Appendix IS-4

Archaeological Resources Assessment

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320 North Halstead Street, Suite 120
Pasadena, California 91107
Tel 626.240.0587 Fax 626.568.2958
www.swca.com

TECHNICAL MEMORANDUM

To: Bryan Haworth
SCD 1811 Sacramento LLC
c/o Skanska USA Commercial Development Inc.
633 W. 5th Street, Floor 68
Los Angeles, CA 90071

From: David K. Sayre, Project Manager

Date: February 17, 2023

Re: Archaeological Resource Assessment for the 1811 Sacramento Street Commercial Development Project, City of Los Angeles, California

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SCD 1811 Sacramento LLC retained SWCA Environmental Consultants (SWCA) to prepare an archaeological resource assessment for the proposed 1811 Sacramento Street Commercial Development Project (Project), located at 1727–1829 East Sacramento Street (Project Site) in the city of Los Angeles, California. Under the proposed Project, a new commercial development would be constructed that consists of a 15-story building with office space, restaurant space, and retail space. The Project will also include uncovered outdoor areas throughout the Project Site that includes exterior office space, outdoor dining space, a rooftop deck, and an outdoor amenity deck. The Project would remove the existing developments within the Project site, which includes three buildings and hardscaping elements. The Project is subject to environmental review in compliance with the California Environmental Quality Act (CEQA); the environmental documents will be submitted to the City of Los Angeles (City) Department of Planning (City Planning), the lead CEQA agency. We understand that Eyestone Environmental is overseeing the preparation of the environmental documents for CEQA compliance.

The Project site consists of an irregularly shaped group of parcels in the southern portion of the city block between Sacramento Street to the south, Bay Street to the north, Lawrence Street to the west, and Wilson Street to the east (Figure A-1 and Figure A-2).[1] The Project site measures approximately 1.71 acres and comprises two parcels: Assessor's Parcel Numbers (APNs) 5166-030-008 and 5166-030-009. The Project is in Section 3, Township 2 South, Range 13 West, and is plotted on the U.S. Geological Survey (USGS) Los Angeles, California, quadrangle (Figure A-3).

This study pertains only to archaeological resources and distinguishes different types of archaeological sites based on cultural and temporal affiliations, referred to here as Prehistoric and Historic period sites;[2] buildings, structures, objects, and other elements of the historical built environment, as well as tribal

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[1] All figures are included in Attachment A.

[2] For purposes of this report, the terms "archaeological resource" and "archaeological site" will be used synonymously; however, any such references are categorically distinct from a "unique archaeological resource" or "historical resources," as defined under CEQA, and should not be used interchangeably. Additional definitions are provided in subsequent sections.

cultural resources, are not assessed in this study but are addressed in separate technical reports. This report documents the methods and results of a confidential records search of the California Historical Resources Information System (CHRIS), a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC), and archival research used to evaluate the presence or likelihood of archaeological resources within the Project site and to inform the analysis of potential impacts in accordance with Appendix G of the CEQA Guidelines.

This report was prepared by SWCA Project Manager David K. Sayre, B.A. Principal Investigator Chris Millington, M.A., Registered Professional Archaeologist, reviewed this report for quality assurance/quality control. Mr. Millington meets the Secretary of the Interior Professional Qualification Standards in archaeology and the Society for California Archaeology's standards for a principal investigator. Copies of this report are on file with Eyestone Environmental, the Project applicant, City Planning, and the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. All background materials are on file with SWCA's office in Pasadena, California.

REGULATORY SETTING

State Regulations

The Office of Historic Preservation (OHP), a division of the California Department of Parks and Recreation, performs certain duties described in the California Public Resources Code (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). This analysis involves a two-part process. First, the determination must be made 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 defined as follows.

- A resource listed in, or formally determined eligible…for listing in the CRHR (PRC 5024.1, 14 California Code of Regulations [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 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 in 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."

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 (CHLs) 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(c), 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. While 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 are lacking identifiable or important association with specific persons or events of regional or national history (Criteria 1 and 2) or lacking 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: chronologically diagnostic, functionally diagnostic, or exotic artifacts; dateable 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 (CHSC) 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. An HCM, monument, or local landmark is defined in the Cultural Heritage Ordinance as follows (Municipal Code Section 22.171.7).

> [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.

City of Los Angeles General Plan

The Conservation Element of the City of Los Angeles General Plan, adopted in September 2001, contains an objective (II-5) to protect the City's archaeological resources for historical, cultural, research, and/or educational purposes. The Conservation Element establishes a policy to "continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition of property modification activities" (City of Los Angeles 2001:II-5–6).

ENVIRONMENTAL SETTING

The Project site is in 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 (California Geological Survey 2010; Dibblee 1991). It is drained by several major watercourses, including the Los Angeles, Rio Hondo, San Gabriel, and Santa Ana Rivers. The Project site is located approximately 5.5 km (3.4 miles) south of the confluence of the Los Angeles River and the Arroyo Seco. Largely thanks to the reliable flow of water from these sources, the location has been ideal for human habitation, both before and after the arrival of European settlers. The Project site is located at an elevation of approximately 73.2 m (240 feet) above mean sea level.

Historically, the Los Angeles River shifted course with frequency across the basin, flooding the project area through the nineteenth century. The now-channelized course of the Los Angeles River is located approximately 0.6 km (0.4 mile) east of the Project site, though historically the channel has shifted

courses several times during flood events. The first recorded shift of the river occurred in 1815 (Figure A-4) when floodwaters overflowed the former channel, shifting the course at least 0.8 km (0.5 mile) to the southwest, near the present route of Spring Street. That flood is reported to have destroyed structures built as part of the original Los Angeles Pueblo (Gumprecht 2001:139–141) and may have also flooded all or parts of the Native American site of Yaanga, which is believed to have been located nearby (discussed below).

Some of the shifts in the river's course were more dramatic. Before 1825, the river flowed west from what is now downtown Los Angeles and discharged into the Ballona Wetlands in what is now Playa del Rey. The river followed a western course approximated by Washington Boulevard and then turned southwest at the Baldwin Hills, flowing along the northwest-facing side of the slopes—the course now occupied by Ballona Creek (Gumprecht 2001:17). Heavy rains in 1825 caused the channel to overflow its banks and the Los Angeles River shifted its course fully south (Figure A-4), emptying into the bay near San Pedro, where the river has discharged ever since. In subsequent years, the river will frequently shift its course within the southern floodplain, which in some areas measures up to 2 miles wide (Gumprecht 2001:16). However, these more dramatic shifts between the western and southern routes are likely to have occurred during most of the life of the watercourse, and certainly over during the last 13,000 years—the period in which there is evidence of Native Americans in southern California. Flood events such as those recorded in more recent history have produced massive deposits of alluvial sediments within the respective floodplains. Alluvial terraces formed where flooding water eroded into uplifted landforms. In the downtown Los Angeles area, the backslopes in the location of Bunker Hill delineate the edge of the historical floodplain.

Geologic mapping by Campbell et al. (2014) indicates the surface sediments at the Project site are classified as late Pleistocene to possibly early Holocene young alluvial deposits (Qya2). Qya2 generally consists of unconsolidated clay, silt, and sand on floodplains, and are clearly related to ongoing depositional processes. Previous drilling activities for soil borings and vapor probes installations for the Phase II Environmental Site Assessment described sediments within the Project site as generally consisting primarily of sand and gravelly sand, with occasional layers of silty sand and clayey silt/clay extending to a depth of at least 50 feet (White and Blackmer 2020).

Geotechnologies, Inc. (Geotechnologies) conducted a preliminary geotechnical investigation of the Project Site in December 2021 (Varela 2022). As part of this study, Geotechnologies excavated three 8-inch diameter hollow stem auger borings to depths between 30 feet and 55 feet below ground surface (bgs). Of the two bores with depths of 30 feet bgs, one bore is located near the eastern edge of the Project site and one bore is located in the southwest portion of the Project site. The third bore was excavated to a depth of 55 feet bgs and was located near the northern edge of the Project site. This report documents that there is approximately 3 to 7 feet of artificial fill beneath the ground surface. The artificial fill consisted primarily of silty sand, which is yellowish brown to dark brown in color, moist, medium dense and fine grained. The upper alluvial flood deposits that underlie the fill deposits within the Project site extends up to 15 feet bgs based on the data reviewed as part of the geotechnical assessment. The upper alluvial sediments were described as being composed of sand, silty sand and sandy silt, which are yellowish brown to grayish brown in color, moist, medium dense, or stiff and fine to medium grained. Below a depth of 15 feet bgs, the lower and older alluvial soils consist mainly of sands, which are yellowish brown to dark brown in color, moist, dense to very dense, and fine to coarse grained, with interlayered gravel and cobbles (Varela 2022). Within the northernmost boring, located near the northern edge of the Project site, "minor" brick fragments were observed within the artificial fill in the first seven feet bgs (Varela 2022).

CULTURAL SETTING

Native American Archaeological Record

Numerous chronological sequences have been devised to aid in understanding cultural changes within southern California. California prehistory is generally divided into three broad temporal periods (i.e., 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. Numerous chronological sequences were also devised to aid in understanding 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 prehistoric chronology for southern California composed of four sequential horizons: Early Man (Horizon I); Milling Stone (Horizon II); Intermediate (Horizon III); and Late Prehistoric (Horizon IV). The regional prehistoric cultural chronology is summarized in Table 1 (adapted from Wallace 1955, 1978). This original synthesis lacked chronological precision initially; however, the advent of radiocarbon dating in the 1950s allowed researchers to further refine and revise these periods as radiocarbon datasets grew and additional analyses were conducted resulting in more refined chronologies and sequences (e.g., Byrd and Raab 2007:217; Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994; see also Moratto 1984). Additional primary syntheses for southern California prehistory were developed by Warren (1968) and King (1981, 1990), which utilized the growing archaeological datasets of specific subregions within southern California to define increasingly localized cultural sequences.

Table 1. Prehistoric Cultural Chronology

Period	Key Characteristics	Date Range
Early Man	• Diverse mixture of hunting and gathering • Greater emphasis on hunting	ca. 10,000–6000 B.C.
Milling Stone	• Subsistence strategies centered on collecting plant foods and small animals • Extended and loosely flexed burials	6000–3000 B.C.
Intermediate	• Shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods • Trend toward greater adaptation to regional or local resources • Fully flexed burials, placed facedown or faceup, and oriented toward the north or west	3000 B.C.–A.D. 500
Late Prehistoric	• Increase in the use of plant food resources, as well as an increase in land and sea mammal hunting • Increase in the diversity and complexity of material culture • Increased usage of the bow and arrow • Increase in population size, accompanied by the advent of larger, more permanent villages	A.D. 500–ca. 1769

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 American groups included the Chumash to the northwest, the Tatataviam/Alliklik to the north (who traditionally occupied the San Fernando Valley and some of the surrounding areas), the Serrano to the east, and the Luiseño/Juaneño to the south (Figure A-5). There was well-documented interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade.

The name “Gabrielino” (sometimes spelled Gabrieleno or Gabrieleño) is a term designated through Spanish custom, which named local tribes according to the nearest mission. Native Americans near Mission San Gabriel Arcángel, for example, were named “Gabrielino.” By the same token, Native

Americans near Mission San Fernando were historically referred to as Fernandeño (Kroeber 1925:Plate 57). There is little evidence that the people we call Gabrielino had a broad term for their group (Dakin 1978:222). Instead, they reportedly identified themselves as inhabitants of a specific community with locational suffixes; for example, a resident of Yaanga was referred to as a Yabit, much the same way that a resident of New York is called a New Yorker (Johnston 1962:10).

Native words that have been suggested for the broader group of Native Americans indigenous to the Los Angeles region also include Tongva and Kizh, although there is evidence that these terms originally referred to local places or smaller groups of people within the larger group that we now call Gabrielino. Tongva, or Tong-vā (Merriam 1955:77–86), was a term for the people living near Tejon, but the similar sounding Tōŋwe was the name for a village near San Gabriel. Tobikhar may have been used to denote the people living near San Gabriel. It means "settlers," and it may be derived from tobohar or tovaar, meaning "earth" (McCawley 1996:9). Kizh, Kij, or Kichereño (Kroeber 1907:141; Sugranes 1909:29) may be derived from the word meaning "houses." The term was first recorded by Horatio Hale between 1838 and 1842 as the name of the language spoken at San Gabriel Mission (Barrows 1900:12). One of Harrington's (1942) native advisors specifically attached the name to people living in the Whittier Narrows area, near San Gabriel Mission's original location, stating that "Kichereño is not a placename, but a tribename, the name of a kind of people" (McCawley 1996:43).

Many present-day descendants of these people have taken on Tongva and Kizh as a preferred group name, in part because of the Native American rather than Spanish origin (King 1994:12). Because there is no agreement over the most appropriate indigenous term for this group, the term Gabrielino is used in the remainder of this report to designate Native people of the Los Angeles Basin and southern Channel Islands and their descendants.

Gabrielino lands encompassed the greater Los Angeles Basin and three Channel Islands: San Clemente, San Nicolas, and Santa Catalina. Their mainland territory was bounded on the northwest by the Chumash at Topanga Creek, the Serrano at the San Gabriel Mountains in the east, and the Juaneño on the south at Aliso Creek (Bean and Smith 1978:538; Kroeber 1925:636). The mainland area occupied by the Gabrielino included four macro-environmental zones (Interior Mountains/Adjacent Foothills, Prairie, Exposed Coast, and Sheltered Coast) that encompass the watersheds of the Los Angeles, Santa Ana, and San Gabriel Rivers (Bean and Smith 1978:538).

The Gabrielino subsistence economy centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches. As for most Native Californians, acorns were their staple food (an established industry by the time of the Early Intermediate period). Inhabitants supplemented acorns with the roots, leaves, seeds, and fruits of a variety of flora (e.g., islay, cactus, yucca, sages, and agave). Freshwater and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed (Bean and Smith 1978:546; Kroeber 1925:631–632; McCawley 1996:119–123, 128–131).

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 hammerstones 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. Catalina Island steatite was used to make ollas and cooking vessels (Blackburn 1963; Kroeber 1925:629; McCawley 1996:129–138).

At the time of Spanish contact, the basis of Gabrielino religious life was the Chinigchinich religion, centered on the last of a series of heroic mythological figures. Chinigchinich gave instruction on laws and institutions and also taught the people how to dance, the primary religious act for this society. He later withdrew into heaven, where he rewarded the faithful and punished those who disobeyed his laws (Kroeber 1925:637–638). The Chinigchinich religion 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 associated with villages or without apparent village association (see Stanton et al. 2016). 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 to ethnographic descriptions of an elaborate mourning ceremony that included a variety of offerings, such as seeds, stone grinding tools, otter skins, baskets, wood 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).

Relocating 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 relocating 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 have 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 site 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 the Downtown Los Angeles Area

Although the precise location of any given village is subject to much speculation, it is clear that the banks of the Los Angeles River were home to many Gabrielino villages throughout the greater Los Angeles area. The closest ethnographically documented village to the Project site is Yaanga (alternative spellings and names include Yang-na, Yangna, and Yabit; see Figure A-6 and Figure A-7). Though the actual location is disputed, generally Yaanga is believed to have been located near present-day Union Station, approximately 2.4 km (1.5 miles) north of the Project site (McCawley 1996:57; Morris et al. 2016; Figure A-6 and Figure A-7). Historical records place Yaanga near Los Angeles's original plaza, near present-day Union Station (see Figure A-7). Historians and archaeologists have presented multiple possible village locations in this general area; 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 (1962:122) 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." A second village, known as Geveronga, has also been described in ethnographic accounts as immediately adjoining the Pueblo of Los Angeles, though much like Yaanga, its location can only be inferred from ethnographic information (McCawley 1996:57). The approximate location for Geveronga is 3.2 km (2 miles) northwest of the Project site (see Figure A-6 and Figure A-7).

Aside from the ethnographic evidence suggesting the location of these villages, little direct, indisputable archaeological evidence of 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, 1 mile 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 Crespi and engineer Miguel Costansó, both of whom were associated with the 1769 Portolá expedition. The notes from these sources indicate the village was located between 2.0 and 2.4 km (between 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 located adjacent to the original site of the Los Angeles Plaza (Morris et al. 2016:112).

After the settlement of Los Angeles in 1781, Yaanga faced many new challenges because of its proximity to the new city. The last recorded birth at Yaanga is believed to have been in 1813, after which the village

was forced to relocate south of the original site (Morris et al. 2016:97). This new village, known as Ranchería de los Poblanos by the Angelenos, is believed to have been located at the intersection of Los Angeles Street and 1st Street (Morris et al. 2016:96–97; and Figure A-7). This rancheria existed for approximately 10 years, between 1826 and 1836, after which the indigenous population was forced to relocate to a plot of land near Commercial and Alameda Streets (Morris et al. 2016). This rancheria existed for approximately another 10 years, between 1836 and 1845, during which nearby landowners attempted to forcibly relocate them to obtain more land for agricultural use. The City Council session on June 7, 1845, reports that the village be moved to the "height across the river, at the most convenient place, defining the most orderly location." Ultimately, it required a special commission to prompt the move, which did not happen until December 22, 1845 (Phillips 2010:196). The new site was called "Pueblito," but the location was only generally described as an area "across (east of) the river" or near the "Spring of the Abilas" or simply as "Boyle Heights" (Guinn 1915; Robinson 1938; Phillips 2010; Morris et al. 2016). Pueblito was razed in 1847, at which time legislation was passed to require the indigenous population to live in dispersed settlements or with their employers throughout the city.

There was another rancheria within the boundaries of Los Angeles during this time composed of Island Gabrielino—Rancheria de los Pipimares. The rancheria may have been in existence from as early as 1820 but ceased to exist after 1846 (Morris et al. 2016). Archival research identified the likely location of Rancheria de los Pipimares to be within the area of San Pedro and 7th Streets (Morris et al. 2016; see Figure A-7), approximately 1.4 km (0.9 mile) northwest of the Project site. Reports describe the Gabrielino at Rancheria de los Pipimares taking part in festivals and mourning ceremonies, which were known to spread over large areas of land. This rancheria was likely a community of Native Americans from San Nicolas Island, who are noted as having practiced the tradition of inhuming their dead, as opposed to the cremation practiced by mainland tribes. Directly east of San Pedro Street and south of 7th Street was the property of Jose Jacinto Reyes, godfather of more Island Gabrielino than anyone else in the city. The Reyes land was later passed on to Luis Lamoreau, who in 1846 filed two petitions to move the residents of Rancheria de los Pipimares to the "general village," likely Pueblito (Morris et al. 2016). This increases the probability that the Rancheria de los Pipimares was indeed located along the west side of 7th Street.

Historic Period

The history for the state of California after European colonization is generally divided into three periods: the Spanish period (1769–1822), Mexican period (1822–1848), and American period (1848–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish period in California begins with the establishment in 1769 of a settlement at San Diego 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 period, 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 Period (1769–1822)

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 Cabrílllo stopped in 1542 at present-day San Diego Bay. With his crew, Cabrílllo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present 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 Cabrílllo 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, Friar 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").

Mexican Period (1822–1848)

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 during the Mexican period, 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. During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity for trade internationally and across other parts of the United States and Mexico. The number of non-native inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

American Period (1848–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). 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, and 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. The County of Los Angeles 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. The city at this time 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 had purchased large tracts of land in the Owens Valley, and Mulholland planned and completed the construction of the 240-mile aqueduct that brought the valley's water to the City (Nadeau 1997).

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 alongside 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 (Ríos-Bustamante 1992; Robinson 1979:238; 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 located 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 in size 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 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). These factors, combined with the expansion of port facilities and railroads throughout the region, contributed to 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. While 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 in 1898, which re-constructed and expanded the system into the twentieth century and became the main streetcar system for central Los Angeles. Los Angeles Public Transit is discussed in more detail below.

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 aviation and eventually aerospace industries having a large presence 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, while continuing to struggle with its population's growth and needs.

LOS ANGELES ZANJA SYSTEM

A discussion of the Los Angeles zanja system is included here because portions of the system are present in the vicinity of the Project site. From Los Angeles's beginnings as a small pueblo, water was understood as a crucial force to control and use if the city was to survive. Since the 1770s, a canal known as the Zanja Madre had been diverting water from the Los Angeles River to the camp that would become the Pueblo of Los Angeles. The pueblo's residents used this water for ranching, agriculture, drinking, bathing, and washing clothes (Newmark and Newmark 1970). Though gravity was sufficient to force the water down the zanja onto the pueblo lands, the flow of water was not smooth and continuous because the ditch was frequently impeded by debris and damaged during heavy rainfall. Though at this time the maintenance of the zanja was the responsibility of all residents of the pueblo, the town council or "ayuntamiento" realized early on that one person had to be in charge of ensuring the functionality of the zanja and to regularly inspect it. To this aim, the ayuntamiento appointed a rotating position known as the zanjero, whose job was to properly inspect, maintain, and coordinate repairs of the zanja. Every week a new city official would be in charge of the zanjas and every head of household was required to contribute some share, be it money or labor, to the maintenance of the zanjas, though many simply supplied Native American labor to fulfill their contribution (Gumprecht 2001:60; Hoffman and Stern 2007:3).

Californians were still using the publicly owned zanjas after California's entrance into the union, and by this time, the roles and duties of the zanjero had ballooned to include issuing permits, overseeing deputy zanjeros, and collecting fees. Because the position had become so important, Mayor Stephen Foster established a permanent zanjero position, eliminating the rotating schedule that was used during

the Spanish and Mexican periods, and providing stability to the office. The position quickly became one of the most important appointed positions in Los Angeles (Gumprecht 2001:60). At the time, property owners were still "required to contribute a certain amount of time" to devote to maintaining the zanja, underlying the importance of the zanja system to the young city (Gumprecht 2001:60). Though the duties and importance of the zanjeros changed over time, the importance of Native American labor in the pueblo's functioning remained constant from the Spanish into the American period; not only did Native American laborers make up the majority of the farm labor, but they were often tasked with fixing the zanjas (Hoffman and Stern 2007:3–4).

As the budding city grew, new zanjas needed to be built to irrigate increasingly more farmlands. In 1857, the first offshoot was completed—Zanja No. 1, which ran between Alameda Street and the Los Angeles River. By 1870, there were a total of eight zanjas covering approximately 80 km (50 miles) that connected to the Zanja Madre. At this early time, the zanjas were little more than earthen ditches; none were covered or lined, allowing residents to easily steal water.

Though the zanjas were a crucial water supply in early Los Angeles, they also served as waste disposal and a sewer system for early residents (Sklar 2008:19). Dead animals were frequently found in the zanjas and, in some cases, even deceased people. Not surprisingly, dysentery during this period was common. Despite public knowledge that the zanja water was unsanitary, people continued bathing, washing, and dumping in the zanjas. Over time, the city attempted to stop the constant bathing and washing in the main zanja; however, even after a law was passed explicitly prohibiting "bathing, washing clothes, dumping refuse, and the slaughter of cattle in the zanjas," all practices remained commonplace (Gumprecht 2001:62). Zanja No. 8 was singled out as being exceptionally foul, and one city official even recommended that all drainages to other zanjas from Zanja No. 8 be cut off so as to preserve the others. As residents became fed up with the contamination of the zanjas, Angelenos realized that sewers were necessary.

The first sewer was privately constructed for the Bella Union Hotel, which used a square wooden pipe crossing Los Angeles Street to a connection with the zanja. At this time in the early 1860s, however, city engineers were focused more on mapping, constructing sidewalks, and installing lights than on developing a sewer network. After the Civil War, more settlers arrived in Los Angeles and within a few years the need for a sewer system became apparent. Despite the public awareness of sewage problems, sewer construction continued at a haphazard pace and without massive public investment until 1885, at which point the completion of the railroad to the city had cause exorbitant growth in overall population and density, and the sewage problem had become dire (Sklar 2008).

Over time it became necessary to modernize and update the zanjas. This first happened in 1877 when the city created its first comprehensive plan to improve and extend the zanjas using a bond measure of $75,000. Sometime during this period, many of the original zanjas were upgraded to cement or wrought iron pipe. Useful in determining the status of each zanja during this period is William Hall's 1888 study on irrigation in California. In this work, Hall describes each zanja segment, providing information on construction type and length. Hall used the terms "low service" and "high service" to reference locations where the zanja diverted water from the Los Angeles River, and he separated the city's irrigation works into eastern and western districts according to their location with respect to the river.

