kV transmission line LOC, PG&E water line upgrades, and road and trail improvements; for a total of 274.19 acres. The total Proposed Project area includes areas that were initially included in the Proposed Project area but were removed during refinement of the project design. A visual survey of additional components was conducted from the public right-of-way (ROW) where pedestrian access was not available, including the existing PG&E San Jose B substation and Staging Areas 2 through 11. The majority of the survey area is pavement, asphalt, and landscaped sidewalks in a developed urban environment with good ground visibility.

No cultural materials were collected during the surface survey. Photographs and field notes are held by PanGIS. This report and supporting documentation are on file with PanGIS and KP Environmental. The remainder of the northern HVDC substation site (Skyline terminal) and the temporary construction staging areas will be surveyed prior to construction.

Introduction

Project Description

LS Power Grid California, LLC (LS Power), a designated California Public Utility, is proposing the Power Santa Clara Valley Project (Proposed Project) located in the City of San José and unincorporated Santa Clara County, California (***Figure 1: Project Vicinity Map*** **(Appendix E)**). The Proposed Project includes the construction of two new substations and associated transmission lines between the existing Pacific Gas and Electric Company's (PG&E) San Jose B substation and the existing PG&E Metcalf substation.

The Proposed Project was approved by the California Independent System Operator Corporation (CAISO) in the 2021-2022 Transmission Plan (referred to as the Metcalf to San Jose B HVDC Project in the 2021-2022 Transmission Plan) to improve reliability and strengthen the CAISO controlled grid. In addition to resolving reliability needs, the Proposed Project will support economic development and provide better access to cost effective, renewable energy. The Proposed Project has a CAISO specified in-service date of June 2028.

Project Area

The Proposed Project is located in the City of San José and the County of Santa Clara, California, (***Figure 2: Project Location Map*** and ***Figure 3: Project Overview*** **(Appendix E)**). The Proposed Project is situated primarily along the Monterey Road corridor, West of US-101, east of SR-87, and north of SR-87, as shown on ***Figure 3: Project Overview*** **(Appendix E)**. The land surrounding the Proposed Project site is dense urban in the north; light industrial, commercial, and suburban residential in the center; and rural and agricultural at the south end.

Substations

The northern site is the proposed Skyline terminal, which is located west of State Route 87 (SR-87) and south of Coleman Avenue, approximately one mile south of the San José Mineta International Airport. Specifically, the proposed Skyline terminal site consists of approximately 10.6 acres and is located on the corner of Santa Teresa Street and Ryland Street, immediately south of the existing PG&E San Jose B substation. The Skyline substation site is located within the City of San José. Surrounding land uses consist of the existing San Jose B substation to the north, SR-87 to the east, commercial uses to the south, and the Guadalupe River Park and Trail to the west.

The southern site is the proposed Grove terminal which is located in the vicinity of the existing Metcalf substation, which is located along Monterey Road, about 0.2 mile west of U.S. Route 101 and approximately 0.65 mile south of the existing Metcalf substation. The proposed Grove terminal site is located along Monterey Road and consists of approximately 13.7 acres. San José and the County of Santa Clara jurisdictional boundaries transverse across the four parcels that consist of the proposed Grove terminal site. Surrounding land uses consist of office and industrial uses to the northwest; open space, Coyote Creek Parkway, and U.S. Route 101 to the northeast; a private lot consisting of disturbed land from a past orchard and a residential structure to the southeast; and Monterey Road and agricultural uses to the southwest.

Transmission Lines

The proposed Grove to Skyline +/-320 kV DC transmission line is located mainly within the City of San José and will connect the new Grove terminal to the new Skyline terminal. The transmission line will be

located within existing roadways such as Bassett Street, Little Market Street, Market Street, First Street, and Monterey Road. The new 500 kV Grove to Metcalf AC transmission is located within the City of San José and County of Santa Clara. Approximately 324 feet would be located on the Grove terminal site, 3,330 feet of this alignment would be constructed underground on Santa Clara County land within the County of Santa Clara, and approximately 4,735 feet would be located underground within Coyote Ranch Road within the County of Santa Clara. The new San Jose B to Skyline 115 kV transmission line is located in the City of San José, on the proposed Skyline terminal site and span overhead across the fence to the adjacent PG&E San Jose B substation to the north.

Project Components

Substations

The proposed substations (the Skyline terminal and the Grove terminal) would convert alternating current (AC) to direct current (DC) or the reverse. To facilitate this conversion, each new substation would include Voltage Source Converter (VSC) HVDC equipment, an AC switchyard using gas-insulated switchgear (GIS) in a breaker-and-a-half (BAAH) configuration, and converter transformers including an on-site spare.

All major substation equipment (e.g., VSC HVDC equipment, GIS, power transformers, cooling equipment, etc.) would be installed on concrete foundations. Foundations are planned to be a combination of deep, reinforced drilled shafts foundations and slab foundations with spread footings. Below-ground work would include the construction of the foundations for the substation equipment and oil containment for transformers. The depth of ground disturbance is anticipated to be up to 50 feet for the substation equipment (drilled shafts) foundations.

The proposed substation would be primarily powered by station service transformers located within the facility that would step-down the voltage from the low voltage side of the station power transformers. An electric distribution line would be installed to provide backup power for each substation from existing PG&E distribution lines that are near each substation.

The main components of the two proposed substations are described below.

Skyline Terminal

The proposed Skyline terminal site would be constructed immediately south of the existing San Jose B substation within a 10.6-acre site (Assessor Parcel Numbers [APNs] 259-23-020 and 259-23-024) currently owned by LS Power. Construction of the Skyline terminal would permanently disturb a total area of approximately 4.5 acres. The proposed Skyline terminal would include 115 kV GIS, bus-work, and termination equipment as well as three single-phase 320/115 kV transformers with an on-site spare. A site plan of the Skyline substation is provided as ***Figure 4: Skyline Terminal Site Plan*** **(Appendix E)**.

The new Skyline substation would be interconnected with the existing PG&E San Jose B substation via a new short, single circuit, overhead 115 kV AC connection; as the proposed Skyline substation is located adjacent to PG&E's San Jose B substation. The existing San Jose B substation needs to be rebuilt in order to create a new point of interconnection for the Proposed Project. As such, PG&E would construct a new 115 kV switchyard using GIS equipment in a BAAH configuration.

Grove Terminal

The proposed Grove terminal would be constructed approximately 0.65 mile south of the existing Metcalf substation within a 13.7-acre site (APNs 725-14-008, 725-14-009, 725-14-014, and 725-14-015) that would be owned by LS Power. Construction of the Grove terminal would permanently disturb a total area of approximately eight acres. The property is currently being used as an orchard and has a perimeter fence, well, a deteriorating outbuilding, and a radial electric distribution line. These existing facilities would be removed, and the well would be capped per regulations. A site plan of the Grove terminal is provided on ***Figure 5: Grove terminal Site Plan*** **(Appendix E)**.

To provide a point of interconnection for the new 500 kV transmission line (see below), PG&E needs to add electrical infrastructure to support the termination of the new transmission line within the Metcalf substation. PG&E would add a new 500 kV bay with the associated grounding, conduits and wiring, foundations, support structures, bus-work, breakers, disconnect switches, jumpers, and protection and control equipment to the existing 500 kV substation yard.

Grove to Skyline 320 kV DC Transmission Line

The Proposed Project includes a new Grove to Skyline +/-320 kV DC transmission line connecting the proposed Skyline terminal to the proposed Grove terminal (***Figure 3: Project Overview*** **(Appendix E)**). This +/-320 kV DC transmission line would be approximately 13 miles in length and would be constructed underground, almost entirely within existing public ROW. The +/-320 kV DC underground transmission line would be encased with a duct bank proposed to have five smaller internal ducts. The minimum depth for the top of the duct bank would be approximately three feet, with the top of the duct bank varying between approximately three to 10 feet beneath the surface. The typical width for the underground duct bank would be approximately three feet or less. The splice vaults would be approximately ten feet deep.

After construction, all road surfaces would be restored to their original condition, matching thickness and type in kind or in compliance with local requirements.

Skyline to San Jose B 115 kV Station Tie Line

A new 115 kV station tie line would be constructed to connect the proposed Skyline terminal to the existing, rebuilt and expanded PG&E San Jose B substation. This transmission line would be a short, single circuit, overhead segment. This new transmission line could be as short as one span because the proposed Skyline terminal is located adjacent to PG&E's San Jose B substation. The proposed Skyline to San Jose B 115 kV station tie line would be rated at 796 MVA.

Metcalf to Grove 500 kV Transmission Line

The Proposed Project would also construct a new 500 kV AC transmission line connecting the existing PG&E Metcalf substation to the proposed Grove terminal. The proposed 500 kV AC transmission line would consist of approximately 1.2 miles of underground alignment. The 500 kV underground transmission line would be encased within a duct bank proposed to have seven smaller internal ducts. A duct bank would generally be used everywhere, except where trenchless crossings are required. The Metcalf to Grove 500 kV transmission line would include one horizontal directional drill (HDD) crossing under Coyote Creek. The typical depth for the 500 kV underground transmission duct bank is

approximately six feet, with the top of the duct bank being located approximately three to four feet beneath the surface. The splice vaults would be approximately ten feet deep.

Below-Ground Conductor/Cable Installations

The typical depth for the underground transmission line duct banks is approximately five to six feet, with the top of the duct bank being located approximately three to four feet beneath the surface. The splice vaults would be approximately ten feet deep. LS Power would install cables in the duct bank once the duct bank and splice vaults are installed. Cable installation activities would occur at all splice vault locations and near the substation termination structures. Splice vaults would generally be installed along the transmission line alignment about every 1,500 to 3,000 feet to facilitate installation of the underground cables.

Telecommunication Lines

The Proposed Project includes telecommunications infrastructure that would connect the new HVDC terminals to each other, connect the HVDC terminals to the existing PG&E substations, and connect each HVDC terminal to local existing third-party internet providers. It is anticipated that these telecommunication lines would all be underground, and no overhead lines or wireless connections (e.g., antennas) are anticipated. Underground telecommunication paths would be installed along the proposed transmission lines to provide redundant communications. Additional telecommunication connections would be made at each HVDC terminal location, connecting to existing third-party internet service providers. Each telecommunication path would consist of fiber optic cables. A total of two 13-mile underground fiber optic cables would be installed along the proposed Grove to Skyline 320 kV transmission line alignment, and two 1.5-mile underground fiber optic cables would be installed along the proposed Metcalf to Grove 500 kV transmission line alignment. In addition, two short underground fiber optic cables would connect the Skyline terminal to the existing San Jose B substation. Finally, Proposed Project facilities may also be connected to existing internet provider(s) during operations.

Access Roads

The existing and primary access to the Proposed Project locations for both construction and operations and maintenance would be from existing public roads. The existing and primary access to the Skyline terminal site for both construction and operation and maintenance would be from Santa Teresa Street and Ryland Street via an existing gravel access road. Santa Teresa Street and Ryland Street are both existing two-lane, approximately 30-foot wide, public paved roads providing access to the site via Coleman Avenue from the SR-87 interchange with Taylor Street. No improvements are expected to be required along Santa Teresa Street and Ryland Street, but the existing gravel access road would be improved to have a width of 20 feet and graded to accommodate construction, as well as operation and maintenance (O&M) vehicles.

The existing and primary access to the Grove terminal for both construction and operations and maintenance would be from Monterey Road. Monterey Road is an existing four-lane, approximately 80-foot wide, public paved divided highway that currently provides access to the site via an existing private dirt road. A new approximately 300-foot-long access road would be constructed to the north of the existing private dirt road to provide access to the Grove terminal from Monterey Road. The new access

road would require a new approach at Monterey Road, have a width of 20 feet, and be graded to accommodate construction, as well as operation and maintenance (O&M) vehicles.

The Proposed Project also includes new permanent access roads, which would provide internal access within each new substation site. The internal access road would create a gravel or rocked internal road that would loop around each new substation. The new road within the Skyline terminal substation site would be approximately 20 feet wide and approximately 1,900 feet long. The new road within the Grove terminal site would be approximately 20 feet wide and approximately 2,000 feet long. Construction of this internal access road would include grading and rocking per the final Proposed Project design. Permanent gates would be installed at both new substation driveways along the perimeter wall that would align with the internal access road.

Work Areas

Staging Areas

The Proposed Project includes 12 potential temporary construction staging areas (including the staging areas within the two substation sites) resulting in a total area of approximately 70 acres. The staging areas would be located along the project alignment (***Figure 3: Project Overview*** **(Appendix E)**). The staging areas would be fenced and/or gated during the construction phase of the Proposed Project.

Preparation of the staging area would involve clearing, grubbing, and limited grading depending on site conditions. Gravel may be used to line the ground at the staging area to avoid the creation of unsafe conditions and unnecessary sediment transport off site. Perimeter fencing would be installed around the outer limits of the work area and lighting would also be installed for security purposes. Temporary construction power would be provided via existing distribution near the Proposed Project site.

Underground Transmission Line Work Areas

Underground transmission line work areas are typically 15 feet on each side of the trench. For the Proposed Project, the underground transmission lines are being installed within existing public and private roadways, such as Monterey Road and Coyote Ranch Road. In these cases, the construction work areas are limited to the public/roadway ROW.

Substations

Work areas for the two substations will be confined to the substation property boundaries. During construction, the substations will be secured with fencing similar to the staging areas. The substation sites will also be utilized for construction staging and laydown, as needed (refer to description of staging areas above).

Other Potentially Required Facilities

An existing radial overhead distribution line located on the proposed Grove terminal site would need to be relocated. Approximately three wooden poles associated with this radial distribution line are located on the proposed Grove terminal site. These wooden poles would be removed utilizing a line truck or similar equipment with an attached boom. The entire wood pole (above-ground and below-ground portions) would be removed.

A new overhead distribution line would be installed to provide power for construction from the existing distribution line located along Monterey Road on the western boundary of the Grove terminal site. The

distribution line would be installed on approximately three wood poles (up to approximately 24-inches in diameter) that would be placed on the southern side of the Proposed Project's access road and into the Grove terminal. A new permanent distribution line would be installed underground and would connect to the terminal during O&M.

A new underground distribution line would be installed to provide power for construction from the existing distribution line located along Ryland Street on the northern boundary of the Skyline substation site. The distribution line would be installed underground until it reaches the auxiliary transformer within the Skyline terminal site. The distribution line would also serve the Skyline substation during O&M.

San Jose B Substation

At the existing PG&E San Jose B substation, existing facilities would be rebuilt and expanded to allow the interconnection of the proposed Skyline to San Jose B 115 kV station tie line. Because the existing San Jose B substation presently has a straight bus configuration with four existing transmission line connections and lacks space for the proposed Skyline to San Jose B 115 kV station tie line, the existing substation would be rebuilt in order to create a bay position for the proposed Skyline to San Jose B 115 kV station tie line. Much of the existing air insulated 115 kV switchyard at the existing PG&E San Jose B substation would be removed, and PG&E would convert the existing San Jose B substation to a GIS BAAH configuration. The new GIS configuration would include five BAAH bays. The GIS enclosure is expected to be approximately 150 feet long by 85 feet wide by 31 feet tall. The new GIS equipment and controls required to monitor and protect the electrical equipment would be located within a new enclosure that would be located on the proposed Skyline terminal site. Other work would involve installation of typical substation equipment, including structural yard steel, bus work/fittings, conduits, and grounding as well as underground 115 kV cable. The existing and new fence would be modified or installed per PG&E's substation standards and security requirements. Modifications at the existing San Jose B substation would also be made to bus work, disconnect switches, circuit breakers, steel support structures, and communication systems. While this work is not part of LS Power's Proposed Project, it is considered a connected project for purposes of CEQA compliance.

Metcalf Substation

The existing Metcalf substation facilities would be modified to allow the interconnection of the new Metcalf to Grove 500 kV transmission line. LS Power's scope for the new Metcalf to Grove 500 kV transmission line connection between the proposed Grove terminal and the existing Metcalf substation is proposed to stop at a dead-end structure located within the northwestern boundary of the existing Metcalf substation property line. PG&E would be responsible for bringing the new circuit from that point to the new bay within the existing Metcalf substation. The required work at the substation would include installation of a new 500 kV bay with two new 500 kV circuit breakers, five new 500 kV breaker disconnect switches, one new 500 kV line disconnect switch, three new 500 kV line capacitor coupled voltage transformers (CCVTs), two new dead-end structures, and typical substation equipment, including bus work, conduits, grounding, and communication systems. Additionally, the existing substation security wall would be required to be extended/relocated approximately 100 feet to the north.

PG&E Water Source Upgrades

The existing well on the Metcalf substation site would remain in place and utilized for the Proposed Project. However, PG&E would be responsible for constructing a new water line that would provide a new water source and connect to the existing PG&E Metcalf substation. The new waterline would connect to the Metcalf substation via a proposed 10-inch water line that would leave the Metcalf substation and travel north on Metcalf Road to a 16-inch water main in Malech Road. The waterline would include a 0.37-mile 10-inch water line that would travel north on Metcalf Road to the intersection of Malech Road and Metcalf Road.

Road and Trail Improvements

The Proposed Project would include a new road alignment along Coyote Ranch Road that would consist of base rock topped with pavement. Coyote Ranch Road would be realigned to straighten and minimize roadway bends on Santa Clara County Parks land. The new alignment of Coyote Ranch Road would be approximately 20 feet wide, excluding the shoulder, and would remove two 90-degree curves and a portion of the existing roadway. The new road alignment would be approximately 20 feet wide, excluding the shoulder, and 850 feet long, which would result in a disturbance area of 0.39 acre. A new turnaround would be installed at the entrance of Coyote Ranch on Santa Clara County Parks land. These road improvements would allow for more effective ingress and egress of fire apparatuses to Coyote Ranch. In addition to the realignment of Coyote Ranch Road, Coyote Creek Trail would be realigned out of the Coyote Creek riparian area on Santa Clara County Parks land and alongside Coyote Ranch Road. The Coyote Creek Trail alignment would be approximately 12 feet wide and 2,300 feet long, resulting in a disturbance area of approximately 0.63 acre. This alignment would be graded flat and consist of base rock topped with pavement.

Proposed Project Area

The Proposed Project area covers approximately 270.1 acres, including 5.1 acres for the proposed northern HVDC substation site (Skyline terminal); 7.4 acres for the proposed southern HVDC substation site (Grove terminal); 187.3 acres for the transmission lines; 5.5 acres for the existing PG&E substation upgrades, 1.0 acre for the realignment of Coyote Creek Trail and Coyote Creek Road, 0.5 acre for the PG&E water line connection, and 63.3 acres of combined temporary staging areas, as shown on ***Figure 3: Project Overview*** **(Appendix E)**.

Key Personnel

The records search and Sacred Lands File search were conducted by PanGIS, Inc. (PanGIS) staff archaeologists. PanGIS Director of Cultural Resources Douglas Mengers, M.A., RPA, DPPH, conducted tribal outreach. The field survey was conducted under the direction of Mr. Mengers and led by PanGIS Archaeologists Neil Thompsett, M.A., and Christine Lambert, B.A. This report was prepared by Douglas Mengers with contributions by PanGIS Senior Archaeologist Stephen Harvey, M.A., RPA, and PanGIS Staff Archaeologist Christine Lambert, B.A. Mr. Mengers' resume is included in Appendix A.

Regulatory Environment

Federal, state, and local regulations were reviewed for applicability to the Proposed Project. Section 106 of the National Historic Preservation Act (NHPA) does not apply to the Proposed Project because no federal agency discretionary action is required, and no federal lands or monies are involved.

The California Public Utilities Commission (CPUC) General Order (GO) 131-D governs the construction of all electric facilities by investor-owned utilities. Substation and electric line projects greater than 50 kilovolts (kV) are subject to CPUC review and approval unless they qualify for exemptions. The development of the Proposed Project would require CPUC licensing and accompanying California Environmental Quality Act (CEQA) compliance.

Federal

No federal regulations related to cultural resources are applicable to the Project; Section 106 of the National Historic Preservation Act (NHPA) does not apply because no federal agency discretionary action is required for the project and no federal lands or monies are involved.

