Appendix D

Archaeological Resources Assessment

Archaeological Resources Assessment for the Sunset and Vine Project, Los Angeles, California

JULY 2023

PREPARED FOR

Eyestone Environmental, LLC

PREPARED BY

SWCA Environmental Consultants

ARCHAEOLOGICAL RESOURCES ASSESSMENT FOR THE SUNSET AND VINE PROJECT, LOS ANGELES, CALIFORNIA

Prepared for

Eyestone Environmental, LLC
2121 Rosecrans Avenue, Suite 3355
El Segundo, California 90245
Attn: Laura Rodriguez

Prepared by

Erica Nicolay

Principal Investigator

Chris Millington, M.A., RPA

SWCA Environmental Consultants
320 North Halstead Street, Suite 120
Pasadena, California 91107
(626) 240-0587
www.swca.com

SWCA Project No. 80550

SWCA Cultural Resources Report No. 23-409

July 2023

Keywords: California Environmental Quality Act (CEQA); City of Los Angeles, Department of City Planning; archaeological resources, literature search, archival research; management/planning; Gabrielino; Rancho La Brea; Colegrove, Hollywood; Township 1 South, Range 14 West, Section 11; U.S. Geological Survey (USGS) Hollywood, California, 7.5-minute topographic quadrangle

MANAGEMENT SUMMARY

Purpose and Scope: Eyestone Environmental, LLC, retained SWCA Environmental Consultants (SWCA) to conduct an archaeological resources assessment for a proposed development in the Hollywood neighborhood of Los Angeles, California (Project). The Project proposes to develop a new, eight-story, mixed-use building in the Hollywood Community Plan area. The Project includes an existing 19-story tower which would remain and seven buildings which would be demolished, including four commercial buildings fronting on West Sunset Boulevard, a one-story commercial building fronting on North Vine Street, a one-story commercial building fronting on West Leland Way, and a one-story duplex on West Leland Way. The Project includes a parking structure with two above grade parking levels and two subterranean parking levels. The Project consists of nine adjoining parcels located at 6260–6290 West Sunset Boulevard, 1460–1480 North Vine Street, and 6251–6165 West Leland Way and is bounded by West Sunset Boulevard to the north, West Leland Way to the south, North Vine Street to the west, and a multi-family residential apartment building that is currently under construction to the east.

The Project is subject to review under California Environmental Quality Act (CEQA), and the City of Los Angeles, Department of City Planning (City Planning) is the lead CEQA agency. The following study was conducted to analyze the potential for impacts to archaeological resources in the Project Site in accordance with Section 15064.5 in Title 14 of the California Code of Regulations, and the significance thresholds in Appendix G of CEQA Guidelines. This report documents the methods and results of a confidential records search of the California Historical Resources Information System, a search of the Sacred Lands File (SLF) through the California Native American Heritage Commission (NAHC), and archival research used to evaluate the presence or likelihood of archaeological resources within the Project Site. As part of City Planning's compliance with Public Resources Code 21080.3.1, certain California Native American tribes are required to be notified and may request consultation. All outreach and consultation with California Native American tribes is limited to those being notified as a part of City Planning's regulatory compliance. This process is ongoing; thus, SWCA has not analyzed or otherwise considered information or recommendations put forward by tribal parties during consultation.

Dates of Investigation: SWCA requested a search of the Sacred Lands File (SLF) and list of Native American contacts from the California Native American Heritage Commission (NAHC) on May 2, 2023. The NAHC emailed a response on May 24, 2023, indicating that the SLF search was completed with negative results. The NAHC also provided a contact list of nine Native American tribes that may have knowledge of cultural resources in or near the Project Site. SWCA received the results of a California Historical Resources Information System (CHRIS) records search (within a 0.8-kilometer [km] [0.5-mile] radius) from the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, on June 2, 2023.

Summary of Findings: The nearest named Native American villages and settlements described in ethnographic sources is the village of Kaweenga, approximately 5.7 km (3.6 miles) northwest of the Project Site. The nearest known and notable site to the Project Site is the La Brea Tar Pits. The La Brea Tar Pits, located 4.7 km (2.9 miles) southwest of the Project Site, served as an important source of asphaltum for Native Americans dating back at least 10,000 years. Other unnamed Native American settlements have been documented between 8.7 and 16.7 km (5.4 and 10.4 miles) south-southwest of the Project Site along the former course of the Los Angeles River (now Ballona Creek) and several wetland features that once existed in the Las Cienegas area. Maps from the late nineteenth century indicate that the Project Site is north of wetland habitat including a wet meadow and valley freshwater marsh which are mapped approximately 1.0 km (0.6 mile) south of the Project Site. The relative proximity to these natural resources, especially the freshwater sources, wetlands habitats, and asphaltum source, suggests an increased level of sensitivity for prehistoric archaeological resources.

During the nineteenth century, the Project Site remained undeveloped open space in the northern portion of Rancho La Brea, a Mexican land grant. Beginning in the early twentieth century the land began to be subdivided and developed with residential buildings. Over the first half of the twentieth century, several existing developments were converted to commercial properties. In 1962, the Sunset Vine Tower was developed and several smaller structures within the Project Site were demolished to make way for parking. Today, eight structures exist within the Project Site, seven of which will be demolished as part of the Project and one of which, the Sunset Vine Tower, will remain. The seven buildings that will be demolished were developed between 1911 and 1971.

The archaeological preservation conditions within the Project Site are poor. Based on regional geologic mapping, the subsurface environment of the Project Site appears to be characterized by alluvium and fan deposits formed in the late Pleistocene age. The surface sediments are likely underlaid or adjacent to older Pleistocene-age deposits that were formed well before Native Americans were present. The record of historical land uses in the Project Site suggests the alluvial sediments that once formed the surface have been substantially altered and likely partially or fully replaced with fill. Although the poor preservation conditions suggest a decreased likelihood that any Native American archaeological resources are likely to be encountered below the surface during ground-disturbing activities for the Project, there is a lack of more detailed information on the subsurface conditions within the Project Site. Where extant buildings with basement levels exist, the Native American archaeological sensitivity is low. Lacking more detailed information on the subsurface conditions within the Project Site, the Native American archaeological sensitivity may contain a mix of low and moderate sensitivity. Accordingly, SWCA finds the Project Site has low sensitivity for archaeological resources affiliated with Native Americans.

The expected stratum of fill within the Project Site represents the area in which any Historic period archaeological resources have potential to occur within the Project Site, the most likely type of which are domestic refuse deposits, individual pieces of refuse, and structural remains from the first half of the twentieth century. Within the Project Site the majority of residential developments originally built within the Project Site either still remain or were demolished and replaced with parking lots. The parking lots within the Project Site may have capped existing archaeological deposits, and although less likely, there may be archaeological deposits below the existing buildings within the Project Site. SWCA has identified areas of moderate sensitivity areas within the footprint of extant buildings and areas of high sensitivity where there are existing parking lots. In summary, SWCA finds the Project Site has a moderate to high sensitivity for containing Historic period (non–Native American) archaeological resources.

Conclusion: The depth of excavation for the Project is assumed to extend up to at least 11 meters (36 feet) below the surface within the Project Site, which would require excavation of the underlying alluvial sediments and removal of the overlying fill. The potential for unidentified archaeological resources within the Project Site was assessed based on available evidence and is found to include areas of moderate and high sensitivity. Construction at the Project Site would adhere to applicable regulatory compliance measures intended to reduce and avoid creating significant impacts to archeological resources in the event of a discovery during implementation of the Project. However, given the moderate to high potential for archaeological resources, SWCA recommends the mitigation measures outlined below to ensure that potential impacts to archeological resources are less than significant. SWCA recommends that a Qualified Archaeologist be retained (CUL-MM-1), worker environmental awareness training be implemented (CUL-MM-2), an Archaeological Resource Management Plan (ARMP) be prepared (CUL-MM-3), monitoring activities for ground-disturbing activities be conducted in accordance with the ARMP (CUL-MM-4), and a monitoring report be prepared at the culmination of monitoring activities (CUL-MM-5).

Disposition of Data: This report will be on file with Eyestone Environmental, LLC; City of Los Angeles, Department of City Planning; the SCCIC at California State University, Fullerton; and SWCA's Pasadena office.

CONTENTS

Appendices

Figures

Tables

INTRODUCTION

Eyestone Environmental, LLC (Eyestone), retained SWCA Environmental Consultants (SWCA) to conduct an archaeological resources assessment for a proposed development in the Hollywood neighborhood of Los Angeles, California (Project). The Project would include one new eight-story, mixed-use building within a Project Site that collectively measures 1.74 acres. This study was conducted to analyze the potential for impacts to archaeological resources located in the Project Site pursuant to the California Environmental Quality Act (CEQA), including relevant portions of Public Resources Code (PRC) Section 5024.1, Title 14 California Code of Regulations (CCR) Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1. This report documents the methods and results of a confidential records search of the California Historical Resources Information System (CHRIS), a search of the Sacred Lands File (SLF) through the California Native American Heritage Commission (NAHC), and archival research used to evaluate the presence or likelihood of archaeological resources within the Project Site. The Project is subject to review under CEQA, and the City of Los Angeles (City) Department of City Planning (City Planning) is the lead CEQA agency.

SWCA archaeologist Erica Nicolay, M.A., prepared the report and senior archaeologist Chris Millington, M.A., Registered Professional Archaeologist (RPA), acted as principal investigator. Copies of the report are on file with SWCA's Pasadena, California, office and the South Central Coastal Information Center (SCCIC), located at California State University, Fullerton.

Note to the reader: the CHRIS assigns trinomial site numbers to all archaeological sites, which will be referenced herein first by their trinomial number and, for ease of reference, will exclude the "CA-" prefix. Sites that are not assigned a trinomial are referenced by their primary number.

PROJECT DESCRIPTION AND LOCATION

The Project proposes to develop a new, eight-story, mixed-use building in the Hollywood Community Plan area (Figure 1). The Project Site includes an existing 19-story tower which would remain and four commercial buildings fronting on West Sunset Boulevard, a one-story commercial building fronting on North Vine Street, a one-story commercial building fronting on West Leland Way, and a one-story duplex on West Leland Way, all of which would be demolished. Additionally, the Project would include a parking structure with two above grade parking levels and two subterranean parking levels. Ground disturbance is expected to extend to a maximum depth of 11 meters (m) (36 feet) below the existing grade. The Project consists of nine adjoining parcels located at 6260–6290 West Sunset Boulevard, 1460–1480 North Vine Street, and 6251–6165 West Leland Way and is bounded by West Sunset Boulevard to the north, West Leland Way to the south, North Vine Street to the west, and a multi-family residential apartment building that is currently under construction to the east of the Project Site. The Project Site encompasses Assessor's Parcel Numbers (APNs) 5546-025-017, 5546-025-020, 5546-025-029, 5546-025-030, and 5546-025-031 (Figure 2). The Project Site is in Section 11, Township 1 South, Range 14 West, as depicted on the U.S. Geological Survey (USGS) Hollywood, California, 7.5-minute quadrangle (Figure 3).

Figure 1. Project vicinity.

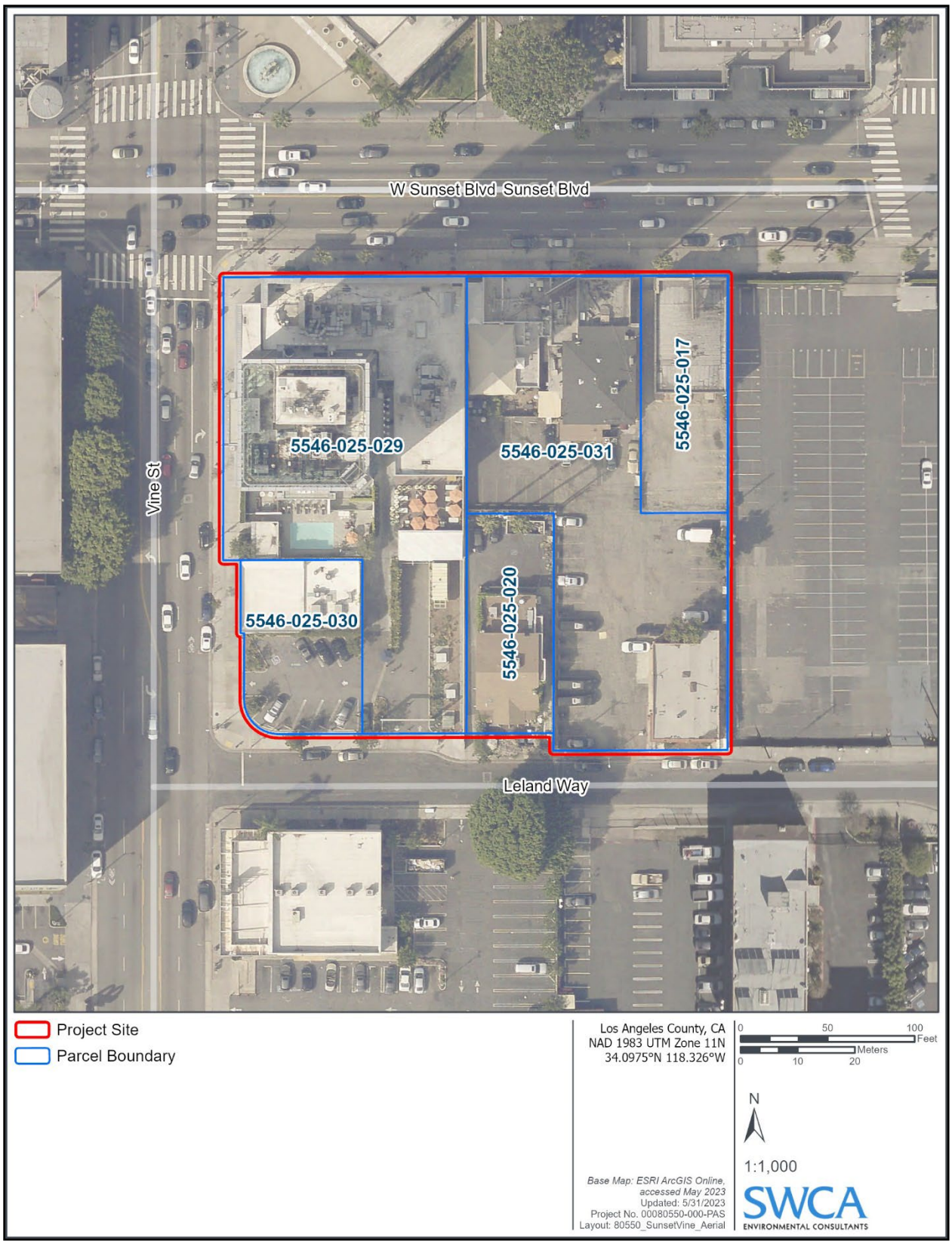

Figure 2. Aerial photograph of Project Site and parcels labeled with APNs.

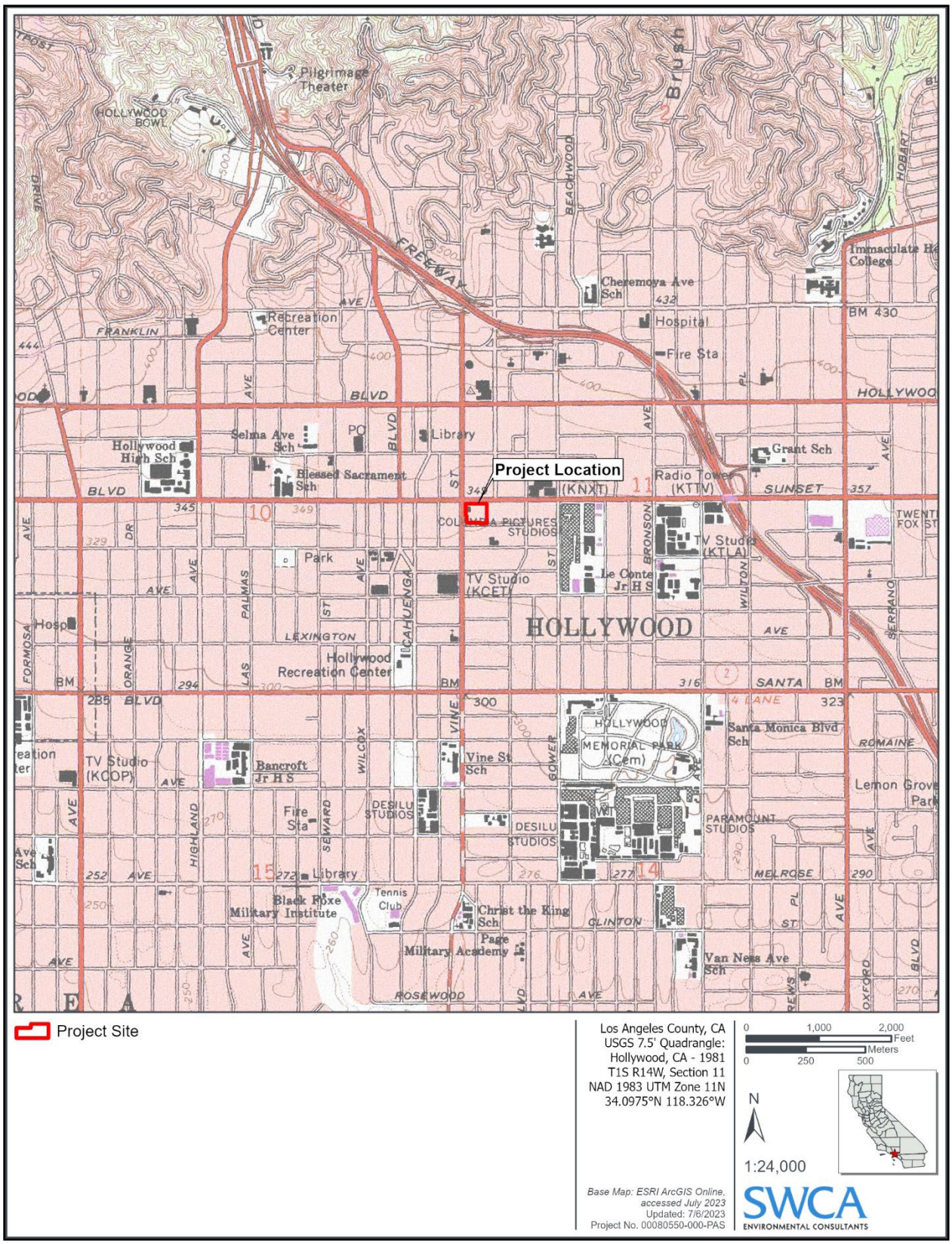

Figure 3. Project Site plotted on the USGS Hollywood, California, 7.5-minute quadrangle.

REGULATORY SETTING

State Regulations

The California Office of Historic Preservation, a division of the California Department of Parks and Recreation, performs certain duties described in the California PRC and maintains the California Historic Resources Inventory and California Register of Historical Resources (CRHR). The state-level regulatory framework also includes CEQA, which requires the identification, and mitigation if necessary, of substantial adverse impacts that may affect the significance of eligible historical and archaeological resources.

California Environmental Quality Act

CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely affected by a proposed project. Under CEQA, a "project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment" (PRC Section 21084.1). Answering this question is a two-part process: first, the determination must be made as to whether the proposed project involves cultural resources. Second, if cultural resources are present, the proposed project must be analyzed for a potential "substantial adverse change in the significance" of the resource.

HISTORICAL RESOURCES

According to CEQA Guidelines Section 15064.5, for the purposes of CEQA, historical resources are:

- A resource listed in, or formally determined to be eligible by the State Historical Resources Commission, for listing in the CRHR (PRC 5024.1, 14 CCR 4850 et seq.).
- A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k), or identified as significant in a historic resources survey by meeting the requirements of PRC Section 5024.1(g).
- Any object, building, structure, site, area, place, record, or manuscript that the lead agency determines to be eligible for national, state, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if the resource meets the criteria for listing on the CRHR (as defined in PRC Section 5024.1, 14 CCR 4852).

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity (as defined above) does not meet National Register of Historic Places (NRHP) criteria may still be eligible for listing in the CRHR.

According to CEQA, the fact that a resource is not listed in or determined eligible for listing in the CRHR, or is not included in a local register or survey, shall not preclude the lead agency from determining that the resource may be a historical resource (PRC Section 5024.1). Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (CEQA Guidelines, Section 15064.5[b]).

Substantial Adverse Change and Indirect Impacts to Historical Resources

CEQA Guidelines specify that a "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" (CEQA Guidelines, Section 15064.5). Material impairment occurs when a project alters in an adverse manner or demolishes "those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion" or eligibility for inclusion in the NRHP, CRHR, or local register. In addition, pursuant to CEQA Guidelines Section 15126.2, the "direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."

UNIQUE ARCHAEOLOGICAL RESOURCES

In terms of archaeological resources, PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions, and that there is a demonstrable public interest in that information.
2. Has a special and particular quality, such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Sections 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs, may be nominated for inclusion in the CRHR. According to PRC Section 5024.1(i), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- **Criterion 2:** It is associated with the lives of persons important in our past.
- **Criterion 3:** It 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.
- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity does not meet NRHP criteria may still be eligible for listing in the CRHR. Although all sites are evaluated according to all four of the CRHR criteria, the eligibility for archaeological resources is typically considered under Criterion 4.

Most prehistoric archaeological sites lack identifiable or important association with specific persons or events of regional or national history (Criteria 1 and 2), and/or lack the formal and structural attributes necessary to qualify as eligible under Criterion 3.

An archaeological site may be considered significant if it displays one or more of the following attributes (California Office of Historic Preservation 1991): chronologically diagnostic, functionally diagnostic, or exotic artifacts; datable materials; definable activity areas; multiple components; faunal or floral remains; archaeological or architectural features; notable complexity, size, integrity, time span, or depth; or stratified deposits. Determining the period(s) of occupation at a site provides a context for the types of activities undertaken and may well supply a link with other sites and cultural processes in the region. Further, well-defined temporal parameters can help illuminate processes of culture change and continuity in relation to natural environmental factors and interactions with other cultural groups. Finally, chronological controls might provide a link to regionally important research questions and topics of more general theoretical relevance. As a result, the ability to determine the temporal parameters of a site's occupation is critical for a finding of eligibility under Criterion 4 (information potential). A site that cannot be dated is unlikely to possess the quality of significance required for CRHR eligibility or be considered a unique archaeological resource. The content of an archaeological site provides information regarding its cultural affiliations, temporal periods of use, functionality, and other aspects of its occupation history. The range and variability of artifacts present in the site can allow for reconstruction of changes in ethnic affiliation, diet, social structure, economics, technology, industrial change, and other aspects of culture.

Treatment of Human Remains

The disposition of burials falls first under the general prohibition on disturbing or removing human remains under California Health and Safety Code Section 7050.5. More specifically, remains suspected to be Native American are treated under CEQA at CCR Section 15064.5; PRC Section 5097.98 illustrates the process to be followed if remains are discovered. If human remains are discovered during excavation activities, the following procedures shall be observed.

- Stop immediately and contact the County Coroner:

  1104 North Mission Road
  Los Angeles, California 90033
  (323) 343-0512 (8:00 a.m. to 5:00 p.m. Monday through Friday) or
  (323) 343-0714 (after hours, Saturday, Sunday, and holidays)

- If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC.
- The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the deceased Native American.
- The MLD has 48 hours to make recommendations to the owner, or representative, for the treatment or disposition, with proper dignity, of the human remains and grave goods.
- If the owner does not accept the MLD's recommendations, the owner or the MLD may request mediation by the NAHC.

Local Regulations

Los Angeles Historic-Cultural Monuments

Local landmarks in Los Angeles are known as Historic-Cultural Monuments (HCMs) and are under the aegis of the City of Los Angeles Planning Department, Office of Historic Resources (OHR). An HCM, monument, or local landmark is defined in the Cultural Heritage Ordinance as follows:

> [A] Historic-Cultural Monument (Monument) is any site (including significant trees or other plant life located on the site), building or structure of particular historic or cultural significance to the City of Los Angeles, including historic structures or sites in which the broad cultural, economic or social history of the nation, State or community is reflected or exemplified; or which is identified with historic personages or with important events in the main currents of national, State or local history; or which embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for a study of a period, style or method of construction; or a notable work of a master builder, designer, or architect whose individual genius influenced his or her age (Los Angeles Municipal Code Section 22.171.7).

City of Los Angeles General Plan

The City's *General Plan Conservation Element* (Conservation Element), Chapter II, Section 3, defers to the State CEQA Guidelines with regard to the identification, evaluation, and mitigation of impacts to archaeological resources. The Conservation Element recognizes that the City has the primary responsibility to protect significant archaeological resources and states the following:

> If it is determined that a development project may disrupt or damage such a site, the project is required to provide mitigation measures to protect the site or enable study and documentation of the site, including funding of the study by the applicant. The city's environmental guidelines require the applicant to secure services of a bona fide archaeologist to monitor excavations or other subsurface activities associated with a development project in which all or a portion is deemed to be of archaeological significance. Discovery of archaeological materials may temporarily halt the project until the site has been assessed, potential impacts evaluated and, if deemed appropriate, the resources protected, documented and/or removed. (City of Los Angeles 2001:II-3)

The Conservation Element gives the following objective and policy for archaeological and paleontological resources:

- **Objective:** protect the city's archaeological and paleontological resources for historical, cultural, research and/or educational purposes.
- **Policy:** continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition or property modification activities.

METHODS

California Historical Resources Information System Records Search

On May 2, 2023, SWCA requested a search of the CHRIS at the SCCIC, located on the campus of California State University, Fullerton. SWCA received the results on June 2, 2023. The search included any previously recorded cultural resources and investigations within a 0.8 kilometer (km) (0.5-mile) radius of the Project Site for archaeological resources. The CHRIS records search also included a review of the NRHP, the CRHR, California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the Office of Historic Preservation's Built Environment Resources Directory, and the California State Inventory of Historic Resources.

Sacred Lands File Search

The NAHC is charged with identifying, cataloging, and protecting Native American cultural resources, which includes ancient places of special religious or social significance to Native Americans, and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC's inventory of these resources is known as the SLF. In addition, the NAHC maintains a list of tribal contacts affiliated with various geographic regions of California. The contents of the SLF are strictly confidential, and SLF search requests return positive or negative results in addition to a list of tribal contacts with affiliation to the specified location.

Archival Research

SWCA compiled property-specific historical materials and reviewed archaeological and ethnographic literature to identify relevant background information for the Project Site. SWCA's research focused on a variety of primary and secondary materials relating to the history and development of the Project Site, including historical maps, aerial and ground photographs, ethnographic reports, archaeological site information from the region, and other environmental data. Archival research focused on assessing the general sequence of developments within the Project Site and vicinity. Sources from the early- to mid-nineteenth century were used to assess the environmental setting before development dramatically increased in the latter years of the nineteenth century, at which point the character of the landscape transitioned from rural open space and large agricultural properties to a fully urbanized setting.

Sources consulted included the following publicly accessible data sources: OHR (SurveyLA); David Historical Map Collection; Early California Cultural Atlas (Native American villages and placenames [Hackel et al. 2015]); Huntington Library Digital Archives; Library of Congress; Los Angeles Public Library Map Collection; Sanborn Fire Insurance Company maps (Sanborn maps); USGS historical topographic maps; University of California, Santa Barbara, Digital Library (aerial photographs); and University of Southern California Digital Library.

Archaeological Sensitivity Analysis

Generally, the location of an archaeological deposit is unpredictable in nature; however, combining information from different sources can allow for a qualitative assessment of the potential for an archaeological resource to be present in a given area. Accordingly, sensitivity assessments are qualitative or probabilistic in nature—ranging along a spectrum of increasing probability—which is designated here

as low, moderate, and high sensitivity. The sensitivity assessment essentially combines two variables: indications of intensive use and preservation conditions. For areas in which there is a favorable setting for habitation or use, soil conditions capable of preserving buried material, and little to no disturbances, the sensitivity is high. Areas lacking these traits are considered to have low sensitivity. Areas with a combination of these traits are generally considered to have moderate sensitivity.

SWCA's sensitivity assessment considered the potential for archaeological components associated with Native American populations from those of non–Native American populations, which began with Spanish colonization. The first variable considered concerns the link between human behavior and material remains, i.e., whether there are any indications that a given area was the focus of past use such that any material remains or physical evidence associated with those activities would have resulted. For Native American archaeological resources, questions about the environmental setting are particularly important. What was the environmental setting within the period of human occupation in southern California beginning approximately 13,000 years ago? Based on what is known about past Native American lifeways, was the location favorable for habitation or other types of activities within this time span? For historical (i.e., non–Native American) archaeological resources, information obtained from archival sources can help to characterize the types of activities that occurred within the Project Site.

Indicators of favorable habitability for Native Americans are proximity to natural features (e.g., perennial water source, plant or mineral resource, animal habitat) and other known Native American archaeological sites, flat topography, prominent viewsheds, and relatively dry conditions. Access to permanent sources of fresh water, especially springs or spring-fed streams for inland settings, carried particular significance. Many and perhaps most streams in the Los Angeles Basin are seasonal or at least include substantial portions in which the water does not reach the surface and is primarily contained below ground. Even if the streams themselves did not always provide perennial access to fresh water, stream courses often formed important habitat for plants and animals that were important to Native American subsistence and cultural practices, as did various types of wetland features that formed in patches across the landscape.

Also, as has been reported through oral history, stream courses provided navigable means of travel by foot, which is to say, streams were used trails and would have been part of a network of travel corridors in the region. Native Americans who foraged for resources in the region would have accessed settlements and areas with natural resources using footpaths and trails. Foraging and other types of activities, including interring human remains, would have occurred intermittently along these routes, some of which would have produced archaeological deposits. Such deposits, typically described as open camps, tend to be characterized by less substantial deposits than what might be expected at a more permanently inhabited settlement or intensively used area. At least some of the primary thoroughfares within the contemporary street grid were likely established along some of these trails. For example, when the Portolá expedition passed through this part of the Los Angeles Basin, they were reportedly guided by Native Americans following along one such trail.

Thus, freshwater sources, stream courses, wetland features, and other areas of concentrated plant and animal communities, were all important factors in Native American subsistence foraging practices and patterns in land use and settlement. Accordingly, proximity to any of these natural features is indicative of an area in which activities were more concentrated and therefore, more likely to produce physical evidence. However, within the urbanized setting that characterizes the Project Site and its surroundings, there is little to no direct evidence identified that would allow for a reliable reconstruction of any such trails in a spatially explicit way. Therefore, in the absence of direct archaeological evidence associated with a specific stream, wetland feature, or vegetation community, the influence on Native American archaeological sensitivity is considered generalized at a local scale and is considered alongside other variables where it concerns the potential for archaeological sensitivity.

Because historical (i.e., non–Native American) archaeological resources can commonly be assessed using archival materials that are more easily tied to a specific geography, assessing the sensitivity is typically more explicit and precise than it is for Native American archaeological resources. Typical indicators of historical archaeological sensitivity include the following: presence of bricks, glass, and/or building materials in geotechnical bores; historically documented occupation of a property, especially if they occurred before trash and sewer services were established; and multiple episodes of construction and demolition of historical structures.

The next consideration given is whether the Project Site is conducive to the preservation of any such material remains that may have once been present. Assessing the preservation conditions considers the following types of questions. Is there a potential for shallow or deeply buried deposits? What kinds of land uses have occurred within the region and have there been any alterations to the physical setting within the Project Site? What is the age of the sediments and is there evidence of high or low energy deposition or erosion during the period of human occupation and historical land uses? Did the physical alterations result from natural causes, such as flooding or erosion, or from more recent historical land developments, such as mechanical grading, and how have these processes influenced the potential for preserving buried materials? In other words, is there evidence that physical alterations to the subsurface setting may have eroded, displaced, or otherwise destroyed any potential archaeological resources that may have once been present?

To assess these variables, SWCA considers archaeological, ethnographic, historical, environmental, and other archival data sources. Archaeological site data include those identified in the CHRIS records search and supplemental background research. The CHRIS data are also analyzed in greater detail to identify any sample bias in the identification of sites, which is to say, to what degree the absence of archaeological site information is because no resources were identified or because an archaeological investigation never occurred. For assessing Native American archaeological sensitivity, the information obtained through background research is reviewed to determine whether the general location is described in ethnographic studies and oral histories, and whether the historical ecological conditions of the Project Site area are similar to the physical setting in which other Native American archaeological sites have been identified. The sensitivity assessment considers proximity to a given feature, such as a previously recorded archaeological site, former village, settlement, placename, or environmental feature; however, there is no universal measure of sensitivity as a function of distance, nor is there a consistent depth above or below which buried resources can occur in all circumstances. These variables are assessed on a case-by-case basis and the conclusions incorporate a degree of professional judgment based on industry standards and best practices for archaeology.