By 1888, nearly 50 percent of the zanjas in Los Angeles were made of some type of conduit, be it wooden flumes, cement- or masonry-lined canals, cement and iron pipe, or brick culverts. In one section of Hall's report, he estimates the cost of the zanja system to date, and his explanation for the difficulty of such a task provides important information on the materials and integrity of the various segments:

> The difficulty of arriving at the original cost of works, constructed by 'piecemeal,' in a period of twelve years, under no definite plan, and supervised by successive city officials (and this refers only to the works regarded as permanent and not to the long-built earthen ditches) changes almost every year, without any system of keeping accounts of construction segregated from ordinary maintenance expense, can scarcely be appreciated until one attempts the task. Much of the work has been done several times over; ditches have been flumed, and after a time the flumes replaced with pipe; pipe-lines have been, locally but radially, altered and enlarged; iron pipe substituted for cement pipe, and vice versa; and no small part of the work has been abandoned and fallen into disuse. (Hall 1888:547–548)

Many projects to improve the system, such as constructing a tunnel to replace part of the Zanja Madre, were started but never completed (Hall 1888:565). Zanja No. 1 runs east of the Project site and Zanja No. 2 runs along Alameda Street west of the Project site (Figure A-8). Though the zanjas were improved greatly between 1870 and 1888, when Hall conducted his study, the water system in Los Angeles was crude and not in keeping with the rapid development occurring. The last 20 years of the nineteenth century brought many changes to Los Angeles; the real estate boom of the 1880s created a fivefold population increase in the city by 1890. This population increase had the added result of decreasing the city's irrigation needs, because many of the original vineyards and orchards had already been abandoned, but increasing the city's domestic water needs (Hoffman and Stern 2007:19). Two years after Hall's 1888 survey, the zanjas began to be abandoned, starting first with Zanja No. 5. Slowly, property owners began requesting that zanjas be abandoned, because the unused structures now served as impediments to development, and fertile land that once held rows of orchards and vines was now far more valuable for homes (Gumprecht 2001:89). By 1904, all the zanjas had been abandoned; most were filled in, but some continued to be used as sewers (Hoffman and Stern 2007:19). The Project site is situated between Zanja No. 1 and Zanja No. 2 (Figure A-8).

Zanja No. 1

This Zanja segment was documented by Hall in 1888 as part of the low service system of the western district. At the time of Hall's inventory, Zanja No. 1 was constructed in three different ways across a length of 3,573.7 m (11,725 feet) that extended from the end of Zanja No. 6-1, south to the city boundary. Of this length, 2,933.7 m (9,625 feet) was described as open ditch, 396.24 m (1,300 feet) of 40.6-cm (16-inch) cement pipe, and 243.84 m (800 feet) of wooden flume (Hall 1888:545). Beginning at 1st Street, Zanja No. 1 flowed down Hewitt Street in a box flume, across 2nd and 3rd Streets before it turned east where it split with Zanja No. 2 at 4th Street. Here at least some of its cement pipe construction was present as it was exposed by Mr. Ghiotto, Central District Supervisor of the Water Distribution Division in 1948 (Layne 1957). Upon reaching Molino Street the zanja turned south to follow it, across Palmetto Street and down Mateo and Lemon Streets to the city limits, after which point it divided into additional channels that extended to the orchards and vineyards further south (Gumprecht 2001: 77).

Zanja No. 2

This zanja segment was documented by Hall in 1888 as part of the low service system of the western district. At the time of Hall's inventory, Zanja No. 2 was constructed entirely of a wooden flume box measuring 3 × 1 feet and running an estimated 4,023.4 m (13,200 feet) (Hall 1888:545). Zanja No. 2 originated at its connection with Zanja No. 6-1, where Zanja No. 1 diverged. Zanja No. 2 essentially extended Zanja No. 6-1 on the same south-southwestern alignment, terminating at the city boundary near the present-day intersection of Alameda Street and 25th Street. From its connection to Zanja No. 6-1 on First Street the zanja ran along the south-southwestern alignment, but with two zig-zags before following Alameda Street. The northernmost segment trended south for approximately 548.6 m (1,800 feet), turning west for 91.4 m (300 feet) along 4th Street. Mid-way between Colyton Street and Seaton Street the zanja

turned to a southwestern trajectory, extending 365.8 m (1,200 feet) to Palmetto Street, where it trended west along a 115.8-m (380-foot) segment on the south side of the street before finally turning south-southwest, where the southernmost segment flowed along the east side of Alameda Street. Hall's tabulation of acres irrigated by each zanja segment lists Zanja No. 2 among the highest, which was sustained through the 1880s (Hall 1888:557).

Between 1885 and 1894 several newspaper articles reference seeking and awarding bids to either construct or replace unspecified segments of the wooden flume, reportedly completed by Peter Keenan (*Los Angeles Times* 1885:4, 1894:10). Two articles published in 1898 by the *Los Angeles Herald* mention the construction of a concrete zanja pipe "concrete zanja pipe on Fourth street between Colyton Seaton and Palmetto streets," (*Los Angeles Herald* 1898a:7) and that "…property owners of Seaton Street, along which street this zanja runs, are desirous of improving the street, provided the zanja is piped by the city" (*Los Angeles Herald* 1898b:7). No follow-up reports are provided to confirm the construction type or locations. An additional proposal to pipe Zanja No. 2 from 4th Street to Seaton Street was published in 1902 by the *Los Angeles Times*, again with no specific routes mentioned (*Los Angeles Times* 1902:13).

In 1892 the *Los Angeles Herald* published a message from Mayor Henry T. Hazard stating that a contract was prepared to repair Zanja No. 2 along Alameda and noting that the existing flume is old and in need of repair (*Los Angeles Herald* 1892:3). The message was likely a follow-up to an 1891 petition submitted by the Los Angeles Electric Company to alter the zanja along Alameda Street beginning at the point of its intersection with Palmetto Street (*Los Angeles Herald* 1891:3), located north of the Project site. Although the proposal being considered referred to a segment of the zanja outside the Project site, in all likelihood the mayor's statement about the zanja's condition applied equally to the connecting segments, including the one within or next to the Project site. Another article published in 1890 described a request by Charles Lantz, who requested the zanjero place iron grating over the top of the zanja pipe on 4th Street between Colyton and Carolina Streets to protect children from injury (*Los Angeles Herald* 1890:8). The 1894 Sanborn Fire Insurance (Sanborn) Map shows the zanja originating south of 4th Street (north of the Project site) with no other indications of its alignment within the street or in adjacent parcels to the north, which suggests the segment was likely replaced with a subterranean pipe, possibly the concrete conduit referenced in the articles. It is possible the non-specific references to construction of concrete pipe along Zanja No. 2 may have included the segment west of the Project site, but the available evidence suggests it was constructed as a wooden flume at the time it was de-commissioned, and the property was subsequently developed.

These reports are consistent with Hall's (1888) inventory that recorded Zanja No. 2 as a wooden flume box and reflects the piecemeal modifications, multiple designs, and variable building materials that define the zanja system but could be true of single zanja segments. And like many of the other zanjas comprising the system at its peak in the 1880s, portions of Zanja No. 2 likely had precursors constructed during the Spanish or Mexican Periods and the physical remains likely persisted into the twentieth century after being otherwise abandoned.

LOS ANGELES PUBLIC TRANSIT

A discussion of the early Los Angeles public transit system is included here because portions of the system are present in the vicinity of the Project site. Public transit in Los Angeles began as early as 1874, with horse-drawn streetcars servicing various parts of the city (Crump 1970). Most of these were short, unconnected routes, but by 1880 three longer lines were present in the city: a 2.5-mile route that extended south from the Plaza along Main and Spring Streets to Sixth Street, another that traveled north along Spring Street and Downey Avenue (now North Broadway) into East Los Angeles (now Lincoln Heights), and another that serviced Boyle Heights along Aliso Avenue. Most lines were constructed by private developers in attempts to promote real estate in the city and its environs (Figure A-9). These lines were

designed to connect the central portion of the city with the outlying areas that were not yet developed. Those parcels located along the streetcar routes were narrow, to draw commercial investors to build stores and restaurants in order to develop the cores of these neighborhoods (Crump 1970; Fogelson 1967).

As the city neared the end of the nineteenth century, numerous privately owned passenger streetcar lines were in place. Beginning in the 1880s, many lines were rebuilt or replaced by cable cars, and developers began to develop electric lines in the late 1880s and early 1890s (see Figure A-9). These electrically driven streetcars made use of overhead wires that powered the motors through the use of a top-mounted pole called a trolley, giving the rise to the use of that term to refer to streetcars. Many of these early lines were subsequently consolidated into Henry E. Huntington's Los Angeles Railway (LARy) in 1898, which re-constructed and expanded the system into the twentieth century and became the main streetcar system for central Los Angeles (Electric Railway Historical Association of Southern California 2013). 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 (see Figure A-9). The LARy lines were run on narrow-gauge rails and extended throughout the city, while Pacific Electric was an inter-urban rail system that used standard gauge rails. By the 1920s, the city had over 1,100 miles of tracks and the largest streetcar system in the world.

This immense public transportation system had lasting impacts on the growth of the city and the built environment as it exists today. By increasing both residential distance from, and ease of access to, central Los Angeles, the early neighborhood commercial districts began to look more like small towns. Neighborhoods developed specific identities, and this created the basis for the suburban growth and design of city, but also led to the end of the streetcar system. After World War I, car ownership in Los Angeles grew, and the use of trolleys began to decline, partly due to the failure of both the LARy and Pacific Electric to expand their systems. As the city continued to develop, particularly with single-family tract housing, this included improvements to the street system to better support the automobile. These newly constructed suburbs were better served by automobiles. With the development of freeways in the 1950s, Los Angeles citizens became more dependent upon personal automobile use. Despite this, both the Pacific Electric Red Cars and LARy Yellow Cars continued to serve the city of Los Angeles until they were eventually discontinued in the early 1960s (Electric Railway Historical Association of Southern California 2013). As shown in Figure A-9, several of the former cable and streetcar routes ran near the Project site. Figure A-9 shows the Pacific Electric railway lines running along 9th Street south of the Project site and along Alameda Street west of the Project site, the Los Angeles railway along Mateo Street east of the Project site, and the Los Angeles Inter-Urban railway along 4th Street north of the Project site.

HISTORICAL DEVELOPMENT OF THE PROJECT VICINITY

The Project site is located at the southern edge of the city's boundary when it was incorporated in 1849. In the first map of Los Angeles, surveyed by E. O. C Ord in 1849 (Ord et al. 1957), the Project site can be seen plotted at the southern edge of agricultural fields that were developed south of the historic core surrounding the Church and Plaza. Ord's map shows several roads west of the Project site that include portions of what would later become present-day Alameda Street, 8th Street, and McGarry Street (Figure A-7). Another road is present north of the Project site that extends from Alameda Street to the west to an area that is currently 7th Street to the north of the Project site. This road is no longer present.

Development began to increase in the area in the latter half of the nineteenth century. With the completion of the railroad sparking what turned into a population boom in the 1880s, developments expanded from the historic core, especially to the west. The 1880s population boom resulted quickly in the subdivision of the small farms in the vicinity of the Project site into lots, initially sold for primarily residential and commercial properties. However, industrial developments quickly came to define various areas in vicinity of the Project site. The City Council's decision to create an industrial district between Main Street and the

river and subsequent zoning changes in the 1910s quickened the conversion of the area into a fully industrial sector, with few remaining residences and an increasing number of manufacturers establishing warehouses and other facilities. Through the 1890s and into the early twentieth century, the City annexed new lands, and the large lots originally surveyed in the 1850s were subdivided and developed into city blocks with residential buildings being erected around the Project site. While residential housing did increase, agricultural lands, such as orchards, existed until the end of the nineteenth century. By 1921 the entire area was heavily developed with commercial properties, as well as pockets of residential neighborhoods and railroad yards.

The rapid industrialization of the neighborhood was primarily driven by the proximity to several railways and freight depots. Atchison, Topeka, and Santa Fe Railway (AT&SF), built in 1887, ran just east of the Project site along the Los Angeles River, while Southern Pacific Railway tracks ran along Alameda Street to the west. Opened in 1893, the AT&SF La Grande Station, located north of the Project site on 2nd Street and Santa Fe Avenue, served as the railroad's main passenger terminal until the opening of Union Station in 1939. To the north at Central Avenue and 4th Street at the convergence of three railways – the Los Angeles Railway Company, Pacific Electric Railway Company, and the Los Angeles Inter-Urban Railway Company – was the Arcade Depot, built in 1888 in a Victorian style. The Arcade Depot was dismantled in 1915, after the Southern Pacific Railroad opened its Central Depot at Central and Fifth Street. Smaller gauge railroad spurs were constructed along many of the smaller streets to connect each block to the primary rail lines, including at least three smaller rail spurs that extended from the main AT&SF railroad to Carolina Street (now Hewitt Street) and Palmetto Street north of the Project site in the 1910s and 1920s.

The mid-twentieth century saw many changes within the vicinity of the Project site and Los Angeles as a whole from growth in automobile sales and increases in business and commerce. The demise of the city's public transportation system encouraged much of the movement of the largely white, middle class from the city center (Grimes 1998:5). During this time, much of downtown Los Angeles, including the Project site, began transitioning into primarily commercial and business real estate. The construction of Interstate 10 in the late 1950s dramatically transformed the vicinity of the Project site as buildings were razed, streets realigned, and city blocks altered to accommodate its construction. This further shifted the character of the adjacent neighborhoods away from residential developments, even for multi-family properties, and towards more commercial uses.

RECORDS SEARCH

Previously Conducted Studies

SWCA received the results of the CHRIS records search from the SCCIC on November 14, 2022. Results of the records search indicate that 32 cultural resource studies have been conducted within 0.8 km (0.5 mile) of the Project site, none of which intersect the Project site (Table 2; Attachment B). The 32 previous cultural resource studies within 0.8 km (0.5 mile) of the Project site consist of 12 archaeological field studies, one archaeological study, one archaeological field study with architectural/historical evaluation, one archaeological field study with "other" research, one architectural/historical study, three architectural/historical evaluations, two architectural/historical evaluations with "other" research, two literature searches, one management/planning study, one management/planning study with monitoring, two monitoring projects, and five "other research" studies.

A confidential records search results map depicting previous cultural resource studies in and within 0.8 km (0.5 mile) of the Project site is included in Attachment B.

Table 2. Prior Cultural Resource 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-02577	*Results of a Records Search Phase Conducted for the Proposed Alameda Corridor Project, Los Angeles County, California*	Wlodarski, Robert J. (Historical, Environmental, Archaeological, Research Team)	1992	Outside
LA-02644	*The Results of a Phase 1 Archaeological Study for the Proposed Alameda Transportation Corridor Project, Los Angeles County, California*	Wlodarski, Robert J. (Historical, Environmental, Archaeological, Research Team)	1992	Outside
LA-02950	*Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project*	– (Peak & Associates, Inc.)	1992	Outside
LA-03103	*Cultural Resources Impact Mitigation Program Angeles Metro Red Line Segment 1*	Greenwood, Roberta S.	1993	Outside
LA-03813	*An Archival Study of a Segment of the Proposed Pacific Pipeline, City of Los Angeles, California*	– (Peak & Associates, Inc.)	1992	Outside
LA-04097	*Council District Nine Revitalization/recovery Program Final Environmental Impact Report*	– (Myra L. Frank & Associates, Inc.)	1995	Outside
LA-04625	*Historic Property Survey Report for the Proposed Alameda Corridor from the Ports of Long Beach and Los Angeles to Downtown Los Angeles in Los Angeles County, California*	Starzak, Richard (Myra L. Frank & Associates)	1994	Outside
LA-04834	*Cultural Resources Inventory Report for Williams Communications, Inc. Proposed Fiber Optic Cable System Installation Project, Los Angeles to Anaheim, Los Angeles and Orange Counties*	Ashkar, Shahira (Jones & Stokes Associates, Inc.)	1999	Outside
LA-04835	*Cultural Resources Inventory Report for Williams Communications, Inc. Proposed Fiber Optic Cable System Installation Project, Los Angeles to Riverside, Los Angeles and Riverside Counties*	Ashkar, Shahira (Jones & Stokes Associates, Inc.)	1999	Outside
LA-05430	*Cultural Resource Assessment for Pacific Bell Wireless Facility SM 003-02, County of Los Angeles, Ca*	Duke, Curt (LSA Associates, Inc.)	2000	Outside
LA-06348	*Cultural Resource Assessment for Pacific Bell Wireless Facility SM 003-02, County of Los Angeles, California*	Duke, Curt (LSA Associates, Inc.)	2000	Outside
LA-07425	*City of Los Angeles Monumental Bridges 1900-1950: Historic Context and Evaluation Guidelines*	McMorris, Christopher (JRP Historical Consulting)	2004	Outside
LA-07427	*Caltrans Historic Bridge Inventory Update: Metal Truss, Movable, and Steel Arch Bridges*	McMorris, Christopher (JRP Historical Consulting)	2004	Outside
LA-07945	*Archaeological Inventory Report: East Downtown Truck Access Improvements Project, Los Angeles, California*	Messick, Peter (Greenwood and Associates)	2006	Outside
LA-08252	*Request for Determination of Eligibility for Inclusion in the National Register of Historic Places/Historic Bridges in California: Concrete Arch, Suspension, Steel Girder and Steel Arch*	Snyder, John W., Stephen Mikesell, and D. Pierzinski (Caltrans)	1986	Outside
LA-08298	*Cultural Resources Record Search and Site Visit Results for Royal Street Communications, LLC Candidate La2915a (Skid Row Trust), 676 South Central Avenue, Los Angeles, Los Angeles County, California*	Bonner, Wayne H. (Michael Brandman Associates)	2007	Outside

Report Number	Title	Author: Affiliation	Year	Proximity to Project site
LA-08518	*Historic Architectural Survey and Section 106 Compliance for a Proposed Wireless Telecommunications Service Facility Located on a Warehouse Building in the City of Los Angeles (Los Angeles County), California*	Taniguchi, Christeen (Galvin and Associates)	2004	Outside
LA-09110	*Cultural Resources Records Search and Site Visit Results for Sprint Nextel Candidate LA73XC116B (Hardwood), South Santa Fe Avenue, Los Angeles, Los Angeles County, California*	Bonner, Wayne H. (Michael Brandman Associates)	2007	Outside
LA-09271	*Archaeological Resources Assessment and Evaluation of "Maintenance of Way" Building for the Asphalt Plant No. 1 Street Services Truck Route Project City of Los Angeles, California*	Strauss, Monica, Candace Ehringer, and Angel Tomes (EDAW, Inc.)	2007	Outside
LA-10451	*Finding of Effect - 6th Street Viaduct Seismic Improvement Project*	Chasteen, Carrie (Parsons)	2008	Outside
LA-10452	*Historical Resources Evaluation Report - 6th Street Viaduct Seismic Improvement Project*	Smith, Francesca (Parsons)	2007	Outside
LA-10506	*Cultural Resources Monitoring: North Outfall Sewer - East Central Interceptor Sewer Project*	Greenwood, Roberta S., Scott Savastio, and Peter Messick (Greenwood and Associates)	2004	Outside
LA-10638	*Preliminary Historical/ Archaeological Resources Study, Southern California Regional Rail Authority (SCRRA) River Subdivision Positive Train Control Project, City of Los Angeles, Los Angeles County, California*	Tang, Bai "Tom" (CRM Tech)	2010	Outside
LA-10789	*Cultural Resources Technical Report for the Olympic and Mateo Street Improvements Project, City of Los Angeles, Los Angeles County, California*	Carmack, Shannon and Cheryle Hunt (SWCA Environmental Consultants)	2010	Outside
LA-10887	*Historic Property Survey Report for the North Outfall Sewer-East Central Interceptor Sewer, City of Los Angeles, County of Los Angeles, California*	Starzak, Richard, Alma Carlisle, Gail Miller, Catherine Barner, and Jessica Feldman (Myra L. Frank & Associates, Inc.)	2001	Outside
LA-11048	*American Recovery and Reinvestment Act (ARRA) Funded Security Enhancement Project (PRJ29112359) - Improved Access Controls, Station Hardening, CCTV Surveillance System, and Airborne Particle Detection at Los Angeles Station and Maintenance Yard, Los Angeles, California*	Speed, Lawrence (URS)	2009	Outside
LA-11409	*Construction Phase Cultural Resources Monitoring and Treatment Plan for the City of Los Angeles North Outfall - East Central Interceptor Sewer Project*	Horne, Melinda C. (Myra L. Frank & Associates)	2000	Outside
LA-11618	*Los Angeles Wholesale Terminal Market Historic Resource Report*	Grimes, Teresa, Jessica MacKenzie, and Jessica Fatone (Christopher A. Joseph & Associates)	2007	Outside
LA-11642	*Westside Subway Extension Project, Historic Properties and Archaeological Resources Supplemental Survey Technical Reports*	Daly, Pam, and Nancy Sikes (Cogstone)	2012	Outside
LA-11785	*Final Environmental Impact Statement/Final Environmental Impact Report for the Westside Subway Extension*	Rogers, Leslie (U.S. Department of Transportation Federal Transit Admin. and LA County Metro Transit Authority)	2012	Outside

Report Number	Title	Author: Affiliation	Year	Proximity to Project site
LA-12586	*Archaeological Survey Report for the 6th Street Viaduct Improvement Project City of Los Angeles Los Angeles County, California*	Glenn, Brian, and Patrick Maxon (BonTerra Consulting)	2008	Outside
LA-13239	*Extent of Zanja Madre*	Gust, Sherri (Cogstone)	2017	Outside

Previously Recorded Cultural Resources

The CHRIS records search did not identify any known archaeological resources within a 0.8-km (0.5-mile) radius of the Project site.

NATIVE AMERICAN SITES IN DOWNTOWN LOS ANGELES

The following are notable Native American sites that have been recorded within downtown Los Angeles area. These are referenced here as a supplement to the CHRIS records search and are based on background research previously conducted by SWCA. The sites discussed here are located to the north of the Project site between 1.6 and 2.0 miles. A map of their locations is included as a confidential attachment (Appendix B).

LAN-7/H

LAN-7/H is an archaeological site that primarily contained historic period deposits but also contained two pieces of ground stone and a brown mission ware (Tezon) ceramic sherd, which are typically associated with Native American activities. The site was initially recorded by Meighan in 1951 and updated by Huey and Romani in 1980. The historic component includes artifacts dating from 1860 to 1880s that are associated with Los Angeles's earliest Chinatown. The site is located west of Union Station and across Alameda Street and was discovered when the area was bulldozed for construction of the Santa Ana Freeway. The only mention of depth in the site records states that the depth of midden is approximately 60 cm below the surface.

LAN-1575/H

Site LAN-1575/H is a multi-component resource with prehistoric and historic components identified at the present-day location of Union Station. The site included extensive historical features of ca. 1860 to 1930s Chinatown including privies, wells, and architectural remains, as well as a prehistoric Native American cemetery with several primary and secondary internments and numerous prehistoric artifacts. The prehistoric component and several other prehistoric sites nearby are considered potential remnants of the Gabrielino village of Yaanga. Native American deposits were identified below, but also partially intermixed with, a stratum of historic period sediments, both of which were underneath a surface stratum of construction fill (Goldberg et al. 1999:32). The resource was initially identified in 1989 during monitoring of the construction for the Metro-Rail Subway and was then updated twice during Phase I and monitoring projects, with the most recent site update in 2015. Cultural material was observed down to 12 feet below the surface.

Goldberg et al. (1999) summarized the results of archaeological data recovery conducted in 1996 by Applied Earthworks for the Metropolitan Water District Headquarters Facility Project. The report describes Native American deposits identified below, but also partially intermixed with, a stratum of historic period sediments, of which both were identified underneath a surface stratum of construction fill (Goldberg et al. 1999:32). The data obtained from P-19-001575/H clearly demonstrate the potential for significant prehistoric archaeological resources to be preserved beneath historic period deposits, which, in

turn, can be preserved underneath asphalt and modern construction debris in a fully urbanized setting. The report documents archaeological remains preserved as far below the modern grade as 3.0 m (9.8 feet). The material was discovered within lenses of alluvial sediments deposited during floods within the Los Angeles River floodplain.

In 2019 during construction of the Los Angeles County Metropolitan Transportation Authority's (Metro's) Patsaouras Bus Plaza Station, 13 archaeological features were identified, including Native American human remains and artifacts, as well as historic period deposits (i.e., not affiliated with Native Americans). This new component included materials 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 U.S. Highway 101 and Interstate 10. The new component was identified during mechanical excavation of areas understood to have been extensively disturbed by the Southern California Gas Company's Manufactured Gap Plant, U.S. Highway 101, El Monte Busway Bridge, the Metro Red Line, and Patsaouras Plaza, among other developments. Full details and archaeological reporting for this discovery were not available at the time of this study, and the information regarding the contents and location of the discovery was based on publicly available information included in Metro's 2019 board reports (File #2019-0195).

LAN-4662

LAN-4662 consists of a single prehistoric Native American bone identified east of Union Station and below the southbound lane of the 900 block of Vignes Street. The resource was identified by AECOM in 2013. The bone is the shaft of a right femur with both epiphyses broken off and is highly permineralized. The femur was encountered during construction activities at a depth of 19 feet below the present street surface, within poorly sorted alluvial deposits, and the surrounding matrix is described as "concretized." The site form postulates that the bone was deposited by the Los Angeles River, and radiocarbon dating yielded a calibrated date of 3640 to 3560 years cal B.P., which places it within the middle Holocene period. Archaeological testing did not reveal any further remains.