State

California Environmental Quality Act (CEQA)

The CEQA Guidelines (§15064.5) address determining the significance of impacts to archaeological and historic resources.

(a) For purposes of this section, the term "historical resources" shall include the following:
  (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] §5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et seq.).
  (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
  (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC §5024.1, Title 14, Section 4852) including the following:
    (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    (B) Is associated with the lives of persons important in our past;
    (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
    (D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.

(b) A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

(1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

(2) The significance of an historical resource is materially impaired when a project:

(A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or

(B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(C) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

(c) CEQA applies to effects on archaeological sites:

(1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).

(2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the PRC, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the PRC do not apply.

(3) If an archaeological site does not meet the criteria defined in subsection (a) but does meet the definition of a unique archaeological resource in Section 21083.2 of the PRC, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in PRC Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.

(4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

(d) Section 15064.5 (d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

(e) When an Initial Study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission (NAHC) as provided in PRC §5097.98. The

applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

(1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).

(2) The requirements of CEQA and the Coastal Act.

(f) CEQA also addresses tribal cultural resources. Section 21074 of the statute reads:

(a) "Tribal cultural resources" are either of the following:

(g) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(h) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(i) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

California Health and Safety Code and Public Resources Code

Broad provisions for the protection of Native American cultural resources are contained in the California Health and Safety Code, Division 7, Part 2, Chapter 5 (Sections 8010 through 8030).

Several provisions of the Public Resources Code (PRC) also govern archaeological finds of human remains and associated objects. Procedures are detailed under PRC Section 5097.98 through 5097.996 for actions to be taken whenever Native American remains are discovered. Furthermore, Section 7050.5 of the California Health and Safety Code states that any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in PRC Section 5097.99. Any person removing human remains without authority of law or written permission of the person or persons having the right to control the remains under PRC Section 7100 has committed a public offense that is punishable by imprisonment.

PRC Chapter 1.7, Section 5097.5/5097.9 (Stats. 1965, c. 1136, p. 2792), entitled Archaeological, Paleontological, and Historical Sites, defines any unauthorized disturbance or removal of a fossil site or remains on public land as a misdemeanor. A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock

art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

Assembly Bill 52

Assembly Bill 52 (AB 52) established that TCR must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. A TCR is a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe. A TCR is either:

- On the CRHR or a local historic register;
- Eligible for the CRHR or a local historic register; or
- The lead agency determines that the resource meets the register criteria.

A project that has potential to impact a TCR such that it would cause a substantial adverse change constitutes a significant effect on the environment unless mitigation reduces such effects to a less-than-significant level. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

AB 52 amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact or a tribal representative of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an Environmental Impact Report (EIR) or adopt a Mitigated Negative Declaration (MND) (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American

tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order 131-D (GO 131-D), Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters" (CPUC, 1995). Consequently, public utilities are directed to consider local regulations and consult with local agencies, but County regulations are not applicable as the City of San José and the County of Santa Clara do not have jurisdiction over the Proposed Project. Because the CPUC has exclusive jurisdiction over the Proposed Project siting, design, and construction, the Proposed Project is not subject to local land use and zoning regulations or discretionary permits. This section identifies local land use plans and regulations related to cultural resources for informational purposes and to assist with California Environmental Quality Act (CEQA) review. Although LS Power Grid California, LLC (LS Power) is not subject to local discretionary permitting, ministerial permits would be secured as required.

City of San José General Plan

The City of San José General Plan 2040 sets forth a vision and a comprehensive road map to guide the City's continued growth through the year 2040 (City of San José, 2024). The various elements of the San José General Plan 2040 have been combined into a consistent and meaningful plan and organized in a manner designed to meet public needs. The following policies related to cultural resources have been provided for informational purposes only:

Policy CD-1.26	Apply the Historic Preservation Goals and Policies of this Plan to proposals that modify historic resources or include development near historic resources.
Goal ER- 10	Preserve and conserve archaeological significant structures, sites, districts and artifacts in order to promote a greater sense of historic awareness and community identity.
Policy ER-10.1	For purposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archaeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.
Policy ER-10.2	Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and

	tentative subdivision maps that upon their discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced.
Policy ER-10.3	Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforces, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.
Goal LU-13	Preserve and enhance historic landmarks and districts in order to promote a greater sense of historic awareness and community identity and contribute toward a sense of place.
Policy LU13.12	Develop and encourage public/public and public/private partnerships as a means to support, expand, and promote historic preservation.
Policy LU-13.15	Implement City, State, and Federal historic preservation laws, regulations, and codes to ensure the adequate protection of historic resources.
Policy LU-13.16	Alert property owners, land developers, and the building industry to historic preservation goals and policies and their implications early in the development process.
Goal IP-10	Use the Site Development permit process to implement the Environ General Plan goals and policies.
Policy IP-10.3	In addition to a Site Development permit, require an Historic Preservation permit for modifications to a designated Historic Landmark structure. This permit process fosters the implementation of Historic Preservation goals and policies of the Envision General Plan.

City of San José Historic Preservation

The council of the City of San José adopted the Historic Preservation Ordinance (Section 13.48 of the City's Municipal Code) to promote a harmonious outward appearance of structures in the historic styles and a general harmony as to style, form, color, proportion, texture, and material between buildings of historic design and those of more modern design; that such purpose is advanced through the preservation and protection of the old historic or architecturally worthy structures and neighborhoods which impart a distinct aspect to the City of San José and which serve as visible reminders of the historical and cultural heritage of the City of San José. . Basic components of the ordinance include purpose, definitions, historic landmark commission, historic resource inventory, historic preservation officer, procedures for designation of a landmark, procedures for designation of historic districts, notice of amendment or rescission of designation, historic preservation permits, historic property contracts, and conservation areas.

County of Santa Clara General Plan

The County of Santa Clara General Plan is a comprehensive long-range general plan for the physical development of the County of Santa Clara (County of Santa Clara, 1994). The various elements within

the General Plan include strategies and policies for the physical development of the County. The following policies related to cultural resources have been provided for informational purposes only:

Policy 5.1: Protection and preservation of heritage resources both natural (e.g., heritage trees; and paleontological resources) and cultural (e.g., historic sites and structures, and archaeological sites). Cultural heritage resources reflecting the contributions to society of all cultures acknowledged, preserved and commemorated.

C-RC 49: Cultural heritage resources within Santa Clara County should be preserved, restored wherever possible, and commemorated as appropriate for their scientific, cultural, historic and place values.

C-RC 52: Prevention of unnecessary losses to heritage resources should be ensured as much as possible through adequate ordinances, regulations, and standard review procedures. Mitigation efforts, such as relocation of the resource, should be employed where feasible when projects will have significant adverse impact upon heritage resources.

Santa Clara County Historic Preservation Ordinance

On October 17, 2006, the Board of Supervisors adopted the Historic Preservation Ordinance, enacting Division C17 of the Santa Clara County Ordinance Code. Basic components of the ordinance include purpose and intent, definitions, heritage resource inventory, landmark designation criteria and process, and landmark alteration requirements and demolition procedures, as well as information on appeals, hardship determination, maintenance, and enforcement. The Board of Supervisors updated the Historic Preservation Ordinance on December 1, 2009, to clarify the owner consent process for landmark designation.

Setting

The following Natural Setting section is drawn from the Santa Clara Valley Habitat Plan (Santa Clara Valley Habitat Agency 2012). The Prehistory section is summarized from Byrd et al. (2017) and Milliken et al. (2007). The Ethnography section is drawn from Levy (1978) and the Amah Mutsun Tribal Band (2023). The historic-period section was developed from historic context statements produced for the County of Santa Clara (Archives & Architecture 2012, Dill Design Group 2003).

Natural Setting

The Proposed Project is in the Santa Clara Valley, the southerly on-land portion of a regional topographic depression that includes San Francisco Bay as well as the Petaluma, Sonoma, and Napa valleys to the north. Roughly hourglass in shape, the Santa Clara Valley is approximately 11 miles wide at the southern end of San Francisco Bay, narrowing to a minimum of about 2.5 miles north of Morgan Hill. The valley floor is nearly flat along the Bay, with gentle undulations and local, low hills to the south. Valley floor elevations increase from sea level in the north to approximately 350 feet above mean sea level (amsl) at the valley's narrowest point north of Morgan Hill. This low "saddle" in the valley represents the watershed divide between the Coyote Valley Watershed, in which streams flow north to San Francisco Bay, and the watersheds to the south, in which streams flow south to the Pajaro River and ultimately to Monterey Bay.

On the west side of the valley, the Santa Cruz Mountains rise to a maximum elevation of almost 4,000 feet amsl. Typical of the Coast Ranges, the range trends northwesterly and is characterized by steep, rugged slopes and abrupt, deeply incised drainages. On the east side of the valley, the Diablo Range forms a similarly rugged barrier, flanked by more gently sloping but strongly dissected alluvial foothills. Like the Santa Cruz Mountains, the Diablo Range is a long, northwest-trending uplift characterized by extremely rugged topography and heights in excess of 1,000 feet. Topography in the study area largely reflects active tectonics associated with the fault system of the San Andreas plate boundary. The area's soils are also very diverse due to the geologic, climatic, and topographic diversity of the Santa Clara Valley and neighboring uplands.

Santa Clara County has a Mediterranean climate, characterized by extended periods of precipitation during the winter months and virtually no precipitation from spring through autumn. Annual average rainfall varies significantly due to topography and related orographic and rain shadow effects. Major watersheds in the area include those of Coyote Creek and the Guadalupe River. While rainfall is the primary source of surface flows in the County, high groundwater tables contribute to the flows of some local streams.

Due to the variation in topography and soil diversity within the County there are a wide array of natural community types and subsequently very diverse flora and fauna. Vegetative communities, or land cover types, in the Santa Clara Valley include grassland, chaparral and coastal scrub, oak woodland, riparian forest and scrub, conifer woodland, wetland, and open water, as well as irrigated agriculture. Analysis conducted for the Santa Clara Valley Habitat Plan identified 147 special-status species that occur or have the potential to occur in the study area, including mammals, birds, reptiles, amphibians, freshwater fish, invertebrates, and vascular plants (Santa Clara Valley Habitat Agency 2012).

Cultural Setting

Prehistoric Context

The following prehistoric context, summarized from Byrd et al. (2017), provides a temporally organized discussion of the archaeological record in the Proposed Project area and vicinity. It is not intended to be an exhaustive account of the prehistory of this region but is sufficient for acquiring a basic understanding of the various Native American groups who occupied this region and their lifeways, as it relates to the archaeology of the San Francisco Bay-Delta Area. The current understanding of the temporal sequence of Native American occupation in the Bay-Delta region is primarily built upon radiocarbon dating of archaeological site components. Radiocarbon dating allows sites to be accurately placed in time, and then, for comparative purposes, sites can be grouped within time intervals to track regional trends and differences.

The most recent and refined chronology for the Bay-Delta Area, referred to as “Scheme D,” employs a three-stage sequence – Early, Middle, and Late Periods – with transitional Early/Middle and Middle/Late Periods in between (Groza 2002, Groza et al. 2011). The current Scheme D, based on stylistic temporal variation in well-dated and widely traded shell bead types, is primarily a Late Holocene sequence (post-4200 cal BP), although the onset of the Early Period is still generally considered to have its origins in the Middle Holocene (>4200 cal BP). Due to the lack of evidence for earlier occupation in the Bay-Delta Area, additional terms are lacking to refer to the Terminal Pleistocene through Middle Holocene archaeological record (13,500-4200 cal BP), Early Holocene (11,700-8200 cal BP), Middle Holocene (8200-4200 cal BP), and Late Holocene (4200 cal BP, onward). The Late Holocene is further divided into shorter periods using Groza et al.'s (2011) Scheme D dating results.

A number of plant species from arid and semi-arid regions to the south and east of San Francisco were able to colonize the valleys and uplands of the central North Coast Ranges during the Early to Middle Holocene as a result of increased temperatures and more severe summer droughts. Likewise, many taxa favoring cooler and moister conditions retreated from the central Coast Ranges, leaving only isolated remnants in the most favorable microclimates. A number of semi-desert to desert plant taxa reached their northern extent in the Diablo Ranges near Mount Diablo, and isolated stands of other south coast plant species in the uplands of Sonoma, Napa, and Solano Counties, suggest a continuous distribution of xeric taxa from the central to southern North Coast Ranges during the Early to Middle Holocene.

Terminal Pleistocene (13,500-11,700 cal BC)

Currently, there is growing agreement that humans entered the Americas via multiple migrations using both coastal and inland routes. Most scholars view this as a post-glacial maximum process (after 21,000 cal BP), although some have argued for pre-glacial maximum incursions. The coastal route, referred to as "the Kelp highway," entailed travel by boat exploiting this corridor's highly productive marine resources. This reconstruction has been bolstered by a growing body of evidence from coastal southern California, particularly the Channel Islands, demonstrating that humans were living along the California coast at the end of the Pleistocene.

The Terminal Pleistocene is largely contemporaneous with the Clovis and Folsom periods of the Great Plains and the Southwest and is generally considered to be represented by wide-ranging, mobile hunters and gatherers who periodically exploited large game. Throughout California, Terminal Pleistocene occupation is infrequently encountered and poorly understood and most often represented by isolated

fluted points. No fluted points or archaeological deposits dated to the Terminal Pleistocene have been documented in the Bay-Delta Area. The Borax Lake site (CA-LAK-36), situated near Clear Lake in the North Coast Ranges, is the nearest locality where fluted points are reported. Isolated fluted points have also been documented at Tracey Lake in the Delta and at the Wolfsen mound (MER-215), a major Late Holocene residential site along the middle San Joaquin River. However, the latter find appears to be intrusive to the site.

The absence of Terminal Pleistocene archaeological remains is undoubtedly the result of several factors, most notably the likelihood that initial human populations were small, highly mobile, and traveled rapidly across the continent. Therefore, their archeological signature on the landscape was generally faint and wide-spaced. For coastal areas, sea level rise, coastal erosion, and localized subsidence have further reduced the likelihood of documenting initial occupation of the region, and some sites may be preserved under water. On the interior of central California, widespread landscape evolution and floodplain development during the Holocene has also obscured the earliest records of human colonization.

Early Holocene (11,700-8,200 cal BP)

It is typically thought that evidence for Early Holocene human occupation in central California is the product of semi-mobile hunter-gatherers exploiting a wide range of plant and animal foods from marine, lacustrine, and terrestrial contexts. Early Holocene assemblages often include stemmed points, crescents, and steep- edged formed flake tools that share many attributes with contemporaneous material in the Great Basin and southern North Coast Ranges. However, milling tools (handstones and millingstones) are ubiquitous in these early deposits, a characteristic which distinguishes Early Holocene occupations in California from those in the Great Basin. There are only four Early Holocene deposits archaeologically documented in the Bay-Delta Area, resulting in few and poorly established patterns. These include two at Los Vaqueros Reservoir (CCO-696 and CCO-637) in the East Bay region, the Laguna Creek site (P-48-000897) near Lagoon Valley on the western margin of the North Delta region, and the Fremont site (P-01-011556) in the city of Fremont in the South Bay region. Two nearby Early Holocene sites include the Blood Alley site (SCL-178) in the Coyote Narrows of the Santa Clara Valley, and SCR-177 at Scott's Valley in the Santa Cruz Mountains. All six of these sites were identified in buried terrestrial contexts. No sites from this time span have been documented as yet in the Bay or coastal settings, as these contexts are now submerged, making them difficult to discover.

Diverse resource exploitation is indicated by artifact and ecofact assemblages from these sites. They include handstones and millingstones (but not mortars and pestles), large, flaked cores and cobble tools, flake tools, well-made bifaces, and a single flaked stone crescent. Obsidian from the closest sources in the southern North Coast Ranges (particularly the Napa Valley) predominates, although eastern Sierra obsidian (Bodie Hills) is also represented at Los Vaqueros. Trace amounts of marine shellfish have been recovered from some inland sites, while faunal assemblages are varied and include deer, elk, rabbit, ground squirrel, coyote, and grizzly bear. Carbonized plant remains from CCO-696 are dominated by acorn, indicative of fall-winter occupation, while those from the Laguna Creek site and the Fremont site are primarily summer-ripening seeds, consistent with the idea that these early foragers moved seasonally. Each Los Vaqueros site also included a single human burial. These Early Holocene deposits demonstrate that the general region was occupied throughout this time segment, but a better understanding of the nature of early occupation will require much more information.

Middle Holocene (8,200-4,200 cal BP)

Evidence for Middle Holocene occupation is much more ubiquitous than for earlier time segments. More than 60 Bay-Delta Area archaeological sites have produced radiocarbon dates indicating occupation during the Middle Holocene. Both surface and buried deposits are present, including a number of substantial residential settlements. Notably, the Middle Holocene includes a series of buried sites with diverse cultural assemblages and occasional burials, such as East Bay region sites ALA-483 in the Amador- Livermore Valley, the Marsh Creek Site (CCO-18/548) and the Los Vaqueros Dam site (CCO-637) in the northern Diablo Range, and Northwest Bay site MRN-17 on De Silva Island in Richardson Bay. In addition, several isolated human burials have been found in buried contexts, including several in the northern Santa Clara Valley of the South Bay (such as SCL-33, -484, -674, and -832) and along the edge of the bay in the Southwest region - in the Mission Bay/Yerba Buena Cove area (SFR-28, BART Skeleton, the Transbay Skeleton) and near Coyote Point (SMA-273).

Artifact assemblages are varied and include ground stone (some only with millingstones and handstones, some with mortars and pestles, and some with both); side-notched dart points; cobble-based chopping, scraping, and pounding implements; and shell beads and ornaments. Notably, Type N grooved rectangular Olivella beads are present at San Bruno Mountain mound (SMA-40), Yfiigo mound (SCL-12/H), and CCO-474/H along the eastern edge of San Pablo Bay. These beads are well-dated to the Middle Holocene across a large region, from the northwestern Great Basin to San Clemente Island, and indicate the presence of an extensive regional interaction sphere by at least 5200 cal BP. Obsidian from the Napa Valley and eastern Sierra Nevada, including Casa Diablo and Bodie Hills sources, make up a significant amount of the toolstone in some Middle Holocene sites, beginning a pattern of extensive inter-regional obsidian exchange that would continue through the Late Holocene.

Current evidence suggests that the mortar and pestle were in use by 6000 cal BP, primarily at sites in the Amador-Livermore, Kellogg Creek, and San Ramon Valleys (ALA-574, CCO-308, CCO-637) in the East Bay region. Mortars and pestles were the predominant milling tools used thereafter throughout the East and South Bay regions. The first evidence for extensive use of estuarine resources occurs during the Middle Holocene with the expansion of San Francisco Bay's mud flats and tidal marshes. Estuarine shell midden deposits are present at MRN-17 on De Silva Island, CCO-474/H near Hercules, and at the San Bruno Mountain mound (SMA-40) between 6300 and 5000 cal BP, and somewhat later (4900 cal BP) in the East Bay at ALA-307. Shellfish exploitation included bay oyster (Ostrea) and mussel (Mytilus), while inland East Bay sites included freshwater shellfish. Faunal remains reveal diverse, local, niche-based exploitation strategies that included hunting seasonal waterfowl and capture of estuary, anadromous, and freshwater fish. Archaeobotanical assemblages from Middle Holocene contexts are varied; for example, CCO-18/H features produced a varied assemblage of nutshell, small seeds, and fruit pits, including acorn, gray pine, bay, buckeye, red maids, goosefoot, farewell-to-spring, juniper, and manzanita berry pits. These remains suggest that a wide range of habitats was exploited throughout the year, consistent with either semi-permanent occupation or multi-season visits.

Evidence for long-distance exchange, greater investment in processing technologies (mortar and pestle), and extensively occupied habitation sites, including the basal layers of many bay shore shell mounds, suggest higher population levels, more complex adaptive strategies, and longer seasonal occupation than took place during the Early Holocene. Along with burial by alluviation, undoubtedly pre-6000 cal BP sites situated along the bay margin would have been inundated by subsequent sea level rise. In part, this

may explain why habitation sites from between about 8000 and 7000 cal BP are extremely rare in the wider Bay-Delta Area.