ENVIRONMENTAL SETTING

The Project Site is in the northwest portion of the Los Angeles Basin, a broad, level plain defined by the Pacific Ocean to the west, the Santa Monica Mountains and Puente Hills to the north, and the Santa Ana Mountains and San Joaquin Hills to the south. This extensive alluvial wash basin is filled with Quaternary alluvial sediments deposited as unconsolidated material eroded from the surrounding hills. Several major watercourses drain the Los Angeles Basin, including the Los Angeles, Rio Hondo, San Gabriel, and Santa Ana Rivers. The Project Site and vicinity are within a fully urbanized setting on an open aspect plain at an elevation of approximately 104 m (341 feet) to 106 m (349 feet) above mean sea level. The Project Site is located approximately 8.7 km (5.4 miles) northwest from downtown Los Angeles and approximately 18.8 km (11.7 miles) northeast of the Pacific Ocean.

The Project Site is situated on a broad alluvial plain gently sloping south and is located southeast of the Santa Monica Mountains. During most of the nineteenth century, the Project Site and surrounding parts

of the alluvial plain had been used for ranching and agriculture and reflected a rural character. Beginning in the 1880s, urban and suburban growth occurred steadily throughout the Los Angeles Basin but was notably punctuated by extensive real-estate booms that continued through the 1920s and after World War II. Though the presence of large oil fields delayed real estate development in some parts of the city, including areas to the south and southwest of the Project Site, by the mid-1920s the Project Site and much of the surrounding vicinity had been developed into built environment that characterizes the present-day setting.

Hydrology

Prior to these major historical transformations of the landscape, the alluvial plain in this part of the Los Angeles Basin was drained by several seasonal streams, some of which included water from several springs. These stream courses generally flowed south and southwest where they converged with the westernmost portion of what is now Ballona Creek, which has been the primary channel of the Los Angeles River at various times over at least the last several hundred years (Gumprecht 2001). These stream courses, springs, vegetation, and elements of the natural topography are reflected in historic maps produced in the latter parts of the nineteenth century, especially the 1888 irrigation map by W. H. Hall (Figure 4).

Historical maps like those from Hall's irrigation study were incorporated into the Dark et al. (2011) study reconstructing the historical ecology of the Ballona Creek watershed in the northwestern part of the Los Angeles Basin. Dark et al. (2011) used multiple archival sources from the nineteenth and twentieth centuries to produce digital geographic data for former stream courses, springs, and various types of wetland features, which they correlated with different plant and animal communities. The digitized features within the watershed provide a reasonable approximation of the hydrological conditions over at least the past several centuries; however, smaller stream courses and the main channel of larger stream courses are highly dynamic and vary over longer periods of time. Springs, for example, may become active or dormant depending upon changes in groundwater levels, which would have varied over a period of thousands of years. Vegetation and animal communities have also shifted, especially in the late Pleistocene to Holocene climatic transition, but also across the Holocene period when Native American communities became more established. Therefore, the interpretations based upon the reconstructed historical ecological conditions should not assume that these features have been in the same location for the entire period in which humans have been in North America.

The Project Site is situated in the northeastern part of the Ballona watershed and is situated approximately 1.0 km (0.6 mile) north of two types of wetland habitat—wet meadow and valley freshwater marsh—mapped by Dark et al. (2011) (Figure 5). These features are part of a larger pattern that Dark et al. (2011:20) observed in which there is "a band of wetland habitat that transitions into the La Cienega system to the south." They continue, "Valley freshwater marsh transitions into wet meadow, which in turn becomes a huge swatch of alkali meadow. This area is depicted in detail on historical topographic maps, the Hall irrigation maps, and a diseño of this area" (Dark et al. 2011:20). The diseño (map) drawn for Rancho La Brea is included here in Figure 6. The diseño defines the northern rancho boundary by a line of mountains—the southern margin of the Santa Monica Mountains—with three canyons or drainages marked by stands of laurels ("laureles" in the map), alder, and sycamores ("alisos" in the map). Part of the "band" of wetland features described by Dark et al. (2011) is circled in red on Figure 6. The map is drawn to a relative scale and is not geographically precise. The Project Site would be situated somewhere in the upper center of the circled area.

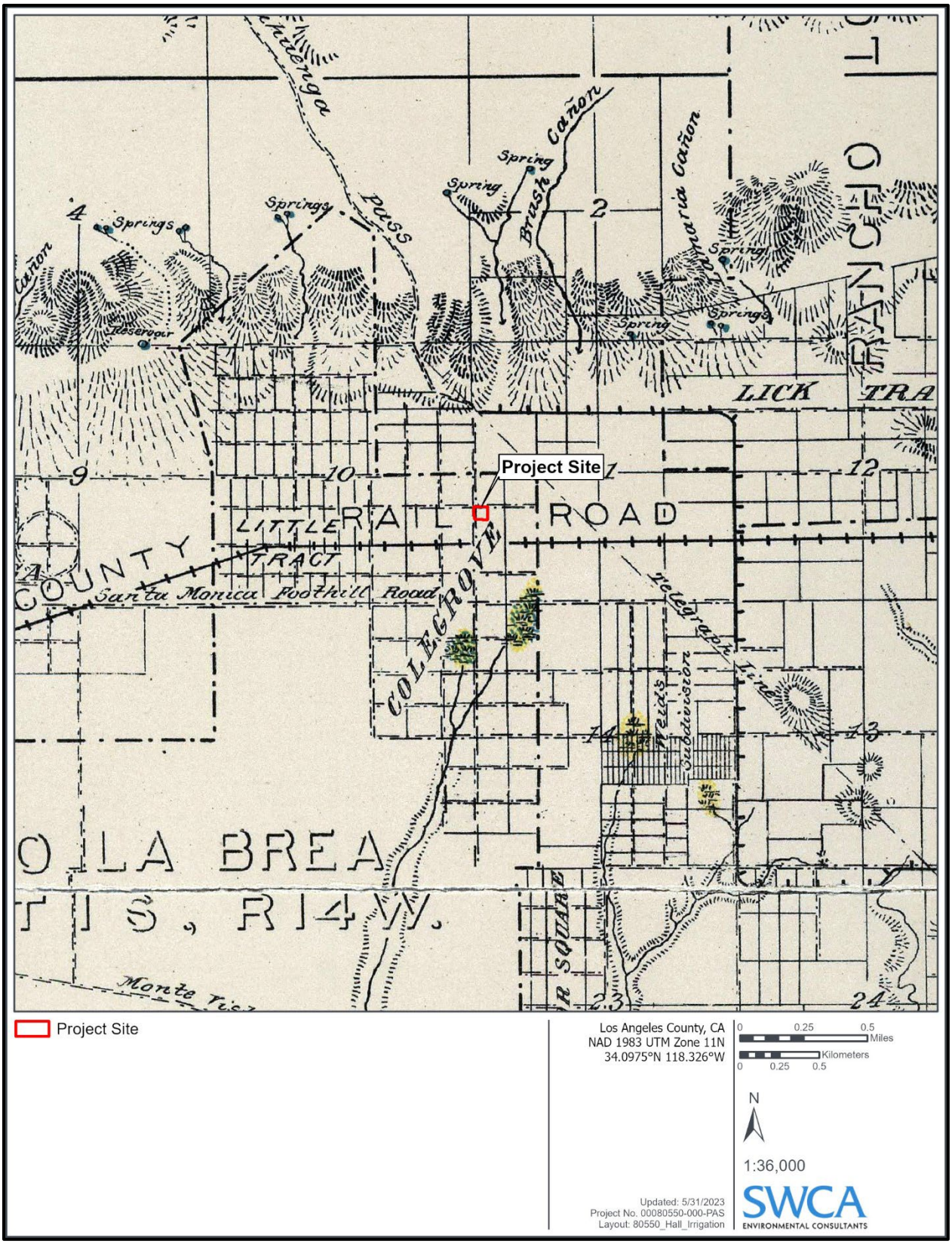

Figure 4. Project Site plotted on Hall's (1888) irrigation map showing natural and artificial water sources (Source: David Rumsey Map Collection, Image No. 583003).

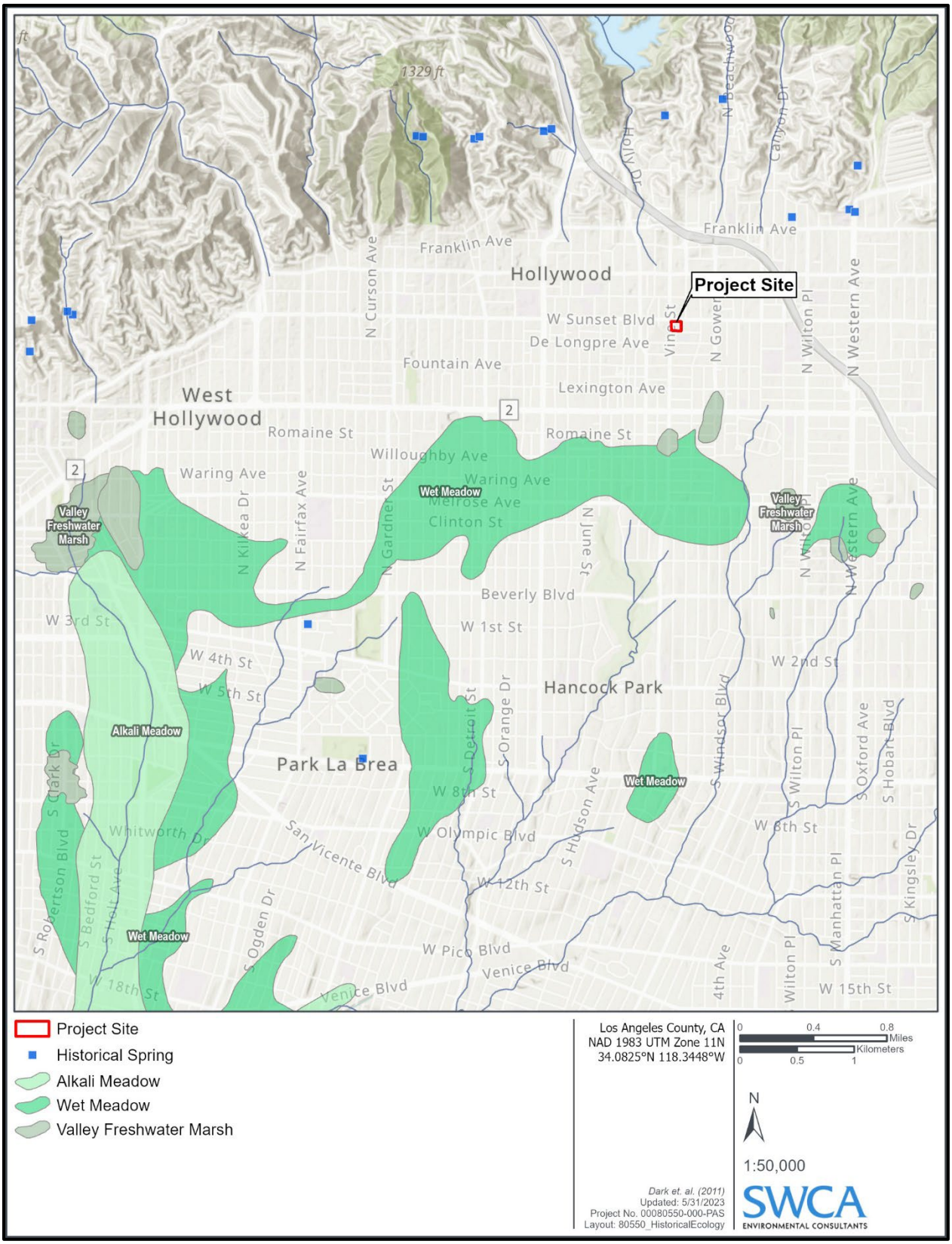

Figure 5. Project Site plotted on the Dark et al. (2011) reconstruction of historical ecology of the Ballona Creek watershed.

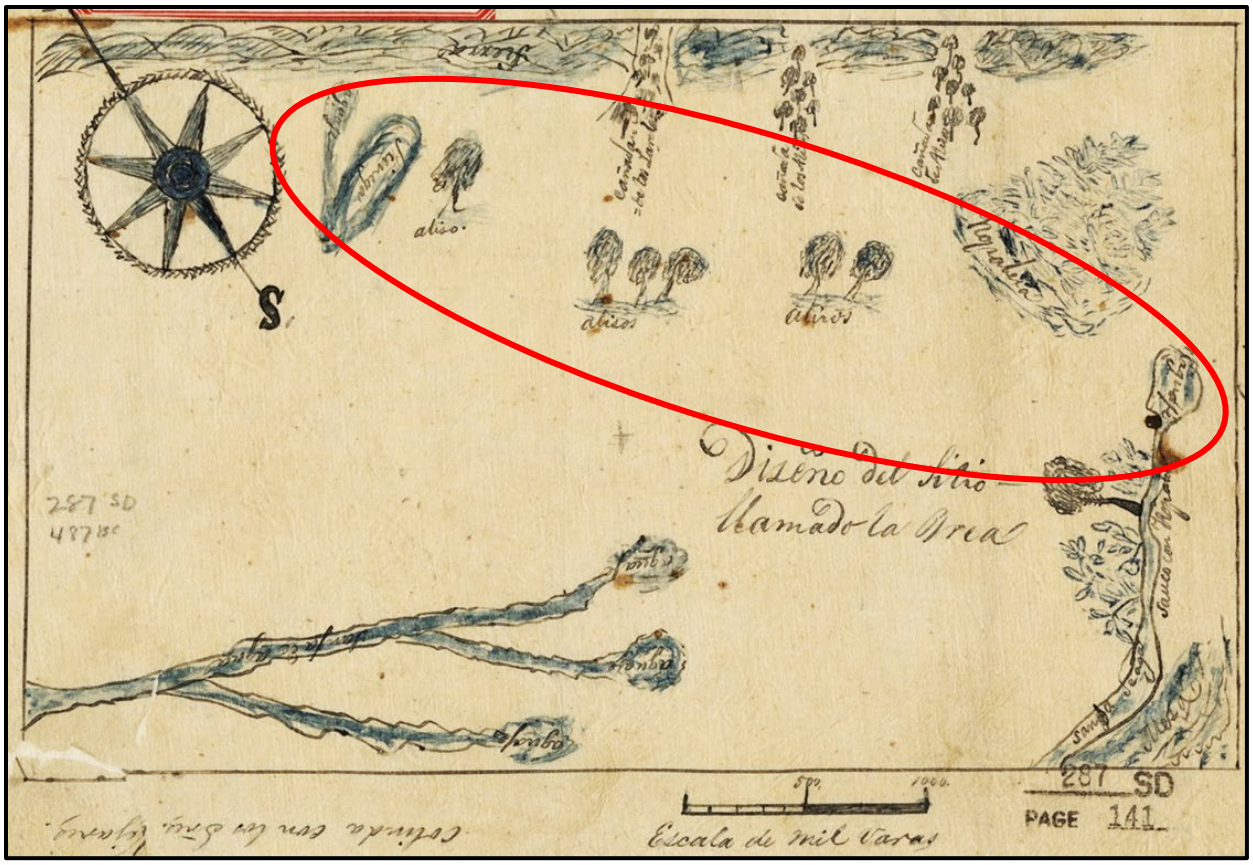

Figure 6. Map associated with the Spanish-period land grant, "Diseño del Sitio Llamada La Brea," ("Map of the Site Named La Brea"), hand-copied from the original that was made in the 1840s (Source: University of California–Berkeley, Bancroft Library).

In addition to the wetland habitats, the Project Site is situated south of multiple streams that once originated in the foothills of the Santa Monica Mountains and ran downslope until reaching the area around present-day Hollywood Boulevard. These streams are shown on both Figure 4 and Figure 5. Additionally, multiple streams are mapped by Dark et al. (2011) to the south and southeast of the Project Site as originating from within the alluvial plain, flowing south and in some places converging with other streams, and discharging into Ballona Creek, or what at various times would previously have been the Los Angeles River.

Flora and Fauna

Even before the urbanization of the twentieth century, the ecology of the Los Angeles prairie had already undergone a transformation during the preceding century as a result of ranching and agricultural practices that accompanied European settlement (Schiffman 2005). While there are fewer surviving examples of the pre-settlement ecology in the lower elevations, compared with the surrounding hillsides, various attempts have been made to reconstruct the historical ecology of the Los Angeles Basin.

Schiffman (2005:40) provides a succinct summary of the vegetation structure and species composition for the Los Angeles Basin:

> Most steep hillsides were covered by impenetrably dense evergreen chaparral shrubs such as California lilac (*Ceanothus* spp.), chamise (*Adenostoma fasciculatum*), scrub oak (*Quercus*

> *berberidifolia*), and manzanita (*Arctostaphylos* spp.) or sparsely shrubby and drought deciduous coastal sage scrub vegetation that included buckwheat (*Eriogonum fasciculatum*), sages (*Salvia* spp.), and sagebrush (*Arternisia californica*). In contrast to the shrubby hills and mountain slopes the dense, clayey soils of the flat valleys and plains supported a diverse prairie vegetation of colorful ephemeral wildflowers mixed with grasses and other plants of low stature. In addition, woodlands of walnut (*Juglans californica*) and oak (*Quercus agrifolia* and *Q. lobata*) were found in canyons and on some hillsides, and broad corridors of willow (*Salix* spp.), alder (*Alnus rhombifolia*), sycamore (*Platanus occidentalis*) and mulefat (*Baccharis salicifolia*) lined the river floodplains and feeder creeks that dissected the landscape.

In the late nineteenth century, the vegetation across the inland portions of the northwestern Los Angeles Basin consisted of species associated with the coastal sagebrush community (Kuchler 1977). In addition to the species Schiffman references, those found in the coastal sagebrush unit also include California sandaster (*Corethrogyne filaginifolia*), Menzies' golden bush (*Isocoma menziesii*), coyotebrush (*Baccharis pilularis*), California brittlebush (*Encelia californica*), fuchsiaflower gooseberry (*Ribes speciosum*), and orange bush monkeyflower (*Mimulus aurantiacus*). Ethington et al. (2020) prepared a comprehensive study analyzing the historical ecology of the Los Angeles River. Their work collated several of the prior efforts with a regional characterization of "potential natural vegetation" across the Los Angeles River watershed. The resulting spatial data helps to reflect the varied nature of the plant communities within the Los Angeles Basin. The Project Site is mapped within a unit confirming the presence of mainly species associated with coastal sagebrush community—coastal sage scrub in the Ethington et al. (2020) schema.

Dark et al. (2011:21–22) listed some of the types of plants associated with the localized wetland features they mapped in the Ballona watershed and includes the following among the notable species: marsh pennywort (*Hydrocotyle verticillata*), water parsley (*Oenanthe samentosa*), seaside heliotrope (*Heliotropium curassavicum*), chairmaker's bulrush (*Schoenoplectus americanus*), prairie bulrush (*Scirpus maritimus*), marsh milkvetch (*Astragalus pycnostachyus*), swollen duckweed (*Lemna gibba*), common duckweed (*Lemna minor*), floating primrose-willow (*Ludwigia peploides*), curlytop knotweed (*Polygonum lapathifolium*), silverweed cinquefoil (*Potentilla anserine*), yerba mansa (*Anemopsis californica*), and seep monkeyflower (*Mimulus guttatus*).

With this mosaic of ecological communities, the area would have provided a very productive environment for past Native American communities, one well suited to a foraging economy with a variety of water birds, small and large mammals, fish, reptiles and amphibians, and edible plant species. In terms of the resources potentially available in closer proximity to the Project Site, Native Americans would have made use of plant species both within the coastal sagebrush community and within the more discrete wetland habitats. The plants found in these zones were used to make a variety of objects or were consumed directly, but also provided habitat for animals that were similarly incorporated into the Native American diet and used to make a variety of objects used in daily life. An exhaustive account of Native American plant use and dietary choices is beyond the scope of this study (see Anderson [2005] for a description of practices by Native Americans groups across California). In brief, those specific to the coastal sagebrush unit included multiple plant species with edible seeds, as well as the prickly-pear cactus (McCawley 1996:115). Nearby oak and walnut woodlands were important areas for acorn gathering, and plant species used in basketry were commonly found in freshwater marshes (Ethington et al. 2020:42).

In addition to the natural resources found within the inland environments, Native American communities in the Los Angeles Basin would have had access to plant, animal, and lithic resources along the coast and surrounding hills and mountains. Descriptions of these ecological conditions and the associated Native American uses of resources found therein is described elsewhere. For example, Lightfoot and Parrish (2009:253–277) provide a summary for coastal and inland settings for Southern California, an overview

of the Santa Monica Mountains is included in King's (2011) report, the Ballona region is described in Homburg et al. (2014), and coastal environments are addressed in numerous studies such as those by Byrd and Raab (2007), Erlandson (1994), and Gamble (2008). A sample of some of the plant and animal species that were important to the Gabrielino is included below (see Gabrielino Ethnography).

Regional Geology and Local Soils

The Los Angeles Basin is situated between the northernmost portion of the Peninsular Ranges and the south end of the Transverse Ranges. The Project Site is within the northernmost Central Block of the Los Angeles Basin, which includes the low portions of the Los Angeles coastal plain from Beverly Hills to the Downey Plain within central Orange County (Norris and Webb 1990; Yerkes et al. 1965). Surficial geology in the vicinity of the Project is characterized by alluvial fan deposits that formed during the middle and late Pleistocene—between approximately 130,000 and 11,500 years ago. These geological units are mapped by Bedrossian et al. (2012) as old alluvial fan deposits (Qof)[1] (Figure 7). Campbell et al. (2014) subdivided the Qof into four units that are separated by age and subtle differences in composition. The Project Site is within Qof, Unit 4 (Qof_4)—the youngest of the four Qof units. Qof_4 is late Pleistocene in age and could be underlain by older Pleistocene fan deposits like Qof, Unit 2 (Qof_2), which at its closest to the Project Site, is mapped at the surface approximately 0.4 mile south (Nolasco et al. 2023).

In SWCA's paleontological assessment of the Project Site, Nolasco et al. (2023) note that Pleistocene fossils have been identified in Qof units at depths as shallow as 5 feet that were also recovered from an urbanized setting. Thus, as a general pattern, prior construction events that involved ground disturbance would be altering a surface formed in the last Ice Age, and to the extent these activities involved the removal of sediments, the underlying stratum would be exposing sediments that may pre-date the arrival of humans in North America. Nolasco et al. (2023) provide additional contextual information on the process by which fossil preservation is influenced by local geologic processes within Pleistocene alluvial fan deposits of the Santa Monica Mountains, whereby in a higher energy depositional setting, like on a backslope, the creation and preservation of fossils is less likely to occur compared to low-energy areas in the basins. Because the oldest Native American period of occupation in the Los Angeles Basin dates to the latest part of the late Pleistocene, archaeological preservation is also subject to these same processes.

A preliminary geotechnical study was conducted for the Project by Geotechnical Professionals, Inc. (GPI) (Kempton and Schade 2020). As a preliminary study, the subsurface testing was limited to the use of three cone penetration tests (CPT) that extended between 51.5 and 75 feet deep. The results indicated that the soils are composed of 11 to 15 feet of loose to medium dense silty sand and firm sandy silt, which are underlain predominantly by interbedded layers of very stiff to hard clays and silts (Kempton and Schade 2020). Subsurface investigations based strictly on the use of CPTs to estimate sediment composition lack the detail needed to identify fill sediments, i.e., sediments that have been mechanically altered during prior developments. Thus, GPI's study does not provide the depth of fill, but the unconsolidated sediments identified in the upper 15 feet are considered to be a reliable indicator of the maximum depth at which fill may be present.

[1] Quaternary deposits in Southern California are otherwise distinguished as Very Old or Young.

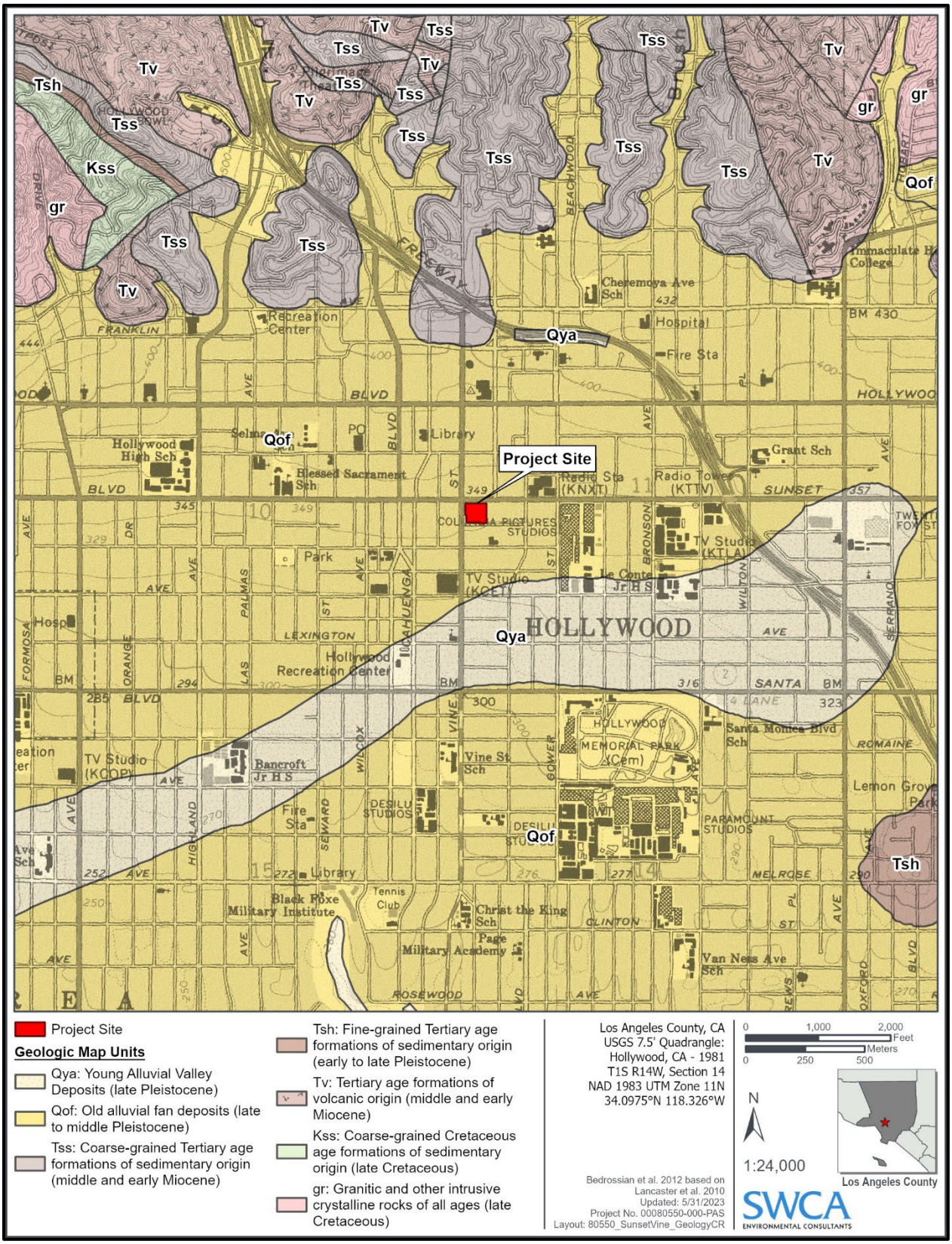

Figure 7. Project Site plotted on the Bedrossian et al. (2012) geological map for the area.

CULTURAL SETTING

Native American Archaeological Record

Over the years, researchers have devised numerous chronological sequences to aid in understanding cultural changes at various scales (regional vs. local patterning) in Southern California, as demonstrated in the archaeological record. The Native American archaeological record for California is generally divided into three broad temporal periods (Paleoindian, Archaic, and Emergent periods; see Fredrickson [1973, 1974, 1994]) that reflect similar cultural characteristics throughout the state and were generally governed by climatic and environmental variables, such as the drying of pluvial lakes at the transition from the Paleoindian to the Lower Archaic Period. Numerous chronological sequences were also devised to characterize cultural changes on a smaller scale, within the subregion of Southern California specifically.

Building on early studies and focusing on data synthesis and artifact types, Wallace (1955, 1978) developed a chronology of Native American archaeology for the Southern California coastal region that is still widely used today and is applicable to near-coastal and some inland areas. Wallace's (1955, 1978) chronology for Southern California was composed of four sequential horizons: Horizon I, Early Man; Horizon II, Milling Stone; Horizon III, Intermediate; and Horizon IV, Late Prehistoric (Late Period). Wallace's 1955 synthesis initially lacked chronological precision due to a paucity of absolute dates (Moratto 1984:159) but this situation has been alleviated in the last several decades by the availability of thousands of radiocarbon dates obtained by Southern California researchers (Byrd and Raab 2007:217). Consequently, several revisions have been made to Wallace's 1955 synthesis using radiocarbon dates and projectile point assemblages, resulting in more refined chronologies and sequences (e.g., Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994; see also Moratto 1984).

Additional primary syntheses for organizing the Native American archaeological record in California were developed by Warren (1968) and King (1981, 1990), which used the growing archaeological data sets of specific subregions within Southern California to define increasingly localized cultural sequences. Using the concepts of cultural ecology and cultural tradition, Warren (1968) proposed a series of six "traditions." Three of these traditions—the San Dieguito Tradition, Encinitas Tradition, and Campbell Tradition—correlated with Wallace's Horizons I, II, and III. The Chumash Tradition, Takic Tradition (formerly "Shoshonean"), and Yuman Tradition are represented in Wallace's Horizon IV. These ecologically based traditions are applicable to specific regions within Southern California.

More recently, there have been several syntheses of chronologies from before Spanish colonization for Southern California (Byrd and Raab 2007; Sutton 2009; Sutton and Koerper 2009). Extensive mitigation-driven excavations have further refined a local chronology for the Ballona Wetlands area, which integrates data from more than 200 radiocarbon date ranges (Douglass et al. 2016). The Ballona Wetlands area is also in the northwest Los Angeles Basin, several miles southwest of the Project Site, and thus directly relevant to the cultural context for this Project. The Ballona chronology is included alongside the more general Southern California chronologies in Figure 8, which provides a reference point for the primary periods and cultural traditions discussed below along with chronologies denoted by years before present (B.P.) and calendar ages (B.C. and A.D.).[2]

[2] Elsewhere in this report, uncalibrated radiocarbon ages are presented as radiocarbon years B.P., and their calibrated dates are expressed as cal B.P.

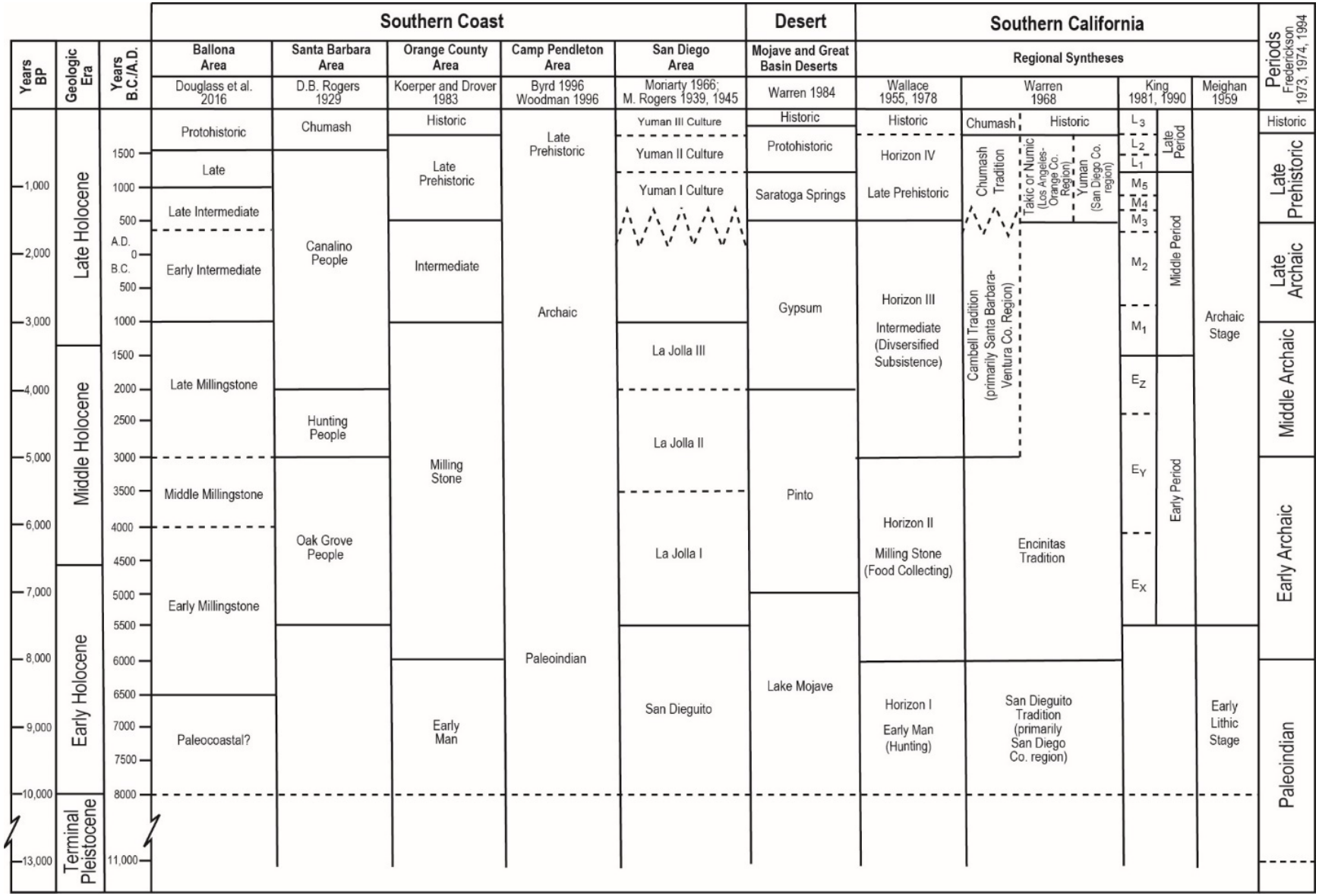

Figure 8. Chronological frameworks for Southern California and Los Angeles Basin cultural traditions and archaeological contexts.