P-19-100515

P-19-100515 was originally recorded in 2005 by D. Slawson for Greenwood and Associates as a historic isolated find that consisted of dark brown loam mixed with coal ash and cinders, as well as a range of additional cultural material dating from the 1840s through ca. 1900. The majority of the diagnostic artifacts date from 1830 to 1900. The cultural remains were discovered during the course of City sewer pipe repair within Republic Street, an alley, immediately southwest of Plaza de Los Angeles in the City's central district. Cultural material was observed down to 9 feet below the surface and included red brick fragments, large mammal bone, rusted metal, bottle glass, and a variety of domestic ceramic ware.

The resource was later categorized as a multi-component site in 2005 by A. Hale during emergency sewer repairs. Historic-era ceramics and glass artifacts were embedded in the sewer line backfill soils at two different locations, and the cultural materials dated from 1813 through 1947. Three shell fragments were documented that are commonly associated with Native American sites: two *Haliotis* sp. fragments and a *Tivela stultorum*.

Sacred Lands File Search

On November 17, 2022, the NAHC submitted the results of an SLF search. The results of the SLF search were negative. In the response letter, the NAHC noted that the lack of recorded sites does not indicate the absence of resources within the Project site and that the CHRIS and SLF are not exhaustive. The NAHC's response to SWCA's request included a list of 10 Native American contacts who may have knowledge of cultural resources in or near the study area and recommended they be contacted prior to work. All

tribal outreach and consultation conducted for the Project will be implemented by the City pursuant to the provisions of Assembly Bill 52. No outreach to tribal parties was conducted as part of the current study. The SLF results letter is included in Attachment C.

ARCHIVAL RESEARCH

Methods

SWCA's research focused on assessing Historic period land uses through a review of available archival sources that includes various types of written records, photographs, and maps. In addition to the literature sources cited above and listed in the references section below, SWCA's archival research consulted the following publicly accessible sources: David Rumsey Historical Map Collection; Huntington Library Digital Archives; Library of Congress; Los Angeles Public Library Map Collection; USGS historical topographic maps; and University of California, Santa Barbara, Digital Library (aerial photographs). Historical maps drawn to scale are georeferenced using ESRI ArcGIS software suite to show precise relationships to the Project site. An EDR records search performed during the Phase I Environmental Site Assessment (2020) returned historic aerial photographs, historic topographic maps, and Sanborn Fire Insurance maps and is included as a mapbook in Attachment D.

Results

SWCA's archival research included a review of historical maps for the Project site and vicinity and focused on documenting historical modifications to the physical setting and identifying any potential natural or artificial features with relevance to use by Native Americans or (e.g., stream courses, vegetation, historical topography, roads, habitation markers) or use of the location by non-Native American people in the historic period. The Project site is located south of downtown Los Angeles in what is presently known as the Arts District and was included in some of the earliest surveys of the city. The Project site is situated approximately 0.4 mile west of the bed of the Los Angeles River, including two separate historical courses from before 1815 and after 1825 (see Figure A-4 and Figure A-6). At the time of Ord's survey in 1849 and subsequent survey by Hancock in 1857, the Project site was plotted at the southern edge of agricultural fields south of the historic core of the city and west of the Los Angeles River. An 1858 General Land Office Map shows the Project site at the southern edge of City lands and is within an area labeled Lot 37.

An 1877 map of Los Angeles County (Bien 1877) depicts the Project site within the city core and within the northeast corner of a parcel owned by T. Leahy (Figure A-10). The 1880s population boom in Los Angeles quickly manifested in the sale and subdivision of the parcels within the Project site. A Real Estate Map in 1884 shows the property straddling the boundaries between two parcels: one owned by O. A. Williams (7.5 acres) in the northern portion and Thomas Leahy (38.1 acres) in the southern portion (Figure A-11). Thomas Leahy (1834–1899) was a Los Angeles council member between 1876 and 1879 and arrived in California in 1851 at the age of 17 from County Cork, Ireland. His move was assisted by his uncle, Mathew Keller, who had arrived in Los Angeles in 1849 by way of New Orleans (Los Angeles Revisited 2014). Stevenson's 1884 survey map of Los Angeles depicts a parcel east of Alameda Street, north of 7th Street, and three parcels north of Thomas' parcel as "M. Keller", who is presumed to be Thomas' uncle. Thomas was most likely escaping the great potato famine in Ireland and became a merchant when he arrived in Los Angeles. Leahy soon purchased 46 acres for a vineyard in 1862 from Jose Rubio that included an old adobe (Figure A-12 through Figure A-15). Leahy retired to 8th Street and Alameda Street after being a council member. One of Leahy's sons started Leahy Manufacturing nearby as manufacturing increased in Los Angeles. In 1907, Thomas Leahy's widow, Caroline Leahy, sold the property to Bishop, a cracker and confection company.

Hall's 1888 Irrigation map shows the Project site midway between Zanja No. 1 to the east and Zanja No. 2 to west (Figure A-16). A hand drawn map from 1879 depicts the Project site partially within parcels labeled as Rubio and M. Coronell with Zanja No. 1 running north/south just east of the Project site. As this was a hand drawn map of the Kiefer parcel, located northeast of the Project site, the landowners of the parcels within the Project site do not appear accurate. "M. Coronell" most likely refers to Antonio Coronel, whose tract is documented as being west of Alameda Street at 7th Street. Antonio Coronel held the offices of city mayor, county assessor and state treasurer (Los Angeles Revisited 2014). "Rubio" most likely refers to Jose Rubio who had sold the land to Thomas Leahy in 1862. By 1891, Arthur Solano's parcel map of Los Angeles shows the area southeast of 7th Street and Alameda Street changing ownership from the O.A. Williams parcel to another parcel owned by T. Leahy (Figure A-17). This map shows the Project site as partially within the original Leahy parcel and partially within the new parcel transferred from O.A. Williams, with a flume lined with trees and hedges transecting the northern portion of the Project site between Zanja No. 1 and Zanja No. 2.

Archival research focused on maps and aerial photographs of the Project site (1857–1971) to assess historical land uses within the American Period. The Project site is south of the historic core of Los Angeles and at the southern extent covered by E. O. C. Ord's first survey of Los Angeles in 1849, newly ceded to the United States from Mexico. City-wide surveys by Henry Hancock and George Hansen between 1853 and 1857 incorporated newly sectioned lots within the undeveloped areas outside the central urban core; these included numbered 35-acre lots and so-called donation lots within what is now downtown Los Angeles. The Project site is situated within agricultural fields just northwest of Hancock's newly designated lots—Lot 57 (Figure A-7).

Review of Sanborn maps document the development of the Project site from 1906 to 1953. The first Sanborn map of the Project site, dated 1906, depicts the vicinity of the Project site as subdivided into lots and the east half of the Project site as developed with dwellings fronting Sacramento Street with outbuildings and a large shed (Figure A-18). The western portion of the Project site is undeveloped, and the entire northern portion of the block north of the Project site is undeveloped, with the exception of a carpet cleaning business in the northwesternmost lot along Lawrence Street and Shearer Street (present-day Bay Street). By 1921, the majority of dwellings observed on the 1906 Sanborn map are replaced by a large commercial building in the eastern portion of the Project site, which is labeled the "Royal Packing Co." (Building 1) on a Baist real estate map (Figure A-19). The Project site is situated in the Thomas Leahy Subdivision of the 8th Street Tract and a train yard is present in the northern portion of block, directly north of the Project site. One possible dwelling is present west of Building 1, and several are depicted east of Building 1. These dwellings appear to be roughly drawn and it is unclear whether they are the same as the ones visible on the 1906 Sanborn map. The train yard is depicted north of the Project site with a spur along the northern edge of Building 1 within the Project site. A 1924 historical topographic map depicts Building 1 and the two possible dwellings east of Building 1 from the 1921 Baist map, as well as a structure intersecting the western portion of the Project site. An updated 1953 reprint of the 1906 Sanborn map shows the Pacific Diamond Bag Company (Building 1) in the eastern portion of the Project site with an attached cleaning business, a trucking yard and a truck companies storage and service building (Building 2) in the central portion of the Project site, and a magazine and paper warehouse (Building 3) in the western portion of the Project site (Figure A-20).

An 1894 historical topographic map depicts the Project site within a small undeveloped area with present-day Wilson Street established along the eastern edge of the Project site (Figure A-21). The AT&SF Railroad is plotted east of the Project site along the western bank of the Los Angeles River and a railway spur is present directly north of the Project site. A 1927 historical aerial photograph shows Building 1 from the 1906 Sanborn map as the only structure in the Project site and the building takes up most of the eastern portion of the Project site with the remaining portion of the Project site undeveloped (Figure A-

22). The Southern Pacific railway yard is depicted to the north of the Project site with train cars present. Building 1 is also depicted on a 1928 historical topographic map (Figure A-23).

The Project site remains relatively unchanged through 1947, and by 1952 the structures present on the 1953 Sanborn map are seen on a historical aerial map (Figure A-24). A 1953 historical topographic map does not show any structures but does depict two railway spurs transecting the edges of the Project site (Figure A-25). The Project site remained unchanged through 1965, and a 1966 historical topographic map (Figure A-26) shows the immediate vicinity of the Project site as a railway yard including the Project site. By 1971, a historical aerial photograph shows Building 1 no longer present within the Project site and a new building is shown as being constructed in the place of Building 1 (Figure A-27).

SENSITIVITY ASSESSMENT

Methods

This section assesses the potential (i.e., sensitivity) for archaeological resources to be preserved below the surface of the Project site. 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 during the Historic period. 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 time period of human occupation in southern California (approximately the last 13,000 years)? Was the location favorable for habitation or other types of activities in this time span based on what we know about past Native American lifeways? For Historic period, non–Native American archaeological resources, information obtained from archival sources can help to characterize the types of activities that occurred at a given location.

The next consideration given is whether the setting of a given 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? Did the physical alterations result from natural causes, such as flooding or erosion, or from more recent historic-period developments, such as mechanical grading, and how have these processes influenced the potential for preserving buried materials? In other words, is there evidence that natural or Historic-period developments may have eroded, displaced, or otherwise destroyed any potential materials 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 by 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 site information is the result of no resources having been identified or that no archaeological investigation took place. 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, as well as whether the area of interest is similar to the physical setting in which other Native American archaeological sites have been identified. Where the sensitivity assessment considers proximity to a given feature—a known archaeological site, a former village, settlement, or placename, or an environmental feature—there is no universal measure between sensitivity and 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.

Results

The Project site is currently developed with a vacated industrial warehouse building on the eastern portion and two vacated, adjoined industrial buildings in the western portion of the Project site. The central portion of the Project site is paved with asphalt and concrete. The Project site is north of Sacramento Street, west of Wilson Street, and east of Lawrence Street. A defunct railroad spur defines the southwestern edge of the Project site.

Native American-Affiliated Archaeological Resources

The CHRIS and SLF searches were negative for tribal cultural resources or potential tribal cultural resources within the Project site or a 0.5-mile radius. SWCA conducted supplemental background research focusing on Native American land uses and settlement patterns in the region, as well as the effects of ranching and urban development. Several Native American sites were identified in the Project vicinity, the closest of which are Geveronga and Yaanga, which have been described in ethnographic accounts as immediately adjoining the Pueblo of Los Angeles, but its location can only be inferred from ethnographic information.

The Gabrielino settlement known as Yaanga is estimated to have been located in the area between the Los Angeles Plaza and present-day Union Station, approximately 2.4 km (1.5 mile) north of the Project site. Far less is known about another nearby settlement known as Geveronga, which is estimated to have been located somewhere west of Yaanga. The best estimates of its former location place it in a drainage basin formed along the toeslopes of the Elysian Hills, approximately 3.2 km (2 miles) northwest of the Project site. Collectively, these former Native American settlements are considered by SWCA to have been located too far from the Project site such that a buried tribal cultural resource directly associated with their occupation is likely to be located within the Project site. Rather, the presence of pre-Spanish period settlements suggests that certain locations of what is now downtown Los Angeles were indeed important locations for past Native American communities, and there was some degree of increased activity focused here, but within a broad and more generalized area. Accordingly, the influence on sensitivity for a buried tribal cultural resource is considered to be similarly generalized across the downtown Los Angeles area, with only a minor influence on the comparatively smaller Project site. This more generalized sensitivity would include any material remains associated with traditional Native American lifeways that include foraging, food processing and cooking, resource gathering, rituals, inhuming the deceased, established temporary open camps, and seasonal settlements. Archaeological remains from these types of activities are commonly identified by the presence of objects such as tools or the debris left by their manufacture, plant and animal remains, hearths, and items of adornment or sacred objects.

The Project site is west of the Los Angeles River, currently located approximately 0.6 km (0.4 mile) east of the Project site, though within the river's historical floodplain. Shifts in the main channel of the Los Angeles River have occurred numerous times in recorded history, including two significant shifts in 1815 and 1825. The first recorded shift of the river occurred in 1815 when floodwaters overflowed the former channel, shifting the course at least 0.8 km (0.5 mile) to the southwest, near the present route of Spring Street. That flood is reported to have destroyed structures built as part of the original Los Angeles Pueblo (Gumprecht 2001:139–141) and may have also flooded all or parts of the Native American site of Yaanga, which is believed to have been located nearby.

The general proximity of the Project site to areas of known habitation, the river, and broad travel corridors has the effect of an overall increase in the sensitivity for unknown tribal cultural resources, at least higher than low background levels, particularly for the archaeological remains of temporary open camps. Such camps are typically identified by the presence of hearth features, ground stone, and other types of artifact assemblages. However, additional factors related to preservation of such materials are considered with respect to alluvial depositional settings within the Los Angeles River floodplain and are discussed below.

The Project site is situated northwest of the reported location of Rancheria de los Pipimares—a village site occupied by Gabrielino from San Nicolas Island (known as Nicoleño) during the early and middle parts of the nineteenth century. Rancheria de los Pipimares is estimated to have been between 7th and 8th Streets, west of San Pedro Street, which is approximately 1.4 km (0.9 mile) northwest of the Project site. Other nearby rancherias occupied during the Historic period by Gabrielino and other Native Americans include Rancheria de los Poblanos, one unnamed settlement, and Pueblito (on the east side of the Los Angeles River). Because the location of the Historic period rancherias can be traced to streets and City blocks included in the contemporary street grid, and the activities associated within those settlements are believed to have been more geographically constrained, the influence on tribal cultural resource sensitivity is similarly confined to smaller areas, with little to no influence on the sensitivity within the Project site.

The Project site is on the southeastern portion of the City's original 1849 annexation boundary. Maps and historical accounts characterize the Project site and surroundings as open fields used for livestock grazing and growing corn. The first development identified within the Project site are single-family residences, present by 1906. The Project site was subject to re-development prior to 1921 during which time several Historic-period buildings were constructed and demolished. These construction-demolition episodes have compromised the integrity of the physical setting and likely destroyed or displaced any tribal cultural resources that may have been deposited on the surface or shallowly buried.

It has been demonstrated elsewhere in the downtown portion of Los Angeles that deeply buried archaeological deposits can exist within alluvium below Historic-period disturbances and may also be intermixed with Historic-period debris. Alluvial deposits within the Los Angeles Basin can be massive, extending hundreds of feet below the surface, and may contain sediments deposited before human occupation of North America. Furthermore, most accumulations of alluvial sediments were formed by a combination of high- and low-energy depositional events. High-energy events are less likely to have preserved any material remains left on the surface by Native Americans, while low-energy floods tend to produce more favorable environments for the preservation of cultural materials. Thus, low-energy alluvial sediments dating to the late Pleistocene or Holocene time periods have the greatest potential for preserving tribal cultural resources. There is no absolute measure of depth below the surface in which sediments with these properties occur and site-specific conditions must be considered. Also, such soil conditions are an indicator of a setting favorable for preservation, but the presence of soils with these properties is not an absolute indicator of tribal cultural resource presence.

The Project site is mapped within a geologic unit composed of alluvium deposited between the late Pleistocene to possibly early Holocene, which can be favorable for the preservation of a deeply buried tribal cultural resource. However, given the horizontal extent and depth of this geologic unit and those of similar composition and age within the Los Angeles Basin, SWCA does not consider the presence of these sediments alone to be sufficient evidence to suggest a strong influence on the tribal cultural resource sensitivity directly within the Project site. Rather, it demonstrates that there is at least a low level of potential for a deeply buried resource.

Whatever the reason for intensified use by Native Americans adjacent to the river (current or former alignments) during the Prehistoric and Ethnohistoric periods, disturbances from natural erosional processes and historical development reduces the likelihood that any physical traces of those activities remain preserved as archaeological deposits. The preservation conditions in the former floodplain of the Los Angeles River are known to vary widely over the time period in which Native Americans have been living in the Los Angeles Basin. Sediment profiles taken along the Los Angeles River show regular periods of high-energy deposition in the form of large gravelly strata, intermixed with evidence of low-energy deposition in the form of silty or clayey deposits with lower gravel content and size. The CHRIS records search results identified a site in which a 3,600-year-old femur from a Native American (P-19-004662) was recovered 19 feet below the surface within the Los Angeles River floodplain. That the bone was found in isolation and in a sediment matrix typical of high-energy deposition (i.e., flooding), which strongly suggests the bone was redeposited from another location. In contrast, archaeological deposits that may have once been on the surface or shallowly buried are very unlikely to be preserved where excavation for large-scale grading occurred within the Project site.

The deposit of alluvial sediments within the Los Angeles River floodplain is capable of preserving deposits of archaeological materials where low-energy flood events occur; however, high-energy flood events create settings that are very unlikely to preserve archaeological remains. Given the intensive modifications to the surface and subsurface within the Project site, SWCA finds that the Project site has a **low sensitivity for containing archaeological resources affiliated with Native Americans.**

Historic Period (Non-Native American) Archaeological Resources

Assessing Historic-period archaeological resources (i.e., those that are not affiliated with Native American activities) focused on reviewing maps and aerial photographs of the Project site as a means of determining prior land uses. Archival sources revealed a variety of historical land uses included the following: agricultural (early 1800s–ca. 1906), residential (ca. 1906–1921), light industrial (1921–present). The first map of Los Angeles was drawn in 1849 and shows agricultural fields were already established in the location of the Project Site. Zanja No. 1 and No. 2 were constructed between the 1870s and 1880s to the east and west of the Project site, respectively. By 1891 there was an unnamed irrigation channel constructed between Zanja No. 1 and No. 2 that was mapped along an east-west transect through the northern portion of the Project site. Residential dwellings were present within the Project site between 1906 and 1921, by which time they were demolished and replaced with a commercial building labeled Royal Packing Company. Initial research indicated that some of the dwellings can be associated with their former residents.

The geotechnical report noted brick fragments were observed in the sediments described as fill down to 7 feet bgs. It appears that the cycles of construction and demolition have resulted in the accumulation of debris intermixed with near-surface sediments, which are designated in the geotechnical investigation as fill soils. The fill soils may include remnants of the former agricultural or residential land uses, potentially intermixed with some of the light industrial uses from the periods before the Project site was fully paved by 1952. Archaeological materials associated with agricultural uses could include sections of irrigation features, fragments of mechanical farming equipment, and discarded refuse. Residential land uses from

before trash service or sewers were regularly installed often include backyard trash pits and privies filled with a variety of materials such as personal items, food and beverage containers, and other household goods. Archaeological remains of former residences may also include structural foundations, construction materials, and other discarded pieces of refuse. The archaeological components associated with light industrial land uses in unpaved lots may include pieces of hardware, building materials, materials associated with the use of rail lines, as well as random pieces of refuse discarded by warehouse workers.

While the historical land uses and presence of the fill soils are both indicators of increased sensitivity for historical archaeological components, the same processes of demolition and construction would have likely destroyed or displaced any material remains that may have been deposited during the prior land uses. The result is an overall decrease in the sensitivity for a buried Historic-period archaeological resource within the Project site. Therefore, based on the above considerations, SWCA considers the Project site to have **moderate sensitivity for Historic-period archaeological resources**.

IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES

No known archaeological resources have been recorded within the Project site. Because the Project site is paved or otherwise developed with buildings and above-grade structures, an archaeological field survey was not conducted and an assessment of the potential for buried resources was based on archival research. SWCA's assessment of the archaeological sensitivity indicates that there is a low sensitivity for Native American archaeological resources within the Project site, and there is moderate sensitivity for Historic-period (non-Native American) archaeological resources associated with agricultural, residential, and light industrial land uses from at least the early 1900s to 1952. The area in which there is sensitivity for these resources is represented by the presence of fill soils designated in the geotechnical investigation, which were noted to a maximum depth of 7 feet bgs. The potential for Native American archaeological materials is low for the reasons discussed at length above, but also because of the physical alterations to the Project site that occurred during the historical land uses, which have compromised the preservation conditions. While the sensitivity for Native American archaeological components is found to be low, the potential for such components cannot be fully ruled out, and individual artifacts could be intermixed within the fill sediments, but if present, would be more likely to be found as a deeply buried deposit within the underlying alluvial sediments. The likelihood of either scenario is still considered to be low. Confirming the presence of archaeological components would require testing and SWCA considers this to be infeasible given the size of the Project site and the constraints posed by the existing pavement and above-grade developments.

Regardless of the age, if present, archaeological resources that may be preserved below ground within the Project site have the potential to be significant under CEQA. The Project proposes to construct a new commercial development that includes a 15-story building with office, restaurant, and retail uses. The Project would remove the existing developments within the Project site, which includes demolishing three buildings and hardscaping elements. Mechanical grading and excavation may also require removal of fill soils across the Project site to meet geotechnical design guidelines.

Construction at the Project site would adhere to applicable regulatory compliance measures intended to avoid creating, or to reduce, significant impacts to archaeological resources in the event of a discovery during grading, excavation, or other ground-disturbing activities. Given the potential for encountering previously unrecorded resources, mitigation measures are recommended to ensure that potential impacts to archaeological resources that may be present in the Project site are less than significant. The recommended mitigation measures presented here provide a framework for mitigating impacts to a variety of resource types but include the Historic-period archaeological resources assessed as having moderate sensitivity. The measures have been developed in accordance with, and incorporate the performance standards of, the Secretary of the Interior's Standards for professional archaeology, PRC

Section 5024.1, Title 14 CCR, Sections 15064.5 and 15126.4 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1, OHP's *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format*, and the guidelines of the City of Los Angeles General Plan Conservation Element.

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.

The recommended mitigation measures are as follows:

- **MM Arch-1: Retain a Qualified Archaeologist.** Prior to the issuance of a demolition permit, the Project proponent shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology, during the excavation phase to carry out and ensure proper implementation of the mitigation measures related to archaeological resources. The qualified archaeologist shall submit a letter of retention to the Project proponent no fewer than 15 days before demolition or excavation activities commence. The letter shall include a resume for the qualified archaeologist that demonstrates fulfillment of the SOI standards.
- **MM Arch-2: Prepare an Archaeological Resources Monitoring and Mitigation Plan (ARMMP).** Prior to the commencement of demolition and excavation, an ARMMP shall be prepared. The ARMMP shall include, but not be limited to, a construction worker training program (described in MM Arch-3), monitoring protocol for demolition and excavation activities, discovery and processing protocol for inadvertent discoveries of archaeological resources, and identification of a curation facility should artifacts be collected. The ARMMP shall identify areas that require monitoring, provide a framework for assessing the geoarchaeological setting to determine whether sediments capable of preserving archaeological remains are present, and include a protocol for identifying the conditions under which additional or reduced levels of monitoring (e.g., spot-checking) may be appropriate. The duration and timing of the monitoring shall be determined based on the rate of excavation, geoarchaeological assessment, and, if present, the quantity, type, and spatial distribution of archaeological resources identified.

  The ARMMP shall minimally include a historical context statement, research design, and methodology by which any newly identified archaeological sites will be evaluated for CRHR eligibility and as unique archaeological resources. The ARMMP will specify the specific types of archaeological sites likely to be encountered, as well as the means by which significance will be assessed. If any archaeological resources are identified and are found not to be significant or do not retain integrity, then they will be recorded to a level sufficient to document the contents and condition. The ARMMP shall include a proactive identification and documentation protocol that would facilitate preservation or mitigation of impacts to any archaeological sites identified in a cost-effective manner. The ARMMP will include potential treatment plans to be implemented in the event that a newly discovered archaeological resource 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). The ARMMP will require that, if the treatment plans outlined therein are found to be infeasible or other alternatives are proposed, the qualified archaeologist shall coordinate with the Project proponent and County Planning to amend the ARMMP with a formal treatment plan that would reduce impacts to the resource(s). The treatment plans stated in the ARMMP or prepared after the discovery of a historical resource, 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 that avoidance is not feasible,

appropriate treatment will be developed based on the type of resource and the results of the significance evaluation, which may include data recovery.

The ARMMP 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. The ARMMP shall be prepared in compliance with PRC Section 5024.1, Title 14 California Code of Regulations, Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1.