Late Holocene (4,200-180 cal BP)

The Late Holocene is generally divided into the following five main time periods: Early (4200- 2550 cal BP), Early/Middle Transition (2550-2150 cal BP), Middle (2150-930 cal BP), Middle/Late Transition (930-685 cal BP), and Late (685-180 cal BP). The Middle and Late Periods can be further subdivided (into four and two subdivisions, respectively), based largely on the seriation of specific types of shell beads. The Late Holocene is very well-documented in the Bay-Delta Area, with more than 240 radiocarbon-dated sites reflecting widespread occupation. Over the last 4,000 years it is generally thought that regional human population increased, and there was an upward trend in social, political, and economic complexity, in part reflected by distinct, geographically specific cultural traditions. Concurrently, a number of studies indicate that there was an increasing reliance on lower-ranked and more costly foods (including particular species of marine mammals, terrestrial mammals, birds, fish, plants, and possibly dogs) indicative of resource intensification. Territorial circumscription, active landscape management (burning), and periodic upswings in inter-group violence are also indicated. Drawing largely on mortuary remains, a number of scholars have argued that community organization entailed non-egalitarian social structure and status ascription. Most suggest that these changes took place near the beginning of the Late Period, although some argue that they developed earlier, during the Middle Period.

The Early Period (4,050-2,550 cal BP)

This period marks the establishment or expansion of a number of large shell mounds. Prominent sites near the bay margins dating to the Early Period include University Village (SMA-77), Ellis Landing (CCO-295), San Bruno Mountain mound (SMA-40), Stege mound (CCO-298), West Berkley mound (ALA-307), MRN-67, and ALA-17. The earliest shell mound artifact assemblages consisted of stemmed and short, broad leaf projectile points; square-based knife blades; mortars (both unshaped and cylindrical) and pestles (short and sturdy, cylindrical); crescentic stones; perforated charmstones; bone awls; polished ribs; notched and grooved net sinkers; rectangular and spire lopped Olivella (olive snail) beads; rectangular abalone (Haliotis sp.) beads and various pendant types; antler wedges; and stone bars or "pencils."

Bay margin sites reveal a strong emphasis on marine shellfish, marine fishes, and marine mammals. Recent research reveals that localized variation in shellfish exploitation is pervasive, with oysters, mussels, and horn snail often dominating. In contrast, interior sites emphasized freshwater fish and shellfish along with terrestrial mammals. Nuts, berries, and small seeds appear to have been particularly important plant foods.

Very large cemeteries first occur in the Late Holocene, and graves are common at most Late Holocene sites. Burials are almost exclusively found in a loose to tightly flexed position in Bay margin and Santa Clara Valley sites, and the regular occurrence of grave offerings, including shell beads and ornaments, bone objects, and charmstones, suggests well-developed mortuary practices. In the valleys of the East Bay and watersheds connected to the San Joaquin Valley, extended burials are common in the same cemeteries as flexed burials. This pattern reflects either a distinct cultural tradition (an early expression of the intrusive Meganos culture), or possibly communities with members from the Central Valley or Bay-Delta Area where these contrasting burial postures predominate. Artifacts recovered mostly from

burial contexts reflect extensive trade networks, providing access to finely crafted implements made of obsidian originating east of the Sierra Nevada and from Napa County. Haliotis (abalone) and Olivella beads and ornaments also represent trade items, since manufacturing sites are undocumented in the local region. Multi-season plant and animal foods, residential structures, cemeteries, mortars and pestles, and evidence for regular exchange, all suggest that relatively sedentary communities had emerged by the Early Period.

The Middle Period (2,150-930 cal BP)

This portion of the Late Holocene is often considered to have witnessed greater settlement permanence, characterized by either sedentary or multi-season occupation. This time interval is also often considered to have been the heyday of mound building (as many of the bay margin shell mounds have dates within this time span) and correlated with greater social complexity and ritual elaboration. A series of changes in artifact types has been documented, including barbless and single-barbed bone fishing spears; large, shaped mortars and equally large pestles; and ear spools and varied forms of Haliotis and Olivella beads and ornaments. Mortuary practices were often highly ritualized, and some individuals, typically males, were buried with thousands of shell beads. Terrestrial resources appear to have been more heavily exploited than previously, based on food remains and isotopic analysis of human bone. Shifts in resource emphasis included greater use of deer; less reliance on oysters and more on mussels, clams, or horn snail; and increased acorn exploitation. During the Middle Period there are also indications that people originating in the San Joaquin Valley moved into the East Bay through Amador-Livermore Valley and the San Ramon and Walnut Creek Valleys, ultimately reaching the bay plain near Fremont. Referred to as the Meganos Intrusion, settlements associated with this distinctive cultural tradition are characterized by a high frequency of extended burials, and primarily date between about 1530 and 930 cal BP in the East Bay region. Earlier Meganos settlements from the Early Period (>4050-2550 cal BP) and Early/Middle Transition (2550-2150 cal BP) occur on the eastern side of the Diablo Range and in the sand mounds of the Delta, generally considered to be their cultural homeland.

The Late Period (685-180 cal BP)

This most recent portion of the Late Holocene is, of course, the best-documented era, and current evidence suggests that Bay-Delta Area populations grew in size, sedentary villages flourished, and material signatures of ritual activity increased. Artifact assemblages at the end of this period included clamshell disk beads, distinctive Haliotis pendants, flanged steatite pipes, chevron-etched bone whistles and tubes, elaborately finished stone "flowerpot" mortars, and needle-sharp coiled basketry awls. The bow and arrow are first documented in the region circa 700 cal BP, near the start of the Late Period. The technological development is represented by a regionally distinctive arrow point style, the Stockton Serrate, with its distinctive square serrations and almost exclusive manufacture from Napa Valley and Annadel obsidian. The point style represents a local invention, rather than the adoption of existing arrow types from neighboring groups in central and northern California. This in situ point style development suggests that ethnic continuity was present across the Bay region from the Middle/Late Transition (930-685 cal BP) through Late Period (685-430 cal BP).

Late Period archaeobotanical remains reveal greater reliance on small seeds, further supplementing the earlier use of acorns and other nuts. This may suggest surplus production and storage for use in the fall and winter. Likewise, faunal evidence indicates a wide range of species was used, notably sea otters, rabbits, and deer from estuary and terrestrial habitats. Clams (Macoma) and horn snails (Cerithidea)

were also important to the diet, the latter used almost exclusively in the South Bay. Funerary rituals were strongly patterned and included flexed interments and intentionally broken grave offerings, along with occasional cremations. Extensive trade relations also appear to have flourished with neighboring groups during this period, although the long-range acquisition of eastern Sierra obsidian declined. In parts of the East Bay, Napa Valley obsidian makes up between 70 and 100 percent of all flaked stone debitage. Clam shell disk beads, manufactured north of the Bay, were traded southward as well as to the east into the Central Valley and beyond. However, clam shell beads are rare in the South Bay region during the Late Period, indicating different regional interaction spheres within the Bay-Delta Area.

Ethnohistoric Context

The Bay-Delta study area, based on ethnohistorical reconstructions, falls within the aboriginal territory of several distinct, federally recognized Native American groups. These include the Ohlone in the southern and central portion of the bay; Coast Miwok in the northwest portion of the bay; and Bay Miwok, Plains Miwok, and Patwin in the eastern Bay-Delta Area. Each of these Native groups were hunter-gatherers, lived in villages with well-defined tribal territories, interacted and traded extensively with neighboring groups, and spoke unique languages. These languages were, however, all part of the Penutian-speaking phylum, with the Ohlone and Miwok languages more closely related to each other (both within the Utian language group) than to the Patwin (part of the Wintuan language family). Some San Francisco Bay Costanoan-speaking local tribes had overlapping social and marriage networks with neighboring Coast Miwok, Bay Miwok, and Delta Yokuts-speaking groups, and thus shared genetic relationships with them, and probably some cultural relationships as well (Milliken et al. 2009).

In the study area, traditional Native lifeways were disrupted first by the influx of European explorers and then profoundly altered by the establishment of Spanish missions in the late eighteenth century. Colonization and occupation quickly reduced Native populations, displaced them, and dramatically altered their traditional way of life. As a result, these groups are not as well-known ethnographically compared to groups in some other regions of California. Much of what we know comes from early European accounts (both explorers and mission staff), along with a few twentieth-century interviews by anthropologists who gathered information on remembered lifeways (Bean 1994; Galvin 1971; Harrington 1921-1929; Kroeber 1925).

As such, any discussion of Native lifeways at contact is a reconstruction based on incomplete data and a low level of rigor invested by early ethnographers and subject to varying perspectives and analytical efforts, particularly with respect to group size and territorial extent. Recent interpretations of Native populations, sometimes contradictory with earlier studies, are largely based on detailed research using mission records, particularly those carried out by Milliken. Notably, we rely upon Milliken's most recent research results, referred to as the Community Distribution Model (CDM) for estimating populations and their density, and distinguishing tribelets and their spatial extent (identified as "regions") (Milliken 2010).

With respect to reconstructing population estimates at Spanish contact, Milliken's approach placed more emphasis on the impact of post-contact diseases on Native populations than previous reconstructions. The basic premise is that tribelets recruited into the missions later in time (typically those further from a mission) have lower mission baptismal numbers due to the greater impact of Euro-American diseases. To correct for these impacts and obtain the most accurate estimate of individual tribelet's population at contact, three steps were taken by Milliken. First, only adults (15 and above)

were used to calculate population estimates, since children, especially infants, were most likely to have been impacted by disease vectors. Second, a mortality factor was used to estimate the impact of diseases on the total population. Finally, the estimated adult population was doubled to obtain an estimate of total population. The results yield much more precise and accurate population estimates, undoubtedly represent the most accurate reconstruction to date, and are the results used most often referred to by current researchers. Each of the three groups that inhabited the study area in the late eighteenth century is discussed below; the level of detailed information provided in this section varies based on the information received from the tribes.

Ohlone

Ohlone (also referred to as Costanos, Spanish for "coastal people") is a linguistic subfamily of the Penutian language stock (Bean 1994; Kroeber 1925; Levy 1978; Teixeria 1997). Western Miwok (such as that spoken by the Coast Miwok north of Golden Gate) is the closest related language. According to early linguists, there were eight branches of the Costanoan language, each associated with a geographic location and the tribelet(s) that inhabited the locality. Four of these groups, the Ramaytush, Chochenyo, Tamyen, and Karkin, fall within the Project study area. Whether these were distinct languages or dialects is uncertain.

The territory of the Ohlone covered around 17,350 square kilometers (6,700 square miles), extending 177 kilometers (110 miles) along the Pacific Coast from south of Monterey Bay all the way up the San Francisco Peninsula and inland some 32 to 72 kilometers (20 to 45 miles) into the Coast Ranges, running along the east side of San Francisco Bay to the Carquinez Strait. At the time of Spanish contact, the Bay-Delta Area and Coast Range valleys were dotted with Ohlone villages. Based on mission records, Milliken estimates that the Ohlone population was around 16,000, with an average population density of 2.4 per mile.

For the Ohlone as a whole, the basic unit of political organization was a territory-holding group of one or more associated villages and smaller temporary encampments. Often referred to as a tribe or tribelet (Kroeber 1962), these groups were generally considered independent, multi-family, landholding groups. Each regional community was a largely autonomous polity numbering typically between 150 and 400 people falling under the jurisdiction of a headman and council of elders who served as advisors to the villagers (Levy 1978). Permanent villages were established near the coast, the bay, and along river drainages, while temporary camps were in prime resource-processing areas. Some tribes occupied a central village, while others had several villages within a few miles of each other. Milliken has identified 59 Ohlone tribelets, of which 20 have more than half their territory within the Project study area. Notably, the tribelets within the study area, especially along the eastern and southern margins of the bay, had a considerably larger population density (4.3 per square mile for the study area) than the Ohlone as a whole.

Tribelet organization included a chief, which could be a man or woman, although the office was generally inherited via patrilineal descent (Levy 1978). The chief represented a tribal council of elders and took a leadership role in such important tasks as hosting visitors and leading food procurement expeditions. War leaders and shaman also played key roles in each community. The Ohlone had clans and moieties, and households appear to have been large, with 10 to 15 individuals per family. Patrilineal extended households were common (Harrington 1942), sororal polygamous households (where wives

are sisters) were also present (Palau 1926), and patrilocal lineages played an important role in group interaction.

Tamien Nation

The Tamien people (also spelled as Tamyen and Thamien) are one of eight linguistic divisions of the Ohlone (Costanoan) groups of Native Americans who live in Northern California. The Tamien traditionally lived throughout the Santa Clara Valley. The use of the name Tamien is on record as early as 1777, and it comes from the Ohlone name for the location of the first Mission Santa Clara (Mission Santa Clara de Tamine) on the Guadalupe River. Father Pena mentioned in a letter to Junipero Serra that the area around the mission was called Thamien by the native people (Kroeber 1925; Hylkema 1995). The missionary fathers erected the mission on January 17, 1777, at the native village of So-co-is-u-ka (Rensch et al. 2002).

Traditionally, the Tamien people spoke the Tamien language, a Northern Ohlone language, which ceased to be spoken since possibly the early 19th century. "Tamyen", also called Santa Clara Costanoan, has been extended to mean the Native people of Santa Clara Valley, as well as the language they spoke. Tamien is listed as one of eight Costanoan language dialects in the Utian family, although the legitimacy of the Utian genetic group is contested (Milliken et al. 2009). Tamien was the primary language of the Native people living at the first and second Mission Santa Clara (both founded in 1777). Linguistically, it is thought that Chochenyo, Tamyen and Ramaytush are dialects of a single language. However, this has not been proven, and Chochenyo, Tamien, and Ramaytush remain separate political tribes.

Tamien territory extends over most of the present-day Santa Clara County, California and was bordered by communities that spoke other Ohlone languages: Ramaytush to the northwest on the San Francisco Peninsula, Chochenyo, East Bay, Mutsun, south of San Martin, and the Akwaswas to the southwest. Tamien villages were not "tribelets" but an actual Nation of Tamien speaking villages.

Amah Mutsun

The Amah Mutsun occupied the San Juan Valley for thousands of years before the Spanish arrived in the late 1700s (Amah Mutsun Tribal Band 2023). The community was originally made up of approximately 20 to 30 contiguous villages stretched across the Pajaro River Basin and surrounding region. Members of these different villages were united by shared cultural practices and tribal traditions, including religious practices, method of fishing and hunting, ceremonial dress, craftsmanship, and shelter.

Most significantly, Amah villages were distinct from tribes outside their valley because of their unique language; no other Indian tribe spoke Mutsun. While the Costanoan/Ohlone language family was made up of eight separate languages, including Mutsun, each language was different from one another.

The Amah Mutsun Tribe had been drawn to the triangle of land formed by the Monterey Bay and the Pajaro and San Benito rivers due to the abundance of fresh water and fish. The Tribe was geographically isolated from its neighbors due to the physiography of the San Juan Valley (Tratrah).

Some Tribal ways of life for the Mutsun were that Chiefs were responsible for feeding visitors; providing for the impoverished; directing ceremonial activities; and directing hunting, fishing, gathering, and warfare expeditions. The Mutsun ensured a sustained yield of plant and animal foods by careful management of the lands. Controlled burning of extensive areas of land was carried out each fall to

promote the growth of seed-bearing annuals. The Mutsun diet consisted of acorns, hazelnuts, blackberries, elderberries, strawberries, gooseberries, madrone berries, wild grapes, wild onions, cattail roots chuchupate (herb), wild carrots, deer, elk, antelope, bear, rabbit, raccoon, squirrel, rat, mouse, sea lion, whale, duck, geese, and a variety of birds. Also eaten were salmon, steelhead, sardine, shark, swordfish, trout, lampreys, mussels, abalone, octopus, grasshoppers, caterpillars, and most varieties of reptiles. The Mutsun never ate eagles, owls, ravens, buzzards, frogs, or toads.

Family dwellings were domed structures thatched with tule, grass, ferns, etc. A small sweathouse was constructed by digging a pit in the bank of a stream and building the remainder of the structure against the bank. Dance enclosures were constructed in the middle of the village and were circular or oval in shape and consisted of a woven fence of brush or laurel branches about four and one-half feet high. There was a single doorway and a small opening opposite it. Tule boats (balsas) were used by the Mutsun for transportation, fishing, and hunting. Bow and arrows, spears, nets, and basket traps were used for hunting and fishing. Fish poisoning and fishhooks were also used. Tools were made of bone, wood, rocks, and minerals. Baskets were used in the collection, preparation, and storage of food.

The Spanish started their colonization of Central California in 1770, founding Mission San Carlos Borremeo del Rio Marmelo (Carmel) by Junipero Serra, second of the 21 missions. Mission Santa Cruz was founded in 1797, and the construction of Mission San Juan Bautista began in 1797. The Amah Mutsun people were aware of the actions of the Spanish; many village and religious sites were abandoned and spies were sent to the Missions at Monterey and Santa Cruz. They witnessed the destruction of the sacred tree near Monterey and the subjugation of the villages of Rumsen (Carmel), Awaswas (Santa Cruz), and other neighboring villages. When the Spanish came to Tratrah, they conducted a campaign to subjugate the Amah Mutsun. First, they invaded the religious shrines of the Amah replacing them with Christian icons. When this was not totally successful, the Spanish soldiers forcibly removed the Indians from their villages and brought them to the Mission compound, separating children from parents. The Amah Mutsun were considered Mission property upon baptism and were not permitted to return to their Tribal Lands.

Many of the Christianized Indians, who were called “neophytes,” attempted to flee the harsh conditions and slavery of the Mission. As a result, Spanish military expeditions were routinely dispatched to look for runaways and bring them back to the Mission. For this reason, some of the Amah took up weapons against the Spanish. First were the Ausaima, and, in 1802 after a series of battles, the Ausaima were defeated. Some records indicate that they may have moved to the central valley near the Merced River. The Orestac also battled the Spanish, but with little success. Under these oppressive conditions, the Amah were forced to conduct their tribal activities and speak their language in secret. At the same time, while life at the Mission was repressive, the plight they experienced broke down any barriers that may have existed between the inhabitants of the different Amah Mutsun villages.

Although the stated goal of the Missions was to return land to the Indians, no land was ever provided. During the Mission period, over 19,421 Indians died at Mission San Juan Bautista, and approximately 150,000 Indians died in California. According to anthropologist estimates, the California Indian population was reduced from 350,000 to 200,000 during this time.

The San Juan Bautista Mission priests maintained meticulous documentation of many Amah Mutsun activities. In 1841, Father Felipe de la Cuesta, a priest of Mission San Juan Bautista, published the

Mutsun language in Europe, which was followed by a much later release in America. Father Felipe de la Cuesta translated prayers, songs, doctrines, confessions, and all primary vocabulary.

The Mission library contained records about the local Amah, including records of births, baptisms, marriages, and funerals, as well as punishment and imprisonments. From these records, journals, and other documents, it is apparent that the priests attempted to inculcate the Amah Mutsun with a new value system, so as to "civilize" them. Tribal activity was forbidden. Neophytes were not allowed to speak the Mutsun language, conduct Tribal ceremonies, or use their own Indian names. They were punished if these rules were broken. In addition to battling assaults on their culture, the Indians were also afflicted with foreign diseases brought by the Spanish, including smallpox, measles, and venereal diseases. As a result, by 1833 there had been a total of 3,396 baptisms, 858 marriages, and 19,421 deaths at Mission San Juan Bautista.

Life for the Amah Mutsun changed when, in the early 1820s, Mexico won independence from Spain, and more Mexicans began to arrive in the San Juan Valley. The Mexicans consolidated control of outlying lands, and by 1833 they forced the Mexican Government to turn over and secularize the Mission. Shortly thereafter, the remaining Amah Mutsun were finally allowed to leave the Mission compound. However, their problems continued with the Mexican authorities. Although the Mexicans promised a return of ancestral land, the officials reneged under pressure from Mexican and Spanish citizens who wanted land. Forced to scavenge for land and work, the Amah Mutsun settled for a time in the town of San Juan Bautista.