Terminal Pleistocene: Paleoindian/Paleocoastal Tradition

Any discussion of human occupation of coastal areas during the Terminal Pleistocene must be prefaced with an understanding that sea level rise during this period of severely shifting climate inundated many kilometers of shoreline worldwide and along Southern California coastlines specifically, submerging an unknown number of archaeological sites (Reeder-Myers et al. 2015). Therefore, any evidence that we do have of human occupation in what are now coastal settings is likely only a small fraction of what originally existed (Erlandson et al. 2007; Erlandson et al. 2015). Recent studies using offshore core samples have made important progress in reconstructing paleoshorelines and the paleoenvironment of Southern California's Terminal Pleistocene coast (Gusick et al. 2022).

The earliest evidence for human occupation in Southern California is found on the northern Channel Islands, where multiple Terminal Pleistocene sites have been identified and dated in the past couple decades, firmly establishing the presence of early coastal-adapted people in the region (Erlandson and Braje 2008; Erlandson and Colton 1991; Erlandson et al. 1996; Erlandson et al. 2011; Erlandson et al. 2020; Gusick and Erlandson 2019). On Santa Rosa Island, human remains have been dated from the Arlington Springs site to approximately 13,000 years ago (Johnson et al. 2002). Recent excavations and radiometric dating of multiple archaeological assemblages on San Miguel, Santa Rosa, and Santa Cruz Islands document Paleoindian technologies, subsistence strategies, and seasonality of site occupation during the latter part of the Terminal Pleistocene (ca. 11,700 B.P.), with similarities to the Western Stemmed Tradition found across much of western North America (Braje et al. 2013; Erlandson 2013; Erlandson and Braje 2008; Erlandson et al. 1987; Erlandson et al. 2011; Erlandson et al. 2020; Jew et al. 2013; Rick et al. 2013).

Finely crafted chipped stone crescents like those recorded on the northern Channel Islands as part of the Paleocoastal toolkit were also found in surficial contexts on San Nicolas Island, suggesting an earlier occupation for the southern Channel Islands as well (Davis et al. 2010). It is possible that similarly early sites were present on the mainland California coast as well; however, the rate and degree of development beginning with Spanish colonization and continuing to the present has likely destroyed most early sites along the California mainland coast. Nevertheless, three fluted points representing the Clovis culture have been found in Southern California mainland coastal areas, including one in Santa Barbara County (Erlandson et al. 1987), one in Los Angeles County near Malibu (Stickel 2000), and one in El Morro Canyon, in what is now Crystal Cove State Park in Orange County (Fitzgerald and Rondeau 2012). Additionally, numerous fluted projectile points of the Clovis and Folsom Traditions have been reported from inland contexts in central and Southern California (e.g., Davis 1975; Dillon 2002; Moratto et al. 2011; Riddell and Olsen 1969; Rondeau 2006; Yohe and Gardner 2016).

PALEOCOASTAL OCCUPATION OF THE BALLONA AREA

Two sites, LAN-61 and LAN-63, in the Ballona area are believed to include occupations from this time period based on diagnostic artifacts (crescents and stemmed points) (Lambert 1983; Van Horn 1987). However, recent data recovery excavations and analyses, including numerous radiocarbon dates, failed to provide incontrovertible evidence that people were using this area during the Paleocoastal period (Douglass et al. 2005), although this lack of radiocarbon dates does not necessarily negate the possibility that an earlier occupation occurred and might be uncovered in the future.

Early Holocene (ca. 11,500 to 7000 B.P.)

HORIZON I: EARLY MAN

During the early twentieth century, several sensationalized finds were thought to be evidence of "Early Man" in the Los Angeles Basin; however, subsequent analyses have not held up as hoped. First, in 1914 human remains were found in direct association with extinct Pleistocene fauna at the La Brea Tar Pits (LAN-159/H) (Merriam 1914). Although early estimates suggested that this find extended up to 34,000 years ago, radiocarbon dating has since shown these remains to have an estimated age range of approximately 9000 to 4450 B.P. (Berger et al. 1971; Payen 1970), with the most recent redating using accelerator mass spectrometry providing a calibrated date range of ca. 10,200 cal B.P. (Fuller et al. 2016), placing this individual at the transition between the Paleoindian/Paleocoastal period and the Millingstone period.

A second early discovery at Angeles Mesa in Baldwin Hills (the Haverty, or Angeles Mesa Site, LAN-171) included partially mineralized skeletal remains of several individuals found in depths up to 7 m (23 feet) below surface (Brooks et al. 1990; Stock 1924). Issues, however, with the various methods used to date these bones remain unresolved and have returned estimated dates of more than 50,000 years ago based on amino acid racemization (Taylor et al. 1985) and radiocarbon date ranges that span 15,900 ± 50 to 3870 ± 350 B.P., representing an unacceptably large margin of error for a single individual (Berger et al. 1971; Brooks et al. 1990). The wide range of dates suggested problems with the methods used in the radiocarbon dating and calibration, especially concerning the use of amino acid racemization (AAR), and subsequent revisions to the estimates found a revised date range of between 7900 and 4050 B.P. (Taylor et al. 1985:137).

There are similar concerns related to the age of remains referred to as "Los Angeles Man"—designated LAN-172 (Lopatin 1940)—which were discovered in a similar depositional context less than 3.2 km (2.0 miles) from the Haverty Site in 1936 (Brooks et al. 1990; Erlandson et al. 2007:54). The remains at LAN-172 consisted of skull fragments and a broken humerus that were described as having been found in the same stratigraphic setting as mammoth bones, suggesting late Pleistocene antiquity, although neither of the discoveries were conducted as controlled excavation and the mammoth discovery was made approximately 370 m (1,213 feet) away. Subsequent dating using AAR could only yield a date of more than 23,600 B.P. (Berger et al. 1971:47), but revised estimates based on radiocarbon and AAR yielded a more much more recent date of 3560 B.P. (Taylor et al. 1985:137).

Mainland sites attributed to Horizon I generally indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones et al. 2002) and a greater emphasis on large-game hunting inland. Fundamental elements of lithic tool technology described by Wallace (1955) for this period include numerous scrapers, choppers, chipped and notched crescents, and large blades and points. Wallace (1955) also describes clam shell and bone beads, along with an absence of seed-grinding implements from the site type for this period, Malaga Cove. Several sites in Orange and San Diego Counties contain components that date to between 9,000 and 10,000 years ago (Byrd and Raab 2007:219; Macko 1998a:41; Mason and Peterson 1994:55–57; Sawyer and Koerper 2006), and radiocarbon dates from the Goleta Slough area in Santa Barbara County indicate occupations spanning ca. 9300 to 8400 cal B.P. (ca. 7300–6400 B.C.) with a primary subsistence focus on lagoon/bay shellfish (Owen et al. 1964).

HORIZON II: MILLINGSTONE

The Millingstone horizon corresponds to the Early Holocene when rising sea levels continued to encroach on coastlines, although global climate was slowly stabilizing. Set during a warmer and drier climatic

regime than the previous horizon, the Millingstone horizon is characterized by subsistence strategies centered on collecting plant foods and small animals, although in coastal areas where archaeological assemblages have been preserved, there is also ample evidence of marine resource use during this time as well (Connolly et al. 1995; Rick et al. 2001). The importance of seed processing is apparent in the dominance of stone grinding implements in archaeological assemblages from this period, namely milling stones (metates) and hand stones (manos) (Erlandson 1991, 1994; Moriarty 1966; Warren 1967).
The variety of site types from this period indicate a mobile settlement pattern, and later research indicated that Millingstone horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions (Byrd and Raab 2007:220).

Millingstone assemblages are characterized by the extensive use of milling implements (particularly manos and metates) and mullers along with scraper planes, choppers, and core tools and a general lack of finely crafted projectile points, although leaf-shaped points believed to be darts are present. The general lack of faunal remains along with bone and shell tools at some sites dated to this period have led researchers to suggest a stronger reliance of plant food resources (i.e., seeds) with only a minor focus on hunting. Several sites have been described for this horizon throughout Southern California, including Little Sycamore in Ventura, Porter Ranch in San Fernando, and the La Jolla shellmounds in San Diego. Los Angeles County sites with Millingstone components include Malaga Cove (Level 2, LAN-138; Walker 1952), the Tank Site (LAN-1) in Topanga Canyon (Heizer and Lemert 1947; Treganza and Bierman 1958), the La Brea Tar Pits Site (LAN-159; Salls 1986), the Zuma Creek Site (LAN-174; Wallace 1955; see also Ascher 1959), the Sweetwater Mesa Site (LAN-267; King 1967), the Shobhan Paul Site (LAN-958; Porcasi and Porcasi 2002; Salls 1995); and the Parker Mesa site (LAN-215; King 1962). Primary sites with Millingstone components in Orange County include Bolsa Chica (ORA-83; Herring 1961, 1968), ORA-64 (Drover et al. 1983; Macko 1998b), and the Landing Hill Site (Cleland et al. 2007).

Middle Holocene (ca. 7000 to 4000 B.P.)

HORIZON III: INTERMEDIATE

This horizon corresponds with the Middle Holocene and early Late Holocene time periods geologically and marks the point when current shorelines were established in most parts of the world. Consequently, evidence for marine resource use appears to have increased after 5,000 to 6,000 years ago.
The Intermediate horizon is characterized by important changes in almost all aspects of culture, including settlement patterns, economic activities, mortuary practices, and technology (Byrd and Raab 2007). During this period, economic practices shifted toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. An increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites from this horizon along the California coast. Related chipped stone tools suitable for hunting, including side-notched projectile points, are more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment and signaling a shift away from the processing and consuming of hard-shelled seed resources to the increasing importance of fleshier fruits like the acorn (e.g., Glassow et al. 1988; True 1993). Bow and arrow technology is first seen toward the end of the Intermediate periods (ca. 1500–1000 B.P.) when it appears to have spread to the Southern California coast from the north and east.

Technological markers described for this horizon consist of basket-hopper mortars, mortars and pestles, diverse and plentiful chipped stone assemblages with greater numbers and a wider variety of projectile point types, and bone and antler tools, which are present to some degree but not in the quantity seen during later phases, along with occasional use of bitumen (asphalt) and steatite (Byrd and Raab 2007;

Johnson 1966; Wallace 1955). Faunal assemblages often include terrestrial mammals representing wild game, along with some marine mammal bones and often high densities of shellfish remains.

The Middle Holocene also marks a time of cultural innovation in the archaeological record of California. Significant cultural developments are seen in the increasing formation of larger settlements, the intensification of long-distance trade networks including distinct cultural spheres throughout western North America, and the elaboration of art and personal aesthetics (e.g., shell and stone pendants and increasing variety of shell bead types and styles) (Erlandson and Glassow 1997; Glassow 1997; Howard and Raab 1993; Jenkins and Erlandson 1996; King 1990; Raab and Howard 2002; Vellanoweth 2001).

There is also evidence suggesting migrations into coastal Southern California by desert peoples from the east during the Intermediate period based on changes in mortuary practices (i.e., cremations), the presence of desert tanged projectile points, and increased numbers of stone as opposed to shell beads. This question has been discussed by several archaeologists (Koerper 1979; Kowta 1961; Kroeber 1925; Moratto 1984; True 1966; Van Horn 1987, 1990) with most suggesting an arrival date of ca. 1500 cal B.P., although some argue for a much earlier migration at around 3500 cal B.P., which coincides with the Millingstone/Intermediate period transition (Sutton 2009). Of course, it is possible, and even likely, that multiple migrations of various scale occurred over the course of hundreds, or thousands, of years.

INTERMEDIATE PERIOD IN THE BALLONA AREA

The Intermediate period in the Ballona area is well documented, with five bluff-top sites containing large middens dated to within this period, in addition to four sites along the creek and one site situated on what was likely a small island in the middle of the lagoon (see Douglass et al. 2016:42 and references therein). There was a pronounced increase in settlement and use of this area during the Intermediate period, which some researchers attribute to the incursion of people from the desert areas to the east based on several new cultural traits. These include an increase in stone beads in funerary contexts in conjunction with an unusual paucity of shell beads in burial features at some sites along with a general lack of shell artifacts, the presence of tanged projectile points associated with desert cultures from this period, and the introduction of cremation, all of which are evident at several sites in the Ballona area with Intermediate components (see discussion in Douglass et al. 2016:42–43). Van Horn and Murray (1985) suggested a cultural tradition unique to the Ballona area based on analysis of the microlithic industry and the presence of desert-type projectile points.

Our understanding of settlement trends in the Ballona area during the Intermediate period is based on detailed analyses from three sites (LAN-63, LAN-64, and LAN-206) that demonstrate a high degree of diversity in subsistence activities suggestive of more permanent occupations (Douglass et al. 2005). Extensive excavations also revealed that intrasite space at some of these bluff-top mesa sites was significantly structured and segregated, indicating the increased sedentary nature of habitation sites during the Intermediate period and a degree of site structure not previously seen in the area. Investigations identified discrete activity areas, including inhumation clusters composed of large numbers of broken or “killed” ground stone artifacts and sometimes large numbers of mostly stone beads along with fragmentary cremated human bone, suggesting discrete burial locales for various families or social groups, specific plant procurement and plant processing areas, communal refuse areas, and demarcated ritual spaces (Altschul et al. 2007; Douglass et al. 2005; see also Douglass et al. 2016). Data from extensive data recovery excavations at LAN-63 distinguish this site as containing more evidence of highly structured use areas and ritual activity than any other contemporaneous site; however, it is possible that this is a factor of sampling bias in that this site underwent larger scale data recovery and was entirely exposed due to planned development (Douglass et al. 2005; Douglass et al. 2016). Although there were earlier debates, current information indicates that settlement along the lagoon and creek, as well as on top

of the bluff, was contemporaneous, with occupants of all sites performing similar activities and some sites representing specialized food-collecting and processing locales (Douglass et al. 2016).

Late Holocene (ca. 3000 B.P. to Spanish Colonization)

HORIZON IV: LATE PREHISTORIC

The Late Prehistoric period extended from the end of the Intermediate period (ca. A.D. 500) until Spanish colonization, marked by the Cabrillo expedition in A.D. 1542. This period is characterized by extensive population growth and a large increase in the number and types of sites along the Southern California coast. During this period, there was a significant increase in the population of Native peoples in Southern California accompanied by the advent of larger, more permanent villages (Wallace 1955:223), particularly at the mouths of large mainland coastal canyons and drainages with year-round water supplies (McLendon and Johnson 1999). Large populations, and in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round, although the populations of these villages may have also increased seasonally. The development of social differentiation is indicated during this period by the complexity of site layouts with numerous complex features and the highly variable nature of mortuary treatments and burial grounds (Byrd and Raab 2007).

During the Late Prehistoric, there was an increase in the use of plant food resources in addition to an increase in terrestrial and marine mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric horizon, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely flaked projectile points suggests increased use of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Steatite cooking vessels and containers are also present in sites from this time, and there is an increased presence of composite bone gorges and circular shell fishhooks, perforated stones, arrow shaft straighteners made of steatite, a variety of bone tools, and personal ornaments such as beads made from shell, bone, and stone. Olivella shell bead styles include a variety of wall and callus beads in addition to the previous spire-lopped, and cup beads. There was also an increased use of asphaltum, or bitumen, for waterproofing basketry and caulking canoes and as an adhesive.

Technological markers of this horizon include the increased use of the bow and arrow, stemless points with concave or convex bases, steatite containers, widespread use of asphaltum as adhesive, and increased abundance and types of bone tools, as well as shell, bone, and stone ornaments (Byrd and Raab 2007; Wallace 1955). Wallace (1955) also describes notable distinctions between northern and southern groups during this period, including less pottery north of Orange County, where steatite vessels were more prevalent, and the presence of portable mortars and pestles and basket-hopper slabs in the north with bedrock mortars and milling stones being more prevalent in the San Diego area.

By A.D. 1000, fired clay smoking pipes and ceramic vessels were being used at some sites (Drover 1971, 1975; Meighan 1954; Warren and True 1961). The scarcity of pottery in coastal and near-coastal sites implies that ceramic technology was not well developed, or that occupants were trading with neighboring groups to the south and east for ceramics. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that was caulked with bitumen (asphaltum) and functioned in the same capacity as ceramic vessels.

In Warren's (1968) cultural ecological scheme, the period between A.D. 500 and European colonization, which occurred as early as 1542, is divided into three regional patterns: Chumash/Canaliño (Santa Barbara and Ventura Counties), Takic/Numic (Los Angeles, Orange, and western Riverside Counties), and Yuman (San Diego County). The seemingly abrupt introduction of cremation, pottery, and small

triangular arrow points (Cottonwood Triangular points) in parts of modern-day Los Angeles, Orange, and western Riverside Counties at the beginning of the Late Prehistoric period is thought to be the result of a Takic migration to the coast from inland desert regions within the past few thousand years. Modern Gabrielino, Juaneño, and Luiseño people in this region are considered the descendants of the Uto-Aztecan, Takic-speaking populations that settled along the California coast during this time (see discussion in Byrd and Raab 2007).

LATE PREHISTORIC PERIOD IN THE BALLONA AREA

Settlement patterns in the Ballona area are in stark contrast to the rest of Southern California in that, rather than an increase in the number of sites occupied during the Late Period, there was a sharp decline in the number of sites that were occupied during this time (Douglass et al. 2016). Only five sites in the Ballona area contain evidence of Late Prehistoric period occupation, with three sites along the edge of the wetlands (LAN-47, LAN-62, and LAN-211) containing evidence of more consistent but likely seasonal occupations during this time and two sites on the adjacent bluffs (LAN-61 and LAN-63) that contain isolated and ephemeral evidence of use during the Late Prehistoric period evidenced by the presence of diagnostic Canaliño and Cottonwood Triangular points (Douglass et al. 2005; Douglass et al. 2016; Hull and Douglass 2005). Faunal data from LAN-47 indicate people were primarily subsisting on plant and animal resources found in the adjacent salt marsh environments, including shellfish, waterfowl, fish that inhabit brackish environments, and small mammals, along with a variety of berries and seeds (Altschul et al. 1992). This site has been interpreted as representing a series of temporary camps along the edge of the lagoon at various times during the year depending on when different resources were available. Lithic technology during this period ranged broadly from finely crafted points to expediently produced flaked tools that were manufactured from an equally broad range of lithic materials.

Deposits from LAN-67 and LAN-211 were more disturbed than others assessed by Statistical Research, Inc. (SRI), in the Ballona area but excavations at LAN-62 revealed the development of a specified burial area. Interments appear to have been placed in a more scattered and unorganized manner during previous occupations in the Ballona area. However, during Late Prehistoric period occupations of LAN-62, people began concentrating burials within a specified part of the midden (demarcated as Locus A/B) beginning a cultural practice that continued during subsequent Mission period occupations when the burial space was further restricted and confined to an even smaller area.

Climatic reconstruction for the area suggests a return to drier conditions by around 1,000 years ago (Wigand 2005). It appears that the Los Angeles River may have shifted its course away from Ballona during this time as well, further lessening the freshwater input to the lagoon and likely resulting in an expansion of the salt marshes. These localized deteriorating terrestrial conditions likely prompted the shift in settlement as people directed their focus to the more reliable salt marsh resources (Altschul et al. 2007).

Gabrielino Ethnography

The Project Site is in an area historically occupied by the Gabrielino (Bean and Smith 1978:538; Kroeber 1925:Plate 57). Surrounding native groups included the Chumash and Tatataviam/Alliklik to the north, the Serrano to the east, and the Luiseño/Juaneño to the south (Figure 9). The interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade was regularly documented in ethnographic accounts. The name “Gabrielino” (also spelled Gabrieleno and Gabrieleño) denotes those people who were associated with Mission San Gabriel, whereas those who were associated with the nearby Mission San Fernando were referred to as Fernandeño. In the Mission and Rancho Periods, Mission San Gabriel included Natives of the greater Los Angeles area, as well as members of surrounding groups such as Kitanemuk, Serrano, and Cahuilla.

Figure 9. Native American tribal territories.

There is little evidence that the people we call Gabrielino had a broad term for their group (Dakin 1978:222). Instead, it appears that people identified themselves as inhabitants of a specific community with locational suffixes. For example, a resident of Yaanga was called a Yabit, which Johnston likened to the way that a resident of New York is called a New Yorker (Johnston 1962:10). Native words suggested as labels for the broader group of Native Americans in the Los Angeles region include Tongva (or Tong-v) (Merriam 1955:7–86) and Kizh (Kij or Kichereno) (Heizer 1968:105), and many present-day descendants have taken on their preferred group name. The term Gabrielino is used in the remainder of this report to designate native people of the Los Angeles Basin and their descendants.

The Gabrielino subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and the people used resources in mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches (Bean and Smith 1978:546; Kroeber 1925:631–632; McCawley 1996:119–123, 128–131). The Gabrielino used hundreds of plants but around the Early Intermediate period, like most Native Americans in the region, acorn-bearing oaks became an important species for food resources. These trees were commonly found in the local hills and valleys included species included coast live oak (*Quercus agrifolia*), canyon live oak (*Quercus chrysolepis*), scrub oak, and Engelmann oak (*Quercus engelmanii*). Other important food resources included pine trees with piñon nuts (*Pinus quadrifolia* and other *Pinus* spp.), prickly-pear cacti with fruit and fleshy leaves (*Opuntia littoralis* and *Opuntia basilaris*), chia (*Salvia columbariae*), and yucca with blossoms and flower stalks (*Yucca whipplei, Yucca schidigera,* and *Agave deserti*).

The Gabrielino supplemented acorns with several berries, tubers, greens, and several species of hard-seed plants such as manzanita (*Arctostaphylos glauca* and *Arctostaphylos pringlei*), sunflowers (*Helianthus annuus*), chia and other sages (*Salvia* spp.), lemonade berry (*Rhus trilobata*), wild rose (*Rosa californica*), California buckwheat (*Eriogonum fasciculatum*), and coyote gourd or calabazilla (*Cucurbita foetidissima*). Among the most important tubers are the blue dicks (*Dichelostemma capitatum*) and harvest brodiaea (*Brodiaea jolonensis*) for food and amole (*Chlorogalum pomeridianum*) for tools and soap. Common greens included several *Chenopodium* spp., clovers (*Trifolium* spp.), miner's lettuce (*Claytonia perfoliata*), wild-rhubarb (*Rumex hymenosepalus*), and white sage (*Salvia apiana*), all to be found in the immediate region. Several native California berry-producing plants exist, such as toyon, the desert wild grape (*Vitis girdiana*), and California blackberry (*Rubus ursinus*), while the blue elderberry was gathered for medicines and tools as well as food. Numerous other plants were used as medicines, making twine, basket weaving, creating ornamentation and tools, and in religious ceremonies.

Freshwater and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals were also regularly consumed. Animals available to the Gabrielino would have included mule deer (*Odocoileus hemionus*), desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), pocket mice (*Perognathus* spp.), wood rats (*Dipodomys* spp.), California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), and birds associated with the marshes; and various types of reptiles, amphibians, and insects. While antelope (*Antilocapra americana*) were barely noted by Spanish colonists, they were quite common in 1769 throughout the plains and valleys when the Portolá Expedition came through the region, whereas mule deer appear to have been less common. Predators included mountain lion (*Felis concolor*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), and gray fox (*Urocyon cinereoargenteus*).

The Gabrielino used a variety of tools and implements to gather and collect food resources. These included the bow and arrow, traps, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Groups residing near the ocean used oceangoing plank canoes and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands (McCawley 1996:7). Gabrielino people processed food with a variety of tools, including hammer stones and anvils, mortars and pestles, manos

and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels including soapstone bowls and Catalina Island steatite was used to carve ollas and cooking vessels (Blackburn 1963; Kroeber 1925:629; McCawley 1996:129–138).

At the time of Spanish colonization, the basis of Gabrielino religious life was the ceremonies and rituals connected with the figure of Chinigchinich, who was the last in a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions and taught the people how to dance as a form of religious practice. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws (Kroeber 1925:637–638). The origins of the practices connected to Chinigchinich are somewhat unclear as it seems to have been relatively new when the Spanish arrived. It was spreading south into the southern Takic groups even as Christian missions were being built and may represent a mixture of native and Christian belief and practices (McCawley 1996:143–144).

Deceased Gabrielino were either buried or cremated, with inhumation more common on the Channel Islands and the neighboring mainland coast, and cremation predominating on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996:157). Remains were buried in distinct burial areas, either directly associated with villages or without apparent village association (Altschul et al. 2007). Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes (Ashby and Winterbourne 1966:27), as well as scattered among broken ground stone implements (Cleland et al. 2007). Archaeological data such as these correspond with ethnographic descriptions of an elaborate mourning ceremony that included a variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wooden tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the sex and status of the deceased (Dakin 1978:234–365; Johnston 1962:52–54; McCawley 1996:155–165).

For more than 2,500 years, the Gabrielino and their predecessors practiced the kotuumot kehaay, or mourning ceremony, an important community ritual by which the living assisted the soul of the deceased on its journey to the land of the dead (Hull 2011, 2012; Hull et al. 2013). It was not only an act of loving remembrance—the Gabrielino believed that the spirits of the deceased were dangerous and must be treated properly lest they molest the living (Boscana 1978). Observed every 1 to 4 years to commemorate those who had died since the previous iteration, the 8-day mourning ceremony was either conducted in late summer or in the same month as the person to be honored had died. The ceremony included four primary rites: ritual clothes washing, clothes burning, image burning, and a distribution of the property of the dead. It took place within an approximately 5-m-diameter circular brush enclosure called a yovaar, which was decorated with poles at cardinal directions topped with figures, or around an approximately 12- to 15-m-tall (40 to 50-foot-tall) central kotuumut pole that was painted in various colors representing body parts and erected in a pit in the ground surrounded by offerings of food, clothing, baskets, beads, and money. It included a hosted feast, paid dancers, and the ritual destruction and burial of valuable goods (McCawley 1996:161–165; Merriam 1955).

Hugo Reid, a Scottish immigrant married to a Gabrielino woman and owner of San Gabriel Mission in the 1840s, described the post-burial treatment of grave goods by the Gabrielino in his 1852 letters:

> When a person died, all the kin collected to lament and mourn his or her loss. After lamenting a while a mourning dirge was sung. If the deceased were the head of the family, or a favorite son, the hut in which he died was burned up, as likewise all of his personal effects, reserving only some article or another, or a lock of hair. This reservation was not as a memento of the deceased, but to make a feast with on some future occasion, generally after the first harvest of seeds and berries. (Dakin 1978:235)

Discussing the culmination of the ceremony itself, Reid continued:

> On the eighth day the…old women were employed to make more food than usual, and when the sun was in its zenith, it was distributed, not only among the actors, but to the spectators likewise. After eating, a deep hole was dug, and a fire kindled in it, when the articles reserved at the death of relatives were committed to the flames; at the same time, baskets, money, and seeds were thrown to the spectators, as in the marriage ceremony. During the burning process, one of the seers, reciting mystical words, kept stirring up the fire to ensure the total destruction of the things. The hole was then filled up with earth and well trodden down. The feast was over. (Dakin 1978:242–243)

This mourning ceremony has deep roots in Southern California, predating the period of Spanish colonization (1769–1834) by at least 2,000 years (Hull et al. 2013). It was also reportedly practiced in mid-nineteenth century Gabrielino communities in San Fernando, Piru, and Saticoy (Blackburn 1976:232), in neighboring Luiseño- and Cahuilla-speaking regions, including the greater Los Angeles area (Dietler et al. 2018; Morris et al. 2016).

Continuity After Colonization

The traditional way of life for Indigenous people was dramatically altered by the Spanish mission system and later Mexican and American settlement in this part of Southern California. The dissolution of cultural practices alienated Native Americans from their traditional subsistence patterns, social customs, and marriage networks. European diseases, against which they had no immunity, reached epidemic proportions, and Gabrielino populations were rapidly decimated (Johnson 1987). The increase in agriculture and the spread of grazing livestock into their collecting and hunting areas made maintaining traditional lifeways increasingly difficult. Although many Gabrielino were eventually subsumed by the mission system, some refused to give up their traditional existence and escaped into the interior regions of the state, where they survived as refugees living with other tribes.

Many researchers have brought attention to the role of labor in developing and sustaining colonial settlements by Native Americans providing crucial services and highly skilled roles across multiple types of industry (Akins and Bauer 2021; Anderson 2005:81–82; Hackel 1998, 2005:272–320; Phillips 2010; Silliman 2001).

> The involvement of Native American groups in any of the standard colonial institutions in the Americas—missions, ranchos, trade outposts, presidios, forts, and secular towns—revolved around labor, even in contexts of frequent interethnic marriage. Sometimes colonial groups forced labor on native societies; other times, indigenous peoples found colonial labor opportunistic and capitalized on it. In either case, labor constituted one of the primary and most influential interpersonal and intercultural relations in pluralistic colonial communities. (Silliman 2001:379–384)

Gabrielino acquired equestrian skills used in herding, corralling, and branding cattle, and they routinely conducted the work of killing and skinning livestock. They demonstrated an aptitude for the engineering needed to create irrigation systems—finding grades, laying out ditches, and managing watering regimes. Irrigation was crucial for supplying domestic supplies and agriculture, especially wine making, which also relied on Gabrielino to plant the grapevines. Native women and children provided crucial household chores within the pueblo and ranchos across the Los Angeles Basin. This gave an incentive for Gabrielino and other native groups to remain in reasonable proximity to Spanish settlements. “Most of those who left the missions,” writes Akins and Bauer, “remained close by, often in their traditional tribal homeland, and worked on ranchos” (Akins and Bauer 2021:112).

During the early American Period, Native Americans found work in citrus groves and other large-scale agricultural operations. During the twentieth century, Native Americans affiliated with tribes from outside the region increasingly came to Los Angeles, some out of necessity or in pursuit of new opportunities, and others because of the federal government's termination and relocation policies (Akins and Bauer 2021:266). Native American workers made important contributions to several of the industries important such as aviation and film during the early and middle parts of the twentieth century.

In emphasizing the role of Native American labor in California history, Phillips offers an important consideration in terms of the motivation for taking this perspective.

> By examining how Indians adjusted to the new work regime and by describing how many became efficient workers, the focus remains on Indians themselves. Recognizing adaptation and efficiency, however, is far different from approving the system in which they were achieved… The missions radically altered Indian culture, but they did not destroy Indian people. Even secularization—the systematic breakup of the mission system in the 1830s—was not designed to destroy Indians. In fact, Indians played an important role in this crucial event in California history, a role downplayed by some historians. (Phillips 2010:17–19)

More than merely correcting an omission in historical accounts of local history, by highlighting the crucial role that Native Americans during and after Spanish colonization, a period that traumatically and irrevocably altered Native American lifeways, it conveys the adaptability and persistence of the Gabrielino and other groups, which has allowed for continuity in their tribal identity and community.

It is estimated that several thousand Gabrielino descendants currently live in the Los Angeles area, although no reservation or rancherias were ever set aside and tribal organizations have not been federally recognized (Bean 1995). Gabrielino descendants are represented by the following tribal organizations who actively strive to maintain their cultural legacy: Gabrielino-Tongva Indians of California Tribal Council, the Gabrielino-Tongva Indian Tribe, the Gabrielino/Tongva Nation, the Gabrielino/Tongva San Gabriel Band of Mission Indians, and the Gabrielino Band of Mission Indians–Kizh Nation.

Locating Former Native American Settlements

In general, it has proven difficult to establish the precise location of Native American settlements occupied immediately preceding and following Spanish arrival in California approximately 250 years ago (McCawley 1996:31–32). Many of the settlements and so-called villages had long since been abandoned by the time ethnographers, anthropologists, and historians attempted to document any of their locations, at which point Native American lifeways had been irrevocably changed. McCawley quotes Kroeber (1925:616) in his remarks on the subject, writing that "the opportunity to prepare a true map of village locations 'passed away 50 years ago'" (McCawley 1996:32).