- **MM Arch-3: Worker Environmental Awareness Program (WEAP) Training.** Before the commencement of initial demolition or excavation at the Project site, the retained qualified archaeologist or their designee shall provide a WEAP training to on-site Project personnel responsible for supervising demolition and excavation (i.e., foreman or supervisor) and machine operators. The WEAP training shall brief construction crews regarding the regulatory compliance requirements and applicable mitigation measures that must be adhered to during demolition and excavation activities for the protection of archaeological resources. As an element of the WEAP training, the qualified archaeologist or their designee shall advise the construction crews on proper procedures to follow if an unanticipated archaeological resource is discovered during construction. The qualified archaeologist or their designee shall also provide the construction workers with contact information for the qualified archaeologist and their designee(s) and protocols to follow if inadvertent discoveries are made. In addition, workers shall be shown examples of the types of archaeological resources that would require notification of the archaeologist, if encountered. Once the ground disturbances have commenced, the need for additional or supplemental WEAP training shall be determined through consultation with the qualified archaeologist, Project proponent, or their designated supervisor. Within five days of completing a WEAP training, a list of those in attendance shall be provided by the qualified archaeologist to the Project proponent.
- **MM Arch-4: Monitoring for Archaeological Resources.** Before the commencement of demolition or excavation activities, an archaeological monitor shall be present during ground-disturbing activities as stipulated in the ARMMP. The qualified archaeologist may designate an archaeologist to conduct the monitoring under their direction. The monitor shall have the authority to temporarily halt or redirect construction activities in soils that are likely to contain potentially significant archaeological resources, as determined by the qualified archaeologist. The monitor shall complete a daily log documenting construction activities and observations. The field observations shall include assessment of the geoarchaeological setting and whether sediments are identified that are no longer capable or unlikely to contain archaeological material (i.e., sterile), which may be encountered prior to reaching the total depth of excavation expected for the Project. If initial archaeological monitoring identifies low archaeological sensitivity (i.e., sterile soil strata) below a certain depth or within a certain portion of the Project site, a corresponding reduction of monitoring coverage would be appropriate. 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 ARMMP are found to be infeasible or other alternatives are proposed, the qualified archaeologist shall coordinate with the Project proponent and County Planning to amend the ARMMP 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 that 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.

SUMMARY AND CONCLUSION

This evaluation included a review of historical archival sources and archaeological records. A CHRIS records search did not identify any known archaeological sites in the Project site. The SLF results returned by the NAHC were negative. Background research indicates that subsurface archaeological deposits are commonly encountered during construction projects in downtown Los Angeles and previously unrecorded Historic-period archaeological sites have a high likelihood of occurring within the Project site. Specifically, there is potential to encounter an irrigation ditch linking Zanja No. 1 and Zanja No. 2, refuse associated with residences from the late nineteenth century to the early 1920s, as well as construction material and building foundations associated with the residences and those from several commercial buildings present before 1971. These resources have the highest probability to occur in the previously disturbed soil strata above the younger alluvial deposits.

To address potential impacts to previously undiscovered archaeological resources, the Project will include retaining a qualified archaeologist (MM Arch-1), producing and implementing a detailed ARMMP (MM Arch-2 and MM Arch-4), and conducting a worker training (MM Arch-3). Doing so will ensure that any archaeological sites are identified and determined to be historical resources or unique archaeological resources, for which project-related impacts would be mitigated on the basis of their eligibility under each CRHR criterion and as a unique archaeological resource.

Therefore, after mitigation, potential impacts to archaeological resources would be reduced to less than significant under CEQA. The measures described above address potential impacts to archaeological resources. In the event of a discovery of archaeological resources affiliated with Native Americans that might be considered tribal cultural resources, additional measures may apply.

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White, Donna, and Richard W. Blackmer

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ATTACHMENT A

Report Figures

Figure A-1. Project vicinity.

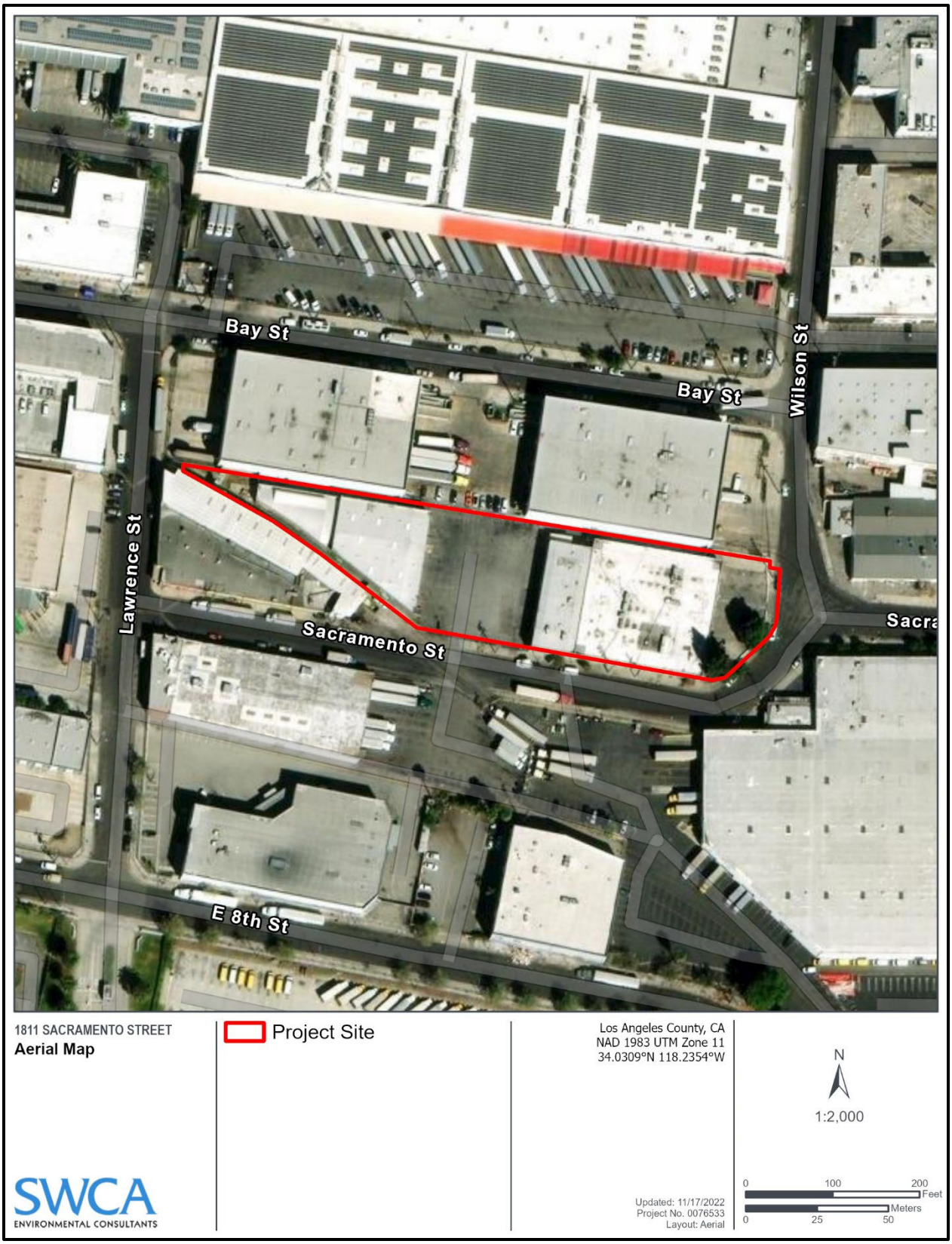

Figure A-2. Project site plotted on a 2020 aerial.

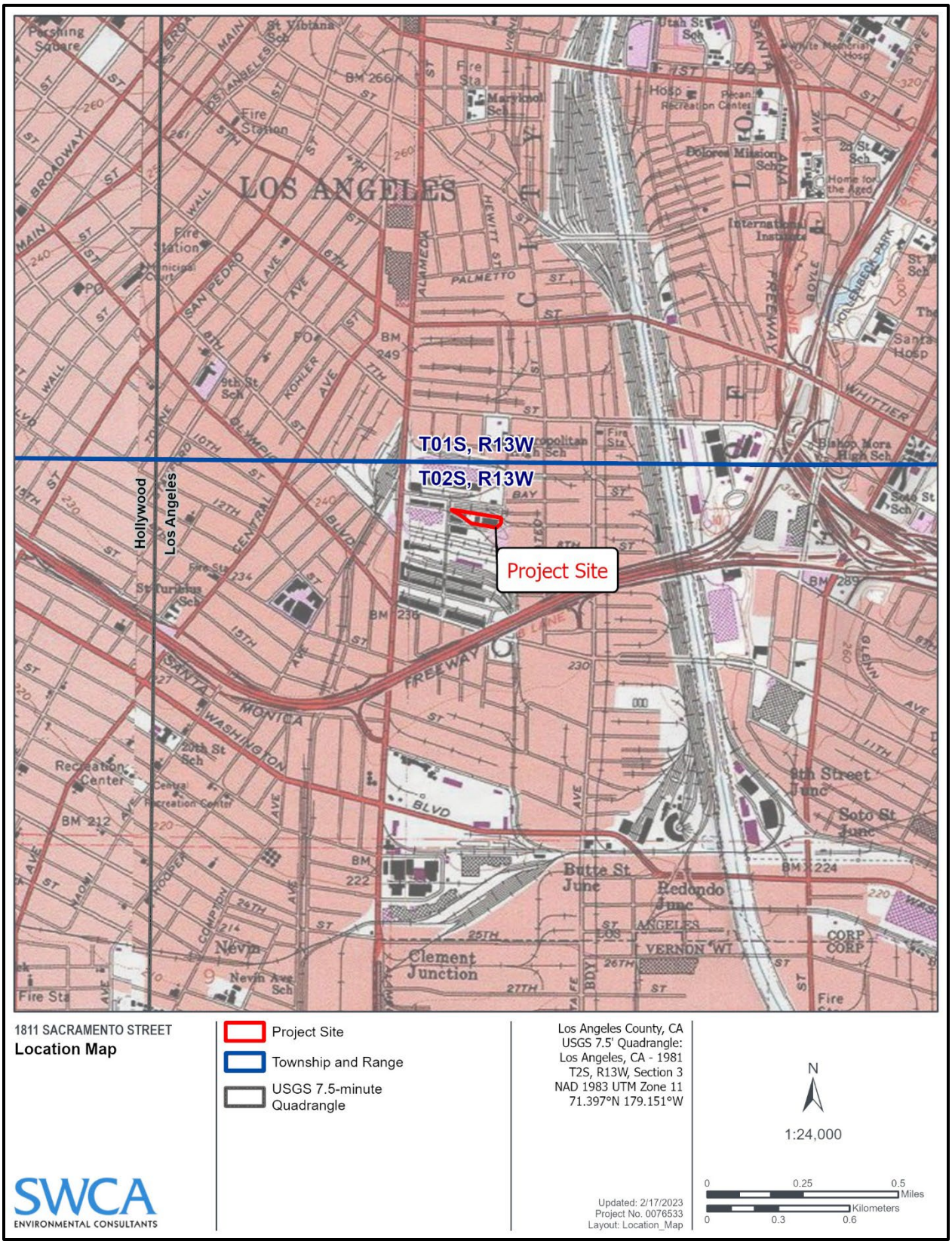

Figure A-3. Project location plotted on USGS Los Angeles, California, 7.5-minute quadrangle.

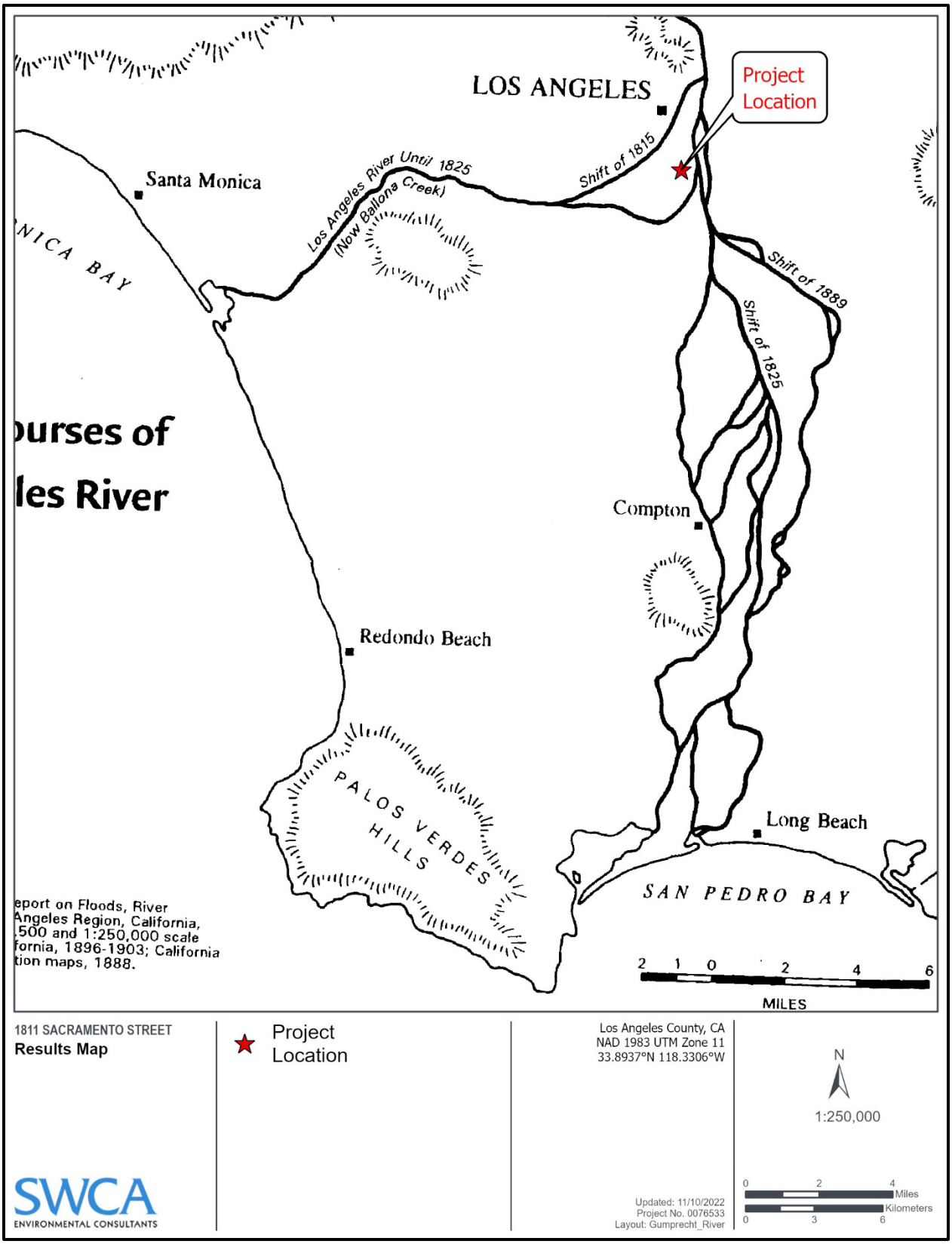

Figure A-4. Multiple courses of the Los Angeles River channel as depicted by Gumprecht (2001:140).

Figure A-5. Native American territorial boundaries based on ethnographic and tribal sources.

Figure A-6. Native American settlements, sites, placenames, and historical points of reference.

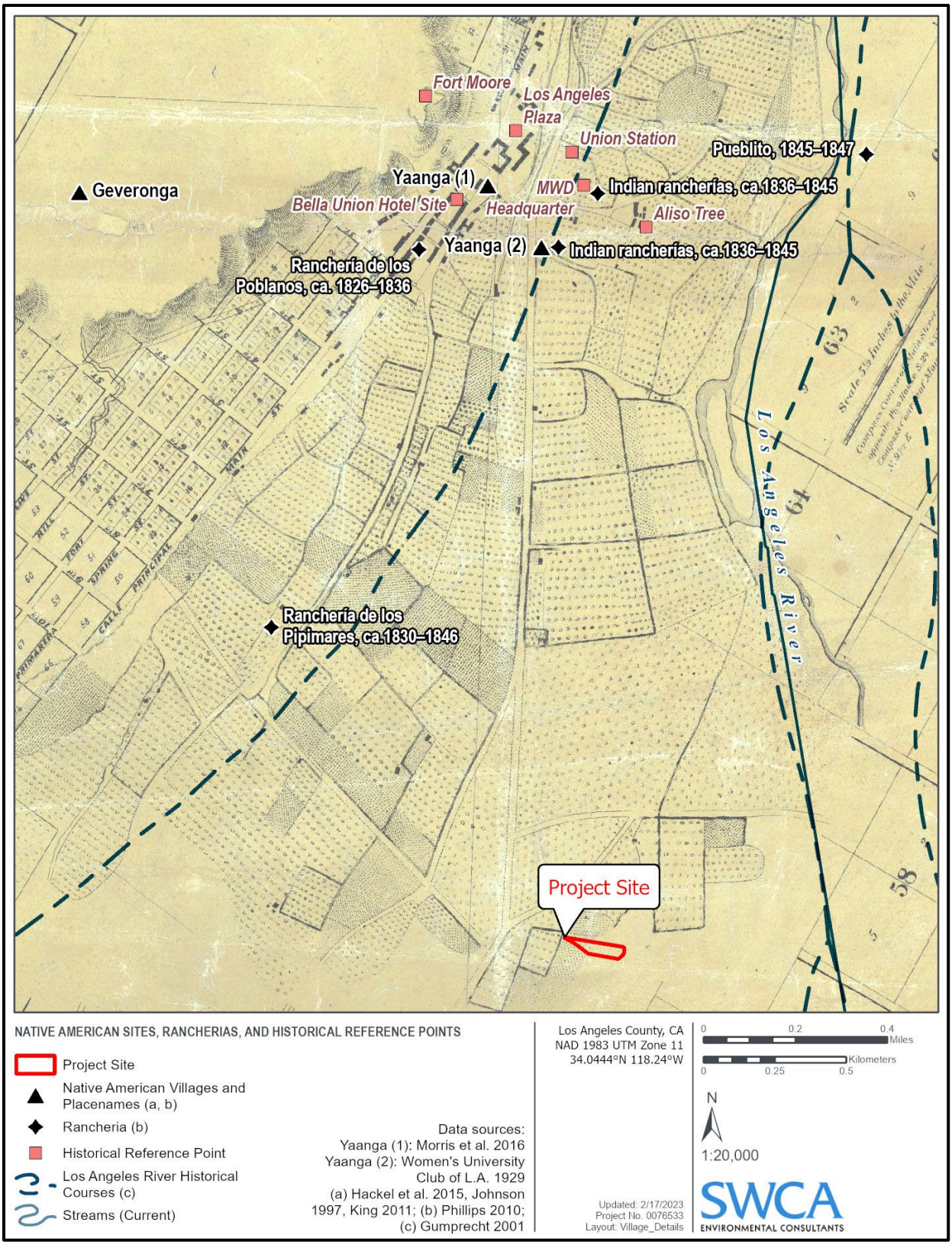

Figure A-7. Project site and Native American village sites, placenames, and historical points of reference plotted on an appended copy of Hancock's 1857 City map (based on Ord's 1849 original).

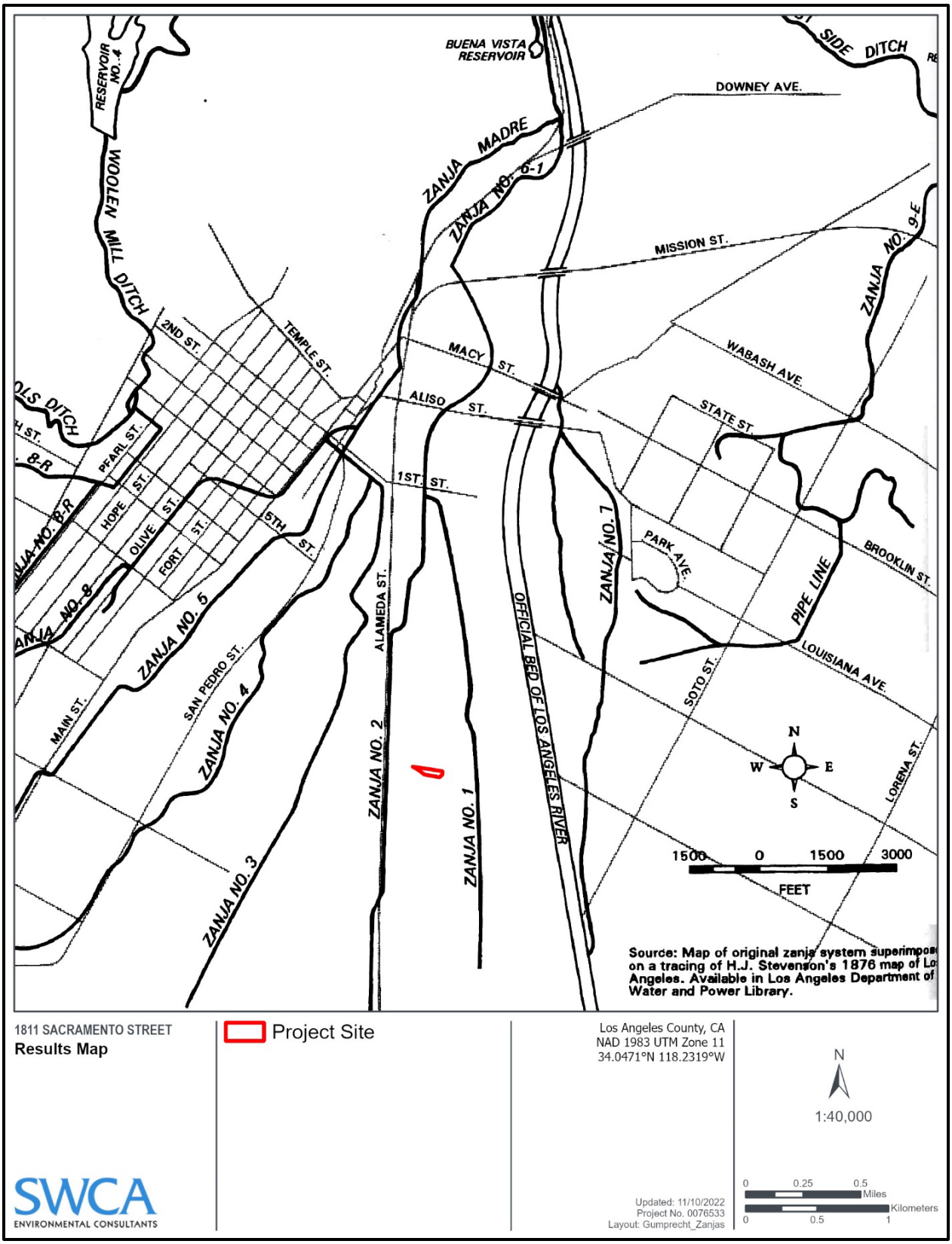

Figure A-8. Project site shown on Gumprecht's (2001:73) map of the zanja system in Los Angeles, ca. 1880.

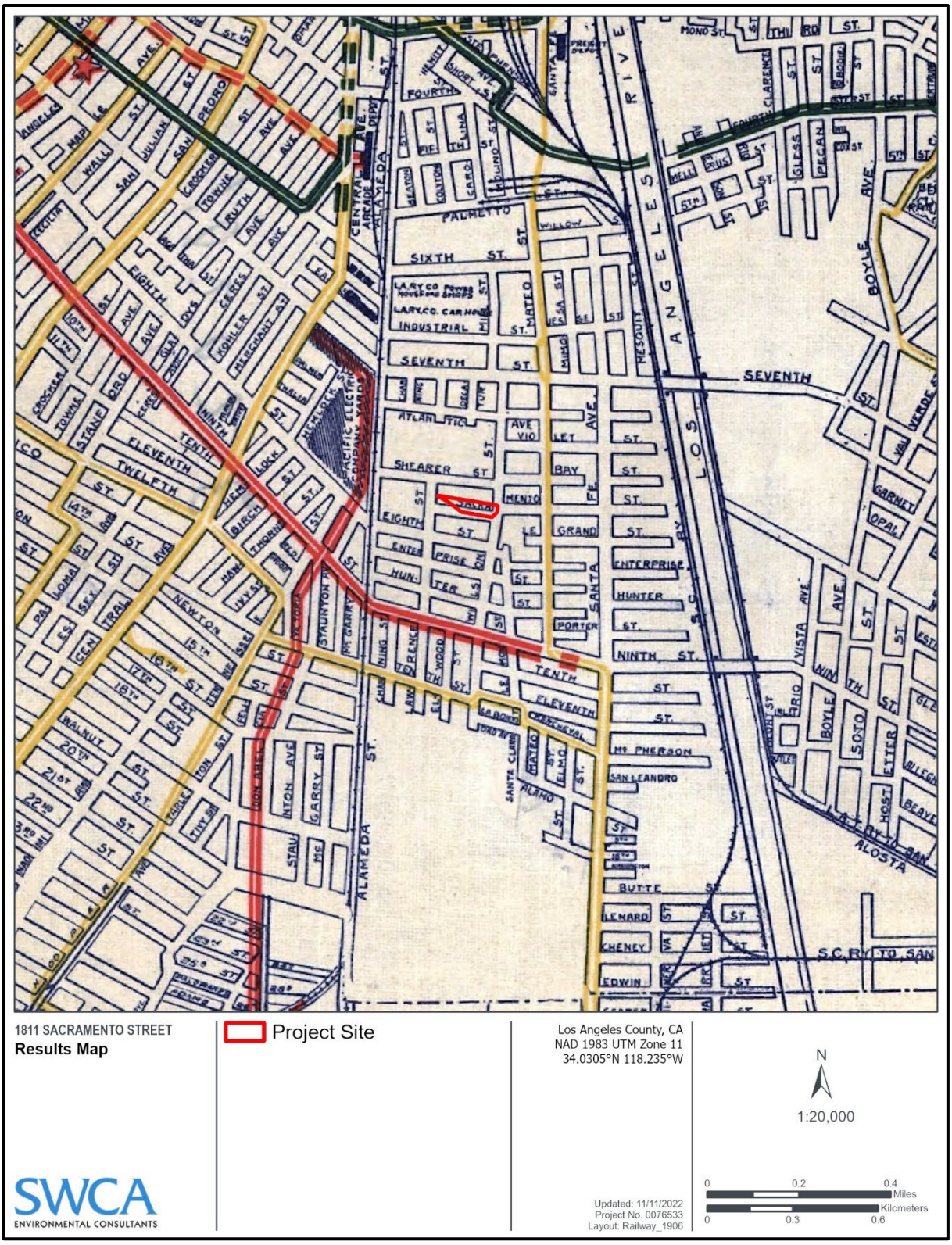

Figure A-9. Project site depicted on a 1906 railway map (Travel and Hotel Bureau 1906). Note that the vicinity of the Project site includes three lines operated by the Los Angeles Railway Company (yellow line), Pacific Electric Railway Company (red line), and Los Angeles Inter-Urban Railway Company (green line).