During the Mexican period, Indians were forced to work under a peonage system. They worked in slave or near slave-like conditions, performing work such as shearing sheep, herding cattle, cutting lumber, harvesting crops, pounding grain into flour, building houses, tanning hides, cleaning houses, serving meals, and making tile and adobe bricks. During the Mexican period, shipping traffic increased. Ships from the eastern coast would bring manufactured goods such as fishhooks, cotton cloth, blankets, shoes, exotic spices, etc. to the California Coast. These items were traded for the skins of wolverines, fisher martens, mink, beaver, otters, and whale oil. The trapping and hunting of these species greatly reduced the populations of these animals. During this period, native plants such as oak trees were logged for fuel, carts, and other purposes. Native plants were eaten by cattle and sheep before they could seed, and the population of these plants was drastically reduced.

Throughout the Mexican period, measles, pneumonia, diptheria, and venereal and other diseases spread throughout the Native population. During the Mexican period, it is estimated that the population of California Indians was reduced by as much as 100,000; their population went from approximately 200,000 to 100,000 in this short period of time.

In 1848, the Amah Mutsun were disturbed again when Anglo settlers came to the region. The Anglos had no respect for the culture and traditional ways of the aboriginal people, nor for their rights to occupancy of the land. Anglos, furthermore, were afraid of the California Indians from the outset. Due to the Anglos' experiences with the Plains Indians, the California Indians were treated with brutality.

In the early 1850s, both the Federal and the State governments concluded there was an "Indian problem." To deal with this "problem", both governments developed their own solution. The federal government became alarmed by reports of violence against the aboriginal populations, and in 1852 it established special military reservations to remove some of the Indians from the general population. At

these military compounds, the federal government conducted treaty negotiations with local Indians. Some of the San Juan Indians participated in the negotiations, serving as interpreters between the Americans and Tribal Chiefs, and were signatories to the treaties signed near Pleasanton. Immediately after the treaties were completed, a powerful California business and political lobby quashed all hopes of getting the treaties ratified in the Senate. The U.S. Senate placed the treaties in confidential files and ordered that they be sealed for 50 years. In 1905 the Senate voted to remove the injunction of secrecy, but the proposed reservation land was now spoken for by the Anglo settlers. Because the treaties were never signed, all California Indians not living on reservations, such as the Mutsun, became landless Indians. The California solution to the Indian problem was that the Governor of California, Peter H. Burnett, signed an Executive Order to Exterminate all Indians.

As a result of this Executive Order, the State of California paid between 35 cents and five dollars as a bounty for every Indian killed and funded military expeditions for the sole purpose of exterminating Indians. During this campaign the State paid out over $1,200,000.00. A report by the California State Library shows that over $259,000 were spent on efforts in Monterey County and Mariposa County alone. County lines were drawn differently during this time, but Monterey County incorporated the traditional tribal territory of the Amah Mutsun. These campaigns continued until 1859.

During the last half of the 19th century, state hostility toward Indians continued, manifesting itself in numerous legal restrictions that deprived Indians of civil rights, voting rights, and basic judicial protections. Their subsistence was again threatened by the government, which considered ejecting all Indians from the state. Obviously, this environment was not conducive to Indian proclamations of sovereignty, demands for ancestral lands, or declarations or Tribal identity. This pervasive, statewide persecution sent an unambiguous message to the Amah Mutsun: hide or be eradicated.

In 1891, the President of the United States signed an act for the relief of the Mission Indians in the State of California, as directed in the Mission Indian Act of 1891. This Act provided that “a just and satisfactory settlement of the Mission Indians residing in the State of California upon reservations which shall be secured to them as hereafter provided,” and “That it shall be the duty of said commissioners to select a reservation for each band or village of the Mission Indians residing within said State, which reservation shall include, as far as practicable the lands and villages which have been in the actual occupation and possession of said Indians, and which shall be sufficient in extent to meet their just requirements, which selection shall be valid when approved by the President and Secretary of the Interior.”

It appears the Act for the Relief of the Mission Indians of the State of California was relegated to those Mission Tribes of southern California who obtained land and have reservations. It also appears that the State of California opposed other Mission Tribes obtaining lands or a reservation. The Amah Mutsun believe that this Act gives Federal Recognition Status to the Amah Mutsun Tribe and that the Tribe was illegally denied a reservation in both San Juan Bautista and Santa Cruz. Through the 1900 Census and a separate census authorized by Congress in 1906 that targeted non-reservation California Indians, the federal government took a renewed and somewhat more positive interest in Indians. The Tribe’s re-emergence during this period can be heavily attributed to Ascencion Solorsano de Cervantes, around whose home much Tribal activity was centered. Ascencion’s house became a place where members came daily to enlist Ascencion’s support and to share news with other members. Ascencion became a repository for Tribal history, learning stories from others and passing on traditions and Tribal lore to the next generation. She took on the responsibility for finding employment, food, and medicine for

members of the Tribe who needed her help. Her leadership in the first three decades of the 20th century was critical to the future of the Tribe, and coincided with the time when the Tribe's members were finally able to practice their culture publicly. Alfred Kroeber extended the first and second volumes of Father Felipe de la Cuesta's work on the Mutsun language and Tribal customs in the early 1920s. Subsequently, John Peabody Harrington continued his research by conducting follow-up interviews with Ascencion Solorsano and the San Juan community throughout the 1930s.

Harrington and the Smithsonian Institute employed Ascension Solorsano's granddaughter, Martha Herrera. They met when Mr. Harrington went to New Monterey to interview Ascension before her death. Martha was hired as his secretary and traveled with him to various California Missions transcribing notes from Spanish to English. He also requested other information, ranging from plants and their medicinal uses to recipes.

By 1928, many Tribal members were not afraid to cooperate with federal authorities and were included in the 1928 Indian Enrollment Process. On their enrollment forms, members were accurately identified as "Mission Indian, San Juan Bautista" for the first time. At least 65 members of the Amah Mutsun were enrolled, including the ancestors of several prominent Mutsun families of today. By this time, the Amah Mutsun had resurfaced as a cohesive Tribal unit, allowing itself to be publicly visible to whites and Hispanics after years of suppression and compulsory sequestration. Ascencion had succeeded in reinvigorating Amah Mutsun identity and raising non-Indian awareness of the Tribe.

Since Ascencion's death in 1930, the Tribe has become stronger, and a series of leaders have ushered in a new era of Tribal growth. The 1930s brought regular Tribal gatherings at marriages, funerals, and baptisms, as it was required that all members assemble for the funeral of another. Many of these events were used to conduct informal Tribal business and exchange family and other Tribal information. In 1947, the Tribe participated in federal litigation to recover compensation from the government for promises it had made during the 1850 negotiations. During the 1950s and 1960s, gatherings of the Amah Mutsun Tribe were held as part of the San Juan Bautista Powwow, an annual three-day celebration at which members would participate in activities to celebrate their Amah Mutsun heritage. In 1991, the Amah Mutsun Tribe formed a government and passed a constitution. In 1992, the Amah Mutsun submitted documents requesting to have their federal recognition restored. The Amah Mutsun Tribal Band is currently listed as number two on the "Ready for Active Consideration", which means the review of the petition should begin sometime within the next few years.

Today the Amah Mutsun Tribe is an active community of nearly 600 members, each of whom can trace their individual descent directly to a Mission San Juan Bautista Indian and/or a Mission Santa Cruz Indian. In addition to the annual gatherings discussed above, the Tribe also holds regular membership meetings of the Tribal Council. The Council is responsible for governing the day-to-day operations of the Tribe. The Tribal Council works closely with its elders, and within the traditional Tribal structure, to resolve member concerns and carry on the business of the Tribe.

Historic Context

The following historic-period context was developed from the *County of Santa Clara Historic Context Statement* (Archives & Architecture 2012) and the *Santa Clara County Heritage Resource Inventory Update: South County* (Dill Design Group 2003).

Early Euro-American Exploration and Settlement (1769–1797)

In the fall of 1769, Spaniard Gaspar de Portolá and a company of 64 men were the first Euro-Americans to visit the place that would become known as the Santa Clara Valley. A small contingent of the Portolá expedition crossed the southern edge of the bay and explored the shore up to about present-day Hayward. The following year Spaniard Pedro Fages led a small party from the Monterey presidio across the San Felipe plain, visiting an Indian village on the shore of San Felipe Lake. These expeditions were followed by several other Spanish visitations in 1772, 1774, and 1776. Juan Bautista de Anza led the last party, settlers who traversed the region on the way to establishing Yerba Buena (to later become San Francisco).

Mission Santa Clara and El Pueblo de San José were established in 1777 by Spanish missionaries and colonists on the banks of the Guadalupe River in the northern part of the valley. Mission Santa Clara was at the northeastern edge of Tamien tribal territory, a subgroup of the Ohlones. The missionaries arrived with cattle, mules, horses, sheep goats, pigs, and chickens. Livestock were let to graze on the fields that had originally supplied the local Ohlone tribes with plants and seed harvests. The pueblo at San José was the first civil settlement established by the Spanish Crown in the northern reaches of Las Californias. The pueblo's primary function was to supplement the crops grown at the missions and to support the garrisons in Monterey and San Francisco. The El Camino Real was established as the major transportation route that linked the pueblo and the mission to the evolving system of Franciscan missions and presidio outposts of the Spanish Empire.

Rancho Period (1794–1846)

Business and commerce during the period of Spanish and Mexican jurisdiction in Alta California consisted of cattle-raising and limited agriculture. Alta California at that time was a frontier province that included the Baja Peninsula as well as the area we now know as California. Under Spanish rule, no foreign ships were allowed to trade within the ports of Alta California, and the only article of regular export was tallow, which was sent by Spanish ships to Nueva España (Mexico). All agricultural crops were consumed locally, sent to the presidios, or used to provision Spanish ships.

In 1794, new regulations permitted the presidio commanders to make land grants within four leagues of any California barracks. In all, 43 ranchos were granted in the Santa Clara Valley between 1802 and 1845. Mexico declared independence in 1821. After the Mexican revolution, Alta California Missions were secularized and Mexican governors authorized hundreds of land grants. Mexican governors ruled Alta California until 1846, and the new government allowed trade with foreign ships. During the Mexican period, the ranchos were primarily devoted to raising large herds of cattle for the hide and tallow trade in the Americas, the basis of the regional economy during this period. A typical rancho included houses, corrals, a garden, a small orchard, often enclosed by a fence or cactus hedge, and an enclosed tract of grain fields, occasionally accompanied by a small gristmill. The remainder of the rancho, where the cattle roamed, was unfenced. Products produced on the ranchos were traded at the nearby ports, Monterey or Alviso, where ships brought necessary goods and foodstuffs.

By 1845, the era of Spanish and Mexican colonization was coming to an end in the region. The Missions had been secularized and all the desirable lands had been granted to the local citizenry. The dominant industry was cattle ranching with the export of hides and tallow the primary source of income. With the exception of soap and wheat, manufactured articles and finer foodstuffs were imported. As American

and European emigrants began to drift into Mexican California during the 1830s and 1840s, many were attracted to the local region. With a population of about 500, San José was the largest town in northern California, situated in a fertile undeveloped valley. In the southern Santa Clara Valley, a large percentage of the rancho land had been acquired by American and European settlers through purchase, marriage, or squatting.

Early American Period (1848–1869)

The American frontier period in California began with the military conquest of California in 1846 and came to a close with the completion of the transcontinental railroad in 1869. This period was dominated by the imposition of American culture on the Hispanic way of life. In May 1846, the United States declared war on Mexico; shortly thereafter, the American flag was raised in Monterey and San José. The hostilities finally ended with the Battle of Santa Clara in January 1847. In 1848, the United States acquired the Mexican province of California in the Treaty of Guadalupe Hidalgo. On the heels of the acquisition of California by the United States was the discovery of gold in the Sierra foothills, which precipitated a sudden influx of population to the state. This event accelerated California statehood, which was achieved in 1850, with San José selected as the first state capital within the newly established County of Santa Clara.

Following the close of the Mexican-American War, it soon became apparent to the rapidly growing, land-hungry population, that the preexisting system of land ownership would no longer be sufficient. New American settlers did not understand the old Mexican concept of land tenure, and they were frustrated since much of the best land in the San Francisco Bay area was taken up by the large Mexican land grants. In many cases, the boundaries of the ranchos were only roughly identified. Throughout California, the new settlers, believing that the territory ceded by Mexico in the Treaty of Guadalupe Hidalgo was now the public domain of the United States, tried to make claim to lands outside the pueblos. They immediately came into conflict with landowners who had acquired title under Spain or Mexico. Many settlers took matters into their own hands and occupied the land in defiance of the law. Squatters in this period maintained the belief that the lands were public and attacked the legality of Mexican titles.

To bring order out of chaos, the United States government created the California Land Claims Commission in 1851 to validate the Mexican titles by determining legal ownership and establishing fixed boundaries for property granted under Spanish and Mexican authority. Intended to protect the pre-existing landowner, this process, in many cases, worked to their detriment. The process of title confirmation was long, cumbersome, and expensive, and many ethnic Mexican rancheros found the economic and legal difficulties insurmountable. Even when the property owners gained legal title to their land, the eviction of the numerous squatters was an almost impossible task.

In 1847, pressure was exerted upon the San José town council (known during this unsettled period as the Junta) to make more land available for public ownership. Land surveys were commissioned and extended the San José city limits to Coyote Creek on the east, and just beyond the Guadalupe River on the west. Unclaimed lands were sold by the alcalde at $50 per city block. With the discovery of gold in 1848, San José was one of several towns in northern California that responded to the stimulus of gold fever by establishing hotels, houses of entertainment, restaurants, saloons, and stores that provided merchandise needed by the miners. California statehood was achieved in 1850, and San José was

selected the first state capital. The combination of migrating miners and the arrival of legislators, newsmen, and interested onlookers, spurred the rapid development of the Santa Clara Valley region.

As the productivity of the gold mines fell off and the enthusiasm of the Gold Rush began to wane, many American pioneers of this period began to look to the cities and fertile rangelands as sources of income. Until the drought of 1864, cattle ranching continued to be the primary economic activity in the region. During the Mexican period, open range methods were followed since grazing lands were ample. As smaller farms began to spread throughout the valley, pastureland was reduced, and cattle ranching became concentrated in the foothills. More intensive stock farming began in the 1860s when cattle were moved from the foothill pastures to valley feed yards until they were ready for marketing. Paralleling the rise and fall of the cattle industry, but on a smaller scale, was sheep ranching, particularly prevalent in the San Felipe portion of southern Santa Clara County. Dairy farming also began in South County in the 1850s and 1860s.

In 1859, Henry Miller purchased 1,800 acres of the Rancho Las Animas from the heirs of José Maria Sanchez. Known as Bloomfield Ranch, the property became the headquarters of the vast Miller and Lux cattle ranching empire. Miller and Lux bought land from the government, from squatters, and from Hispanic Californians who did not wait for their properties to be patented by the American government. Gradually, Miller purchased most of the southern portions of the Santa Clara Valley around Gilroy.

The staple agricultural product after the Gold Rush became wheat. The easy cultivation and high fertility of the soil of the Santa Clara Valley facilitated wheat production with little capital investment. By 1854, Santa Clara County was producing 30 percent of California's total wheat crop. Other grain crops, primarily barley and oats, followed wheat in productivity. The farms in the southern portion of Santa Clara County tended to be larger than elsewhere in the County, as land was cheaper and the soils less fertile. Other industries developed during this period include lumber mills, vineyards and commercial wineries, and orchards.

During the early 1850s, small settlements developed in South County, including San Ysidro, Gilroy, Bell, and San Martin. As distances were too great to allow frequent trips to San José or Monterey, these small settlements provided needed services and commodities to their respective vicinities, such as general merchandise stores, post offices, blacksmith shops, schools, and churches. Along Monterey Road, which was straightened and improved in the 1850s, small hotels were established at periodic intervals as way stations for travelers and stagecoach stops in the 1850s and 1860s.

Late Nineteenth Century (1869-1900)

The decade of the 1860s saw the introduction of railroad transportation into Santa Clara County, beginning with the San Francisco and San José Railroad. The first train arrived in San José on January 16, 1864. A few years later, the Central Pacific (originally known as the Western Pacific Railroad) line was completed from San José to Niles. The line connected San José with the transcontinental railroad in 1869. San José, Santa Clara, and Milpitas thus became part of the national and world economic network that opened new markets for the agricultural and manufactured production of the Santa Clara Valley.

In 1869, the Santa Clara and Pajaro Railroad line was completed through the southern Santa Clara Valley. This event precipitated many changes in South County, as it spurred the development of towns along the railroad line and caused changes in land use due to the accessibility of new markets outside

the region. The railroad line roughly paralleled Monterey Road, connecting San José with "New" Gilroy. In 1870, Southern Pacific Railroad purchased the Santa Clara and Pajaro Railroad line.

Through most of the Late Nineteenth Century Period, grain continued to be one of the primary agricultural pursuits in South County, even though elsewhere in the county production had peaked around 1875. Large stock ranches continued to operate in the eastern foothills and southwest of Gilroy during this period. When the cattle industry shifted to more intensive methods with the introduction and use of feed lots, hay production became a necessity.

Most of the roadhouses along Monterey Road continued to exist after the construction of the southern portion of the railroad. Coyote, Perry's, Madrone, and Tennants became train stations. Most of the communities associated with the stations grew slowly. The train stations functioned as shipping centers for grain, cattle, and fruit products.

By 1890, orchards spread along Monterey Road, particularly between Coyote and Madrone where irrigation was available. By 1900, orchards completely dominated Santa Clara County agriculture. In the early 1890s, the subdivision of the large ranches owned by Daniel Murphy Jr., Diana Murphy Hill, and Catherine Murphy Dunne, and the subsequent development of smaller tracts into orchards, marked a dramatic shift in the valley floor land use from grain farming to horticulture.

The canning industry was pioneered in San José by Dr. James Dawson in 1871. The fruit canning and packing industry quickly became the urban counterpart of the valley's orchards. Commercial growth in Santa Clara County boomed during the 1880s and continued with a steady increase in population toward the end of the nineteenth century. Changes in transportation during this period were a major influence on developmental patterns. Samuel Bishop built the first electrical streetcar line in America when he electrified the line between San José and Santa Clara in 1887/1888.

Early Twentieth Century (1900-World War II)

The business of fruit production, the combination of growing, packing, and canning, was the focus of Santa Clara Valley agriculture by the early twentieth century. Fruit production peaked in the 1920s. With the increased ratio of crop value to land unit, large farms became unnecessary. Increased land prices, cultivation costs, and growing population led to the subdivision of farmlands into highly specialized "fruit ranches" that were three to 50 acres in size. By the 1930s, 83 percent of the orchard ranches raised prunes. Santa Clara Valley produced 25 percent of the world's trade.

The introduction of the automobile and commercial development of the trucking industry had a significant impact on land use patterns throughout Santa Clara County. Until about 1910, local residents relied on horse-drawn vehicles for local transportation and the railroad, with its many depots, for longer distances. The automobile greatly extended the distance an individual could travel to acquire goods and services. As a result, the railroad depots around which towns had developed, such as Morgan Hill, Gilroy, and to some extent San Martin, continued to prosper, and railroad stations without associated towns and minimal services, such as Coyote and Madrone, began to decline and eventually fell into disuse.

After Henry Miller's death in 1916, his Gilroy area lands were sold off in pieces. This property redistribution spurred settlement in those areas. Miller's large land holdings were put on the market and what had once been grazing land was largely developed into prune orchards. Gilroy's population growth between 1910 and 1930 was largely made up of immigrants from southern Italy, many of whom

established small, family-operated wineries or canneries. Japanese immigrants were also attracted to the area's growing agricultural market, specializing in vegetable crops, seeds, and garlic.