Several factors have confounded efforts at locating former Native American settlements. Firstly, many settlements were recorded with alternative names and spellings. Second, there have been conflicting reports on the meaning and locational reference of the placenames. In addition to differences in the interpretation of a given word, some of the placenames refer to a site using relatively vague terms that could fit several possible locations, or the word may reference a natural feature that no longer exists such as a type of plant that once grew in an area now fully urbanized. Third and perhaps most importantly, Native American placenames recorded in historic records and reported in oral histories did not necessarily represent a continually occupied settlement within a discrete location, which is how the term "village" is commonly understood today. Instead, in at least some cases, the settlements were represented by several smaller camps scattered throughout an approximate geography, shaped by natural features that were subject to change over generations (Ciolek-Torello and Garraty 2016; Johnston 1962:122). Furthermore, the criteria for what constitutes a village site has been especially lacking in consistency and

specificity, even within a strictly academic context (see summary by Ciolek-Torello and Garraty [2016:69]). Much of the debate in this regard concerns whether sites were occupied on a permanent or temporary basis, and archaeological data do not always provide unequivocal evidence to make a reliable classification for a given site.

Still, within the range of terms put forth to characterize different types of Native American settlements, there are conventions and core insights shared among scholars. Prehistoric sites in coastal California, for example, are commonly referenced in archaeological sources as residential sites, habitation sites, and seasonal camps, whereas the term village is more often used to reference Mission period settlements such as the Chumash sites of Humaliwo, Helo', and Muwu, or Luiseño sites such as Topomai (Ciolek-Torello and Garraty 2016:69). These Spanish and Mexican period sites are also sometimes referred to as rancherias—a term with connotations for a more permanent settlement and often used synonymously with village. The convention was established by Hugo Reid in 1852 who published the first list of Native American placenames in the Los Angeles area, which was by no means comprehensive (Stoll et al. 2016:387–389). The more generic terms of settlement and site will be used in this report and refer to places where Native American communities were once gathered. Native American sites may also refer to locations where archaeological materials, including human remains, have been discovered. Such locations may consist of one or more known tribal cultural resources or a general area in which a tribal cultural resource could exist.

Native American Communities in Los Angeles

The villages or placenames described in ethnographic literature that are nearest to the Project Site include Geveronga, Maawnga, and Yaanga to the east-southeast in the downtown Los Angeles area, Kuruvungna to the west-southwest near Santa Monica, and Guaspet (also named Waachnga) in the Ballona area near Marina del Rey to the southwest (Figure 10). Additionally, the settlement of Kaweenga is hypothesized to have been on the north-facing side of the Santa Monica Mountains at the terminus of what is known as the Cahuenga Pass, so-named for the Native American settlement. Other notable sites that have archaeological components from the region have been recorded at the Fern Dell recreation area (LAN-196) to the northwest, the La Brea Tar Pits (LAN-159/H) to the southwest, as well as several sites along Ballona Creek and around the Baldwin Hills to the southwest. As depicted in Figure 10, the Project Site is situated somewhat equidistant from the three nearest named Native American settlements, Kaweenga, Maawnga (which has two proposed locations), and Geveronga. These settlements are estimated to have been between 5.71 and 8.10 km (3.55 and 5.03 miles) away from the Project Site.

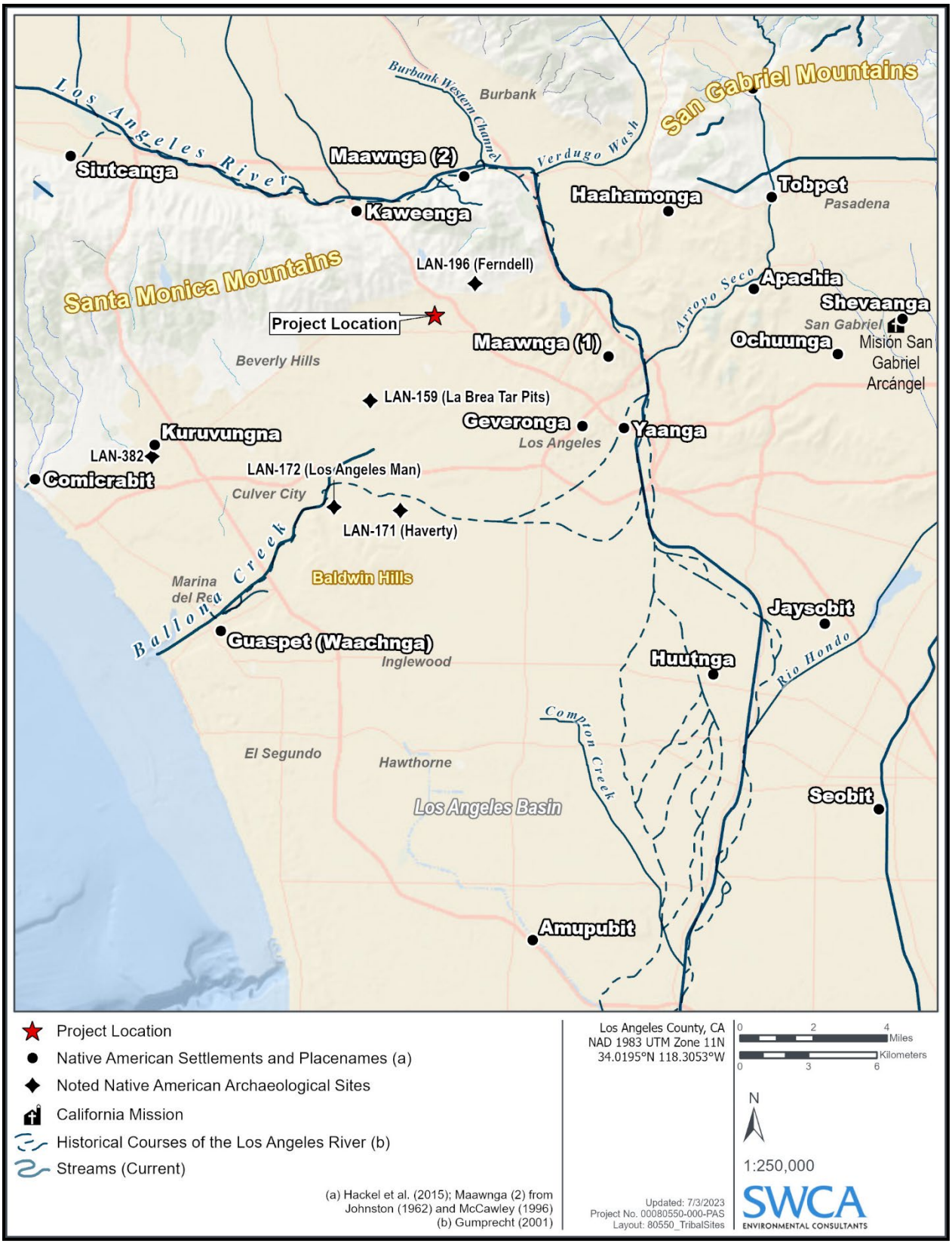

Figure 10. Native American village sites, placenames, and sites described in ethnographic literature.

FERN DELL (LAN-1096, HCM NO. 112)

The site recorded in the Fern Dell (also spelled Ferndell) recreation area is listed in the CHRIS as LAN-1096 and was designated as HCM No. 112 by the OHR in 1973. The Fern Dell recreation area consists of a narrow trail situated at the south end of Griffith Park, at the base of the Santa Monica Mountains, approximately 2.24 km (1.39 miles) northeast of the Project Site. The trail is landscaped with imported plants—most notably multiple species of fern—and an artificially constructed landscape with water and rock features. Construction of Fern Dell began in 1914 under the direction of City Park Superintendent Frank Shearer. In the 1920s, Fern Dell became a popular destination for tourists, especially wellness seekers among whom rumors circulated about the spring water having special healing properties, giving the impression of the place as a kind of natural spa (*Los Angeles Times* 1935). Additional construction occurred in the 1930s by the Civilian Conservation Corps and intermittent efforts were made to restore portions of the setting beginning in the 1980s, which have continued to the present day.

A commemorative plaque was placed at the recreation area and identifies the location as a Gabrielino Indian site associated with a natural spring and refers to the area as "Mocohuenga Canyon." Very similar wording was included on a sign placed in Fern Dell in the 1930s and was also repeated in newspaper articles as early as 1935. Each of these descriptions refer to the place by this name, claiming that "Moco" referred to the "council-ground mound" or "post and council grounds," and Coheunga or Cahuenga as the name of the tribal leader for the area (*Los Angeles Times* 1935). The original sign is no longer present and the City has since placed a commemorative bronze plaque at the southern entrance to the recreational trail.

The site record on file with the SCCIC only contains a generic account of the site that was included in the HCM designation, which describes a "Gabrielino Indian Site." The list of the HCMs prepared by the Cultural Heritage Board includes the following description: "archaeological surveys discovered sites of villages at the mouth of Fern Dell Canyon leaving no doubt that fairly large settlement existed at this point and at others which received water from canyons leading from the Hollywood Hills." This text is taken verbatim from Bernice Johnston in a 1957 article for The Masterkey (Johnston 1957:17), which was also republished in her 1962 book, California's Gabrielino Indians (Johnston 1962). Beyond mentioning the lack of any known traditional Native American names used to describe the Hollywood area, Johnston does not provide any additional context or details on the site.

Aside from the minimal information repeated on the former sign, HCM list, and newspaper articles, there are no other sources describing what artifacts were identified, when and where they were found, or where they may be currently located. When the recreation area was being developed in the early part of the twentieth century, the field of archaeology was not well established and regulations related to the archaeological resources on state and city owned lands were not in place; therefore, it is conceivable that artifacts were identified during the landscaping and groundwork but were never subjected to scientific study or curation. In addition to the lack of information concerning the archaeological contents of the site, there is also no means of assessing whether "Mocohuenga" is a legitimate Gabrielino placename. The early newspaper articles describing Fern Dell commonly reference "Indian legends" and other indications that the name may be the product of American folklore and romanticizing more than Gabrielino ethnography, although it is also possible that there are elements of both reflected in the description and that the source of the oral history was never documented.

Despite the potentially apocryphal association with the Gabrielino, there is no doubt about the existence of a perennial spring, one of several in the south-facing foothills of the Santa Monica Mountains (see Figure 5). And given that several Native American archaeological sites have been identified in similar settings in the foothills near springs, it is plausible that the claim about artifacts having been discovered is a truthful account. Singer (1982:2) essentially reached the same conclusion in his assessment

of archaeological site sensitivity as part of an archaeological survey conducted of Fern Dell and the surrounding foothills. Although there is no way to determine whether the objects were misidentified as human artifacts (i.e., the result of past Native American activity), there is no reason to believe the existence of something believed to be Native American in origin was identified before the 1930s, and that this is the reason why Fern Dell came to be known as a Gabrielino placename. At a minimum, the boundary for LAN-1096 that is recorded in the CHRIS represents an area of sensitivity for buried Native American archaeological components and is a site that may be considered a sacred place by contemporary Gabrielino communities.

LA BREA, KURUVUNGNA, BALLONA, AND LAS CIENEGAS

Among the other notable sites identified in the region are the natural asphaltum seeps now referred to as the La Brea Tar Pits, approximately 4.7 km (2.92 miles) southwest of the Project Site. The tar seeps here are known to have been an important terrestrial asphaltum source used by Native Americans, who also acquired tar from marine sources. Human remains found at the La Brea Tar Pits site suggest it was known to Native Americans more than 10,000 years ago. The asphaltum (tar, also known as bitumen) from the La Brea Tar Pits locality was used by Native Americans for toolmaking and waterproofing baskets and watercraft, among many other uses (Heizer and Treganza 1972:332–333; Hodgson 2003).

Kuruvungna is a site within the campus of present-day University High School, 13.53 km (8.41 miles) west of the Project Site. There is a natural spring here, which is why the site is also known as Kuruvungna Springs, among many other historical names given. Kuruvungna is recognized as a sacred site for local Native American tribes, a historical point of interest, California Historical Landmark No. 522, and includes an archaeological component designated in the CHRIS as LAN-382/H that contains a variety of artifact types, as well as human remains that were identified in 1975 and described simply as a post-cranial skeleton, presumed to be from the Late Period (Messick and Greenwood 2006:13). The springs were an important natural resource to generations of Native Americans before Spanish colonization. In their account of tribal history for the Los Angeles area, Akins and Bauer (2021:264) point out that the location of Kuruvungna—on the periphery of encroaching Spanish and Mexican period ranchos—made it an increasingly important location as a community center for indigenous communities during the nineteenth century. A few of these pools are still present and are an important part of the cultural center constructed here in the 1990s by the Gabrielino community, which remains actively used for education, ceremonial events, and various types of gatherings.

Both the La Brea Tar Pits and Kuruvungna Springs are distinguished for the natural resources they provided to ancestral Native Americans. These two localities, along with the village of Yaanga, also share the distinction of having been described in the diaries of members from the Portolá party when they passed through the area in 1769. Captain Gaspar de Portolá's expedition across the Los Angeles Basin followed a route from nearby Gabrielino settlements to the asphaltum source and then to Kuruvungna Springs (Seaman 1914). The path leading them west from Yaanga—a major Native American settlement in what is now downtown Los Angeles—followed what most researchers assume were trails and footpaths that had been actively used by generations of Native American communities. The alignment for portions of what is now Wilshire Boulevard is believed to have originated from these same paths. Portions of this same route would later become part of the major travel corridor established between the missions, pueblos, and other settlements created during Spanish colonization, which was memorialized in the early twentieth century as "El Camino Real."

The northwestern part of the Los Angeles Basin is also notable for the water features once present here. These included perennial springs and several types of wetland features along Ballona Creek (formerly the Los Angeles River) and tributaries to the south and southwest of the Project Site. The area near the north end of the Baldwin Hills, where the tributaries converged into the primary drainage channel, sustained

highly saturated soils described by the Spanish as "las cienegas," which is the origin of the contemporary placename of Las Cienegas. Numerous Native American archaeological sites have been identified in the periphery of the former wetlands here, approximately 9.6 km (6.0 miles) south-southwest of the Project Site. As mentioned above, the Haverty Site (LAN-171) and Los Angeles Man (LAN-172) were both identified in this area north of the Baldwin Hills.

Downstream and southwest from the Las Cienegas area is the Ballona wetlands and a settlement named Guaspet (alternately referred to in Spanish Mission registers as Guaspet, Guasna, Guashna, Guachpet, Guashpet). Guaspet is described in historical and ethnographic sources, and along with the complex of sites in the Ballona region, was the subject of rigorous study by SRI beginning in 1989. The results of SRI's decades-long study are summarized in a volume by Douglass et al. (2016). Their work carefully distinguishes the extensive Native American archaeological sites, which consist of various types of settlements occupied over thousands of years, and the Native American community in the Ballona area known as Guaspet, which was referenced in Spanish-period mission records. Although some debate may still exist, all accounts of Guaspet point to an area either on the bluffs to the south of Ballona Creek or in the lowlands near the creek (Douglass et al. 2016:416; McCawley 1996:61–63), approximately 16.7 km (10.4 miles) southwest of the Project Site. Based upon the archaeological and ethnographic data compiled by SRI, it is clear the Ballona area—composed of the wetland, creek, bluffs, and beach—was important to Native American lifeways in the past. The area remains important to contemporary Gabrielino descendants.

YAANGA AND RANCHERIAS IN DOWNTOWN LOS ANGELES

Yaanga is among the major Native American communities encountered by the Portolá party when they passed through the Los Angeles Basin in 1769, and was perhaps the largest Gabrielino settlement within the Los Angeles Basin. Compared with Yaanga, much less is known about the two other nearby settlements known as Geveronga and Maawnga. Geveronga was recorded as a place of origin in Mission San Gabriel records which identify 31 people as having come from there between 1788 and 1809 (McCawley 1996:57). Ethnographic accounts describe the location of the settlement as immediately adjoining the Pueblo of Los Angeles to the east, but no physical evidence of its location has ever been identified. The approximate location for Geveronga is 8.1 km (5.0 miles) southeast of the Project Site.

Maawnga was apparently a small settlement somewhere within Rancho Los Feliz. Alternative spellings for Maawnga include Maugna, Moonga, Moomga, Momonga, Maugna, Mau, and Mauga (McCawley 1996:55). Baptismal records from San Fernando Mission record four people from Maawnga. Reid's (1852:8) historical account describes the village site of Maawnga within the 16-km^2 (10-square-mile) area of Rancho Los Feliz (McCawley 1996:55), in what is now portions of Hollywood, Los Feliz, Griffith Park, and Elysian Park. Other references to the settlement's location cite J.P. Harrington's historical informant, who recalled that it was where the first Jewish cemetery was established (Johnston 1962:57). Citing research of Marco Hellman, Johnston (1962:57) places Maawnga within Elysian Park on Chavez Road at a police department pistol range (see also Dillon 1994:23). The two proposed locations for Maawnga are 6.21 and 7.82 km (3.86 and 4.86 miles) north and east, respectively, from the Project Site.

Yaanga is referenced in mission registers and ethnographic accounts that incorporate the alternative spellings of Yang-na, Yangna, and Yabit. The location of Yaanga has long been considered synonymous with that of Los Angeles, first as the Spanish pueblo, then the town and city. Historians and archaeologists have presented multiple possible locations for Yaanga, such as the general area of the plaza and church, around which Los Angeles developed, which is approximately 9.25 km (5.75 miles) southeast of the Project Site. However, like the pueblo itself, it is likely that the village was relocated from time to time due to major shifts of the Los Angeles River during years of intense flooding. Dillon (1994) presented an exhaustive review of the potential locations, most within several blocks of the pueblo plaza.

Johnston concluded that "in all probability *Yangna* lay scattered in a fairly wide zone along the whole arc [from the base of Fort Moore Hill to Union Station], and its bailiwick included as well seed-gathering grounds and oak groves where seasonal camps were set up" (Johnston 1962:122).

Aside from the ethnographic evidence suggesting the location of these villages, little direct, indisputable archaeological evidence for the location of either village has been produced to date. Archaeological materials reportedly were unearthed during the construction of Union Station in 1939, and "considerably more" in 1970 during the rebuilding of the Bella Union Hotel on the 300 block of North Main Street, 9.11 km (5.66 miles) northeast of the Project Site (Johnston 1962:121; Robinson 1979:12). The preponderance of available evidence indicates that there were one or more early historic period Native American communities west of the Los Angeles River near the original plaza site. This assumption is supported through several lines of ethnographic evidence, including the expedition journal of Fr. Juan Crespí and engineer Miguel Costansó, both of whom were associated with the 1769 Portolá expedition. The notes from these sources indicate the village was between 2 and 2.4 km (1.3 and 1.5 miles) west-southwest from the Los Angeles River on high-level ground. The Pueblo of Los Angeles was documented to have been founded directly adjacent to this village. The location of Yaanga was also referenced by long-time Los Angeles resident Narciso Botello and Gabrielino consultant José María Zalvidea, who indicated that Yaanga was originally adjacent to the original site of the Los Angeles Plaza (Morris et al. 2016:112).

During construction of the Metropolitan Water District headquarters building in the mid-1990s, an archaeological site (LAN-1575/H) was identified which included a substantial Native American component composed of artifacts and primary interments and cremation reburials. The archaeological investigation by Applied Earthworks found evidence of occupation that both predated and overlapped the Spanish historic period, but ultimately the researchers could not reach a definitive conclusion as to whether portions of the site represented the material remains of Yaanga (Goldberg et al. 1999:151–159). In 2019, during construction of Metro's Patsaouras Bus Plaza Station, which was partly within the boundary of LAN-1575/H, new site components were identified that included Native American human remains and artifacts, as well as historic period deposits (i.e., not affiliated with Native Americans). The new site components are consistent with the types and ages identified in LAN-1575/H. Some of these new discoveries were identified within the boundary designated for LAN-1575/H, but the majority extend east along Highway 101 and Interstate 10.

After the Pueblo of Los Angeles was established in 1781, Yaanga faced many new challenges because of its proximity to the new Spanish settlement. The last recorded birth at Yaanga is believed to have been in 1813, after which the settlement was forced to relocate south of the original site (Morris et al. 2016:97). This new settlement, known by the Angelenos as Ranchería de los Poblanos, is believed to have been at the intersection of Los Angeles Street and 1st Street (Morris et al. 2016:96–97). Ranchería de los Poblanos was the first of at least five forced relocations of Native Americans between 1836 and 1847 (Phillips 2010:185). City records from the time typically referred to these sites as rancherias.

Although most of the natural landscape features that would have characterized Yaanga and its surroundings are no longer present and the precise location of the settlement remains an open question, the general location still retains its association with Yaanga and is considered an important place by contemporary Gabrielino groups. The proximity of Yaanga to a massive sycamore tree known as El Aliso is also commonly cited and often referred to synonymously with that of Yaanga. The tree is visible in early photographs and plotted on plat maps showing the vineyard and winery established by Louis Vignes. A memorial plaque was recently placed to commemorate Yaanga and its location—on the north side of Commercial Street near the intersection with Vignes Street. The location was chosen based on proximity to the place where El Aliso had once grown, which was in what is now in the channel excavated for the Hollywood Freeway.

KAWEENGA

Among the many Native American settlements in the San Fernando, the site of Kaweenga was prominent (Ciolek-Torello et al. 2010:23–25; Heizer 1968:8; Johnston 1962:10; Northwest Economic Associates and King 2004:95, 106–108). Alternative spellings for the site from mission registers and ethnographic accounts include Kawenga, Kawengna, Kawengnavit, Kawepet, Cabuenga, and Cabuepet. The Hispanicized version of Kaweenga is the modern placename of Cahuenga. Kaweenga means "Place of the Mountain," most likely a reference to what is now known as Cahuenga Peak (Johnston 1962:10). The site is recorded as having a historical association with Rancho Cahuenga, which helps to approximate the settlement's location. McCawley (1996:40) cited the village site as having been in what is now Universal City, but others have noted that he "has probably confused the tract of land called Cahuenga, which is located in the center of Rancho Providencia in the modern city of Burbank, with the Campo de Cahuenga (Cahuenga House), which is located at the foot of Cahuenga Pass" (Ciolek-Torello et al. 2010:23). These estimates place Kaweenga approximately 5.71 km (3.55 miles) northwest of the Project Site.

Ciolek-Torello et al. (2010) surmise that Kaweenga, like other Native American settlements, was likely a composite of many smaller settlements (or rancherias) in a general area rather than being one settlement (Ciolek-Torello et al. 2010:23). They note the strategic location of the area along the south bank of the Los Angeles River and between the foothills to the south and basin to the north. The San Gabriel and San Fernando missions recorded hundreds of Native Americans who identified as having come from Kaweenga. Little else is known about Kaweenga, including where it was located, although work at the Campo de Cahuenga has at least confirmed that there is no evidence for an eighteenth century or earlier Native American settlement in that locality. The adobe at Campo de Cahuenga was built between 1797 and 1833 and is depicted on several land grant maps produced in the mid-nineteenth century.

Mission and Rancho Period (1769 to 1848)

Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Mission period in California begins with the establishment in 1769 of a settlement at San Diego by the Spanish and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican era of governance within California, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American period, when California became a territory of the United States.

Spanish explorers made sailing expeditions along the coast of Southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríquez Cabríllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabríllo explored the shorelines of present-day Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present-day California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabríllo and Vizcaíno (Bancroft 1886:96–99; Gumprecht 2001:35).

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portolá established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July 1769, while Portolá was exploring Southern California, Franciscan Fr. Junípero Serra founded

Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portolá expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Juan Crespí, a member of the expedition, named the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula or "Our Lady the Queen of the Angels of the Porciúncula." Two years later, Fr. Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Engelhardt 1927). In 1781, a group of 11 Mexican families traveled from Mission San Gabriel Arcángel to establish a new pueblo called El Pueblo de la Reyna de Los Angeles ("the Pueblo of the Queen of the Angels"). This settlement consisted of a small group of adobe-brick houses and streets and would eventually be known as the Ciudad de Los Angeles ("City of Angels").

A major emphasis during the Spanish period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants.

Extensive land grants were established in the interior while California was under the control of the Mexican government, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. The secularization of the missions following Mexico's independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos. The Project Site is within the original boundaries of Rancho La Brea, which was granted to Antonio Jose Rocha in 1828 (Seaman 1914).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. This was largely the case for Rancho La Brea, which was situated in the vast, open space between Los Angeles and the Pacific Ocean. Cattle hides became a primary Southern California export, providing a commodity to trade for goods from the East and other areas in the United States and Mexico. The number of nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers, contributing to the rise of diseases foreign to the Native American population with no immunities.

American Period (1848 to Present)

War in 1846 between Mexico and the United States began at the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. This battle was a defeat for the Americans and bolstered the Californios' resolve against American rule, emboldening them to continue the offensive in later battles at Dominguez Field and in San Gabriel (Beattie 1942). However, this early skirmish was not a sign of things to come, and the Americans were ultimately the victors of this 2-year war. The Mexican–American War officially ended with the Treaty of Guadalupe Hidalgo in 1848, which resulted in the annexation of California and much of the present-day Southwest, ushering California into its American period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. territories. Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the Southern California economy through 1850s. The Gold Rush began in 1848; with the influx of people seeking gold, cattle were no longer desired mainly for their hides, but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for Southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 1941).

On April 4, 1850, only 2 years after the Mexican–American War and 5 months prior to California's achieving statehood, Los Angeles was officially incorporated as an American city. Settlement of the Los Angeles region continued steadily throughout the Early American period. Los Angeles County was established on February 18, 1850, one of 27 counties established in the months prior to California's acquiring official statehood in the United States. At that time, the city was bordered on the north by the Los Felis and the San Rafael Land Grants and on the south by the San Antonio Luge Land Grant. Many of the ranchos in the area now known as Los Angeles County remained intact after the United States took possession of California; however, a severe drought in the 1860s resulted in many of the ranchos being sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns (Dumke 1944).

Ranching retained its importance through the mid-nineteenth century, and by the late 1860s, Los Angeles was one of the top dairy production centers in the country (Rolle 2003). By 1876, the county had a population of 30,000 (Dumke 1944:7). Los Angeles maintained its role as a regional business center, and the development of citriculture in the late 1800s and early 1900s further strengthened this status (Caughey and Caughey 1977). These factors, combined with the expansion of port facilities and railroads throughout the region, contributed to the impact of the real estate boom of the 1880s on Los Angeles (Caughey and Caughey 1977; Dumke 1944). By the late 1800s, government leaders recognized the need for water to sustain the growing population in the Los Angeles area. Irish immigrant William Mulholland personified the city's efforts for a stable water supply (Dumke 1944; Nadeau 1997). By 1913, the City of Los Angeles had purchased large tracts of land in the Owens Valley, and Mulholland planned and completed the construction of the 386-km (240-mile) aqueduct that brought the valley's water to the city (Nadeau 1997).

Los Angeles continued to grow in the twentieth century, in part due to the discovery of oil in the area and its strategic location as a wartime port. The county's mild climate and successful economy continued to draw new residents in the late 1900s, with much of the county transformed from ranches and farms into residential subdivisions surrounding commercial and industrial centers. Hollywood's development into the entertainment capital of the world and Southern California's booming aerospace industry were key factors in the county's growth in the twentieth century.

Los Angeles: From Pueblo to City

On September 4, 1781, 44 settlers from Sonora, Mexico, accompanied by the governor, soldiers, mission priests, and several Native Americans, arrived at a site along the Rio de Porciúncula (later renamed the Los Angeles River), which was officially declared El Pueblo de Nuestra Señora de los Angeles de Porciúncula, or the Town of Our Lady of the Angels of Porciúncula (Robinson 1979:238; Ríos-Bustamante 1992; Weber 1980). The site chosen for the new pueblo was elevated on a broad terrace

0.8 km (0.5 mile) west of the river (Gumprecht 2001). By 1786, the area's abundant resources allowed the pueblo to attain self-sufficiency, and funding by the Spanish government ceased.

Efforts to develop ecclesiastical property in the pueblo began as early as 1784 with the construction of a small chapel northwest of the plaza. Though little is known about this building, it was at the pueblo's original central square near the corner of present-day Cesar Chavez Avenue and North Broadway (Newcomb 1980:67–68; Owen 1960:7). Following continued flooding, however, the pueblo was relocated to its current location on higher ground, and the new town plaza soon emerged.

Alta California became a state in 1821, and the town slowly grew as the removal of economic restrictions attracted settlers to Los Angeles. The population continued to expand throughout the Mexican period and on April 4, 1850, only 2 years after the Mexican–American War and 5 months prior to California earning statehood, the city of Los Angeles was formally incorporated. Los Angeles maintained its role as a regional business center in the early American period and the transition of many former rancho lands to agriculture, as well as the development of citriculture in the late 1800s, further strengthened this status (Caughey and Caughey 1977). As previously mentioned, the development of agriculture in the region coupled with key infrastructure expansions at the time helped usher in the real estate boom of the 1880s in Los Angeles (Caughey and Caughey 1977; Dumke 1944).

Newcomers poured into the city, nearly doubling the population between 1870 and 1880, resulting in an increased demand for public transportation options. As the city neared the end of the nineteenth century, numerous privately owned passenger rail lines were in place. Though early lines were horse and mule drawn, they were soon replaced by cable cars in the early 1880s, and by electric cars in the late 1880s and early 1890s. Many of these early lines were subsequently consolidated into Henry E. Huntington's Los Angeles Railway Company (LARy) in 1898, which reconstructed and expanded the system into the twentieth century and became the main streetcar system for central Los Angeles, identified by their iconic "yellow cars." During this period, Huntington also developed the much larger Pacific Electric system (also known as the "red cars") to serve the greater Los Angeles area. Just as the horse-and-buggy street cars were replaced by electric cars along the same routes, gas-powered buses (coaches) eventually served former yellow car routes. Both the red cars and LARy served Los Angeles until they were eventually discontinued in the early 1960s.

Los Angeles continued to grow outward from the city core in the twentieth century in part due to the discovery of oil and its strategic location as a wartime port. The military presence led to the growth in the aviation and eventually aerospace industries in the city and region. Hollywood became the entertainment capital of the world through the presence of the film and television industries and continues to tenuously maintain that position. With nearly 4 million residents, Los Angeles is the second largest city in the United States (by population), and it remains a city with worldwide influence that continues to struggle with its population's growth and needs.

RANCHO LA BREA

The Project Site is just outside of the boundaries of the northeasternmost extent of Rancho La Brea—originally a Spanish period land grant of 1e-square league (4,444.4 acres) given to Antonio Jose Rocha in 1828 (Seaman 1914). The rancho is just southwest of Rancho Los Felis, and vast open space between Los Angeles and the Pacific Ocean, which included very few landmarks amidst the agricultural fields and lands used for grazing cattle and sheep. In his memoir, merchant Harris Newmark describes the surroundings in 1854 as "one huge field, practically unimproved and undeveloped," extending from Spring Street to the coast (Newmark 1930:112). As a ranch property, Rancho La Brea derives its name from the association with the swampy asphaltum source (brea in Spanish), now world-famous as a paleontological site.

The land grant to Rocha was unique in that he was not a Mexican citizen but a Portuguese immigrant who had deserted an English schooner after stopping in Monterey, California, before making his way south (Torrence 1977:8). Only by forming a partnership with one Nemesio Dominguez were they able to get Rancho La Brea, giving Rancho La Brea the distinction of being the first land granted to a foreigner (Bertao and Dias 1987). The provisions of the grant allowed pueblos citizens to carry away as much tar as they needed for waterproofing their adobe houses (Torrence 1977:9). Rocha, meanwhile, who had become a Los Angeles pueblo resident and at no point lived on the rancho, filled Rancho La Brea with his cattle and horses and constructed corrals and a small shack for the herdsmen (Torrence 1977:9–10). Even as a Spanish- and Mexican-era rancho, public access to the asphaltum seeps and grazing within the Rancho La Brea boundaries was consistently maintained, and in the case of the former, land grants often included stipulations recognizing the asphaltum as a public resource (Torrence 1977:9).

The land ownership history of Rancho La Brea in the early American Period is a complicated one, precipitated by the death of Rocha in 1837. Rocha's widow, Maria Josefa, attempted to acquire the land grant after his death; however, by the time of her death in 1851 the process had not been completed. With her death the land was passed to three of her heirs, including Antonio Jose Rocha II and Jose Jorge Rocha, and to her young granddaughter Josef de la Merced Jordan (Torrence 1977:11). Antonio Jose Rocha II also acquired the portion of the Rancho that had originally been granted to Nemesio Dominguez in 1852. The Rocha family submitted their petition for the entirety of Rancho La Brea to the U.S. Land Commission in 1852, which initiated a legal process that would take close to 20 years to resolve, and involved numerous claims, appeals, unfiled grand deeds, quit claim deeds, informal agreements, and exchanges among multiple parties.