Figure A-10. Project site shown in red on Julius Bien's 1877 map of Los Angeles County.

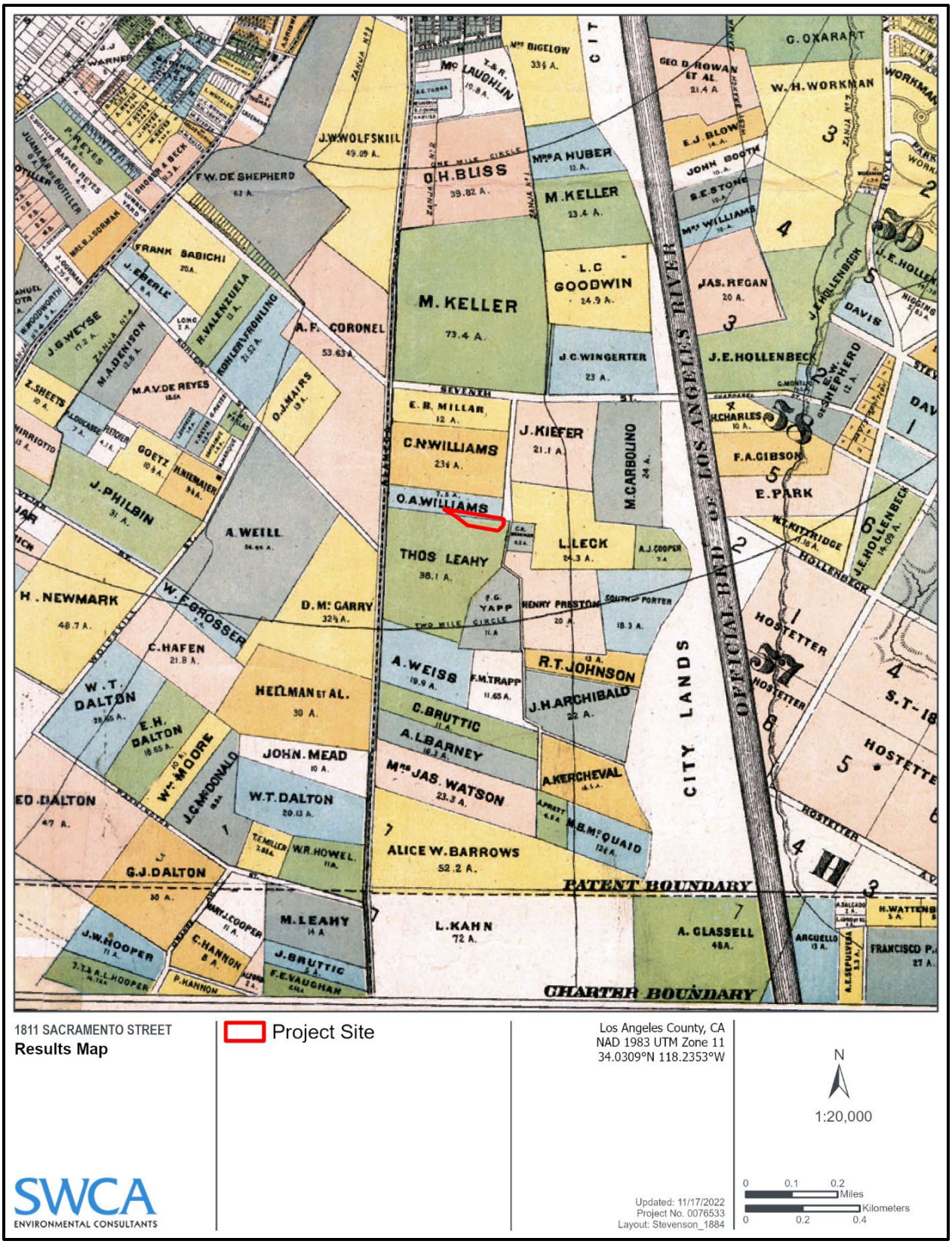

Figure A-11. Project site shown on H. J. Stevenson's survey map of Los Angeles, 1884.

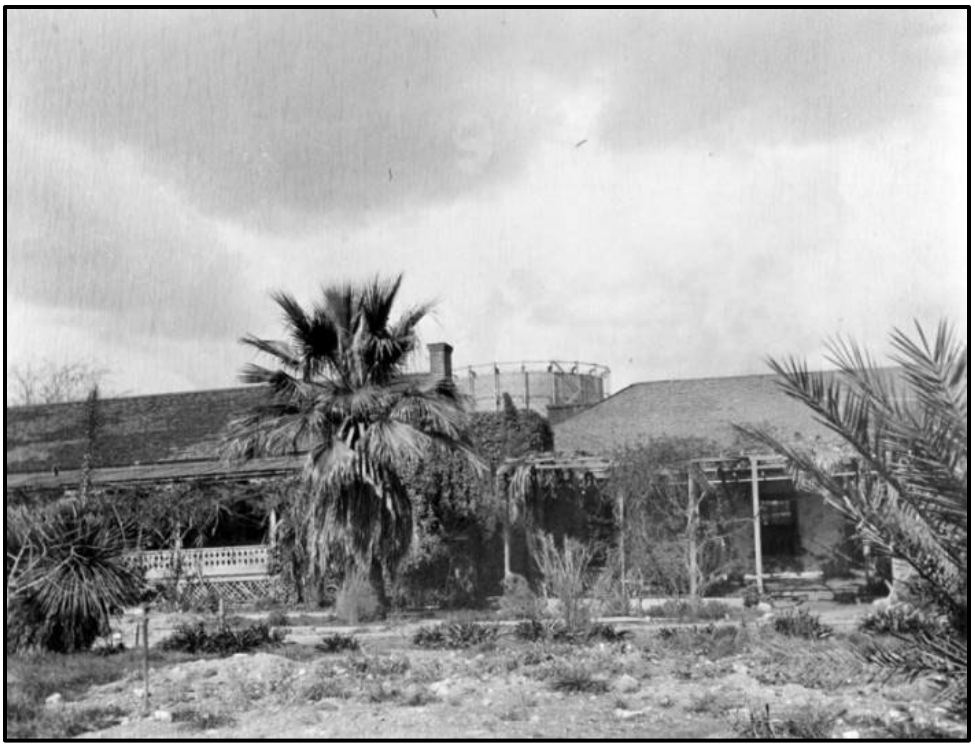

Figure A-12. Exterior view (facing east) of the one-story home of Thomas Leahy (at left) on Alameda near 8th Street. To the right is the adobe which was over 100 years old in 1873 (photo courtesy of Security Pacific National Bank Photo Collection).

Figure A-13. Exterior view (facing southeast) of the one-story home of Thomas Leahy (at left) on Alameda near 8th Street. To the right is the adobe which was over 100 years old in 1873 (photo courtesy of Security Pacific National Bank Photo Collection).

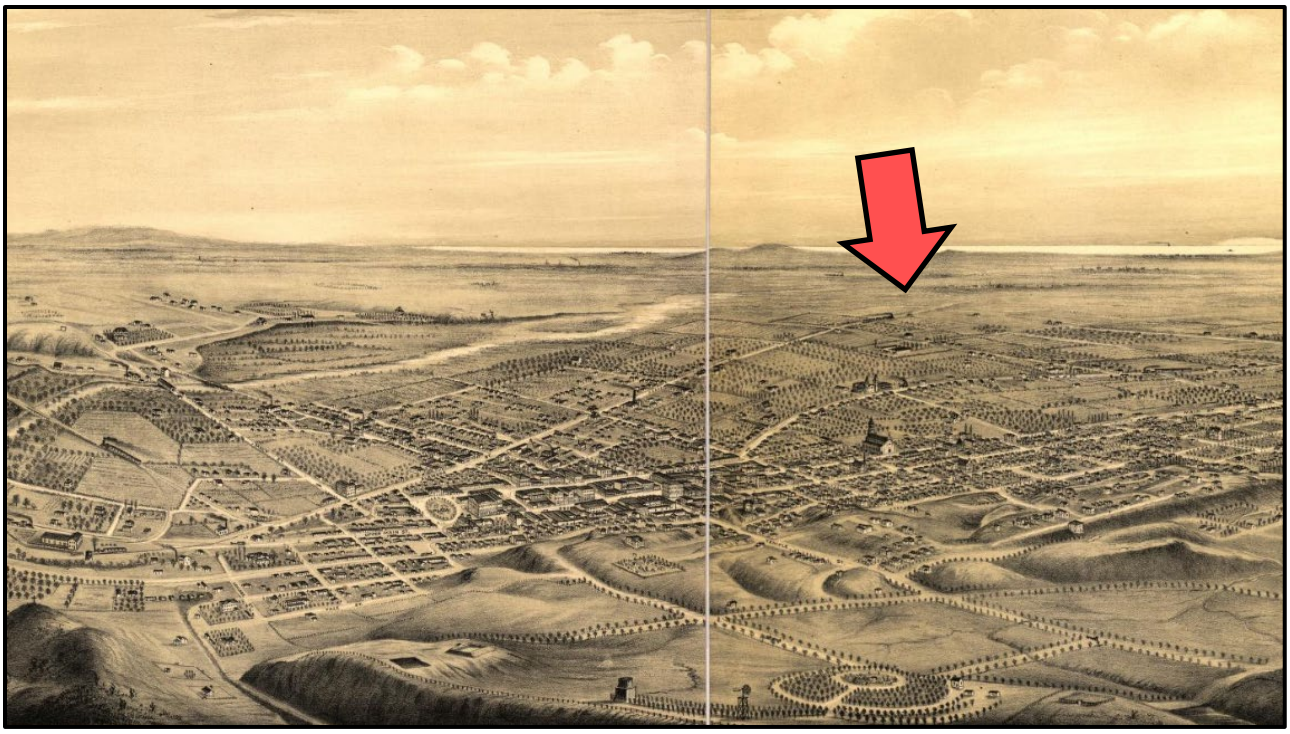

Figure A-14. Bird's-eye view of Los Angeles, California, facing southeast (1877), with arrow pointing to the Project site (courtesy of the Library of Congress).

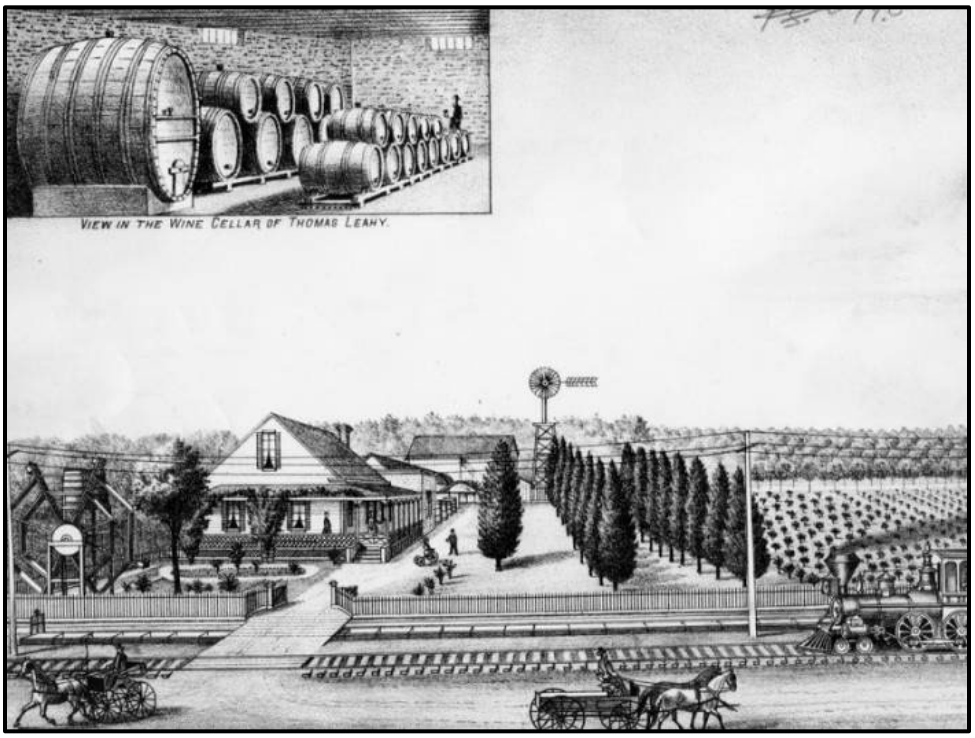

Figure A-15. Drawing of the residence and part of the orange grove and vineyard of Thomas Leahy on Alameda Street, Los Angeles (photo courtesy of Security Pacific National Bank Photo Collection).

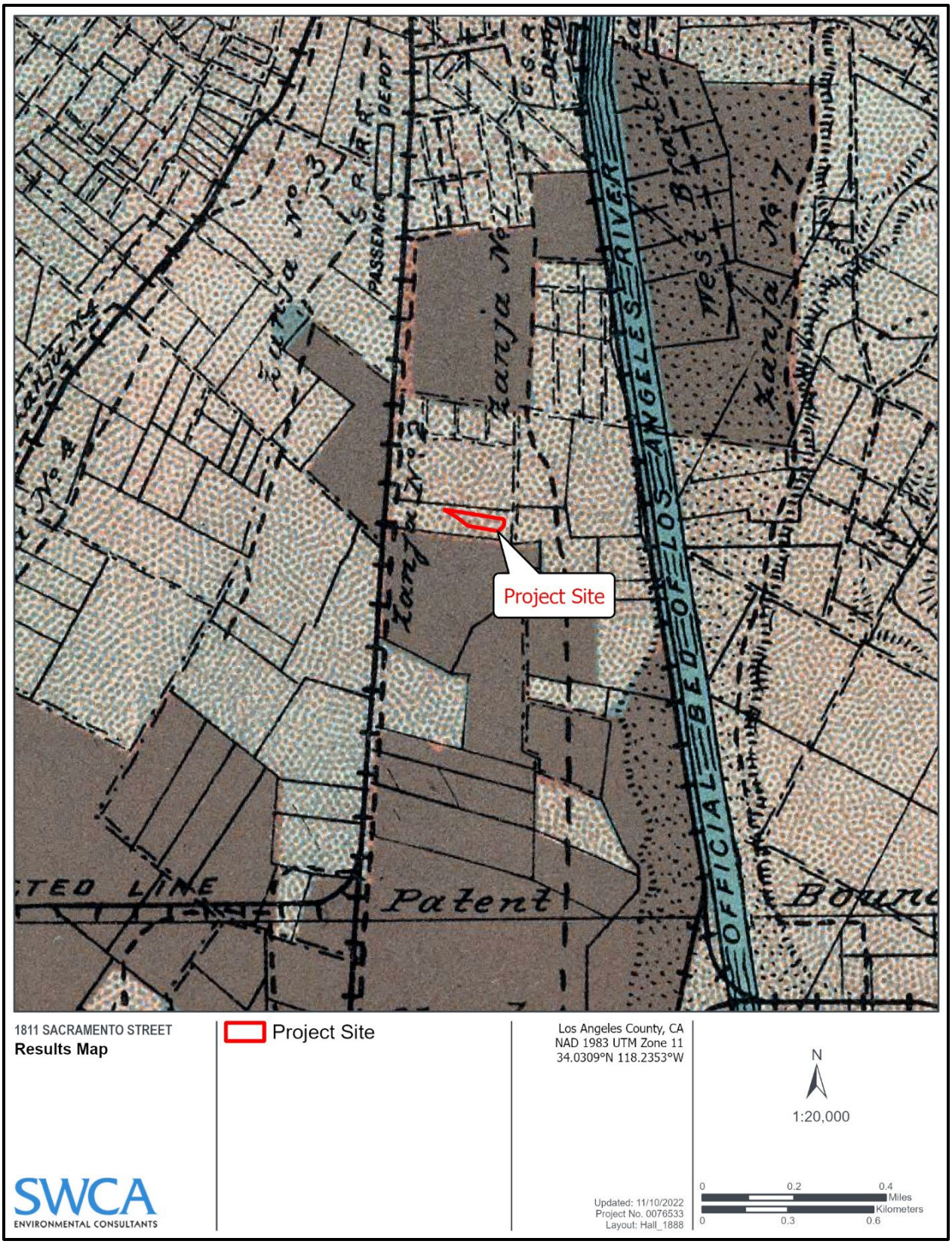

Figure A-16. Project site with Zanja No. 1 and Zanja No. 2 shown on Hall's irrigation map from 1888. Note that the darker shaded areas are properties that were receiving irrigation water.

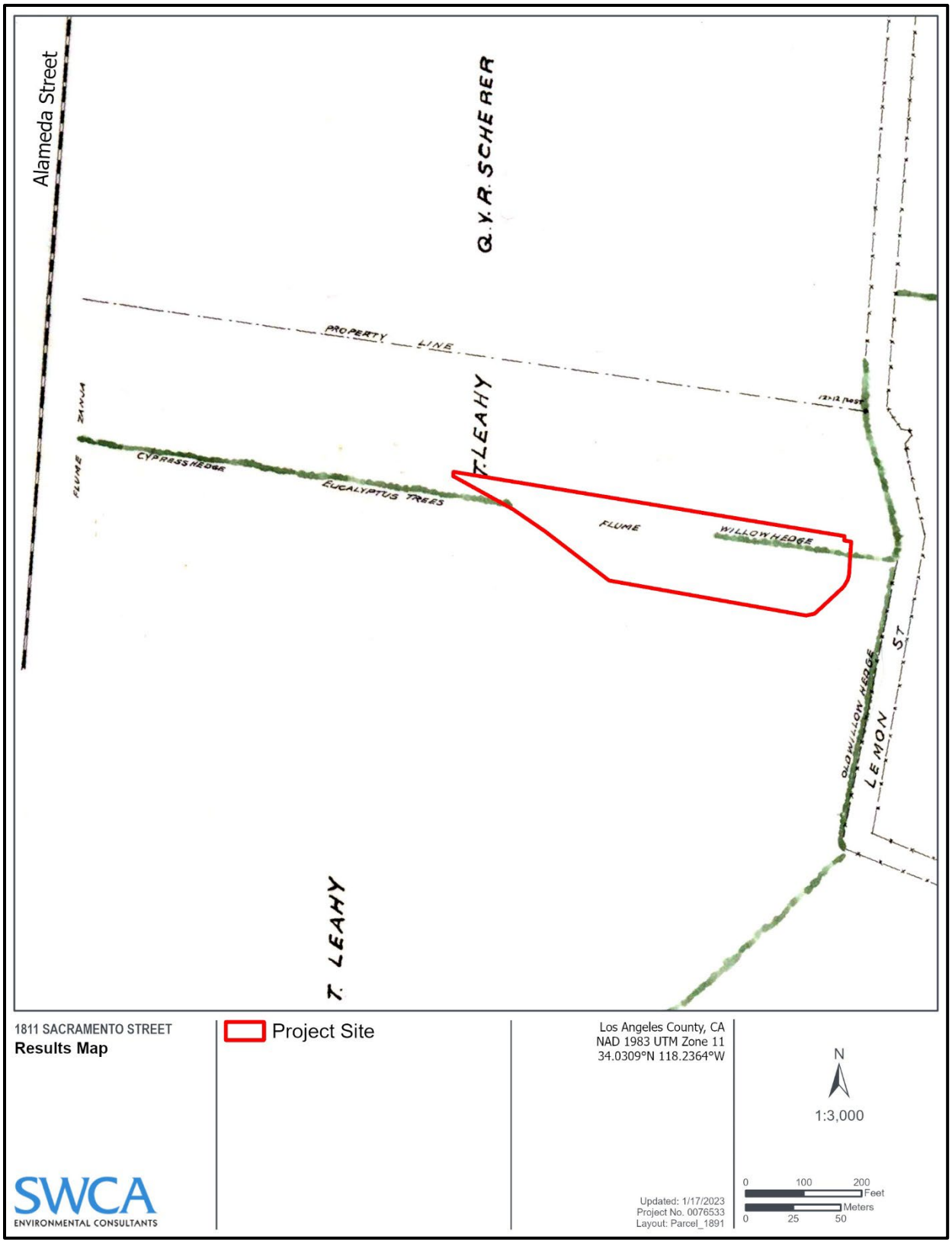

Figure A-17. Project site shown on an 1891 parcel map (Solano 1891) with Zanja No. 1 to the east and Zanja No. 2 to the west. Note the flume running through the Project site from Zanja No. 2 (Alameda Street) along a row of trees and hedges towards Zanja No. 1 within the Leahy property.

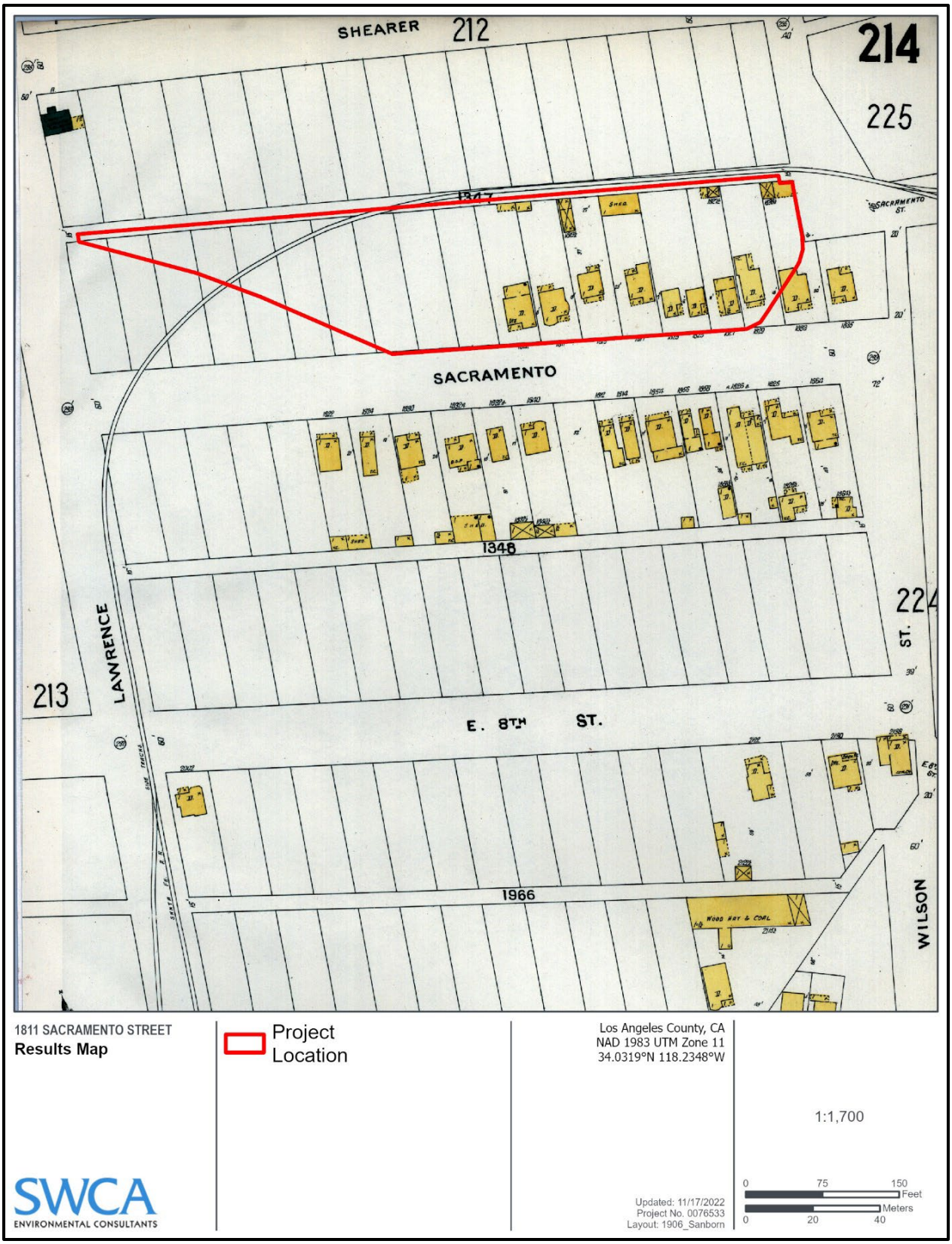

Figure A-18. Project site shown on the Sanborn Fire Insurance map, 1906, Vol. 2, Plate 215.