In the early 1920s, the Western Pacific Railroad alignment between Fremont and San José was constructed, changing land uses in some areas from residential and agricultural to industrial use. By 1928, all of San José city streets had been paved and old wooden bridges were being replaced by concrete bridges. Highway improvements included the widening of the San Francisco and Oakland highways in 1929-1932, the construction of the Bayshore Highway in the Santa Clara County in 1927 and realigning and widening the Santa Cruz Highway. With increased automobile competition, streetcar lines were abandoned in the 1920s and 1930s and replaced by private bus lines.

World War II, like the Gold Rush a century before, had a major effect on the changing complexion of Santa Clara County. The San Francisco Bay area was the gateway to the Pacific theater from 1941 to 1945. The large naval air station at Moffett Field became a center of much activity. Thousands of military personnel were brought to the area for training and processing, exposing the Santa Clara Valley to public view.

Events at Stanford University were also setting the stage for significant developments in the post-war period. Frederick Terman became an engineering professor at Stanford in 1930. Under his guidance the university became a leader in the field of electronics. Many of Stanford's pre-war graduates played important roles in the post-war development of the local electronics industry.

Late Twentieth Century (1951-Present)

William Hewlett and David Packard, two of Professor Terman's students at Stanford University, developed electronic test equipment in a Palo Alto garage in 1939. During World War II this small company obtained government contracts and continued to grow during the post-war period. In 1954, the Stanford Industrial Park was established attracting the companies of Hewlett-Packard and the Varian brothers (also students of Terman) as well as Sylvania, Philco-Ford, General Electric, and Lockheed's research laboratory. These companies formed the nucleus of what became known as Silicon Valley.

Soon after World War II, the business community launched an active campaign to attract new non-agricultural related industries to Santa Clara County. Early industries that established plants in the Santa Clara Valley included Chicago's International Mineral and Chemical Corporation's Accent plant in 1946, the General Electric plant in the early 1950s, and in the 1950s International Business Machines (IBM) began to expand their West Coast operations in San José that established in 1943. By the 1960s, Santa Clara County's economic base was dependent upon the electronic and defense industries.

Attracted by the increasing job market, the population of the Santa Clara Valley experienced phenomenal growth after 1950. Between 1950 and 1975 the population increased from 95,000 to over 500,000. Between 1950 and 1969, residential subdivisions replaced orchards at amazing speed.

The southern part of Santa Clara County has retained much of its rural character, although patterns of agricultural development have changed. Some of the larger tracts of agricultural land have been subdivided into smaller tracts of land developed as family-owned or leased farms. Large tracts have also been consolidated for agri-business operations that produce large vegetable and garlic crops in the Santa Clara Valley and run livestock in the foothills.

In the last 50 years, agriculture has been replaced by other forms of modern industry and development in South County. In the late 1950s, the hills east of the Coyote area became the 5,200-acre plant site of United Technologies Corporation, an important aerospace contractor. In the early 1980s, the new alignment of U.S. 101, the South Valley Freeway, was completed through the region east of old Monterey Road (now known as U.S. Business 101). In the late 1980s, IBM built its Bernal Road plant west of Coyote.

Since the 1950s, a number of large recreational venues were created in South County. In 1950, Cochrane Ranch was purchased by the Santa Clara Valley Water District, and Anderson Lake was created, now part of the Santa Clara County park system. In 1953, Sada Coe donated 23,300 acres of the old Coe Ranch property to the county for park purposes. In 1969, Coyote Lake was incorporated into the Santa Clara County park system. The Coyote Creek Park Chain extends for 15 miles north from Anderson Lake along the east side of the Santa Clara County Valley.

Methods

Background Research

A records search was conducted to determine if any historic properties or archaeological resources listed or potentially eligible for listing on the NRHP or CRHR were present within or immediately adjacent to the Proposed Project area. The records search request was submitted by PanGIS to the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) on May 16, 2023, and was fulfilled on June 22, 2023.

Materials consulted by the NWIC included prehistoric and historic archaeological resource and report databases, NRHP, CRHR, California Historical Landmark, California Historical Points of Interest (CHPI), California Inventory of Historic Resources, Archaeological Determinations of Eligibility, the California Office of Historic Preservation (OHP) Built Environment Resources Directory, and the Caltrans Bridge Survey. The records search area included a one-mile buffer of the Proposed Project area.

PanGIS consulted historical maps and documents of the records search area including original survey plats and land patents for Township 7 South/Range 1 East, Township 8 South/Range 1 East, and Township 8 South/Range 2 East of the Public Land Survey System (PLSS) (BLM 2023); historical topographic maps (USGS 1:250,000 San José 1947, 1956, 1962, and 1966; USGS 1:125,000 San José 1978; 1:62,500 San José 1889, 1897, 1899, 1953, and 1961, New Almaden 1916 and 1919, Los Gatos 1919, 1940, and 1943, and Morgan Hill 1917 and 1939; and USGS 1:24,000 San José West 1953, 1961, 1968, 1973, and 1980, San José East 1953, 1961, 1968, 1973, and 1980, Santa Teresa Hills 1953, 1968, and 1980, and Morgan Hill 1955, 1968, 1973, and 1980) (USGS 2023); and aerial photographs (1948, 1953, 1956, 1960, 1968, and 1980) (NETROnline 2023).

A Sacred Lands File (SLF) search request of the Proposed Project area was submitted to the Native American Heritage Commission (NAHC) on May 16, 2023.

Surface Survey

The survey area was confined to those portions of the Proposed Project area where access was available. The survey plan entailed five-to-ten meter-wide transects, depending on ground visibility and accessibility. For areas not accessible due to steep or unsafe terrain or dense vegetation, a visual survey was conducted from the nearest accessible area. Previously unrecorded resources encountered would be recorded on digital California Department of Parks and Recreation (DPR) 523 resource forms, and their locations recorded using a handheld device running Environmental System Research Institute (ESRI) Field Maps software. Pen and paper field logs served as a backup. Photographs were taken with a 12-megapixel digital camera. No cultural materials were collected during the surface survey. Photographs and field notes are held by PanGIS.

Resource types

Based on the prehistoric, ethnohistoric, and historic context of the Project area, there is a potential for certain types of resources to exist in the Proposed Project area.

Prehistoric resources in the region are typically characterized by the surface manifestations of human activity generally associated with early Native American activity into the ethnohistoric period. These resource types include lithic scatters (flaked stone artifacts such as cores, bifaces, and debitage created from lithic reduction), diversified artifacts scatters (containing a mix of lithic artifacts, pottery, bone,

and/or shell), habitation sites (a variety of artifact types, features such as hearths, and midden), and burials (including human remains and/or grave goods). Ethnohistoric period sites are defined as Native American settlements occupied after the arrival of European settlers in California and may contain a mix of prehistoric and historic-era artifacts.

Historic-era resources in the region are typically represented by structures or other remains of historic activities greater than 50 years old. Historically, land use in the area has focused on agriculture and ranching; therefore, the resources most likely to be encountered would include irrigation and water conveyance features (pipe, pumping equipment), structural foundations, remains of abandoned roads, historical electrical infrastructure, historic-era refuse deposits (glass bottles and cans), and/or stock-related features such as fence lines and water troughs.

Isolated artifacts in the region are typically characterized by one or two distinct artifacts or a few fragments of the same artifact that are too far away (typically more than 30 meters) from other artifacts or features to be considered part of a site. These may be prehistoric or historic and are frequently displaced from their original context and disassociated from their provenance.

Findings

Background Research

The NWIC record search identified eight studies conducted within the past ten years that intersect the Proposed Project area and had a field component (pedestrian survey, archaeological monitoring, or data recovery), covering a total of approximately 76.47acres (28.3 percent) of the Proposed Project area (**Table 1**). An additional 176 studies were identified that intersect the Proposed Project area that either did not have a field component or were older than ten years, and an additional 886 studies were identified outside of the Proposed Project area but within the one-mile records search buffer (**Appendix B** and ***Figure 6: Records Search Report Locations Map*** **(Confidential Appendix F)**).

Table 1. Previous Cultural Resource Studies within the Last 10 Years Intersecting the Proposed Project Area

Report Number	Year	Author (Company)	Report Title	Acreage in Project
S-045408	2014	Laurie, Leroy (URS Corporation)	Cultural Resources Constraint Report; Metcalf-Morgan Hill 230kV Structures 000/001 and 000/002	1.09
S-045655	2014	Scher, Naomi (Far Western)	Cultural Resources Study for the Metcalf Security Enhancement Project, Santa Clara County, California	67.16
S-045670	2014	Sikes, Nancy (Cogstone/URS)	Archaeological Survey Report, US 101 Express Lanes Project, Santa Clara County, California	2.73
S-046205	2015	Harris, Benjamin, and Helen Blackmore (Caltrans)	Historic Property Survey Report, Resurface and Repair Project, 04-SCL-101 PM 16.00-27.90	3.87
S-047098	2015	Psota, Sunshine (Holman & Associates)	Historic Property Survey Report Capitol Expressway Improvement Project, Santa Clara County, California CML 5937 (196)	0.77
S-049632	2016	Cartier, Robert (Archaeological Resource Management)	Archaeological Auger Testing Program for the North San Pedro Studios Project in the City of San José	0.07
S-051695	2018	Nayyar, Margo (Michael Baker)	Potential Commercial Historic District in San José, Reconnaissance Level Survey and Recommendations	4.56
S-054136	2019	Nayyar, Margo (Michael Baker)	North First Street Local Transit Village Reconnaissance Level Survey and Evaluation Recommendations	0.04

The NWIC records search identified 18 previously recorded resources that intersect with the Proposed Project area. Of these, one (P-43-001279) is multi-component, with prehistoric burials and historic deposits. Four are prehistoric, including a village site with burials (P-43-000189), a single burial (P-43-003535), a lithic scatter (P-43-000571), and isolated faunal remains (P-43-0001450). Of the 13 historic-era resources, six are buildings (P-43-001116, P-43-001307, P-43-001330, P-43-001331, P-43-001334,

and P-43-004139), two are built environment or landscape (P-43-002628 and P-43-002629), one is a deposit (P-43-001452), and four are isolates (P-43-001451, P-43-001453, P-43-001454, and P-43-003568). These resources are listed on **Table 2**, shown on **CONFIDENTIAL Figure 8: Survey Results Map (Appendix F)**, and described below.

Table 2. Previously Recorded Cultural Resources Identified

Resource	Description	Project Component	Status	Comments
P-43-000189 (SCL-000178)	Prehistoric village site with human remains	PG&E Metcalf waterline	Determined Eligible (NRHP D)	Data recovery
P-43-000571 (SCL-000576)	Lithic scatter and fire-cracked rock	Staging Area 2	Recommended Not Eligible (Scher 2014)	Tested
P-43-001116	San Jose Substation B	San Jose B Substation	Recommended Not Eligible 1998	--
P-43-001279 (SCL-000846/H)	Historic deposits and prehistoric cemetery	Grove to Skyline 320 kV Transmission Line (Bassett Street)	Undetermined	Data recovery
P-43-001307	281 Delmas Avenue	Staging Area 9	Not evaluated	Destroyed; DPR update
P-43-001330	255 Delmas Avenue	Staging Area 9	Not evaluated	Destroyed; DPR update
P-43-001331	Primera Baptist Church	Staging Area 9	Determined Eligible (FTA 1999)	Destroyed; DPR update
P-43-001334	201-203 Delmas Avenue	Staging Area 9	Not evaluated	Destroyed; DPR update
P-43-001450	Faunal remains	Grove to Skyline 320 kV Transmission Line (Market Street)	Not evaluated	Isolate
P-43-001451	Historic bottle	Grove to Skyline 320 kV Transmission Line (Market Street)	Not evaluated	Isolate
P-43-001452	Historic deposit	Grove to Skyline 320 kV Transmission Line (Market Street)	Undetermined	Destroyed
P-43-001453	Trolley remains	Grove to Skyline 320 kV Transmission Line (Market Street)	Not evaluated	Isolate
P-43-001454	Historic ceramic	Grove to Skyline 320 kV Transmission Line (Market Street)	Not evaluated	Isolate
P-43-002628	El Camino Real / Juan Batista de Anza Historic Trail	Grove to Skyline 320 kV Transmission Line (Monterey Road)	Listed (Local); Recommended Not Eligible NR/CR	City of San José
P-43-002629	Keesling's Shade Trees	Grove to Skyline 320 kV Transmission Line (Monterey Road)	Listed CHPI (SCL-056); Determined Not Eligible NR 2005	--

Resource	Description	Project Component	Status	Comments
P-43-003535 (SCL-000948)	Prehistoric human remains	Grove to Skyline 320 kV Transmission Line (S Market Street)	Undetermined	Recovered
P-43-003568	Historic bottle	Grove to Skyline 320 kV Transmission Line (Market Street)	Not evaluated	Isolate
P-43-004139	217 W Julian Street	Grove to Skyline 320 kV Transmission Line (Terraine Street)	Recommended Not Eligible 1982	Destroyed; DPR update

Two of the above resources are listed on historic registers: P-43-002629 (Keesling's Shade Trees) is listed on the CHPI (SCL-056) and P-43-002628 (El Camino Real / Juan Batista de Anza Historic Trail) is listed by the City of San José. One resource, P-43-000189 (prehistoric village site with human remains), was determined eligible for listing on the NRHP. One resource, P-43-001331 (Primera Baptist Church), was determined eligible for listing on the NRHP but has since been destroyed. Two resources with prehistoric human remains, P-43-001279 and P-43-003535, have been subjected to burial recovery but their evaluation status is undetermined. Three resources (P-43-000571, P-43-001116, and P-43-004139) have been evaluated and recommended not eligible for listing. Three resources (P-43-001307, P-43-001330, and P-43-001334) have not been evaluated but have been destroyed since recording. One resource (P-43-001452) was destroyed during recording. The remaining five resources (P-43-001450, P-43-001451, P-43-001453, P-43-001454, and P-43-003568) are isolated occurrences. The records search identified an additional 1,184 previously recorded resources outside of the Proposed Project area but within the one-mile records search buffer, including 79 previously recorded resources within approximately 100 feet of the Proposed Project area (**Appendix B** and ***Figure 7: Records Search Resource Locations Map*** **(Confidential Appendix F)**).

Previously Recorded Resources Within the Proposed Project Area

P-43-000189 (SCL-000178) – This prehistoric resource was originally recorded in 1974 as a flake scatter, fire cracked rocks, and ground stone on an alluvial fan at the mouth of Metcalf Canyon. The site was extensively tested in 1977 ahead of Highway 101 construction; over 4,000 artifacts were recovered, including charmstones, projectile points, and disarticulated human remains, with in situ burials encountered during construction monitoring. Some human remains were capped and left in place while others were reinterred north of the site. The site was characterized as a village site with potential house floors, dating to at least 4950 B.P., some of the earliest evidence of occupation in the region. A 2001 survey noted that the site is bisected by Highway 101 and the Metcalf Road overcrossing and that much of the site is covered by 0.5 to 3.0 meters of fill. The resource was determined eligible for listing on the NRHP under Criterion D in 1978. The resource appears to be mismapped in the NWIC database as extending south of the Metcalf Road overcrossing; however, all site record sketch maps show the site boundary ending just north of Metcalf Road. The PG&E Metcalf Waterline component of the Proposed Project intersects the corrected site boundary.

P-43-000571 (SCL-000576) – This prehistoric resource was originally recorded in 1985 as a sparse scatter of lithics and fire-cracked rock on a small hummock, likely the edge of a larger site destroyed during

construction of the adjacent Metcalf PG&E substation. Augur testing of the site in 1988 did not encounter any subsurface deposits. More extensive trench testing was conducted in 2014, which encountered a few additional artifacts within disturbed fill and noted that the deposit lacks integrity. The site boundary was revised after the 2014 work, though the site record gives no reasoning for this adjustment. The resource was recommended not eligible for listing on the CRHR in 2014. The Staging Area 2 component of the Proposed Project intersects the revised site boundary.

P-43-001116 – This historic-era resource is the PG&E San Jose B substation. It was constructed on behalf of PG&E in 1926-1927 and incorporated Spanish Mission style architectural elements on the structure's exterior façades. A 1998 evaluation recommended the resource not eligible for the NRHP and CRHP, primarily due to extensive modifications in 1957 and 1985. The historic-era substation footprint falls within the Proposed Project's Existing San Jose B substation component.

P-43-001279 (SCL-000846/H) – This resource was originally recorded in 2002 as two early-20th century historic deposits about a block apart encountered in fill material during utility trenching. Both appeared associated with the adjacent Southern Pacific rail line and were likely disturbed by road construction. In 2003, archaeological monitoring for construction of an apartment complex near the northern locus encountered a prehistoric cemetery with burn pits and some habitation debris. Forty-nine features were recorded, some with grave goods. The prehistoric component appeared to have been significantly impacted by the 1864 construction of the adjacent SF& SJ Railroad. All portions of the site appear to have been destroyed by apartment complex construction. According to the NWIC, there is no agency determination of the site's eligibility for listing on the NRHP or CRHR, though it was treated as eligible when encountered and the North Valley Yokuts Tribe provided Native American monitoring during evaluation.

The site boundary has been mismapped by NWIC and appears to be based on the 2003 project boundary, rather than the resource boundary clearly identified on the site record map. In addition, the 2002 site record gives no dimensions of the historic deposits or the trenches in which they were encountered and does not include a sketch map. The NWIC appears to have applied a 20-meter buffer to the discovery points to create that portion of site boundary. The mapped location of the 2002 historic component of the site is approximately 20 meters north of the Grove to Skyline 320 kV ROW component of the Proposed Project. The boundary of the prehistoric component of the site is mapped approximately 55 meters north of the Grove to Skyline 320 kV ROW component of the Proposed Project, with the nearest recorded burial location approximately 105 meters north of the Grove to Skyline 320 kV transmission line limits of construction component of the Proposed Project.

P-43-001307 – This resource is a historic-era building at 281 Delmas Avenue, built about 1952 as a dental laboratory to the rear of the 1889 Conrad Wieland House which was demolished in the late 1950s. The current building is a simple Modern Style office building. It was evaluated in 1999 and recommended not eligible for listing on the NRHP under Criteria A, B, and C. The resource is located within the Staging Area 9 component of the Proposed Project.

P-43-001330 – This historic-era building at 255 Delmas Avenue is a Queen Anne/Neo-Classical single-family home constructed in 1905. It was evaluated in 1999 and recommended ineligible for the NRHP under Criteria A, B, and C. The resource is located within the Staging Area 9 component of the Proposed Project.

P-43-001331 – This historic-era resource is the Evangelical Lutheran Bethel Church and adjacent residences at 217 and 253 Delmas Avenue. The church, built in 1903, is listed in the City of San José Historic Resources Inventory as a Contributing Structure/Site to the Delmas Area historic district and is also listed in the Santa Clara County Historic Resources Inventory. The adjacent residence and educational building were constructed in 1905, both with elements of Queen Anne, Craftsman, and Colonial Revival architectural styles. A 1999 evaluation noted that the church appeared eligible for the NRHP under Criterion C (DOE-43-0003-0000 2S2; FTA981001A 2S2; 5101-0056-0000), but that the adjacent buildings did not appear eligible under Criteria A, B, or C. The resource is located within the Staging Area 9 component of the Proposed Project.

P-43-001334 – This resource is a historic-era residence with attached storefront at 201-203 Delmas Avenue. The house was constructed in the late 1890s in the Queen Anne architectural style. A 1999 evaluation recommended the resource as ineligible for the NRHP under Criteria A, B, and C. The resource is located within the Yard 9 component of the Proposed Project.

P-43-001450 – This resource, recorded in 2000 during utility trenching, is an isolated single artiodactyl (deer) long bone. No information regarding collection, testing, or cultural association was included in the site form. According to the NWIC, the resource has not been evaluated for listing on the NRHP or CRHR. The mapped resource location is within the Grove to Skyline 320 kV transmission line limits of construction component of the Proposed Project.