The initial rejection came in 1855, and the appeal given 3 years later was dismissed in 1860 for lack of prosecution (Torrence 1977:12). Antonio Jose Rocha II subsequently deeded his share in the rancho, estimated to be about 3,000 acres, to William Howard, who would in turn hand it over to Benjamin Dreyfus as a means of settling a debt. Jose Jorge Rocha sold his inheritance to John Hancock in 1860. After acquiring another smaller portion in 1864, Hancock had deeds for lands in the rancho totaling approximately 1,480 acres. After a series of decisions by different federal courts, including the U.S. Supreme Court, the patent to the rancho was issued to Hancock on April 15, 1873, which was signed by the U.S. President, Ulysses S. Grant (Torrence 1977:14). John Hancock had retained Cornelius Cole, a U.S. Senator, as his lawyer to oversee the entitlement process, for which Cole ended up with a 483-acre property which became known as Colegrove. Colegrove, which was subdivided in 1893, consisted of the area bounded by Sunset Boulevard on the north, Seward Street on the West, Beverly Boulevard on the south, and Gower Street on the east. The Project Site is in the northeastern portion of Colegrove (Torrence 1977).

In 1877 the Supreme Court issued a ruling that recognized the 1873 patent, which confirmed the following six grantees for Rancho La Brea: Henry Hancock (2,400 acres), John Hancock (1,200 acres), Cornelius Cole (483 acres), James Thompson (256 acres), John Schumacher (90 acres), and John G. Nichols (40 acres). The Project Site is within the parcel granted to Henry Hancock, which had previously been acquired from Jose Jorge Rocha. Henry Hancock is often considered as the sole individual responsible for acquiring the land within Rancho La Brea and is also miscredited with having owned all of Rancho La Brea. However, most of the early acquisition and legal work that led to the confirmation of Rancho La Brea was handled by his brother John, leading Torrence (1977:15) to speculate that Henry had always acted as a silent partner.

Henry Hancock was responsible for surveying much of the City (Torrence 1977:15–17). Before coming to Los Angeles, Hancock attended a military academy, graduated from Harvard Law School, and served in the Mexican War (Lummis 1909). By 1850 he had arrived in Los Angeles after having worked as a lawyer in San Francisco. He served in the 1851 to 1852 term as a member of the State assembly and

was then appointed as the City Surveyor in which he served until 1855, during which time he conducted surveys not only of the Los Angeles pueblo boundary (1853), but most of the large ranchos between Monterey and San Diego (Lummis 1909). As a city surveyor and deputy United States surveyor, Hancock left his mark on the City as he established many of the important boundaries that still exist today. Henry married Ida Haraszthy, and in 1875 the couple had twin boys, only one of whom, George Allan, would survive infancy. Their third son, Bertram, was born in 1877. Around 1870 Henry built a small frame house along the southern margin of the rancho, just off what is now Wilshire Boulevard and within the famous paleontological site known as the La Brea Tar Pits. The family of four lived in the house until he died in early 1883 (Torrence 1977).

After his death in 1883, Hancock's wife took over his property and began operating the rancho. Up to this point, there had not been extensive development in the northern portion of Rancho La Brea and within the Project Site. During the 1880s the northern parts of Rancho La Brea began to see a development boom, spurred by the subdivision of tracts and the facilitation of better transportation in the area. During this time, Ida Hancock sold some of the parcels of land in this area, which were among the most valuable parts of her holdings and began subdividing some of her own holdings. As the northern portions of Rancho La Brea were sold to eager real estate investors, who in turn subdivided and improved the land, the area became very desirable for settlement and eventually led to the development of what is now Hollywood (Torrence 1977:22).

COLEGROVE AND HOLLYWOOD

Colegrove

The Project Site is in the northern portion of Colegrove which was subdivided in 1893 by Cornelius Cole (Torrence 1977). The area, which was located south of the growing community of Hollywood, was situated between Sunset Boulevard to the north, Seward Street to the west, Beverly Boulevard to the south, and Gower Street to the east. By 1907 the Los Angeles Pacific Railway reached Colegrove, which connected the growing community to Los Angeles. The town thrived in the early years of the twentieth century, largely thanks to the local citriculture industry. In 1906 alone there were over 17 million lemons shipped from Colegrove outside of California. Unlike their northern neighbors, the residents of Colegrove did not initially vote for incorporation. Eventually the promise of Owens Valley water and access to the outfall sewer and reliable fire protection swayed residents who voted in 1909 for annexation into the City (Masters 2013; Torrence 1979). Once the Colegrove Addition was added to the City, the area's unique character and identity began to be to be subsumed by Hollywood—its larger and flashier northern neighbor—and by the 1920s the area was simply considered the southern portion of Hollywood (Masters 2013).

Hollywood

The Project Site is in Hollywood—a neighborhood within the City. Hollywood includes portions of what was originally Rancho La Brea and Rancho Los Feliz. Throughout the nineteenth century the area was largely used for agricultural purposes and the farmers who lived there experimented with many different types of fruits, vegetables, and flowers (Historic Resources Group [HRG] 2011:6). At the turn of the century the area began to see a growth in development, particularly from subdivision for commercial and residential properties (HRG 2011:6; Torrence 1977:22). These improvements were part of the more regional real estate boom occurring in the late nineteenth century, the local effects of which included the creation of multiple streetcar lines. Beginning around 1900 a streetcar line ran along Hollywood Boulevard with subsequent lines being established along much of what are now the area's major thoroughfares, including Melrose Avenue, La Brea Avenue, Santa Monica Boulevard, Highland Avenue,

Vine Street, Western Avenue, Vermont Avenue, Virgil/Hillhurst Avenues, Kenmore Avenue, Fountain Avenue, Talmadge Street, Hyperion Avenue, Los Feliz Boulevard, and Beachwood Drive (HRG 2011:6).

Hollywood was incorporated as its own city in 1903 and was bound by Hollywood Hills to the north, Fountain Avenue to the south, Crescent Heights Boulevard to the west, and Mariposa Street to the east. Many residents wanted Hollywood to be annexed by the City; however, the initial lack of common boundary prevented this from happening. In 1910 a common boundary was established and the City voted 409 to 18 in favor of consolidation (HRG 2011:6; Prosser 2016:56–57).

The most important factor that led to the development of Hollywood is the entertainment industry. Film production first began in the area in 1911 and quickly became an important economic driver in the area, growing as the public's interest and desire for motion pictures also grew. By 1919, the City established industrial zones specifically for the filming; however, the area also became well known as a center for radio, television, and record production (HRG 2011:7). During the 1910s, 1920s, and 1930s, Hollywood experienced a period of massive growth and attracted immigrants from all over the world. Notably, after World War II, the area was also a refuge for European migrants escaping the war (HRG 2011:7). As with most parts of the county in the post-war period, Hollywood saw a dramatic increase in residential development in the years after the war (HRG 2011:8).

Hollywood in the second half of the twentieth century saw an initial decline as the entertainment industry began moving to other parts of the city and the area became more known for tourism. This decline reached its peak in the 1980s when the City established the Hollywood Redevelopment Project Site to help boost the area with more development and hoped to preserve the historic core. The investment of the area was successful, and by the beginning of the 2000s until today, the area has seen much more development, particularly of the red line, large, mixed-use projects, and the adaptive reuse of historic buildings (HRG 2011:9). Hollywood is not without its current challenges, as the area is now facing issues related to housing affordability, homelessness, and the results of the COVID-19 pandemic and the associated economic downturn.

RESULTS

CHRIS Records Search

Previously Conducted Studies

SWCA received the results of the CHRIS records search from the SCCIC on June 2, 2023. Results of the records search indicate that 33 cultural resources studies have been conducted within 0.8 km (0.5 mile) of the Project Site (Table 1). A confidential results map depicting the results is included in Appendix A. Of the 33 previously conducted studies, five overlap or border the Project Site. These five studies include three technical reports which were conducted for proposed Metro Subway expansions in Los Angeles (LA-7565, LA-7566, LA-8020), one addendum which provides additional information for a Draft Supplemental Impact Statement for the Metro Subway expansions (LA-7562), and one historic resources survey of the Hollywood neighborhood (LA-11797).

Table 1. Prior Cultural Resources Studies within a 0.8-km (0.5-mile) Radius of the Project Site

Report Number	Title	Author: Affiliation	Year	Proximity to Project Site
LA-01578	Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft Environmental Impact Statement and Environmental Impact Report	Anonymous: Westec Services, Inc.	1983	Outside
LA-02451	Cultural Resources Survey Report 5800 Sunset Boulevard Hollywood, California	Tartaglia, Louis J.: Tartaglia Archaeological Consulting	1991	Outside
LA-03496	Draft Environmental Impact Report Transit Corridor Specific Plan Park Mile Specific Plan Amendments	Anonymous: Unknown	No date	Outside
LA-04345	Cultural Resource Assessment for Pacific Bell Mobile Services Telecommunications Facility La 650-01, 6344 Fountain Avenue, Community of Hollywood, City and County of Los Angeles, California	McLean, Deborah K.: LSA Associates, Inc.	1999	Outside
LA-04580	Cultural Resource Assessment for the AT&T Wireless Services Facility Number 633.2, County of Los Angeles, California	Duke, Curt: LSA Associates, Inc.	1999	Outside
LA-04909	Cultural Resources Investigation for the Nextlink Fiber Optic Project, Los Angeles and Orange Counties, California	Atchley, Sara M.: Jones & Stokes	2000	Outside
LA-05081	Cultural Resource Assessment for Pacific Bell Wireless Facility La 650-02, County of Los Angeles, Ca	Lapin, Philippe: LSA Associates, Inc.	2000	Outside
LA-05095	Descriptive and Historical Date Photographic Record, and Floor Plans Pertaining to the "tav Celebrity Theater" Complex, Hollywood, Los Angeles County, California	McKenna, Jeanette A.: McKenna et al.	1999	Outside
LA-05348	Cultural Resource Assessment for AT&T Fixed Wireless Services Facility Number La_056_a, County of Los Angeles, California	Duke, Curt: LSA Associates, Inc.	2000	Outside
LA-06467	Nextel Communications Site CA-7846a, Los Angeles, Los Angeles County, California	McKenna, Jeanette A.: McKenna et al.	2002	Outside
LA-06811	Cultural Resource Assessment Cingular Wireless Facility No. SM 234-01 Hollywood, Los Angeles County, California	Harper, Caprice D.: LSA Associates, Inc.	2003	Outside
LA-07562	**Additional Information for DSEIS, Core Study Alignments 1, 2, 3, 4, and 5**	**Greenwood, Roberta S.: Greenwood and Associates**	**1987**	**Bordering**
LA-07565	**Technical Report Archaeology Los Angeles Rail Rapid Transit Project "Metro Rail" Core Study, Candidate Alignments 1 to 5**	**Hatheway, Roger G. and Peter, Kevin J.: Greenwood and Associates**	**1987**	**Bordering**
LA-07566	**Technical Report DSEIS, Core Study Alignments 1, 2, 3, 4, and 5**	**Hatheway, Roger G. and Peter, Kevin J.: Greenwood and Associates**	**1987**	**Bordering**
LA-07981	Direct Ape Historic Architectural Assessment for Sprint Telecommunications Facility Candidate La70xc424a (ca Surplus Mart), 6263 Santa Monica Boulevard, Los Angeles, Los Angeles County, California	Bonner, Wayne H.: Michael Brandman Associates	2005	Outside
LA-07992	Results of an Archaeological and Paleontological Monitoring Program at the Site of the "tav Celebrity Theatre" Complex, Hollywood, Los Angeles County, California	McKenna, Jeanette A.: McKenna et al.	2002	Outside
LA-08020	**Technical Report: Cultural Resources Los Angeles Rail Rapid Transit Project "metro Rail" Core Study**	**Southern California Rapid Transit District**	**1987**	**Bordering**

Report Number	Title	Author: Affiliation	Year	Proximity to Project Site
LA-08251	Los Angeles Metro Red Line Project, Segments 2 and 3 Archaeological Resources Impact Mitigation Program Final Report of Findings	Gust, Sherri and Heather Puckett: Cogstone Resource Management, Inc.	2004	Outside
LA-09227	Cultural Resources Records Search and Site Visit Results for AT&T Candidate EL0078-03 (Rooftop Beachwood Drive), Los Angeles, Los Angeles County, California	Bonner, Wayne H.: Michael Brandman Associates	2007	Outside
LA-09233	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate SV11570E (Surplus RT), 1106 North Vine Street, Hollywood, Los Angeles County, California	Bonner, Wayne H.: Michael Brandman Associates	2007	Outside
LA-09405	Proposed Bechtel Wireless Telecommunications Site (ESS Storage), Located At 1860 Vine St., Los Angeles, California 90028	Wlodarski, Robert J.: Cellular Archaeological Resource Evaluations	2008	Outside
LA-09546	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate SV11691A (Music Box), 6122 Hollywood Blvd., Los Angeles, Los Angeles County, California.	Bonner, Wayne H. and K. A. Crawford: Michael Brandman Associates	2008	Outside
LA-09612	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate SV11570A (Santa Monica RT), 6161 Santa Monica Boulevard, Los Angeles, Los Angeles County, California.	Bonner, Wayne H., Sarah H. Williams, and Kathleen Crawford: Michael Brandman Associates	2008	Outside
LA-09802	Cultural Resources Study of the 6161 Santa Monica Blvd. Project, Royal Street Communications Site No. LA3927, Los Angeles County, CA	Dana Supernowicz: Historic Resource Associates	2009	Outside
LA-10149	Finding of no adverse effect: US 101 from Alameda Street Underpass to Barham Boulevard Overcrossing	Stewart, Noah M.: Caltrans District 7	2009	Outside
LA-10507	Technical Report - Historical/Architectural Resources - Los Angeles Rail Rapid Transit Project "Metro Rail" Draft Environmental Impact Statement and Environmental Impact Report	Anonymous: Westec Services, Inc.	1983	Outside
LA-10915	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate SV11691-C (ATT Gower Switch), 1429 North Gower Street, Los Angeles, Los Angeles County, California	Bonner, Wayne: Michael Brandman Associates	2010	Outside
LA-10916	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC, Telecommunications Facility LAC633-01, USID 11760 (Cahuenga/Sunset), 6515 West Sunset Boulevard, Los Angeles, Los Angeles County, California	Bonner, Wayne: Environmental Assessment Specialists, Inc.	2011	Outside
LA-11569	Cultural Resources Study of the Beachwood Building Project, Metro PCS Site No. LA3927, 6001 Santa Monica Boulevard, Los Angeles, Los Angeles County, California 90038	Supernowicz, Dana: Earth Touch	2011	Outside
LA-11797	**Historic Resources Survey Hollywood Redevelopment Project Area**	**Chattel, Robert: Chattel Architecture, Planning & Preservation**	**2010**	**Overlapping**
LA-12155	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA03615E (Wilcox) 1557 Wilcox Avenue, Los Angeles, Los Angeles County, California	Bonner, Wayne and Crawford, Kathleen: MBA	2012	Outside
LA-12157	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SV11570A (Santa Monica RT) 6161 Santa Monica Boulevard, Los Angeles, Los Angeles County, California	Bonner, Wayne and Crawford, Kathleen: MBA	2012	Outside

Report Number	Title	Author: Affiliation	Year	Proximity to Project Site
LA-13136	Cultural Resource Records Search and Site Survey, AT&T Site El0511 Santa Monica Blvd/Vine St. 1106 North Vine Street, Los An6eles, Los Angeles County, California 90038, CASPR# 3551502170	Loftus, Shannon L.: Ace Environmental, LLC	2013	Outside

Report LA-7562 was prepared in 1987 by Greenwood and Associates and borders the Project Site along the northern edge. This report includes a historic map review and analysis of the proposed Metro Rail project alignments. The report identified the potential for encountering significant cultural resources within one of the proposed alignments and stated that monitoring would be conducted, in line with the project's treatment plan. No resources were identified near or within the current Project Site. Reports LA-7565 and LA-7566 were also prepared in 1987 by Greenwood and Associates and border the Project Site along the northern edge. These reports include a historic map review and analysis of the proposed Metro Rail project alignments. Both reports determined that the proposed alignments have a low potential to yield significant archaeological information.

Report LA-8020 was prepared in 1987 by the Southern California Rapid Transit District and borders the Project Site along the northern edge. This report includes a map review, a CHRIS search, and a literature review. The report did not include any conclusions or recommendations for further archaeological work.

Report LA-11797 was prepared in February 2010 by Chattel Architecture, Planning, and Preservation for the Hollywood Redevelopment Project area, which addressed historical resources in the area and not archaeological resources. An update to this historic survey report was prepared in January 2020 by Architectural Resources Group, Consulting GPA, and HRG; however, this report was not included in the results from the SCCIC. The 2020 report also addressed historical resources in the area and not archaeological resources.

Previously Recorded Archaeological Resources

The CHRIS records search identified one previously documented archaeological resource within a 0.8-km (0.5-mile) radius of the Project Site (Table 2). A confidential records search results map depicting the resource boundaries and locations is included in Appendix A. The resource (LAN-3545H) is a historic-period archaeological site with materials dating between the 1910s and 1980s. The site was identified during construction approximately 140 feet to the northwest of the Project Site. LAN-3545H was composed of refuse materials and the remnants of various structures such as a cellar, septic tanks, and a wall segment of a former building. Residential materials included items like food and beverage containers, eating and drinking vessels, flowerpots, cosmetic containers, and animal bones. Building materials included items like bricks, tile, and poured concrete. The archaeological components were found beneath what had been developed with paved lots or buildings. Some materials were recorded directly beneath paved surfaces and others extended to depths of approximately 1 to 2 m (3 to 7 feet) below grade. The historical materials identified appeared to have been associated with residential developments that had existed within the Project area in the early twentieth century and were demolished in multiple phases between the 1930s and 1970s.

Table 2. Previously Recorded Archaeological Sites within a 0.8-km (0.5-mile) Radius of the Project Site

Primary No.	Trinomial	Resource Age	Resource Type	Description	Year Recorded (Recorder)	Proximity to Project Site
P-19-003545	LAN-3545H	Historic	Site	Historic site made up of structural features and refuse scatters.	2002 (Jeanette A. McKenna, McKenna et al.)	Outside

Other historical archaeological sites have been recorded in the Hollywood area that were outside the 0.5-mile radius used in the CHRIS search. While these sites were not identified in the 0.8-km (0.5-mile) radius used for the current CHRIS search, they are representative of the types of historical archaeological sites commonly found in Los Angeles and underline the prevalence of these types of sites within the general project vicinity. Two historical archaeological sites were recorded 0.74 miles (1.19 km) to the west and one recorded 1.02 miles (1.65 km) to the east of the Project Site. Similar to LAN-3545H, these sites were composed of refuse dating between the late eighteenth and middle twentieth centuries identified during construction monitoring. Some of the refuse was documented as having been found in a concentration, which was likely a residential trash pit, while some materials were more loosely scattered. Pieces of refuse more consistent with domestic uses were intermixed with utilitarian items like building materials.

No Native American archaeological resources were identified within 0.8-km (0.5-mile) of the Project Site. The nearest Native American archaeological site is LAN-196 (Fern Dell), which is described above (see Native American Communities in Los Angeles). The archaeological site at the La Brea Tar Pits (LAN-159/H) is the next closest site with Native American archaeological components, and is more than 4.7 km (2.92 miles) to the southwest. Aside from these two sites, there are no other Native American archaeological sites recorded in the Hollywood area or adjacent neighborhoods in this part of the Los Angeles Basin.

Sacred Lands File Search

On May 24, 2023, the NAHC submitted the results of an SLF search in response to SWCA's request; the results are provided as an attachment (Appendix B). The results of the SLF were negative. In the response letter, the NAHC noted that the lack of recorded sites does not indicate the absence of tribal cultural resources within the Project Site, and that the CHRIS and SLF are not exhaustive. The NAHC's response included a list of nine Native American contacts representing seven tribal organizations who may have knowledge of cultural resources in or near the Project Site study area and recommended they be contacted to confirm if they have information about potential resources. These contacts and their affiliated tribal organizations are listed in Table 3. All tribal outreach and consultation conducted for the Project will be implemented by the City pursuant to the provisions of PRC 21082.3.1 and 21082.3.2. The SLF results letters are included in Appendix B.

Table 3. NAHC's Native American Contact List Included with the SLF Results

Name, Title	Affiliation
Andrew Salas, Chairperson	Gabrieleño Band of Mission Indians–Kizh Nation
Anthony Morales, Chairperson	Gabrieleno/Tongva San Gabriel Band of Mission Indians
Sandonne Goad, Chairperson	Gabrieleno/Tongva Nation
Robert F. Dorame, Chairperson	Gabrieleno Tongva Indians of California Tribal Council
Christina Conley, Tribal Consultant and Administrator	Gabrieleno Tongva Indians of California Tribal Council

Name, Title	Affiliation
Charles Alvarez	Gabrieleno–Tongva Tribe
Lovina Redner, Tribal Chair	Santa Rosa Band of Cahuilla Indians
Joseph Ontiveros, Cultural Resources Director	Soboba Band of Luiseño Indians
Isaiah Vivanco, Chairperson	Soboba Band of Luiseño Indians

Tribal Consultation

Pursuant to PRC Section 21080.3.1, as lead CEQA agency, the City is required to send written notification to California Native American tribes who have requested to be notified. The City maintains a list of tribes who have requested notification and is referred to as the Assembly Bill 52 Notification List. The written notifications include basic information about the proposed Project and provides the tribal organization the opportunity to conduct government-to-government consultation if the Native American tribe replies and requests consultation. The notification process for the Project is currently ongoing and as a result, no information pertaining to or derived from the tribal consultation process was available for consideration in this analysis.

Archival Research

The Project Site consists of nine separate lots which were originally subdivided as part of the Leland Tract in 1906. The land-use history for the Project Site is described below and was ascertained through a review of historic maps and aerial photographs.

Map Review (1870s to 1950)

Late nineteenth century and early twentieth century topographic maps show several small, south-flowing streams originating within the foothills of the Santa Monica mountains and running towards Hollywood Boulevard. The nearest stream is mapped as terminating approximately 0.42 km (0.26 mile) north of the Project Site. These streams appear to have been intermittent and ephemeral, i.e., they only contained water for short periods of time during the wet season, and they correspond to what is seen on irrigation maps discussed previously in this report (see Environmental Setting section). These maps also show many south-flowing streams south of the Project Site running generally towards what is now Ballona Creek.

During the nineteenth century, the Project Site remained undeveloped open space within the northern portion of Rancho La Brea. Maps from 1871 and 1877 depict the Project Site as undeveloped, or at least not subdivided in anticipation of development (Figure 11). On the 1871 map, the Project Site is within but just on the border of Rancho La Brea, southwest of a cactus patch and a house, and east of the "Road to the Cahuenga Pass," which would become the route of the US-101. The 1877 map shows the Project Site on unsurveyed land along a hill or slope (Figure 12). In the early twentieth century, the Project Site and general vicinity were characterized by small, sparsely situated, residential developments. The first Sanborn map depicting the Project Site dates to 1919 and shows several residences within the area. In total there are 12 structures labeled domestic residences and four garages within the Project Site at this time (Figure 13). The 1950 Sanborn map shows that most of the properties along Sunset Boulevard had been converted to storefronts and the building at the corner of Sunset Boulevard and Vine Street had been demolished and replaced with a restaurant. One of the residences along Vine Street had also been converted to a storefront, while the five residences with frontages on Leland Way remained unchanged and two additional multifamily residences had been added (Figure 14). There were multiple garages in the rears of the Leland Way residences by this time. The final Sanborn map from 1955 largely depicts the Project Site in the same way as the 1950 Sanborn map (Figure 15).

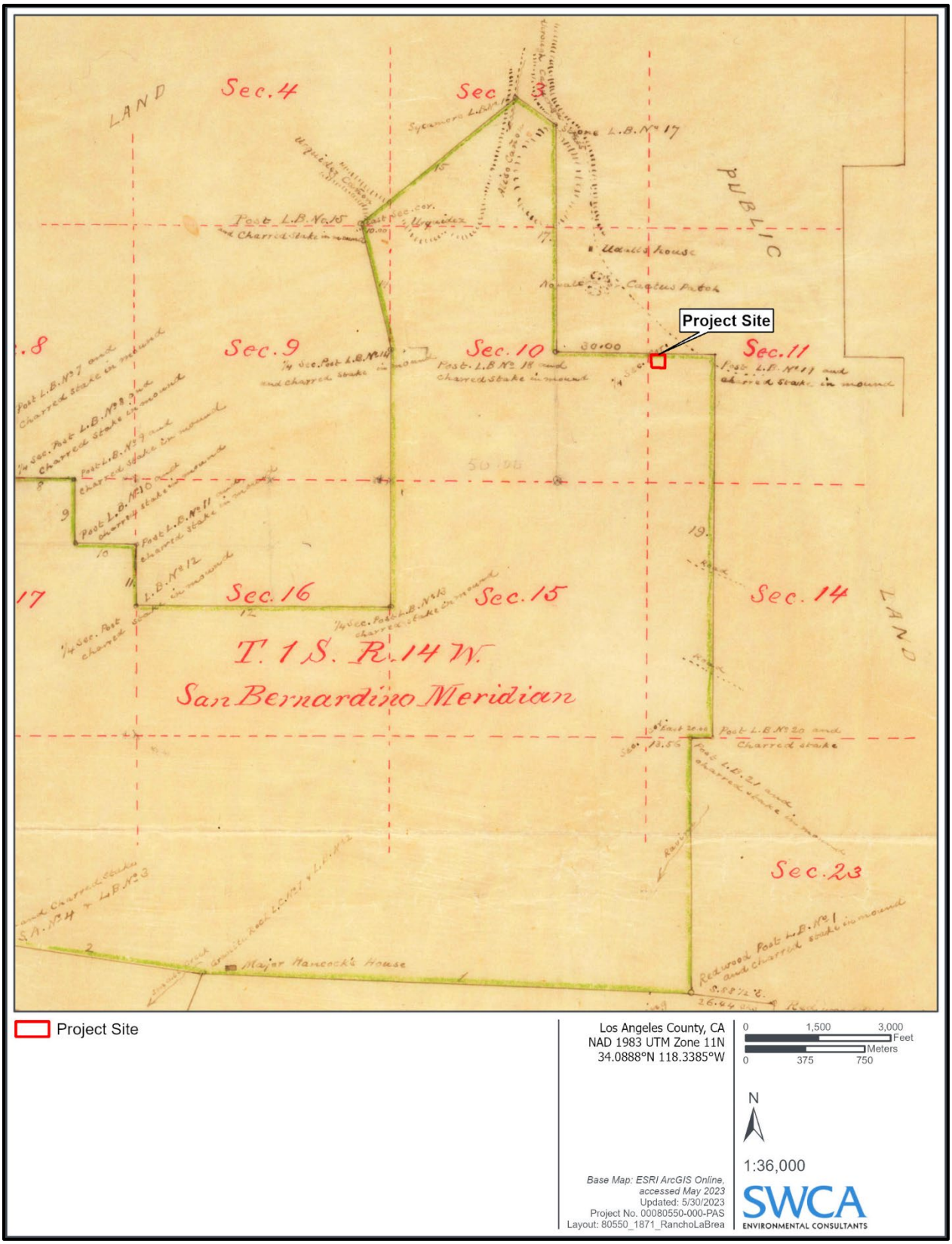

Figure 11. Project Site plotted on an 1871 plat map for Rancho La Brea (Source: Huntington Map Library, Unique identifier 313830).

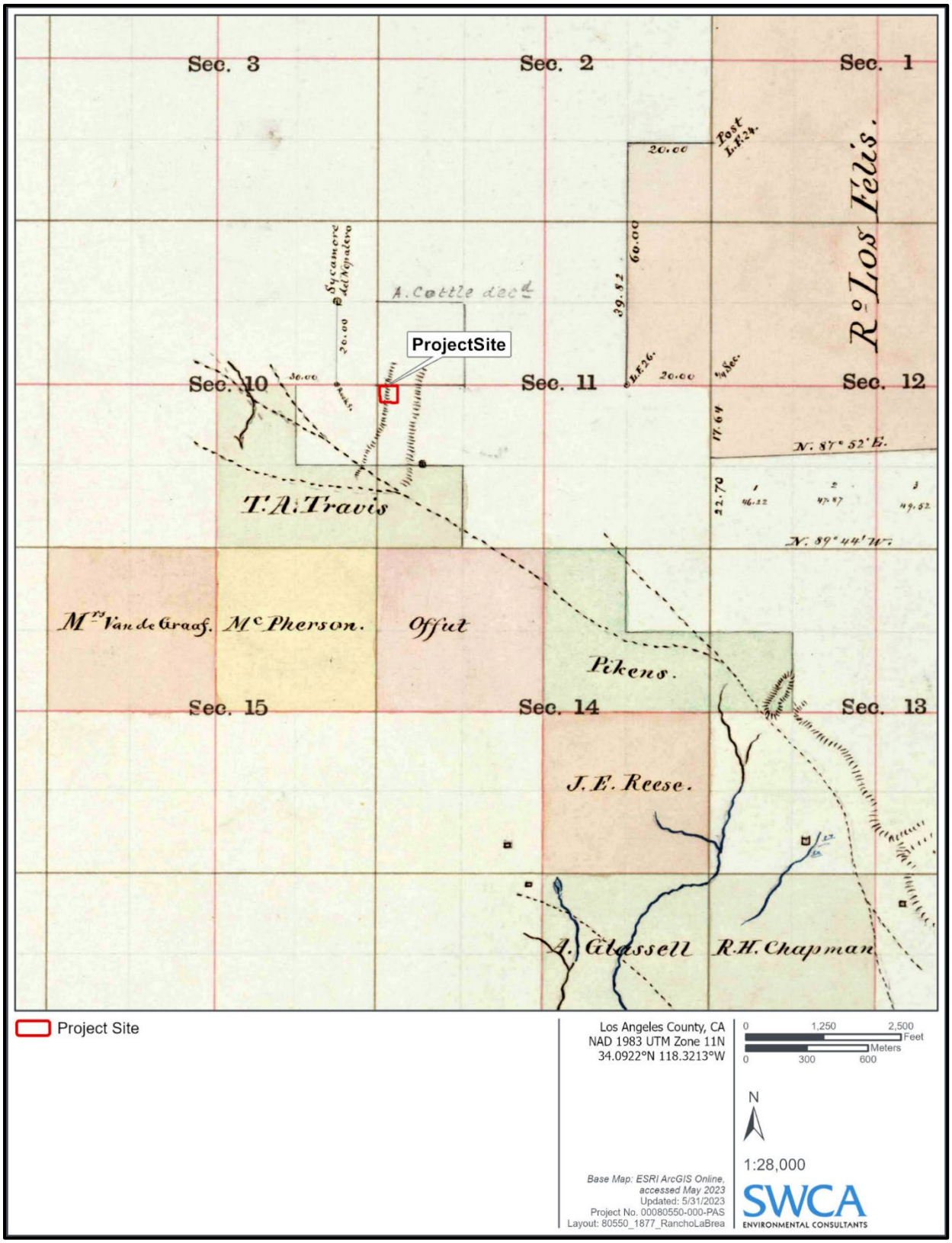

Figure 12. Project Site plotted on an 1877 plat map indicating landowners for various properties and showing some unimproved roads (dashed lines), streams (solid blue lines), and landforms (hatched contours) (Source: Huntington Library, Unique Identifier 312832).