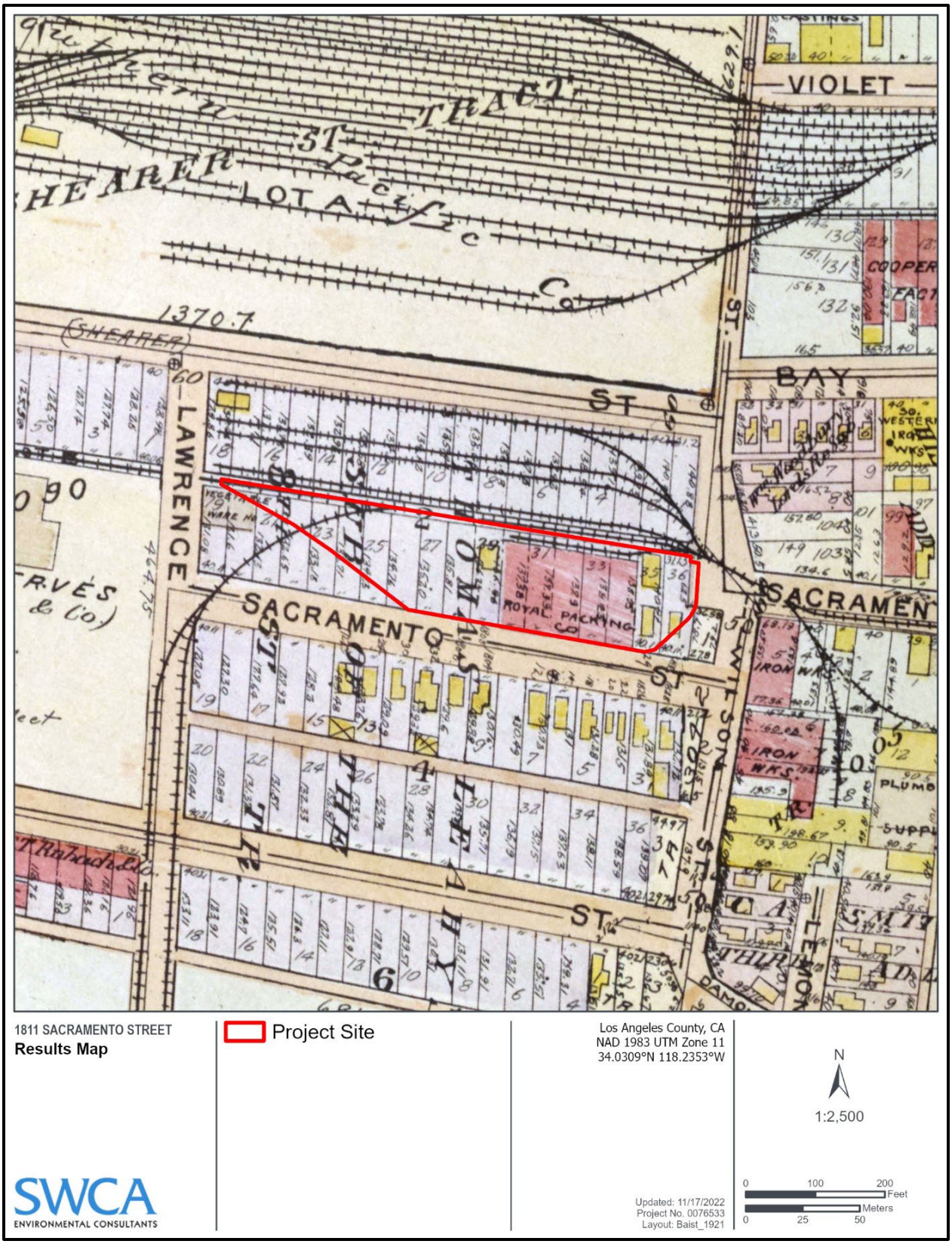

Figure A-19. Project site plotted in the Thomas Leahy's 8th Street Tract as shown on the Baist Real Estate map, 1921 (Source: David Rumsey Map Collection).

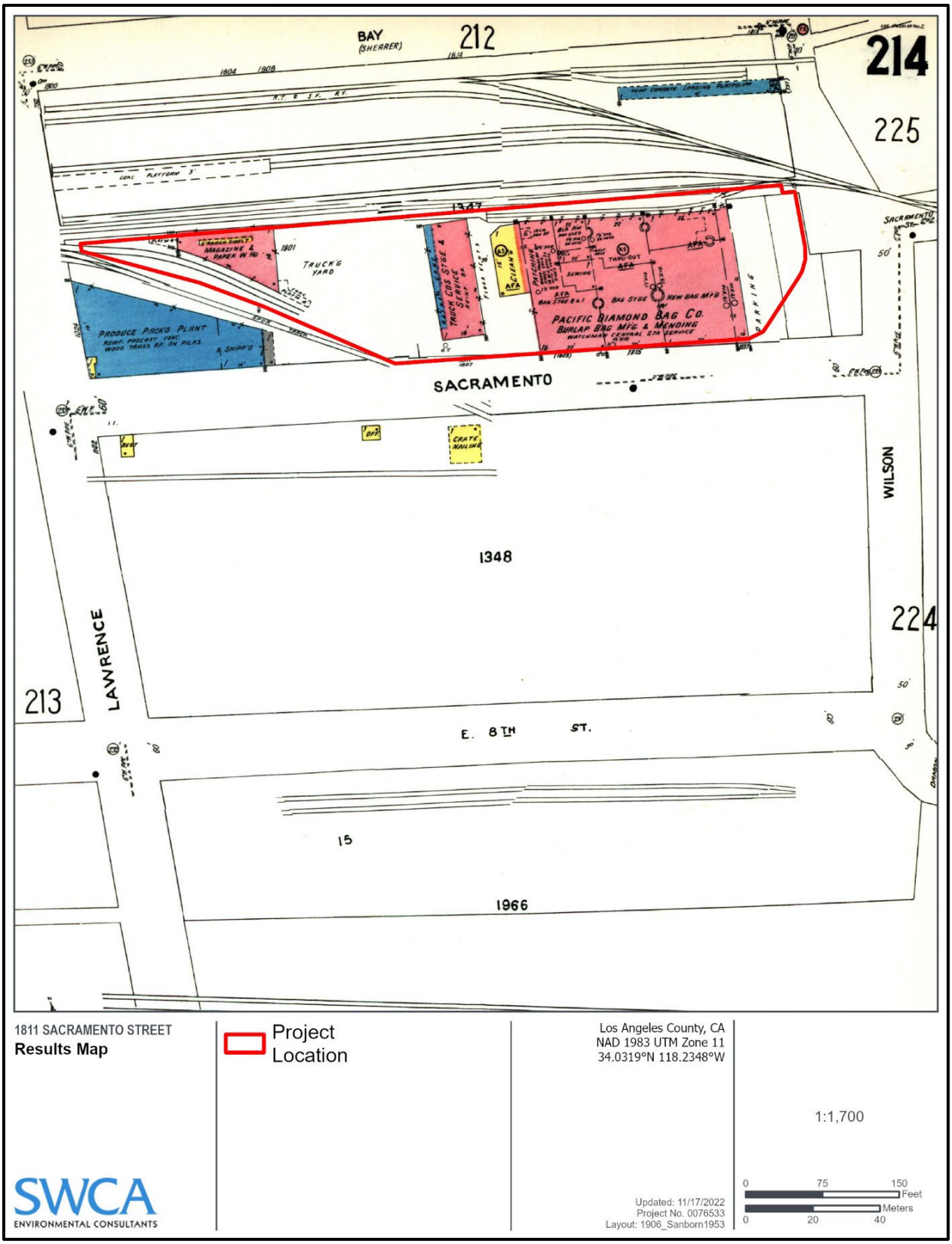

Figure A-20. Project site shown on the Sanborn Fire Insurance map, 1953 revision of 1906 (Vol. 2, Plate 215) map.

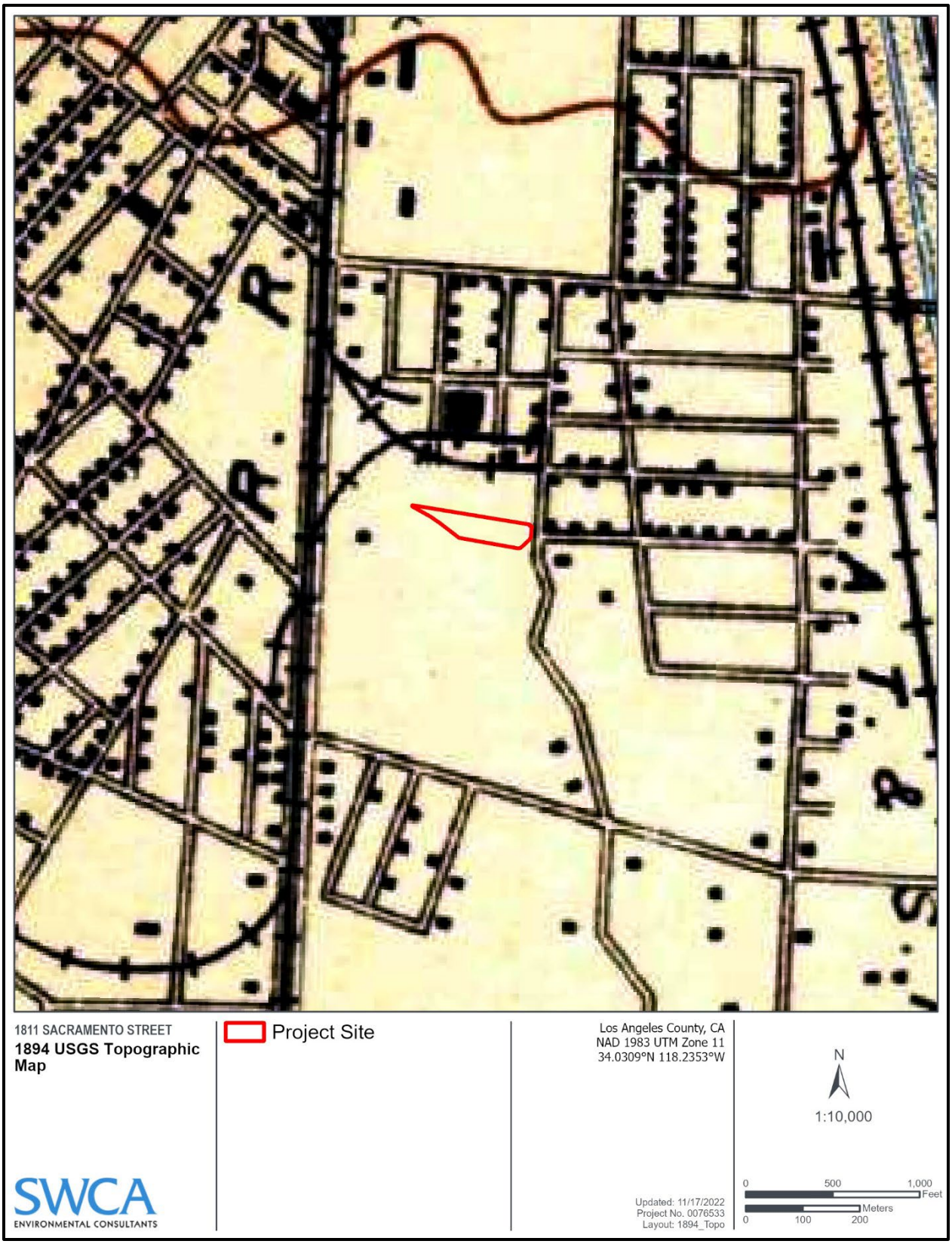

Figure A-21. Project site plotted on an 1894 USGS Los Angeles, California, 15-minute topographic quadrangle.

Figure A-22. Project site plotted 1927 historic aerial photograph.

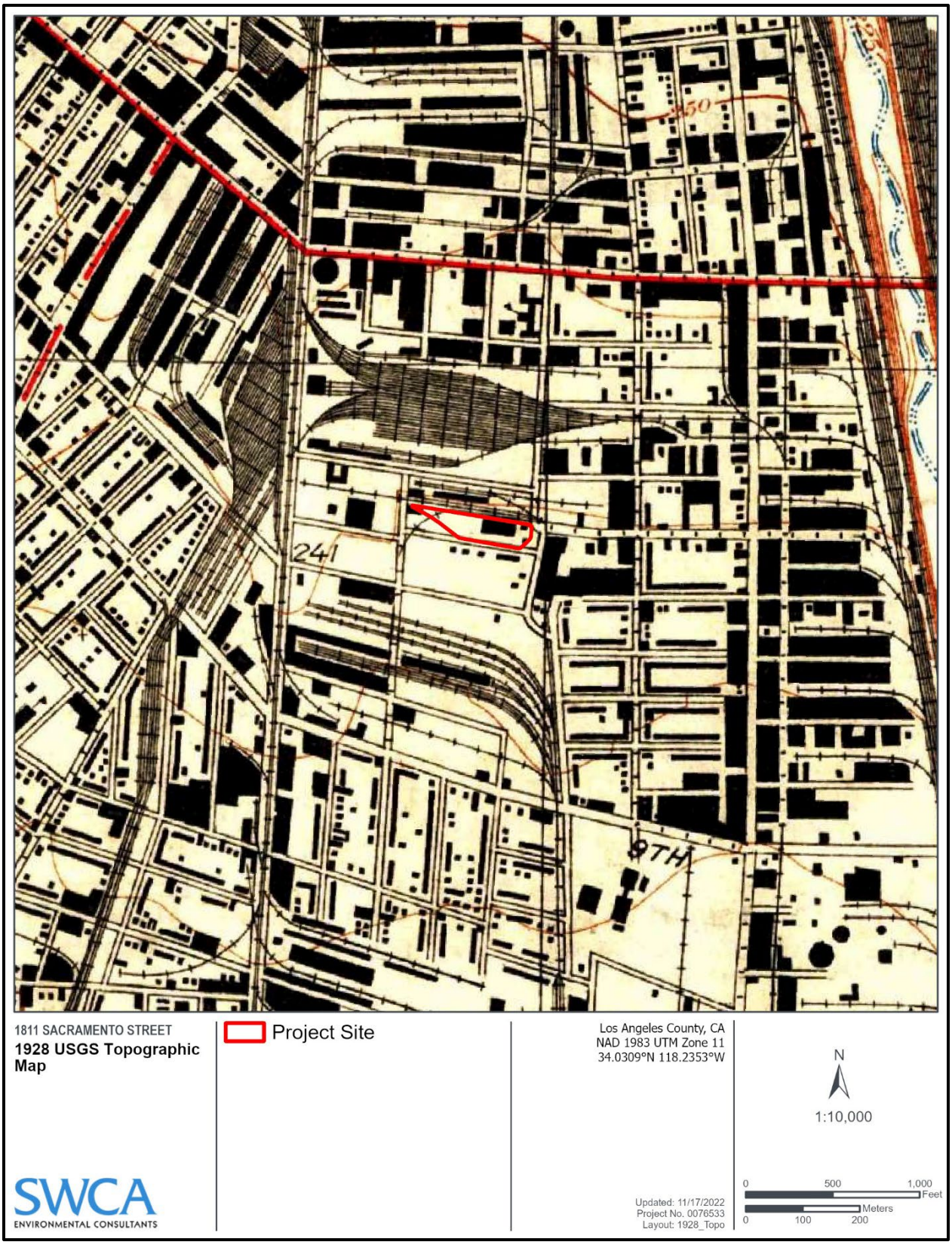

Figure A-23. Project site plotted on a 1928 USGS Los Angeles, California, 7.5-minute topographic quadrangle.

Figure A-24. Project site plotted on a 1952 historic aerial photograph.

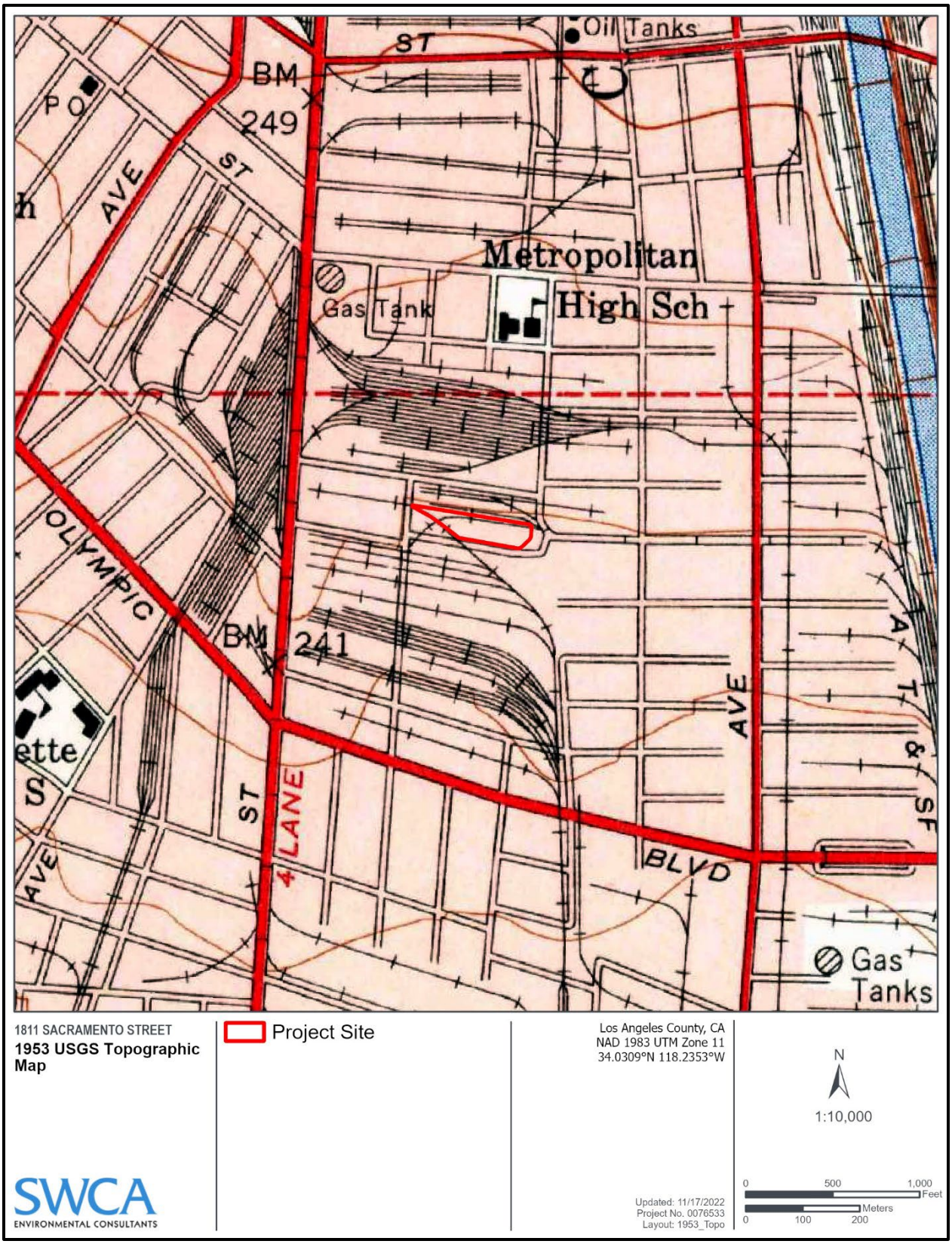

Figure A-25. Project site plotted on a 1953 USGS Los Angeles, California, 7.5-minute topographic quadrangle.

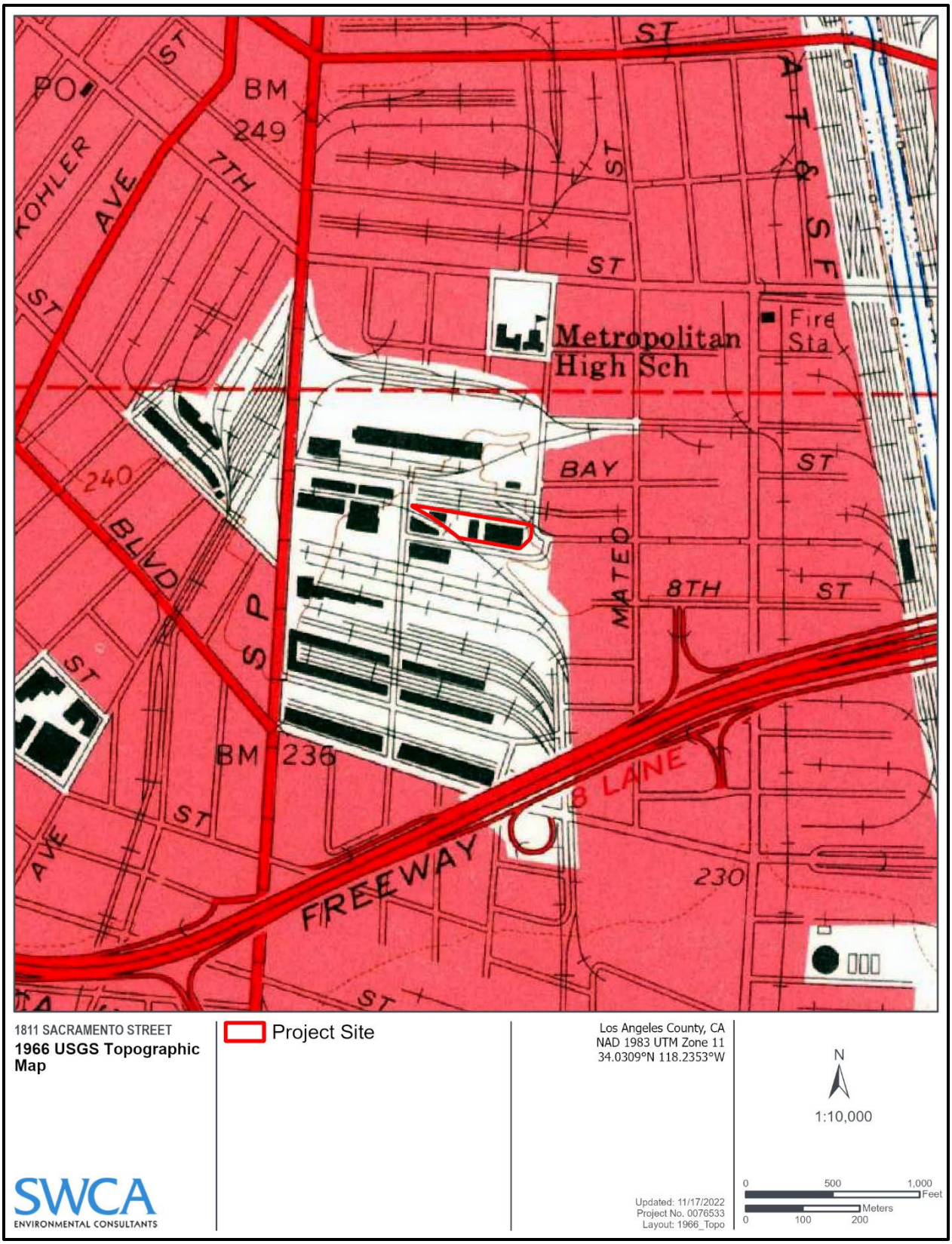

Figure A-26. Project site plotted on a 1966 USGS Los Angeles, California, 7.5-minute topographic quadrangle.