P-43-001451 – This historic-era isolate consists of a green glass champagne bottle neck encountered during utility trenching in 2000. The resource has not been evaluated, but isolates are typically not eligible for listing on the NRHP or CRHR. The find was located at the northwest corner of the intersection of South Market Street and West San Fernando Street, within the Grove to Skyline 320 kV transmission line limits of construction of the Proposed Project.

P-43-001452 – This historic-era resource is a sparse refuse deposit of numerous hand-sawn cow and pig bones with a few pieces of household refuse, disturbed by earlier utility trenching. The artifacts were collected during monitoring for fiber optic cable installation in 2000. According to the NWIC, the resource has not been evaluated for listing on the NRHP or CRHR, but the resource was destroyed during investigation. The mapped resource location is within the Grove to Skyline 320 kV transmission line component of the Proposed Project.

P-43-001453 – This historic-era resource consists of *in situ* elements of a trolley or railroad system at the intersection of South Market Street and West San Fernando Street. The rails have been removed but some wooden ties, spikes, straps, and ballast remain below the road surface. The resource has not been evaluated. Components were observed north, west, and within the intersection, which fall within the Grove to Skyline 320 kV transmission line limits of construction of the Proposed Project.

P-43-001454 – This resource consists of historic-era ceramics encountered during utility trenching in 2000, including fragmented glazed terracotta sewer pipe, red brick fragments, an ironstone porcelain fragment, and a Majolica Mission period ceramic bowl rim sherd (1790-1810). The resource has not been evaluated. The find was located within the intersection of South Market Street and West San Fernando Street, within the Grove to Skyline 320 kV transmission line limits of construction of the Proposed Project.

P-43-002628 – This historic resource is the El Camino Real/Anza Historic Trail within Santa Clara County. The El Camino Real dates to 1776 when Juan Bautista Anza led a party of Spanish explorers along the eastern side of the San Francisco peninsula. The route linked the system of Franciscan missions and is now the Juan Bautista de Anza Historic Trail, part of the National Historic Trail network. In 1850, Monterey Road was established along the route as a Santa Clara County highway, replaced as a paved state highway (SR-82) in 1909. The 52-mile-long road became a California Landmark (#784) in 1963. A 0.3-mile segment of the resource intersects the Proposed Project's Grove to Skyline 320 kV transmission line limits of construction component near the intersection of Monterey Road and Blossom Hill Road.

P-43-002629 – This historic-era resource is the Keesling Shade Trees, a 30-mile alignment of California Black Walnut trees planted along Monterey Road from San José to Gilroy in the early 1900s by Horace Greely Keesling. The resource is a California Registered Point of Historical Interest (#SCL-056). The character defining features of the resource are the rural character of the highway corridor, the open space between each California walnut tree, and the open space between the highway's edge of pavement and the tree trunks. Originally recorded in 1985, a 2008 update noted that the number of trees had been reduced from the thousands to mid-hundreds, with many removed in the 1960s. The trees had originally lined a two-lane road which had become an eight-lane highway, compromising the rural setting. A 2011 update noted lack of integrity and recommended the resource as not eligible for listing on the NRHP. The resource lies within the Grove to Skyline 320 kV transmission line limits of construction of the Proposed Project.

P-43-003535 (SCL-000948) – This resource, recorded in 2002, is a single burial discovered when construction crews were excavating for a water line connection on the east side of Market Street at the Fox California Theater (P-43-001531/CA-SCL-894H). The intact inhumation, recovered in 2002, included faunal remains, lithics, and shell, and was dated to A.D. 320, the Late Middle Period. According to the NWIC, there is no agency determination of the site's eligibility for listing on the NRHP or CRHR, though it was treated as eligible when encountered and the Muwekma Ohlone's cultural resource department conducted the recovery and additional analysis. The site location is under the sidewalk of Market Street, within the Grove to Skyline 320 kV transmission line limits of construction component of the Proposed Project.

P-43-003568 – This historic-era resource consists of a near-complete ceramic inkwell, uncovered during utility trenching in 2015 approximately three feet below the street surface in a disturbed context. The site record does not indicate whether the isolated artifact was collected. The mapped resource location is within the Grove to Skyline 320 kV transmission line limits of construction component of the Proposed Project.

P-43-004139 – This historic-era resource is a light industrial building at 217 West Julian Street. Built circa 1910, the Mission Revival style building had a gable roof, corrugated sheet metal exterior, and steel sash windows. The stucco façade had tile skirts and boxed eaves along the stepped roofline. A 1982 evaluation recommended the building as ineligible for the NRHP. The 217 West Julian Street parcel is within the Yard 10 component of the Proposed Project.

Historic Map Review

A review of historic maps and aerials agrees with the development history presented above regarding this portion of Santa Clara County. The Proposed Project area is shown on the original survey plat maps

of 1867, 1880, 1882, and 1891. Between 1867 and 1891, the Proposed Project area was part of the Pueblo Lands of San José, Rancho San Juan Bautista, and Rancho Santa Teresa.

Topographic and aerial maps from the 1880s through 1968 covering the area depict developed roads, industrial buildings, and shipping stations in and around the northern part of the Proposed Project area from the College Park district in East San José starting with the San Jose B substation component and ending south towards Staging Area 1, where large tracts of the area were developed along the Southern Pacific Railroad (SPRR) and Monterey Road.

The San José Branch of the SPRR runs west bound in proximity to the Proposed Project's Yard 11 component, 160m southeast of San Jose B substation, 60m northwest of Yard 10, 165m northeast of the 500kV transmission line limits of construction, 135m northeast of Staging Area 2, and parallel to the 320 kV transmission line limits of construction as well as the precursor to the Monterey Road highway. Between 1916 and 1968, San José residential and industrial areas gradually developed along Monterey Road with increased automobile use.

The Guadalupe River is shown 105m west of the Proposed Project's Staging Area 11 component and 40m west of San Jose B substation. Very little change occurs within the Proposed Project areas near Coyote Creek and near the Guadalupe River between 1917 and 1939.

West San Carlos Street, to the south of the Proposed Project's Staging Area 9 component, is expanded and further developed with residential and industrial areas between 1948 and 1953. In 1956, a large storing facility was constructed 55m northeast of the Staging Area 8 component, and a factory 60m northeast of Staging Area 7. Between 1899 and 1948 the SPRR was diverted 1.1km southwest from Proposed Project component Staging Area 6. Staging Area 5 encompasses the Santa Clara Fairgrounds which appear in 1953. Staging Area 5 is also 120m east of a cemetery, which, in the 1950s, is marked as the Oak Hill Memorial Park Cemetery.

On the 1948 and 1956 maps, Staging Area 4 is in proximity to a mining quarry. By 1961, further residential and industrial development occurs in and around the Proposed Project area heading northeast. By the early 1950s a substation is shown 515m southeast of Proposed Project component Staging Area 2 and 150m north of the 500kV transmission line limits of construction. By 1968, the substation expands to encompass both Staging Area 2 and the 500kV transmission line limits of construction. From 1968 on, no further development occurred in the area. In 1998 the Guadalupe Freeway was constructed in proximity to the Staging Area 10, Staging Area 11, and San Jose B substation components.

Tribal Outreach

The SLF search was returned by the NAHC with positive results on June 14, 2023 (**Appendix C1**), with instructions to contact the Muwekma Ohlone Indian Tribe of the SF Bay Area and The Ohlone Indian Tribe (in bold in **Table 3**). The NAHC provided a list of Native American contacts who may be able to supply information pertinent to the Proposed Project area (**Appendix C2**). The 13 individuals listed were contacted by email sent October 6, 2023. A sample of the letter sent is attached (**Appendix C3**). A follow-up email was sent on October 23, 2023, to contacts that had not yet replied.

Table 3. Tribal Outreach

Name	Affiliation	Initial Contact	Initial Reply	Follow-up Contact	Follow-up Reply	Comments
Valentin Lopez, Chairperson	Amah Mutsun Tribal Band	Email 10/6/2023	Email 10/16/2023	Email 10/17/2023		Provided information; requested information
Irene Zwierlein, Chairperson	Amah Mutsun Tribal Band of Mission San Juan Batista	Email 10/6/2023	None	Email 10/23/2023	None	--
Ann Marie Sayers, Chairperson	Indian Canyon Mutsun Band of Costanoan	Email 10/6/2023	None	Email 10/23/2023	None	--
Kanyon-Sayers-Roods, MLD Contact	Indian Canyon Mutsun Band of Costanoan	Email 10/6/2023	None	Email 10/23/2023	None	--
Monica Arellano, Vice Chairwoman	**Muwekma Ohlone Indian Tribe of the SF Bay Area**	**Email 10/6/2023**	**None**	**Email 10/23/2023**	**None**	**--**
Katherine Perez, Chairperson	North Valley Yokuts Tribe	Email 10/6/2023	None	Email 10/23/2023	None	--
Timothy Perez	North Valley Yokuts Tribe	Email 10/6/2023	None	Email 10/23/2023	None	--
Andrew Galvan, Chairperson	**The Ohlone Indian Tribe**	**Email 10/6/2023**	**Email 10/14/2023**	**Email 10/25/2023**	**Email 10/25/2023**	**Requested SLF search results and contact list; provided information**
Desiree Vigil, THPO	**The Ohlone Indian Tribe**	**Email 10/6/2023**	**None**	**Email 10/23/2023**	**None**	**--**
Kenneth Woodrow, Chairperson	Wuksachi Indian Tribe/Eshom Valley Band	Email 10/6/2023	None	Email 10/23/2023	None	--
Lillian Camarena, Secretary	Tamien Nation	Email 10/6/2023	None	Email 10/23/2023	None	--
Johnathan Wasaka Costillas, THPO	Tamien Nation	Email 10/6/2023	None	Email 10/23/2023	None	--
Quirina Luna Geary, Chairperson	Tamien Nation	Email 10/6/2023	Email 10/6/2023	Email 10/25/2023	Phone, email 10/30/2023	Provided information; requested monitor

On October 6, 2023, Quirina Luna Geary, Chairwoman of the Tamien Nation, replied via email with an application form for a Tamien Nation Tribal Archival Records Search. The application, with requested Proposed Project and billing information, was submitted by email to Tamien Nation on October 25, 2023. Results of the Tribal Archival Records Search have not yet been received. On October 30, 2023, Chairwoman Geary provided confidential tribal information regarding resources in the Coyote Valley area and requested that tribal monitors be present during cultural resource surveys and any ground-disturbing Project activities.

On October 14, 2023, Andrew Galvan, Chairperson of The Ohlone Indian Tribe, replied via email requesting a copy of the SLF search results and contact list provided by the NAHC. These were sent to Chairperson Galvan via email on October 25, 2023. On October 25, 2023, Chairperson Galvan replied via email and provided information regarding known tribal resources along Coyote Creek near the southern end of the Proposed Project.

On October 16, 2023, Alec Apodaca, Cultural Resources Program Manager of the Amah Mutsun Land Trust, replied via email on behalf of Valentin Lopez, Chairperson of the Amah Mutsun Tribal Band. Mr. Apodaca stated that the southern end of the Proposed Project is within the Coyote locality, an area understood to have been occupied by antecedents of Amah Mutsun. Based on a preliminary SLF search, there are several Indigenous archaeological sites and locations in that area that are culturally sensitive. Based on the relatively high density of culturally significant sites that occur in the Proposed Project area, the Amah Mutsun Tribal Band has requested additional information about the project and discussed how they can best provide information that may guide any future consultation that may be required. Mr. Apodaca also suggested reaching out to Quirina Luna Geary, the Tribal Chairperson of Tamien Nation, since the majority of the Proposed Project occurs in lands that are more appropriately stewarded by Tamien representatives. PanGIS replied that additional information on the Proposed Project will gladly be provided, and that contact has already been initiated with Chairperson Geary.

Surface Survey

A cultural resources pedestrian survey of the Proposed Project components was conducted on September 12-14 and November 8, 2023, and February 24 and March 27 through 28, 2024, by PanGIS staff archaeologists under the direction of PanGIS Director of Cultural Resources Douglas Mengers, M.A., RPA, DPPH. Native American monitors from the Tamien Nation participated in the March 27 through March 28, 2024, survey. The pedestrian survey included the proposed northern HVDC substation site (Skyline terminal), the proposed southern HVDC substation site (Grove terminal), Staging Area 12, the PG&E Metcalf waterline, the Coyote Creek Trail and Coyote Ranch Road realignment area, the 320 kV transmission line limits of construction, and the 500 kV transmission line limits of construction for a total of 274.19 acres, as shown on ***CONFIDENTIAL Figure 8: Survey Results Map (Appendix F)***. A visual survey of additional components was conducted from the public ROW where pedestrian access was not available, including the existing PG&E San Jose B substation and Staging Areas 2 through 11. Images referred to below are in ***Appendix D – Survey Area Photographs***. No cultural materials were collected during the surface survey. Survey notes and photographs are maintained by PanGIS, Inc., in their San Diego, California office.

The majority of the transmission line limits of construction component is pavement, asphalt, and landscaped sidewalks in a developed urban environment (***Images 1-5***). Survey areas were flat; ground visibility varied from 0 percent in paved areas to 10 to 100 percent in road shoulders, depending on ground cover. The proposed Skyline terminal site contained grasses and weeds up to hip-height, some non-native trees, and modern refuse such as railroad ties and metal fragments staged in various piles (***Image 6***). Staging Area components, viewed from public streets, were graded and overgrown, with some gravel areas (***Images 7-8***).

The Santa Clara Valley Water Department (Valley Water) and County of Santa Clara Parks parcels contain the active Coyote Creek with a public bike/hiking path that runs north-south throughout (***Images 9-10***). Survey areas are flat; ground visibility was variable depending on vegetation. Natural

areas surrounding Coyote Creek contain California buckeye, California lilacs, Toyon, Coffeeberry, Pacific Madrone, Western Redbud, California blackberry, California grape, Valley oaks, Coast live oaks, and other chaparral vegetation. The Grove terminal site is a heavily utilized agricultural property containing fruit orchards, irrigation systems and spare material, tractors, and other equipment storage (***Image 11***). The survey area is flat, and the soil has been extensively tilled. Ground visibility ranged from 0 percent in heavily vegetated areas to 90 percent in between rows of fruit trees.

Previously Recorded Resources Revisited

All but one previously recorded cultural resource locations were revisited during the surface survey (***Figure 8: Survey Results Map*** **(Confidential Appendix F)**). No access was provided for the PG&E San Jose B Substation (P-43-001116). One resource, P-43-002628, was not observed during the survey as it has no material component. Nine resources were not observed during the survey, as they are subsurface resources, including: P-43-000571 (SCL-000578), P-43-001279 (SCL-000846/H), P-43-001450, P-43-001451, P-43-001452 (SCL-000843), P-43-001453, P-43-001454, P-43-003535 (SCL-000948), and P-43-003568. One resource, P-43-002629, appeared as recorded in the NWIC site form. One previously recorded archaeological site, P-43-000189 (SCL-000178), was updated and expanded to account for additional surface artifacts encountered during the survey. Five previously recorded historic-era buildings have been destroyed since recording, including: P-43-001307, P-43-001330, P-43-001331, P-43-001334, and P-43-004139. DPR Update forms for these six resources are included in ***Confidential Appendix G***. Results of the site revisits are detailed below.

P-43-000189 (SCL-000178) – In March 2024, PanGIS archaeologists and Tamien Nation monitors revisited a portion of this site during an archaeological survey for the PG&E Metcalf Substation Waterline component of the Proposed Project. Over 40 artifacts were observed near the south end of the mapped site and extending to the southwest outside the mapped and corrected site boundary. Artifacts include a shell scatter, groundstone, lithics, and fire-affected rock. One locus of lithic flakes along Metcalf Road north of Highway 101 appears to be in native soil and is within both the mapped and corrected site boundary. A second locus of lithics on the south side of Highway 101 is in disturbed soil but straddles Metcalf Road, extending past the mapped and corrected site boundary. A third locus begins just outside the southern corner of the site boundary is comprised of ground stone, flaked stone, fire-affected rock, and a shell scatter and extends for approximately 130 meters in disturbed soil on the north side of the PG&E Metcalf Substation. Additional isolated artifacts are located between each of the loci. A DPR Update form is included in ***Confidential Appendix G***.

The P-43-000189 (SCL-000178) site record and burial recovery report were focused on the burial recovery and did not inventory surface finds or state the method used to delineate the site boundary. Most of the new surface finds encountered during survey for the Proposed Project are in a disturbed context and those on the south side of Highway 101 may have been redeposited during construction of the PG&E Metcalf Substation, similar to site P-43-000571 (SCL-000576) on the opposite side of the substation. It is also possible that the new finds are from a different cultural context than that encountered at P-43-000189. Further investigation of P-43-000189 is complicated by its eligibility status, that much of the site is covered by Highway 101, and that burial reinterment locations are unknown.

P-43-000571 (SCL-000576) – In March 2024, PanGIS, Inc. revisited the site during an archaeological survey for the Proposed Project. The northern quarter of the site is within the perimeter fence of the PG&E Metcalf Substation and survey access was not granted. The southwestern half of the site is within

a fenced laydown yard and survey access was not granted. The eastern quarter of the site was surveyed. No cultural resources were observed during the survey.

P-43-001116 – In September 2023, PanGIS, Inc. revisited the site during an archaeological survey for the Proposed Project. The historic-era substation footprint falls within the existing San Jose B substation, which is a secured facility that was not accessible at the time of survey. However, the building described in the 1998 site record has been demolished, likely during upgrades and the expansion of the substation to its current size and condition.

P-43-001279 (SCL-000846/H) – The portion of this resource along Bassett Street was revisited by PanGIS archaeologists in September 2023 during an archaeological survey for the Proposed Project. The portion of the resource south of the railroad tracks is now the site of the Iamesi Village Apartments, while the portion north of the tracks is the Fountain Plaza apartment complex. No historic resources were observed during the survey.

P-43-001307 – In September 2023, PanGIS, Inc. revisited the site during an archaeological survey for the Staging Area 9 component of the Proposed Project. Staging Area 9 is a vacant parcel with no extant structures or foundations; 281 Delmas Ave has been destroyed. A DPR Update form is included in ***Confidential Appendix G***.

P-43-001330 – In September 2023, PanGIS, Inc. revisited the site during an archaeological survey for the Staging Area 9 component of the Proposed Project. Staging Area 9 is a vacant parcel with no extant structures or foundations; 255 Delmas Ave has been destroyed. A DPR Update form is included in ***Confidential Appendix G***.

P-43-001331 – In September 2023, PanGIS, Inc. revisited the site during an archaeological survey for the Staging Area 9 component of the Proposed Project. Staging Area 9 is a vacant parcel with no extant structures or foundations; The church and adjacent residences 217 and 253 Delmas Ave have been destroyed. A DPR Update form is included in ***Confidential Appendix G***.

P-43-001334 – In September 2023, PanGIS, Inc. revisited the site during an archaeological survey for the Yard 9 component of Staging Area 9. Staging Area 9 is a vacant parcel with no extant structures or foundations; The buildings at 201-203 Delmas Ave have been destroyed. A DPR Update form is included in ***Confidential Appendix G***.

P-43-001450 – This resource location, within the paved section of S Market Street just north of W San Fernando Street, was revisited by PanGIS archaeologists in September 2023 during an archaeological survey for the Proposed Project. No cultural resources were observed during the survey.

P-43-001451 – This resource location, the paved intersection of W San Fernando Street and S Market Street, was revisited by PanGIS archaeologists in September 2023 during an archaeological survey for the Proposed Project. No cultural resources were observed during the survey.

P-43-001452 – This resource location, within the paved section of S Market Street just north of W San Fernando Street, was revisited by PanGIS archaeologists in September 2023 during an archaeological survey for the Proposed Project. No cultural resources were observed during the survey.

P-43-001453 – This resource location, the paved intersection of W San Fernando Street and S Market Street, was revisited by PanGIS archaeologists in September 2023 during an archaeological survey for the Proposed Project. No cultural resources were observed during the survey.

P-43-001454 – This resource location, the paved intersection of W San Fernando Street and S Market Street, was revisited by PanGIS archaeologists in September 2023 during an archaeological survey for the Proposed Project. No cultural resources were observed during the survey.