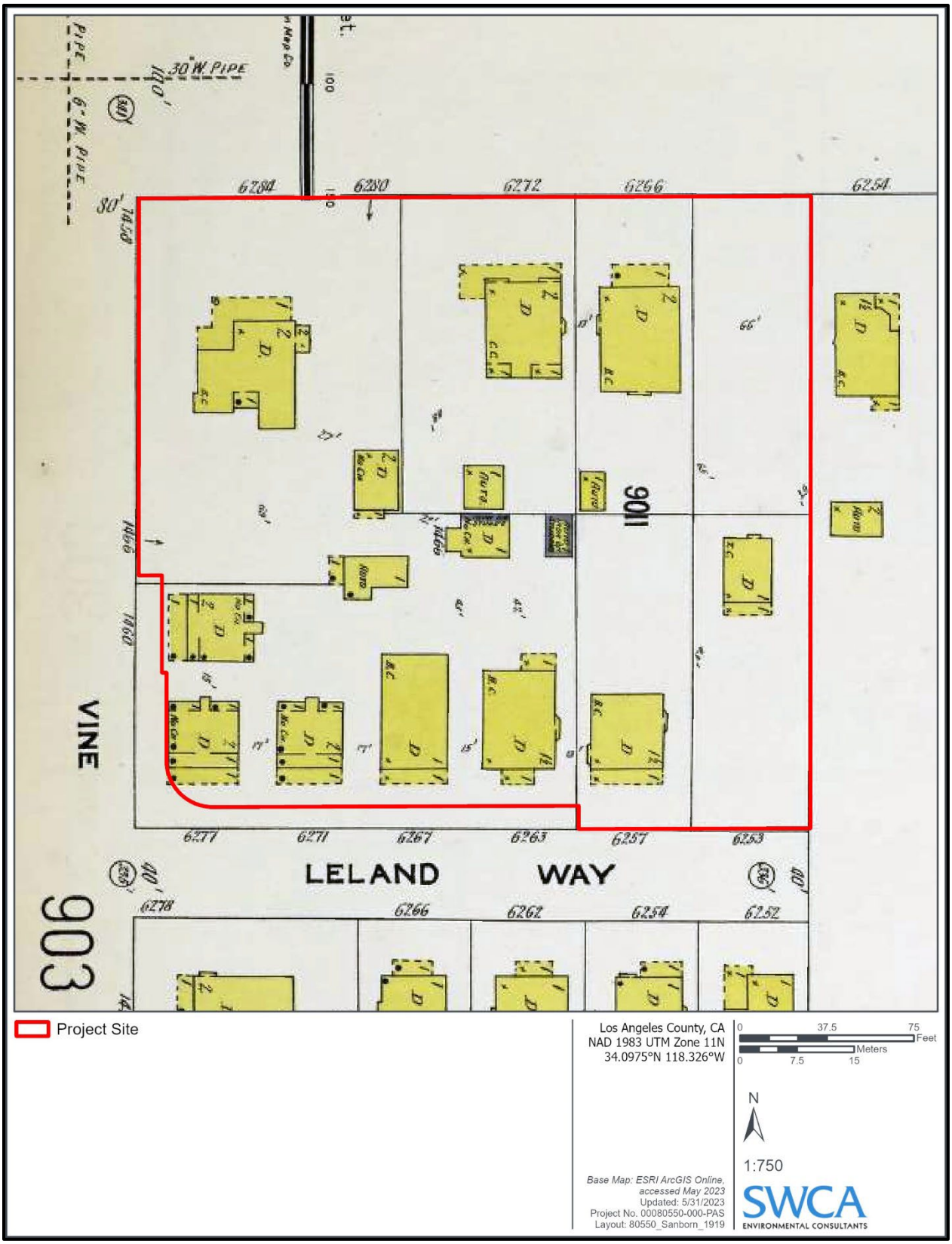

Figure 13. Project Site depicted on the 1919 Sanborn map.

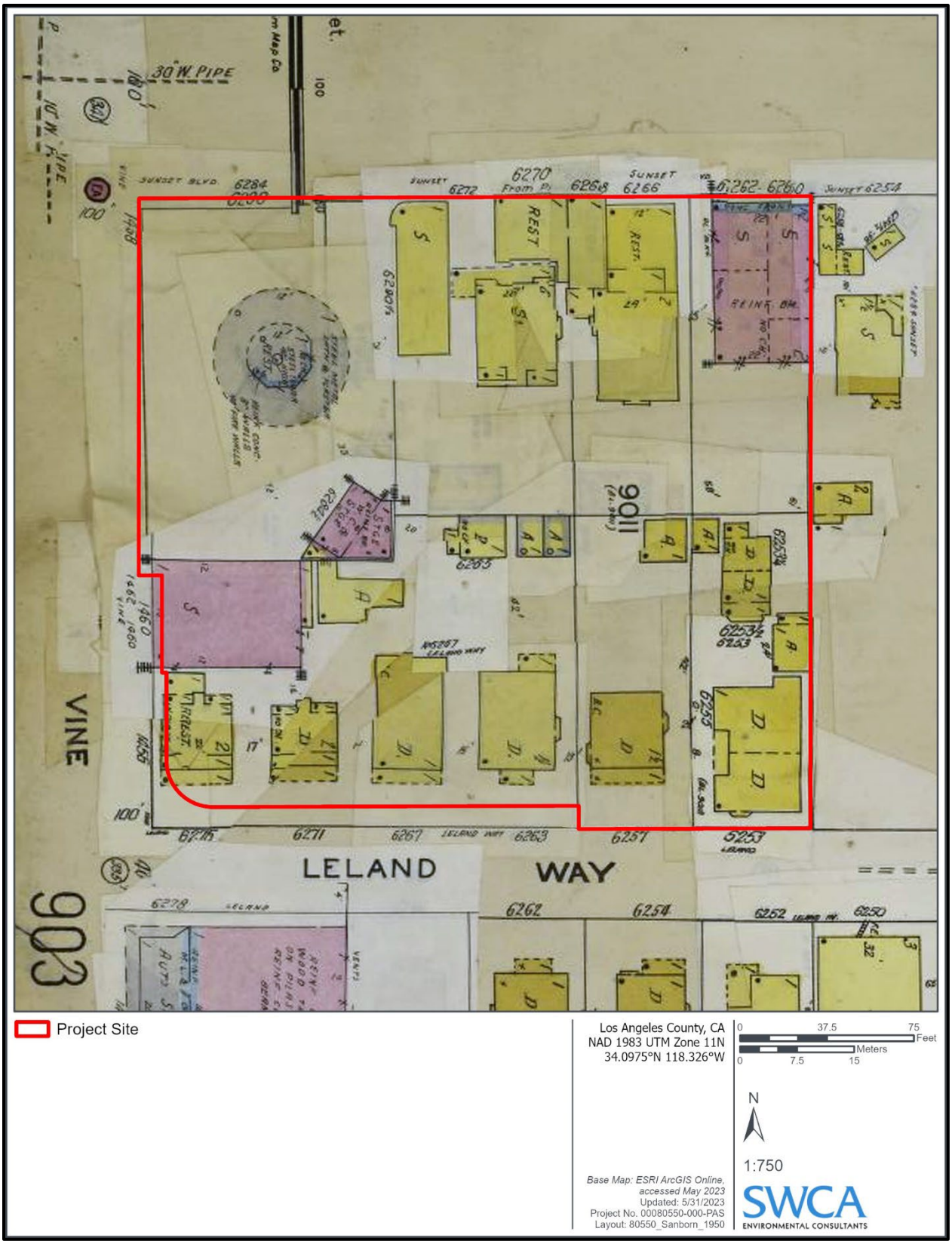

Figure 14. Project Site depicted on the 1950 Sanborn map. Updates to the older basemap are visible as cut-and-paste segments.

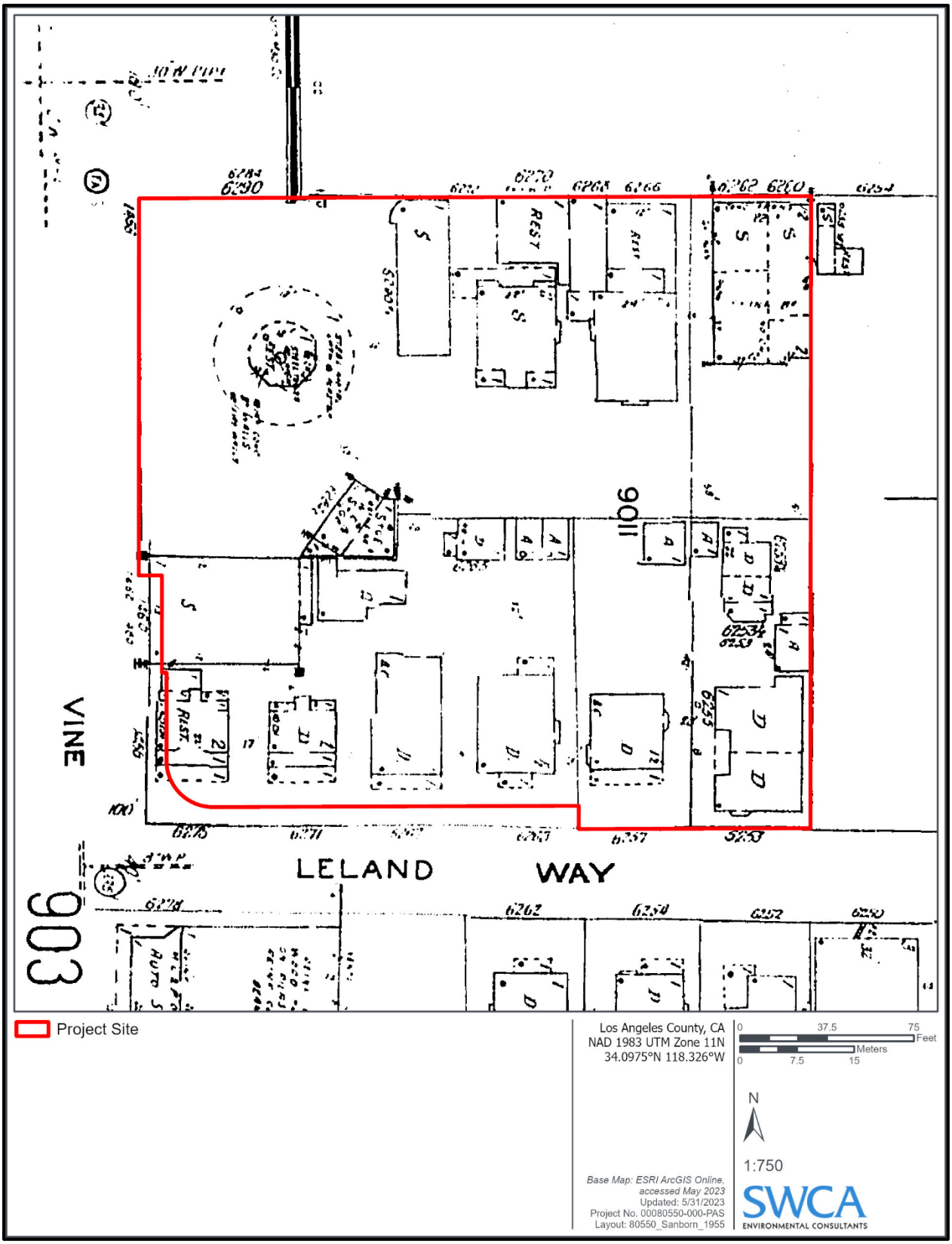

Figure 15. Project Site depicted on the 1955 Sanborn map.

Aerial Photograph Review (1928 to Present)

Aerial photographs from the early and mid-twentieth century provide more clarity regarding the development of the Project Site. The 1928 aerial photograph shows that the Project Site was developed primarily with residences at this time, all of which appear to be smaller, single-family structures (Figure 16). By 1938, the residence that had once existed in the northwest corner of the Project Site had been replaced by a circular restaurant, the same building which is seen on the Sanborn Map from 1950. This restaurant was originally known as the Pig Stand Drive-In and was developed in 1931; however, the restaurant underwent a change of ownership in 1937, becoming the Carpenter's Sandwich Drive-In (Snow and McGee 2021:8). The 1938 aerial photograph indicates that the remainder of the Project Site was largely unchanged between 1928 and 1938 and was still dominated by small residences (Figure 16). The next aerial photograph dates to 1941 and shows the Project Site largely unchanged save for the addition of the building in the northeast corner of the Project Site, and the addition of several smaller ancillary structures, likely garages, behind the residences with frontages on Leland Way (Figure 17). The aerial photograph from 1962 depicts many of the previously noted residences; although it is apparent that the space between the residences that front Vine Street and those that front Leland Way had been converted to parking. The most significant change to the Project Site during this time was the development of the extant, 19-story tower in the northwest corner of the Project Site, replacing Carpenter's Sandwich Drive-In (Figure 17). The Sunset Vine Tower, as it is known, officially opened in 1963 and had the distinction of being the first tower to be constructed after the City of Los Angeles repealed the 14-story building height limit restriction (Snow and McGee 2021:8-9). The aerial photograph from 1989 indicates that all but two of the residences that fronted Leland Way had been demolished. In the aerial photographs from 1989 and 2000, the extant structures along Sunset Boulevard, Vine Street, and Leland Way are all present. The aerial photographs do not show any significant or distinguishable changes to the Project Site after this time (Figure 18).

As previously mentioned, the Project Site contains eight existing structures, one of which, the Sunset Vine Tower, will not be impacted by the proposed development. The remaining seven structures will be demolished as part of the proposed Project. Along Sunset Boulevard, there are four structures, including one built in 1913 (6266 Sunset Boulevard), one built in 1945 (6268 Sunset Boulevard), one built in 1913 and altered in 1944 (6272 Sunset Boulevard), and one built sometime between 1938 and 1941 (6260 Sunset Boulevard) (Snow and McGee 2021). Importantly, although two of the properties along Sunset Boulevard (6266 Sunset Boulevard and 6272 Sunset Boulevard) have seen a change of use over time from residential to commercial, the aerials indicate that the structures themselves have not been demolished but were instead altered or renovated to accommodate these changes. Both structures along Leland Way were originally built around 1911 (6236 Leland Way and 6253 Leland Way). Finally, the structure along Vine Street (1460 Vine Street) was built in 1971 according to records from the Los Angeles Department of Building and Safety. This building appears to have been built directly within the footprint of the structure which existed previously which had been built sometime between 1928 and 1938.

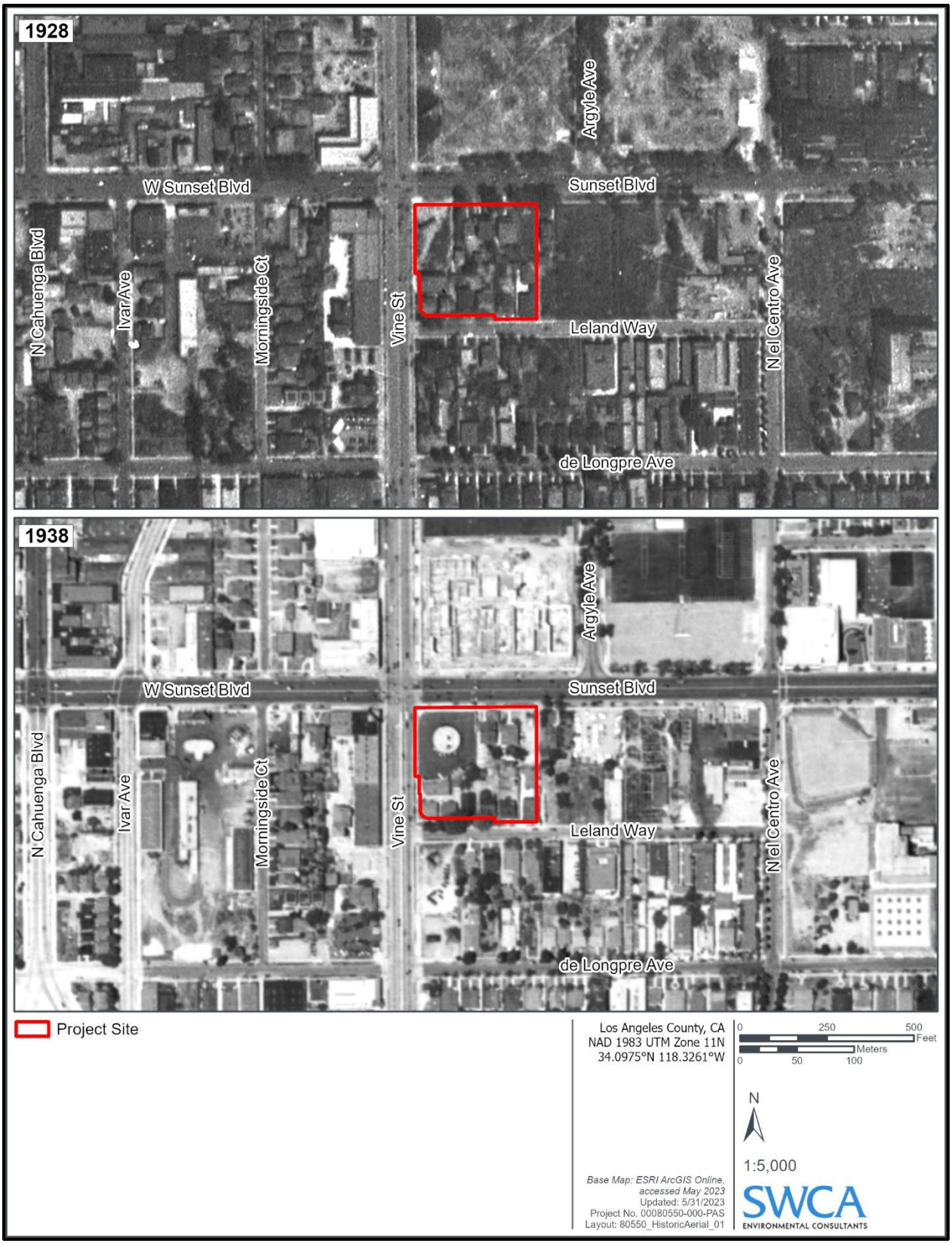

Figure 16. Project Site depicted on aerial photographs from 1928 and 1938.

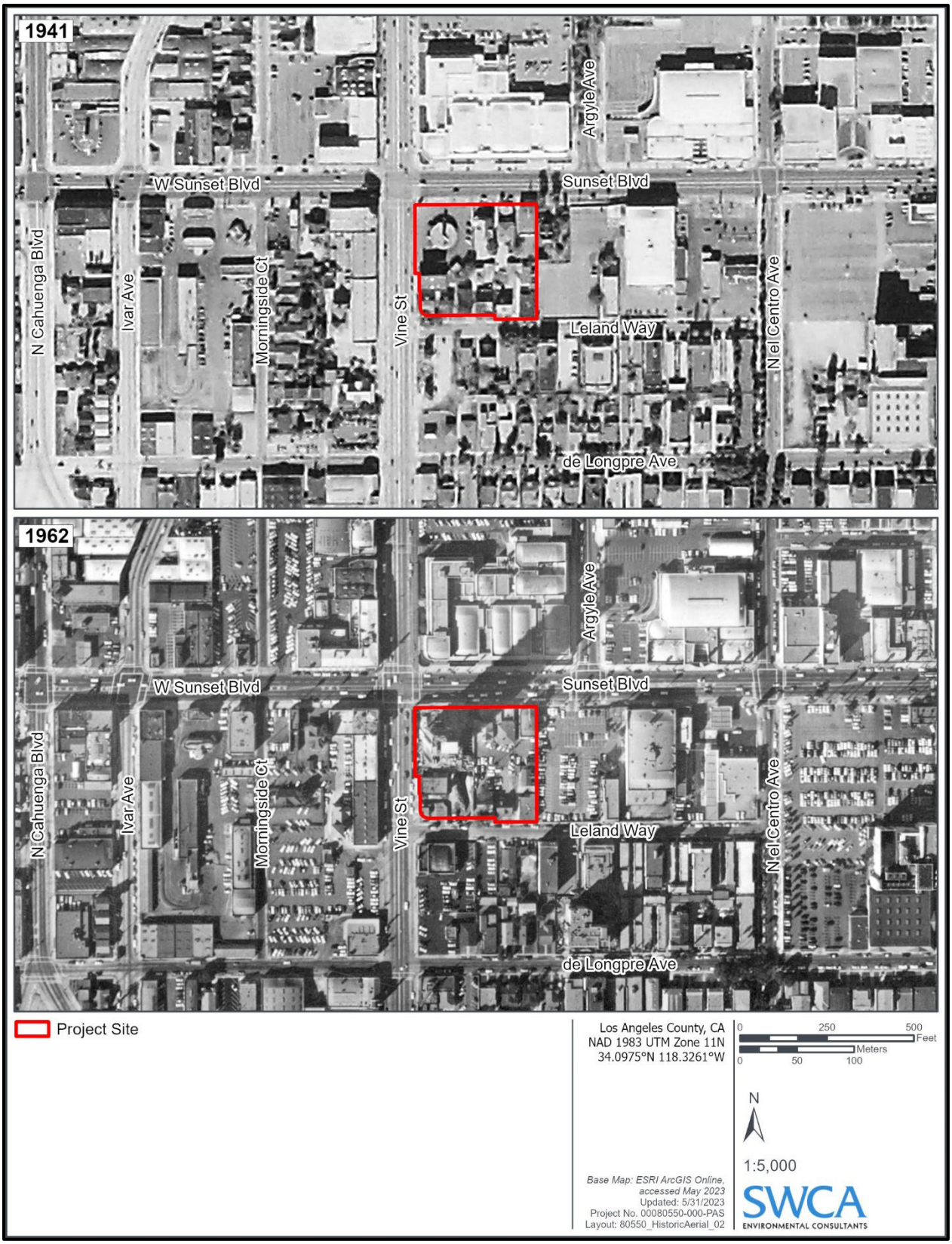

Figure 17. Project Site depicted on aerial photographs from 1941 and 1962.

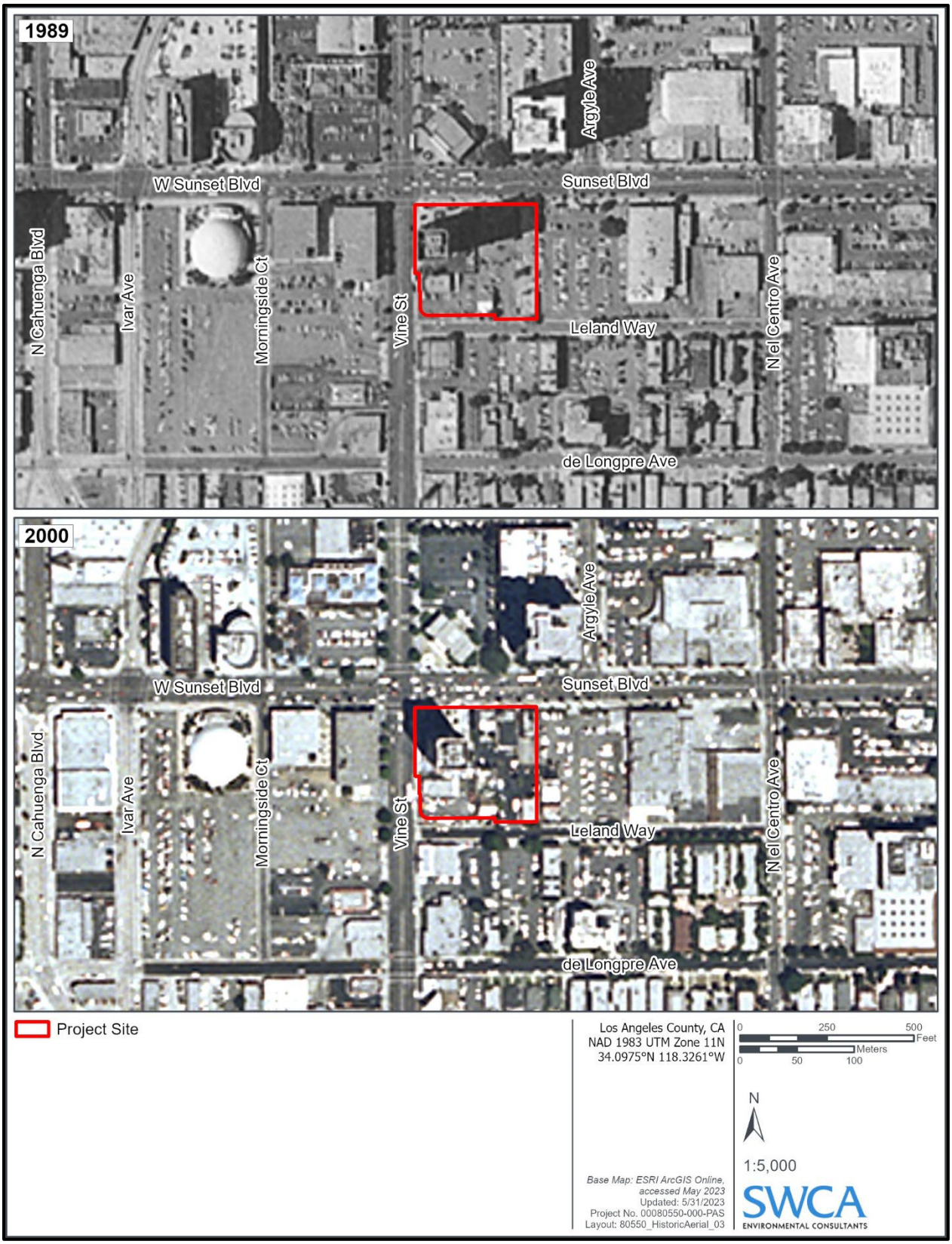

Figure 18. Project Site depicted on aerial photographs from 1989 and 2000.

Archaeological Sensitivity Analysis

Native American Archaeological Sensitivity

SWCA's analysis included a review of the CHRIS records search results, SLF results, ethnographic literature, and regional archaeological information. Tribal consultation is still pending; therefore, no review of any material submitted during consultation was included in this analysis. SWCA identified several Native American placenames and sites in the vicinity, ranging from 2.24 to 16.7 km (1.39 to 10.38 miles) from the Project Site. These include named settlements such as Geveronga, Maawnga, and Yaanga to the east-southeast in the downtown Los Angeles area, Kuruvungna and Guaspet in the Ballona area to the southwest, and Kaweenga to the northwest. The closest settlements (in straight-line distance) is Kaweenga, which is located 5.71 km (3.55 miles) northwest of the Project Site. Other notable sites that have archaeological components in the region have been recorded at the Fern Dell recreation area (LAN-196) to the northwest, the La Brea Tar Pits (LAN-159/H) to the southwest, as well as several sites along Ballona Creek and around the Baldwin Hills to the southwest.

LAN-196, the site recorded at Fern Dell, 2.24 km (1.39 miles) to the northeast, is the nearest archaeological site to the Project Site that was at least reported to contain a Native American component, although the materials were never described in detail and their whereabouts are unknown. The closest archaeological site with confirmed Native American components is at the La Brea Tar Pits (LAN-159/H), which is approximately 4.70 km (2.92 miles) southwest of the Project Site. The La Brea Tar Pits was an important terrestrial source of asphaltum for Native Americans in the region. The Native American sites identified in SWCA's regional background research helps to convey basic regional patterns of settlement and use that show concentrations near permanent water sources and near but peripheral to areas that were subject to substantial inundation or topography that is too steep. At distances ranging from 2.24 to 16.70 km (1.39 to 10.38 miles) away, these sites are too far away to suggest any material components are likely to occur as a buried deposit within the Project Site, which is situated in open space between the known Native American settlements and sites.

While the material components of the site at Fern Dell (LAN-196) cannot be confirmed and there is no record of the source for the Gabrielino placename that was ascribed to it in the 1930s, the presence of a spring there and its topographic setting are both typical of places likely to have been used by Native Americans for at least temporary habitation and seasonal visitation. Several springs have been documented at a similar elevation contour within the southern flank of the Santa Monica Mountains and would have provided important resources used by Native Americans, indicating the foothills and especially the toeslopes are areas of more focused activity.

The Project Site is also located north of wetland features including a valley freshwater marsh and wet meadow that were present at least during the eighteenth century, and likely several centuries prior, if not more. These wetland features and some of the former stream courses have been mapped in the vicinity of the Project Site, mainly to the south and east. Additionally, there are multiple ephemeral streams mapped to the north of the Project Site which originate in the foothills of the Hollywood Hills and flow south, terminating north of the Project Site. The local hydrology is part of the Ballona watershed. The former streams in this area provided drainage for water discharged from the Santa Monica Mountains and form tributaries of Ballona Creek or the Los Angeles River when it followed its western course. There is a concentration of Native American archaeological sites recorded near wetland features formed along the northeast side of the Baldwin Hills, as well as sites along Ballona Creek and in the areas surrounding the Ballona Wetlands, near the Gabrielino settlement known as Guaspet. By contrast to these sites identified in these downstream areas, the site at the La Brea Tar Pits and Fern Dell recreation area are the only two Native American archaeological sites that have been recorded upstream and within the alluvial plain at the base of the Santa Monica Mountains, which includes the Hollywood area and Project Site. The lack of

Native American archaeological sites identified in proximity to any of the natural features designated in historical ecological reconstructions prevents any strict interpretations in the archaeological sensitivity. The absence of sites could be an indication that these areas were not places where Native American activities were ever particularly concentrated such that substantial material remains were ever left behind. The lack of preservation may also explain the absence of physical evidence, which could be the result of natural processes of erosion, especially during high-energy flood events, or historical land development, especially during the early twentieth century. Where the land developments occurred before any amateur or professional archaeological survey could be conducted, there would have never been an opportunity for any sites to be recorded or otherwise noted as having once been present. Even for sites in this area that may have been more deeply buried and have remained preserved below ground, more recent archaeological work conducted during construction monitoring has yet to identify a Native American archaeological site in reasonable proximity to the Project Site. These observations suggests that there is at least a partial increase in the likelihood for a deeply buried Native American archaeological resource to be present in the Project Site, but that the potential must be considered in terms of how substantial the alterations to the physical setting have been.

The subsurface setting for the Project Site appears to be characterized by alluvial fan deposits formed in the late Pleistocene, which is mostly before Native Americans are documented as having been present in the Los Angeles Basin. The surface sediments are likely underlaid by older Pleistocene-age deposits that were formed well before there is any evidence of Native Americans in North America or California. This suggests that any Native American activities that occurred on these surfaces and produced physical remains are, in general, more likely to occur as shallowly buried deposits, and are more vulnerable to mechanical alterations from past construction events. The preliminary geotechnical investigation conducted for the Project Site did not incorporate methods that could determine the presence of fill, which is an indication of where Native American archaeological deposits are much less likely to be preserved. The preliminary results noted that the soils in the Project Site generally consist of 11 to 15 feet of loose to medium dense silty sand and firm sandy silt that are underlain predominantly by interbedded layers of very stiff to hard clays and silts (Kempton and Schade 2020). Although it could not be directly verified whether the uppermost sedimentary stratum is composed of fill, the loose sediments are consistent with the zone in which fill sediments are most likely to be contained.

SWCA considered the physical setting of the Project Site to help assess the potential for the preservation of any Native American archaeological resources that may have once been present as a buried deposit. This assessment considers regional and site-specific historical land uses. The Project Site was part of Rancho La Brea and was used in the Mission and American periods as open range for grazing cattle and sheep. No evidence was identified indicating that there were ranch houses or settlements associated with the operation of a specific ranch in the Project Site from this period, although maps from the late nineteenth century indicate that there was at least one house near the Project Site. The tracts that established the current parcels and street grid were surveyed by 1906 and slowly developed within the first two decades of the twentieth century. Initial residential developments within the Project Site shifted towards commercial uses as the twentieth century progressed, particularly along the Sunset Boulevard and Vine Street. However, several of the commercial developments during this time were within structures that had been converted from the original residential use. Along Leland Way, the residential developments that were originally built were slowly demolished, leaving only the extant two properties within the Project Site. As properties along Leland Way were demolished the vacant areas were then paved. Although several buildings on the Project Site had been demolished and paved over for parking or to accommodate the development of the Sunset Vine Tower, many of the existing structures date to the earliest development of the Project Site. As a result of the development within the Project Site in the early to mid-twentieth century, which included development and demolition events, the surficial and immediate subsurface setting of the Project Site has been mechanically altered through excavation and grading.

These events have likely substantially altered any sediments that would have the ability to contain deposits associated with Native American peoples.

The record of historical land-uses in the Project Site suggests the alluvial sediments that once formed the surface have been substantially altered, which could include off-site removal, being intermixed with imported sediments, or simply displaced within the parcel being developed. As a result of these activities, fill sediments are very likely to characterize the setting immediately beneath the pavement or extant building foundations within the Project Site. The fill sediments have likely replaced, either partially or fully, the Pleistocene-aged deposits that once formed the surface and have the potential to contain Native American archaeological resources. It has been demonstrated at some sites in the greater Los Angeles area that Native American artifacts can be preserved and recovered from within sediments designated as fill, but in each of these examples this occurs when there is an underlying deposit preserved within the naturally deposited sediments. Given that the surface of the Project Site has been completely developed, Native American archaeological deposits that may have once been on the surface or shallowly buried are less likely to have been preserved, and if they are, they would be identified as isolated objects that have been moved from their original locations. Based strictly on the age of sedimentary deposits in the underlying sediments that are described by regional geologic mapping, a deeply buried Native American archaeological site is very unlikely to be present in the older Pleistocene sedimentary units. This assessment is based primarily on regional geological mapping, which may not reflect smaller scale variations within the Project Site. The geotechnical report reviewed for this project does not contain sufficient information to confirm the presence of fill within the Project Site, but the looser sediments noted as being present in the geotechnical testing are indicative of fill.