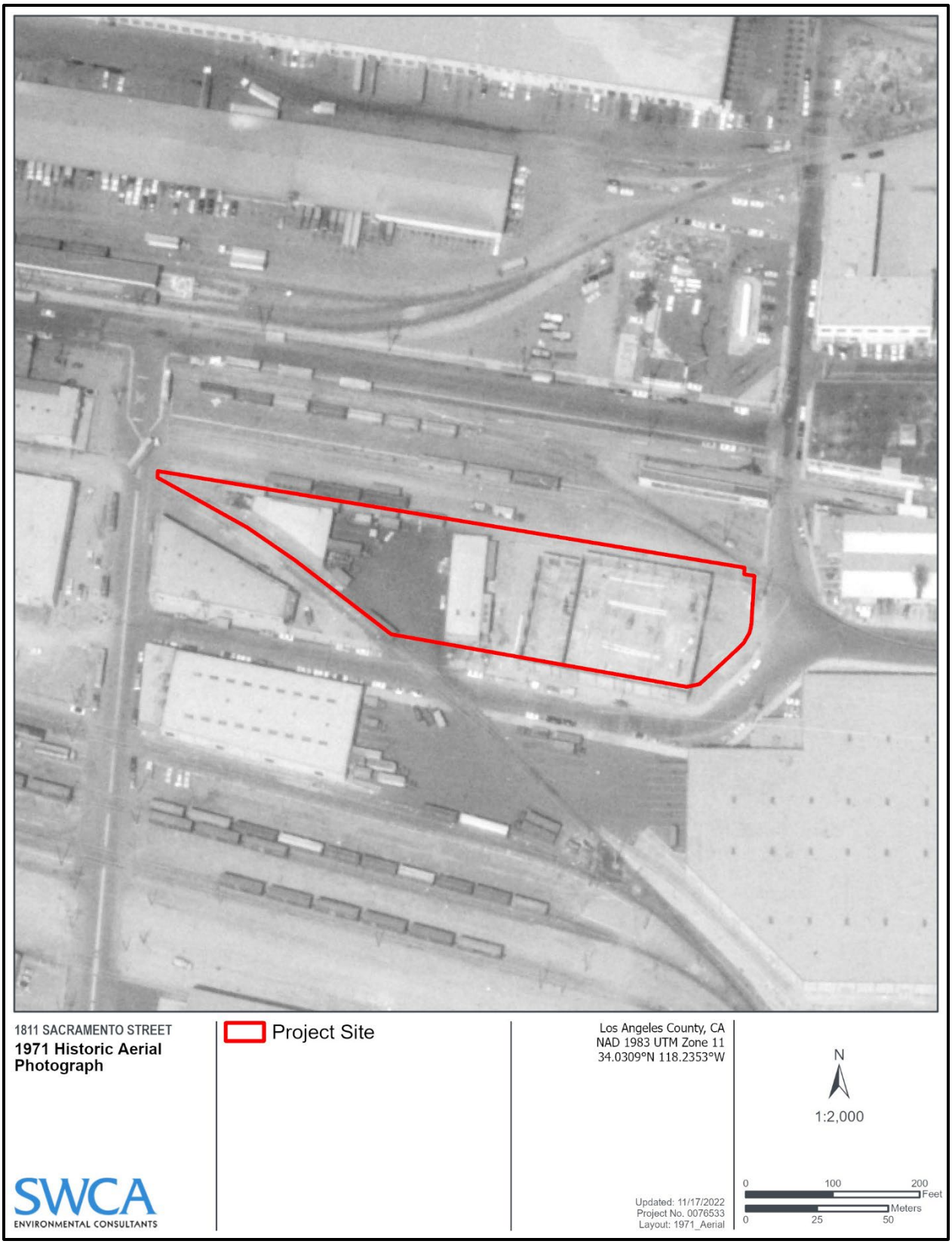

Figure A-27. Project site plotted on a 1971 historic aerial photograph.

Attachment B

California Historical Resources Information System Records Search Results

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CONTENT FROM THIS SECTION HAS BEEN REMOVED FROM PUBLICLY CIRCULATED DRAFTS

Archaeological and other heritage resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This document contains sensitive information regarding the nature and location of archaeological sites, which should not be disclosed to the general public or unauthorized persons pursuant to California Government Code 6254(r) and 6254.10.

Information regarding the location, character, or ownership of a cultural resource is exempt from the Freedom of Information Act pursuant to 54 USC 307103 (National Historic Preservation Act) and 16 USC Section 470(h) (Archaeological Resources Protections Act)

ATTACHMENT C

Sacred Lands File Search

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

November 17, 2022

David Sayre
SWCA Environmental Consultants

Via Email to: david.sayre@swca.com

Re: 1811 Sacramento Mixed-Use Development Project, Los Angeles County

Dear Mr. Sayre:

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
11/17/2022

Fernandeno Tataviam Band of Mission Indians
Rudy Ortega, Tribal President
1019 Second Street, Suite 1 — Tataviam
San Fernando, CA, 91340
Phone: (818) 837 - 0794
Fax: (818) 837-0796
thcp@tataviam-nsn.us

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 — Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
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, Tribal Consultant and 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
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

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

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 1811 Sacramento Mixed-Use Development Project, Los Angeles County.

ATTACHMENT D

Map Books—Sanborn Insurance, USGS Topographic Quadrangles, and Aerial Imagery

1811-1825 Sacramento Street

1811 Sacramento Street

Los Angeles, CA 90021

Inquiry Number: 5993947.3

March 03, 2020

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

03/03/20

Site Name:

1811-1825 Sacramento Street
1811 Sacramento Street
Los Angeles, CA 90021
EDR Inquiry # 5993947.3

Client Name:

Haro Environmental, Inc.
PO Box 7002
Los Osos, CA 93412
Contact: Elliot Haro

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Haro Environmental, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

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Certified Sanborn Results:

Certification # 3D11-430F-A051

PO # NA

Project NA

Maps Provided:

1970
1967
1960
1959
1954
1953
1950
1906

Sanborn® Library search results

Certification #: 3D11-430F-A051

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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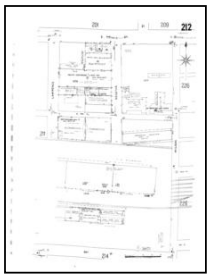
Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1970 Source Sheets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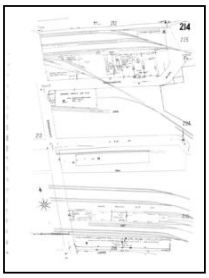
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Volume 2, Sheet 224
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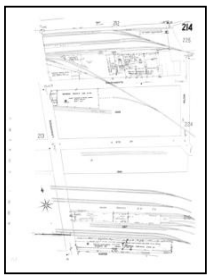
Volume 2, Sheet 225
1970

1967 Source Sheets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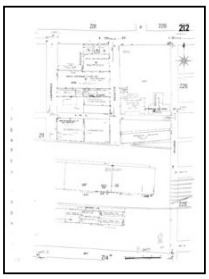
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Volume 2, Sheet 225
1967

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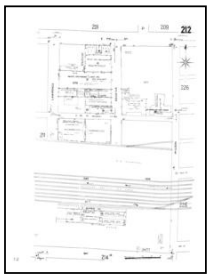
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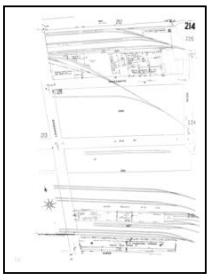
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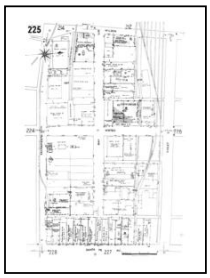
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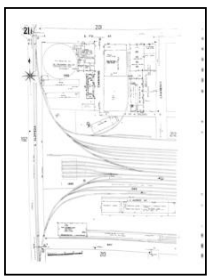
1959 Source Sheets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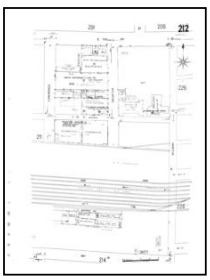
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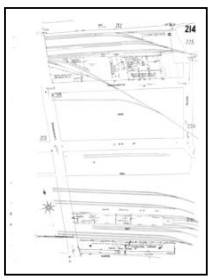
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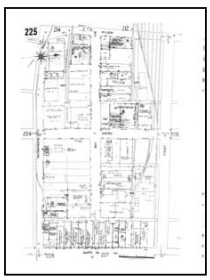
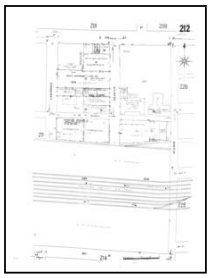
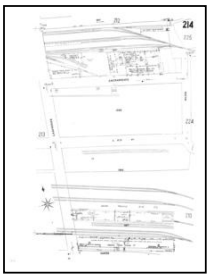

Volume 2, Sheet 225
1959

Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1954 Source Sheets


Volume 2, Sheet 212
1954


Volume 2, Sheet 214
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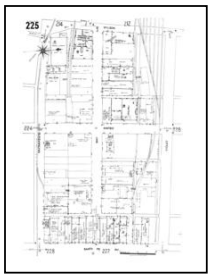
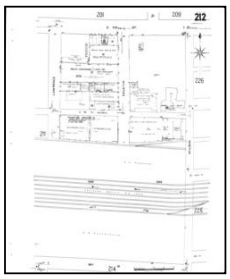

Volume 2, Sheet 225
1954

1953 Source Sheets


Volume 2, Sheet 212
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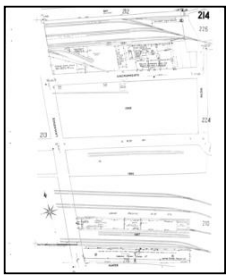
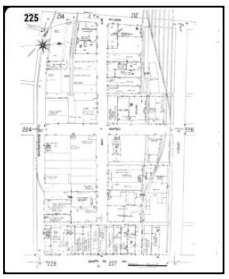

Volume 2, Sheet 214
1953


Volume 2, Sheet 224
1953


Volume 2, Sheet 225
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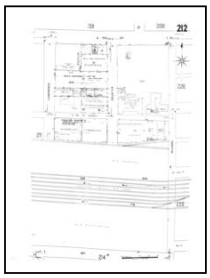
Volume 2, Sheet 212
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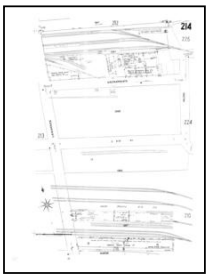
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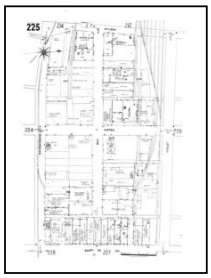
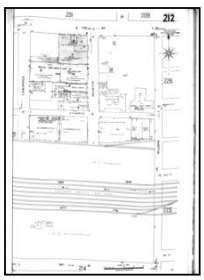
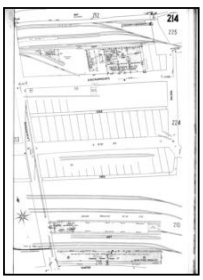
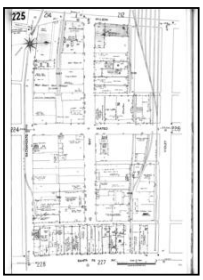

Volume 2, Sheet 225
1953

1950 Source Sheets


Volume 2, Sheet 212
1950-Jun

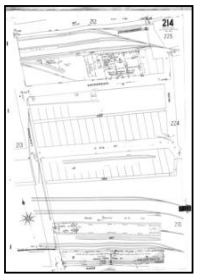

Volume 2, Sheet 214
1950-Jun


Volume 2, Sheet 225
1950-Jun

Sanborn Sheet Key

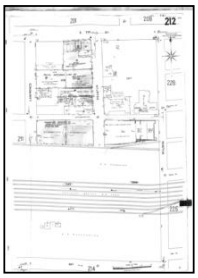
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1950 Source Sheets



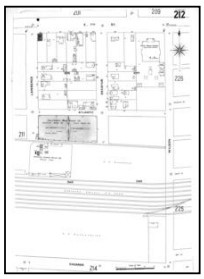
Volume 2, Sheet 214
1950

Volume 2, Sheet 225
1950

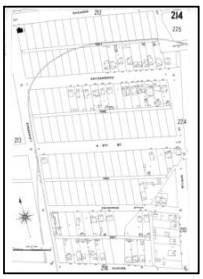


Volume 2, Sheet 212
1950

1906 Source Sheets

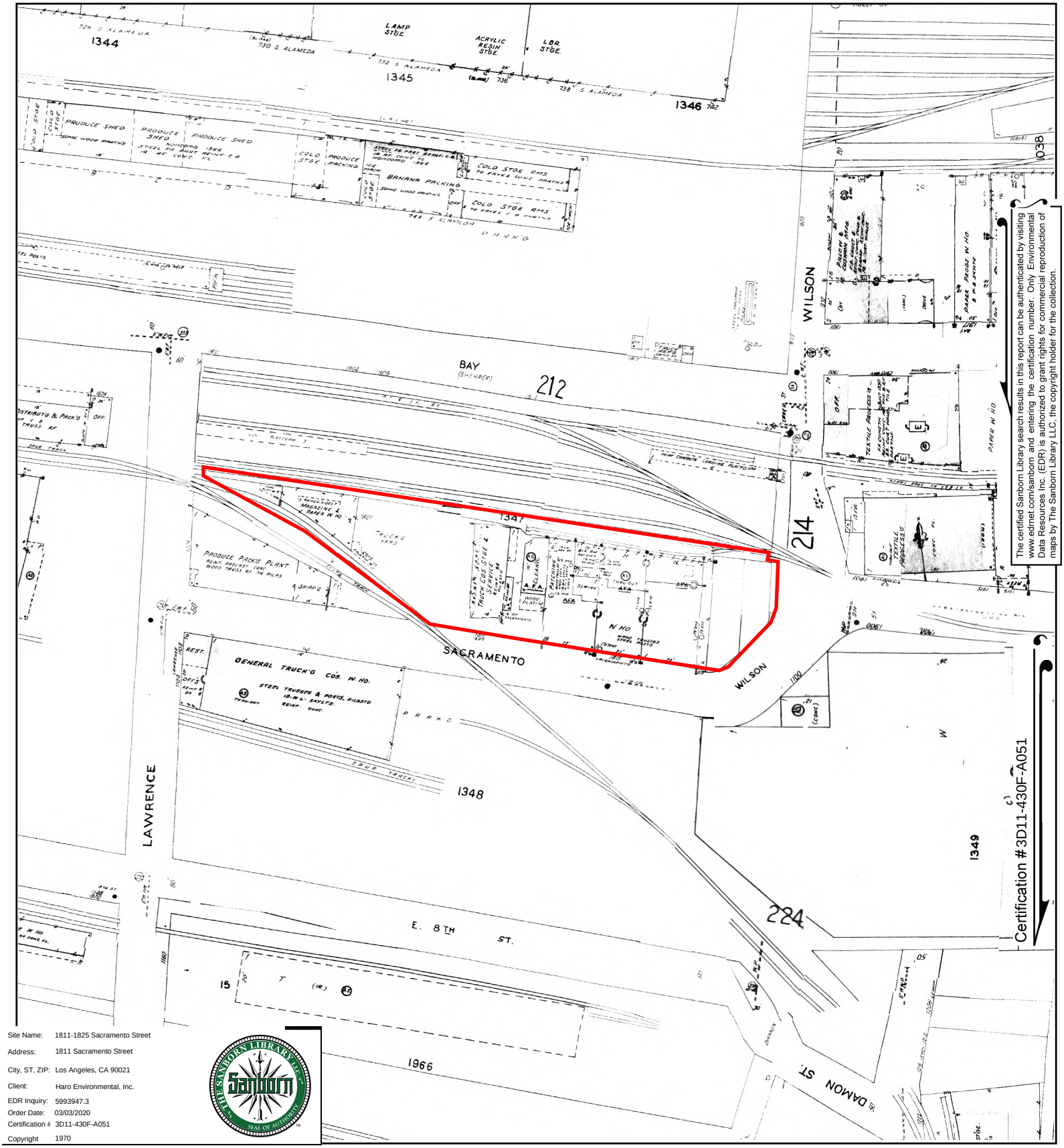


Volume 2, Sheet 212
1906



Volume 2, Sheet 214
1906

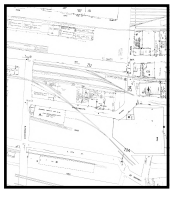
Volume 2, Sheet 225
1906

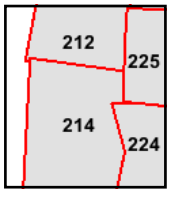


Site Name:	1811-1825 Sacramento Street
Address:	1811 Sacramento Street
City, ST, ZIP:	Los Angeles, CA 90021
Client:	Haro Environmental, Inc.
EDR Inquiry:	5993947.3
Order Date:	03/03/2020
Certification #	3D11-430F-A051
Copyright	1970

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

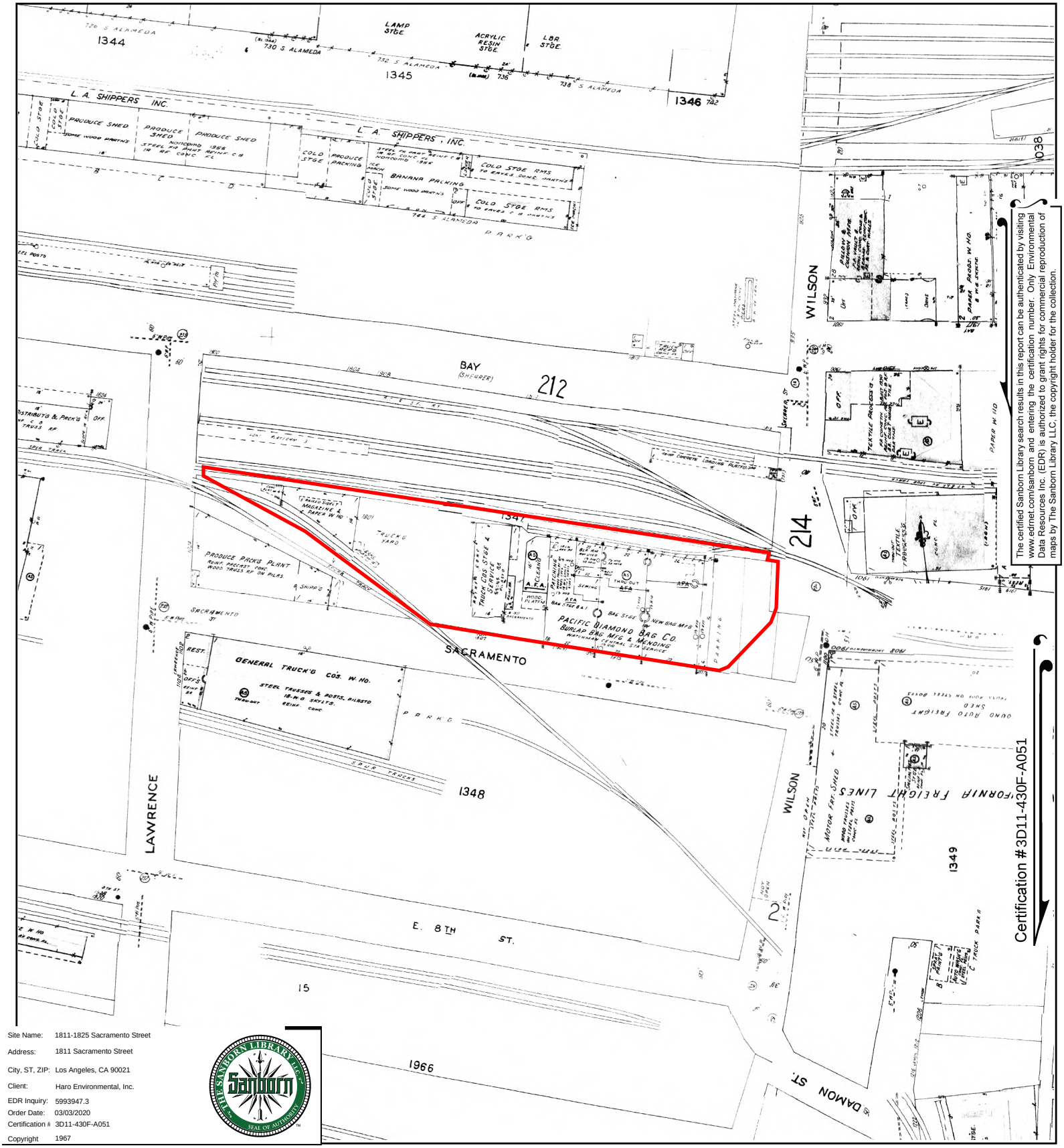
0 Feet 150 300 600





Volume 2, Sheet 225
Volume 2, Sheet 224
Volume 2, Sheet 214
Volume 2, Sheet 212

N



Certification #3D11-430F-A051

Site Name:	1811-1825 Sacramento Street
Address:	1811 Sacramento Street
City, ST, ZIP:	Los Angeles, CA 90021
Client:	Haro Environmental, Inc.
EDR Inquiry:	5993947.3
Order Date:	03/03/2020
Certification #:	3D11-430F-A051
Copyright	1967

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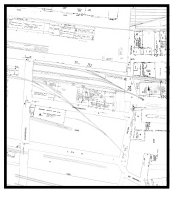

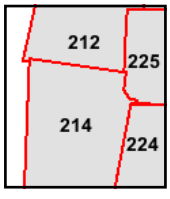

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Volume 2, Sheet 212
Volume 2, Sheet 214

0 Feet 150 300 600

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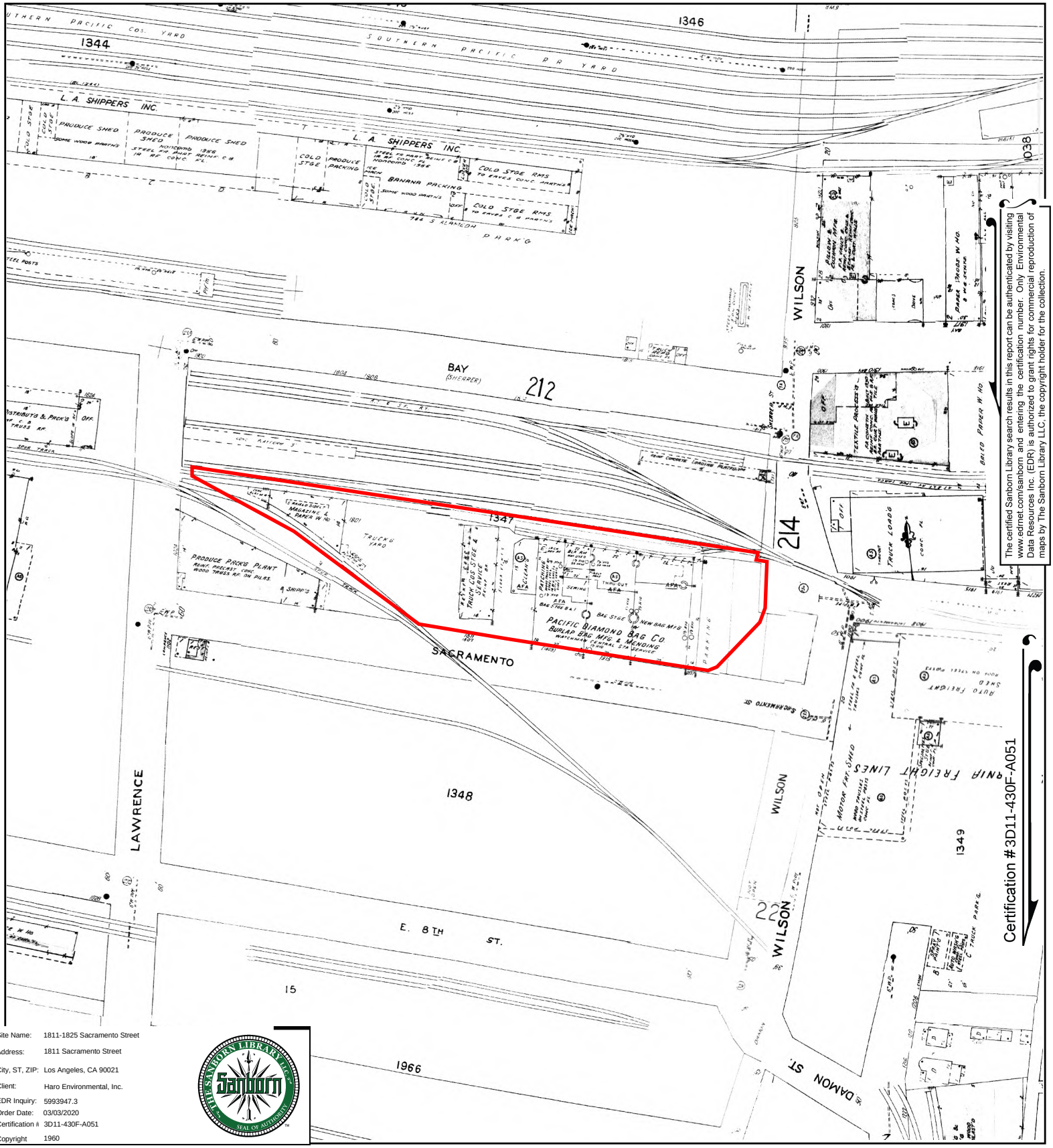

Site Name:	1811-1825 Sacramento Street
Address:	1811 Sacramento Street
City, ST, ZIP:	Los Angeles, CA 90021
Client:	Haro Environmental, Inc.
EDR Inquiry:	5993947.3
Order Date:	03/03/2020
Certification #	3D11-430F-A051
Copyright	1960

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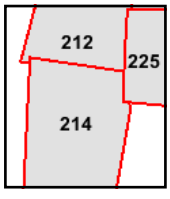