P-43-002628 – In September 2023, PanGIS, Inc. revisited the portion of the resource within the Proposed Project area during an archaeological survey for the Proposed Project. This resource appears as described in the 2008 site record.

P-43-002629 – In September 2023, PanGIS, Inc. revisited segments of Keesling's Shade Trees within the Proposed Project area during an archaeological survey for the Proposed Project. This resource appears as described in the 2008 and 2011 site records, with stretches of trees missing entirely, some with only stumps remaining, and others of mature trees that have been topped below power lines.

P-43-003535 (SCL-000948) – This resource location, the eastern sidewalk of S Market Street south of San Carlos Street, was revisited by PanGIS archaeologists in September 2023 during an archaeological survey for the Proposed Project. No cultural resources were observed during the survey.

P-43-003568 – This resource location, within the paved section of S Market Street just south of Post Street, was revisited by PanGIS archaeologists in February 2024 during an archaeological survey for the Proposed Project. No cultural resources were observed during the survey.

P-43-004139 – In September 2023, PanGIS, Inc. revisited the site during an archaeological survey for the Proposed Project of Staging Area 10. Staging Area 10 is a vacant parcel with no extant structures or foundations, dense weeds and shrubs, and staged equipment; 217 West Julian Street has been destroyed. A City of San José Notice of Development is posted at the property, indicating the parcel is proposed for development of a 17-story residential tower and nine-story parking garage. A DPR Update form is included in ***Confidential Appendix G***.

Previously Unrecorded Resources

No previously unrecorded archaeological resources or Tribal Cultural Resources were encountered during the surface survey.

Management Considerations

The majority of the Proposed Project area, especially the northern extent, is highly developed but unrecorded subsurface resources may be present within the Proposed Project area. Additional cultural resources survey will be required prior to construction as part of the CEQA process for the Proposed Project, including material staging area locations that were unable to be accessed during the current survey. The Proposed Project should avoid impact to resources listed, or eligible for listing, on the NRHP, CRHR, or local registers. The Proposed Project should avoid impact to the built environment resources along the limits of construction regardless of status, but special attention should be paid to unevaluated resources; evaluation of resources and/or confirmation of eligibility status will be required in any impact areas. The Proposed Project should continue to seek Tribal participation. Native American Monitoring should be considered for all prehistoric resources, especially those with a human remains component. No additional cultural resource studies are recommended at this time. However, unanticipated resources may be discovered during ground-disturbing activities, which will then need to be evaluated in order to assess project impacts.

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Appendix A – Resume: Douglas Mengers, PanGIS

Education

M.A., Applied Anthropology, San Diego State University
B.A, History, University of California at San Diego
B.A, Anthropology, University of California at San Diego

Professional Certifications & Registrations

Secretary of Interior Standards (36 CRP Part 61) for Architectural History, History, and Archaeology (historic and prehistoric)
BLM Principal Investigator
Arizona – Principal Investigator
SANDAG Architectural Historian
Caltrans PQS-Equivalent Principal Architectural Historian
CPUC Approved Archaeologist
Rail Safety Training
Hazwoper 40 Hour

Additional Training

Advanced CEQA Essentials
UCSD Architectural History
Surveys, Historic Structure Reports and EIRs
Architectural Styles in CA
Industrial Archaeology: Roads, Bridges, Manufacturing and More
Preparing a Successful Section 106 Consultation Package
Navigating Historic Corridors: Preservation & Transportation Development
From Nuclear Waste to Manholes What, Why and How of Surveys
Survey & Documentation: Pixels, Clouds, Points, and Beyond

Areas of Expertise

Section 106 Compliance
NEPA & CEQA Compliance
Archaeological Field Studies
Historic–Era Structure Evaluations
Historic Artifact Analysis
Native American Outreach
Resource Agency Coordination
EIR/EIS/PEA Cultural sections

Doug Mengers M.A., RPA #39693945, DPPH
Principal Investigator Cultural Resources

Mr. Mengers is a Registered Professional Archaeologist and Historian with 16 years of experience, meeting Secretary of Interior standards for archaeology, history, and architectural history. As a PanGIS Principal Investigator, he is a BLM approved Field Director and CPUC qualified archaeologist. As Field Director he is providing cultural resource services throughout central, coastal and Southern California, including National Forests, BLM, State Parks and other Federally managed lands. He has expertise in project implementation with experience in agency coordination and has a deep understanding of relevant federal, state, and local codes and regulations, including NHPA Section 106/110 compliance, NEPA, ARPA, and CEQA as they pertain to pre-contact and historic-era cultural resources and the built environment.

He has expertise in preparing and directing the preparation of Cultural Resources technical reports, Mitigation Monitoring Plans, Testing Plans, and Historic Structure Assessments in compliance with CEQA and NEPA Guidelines. He creates plans for resource recommendations in compliance with NEPA and has authored hundreds of technical reports, EIR/EIS cultural sections, prepared site records, and created time-sensitive maps using ArcGIS. Mr. Mengers ensures that every aspect of the work meets current regulatory compliance requirements and professional technical and ethical standards.

Select Project Experience:

Land Management Plans (LMP) for CA Dept. of Water Resources and CDFW South Coast Region for Cultural Resources, San Diego and Los Angeles Counties, (2020-2023) PanGIS staff are preparing LMPs on four properties, Boden Canyon ER, Batiquitos Lagoon ER, Hollenbeck Canyon WA, and Ballona Wetlands ER. Project archaeologist, Mr. Mengers is managing staff conducting cultural field studies for use in the development of the LMPs. These studies will enable CDFW to prepare an LMP for each of the properties that can then be processed through CEQA and implemented by CDFW. Studies include Archaeological Background Research, Native American Outreach and Consultation, Site surveys, Archaeological Technical Cultural Report, Cultural Resources Treatment and Protection Plan Cultural Resources Research Design and Context Statement, and On-Call GIS Support.

Tujunga Wash Pedestrian Bridge Project, North Hollywood, Los Angeles County, CA (2022) Principal Investigator for Architectural History Mr. Mengers will manage staff conducting background research with a records search and a Sacred Lands File with the Native American Heritage Commission (NAHC) for the project area. The proposed Project is the construction of a pedestrian bridge across Tujunga Wash, a historic-era built-environment resource which is managed by the United States Army Corps of

Engineers (USACE). The Project is funded and owned by the Social and Public Art Resource Center (SPARC). In order to obtain a construction permit, SPARC is required to complete a Section 408 Permission application with USACE.

City of San Diego Design of Los Penasquitos Lagoon Restoration EIR (2019-2023) Architectural Historian and Cultural Resources Director Mr. Mengers is providing CEQA and NEPA services for cultural and historical resources and GIS mapping support to satisfy City's Historical Resources Guidelines and Section 106 of the NHPA. PanGIS conducted a record search, NAHC Sacred Lands File Search, Native American outreach letters, intensive linear ground surveys, historic research, managed the paleontology study, updated DPR forms, wrote Historical Resources Technical reports with recommendations, and authored the cultural sections for the EIR. PanGIS coordinated with State Parks for a testing permit, wrote a testing plan and report, tested at two archaeological sites to determine their depth and geographic extent. PanGIS staff also supplied additional GIS mapping for the Los Peñasquitos Lagoon Design Phase 1 Project for the EIR and various specialty studies, including maps designed for 508 compliance for reporting for USACE.

SCE Cultural Resources Emergency Survey BLM Needles and Mojave National Preserve (2022 – 2023) Mr. Mengers was the Co-Principal Investigator for this project, co-authoring the reports to BLM and NPS. PanGIS provided cultural resource survey around nine wooden utility poles and overland travel routes. SCE reported emergency work replace multiple downed poles along the Nipton 33kV distribution line within the Mojave National Preserve and on land managed by the BLM Needles Field Office. Nine (9) poles total were impacted by recent monsoons; of those, six (6) poles have project areas that straddle the border between NPS and BLM managed lands. The three (3) remaining poles have project areas solely within the Mojave National Preserve but was accessed via an access route that goes through both BLM and NPS managed land.

SCE Cultural Resources Emergency Survey BLM Barstow (2022 – 2023) Mr. Mengers was the Co-Principal Investigator for this project, co-authoring the report to BLM. PanGIS provided cultural resource survey around seventeen wooden utility poles and five overland travel locations. Southern California Edison (SCE) reported emergency work requiring 17 pole replacements and four areas of overland travel following a windstorm that downed poles in Barstow, California, San Bernardino County, along the Huevos 12-kV circuit. Post-impact assessment of the direct APE, which is defined as a 100-foot (30m) buffer around the replacement poles plus overland travel routes located on BLM administered land was needed to ensure no impacts to known and unknown cultural resources occurred. Known cultural resources were present and the survey revealed additional resources which were recorded.

BLM AZA-038387 Class I and Class III for Vulcan 2 Solar Project, Maricopa County, AZ (2022 - 2023) Principal Investigator Mr. Mengers lead the Class I archaeological study for the proposed Vulcan 2 Solar Project, which includes records research at Arizona State Museum (ASM), AZSITES research, BLM GLO research, context development, report writing, and GIS Analysis. The client wants to develop and operate the Vulcan 2 Solar Project, an up to 650 MW solar photovoltaic (PV) power generating facility with energy storage on up to approximately 5,360 acres of federal land managed by the Bureau of Land Management (BLM) in Maricopa County, AZ. The Class III survey was completed and the report was approved by BLM archaeologists.

Cultural Resources Study for Winston Solar Project, Kern County, CA (2022 - 2023) Principal Investigator for Cultural Resources Mr. Mengers wrote the Class I report and directed staff on the NAHC Sacred Lands File Search, Native American outreach letters, and the records search. The Project is located in rural, western Kern County, near the unincorporated community of Buttonwillow. The proposed project site is a combined total of approximately 1084 acres of private lands. A new 115 kV gen-tie line will interconnect the Project substation with the Pacific Gas & Electric (PG&E)-owned Midway Substation located approximately two miles to the south.

Cultural Resources Treatment Plan (CRTP) and Construction Monitoring For Tumbleweed Energy Storage Project, Kern County, CA (2022 - 2023) Principal Investigator for Cultural Resources Mr. Mengers authored the CRTP which describes the measures to ensure no adverse effects to Historic Properties and historical resources during the Solar project in accordance with the EIR Addendum to AVEP Solar Final EIR. The lead agency under CEQA, is the Kern County Planning and Natural Resources Department. When operating, the proposed Project located on approximately 1,406 acres of privately owned land, will receive energy (charging), store it and when needed, redeliver to the point of interconnection at the existing Southern California Edison (SCE)-owned Whirlwind Substation. PanGIS is now providing archaeological and Native American construction monitoring for this project.

Cultural Resources Management Plan (CRMP) for SCE's Devers-Colorado River (DCR) No.1 Transmission Line Rating Remediation Project (2018) Senior Investigator Mr. Mengers conducted the Class III survey to assist federal permitting agencies in complying with Section 106 of the NHPA and NEPA and to assist the Public Utilities Commission, the lead state agency for the inventory portion of the project. The lead federal agency was the BLM. He prepared the Cultural Resources Management Plan (CRMP) which describes the measures that SCE will take to ensure no adverse effects to Historic Properties/historical resources during the project in accordance with Mitigated Negative Declaration (MND). Mr. Mengers conducted a site tour for the Lead Agency's third-party monitoring firm and directed staff for GIS maps and project files.

HPMP SCE Devers to Palo Verde Transmission Project, Riverside County, CA (2009- 2017) Mr. Mengers served as an Archaeologist/Historian and GIS team leader for this multi-year project. He was a co-author for the Historic Properties Management Plan and was responsible for recording a number of historic districts, canal siphons, other water conveyance systems, historic ranches, historic transmission lines, and conducting testing for historic and prehistoric sites. Responsibilities also included the identification, cataloging, and curation for all historic artifacts recovered from the project, researching and writing portions of the historic context. He also kept the GIS databases up-to-date based on ever-changing engineering GIS data for the construction of the transmission lines.

Class III Cultural Resources Inventory for the Proposed Southern California Edison Company's Devers-Colorado River No.1 Transmission Line Rating Remediation Project, Riverside County, CA (2016-2017) Field Director/Primary Report Author, Mr. Mengers conducted the inventory and identification of historic properties in compliance with NEPA and NRHP on this project that includes Federal, State, and Private property. The level of examination and study further also satisfied the Project review requirements of CEQA. The field investigations included intensive pedestrian survey of the study area, which included 88 identified work areas. Mr. Mengers was the report's primary author and made resource assessments and eligibility recommendations, performed impact analysis, and wrote mitigation measures.

Southern California Edison West of Devers Transmission Project, Riverside County, CA (2015-2018) Mr. Mengers was the Principal Investigator and authored the final project reports. He performed and directed survey, conducted background research, evaluated prehistoric and historic sites and districts, provided site assessments and recommendations (NTRP), and produced DPR forms. This project included water conveyance systems, testing, and Section 106..

Southern California Edison (SCE) CWA15 Environmental Impact Management for the Colorado River-Palo Verde 500kV Transmission Line, Riverside County, CA (2016) SCE was required to manage and document environmental impacts including biological and cultural resources during the construction of the Colorado River-Palo Verde TL. Field director/Primary Report Author, Mr. Mengers provided daily archaeological resources

construction monitoring at multiple construction sites, 14 hours per day/7 days per week. His duties included: obtaining Field Work Authorization from BLM, archaeological survey ahead of construction crews, daily monitoring logs, WEAP training, monthly summary reports, safety tailboard meetings, and ESA staking. Cultural resources encountered during monitoring and survey were recorded with high precision GPS units. All cultural resources within the project area were added to the SCE GIS Schema for cultural resources. He wrote the final report and created maps. The report was submitted to both SCE and BLM.

SDG&E Data Recovery and Treatment Plan for Substation Extension Project (2020 - 2021) Mr. Mengers was the lead historian on this project to expand a substation. During trenching for geotechnical investigations, a subsurface cistern was discovered during archaeological monitoring. Trenching in the vicinity was halted and the client requested a data recovery and treatment plan for the historic-era cistern. Mr. Mengers conducted background research on the area using Sanborn maps and information from the local history center. He then wrote a treatment and data recovery plan, including a discussion of capping. Mr. Mengers also produced a secondary report documenting the Historic Resource Document Research, which included a photographic survey of the property. The plan will be implemented after the geotechnical studies are complete.

SANDAG/NCTD Del Mar Bluffs Stabilization Projects 4/5 (DMB5) San Diego County, CA (2017-2021) Architectural Historian/Senior Archaeologist Mr. Mengers managed the cultural resources investigations to determine potentially significant prehistoric and historic resources including water features and historic structures within the project boundaries. Study included an archival record search, a Sacred Lands File Search, information requests from local Native American tribal representatives, and an intensive pedestrian survey of the project area. He prepared a report documenting archaeological and historical resources and potential for impacts, including NRHP evaluations with SHPO concurrence. This project was subject to NEPA review for Section 106 compliance with USACE as the lead Federal agency.

Cultural Resources Treatment And Protection Plan For Ballona Wetlands Ecological Reserve (ER), Los Angeles County, CA (2020-2022) Project archaeologist Mr. Mengers led a PanGIS team summarizing previous cultural resources work conducted in the ER; providing a research design that will direct assessment, recovery, and interpretation of cultural resources encountered in the ER; describing archaeological methods to be employed; enumerating cultural resources-related tasks to be completed; and delineating treatments of and mitigation for potential effects or impacts to known and unanticipated cultural resources. He was the primary author for the survey report and CRTP plan that will guide CDFW management of cultural resources in the ER.

Mojave National Preserve - Condition Assessment, NRHP Determination of Eligibility, and Treatment Plan for Small Game Guzzlers (2021- 2022) Principal Investigator, Mr. Mengers is leading a team to visit 133 small game guzzlers in the Mojave National Preserve and assess their condition, eligibility for the NRHP, and write a treatment plan. DPR forms for all 133 guzzlers will also be produced. This project will assist the NPS with federal permitting - 36 CFR 800 Section 106 of the NHRP.

Caltrans FNAE and Historic Properties Action Plan for Cottonwood Creek Bridge Widening Project, San Diego County, CA (2020) Principal Investigator, Mr. Mengers wrote the Finding of No Adverse Effect with Standard Conditions and Secretary of the Interior's Standards for the Treatment of Historic Properties Action Plan for the Cottonwood Creek Bridge Widening Project in the County of San Diego. The road over the bridge was found eligible for the NRHP and a historical resource for the purposes of CEQA, so the bridge was evaluated as a component of the road. The purpose of the project is to widen and rehabilitate Cottonwood Creek Bridge, constructed in 1950, to meet federal bridge safety requirements.

Caltrans/City of Porterville, Tule River Bike Path Phase III (2017 – 2018) Principal Investigator, Mr. Mengers provided environmental compliance for archaeological and historical resources. He conducted an archival record search and historic research at local historical societies, conducted Tribal consultation, directed pedestrian surveys of the APE, prepared the ASR/HPSR reports, and coordinated with agency personnel. The purpose of the archaeological survey was to determine if any historic properties or archaeological resources were potentially eligible for listing on the National Register of Historic Places are located within or near the construction area, and documents compliance with Section 106 of the NHPA. Historic railroad bridges, buildings, and trash deposits were recorded and evaluated.

City of San Diego, Testing, Monitoring, and Data Recovery Plans, Artifact Analysis and Curation for 2100 Kettner Redevelopment Project (2019 – 2021) Mr. Mengers served as the Principal Investigator for Historic Archaeology. Based on archival research, archaeological deposits were expected to be observed, recovered and recorded. He developed testing, monitoring and data recovery plans for the project and supervised archaeological monitoring and data recovery. He managed field staff excavating a series of trenches across one full city block of Little Italy. House foundations, privys, and historic trash deposits were found at the project site. Due to soil contamination from historic land use, HAZWOPER procedures were included in the testing plan and were implemented. After the fieldwork was complete, Mr. Mengers developed a curation plan for agency approval. 3500+ artifacts were analyzed, cataloged, and curated per agency guidance. He authored the Historical Resource Technical Report according to City of San Diego Historical Resources Board guidelines, developing historic context statements for the project.

Caltrans Historic District SR-163 Bridge Rail Upgrade Project, San Diego, CA (2019) Four bridges over SR-163 are part of a Historic District and must be upgraded to meet current safety standards. Senior Historical Archaeologist, Mr. Mengers worked with a team of architectural historians to conduct research and make recommendations. He surveyed the bridges, took photos, produced a photo appendix, completed site inventory forms, and was responsible for creating APE maps for direct and indirect effects. He was also responsible for completing two Historic Property Survey Reports (HPSR) and the Finding of Effect or Finding on No Effect (FOE/FONE), along with GIS deliverables and exhibits.

City of San Diego, 4th and J Street Artifact Analysis and Curation Project, San Diego, CA (2019 – 2020) Cultural monitoring for a redevelopment project at 4th and J Streets in downtown San Diego uncovered a deposit of approximately 1,000 Asian and Euro-American historic-era artifacts. Senior Historian Mr. Mengers was the cultural lead and is tasked with overseeing the lab artifact cataloging, artifact analysis, comparative analysis, curation, and a technical report. Twenty percent of the collection is from the Chinese American period and was analyzed by a historian specializing in the history of Chinese American communities in Southern California. He analyzed the Euro-American artifacts, which was 80% of the collection. He met with representatives from the San Diego Chinese Historical Museum to discuss the finds and the curation of the Chinese portion of the artifacts. He authored a Historical Resource Technical Report according to City of San Diego Historical Resources Board guidelines.

FHWA Lawson Valley West Bridge Replacement Project, San Diego County, CA (2020) Senior archaeologist Mr. Mengers managed PanGIS staff conducting archival research, a pedestrian archaeological field survey and creating the GIS deliverables. For the cultural resource reporting, Mr. Mengers authored the Caltrans Archaeological Site Report (ASR) in support of the proposed project's environmental compliance with NEPA and Section 106 of the National Historic Preservation Act. The documents were prepared according to Caltrans guidelines, including the First Amended Section 106 Programmatic Agreement (106 PA) among Federal Highways Administration (FHWA), the State Office of Historic Preservation (SHPO), the Advisory Council of Historic Preservation (ACHP), and Caltrans.