To summarize, no known archaeological sites or resources associated with Native Americans have been identified within the Project Site. Historical maps and ecological reconstructions indicate that natural resources important to Native American communities were once located near the Project but the Project Site is not close enough to these resources to result in an increased sensitivity for Native American affiliated archaeological resources. No evidence was identified to suggest the Project Site once contained a specific natural resource or had a topographic position that would have focused Native American activities and increased the likelihood of material remains from those activities being deposited. Naturally deposited alluvial sediments that are Holocene in age have the best potential to contain a buried Native American affiliated archaeological resources, whereas the older Pleistocene sediments mapped in this part of the Los Angeles Basin are likely too old to contain Native American objects or sites. Land development within the Project Site during the early to middle twentieth century has altered the physical setting and likely destroyed or displaced any tribal cultural resource that may have once been present on the surface or been shallowly buried. Where extant buildings exist, the sediments with the best potential to contain a Native American affiliated archaeological resource would have been excavated and the archaeological sensitivity is clearly low or absent altogether. The geotechnical testing was limited in its assessment of sediments within the Project Site, so it is possible that pockets of Holocene-aged alluvium may still exist, i.e., outside of extant or former building footprints where the land-development activities were relatively shallow. Also, buried Native American resources may even be recovered from within those modified surficial sediments. Thus, the potential for a Native American affiliated archaeological resource cannot be completely ruled out. However, the lack of substantial evidence suggesting the Project Site was intensively used by Native Americans, coupled with the known poor preservation conditions caused by the historical development of the Project Site throughout the twentieth century, indicates that **the overall sensitivity for archaeological resources affiliated with Native Americans within the Project Site is low.**

Historical Archaeological Sensitivity

One historical archaeological site (i.e., those not affiliated with Native Americans) was identified in the CHRIS search conducted within a 0.8-km (0.5-mile) radius of the Project Site. This site included structural remnants and refuse deposits associated with early twentieth century developments which were uncovered during the construction of a nearby property. Historical archaeological sites are commonly identified within the Los Angeles Basin and two others have been noted in the Hollywood area, 0.74 miles (1.19 km) to the west and 1.02 miles (1.65 km) to the east of the Project Site

The Project Site was originally developed for residential purposes before being converted largely to commercial uses between the 1920s and the 1950s. The Project Site contains eight extant buildings, one of which, the Sunset Vine Tower, will remain and seven of which will be demolished. Of the seven buildings that will be demolished, six were built between 1911 and 1945 and one was built in 1971. Several of the residential development which once existed within the Project Site were demolished and replaced with parking. The Project Site is thought to contain at least several feet of fill which would be associated with the early and mid-twentieth century development of the Project Site; however, currently there is not sufficient subsurface data to either confirm or deny the presence or depth of the fill within the Project Site.

Within the areas proposed for ground disturbance, several of the buildings that are planned for demolition within the Project Site, specifically those along Sunset Boulevard and Leland Way, were part of the original development of the block. Additionally, there has been no major redevelopment of the area throughout the twentieth or the twenty-first century. When original buildings were demolished, in most instances they were not replaced with new buildings and instead were replaced with parking lots. The only exception to this appears to be the development at 1460 Vine Street. The development in this lot was redeveloped sometime in the second half of the twentieth century, although the redevelopment appears to have taken place in the direct footprint of the original structure.

Due to the residential nature of the Project Site in the early twentieth century, and the fact that much of the site has been capped with parking lots, there is a high likelihood that intact deposits could remain within the Project Site. The paved areas between the extant structures along Sunset Boulevard and those along Leland Way represent the portion of the property that would have been where the backyards and ancillary structures of the residential developments would have been located. As such, these areas would have the highest likelihood of encountering refuse pits, which are most often associated with residential setting. Although surficial deposits likely would have been disturbed during grading and paving for the parking lot, paving also has the ability to cap subsurface deposits that otherwise remain intact and could contain interpretable historical archaeological data. Additionally, the pavement could have capped other types of historic features, such as structural remains of the buildings which previously existed, particularly in the southwestern corner of the Project Site and between the two extant structures along Leland Way, where residences once existed.

The areas below the seven existing buildings planned for demolition would have a lower level of sensitivity than the paved areas, because they largely represent the first development of the block so the chances of encountering structural remains of previous development or other historical deposits is minimal; however, as indicated by the research done for this report, historic deposits can still be present beneath existing properties so the possibility of encountering historical deposits in these areas cannot be ruled out. As such, the sensitivity within the Project Site is found to be moderate to high across the Project Site.

On the basis of the land-use history, SWCA assessed the historical archaeological sensitivity across the Project Site, designating areas of moderate and high sensitivity (Figure 19). The moderate sensitivity

areas are those within the footprint of extant buildings where the excavation for the foundations of the structures has likely removed previously deposited materials. The high sensitivity areas are those areas which have been capped by extant parking lots. The area below Sunset Vine Tower has not been analyzed as this portion of the Project Site will not be subject to ground disturbance.

To summarize, SWCA finds the Project Site contains areas of **moderate to high sensitivity for containing historical archaeological resources**. The Project Site likely contains fill, within which historic resources could be present, especially refuse pits and the foundations of former buildings and structures from 1900 and 1950. Specifically, SWCA finds that the paved areas of the Project Site contain areas with high sensitivity for historical archaeological resources, while the area below the extant buildings has a moderate sensitivity. This sensitivity analysis does not include the area below the extant Sunset-Vine Tower, which will not be impacted as part of the Project. Individual pieces of refuse and fragments of building materials may also occur essentially anywhere in the fill sediments, even areas of low sensitivity, but will likely exhibit substantial variation in their integrity.

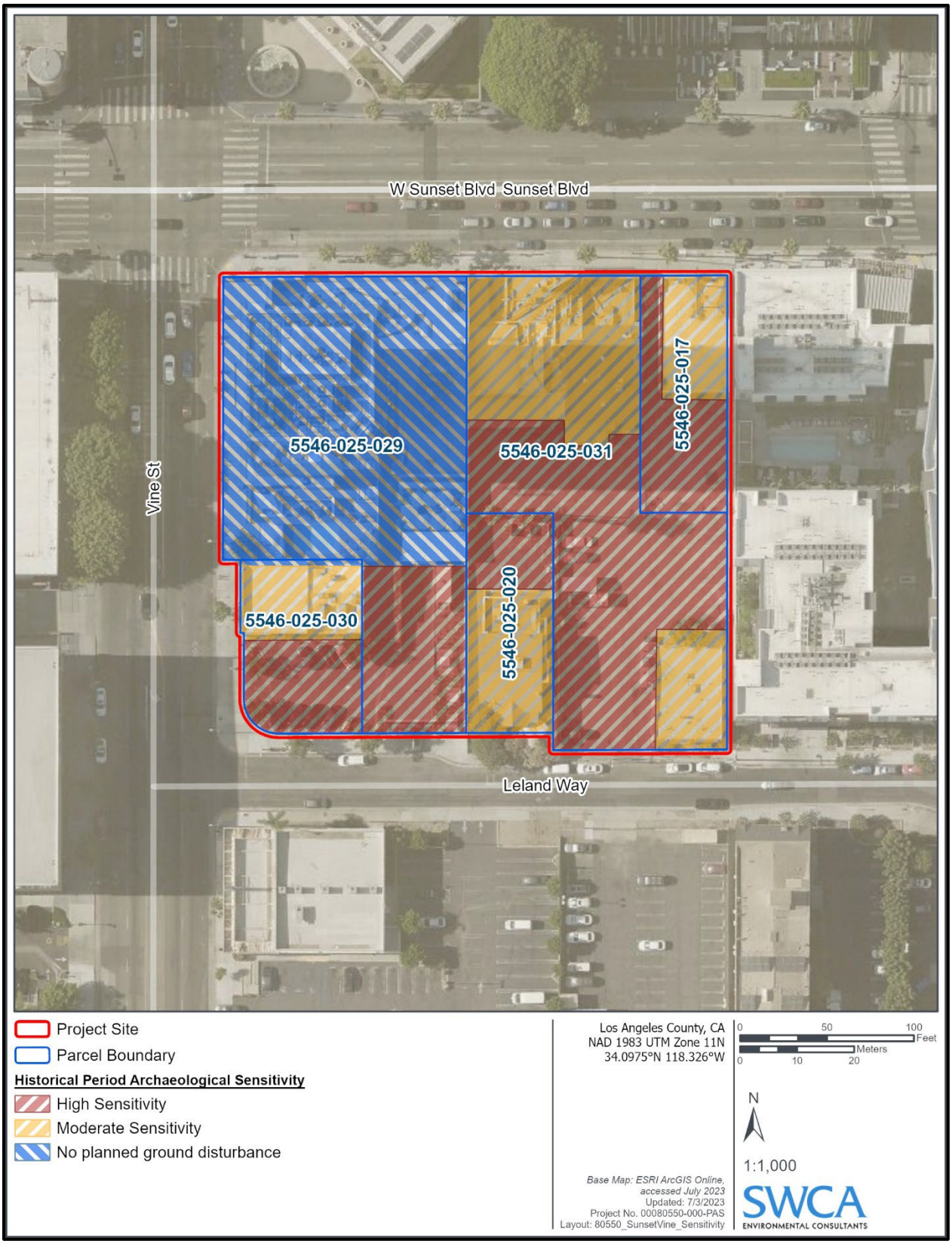

Figure 19. Map showing areas of historical archaeological sensitivity within the Project Site.

DISCUSSION OF RESOURCE SIGNIFICANCE AND IMPACT ANALYSIS

Resource Significance

No previously recorded archaeological resources have been identified within the Project Site. The depth of excavation for the Project is assumed to extend at least 11 m (36 feet) below grade. The potential for as-yet unidentified archaeological resources within the Project Site was assessed based on available evidence and is found to include areas of low, moderate, and high sensitivity, particularly for archaeological resources associated with early twentieth century residential land use. Specifically, the types of archaeological resources most likely to be encountered during ground disturbance include historical trash deposits, building materials, privies, and structural remains, from the early to mid-twentieth century. While the significance of any archaeological resource that may be preserved as a buried deposit within the Project Site cannot be evaluated until it is encountered, this section considers the typical considerations given to the historical archaeological resources determined most likely to occur.

Significance for historical archaeological deposits associated with residential land use is typically found under Criterion 4, but significance can also be found eligible under Criteria 1 and 2 where the archaeological materials can be correlated with a historically significant event or person. Establishing the significance of an archaeological deposit under Criteria 1 or 2 would depend on the nature of the materials and additional background research that make the associations more explicit. The nature of historical refuse scatters and building foundations are such that they are not commonly found eligible for the CRHR under Criterion 3—i.e., refuse scatters and buildings foundations do not typically convey any distinctive characteristics in type, period, region, or method, and are not the focus of masterful design or artistry. As such, considerations under Criterion 3 are omitted from the discussion below.

Determining the integrity and the extent (horizontal and vertical) of any identified archaeological remains is an important component of CRHR eligibility evaluation. Information on the horizontal distribution and vertical depth of the cultural material provides baseline data about the site (e.g., size, presence or absence of subsurface components, discrete activity areas) that contribute to a determination of the site's integrity. For an archaeological site to be considered CRHR eligible, it must be considered significant under the CRHR criteria for evaluation and possess the quality of integrity (location, design, setting, materials, workmanship, feeling, and association). The integrity of an archaeological site, particularly the elements of location, setting, and association, can be seriously impacted by disturbance due to natural or cultural transformations.

CRHR Criteria 1 and 2. An archaeological site can be found significant where a direct association can be demonstrated with a historically significant event (Criterion 1) or person (Criterion 2). No known historically significant events or persons were identified that have direct associations with the location of the Project Site. Additional archival research would be required in order to assess whether any archaeological materials identified in the Project Site (if present) are significant under Criteria 1 and 2. The same integrity considerations described under Criterion 4 would equally apply when determining CRHR eligibility under Criteria 1 and 2. For any refuse deposits or building foundations identified in the Project Site, the CRHR eligibility under Criteria 1 and 2 is considered to be unlikely compared to Criterion 4, but cannot be categorically ruled out.

CRHR Criterion 4. Properties that are significant under Criterion 4 have yielded, or have the potential to yield, information important to the history of the local area, California, or the nation. The Project Site has a history of residential uses beginning in the first decade of the twentieth century that continued to around the 1950s, with multiple cycles of demolition and construction in the subsequent decades. Although much

is known about Los Angeles history in general, questions remain about the details of daily life, especially where it concerns life during the population booms in the early twentieth century, and through the Great Depression. Archaeological deposits that date to this period have the potential to contribute to our understanding of the City during this time period.

When historical archaeological investigations integrate both archival and archaeological data sets, they are even better positioned to meet this potential. Archaeological materials from refuse deposits could provide household- and community-level data, although certain types of data have the potential to answer some research questions better than others. For instance, economic status and consumer choices can be ascertained through an analysis of household artifacts, and the spatial organization of a property can be understood through analysis of structural remains. Refuse from household activities is one of the main sources of archaeological information in historically settled areas. Refuse can be discarded during everyday activities or can be intentionally deposited in disposal areas. Concentrated disposal areas such as privies, trash pits, and wells constitute one of the best sources of information on residents and their behavioral patterns. Therefore, archaeological resources associated with the residences once located on the Project Site are likely to contribute to our understanding of history and rise to the level of significance under Criterion 4. However, assessing the integrity of archaeological materials is important for establishing the eligibility of sites under Criterion 4.

The integrity of any refuse deposits or building foundations depends on whether surfaces or features are preserved, and also includes the potential for identifying and analyzing horizontal and vertical spatial patterning in past behavior. If post-depositional natural or cultural processes have disturbed the context of the artifacts, potential information can be lost or its value highly compromised. As a result, a site with poor integrity often has a diminished capacity to yield information important in history (Criterion 4). Exploring both the horizontal and vertical aspects of the site allows for an evaluation of the information potential of the site and determination of the level of disturbance, if any.

To summarize, evaluations under Criterion 4 should consider whether the archaeological data can contribute to important historic research topics, which for the Project Site could be patterns in historic settlement, demography, consumer behavior, and the nature of land use in the beginning of the twentieth century. This evaluation should factor in existing documentary evidence and integrity of the archaeological remains identified.

Unique archaeological resource. For a historical archaeological refuse scatter or building foundation to be considered a unique archaeological resource, it must contain information needed to answer important scientific research questions of public interest, possess a unique quality such as being the oldest or best example of a resource type, or be directly associated with a scientifically recognized important historic event or person. A historic archaeological site that does not meet the significance threshold for any CRHR eligibility criteria is unlikely to be considered a unique archaeological resource.

Impact Analysis

Human Remains

There was no evidence identified to indicate there are human remains interred in the Project Site, but the discovery of human remains is always a possibility during ground disturbances. Section 7050.5 of the State of California Health and Safety Code states that no further disturbance shall occur until the Los Angeles County coroner has determined the origin and requisite disposition of the remains pursuant to PRC 5097.98. The Los Angeles County coroner must be notified of the find immediately. If the human remains are determined to be Native American, the coroner will notify the NAHC, who will determine and notify an MLD. The MLD shall complete the inspection of the site within 48 hours of notification and

may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. By adhering to these existing regulations, SWCA finds the potential for impacts to human remains would be less than significant.

Archaeological Resources

The Project requires the excavation and removal of the underlying alluvial sediments below the current grade. At a minimum, any sediments designated as fill within the Project Site have moderate sensitivity for archaeological resources that have the potential to be significant under CEQA. Specifically, there is a potential to encounter objects associated with residential land uses beginning around 1900, especially beneath the extant parking lots within the Project Site. The potential for Native American archaeological resources is characterized as being mostly low but possibly including areas of moderate sensitivity and cannot be completely ruled out as a possibility. If present, archaeological resources identified during ground-disturbing activities for the Project could be used to answer important research questions, would be considered eligible for listing in the CRHR under Criterion 4, and therefore meet the qualifications of a historical resource. Construction at the Project Site would adhere to applicable regulatory compliance measures intended to reduce and avoid creating significant impacts to archeological resources in the event of a discovery during grading, excavation, or other soil-disturbing activities within the Project Site. However, given the moderate to high potential for historical archaeological resources, SWCA recommends the mitigation measures outlined below to ensure that potential impacts to archeological resources that may be present in the Project Site are less than significant.

FEASIBILITY OF PRESERVATION IN PLACE

According to CEQA Guidelines 15126.4(b)(3), preservation in place (i.e., avoidance) is the preferred manner of treatment of a significant archaeological site. If avoidance is not feasible, treatment may include archaeological data recovery (i.e., excavation, laboratory processing, and analysis) to obtain important information and thereby reduce potential impacts under Criterion 4 to less than significant. Architectural documentation of engineered properties may reduce potential impacts under Criterion 3 to less than significant. Treatment options for impacts to archaeological resources eligible under Criteria 1 and 2 typically require the same methodological treatment for resources found eligible under Criterion 4, potentially with more directed and extensive research and analysis components.

Preservation in place may include any of the following: planning construction to avoid archaeological sites; incorporating archaeological sites into a park, greenspace, or open space; covering the archaeological site with a layer of chemically stable soil; and deeding the site into a permanent conservation easement. There are no known, previously recorded archaeological sites identified in the Project Site; therefore, planning for avoidance is not applicable to this Project. Archaeological sensitivity was assessed as moderate and high for portions of the Project Site. The Project design currently includes the demolition of multiple properties, the construction of a new eight-story development, and the construction of one subterranean parking lots which will include substantial amounts of excavation and very likely precludes the potential for incorporating any archaeological sites that may be discovered during construction into a park, greenspace, or open space, protecting the archaeological site under a soil stratum, or deeding the property into a conservation easement. Thus, if a previously unrecorded archaeological resource is identified within the Project Site and found to be significant, it is very unlikely that preservation in place will be a feasible form of mitigation under any of the examples listed in CEQA Guidelines. As a result, mitigation measures, including archaeological data recovery, are proposed in the event that a previously unrecorded archaeological site is identified during construction and found to meet CRHR eligibility.

MANAGEMENT RECOMMENDATIONS AND CONCLUSION

Recommended Mitigation Measures

Under CUL-MM-1, a Qualified Archaeologist would be retained to develop and implement a worker environmental awareness program training, as specified in CUL-MM-2. CUL-MM-3 specifies that an Archaeological Resource Management Plan (ARMP) for the Project shall be prepared by the Qualified Archaeologist and shall include specifications for monitoring activities for ground-disturbing activities during implementation of the Project, which are recommended in CUL-MM-4. At the culmination of monitoring activities, a monitoring report will be prepared, as specified in CUL-MM-5. The recommended mitigation measures are as follows:

- **CUL-MM-1: Retain a Qualified Archaeologist.** Prior to any ground-disturbing activities on the Project Site associated with the proposed Project, the Project Applicant shall retain a Qualified Archaeologist. Ground-disturbing activities include activities such as excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing peat, clearing, driving posts, auguring, backfilling, blasting, stripping topsoil, or a similar activity at the Project Site. A Qualified Archaeologist is defined as one who meets the Secretary of the Interior's Professional Qualifications Standards for archaeology and the Society for California Archaeology's qualifications for a principal investigator.
- **CUL-MM-2: Worker Environmental Awareness Program (WEAP) Training.** Prior to the commencement of ground-disturbing activities, the Qualified Archaeologist shall provide a briefing to construction crews to provide information on archaeological monitoring procedures, regulatory requirements for the protection of archaeological resources, and procedures to follow shall unanticipated discoveries of archaeological resources be made during construction. Workers shall be provided contact information and protocols to follow in the event these discoveries are made. Additionally, workers shall be shown examples of the types of resources that would require notification. A copy of the training materials and a list of attendees shall be provided to City Planning no more than 10 days after completing the training.
- **CUL-MM-3: Prepare an Archaeological Resources Management Plan (ARMP).** Before the commencement of ground-disturbing activities, an ARMP shall be prepared. The ARMP shall include, but not be limited to, monitoring protocol for ground-disturbing activities, a worker training program, and discovery and processing protocol for inadvertent discoveries of cultural resources. The ARMP shall identify areas that require full-time monitoring, including but not limited to, the fill consistent with MM-CUL-4 below, and shall detail a protocol for determining circumstances in which additional or reduced levels of monitoring (e.g., spot checking) may be appropriate, including areas assessed as having moderate and low archaeological sensitivity. Specifically, SWCA recommends that the ARMP include a framework for assessing the geoarchaeological setting to determine whether undisturbed sediments capable of preserving archaeological remains are present adjacent to or beneath those sediments disturbed by agricultural and urban development, as well as the depth at which these undisturbed sediments would no longer be capable of containing archaeological material.

  The ARMP shall summarize the requirements for tribal coordination in the event of an inadvertent discovery of Native American archaeological resources, including the applicable regulatory compliance measures, conditions of approval, or mitigation measures established for the inadvertent discovery of tribal cultural resources to be carried out in concert.
- **CUL-MM-4: Monitor for Archaeological Resources.** Monitoring shall occur during ground disturbance for the Project, including excavation within fill, and shall be directed and supervised

by the Qualified Archaeologist. As specified in the ARMP, the frequency of monitoring will be adjusted based upon the rate of ground-disturbing activities, expected archaeological sensitivity, and preliminary results. The monitor shall have the authority to temporarily halt or redirect construction activities in soils that are likely or observed to contain potentially significant archaeological resources, as determined by the Qualified Archaeologist. The monitor shall complete a daily log documenting construction activities and observations. In the event that potentially significant archaeological resources are exposed during construction, work in the immediate vicinity of the find (within 8 m [25 feet]) shall stop until a Qualified Archaeologist can evaluate the significance of the find. Construction activities may continue in other areas in coordination with the Qualified Archaeologist. If the discovery is determined by the Qualified Archaeologist to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to PRC 21083.2(g), and the treatments proposed in the ARMP are found to be infeasible or other alternatives are proposed, the Qualified Archaeologist shall coordinate with the Project proponent and City Planning to amend the ARMP with a formal treatment plan that would reduce impacts to the resource(s). The treatment plan established for the resource(s) shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment and if it is determined avoidance is not feasible, treatment may include architectural documentation and archaeological data recovery (i.e., excavation, laboratory processing and analysis) to remove the resource(s) and reduce potential impacts to less than significant.

- **CUL-MM-5: Report Monitoring Results.** After archaeological monitoring is completed, the Qualified Archaeologist shall prepare a technical report documenting the methods and results of all work completed under the ARMP, including, if any, treatment of archaeological materials; results of artifact processing, analysis, and research; and evaluation of the resource(s) for the CRHR. If archaeological materials are identified and collected for laboratory analysis, once the analysis is complete, any recovered archaeological materials shall be curated at a public, non-profit research institution that shall ensure their long-term preservation and allow access to interested scholars. If no such institutions accept the materials, they shall be donated to an educational institution or historical society. The format and content of the report shall follow the California Office of Historic Preservation's *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format*. Any archaeological resources identified shall be documented on appropriate California Department of Parks and Recreation 523-Series Forms. The report shall be prepared under the supervision of a Qualified Archaeologist and submitted to the Project Applicant. The timing and content of the final report shall consider the quantity of archaeological materials, level of analysis required, and documentation needed to establish the significance of any identified resources. The final draft of the report shall be submitted to the SCCIC.

Conclusion

SWCA finds that **potential impacts to archaeological resources would be reduced to less than significant with mitigation**.

REFERENCES CITED

Akins, Damon B., and William J. Bauer Jr.
2021 *We are the Land: A History of Native California.* University of California Press, Oakland, California.

Altschul, Jeffrey H., Richard Ciolek-Torrello, and Jeffrey A. Homburg
1992 Late Prehistoric Change in the Ballona Wetland. In *Archaeological Investigations of Some Significant Sites on the Central Coast of California*, edited by Herb Dallas, Jr., and Gary S. Breschini, pp. 89–108. Archives of California Prehistory No. 37, Gary S. Breschini and Trudy Haversat, general editors. Coyote Press, Salinas, California.

Altschul, Jeffrey H., John G. Douglass, Richard Ciolek-Torrello, Sarah Van Galder, Benjamin R. Vargas, Kathleen L. Hull, Donn R. Grenda, Jeffrey Homburg, Manuel Palacios-Fest, Steven Shelley, Angela Keller, and David Maxwell
2007 Life at the Nexus of the Wetlands and Coastal Prairie, West Los Angeles. *Proceedings of the Society for California Archaeology* 20:34–42.

Anderson, M. Kat
2005 *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources*. University of California Press, Berkeley, California.

Ascher, Robert
1959 A Prehistoric Population Estimate using Midden Analysis and Two Population Models. *Southwestern Journal of Anthropology* 15(2):168.

Ashby, G. E., and J. W. Winterbourne
1966 A Study of Primitive Man in Orange County and Some of Its Coastal Areas. *Pacific Coast Archaeological Society Quarterly* 2(1):5–52.

Bancroft, Hubert Howe
1886 *History of California, Volume 1, 1542-1800*. The History Company Publishers, San Francisco, California.

Bean, Lowell J.
1995 Gabrielino/Tongva. In *Native America in the Twentieth Century: An Encyclopedia*, edited by Mary B. Davis, pp. 205. Garland Publishing, Inc., New York.

Bean, Lowell J., and Charles R. Smith
1978 Gabrielino. In *California,* edited by Robert F. Heizer, pp. 538–549. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution Press, Washington, DC.

Beattie, George William
1942 Battle of Chino. *The Quarterly: Historical Society of Southern California*. 24(4):143–160.

Bedrossian, Trinda L., Peter Roffers, Cheryl A. Hayhurst, Jeremy T. Lancaster, and William R. Short
2012 *Special Report 217: Geologic Compilation of Quaternary Surficial Deposits in Southern California* (2012 Revision). California Department of Conservation.

Berger, Rainer, Reiner Protsch, Richard Reynolds, Charles Rozaire, and James R. Sackett
1971 New Radiocarbon Dates based on Bone Collagen of California Paleoindians. *Contributions of the University of California Archaeological Research Facility* 12:43–49.

Bertao, David E., and Eduardo M. Dias
1987 "El Portuguese": Don Antonio Rocha California's First Portuguese Sailor. *California History* 66(3):188–195.

Blackburn, Thomas
1963 *Ethnohistoric Descriptions of Gabrielino Material Culture.* Annual Report, Archaeological Survey. University of California, Los Angeles.

1976 Ceremonial Integration and Social Interaction in Aboriginal California. In *Native Californians: A Theoretical Retrospective*, edited by Lowell John Bean and Thomas C. Blackburn, pp. 225-244. Ballena Press, Menlo Park.

Boscana, Friar Gerónimo, O.F.M.
1978 *Chinigchinich: A Revised and Annotated Version of Alfred Robinson's Translation of Father Gerónimo Boscana's Historical Account of the Belief, Usages, Customs and Extravagancies of the Indians of this Mission of San Juan Capistrano Called the Acagchemem Tribe*. Phil T. Hanna, editor. Reprinted. Classics in California Anthropology No. 3. Malki Museum Press, Morongo Indian Reservation, California. Originally published 1933, Fine Arts Press, Santa Ana, California.

Braje, T. J., J. M. Erlandson, and T. C. Rick
2013 Points in Space and Time: The Distribution of Paleocoastal Points and Crescents on the Northern Channel Islands. In *California's Channel Islands: The Archaeology of Human-Environment Interactions*, edited by C. S. Jazwa and J. E. Perry, pp. 26–39. University of Utah Press, Ann Arbor, Michigan.

Brooks, Sheilagh, Richard A. Brooks, G. E. Kennedy, J. Austin, James R. Firby, Louis A. Payen, Peter J. Slota, Jr., Christine A. Prior, and R. E. Taylor
1990 The Haverty Human Skeletons: Morphological, Depositional, and Geochronological Characteristics. *Journal of California and Great Basin Anthropology* 12(1):60–83.

Byrd, Brian F., and L. Mark Raab
2007 Prehistory of the Southern Bight: Models for a New Millennium. In *California Prehistory*, edited by Terry L. Jones and Kathryn A. Klar, pp. 215–228. Altimira Press, Lanham, Maryland.

California Office of Historic Preservation
1991 Guidelines for Archaeological Research Design. Preservation Planning Bulletin, No. 5. California Office of Historic Preservation, Sacramento, California.

Campbell, R.H., C.J. Wills, P.J. Irvine, and B.J. Swanson
2014 Preliminary geologic map of the Los Angeles 30' x 60' quadrangle, California, Version 2.1. California Geological Survey, scale 1:100,000.

Caughey, John, and LaRee Caughey
1977 *Los Angeles, Biography of a City.* University of California Press, Berkeley and Los Angeles.

Ciolek-Torello, Richard, and Christopher Garraty
2016 Site Function, Settlement, and Community Organization in the Ballona. In *People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California. Volume 5: Gabrielino/Tongva Origins and Development: A View from Guaspet*, edited by J. Douglass, S. Reddy, R. Ciolek-Torello, and D. Grenda, pp. 61–151. Statistical Research, Inc., Tucson, Arizona.

Ciolek-Torello, Richard, Holly Warner, and John Goodman
2010 *The NBC Universal Evolution Plan: Cultural Resource and Paleontological Studies, Universal City, Los Angeles, California*. Technical Report 07-14. Statistical Research, Inc., Redlands, California.

City of Los Angeles
2001 *Conservation Element of the City of Los Angeles General Plan.* City Plan Case No. 2001-0413-GPA, Council File No. 01-1094.

Cleland, Robert Glass
1941 *The Cattle on a Thousand Hills: Southern California, 1850-80*. The Huntington Library, San Marino, California.

Cleland, James H., Andrew L. York, and Lorraine M. Willey
2007 *Piecing Together the Prehistory of Landing Hill: A Place Remembered.* EDAW Cultural Publications No. 3. EDAW, Inc., San Diego, California.

Connolly, T. J., J. M. Erlandson, and S. E. Norris
1995 Early Holocene Basketry and Cordage from Daisy Cave San Miguel Island, California. *American Antiquity*, pp. 309–318.

Dakin, Susanna Bryant
1978 *A Scotch Paisano in Old Los Angeles: Hugo Reid's Life in California, 1832-1852 Derived from His Correspondence*. Originally published 1939. University of California Press, Berkeley, Los Angeles, and London, United Kingdom.

Dark, Shawna, Eric D. Stein, Danielle Bram, Joel Osuna, Joeseph Montegerante, Travis Longcore, Robin Grossinger, and Erin Beller
2011 *Historical Ecology of the Ballona Creek Watershed*. Southern California Coastal Water Research Project. Technical Report 671. Electronic PDF version of report and geospatial data. Available at: http://www.ballonahe.org.

Davis, Emma L.
1975 The Expanded Archaeology of China Lake, California. *American Antiquity* 40:39–53.

Davis, Troy, Jon Erlandson, Gerrit Fenenga, and Keith Hamm
2010 Chipped Stone Crescents and the Antiquity of Maritime Settlement on San Nicolas Island, Alta California. *California Archaeology* 2(2):185–202.

Dietler, John, Heather Gibson, and Benjamin Vargas
2018 "A Mourning Dirge was Sung": Community and Remembrance at Mission San Gabriel. In *Forging Communities in Colonial Alta California*, edited by Kathleen L. Hull and John G. Douglass, pp. 62–87. University of Arizona Press, Tucson, Arizona

Dillon, B. D.
1994 *Alameda District Plan, Los Angeles, California: Prehistoric and Early Historic Archaeological Research*. On file, South Central Coastal Information Center, Department of Anthropology, California State University, Fullerton.

2002 California Paleoindians: lack of evidence, or evidence of lack. In *Essays in California Archaeology: A Memorial to Franklin Fenenga,* edited by William J. Wallace and Francis A. Riddell, pp. 110–128. Contributions of the University of California Archaeological Research Facility No. 60. University of California.

Douglass, John G., Jeffrey H. Altschul, and Richard Ciolek-Torello (editors)
2005 *Overlooking the Wetlands: Archaeological Investigations at the West Bluff Project, CA LAN-63, CA-LAN-64, and CA-LAN-206A, Playa del Rey, California.* 2 vols. Draft. Technical Report 05-93. Statistical Research, Inc., Redlands, California.

Douglass, John G., Seetha N. Reedy, Richard Ciolek-Torello, and Donn R. Grenda, editors
2016 People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California. Volume 5: *Gabrielino/Tongva Origins and Development: A View from Guaspet.* Submitted to U.S. Army Corp of Engineers, Los Angeles. SRI Technical Series 94, Statistical Research, Inc., Tucson, Arizona.

Drover, Christopher E.
1971 Three Fired-Clay Figurines from 4-Ora-64, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 7(4):73–86.

1975 Early Ceramics from Southern California. *The Journal of California Anthropology* 2(1):101–107.

Drover, Christopher E., Henry C. Koerper, and Paul E. Lagenwalker II
1983 Early Holocene Adaptations on the Southern California Coast: A Summary Report of Investigations at the Irvine Site (CA-ORA-64), Newport Bay, Orange County, California. Pacific Coast Archaeological Society, Santa Ana, California.

Dumke, Glenn S.
1944 *The Boom of the Eighties in Southern California.* Huntington Library Publications, San Marino, California.

Engelhardt, Zephyrin
1927 *San Gabriel Mission and the Beginning of Los Angeles*. Mission San Gabriel, San Gabriel, California.

Erlandson, Jon M.
1991 Early Maritime Adaptations on the Northern Channel Islands. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by J. M. Erlandson and R. Colten, pp. 101–112. Perspectives in California Archaeology, Vol. 1. Institute of Archaeology, University of California, Los Angeles.

1994 Early Hunter-Gatherers of the California Coast. Plenum Press, New York.

2013 Channel Island amol points: a stemmed paleocoastal type from Santarosae Island, Alta California. *California Archaeology 5*(1):105–121.

Erlandson, J. M., and M. A. Glassow (Editors)
1997 *Archaeology of the California Coast During the Middle Holocene*. Institute of Archaeology, University of California, Los Angeles.