Appendix B – Records Search Results

1) Reports Table

2) Resource Table

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
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

6/22/2023 NWIC File No.: 22-1779

Alice E. Brewster
PanGIS, Inc.
6353 El Camino Real Suite B
Carlsbad, CA 92009

Re: LS Power Metcalf HVDC Project

The Northwest Information Center received your record search request for the project area referenced above, located on the San Jose West, San Jose East, Santa Teresa Hills, Morgan Hill USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a 1.0 mi. radius:

Resources within 1.0 mi. radius:	[1197] please see attached list, pages 3-8
Informal Resources within 1.0 mi. radius:	C-1, C-817, C-827, C-839, C-862, C-1196, C-1413, C- C-1456, C-1550, C-1576, C-1577, C-1579, C-1582, SCL-ISO-1, SCL-ISO-5, 406B-003, 427D-004
Reports within 1.0 mi. radius:	[1066] Please see attached, pages 9 – 13 .

Resource Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed

Report Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Resource Record Copies: ☒ enclosed ☐ not requested ☐ nothing listed

Report Copies: ☐ enclosed ☒ not requested ☐ nothing listed

OHP Built Environment Resources Directory: ☒ enclosed ☐ not requested ☐ nothing listed

Archaeological Determinations of Eligibility: ☒ enclosed ☐ not requested ☐ nothing listed

CA Inventory of Historic Resources (1976): ☒ enclosed ☐ not requested ☐ nothing listed

GLO and/or Rancho Plat Maps: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps: ☐ enclosed ☒ not requested ☐ nothing listed

Local Inventories:		☐ enclosed	☒ not requested	☐ nothing listed
Caltrans Bridge Survey:	**	☒ enclosed	☐ not requested	☐ nothing listed
Ethnographic Information:		☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:		☐ enclosed	☒ not requested	☐ nothing listed
Shipwreck Inventory:		☐ enclosed	☒ not requested	☐ nothing listed

** Current versions of these resources are available on-line:

Caltrans Bridge Survey:
https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/f0004338-common-bridge-types-2004-a11y

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Annette Neal

Researcher

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Appendix C – Sacred Lands File Search Results

1) NAHC Sacred Land File Search Results

2) NAHC Native American Contact List

3) Tribal Outreach Letter

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

June 14, 2023

Alice Brewster
PanGIS, Inc.

Via Email to: alice@pangis.com

Re: LS Power Metcalf HVDC Project, Santa Clara County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the Muwekma Ohlone Indian Tribe of the SF Bay Area and The Ohlone Indian Tribe on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Santa Clara County
6/14/2023

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA, 95632
Phone: (916) 743 - 5833
vlopez@amahmutsun.org
Costanoan
Northern Valley
Yokut

Amah MutsunTribal Band of Mission San Juan Bautista
Irene Zwierlein, Chairperson
3030 Soda Bay Road
Lakeport, CA, 95453
Phone: (650) 851 - 7489
Fax: (650) 332-1526
amahmutsuntribal@gmail.com
Costanoan

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA, 95024
Phone: (831) 637 - 4238
ams@indiancanyon.org
Costanoan

Indian Canyon Mutsun Band of Costanoan
Kanyon Sayers-Roods, MLD Contact
1615 Pearson Court
San Jose, CA, 95122
Phone: (408) 673 - 0626
kanyon@kanyonkonsulting.com
Costanoan

Muwekma Ohlone Indian Tribe of the SF Bay Area
Monica Arellano, Vice Chairwoman
20885 Redwood Road, Suite 232
Castro Valley, CA, 94546
Phone: (408) 205 - 9714
monicavarellano@gmail.com
Costanoan

North Valley Yokuts Tribe
Katherine Perez, Chairperson
P.O. Box 717
Linden, CA, 95236
Phone: (209) 887 - 3415
canutes@verizon.net
Costanoan
Northern Valley
Yokut

North Valley Yokuts Tribe
Timothy Perez,
P.O. Box 717
Linden, CA, 95236
Phone: (209) 662 - 2788
huskanam@gmail.com
Costanoan
Northern Valley
Yokut

The Ohlone Indian Tribe
Andrew Galvan, Chairperson
P.O. Box 3388
Fremont, CA, 94539
Phone: (510) 882 - 0527
Fax: (510) 687-9393
chochenyo@AOL.com
Bay Miwok
Ohlone
Patwin
Plains Miwok

The Ohlone Indian Tribe
Desiree Vigil, THPO
1775 Marco Polo Way, Apt. 21
Burlingame, CA, 94010
Phone: (650) 290 - 0245
dirwin0368@yahoo.com
Bay Miwok
Ohlone
Patwin
Plains Miwok

Wuksachi Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas, CA, 93906
Phone: (831) 443 - 9702
kwood8934@aol.com
Foothill Yokut
Mono

Tamien Nation
Lillian Camarena, Secretary
336 Percy Street
Madera, CA, 93638
Phone: (559) 363 - 5914
Lcamarena@tamien.org
Costanoan

Tamien Nation
Johnathan Wasaka Costillas, THPO
10721 Pingree Road
Clearlake Oaks, CA, 94523
Phone: (925) 336 - 5359
thpo@tamien.org
Costanoan

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed LS Power Metcalf HVDC Project, Santa Clara County.

Native American Heritage Commission
Native American Contact List
Santa Clara County
6/14/2023

Tamien Nation
Quirina Luna Geary, Chairperson
PO Box 8053 Costanoan
San Jose, CA, 95155
Phone: (707) 295 - 4011
qgeary@tamien.org

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed LS Power Metcalf HVDC Project, Santa Clara County.

October 6, 2023

Valentin Lopez, Chairperson
Amah Mutsun Tribal Band
P.O. Box 5272
Galt, CA 95632

Re: Power Santa Clara Valley Project, Santa Clara County, CA

Dear Chairperson Lopez,

LS Power Grid California, LLC (LS Power) is proposing the Power Santa Clara Valley Project (Proposed Project) in the City of San Jose and unincorporated Santa Clara County, California. The Proposed Project was approved by the California Independent System Operator Corporation (CAISO) in the 2021-2022 Transmission Plan (referred to as the Metcalf to San Jose B High Voltage Direct Current [HVDC] Project in the 2021-2022 Transmission Plan) to improve reliability and strengthen the CAISO controlled grid. The Proposed Project includes the construction of two new HVDC substations and associated transmission lines between two existing Pacific Gas & Electric (PG&E) substations: San Jose B substation and Metcalf substation. The proposed northern HVDC substation site is approximately 10.60 acres, and the proposed southern HVDC southern substation site is approximately 13.8 acres. The Proposed Project also includes approximately 13 miles of new +/-320 kV direct current (DC) underground transmission line from the proposed northern HVDC substation to the proposed southern HVDC substation; a short over-the-fence 115 kV alternating current (AC) overhead transmission line would be constructed to connect the proposed northern HVDC substation to the existing PG&E San Jose B substation; and approximately 1.5 miles of 500 kV AC underground transmission line would be constructed to connect the proposed southern HVDC substation to PG&E's existing Metcalf substation. The total area of the Proposed Project is approximately 30 acres.

PanGIS, Inc., is providing cultural resources services for the Proposed Project's planning process, including: a records search at the Northwest Information Center (NWIC), Sacred Lands File (SLF) search with the Native American Heritage Commission (NAHC), a Class III archaeological survey, and a cultural resources technical report.

A records search of the NAHC SLF was ordered on May 16, 2023, for the Proposed Project area; the results, received June 14, 2023, were positive. The NAHC suggested you may be able to supply information pertinent to the Proposed Project area or might recommend others with specific knowledge. Any sensitive cultural information you provide will be protected and will not be disclosed in public documentation. **This is an information request only and is not associated with any official consultation.**

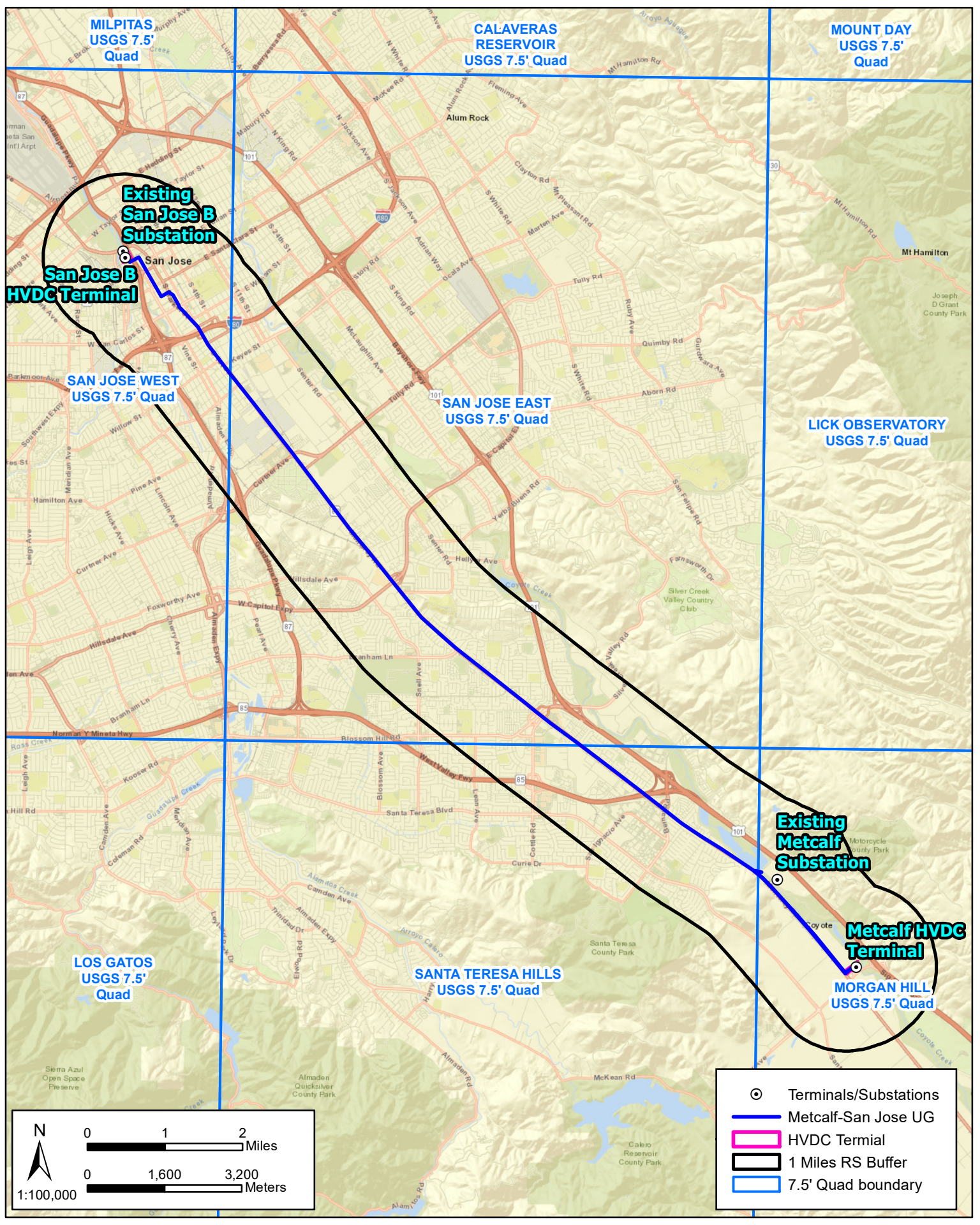
8555 Aero Drive, Suite 200
San Diego, California 92123
Phone: 760.683.8335 Fax: 760.884.3763

Thank you for your consideration of this matter and please do not hesitate to contact me at (619)218-9724 or dmengers@pangis.com should you have any questions or need additional information.

Sincerely,

Douglas Mengers, M.A. RPA, DPPH
Director of Cultural Resources
PanGIS, Inc.

Attachment 1: Power Santa Clara Valley Project Location Map


MILPITAS
USGS 7.5'
Quad
CALAVERAS
RESERVOIR
USGS 7.5' Quad
MOUNT DAY
USGS 7.5'
Quad
Existing
San Jose B
Substation
San Jose B
HVDC Terminal
San Jose
SAN JOSE WEST
USGS 7.5' Quad
SAN JOSE EAST
USGS 7.5' Quad
LICK OBSERVATORY
USGS 7.5' Quad
Existing
Metcalf
Substation
Metcalf HVDC
Terminal
MORGAN HILL
USGS 7.5' Quad
LOS GATOS
USGS 7.5'
Quad
SANTA TERESA HILLS
USGS 7.5' Quad
Alum Rock
Mt Hamilton
Joseph
D Grant
County Park
Silver Creek
Valley Country
Club
Santa Teresa
County Park
Sierra Azul
Open Space
Preserve
Almaden
Quicksilver
County Park
Calero
Reservoir
County Park
N
0 1 2
Miles
0 1,600 3,200
Meters
1:100,000
Terminals/Substations
Metcalf-San Jose UG
HVDC Termial
1 Miles RS Buffer
7.5' Quad boundary

Appendix D – Survey Area Photographs

Image 1. Overview of 320 kV ROW on Terraine Street, facing south (9/12/2023)

Image 2. Overview of 320 kV ROW on S Market Street, facing south (9/12/2023)

Image 3. Overview of 320 kV ROW on Monterey Road, facing north (9/13/2023)

Image 4. Overview of 320 kV ROW on Monterey Road, facing south (9/13/2023)

Image 5. Overview of 500 kV ROW on Coyote Ranch Road, facing southwest (9/13/2023)

Image 6. Overview of Skyline terminal site, facing southwest (9/12/2023)

Image 7. Overview of Yard 8, facing south (9/12/2023)

Image 8. Overview of Yard 3, facing east (9/13/2023)

Image 9. Overview of SCVWD parcel, facing southeast (9/12/2023)

Image 10. Overview of Santa Clara Parks parcel, facing southeast (9/12/2023)

Image 11. Overview of Grove terminal, facing northeast (9/12/2023)

Appendix E – Maps (Non-Confidential)

POWER SANTA CLARA VALLEY PROJECT

Figure 1 Project Vicinity

City of San José, Santa Clara Co., CA

LEGEND

Proposed Project Components

- HVDC Terminal Site
- Transmission Line Alignments

Skyline Terminal

Grove Terminal

Proposed Project Alignment

0 5 10 15 20 25

Miles

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Sources: LSPGC 2023; Service Layer Credits: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

POWER SANTA CLARA VALLEY PROJECT

Figure 2 Project Location

City of San José, Santa Clara Co., CA

LEGEND

Proposed Project Components

- HVDC Terminal Site
- Transmission Line Alignments

Skyline Terminal

Grove Terminal

Proposed Project Alignment

0 2 4 6 8

Miles

G:\LS Power Centinella\MXD\Metcalf\BioTechReport\Figure 2 Project Location.mxd 032124 RCO

Sources: LSPGC 2023; Service Layer Credits: Sources: Esri, USGS, NOAA, National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

POWER SANTA CLARA VALLEY PROJECT

Figure 3 Project Overview

City of San José, Santa Clara Co., CA

Skyline Terminal

San Jose B Substation

Proposed Project Alignment

Metcalf Substation

Grove Terminal

LEGEND

Proposed Project Components

- HVDC Terminal Site
- Grove to Skyline 320 kV DC Transmission Line
- Metcalf to Grove 500 kV AC Transmission Line
- Construction Staging Area
- Existing Substation

0 1 2 3

Miles

G:\LS Power Centinella\MXD\MetcalfBioTechReport\Figure 3 Project Overview.mxd 032124 RCQ

Sources: LSPGC 2023; Sources: Esri, USGS, NOAA, National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

POWER SANTA CLARA VALLEY PROJECT

Figure 4 Skyline Terminal Site

City of San José, Santa Clara Co., CA

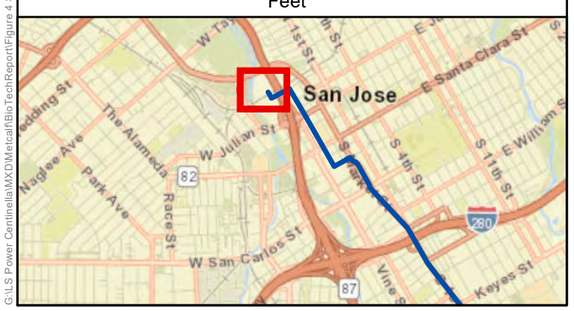
LEGEND

Project Components

- Grove to Skyline 320 kV DC Transmission Line
- Skyline to San Jose B 115 kV AC Transmission Line
- Substation Connection
- New Distribution Line
- New Internet Service Provider
- Dead End Structure
- Skyline Terminal Site Boundary (Limits of Construction)
- Skyline Terminal Property Boundary
- Exterior Access Road
- Terminal Perimeter Wall
- Control Enclosure
- Converter Reactors
- Distribution Station Service
- Distribution Transformer
- GIS Enclosure
- HVDC Converter Enclosure
- PLC Filter
- Converter Transformers
- Spare Transformer
- Valve Coolers
- San Jose B Substation GIS Enclosure
- San Jose B Substation Rebuild/Expansion Area

0 50 100 150 200 250 300

Feet



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POWER SANTA CLARA VALLEY PROJECT

Figure 5 Grove Terminal Site Plan

City of San José, Santa Clara Co., CA

LEGEND

Project Components

- Metcalf to Grove 500 kV AC Transmission Line
- Grove to Skyline 320 kV DC Transmission Line
- Substation Connection
- Existing Distribution Line
- Terminal Distribution Getaway
- New Internet Service Provider
- Grove Terminal Site/Property Boundary (Limits of Construction)
- Exterior Access Road
- Terminal Perimeter Wall
- Frontage Vegetation to Remain
- Control Enclosure
- Converter Reactors
- Distribution Station Service
- Distribution Transformer
- GIS Enclosure
- HVDC Converter Enclosure
- PLC Filter
- Converter Transformers
- Spare Transformer
- Valve Coolers
- Outdoor Equipment Storage Pad

0 100 200 300 400

Feet

G:\LS Power Centinella\MXD\Metcalf\BioTechReport\Figure 5 Grove Terminal Site.mxd 042324 RCQ

Sources: LSPGC, 2023, Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Power Santa Clara Valley Project
Project Fuel Use Calculations - Project Construction

Fuel Usage (gallons) = CO_2 emission (kg) / fuel combustion rate (kg/gallon)

Diesel Emissions		
off road equipment	8263.5	MT
onroad (haul & vendor trips)	779.57	MT
Total Diesel Emissions	9043.07	MT
kg/MT	1000	
Total CO_2 Emissions (kg)	9043070	kg

Diesel fuel combustion rate	10.21	kg/gallon
Diesel fuel consumption	885,707.15	gallons

Gasoline Emissions		
Worker Trips	212.31	MT
kg/MT	1000	
Total Emissions (kg)	212310	kg

Gasoline combustion rate	8.78	kg/gallon
Gasoline consumption	24,181.09	gallons

Notes

Combustion rates taken from The Climate Registry 2020 default emission factors (Table 2.1).

Power Santa Clara Valley Project
Project Fuel Use Calculations - Project Operations

Fuel Usage (gallons) = CO_2 emission (kg) / fuel combustion rate (kg/gallon)

Diesel Emissions		
off road equipment	0	MT
onroad (haul & vendor trips)	0	MT
Total Diesel Emissions	0	MT
kg/MT	1000	
Total CO_2 Emissions (kg)	0	kg

Diesel fuel combustion rate	10.21	kg/gallon
Diesel fuel consumption	0	gallons

Gasoline Emissions		
Worker Trips	6.3	MT
kg/MT	1000	
Total Emissions (kg)	6300	kg

Gasoline combustion rate	8.78	kg/gallon
Gasoline consumption	718	gallons

Notes

Combustion rates taken from The Climate Registry 2020 default emission factors (Table 2.1).