Erlandson, J. M., and T. J. Braje
2008 Five Crescents from Cardwell: The Context of Eccentric Crescents from CA-SMI-679, San Miguel Island, California. *Pacific Coast Archaeological Society Quarterly* 40(1):35–45.

Erlandson, J. M., and R. H. Colton
1991 An Archaeological Context for Early Holocene Studies on the California Coast. In *Hunter-Gatherers of Early Holocene Coastal California*, pp. 1–10. Institute of Archaeology, University of California, Los Angeles.

Erlandson, J. M., T. Cooley, and R. Carrico
1987 A Fluted Projectile Point Fragment from the Southern California Coast: Chronology and Context at CA-SBA-1951. *Journal of California and Great Basin Anthropology* 9:120–128.

Erlandson, J. M., Torben C. Rick, Terry L. Jones, and Judith F. Porcasi
2007 One if by Land, Two if by Sea: Who Were the First Californians? In *California Prehistory: Colonization, Culture, and Complexity,* edited by Terry L. Jones and Kathryn A. Klar, pp. 53–62. Altamira Press, Lanham, Maryland.

Erlandson, J. M., T. J. Braje, K. M. Gill, and M. H. Graham
2015 Ecology of the Kelp Highway: Did Marine Resources Facilitate Human Dispersal from Northeast Asia to the Americas? *The Journal of Island and Coastal Archaeology* 10(3):392–411.

Erlandson, J. M., D. J. Kennett, L. Ingram, D. Guthrie, D. Morris, M. Tveskov, G. West, and P. Walker
1996 An Archaeological and Paleontological Chronology for Daisy Cave (CA-SMI-261), San Miguel Island, California. *Radiocarbon* 38(2):355–373.

Erlandson, J. M., A. F. Ainis, T. J. Braje, B. J. Culleton, K. M. Gill, C. A. Hofman, D. J. Kennett, L. A. Reeder-Myers, and T. C. Rick
2020 Maritime Paleoindian Technology, Subsistence, and Ecology at an ~11,700 year old Paleocoastal site on California's Northern Channel Islands, USA. *PLOS One* 15(9):e0238866.

Erlandson, J. M., T. C. Rick, T. J. Braje, M. Casperson, B. Fullfrost, T. Garcia, D. A. Guthrie, N. Jew, M. L. Moss, L. Reeder, J. Watts, and L. Willis
2011 Paleoindian Seafaring, Shell Middens, and Maritime Technologies on California's Northern Channel Islands. *Science* 331:1181–1185.

Ethington, Philip J., Beau MacDonald, Gary Stein, William Deverell, and Travis Longcore
2020 *Historical Ecology of the Los Angeles River Watershed and Environs: Infrastructure for a Comprehensive Analysis*. Spatial Sciences Institute, University of Southern California, Los Angeles, California.

Fitzgerald, Richard T., and Michael Rondeau
2012 A Fluted Projectile Point from Crystal Cove State Park, Orange County, Alta California. *California Archaeology* 4(2):247–256.

Fuller, B. T., J. R. Southon, S. M. Fahrni, J. M. Harris, A. B. Farrell, G. T. Takeuchi, O. Nehlich, M. P. Richards, E. J. Guiry, and R. E. Taylor
2016 Tar Trap: No Evidence of Domestic Dog Burial with "La Brea Woman." *PaleoAmerica* 2(1):56–59.

Fredrickson, D. A.
1973 Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation. Department of Anthropology, University of California, Davis.

1974 Cultural Diversity in Early Central California: A View from the North Coast Ranges. *Journal of California Anthropology* 1:41–53.

1994 Spatial and Cultural Units in Central California Archaeology. In *Toward a New Taxomomic Framework for Central California Archaeology*. Edited by Richard E. Hughes, pp. 25–47. University of California Archaeological Research Facility Contributions No. 51, Berkeley.

Gamble, L. H.
2008 *The Chumash World at European Contact: Power, Trade, and Feasting among Complex Hunter-Gatherers*. University of California Press, Berkeley and Los Angeles, California.

Glassow, M. A.
1997 Middle Holocene Cultural Development in the Central Santa Barbara Channel Region. In *Archaeology of the California Coast during the Middle Holocene*, edited by J. M. Erlandson and M. A. Glassow, pp. 73–90. Perspectives in California Archaeology, Vol. 4. Institute of Archaeology, University of California, Los Angeles.

Glassow, Michael A., L. Wilcoxon, and J. M. Erlandson
1988 Cultural and Environmental Change During the Early Period of Santa Barbara Channel Prehistory. In *The Archaeology of Prehistoric Coastlines*, edited by G. Bailey and J. Parkington, pp. 64–77. Cambridge University Press, Cambridge, United Kingdom.

Goldberg, Susan K., B.J. Adams, C. Denardo, S.A. Williams, M.J. Wyss, M.C. Robinson, S.L. Martin, M.S. Shackley, T.M. Oringer, J.L. McVicar, and Beta Analytic Inc
1999 *The Metropolitan Water District of Southern California Headquarters Facility Project, The People of Yaanga?: Archaeological Investigations at CA-LAN-1575/H*. Applied EarthWorks, Inc., Hemet, California.

Gumprecht, Blake
2001 *The Los Angeles River: Its Life, Death, and Possible Rebirth*. Johns Hopkins University Press, Baltimore, Maryland.

Gusick, A.E. and J.M. Erlandson
2019 Paleocoastal Landscapes, Marginality, and Initial Settlement of California's Islands. In, *An Archaeology of Abundance: Re-evaluating the Marginality of California's Islands*, edited by K. Gill, J. Erlandson, and M. Fauvelle, pp. 59–97. University of Florida Press, Gainesville.

Gusick A.E., J. Maloney, T.J. Braje, G.J. Retallack, L. Johnson, S. Klotsko, A. Ainis, and J.M. Erlandson
2022 Soils and terrestrial sediments on the seafloor: Refining archaeological paleoshoreline estimates and paleoenvironmental reconstruction off the California coast. *Front. in Earth Sci.* 10:941911. Available at: https://www.frontiersin.org/articles/10.3389/feart.2022.941911/full. Accessed June 2023.

Hackel, Steven
1998 Land, Labor, and Production: The Colonial Economy of Spanish and Mexican California. In *Contested Eden: California Before the Gold Rush*, edited by R. A. Guiterrez and R. J. Orso, pp. 111–146. University of California Press, Berkeley and Los Angeles.

2005 Children of Coyote, Missionaries of Saint Francis: Indian-Spanish Relations in Colonial California, 1769-1850. University of North Carolina Press, Chapel Hill, NC.

Hackel, Steven, Jeanette Zerneke, and Nat Zappia
2015 Early California Cultural Atlas. Available at: http://ecai.org/. Accessed August 10, 2022.

Hall, William Hamilton
1888 *Irrigation in California (Southern)*. Office of State Engineer, Sacramento, California.

Harrington, John P.
1942 Culture Element Distributions: XIX Central California Coast. *University of California Anthropological Records* 7(1):1–46.

Heizer, Robert F.
1968 *Village Names in Twelve California Mission Records.* Reports of the University of California Archaeological Survey 74.

Heizer, Robert F., and Edwin M. Lemert
1947 *Observations on Archaeological Sites in Topanga Canyon, California*. University of California Publications in American Archaeology and Ethnology Vol. 44, No. 2. University of California Press, Berkeley.

Heizer, Robert F., and A. E. Treganza
1972 *Mines and Quarries of the Indians of California*. Ballena Press, Ramona, California.

Herring, Alika K.
1961 Three Unusual Artifacts from Orange County, California. *Science of Man* 1:132.

1968 Surface Collections from ORA-83, a Cogged Stone Site at Bolsa Chica, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 4(3):3–37.

Historic Resources Group (HRG)
2011 *Historic Resources Survey Report, Hollywood Community Plan Area*. Prepared for the City of Los Angeles.

Hodgson, Susan F.
2003 *California Indians, Artisans of Oil*. California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, Sacramento, California.

Homburg, Jeffrey A., John G. Douglass, Seetha N. Reddy (editors)
2014 *People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California. Volume I: Paleoenvironment and Culture History*. Statistical Research, Inc., Redlands, California.

Howard, W. J., and L. M. Raab
1993 Olivella grooved rectangle beads as evidence of an early period Southern Channel Islands interaction sphere. *Pacific Coast Archaeological Society Quarterly* 29(3):1–11.

Hull, Kathleen L.
2011 Archaeological Expectations for Communal Mourning in the Greater Los Angeles Basin. *Journal of California and Great Basin Anthropology* 31:23–36.

2012 Communal Mourning Revisited: A New Appraisal of Old Evidence. *California Archaeology* 4:3–38.

Hull, Kathleen L., and John G. Douglass
2005 Chronology. In *Overlooking the Wetlands: Archaeological Investigations at the West Bluffs Project, CALAN-63, CA-LAN-64, and CA-LAN-206A, Playa del Rey, California,* Vol. 2, edited by John G. Douglass. Technical Report 09-93. Statistical Research, Inc. Redlands, California.

Hull, Kathleen L., John G. Douglass, and Andrew L. York
2013 Recognizing Ritual Action and Intent in Communal Mourning Features on the Southern California Coast. *American Antiquity* 78(1):24–47.

Jenkins, D. L., and J. M. Erlandson
1996 Olivella grooved rectangle beads from a middle Holocene site in the Fort Rock Valley, Northern Great Basin. *Journal of California and Great Basin Anthropology*, pp. 296–302.

Jew, N. P., J. M. Erlandson, and F. J. White
2013 Paleocoastal lithic use on western Santa Rosa Island, California. *North American Archaeologist* 34(1):49–69.

Johnson, J. R.
1987 Chumash Social Organization: An Ethnohistoric Perspective. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Santa Barbara.

Johnson, K. L.
1966 *Site LAN-2: A Late Manifestation of the Topanga Complex in Southern California Prehistory*. Anthropological Records 23. University of California Press, Berkeley.

Johnson, J. R., T. W. Stafford, Jr., H. O. Ajie, and D. P. Morris
2002 Arlington Springs Revisited. In *Proceedings of the Fifth California Islands Symposium*, edited by D. R. Brown, K. C. Mitchell, and H. W. Chaney, pp. 541–545. Santa Barbara Museum of Natural History, Santa Barbara, California.

Johnston, Bernice E.
1957 The Gabrielino Indians of Southern California, Part IX, The Great Valleys. *The Masterkey* 31(2):49–58.

1962 *California's Gabrielino Indians.* Frederick Webb Hodge Anniversary Publication Fund 8, Southwest Museum, Los Angeles, California.

Jones, Terry L., Richard T. Fitzgerald, Douglas J. Kennett, Charles Miksicek, John L. Fagan, John Sharp, and Jon M. Erlandson
2002 The Cross Creek Site and Its Implications for New World Colonization. *American Antiquity* 67:213–230.

Kempton, J. Justin, and Paul R. Schade
2020 Updated Planning-Level Preliminary Geotechnical Investigation Proposed Sunset-Vine SV2 Mixed-Use Development 6266-6270 Sunset Boulevard, 6251-6263 Leland Way, and 1460 North Vine Street Hollywood Area, Los Angeles, California GPI Project No. 2910.2I. Prepared for Sares Regis Group, Newport Beach, California.

King, Chester D.
1962 Excavations at Parker Mesa (LAN-215). In *Archaeological Survey Annual Report for 1961–1962*, pp. 91–155. Department of Anthropology, University of California, Los Angeles.

1967 *Archaeological Investigations of the Hammack Street Site: LAN-194.* On file, California Historical Resources Information System, South Central Coastal Information Center, Department of Anthropology, California State University, Fullerton.

1981 The Evolution of Chumash Society: A Comparative Study of Artifacts Used in Social System Maintenance in the Santa Barbara Channel Region Before A.D. 1804. Unpublished Ph.D. dissertation, University of California, Davis.

1990 Evolution of Chumash Society: A Comparative Study of Artifacts Used in Social System Maintenance in the Santa Barbara Channel Region Before A.D. 1804. Revised Ph.D. dissertation with a new preface and updated bibliography. In *The Evolution of North American Indians*, edited by David Hurst Thomas. Garland Publishing, New York.

2011 *Overview of the History of American Indians in the Santa Monica Mountains.* Topanga Anthropological Consultants, Topanga, California.

Koerper Henry
1979 On the Question of the Chronological Placement of Shoshonean Presence in Orange County, California. *Pacific Coast Archaeological Society Quarterly* 15(3):69–94.

Koerper, Henry C., and Christopher E. Drover
1983 Chronology Building for Coastal Orange County: The Case from CA-ORA-119-A. *Pacific Coast Archaeological Society Quarterly* 19(2):1–34.

Koerper, Henry C., Roger D. Mason, and Mark L. Peterson
2002 Complexity, Demography, and Change in Late Holocene Orange County. In *Catalysts to Complexity, Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 63–81. Perspectives in California Archaeology Vol. 6. Costen Institute of Archaeology, University of California, Los Angeles.

Kowta, Makoto
1961 Excavations at Goleta, SBA-60, Part 2: Artifact Description – Chipped Lithic Material. *Archaeological Survey Annual Report* 1960–1961, pp. 349–384. University of California Los Angeles.

Kroeber, Alfred J.
1925 *Handbook of the Indians of California*. Bulletin 78, Bureau of American Ethnology, Smithsonian Institution. Government Printing Office, Washington, DC. Reprinted 1976 by Dover Publications, Inc., New York.

Kuchler, A. W.
1977 Natural Vegetation of California. Map. California Native Plant Society, Williams and Heintz Map Corporation, Davis, Washington D.C.

Lambert, Vincent
1983 A Surface Collection from the Del Rey Hills, Los Angeles, California. *Journal of New World Archaeology* 5(3):7–19.

Lightfoot, Kent G., and Otis Parrish
2009 *California Indians and Their Environment, An Introduction*. University of California Press, Berkeley and Los Angeles, California.

Los Angeles Times
1935 Magic "Spa" Upsets Park. August 26, 1935. Los Angeles, CA.

Lopatin, I. A.
1940 Fossil Man in the Vicinity of Los Angeles, California. In *Proceedings of the Sixth Pacific Science Congress of the Pacific Science Association, Held at the University of California, Berkeley, Stanford University, and San Francisco, July 24th to August 12th, 1939, Vol. 4*, edited by the Pacific Science Association, pp. 177–181. University of California Press, Berkeley.

Lummis, Charles F.
1909 The Making of Los Angeles. In *Outwest.* Volume 30, Number 4. Outwest Magazine Company. Los Angeles, California.

Macko, Michael E.
1998a *The Muddy Canyon Archaeological Project: Results of Phase II Test Excavations and Phase III Data Recovery Excavations at Archaeological Sites within the Crystal Cove Planned Community, Phase IV, Tentative Tract 15447, San Joaquin Hills, Orange County, California*. Report on file, South Central Coastal Information Center, California State University, Fullerton.

1998b *Executive Summary of Mitigation Measures Implemented Pursuant to the Operation Plan and Research Design for the Proposed Newporter North Residential Development, Huntington Beach, California.*

Mason, Roger D., and Mark L. Peterson
1994 *Newport Coast Archaeological Project: Newport Coast Settlement Systems–Analysis and Discussion,* Vol. 1, part 1 of 2. Prepared by the Keith Companies. Copies on file at the South Central Coastal Information Center, California State University, Fullerton.

Masters, Nathan
2013 Hooray for…Colegrove? Remembering Hollywood's Forgotten Neighbor. Available at: https://www.kcet.org/shows/lost-la/hooray-for-colegrove-remembering-hollywoods-forgotten-neighbor. Accessed April 24, 2023.

McCawley, William
1996 *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning, California.

McLendon, S., and J. R. Johnson
1999 *Cultural Affiliation and Lineal Descent of Chumash Peoples in the Channel Islands and Santa Monica Mountains,* 2 vols. Report submitted to the Archaeology and Ethnography Program, National Park Service. Santa Barbara Museum of Natural History, Santa Barbara.

Meighan, Clement W.
1954 A Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10(2):215–227.

Messick, Peter, and Roberta S. Greenwood
2006 *Archaeological Monitoring Report University High School Project Los Angeles, California*. Prepared for NSA Construction Group, Inc. Prepared by Greenwood and Associates. On file, South Central Coastal Information Center.

Merriam, John C.
1914 Preliminary Report on the Discovery of Human Remains in an Asphalt Deposit at Rancho La Brea. *Science* 40(1023):198–203.

Merriam, Clinton Hart
1955 *Studies of California Indians*. University of California Press. Berkeley, California.

Moratto, M. J.
1984 *California Archaeology*. Academic Press, New York.

Moratto, M. J., Alan P. Garfinkel, Jon M. Erlandson, Alexander K. Rogers, Michael F. Rondeau, Jeffrey Rosenthal, Craig Skinner, Tim Carpenter, and Robert M. Yohe
2011 Fluted and Basally Thinned Concave Base Points of Obsidian in the Borden Collection from Inyo County, Alta California: Age and Significance. *California Archaeology* 10(1):27–60.

Moriarty, J. R., III
1966 Cultural phase divisions suggested by typological change coordinated with stratigraphically controlled radiocarbon dating in San Diego. *The Anthropological Journal of Canada* 4(4):20–30.

Morris, Susan L., John R. Johnson, Steven J. Schwartz, René L. Vellanoweth, Glenn J. Farris, and Sara L. Schwebel
2016 The Nicoleños in Los Angeles: Documenting the Fate of the lone Woman's Community. *Journal of California and Great Basin Anthropology* 36(1):91–118.

Nadeau, Remi
1997 *The Water Seekers.* 4th ed. Revised. Crest Publishers, Santa Barbara, California.

Newcomb, Rexford
1980 Architectural Observations (1822). In *The Old Plaza Church,* compiled and edited by Francis J. Weber, pp. 66–70. Libra Press Limited, Leicestershire, United Kingdom.

Newmark, Harris
1930 *Sixty Years in Southern California: 1853–1913* (3rd Edition). The Riverside Press Cambridge, Cambridge, Massachusetts.

Nolasco, Jasmyn, Mathew Carson, and Russell Shapiro
2023 *Paleontological Resources Technical Report for the Sunset and Vine Project, Los Angeles, California*. On file, SWCA Environmental Consultants, Pasadena, California

Norris, R.M., and R.W. Webb
1990 Geology of California. Second Edition. Santa Barbara, California: John Wiley & Sons, Inc.

Northwest Economic Associates (NEA) and Chester King
2004 *Ethnographic Overview of the Angeles National Forest: Tataviam and San Gabriel Mountain Serrano Ethnohistory*. Prepared for the U.S. Department of Agriculture.

Owen, Thomas J.
1960 The Church by the Plaza: A History of the Pueblo Church of Los Angeles. *The Historical Society of Southern California Quarterly* March:5–28.

Owen, R., F. Curtis, and D. Miller
1964 The Glen Annie Canyon Site, SBA-142, An Early Horizon Coastal Site of Santa Barbara County. *Los Angeles: University of California Archaeological Survey Annual Report* 1963–1964:431–520.

Payen, Louis A.
1970 A Spearthrower (Atlatl) from Potter Creek Cave, Shasta County, California. In *Papers on California and Great Basin Prehistory*, edited by Eric W. Ritter, Peter D. Schulz, and Robert Kautz, pp. 157–170. Center for Archaeological Research at Davis Publication No. 2. University of California, Davis.

Phillips, George Harwood
2010 *Vineyards and Vaqueros*. University of Nebraska Press, Lincoln, Nebraska.

Porcasi, Judith, and Paul Porcasi
2002 New Dates and Data from Archaic Malibu with Some Regional Considerations. *Pacific Coast Archaeological Society Quarterly* 36(4):21–43.

Prosser, Daniel
2016 Los Angeles Citywide Historic Context Statement; Context: Pre-Consolidation Communities of Los Angeles, 1862 – 1932. Prepared for the City of Los Angeles.

Raab, L. M., and W. J. Howard
2002 Modeling Cultural Connections between the Southern Channel Islands and Western United States: The Middle Holocene Distribution of Olivella Grooved Rectangle Beads. In *Proceedings of the Fifth Channel Islands Symposium*, edited by K. Mitchell and C. Mitchell, pp. 590–597. Santa Barbara, California, Santa Barbara Museum of Natural History

Reeder-Myers, L., J. M. Erlandson, D. R. Muhs, and T. C. Rick
2015 Sea level, paleogeography, and archeology on California's Northern Channel Islands. *Quaternary Research*, *83*(2):263–272.

Reid, Hugo
1852 Los Angeles County Indians. Los Angeles Star 1(41)-2(11) 21 February -24 July. (Reprinted in The Indians of Los Angeles County: Hugo Reid's Letters of 1852, edited and annotated by Robert F. Heizer. Southwest Museum, Los Angeles, 1968.)

Rick, T. C., J. M. Erlandson, and R. L. Vellanoweth
2001 Paleocoastal Marine Fishing on the Pacific Coast of the Americas: Perspectives from Daisy Cave, California. *American Antiquity* 66:595–613.

Rick, T.C., J.M. Erlandson, N.P. Jew, and L.A. Reeder-Myers
2013 Archaeological Survey and the search for the Paleocoastal peoples of Santa Rosa Island, California, USA. *Journal of Field Archaeology* 38(4):324–331.

Riddell, F. A., and W. H. Olsen
1969 An Early Man Site I the San Joaquin Valley. *American Antiquity* 34:121–130.

Ríos-Bustamante, Antonio
1992 *Mexican Los Angeles: A Narrative and Pictorial History*. Floricanto Press, Mountain View, California.

Robinson, W. W.
1979 *Land in California: The Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip, Homesteads*. University of California Press, Berkeley.

Rolle, Andrew F.
2003 *California: A History.* Revised and expanded 6th Ed. Harlan Davidson, Wheeling, Illinois.

Rondeau, Michael
2006 Revising the number of reported Clovis points from Tulare Lake, California. *Current Research in the Pleistocene* 23:140–142.

Salls, Roy A.
1986 The La Brea Atlatl Foreshafts: Inferences for the Millingstone Horizon. *Pacific Coast Archaeological Society Quarterly* 22(2):21–30.

1995 The Shobhan Paul Site (CA-LAN-958): Archaeological Investigations of a Coastal Millingstone Horizon Occupation. *Coyote Press Archives of California Prehistory*, No. 43. Coyote Press, Salinas, California.

Sawyer, William A., and Henry C. Koerper
2006 The San Joaquin Hills Venus: A Ceramic Figurine from CA-ORA-1405-B. In *Contributions from Orange County Presented in Remembrance of John Peabody Harrington*, edited by Henry C. Koerper, pp. 13–34. Coyote Press Archives of California Prehistory No. 53. Coyote Press, Salinas, California.

Schiffman, Paula M.
2005 The Los Angeles Prairie. In *Land of Sunshine: An Environmental History of Metropolitan Los Angeles*, edited by William Deverell and Greg Hise, pp. 38–51. University of Pittsburgh Press, Pittsburgh, Pennsylvania.

Seaman, Florence Josephine
1914 A Brief History of Ranch La Brea. *Annual Publication of the Historical Society of Southern California* 9(3): 253–256.

Silliman, Stephen W.
2001 Theoretical Perspectives on Labor and Colonialism: Reconsidering the California Missions. *Journal of Anthropological Archaeology* 20(4):370–407.

Singer, Clay A.
1982 *Cultural Resource Survey and Impact Assessment for Tentative Tract No. 39213, the Former Huntington Hartford Estate in the Hollywood Hills, Los Angeles County, California*. Manuscript on-file, South Central Coastal Information Center, Fullerton, California.

Snow, Jenna and Kathryn McGee
2021 *Cultural Resources Technical Appendix 6266-6270 Sunset Boulevard and 6251-6253 Leland Way, Los Angeles, CA 6263 Leland Way, Los Angeles, CA Los Angeles, CA*. Historic Preservation Consulting, Los Angeles, CA.

Stickel, E. Gary
2000 *A Phase 3 Excavation and Mitigation Report on the Archaeological Site CA-LAN-451, City of Malibu, California*. Prepared for Timber Rock Properties, Santa Monica, California. Environmental Research Archaeologists – A Scientific Consortium.

Stock, Chester
1924 A Recent Discovery of Ancient Human Remains in Los Angeles, California. *Science* 60(1540):2–5.

Stoll, Anne Q., John G. Douglass, and Richard Ciolek-Torrello
2016 The Early Historical Period in the Ballona. In *People in a Changing Land: The Archaeology and History of the Ballona in Los Angeles, California. Volume 5: Gabrielino/Tongva Origins and Development: A View from Guaspet*, edited by J. Douglass, S. Reddy, R. Ciolek-Torello, and D. Grenda, pp. 385–416. Statistical Research, Inc., Tucson, Arizona.

Sutton, Mark Q.
2009 People and Language: Defining the Takic Expansion into Southern California. *Pacific Coast Archaeological Society Quarterly* 41(2 and 3):31–93. Original issue year 2005.

Sutton, Mark Q., and Henry C. Koerper
2009 The Middle Holocene Western Nexus: An Interaction Sphere between Southern California and the Northwestern Great Basin. *Pacific Coast Archaeological Society Quarterly* 41(2–3):1–29.

Taylor, R. E., L. A. Payen, C. A. Prior, P. J. Slota, Jr., R. Gillespie, J. A. J. Gowlett, R. E. M. Hedges, A. J. T. Jull, T. H. Zabel, D. J. Donahue, and R. Berger
1985 Major Revisions in the Pleistocene Age Assignments for North American Human Skeletons by C-14 Accelerator Mass Spectrometry: None Older than 11,000 C-14 Years B.P. *American Antiquity* 50:136–140.

Treganza, Adán E., and Agnes Bierman
1958 *The Topanga Culture: Final Report on Excavations, 1948*. University of California Anthropological Records Vol. 20, No. 2. University of California Press, Berkeley.

Torrence, Bruce L.
1977 *Rancho La Brea*. Los Angeles, California.

1979 Hollywood: The First 100 Years. Hollywood Chamber of Commerce and Fiske Enterprises. Hollywood, California.

True, Delbert L.
1966 *Archaeological Differentiation of Shoshonean and Yuman Speaking Groups in Southern California*. Ph.D. dissertation, Department of Anthropology, University of California, Los Angeles. University Microfilms, Ann Arbor, Michigan.

1993 Bedrock Milling Elements as Indicators of Subsistence and Settlement Patterns in Northern San Diego County, California. *Pacific Coast Archaeological Society Quarterly* 29(2):1–26.

Van Horn, David M.
1987 *Excavations at the Del Rey Site (LAN-63) and the Bluff Site (LAN-64), in the City of Los Angeles*. Archaeological Associates, Sun City, California. Submitted to Howard Hughes Realty, Los Angeles, California.

1990 Marymount Points: A Tanged Arrowhead Series in Coastal Southern California. *Journal of New World Archaeology* 7(4):29–36.

Van Horn, David M., and John R. Murray
1985 *The Loyola Marymount Archaeological Project: Salvage Excavations at LAN-61A–C.* Archaeological Associates, Sun City, California. On file, California Historical Resources Information System, South Central Coastal Information Center, Department of Anthropology, California State University, Fullerton.

Vellanoweth, R. L.
2001 AMS radiocarbon dating and shell bead chronologies: Middle Holocene trade and interaction in western North America. *Journal of Archaeological Science*, 28(9):941–950.

Wallace, W. J.
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11(3):214–230.

1978 Post-Pleistocene Archaeology, 9000 to 2000 B.C. In *California*, edited by Robert F. Heizer, pp. 25–36. Handbook of North American Indians Vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, DC.

Walker, Edwin F.
1952 Five Prehistoric Archaeological Sites in Los Angeles County, California. Publications of the Frederick Webb Hodge Anniversary Publication Fund Vol. 6. Southwest Museum, Los Angeles, California.

Warren, Claude N.
1967 The San Dieguito Complex. A Review and Hypothesis. *American Antiquity* 32(2):168–185.

1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams. *Eastern New Mexico University Contributions in Anthropology* 1(3):1–14, Portales, New Mexico.

Warren, Claude N., and D. L. True
1961 The San Dieguito Complex and its Place in California Prehistory. *Archaeological Survey Annual Report for 1960-1961*, pp. 246–337. University of California, Los Angeles.

Weber, Francis J.
1980 Nuestra Señora de Los Angeles (1966). In *The Old Plaza Church*, *A Documentary History,* compiled and edited by Francis J. Weber, pp. 203–211. Libra Press Limited, Hong Kong.

Wigand, Peter E.
2005 Pollen and Macrobotanical Analysis. In *Overlooking the Wetlands: Archaeological Investigations at the West Bluffs Project, CA-LAN-63, CA-LAN-64, and CA-LAN-206A, Playa del Rey, California*, Vol. 2, edited by John G. Douglass, Jeffrey H. Altschul, and Richard Ciolek-Torrello, pp. 12.1–12.64. Draft. Technical Report 05-93. Statistical Research, Inc., Redlands, California.

Yerkes, R. F., T. H. McCulloh, J. E. Schoellhamer, and J. G. Vedder
1965 Geology of the Los Angeles Basin – an introduction. Geological Survey Professional Paper 420-A.

Yohe, Robert M., II, and Jill K. Gardner
2016 Recently Discovered Clovis Points in Indian Wells Valley on the Naval Air Weapons Station China Lake, Southeastern Alta California. *California Archaeology* 8(1):91–109.

APPENDIX A

California Historical Resources Information System
Records Search Results

PARTIALLY CONFIDENTIAL

South Central Coastal Information Center
California State University, Fullerton
Department of Anthropology MH-426
800 North State College Boulevard
Fullerton, CA 92834-6846
657.278.5395 / FAX 657.278.5542
sccic@fullerton.edu
California Historical Resources Information System
Orange, Los Angeles, and Ventura Counties

6/2/2023 Records Search File No.: 24714.10983

Erica Nicolay
SWCA Environmental Consultants
320 N Halstead St.
Pasadena, CA 91107

Re: Record Search Results for the Sunset and Vine Project (80550)

The South Central Coastal Information Center received your records search request for the project area(s) referenced above, located on the Hollywood, CA USGS 7.5' quadrangle(s). The following reflects the results of the records search for the project area and a ½-mile radius:

As indicated on the data request form, the locations of archaeological resources and reports are provided in the following format: ☐ custom GIS maps ☒ shape files ☐ hand-drawn maps

Archaeological resources within project area: 0	None
Archaeological resources within ½-mile radius: 1	SEE ATTACHED MAP or LIST
Reports within project area: 5	LA-07562, LA-07565, LA-07566, LA-08020, LA-11797
Reports within ½-mile radius: 28	SEE ATTACHED MAP or LIST

Resource Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database (spreadsheet):	☒ 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 (spreadsheet):	☒ 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 (BERD) 2022:	☒ available online; please go to https://ohp.parks.ca.gov/?page_id=30338		
Archaeo Determinations of Eligibility 2022:	☐ enclosed	☐ not requested	☒ nothing listed
Los Angeles Historic-Cultural Monuments	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☒ not available at SCCIC		
Historical Literature:	☒ not available at SCCIC		

GLO and/or Rancho Plat Maps: ☒ not available at SCCIC
Caltrans Bridge Survey: ☒ not available at SCCIC; please go to http://www.dot.ca.gov/hq/structur/strmaint/historic.htm
Shipwreck Inventory: ☒ not available at SCCIC; please go to http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp
Soil Survey Maps: (see below) ☒ not available at SCCIC; please go to http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

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,

Isabela Kott
Assistant Coordinator, GIS Program Specialist

Enclosures:

(X) GIS Shapefiles – 34 shapes
(X) Resource Digital Database (spreadsheet) – 1 line
(X) Report Digital Database (spreadsheet) – 33 lines
(X) Resource Record Copies – (archaeological only) 6 pages
(X) Report Copies – (project area only) 260 pages

APPENDIX B

Native American Heritage Commission
Sacred Lands File Search Results

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

May 22, 2023

Erica Nicolay
SWCA Environmental Consultants

Via Email to: erica.nicolay@swca.com

Re: Sunset and Vine Project, Los Angeles County

Dear Ms. Nicolay:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded 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. I suggest you contact all of those indicated; if they cannot supply information, they might 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 me. 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: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Los Angeles County
5/22/2023

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 — Gabrieleno
Covina, CA, 91723
Phone: (844) 390 - 0787
admin@gabrielenoindians.org

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 — Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231 — Gabrielino
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Christina Conley, Cultural Resource Administrator
P.O. Box 941078 — Gabrielino
Simi Valley, CA, 93094
Phone: (626) 407 - 8761
christina.marsden@alumni.usc.edu

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 — Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

Gabrielino-Tongva Tribe
Charles Alvarez,
23454 Vanowen Street — Gabrielino
West Hills, CA, 91307
Phone: (310) 403 - 6048
roadkingcharles@aol.com

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair
P.O. Box 391820 — Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosa-nsn.gov

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P. O. Box 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 — Cahuilla
San Jacinto, CA, 92581 — Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

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 Sunset and Vine Project, Los Angeles County.