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Volume 2, Sheet 212

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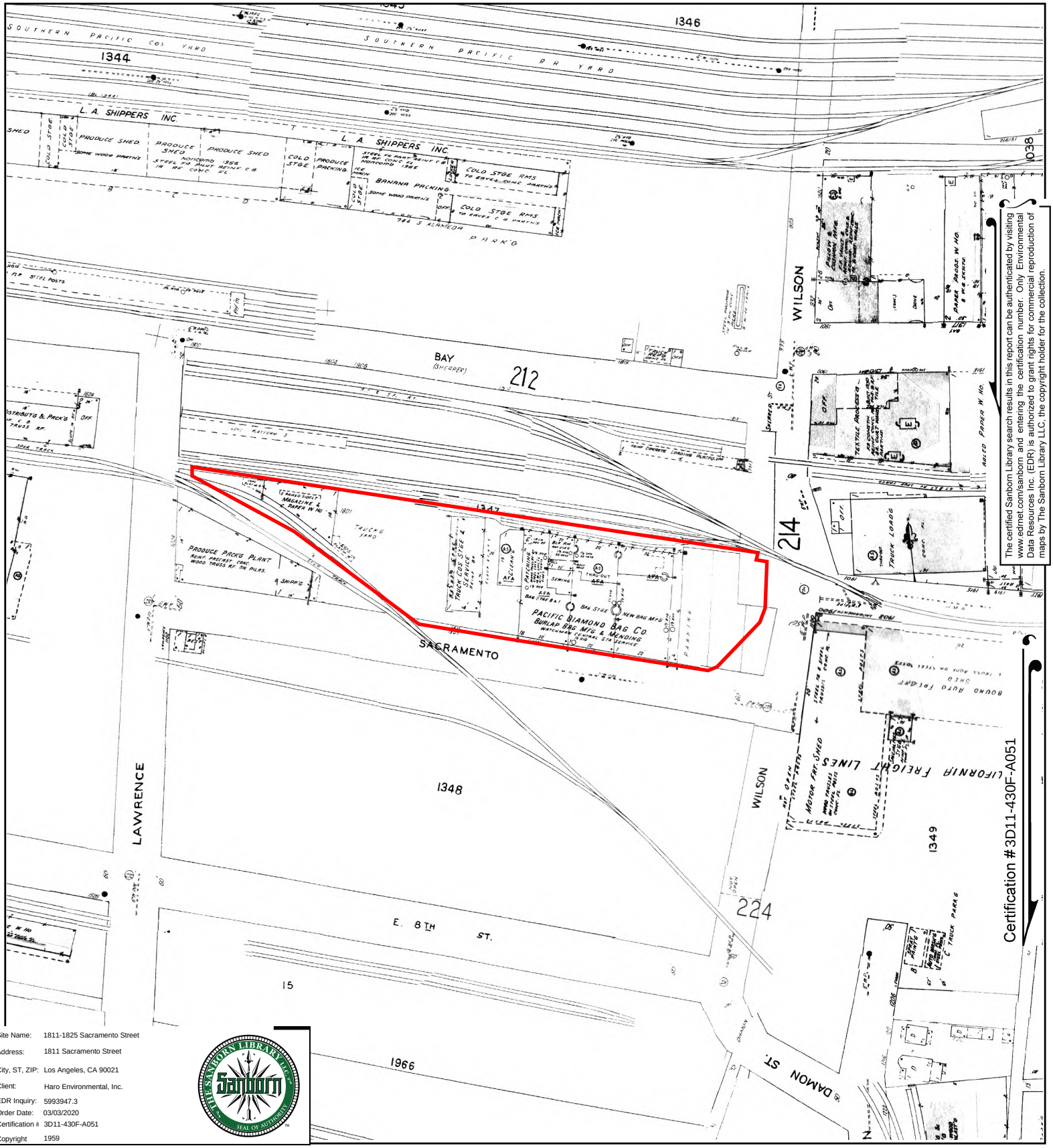

Site Name:	1811-1825 Sacramento Street
Address:	1811 Sacramento Street
City, ST, ZIP:	Los Angeles, CA 90021
Client:	Haro Environmental, Inc.
EDR Inquiry:	5993947.3
Order Date:	03/03/2020
Certification #	3D11-430F-A051
Copyright	1959

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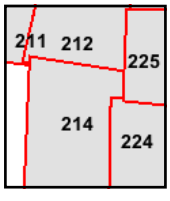

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Volume 2, Sheet 214
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Volume 2, Sheet 211

0 Feet 150 300 600

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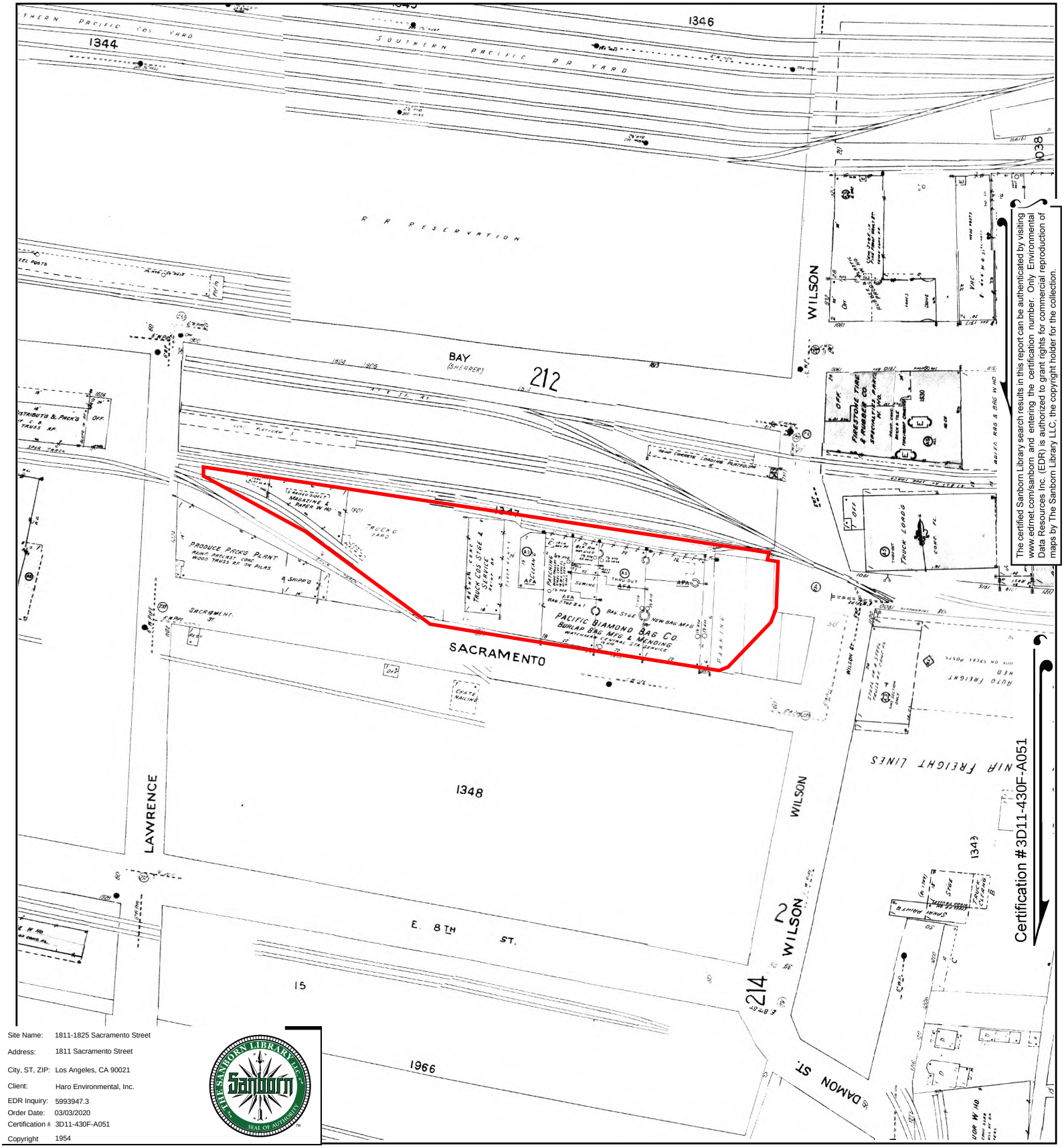

Site Name:	1811-1825 Sacramento Street
Address:	1811 Sacramento Street
City, ST, ZIP:	Los Angeles, CA 90021
Client:	Haro Environmental, Inc.
EDR Inquiry:	5993947.3
Order Date:	03/03/2020
Certification #:	3D11-430F-A051
Copyright	1954

This Certified Sanborn Map combines the following sheets.
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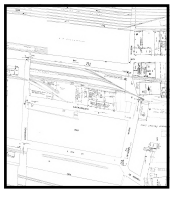

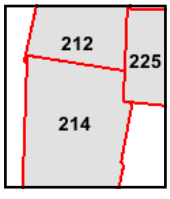

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Volume 2, Sheet 212

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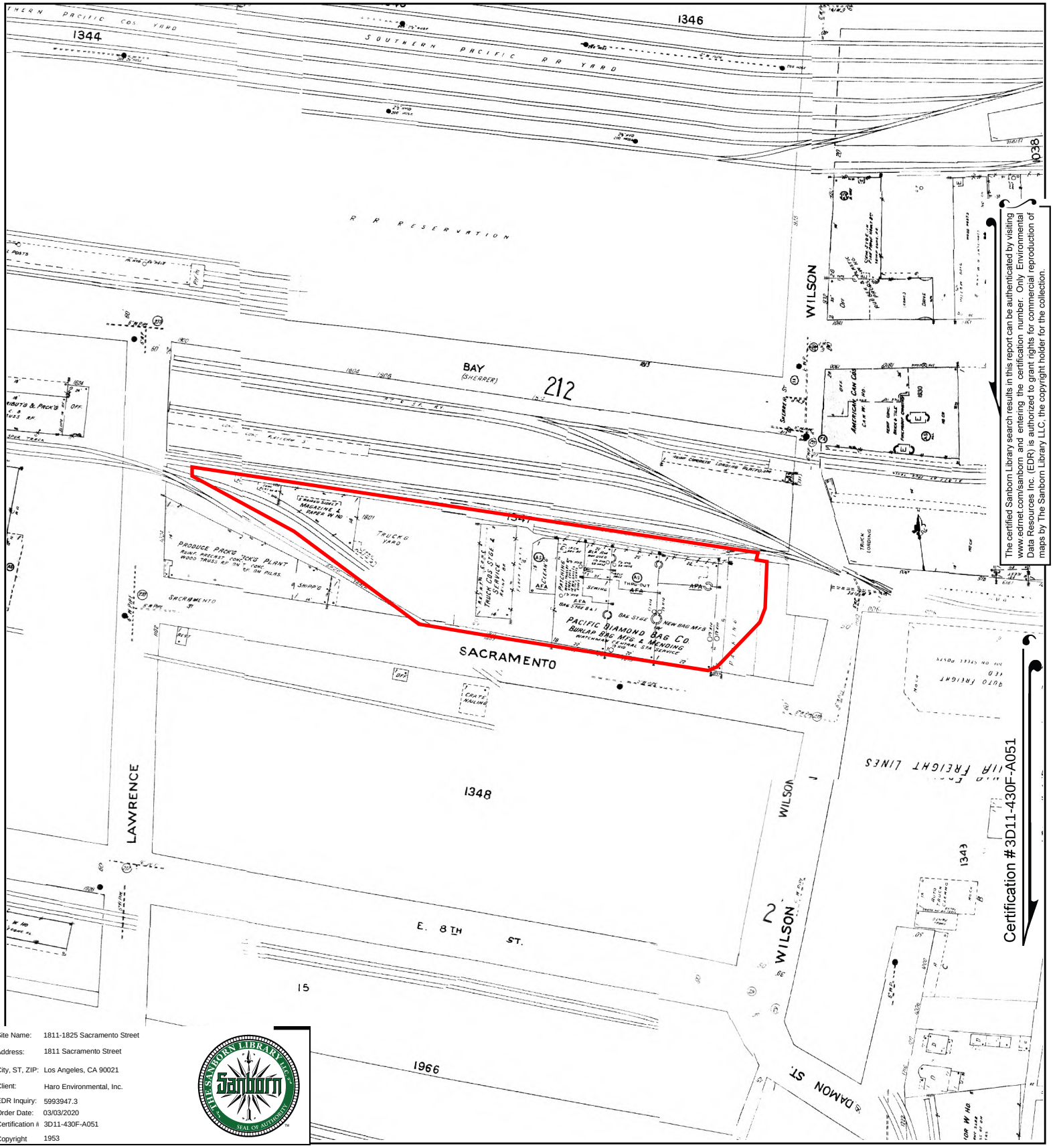

Site Name:	1811-1825 Sacramento Street
Address:	1811 Sacramento Street
City, ST, ZIP:	Los Angeles, CA 90021
Client:	Haro Environmental, Inc.
EDR Inquiry:	5993947.3
Order Date:	03/03/2020
Certification #:	3D11-430F-A051
Copyright	1953

This Certified Sanborn Map combines the following sheets.
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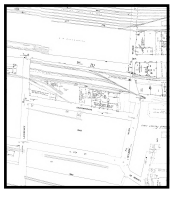

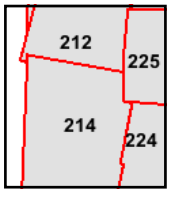

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Volume 2, Sheet 214
Volume 2, Sheet 212
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Volume 2, Sheet 224
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Volume 2, Sheet 212

0 Feet 150 300 600

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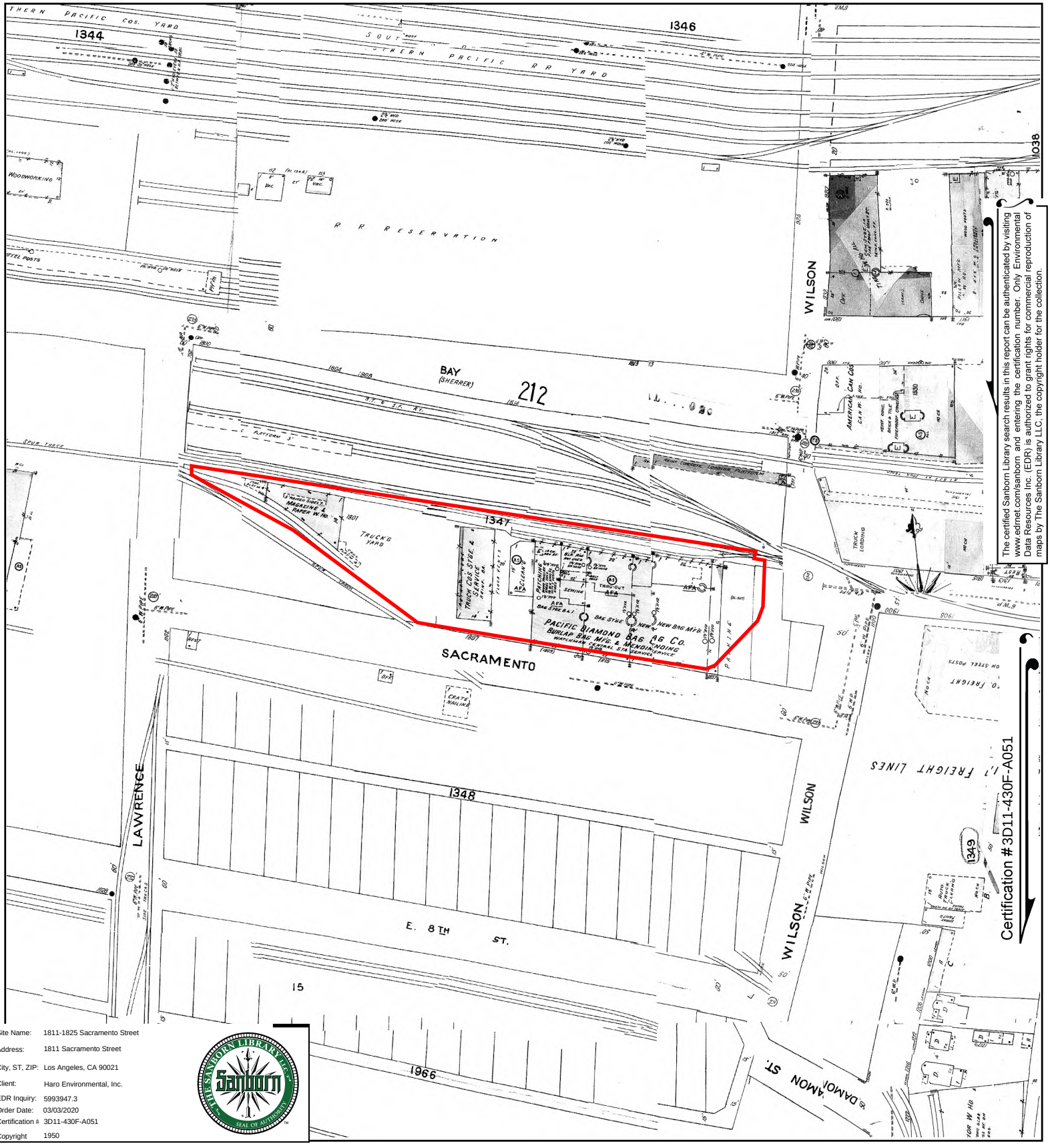

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Address:	1811 Sacramento Street
City, ST, ZIP:	Los Angeles, CA 90021
Client:	Haro Environmental, Inc.
EDR Inquiry:	5993947.3
Order Date:	03/03/2020
Certification #:	3D11-430F-A051
Copyright	1950

This Certified Sanborn Map combines the following sheets.
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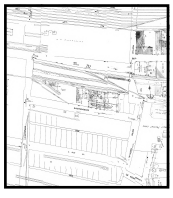

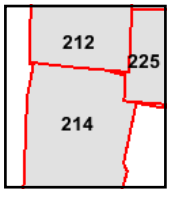

Volume 2, Sheet 212
Volume 2, Sheet 225
Volume 2, Sheet 214
Volume 2, Sheet 225
Volume 2, Sheet 214
Volume 2, Sheet 212

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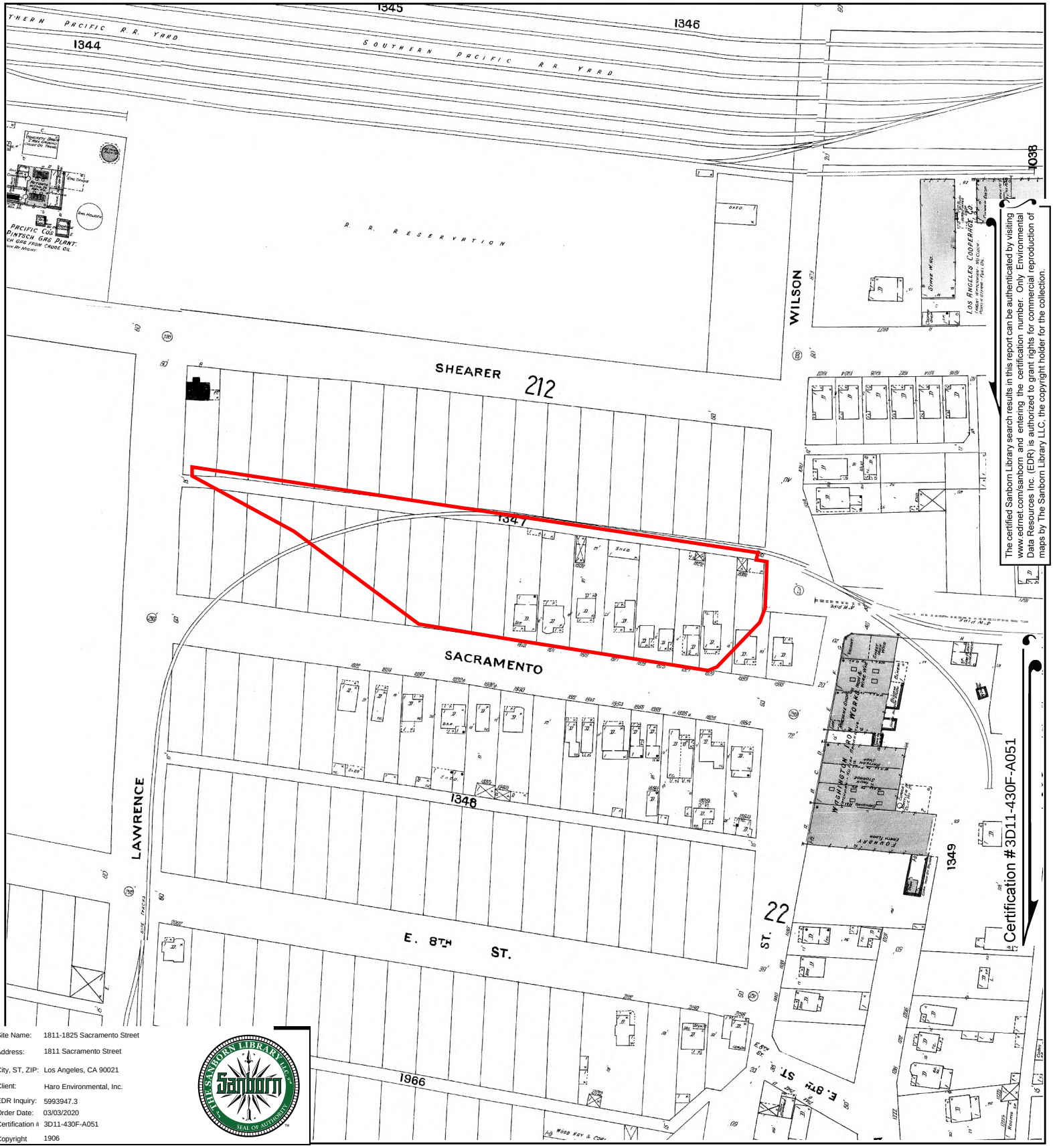

Site Name:	1811-1825 Sacramento Street
Address:	1811 Sacramento Street
City, ST, ZIP:	Los Angeles, CA 90021
Client:	Haro Environmental, Inc.
EDR Inquiry:	5993947.3
Order Date:	03/03/2020
Certification #	3D11-430F-A051
Copyright	1906

This Certified Sanborn Map combines the following sheets.
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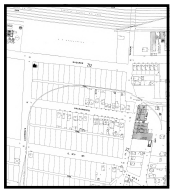
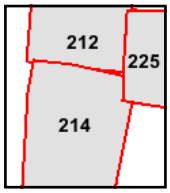




Volume 2, Sheet 225
Volume 2, Sheet 214
Volume 2, Sheet 212

N

1811-1825 Sacramento Street

1811 Sacramento Street

Los Angeles, CA 90021

Inquiry Number: 5993947.4

March 03, 2020

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

03/03/20

Site Name:

1811-1825 Sacramento Street
1811 Sacramento Street
Los Angeles, CA 90021
EDR Inquiry # 5993947.4

Client Name:

Haro Environmental, Inc.
PO Box 7002
Los Osos, CA 93412
Contact: Elliot Haro

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Haro Environmental, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA
Project: NA

Coordinates:

Latitude:	34.03081 34° 1' 51" North
Longitude:	-118.235698 -118° 14' 9" West
UTM Zone:	Zone 11 North
UTM X Meters:	385923.85
UTM Y Meters:	3766260.64
Elevation:	241.46' above sea level

Maps Provided:

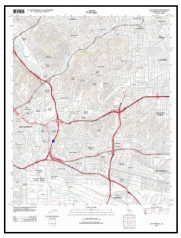
2012	1896
1991, 1994	1894
1981	
1972	
1966	
1953	
1928	
1900	

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

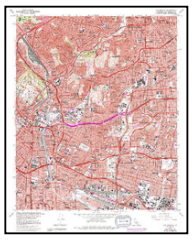
Hollywood
2012
7.5-minute, 24000



Los Angeles
2012
7.5-minute, 24000

1991, 1994 Source Sheets

Hollywood
1991
7.5-minute, 24000
Aerial Photo Revised 1978



Los Angeles
1994
7.5-minute, 24000
Aerial Photo Revised 1978

1981 Source Sheets

Hollywood
1981
7.5-minute, 24000
Aerial Photo Revised 1978

Los Angeles
1981
7.5-minute, 24000
Aerial Photo Revised 1978

1972 Source Sheets

Los Angeles
1972
7.5-minute, 24000
Aerial Photo Revised 1972

Hollywood
1972
7.5-minute, 24000
Aerial Photo Revised 1972

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1966 Source Sheets

Hollywood
1966
7.5-minute, 24000
Aerial Photo Revised 1964

Los Angeles
1966
7.5-minute, 24000
Aerial Photo Revised 1964

1953 Source Sheets

Hollywood
1953
7.5-minute, 24000
Aerial Photo Revised 1952

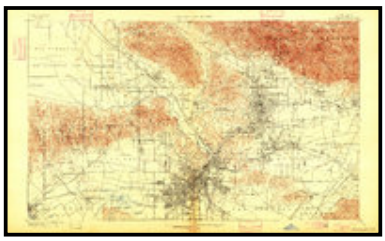
Los Angeles
1953
7.5-minute, 24000
Aerial Photo Revised 1952

1928 Source Sheets

Los Angeles
1928
7.5-minute, 24000

1900 Source Sheets

Pasadena
1900
15-minute, 62500



Los Angeles
1900
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

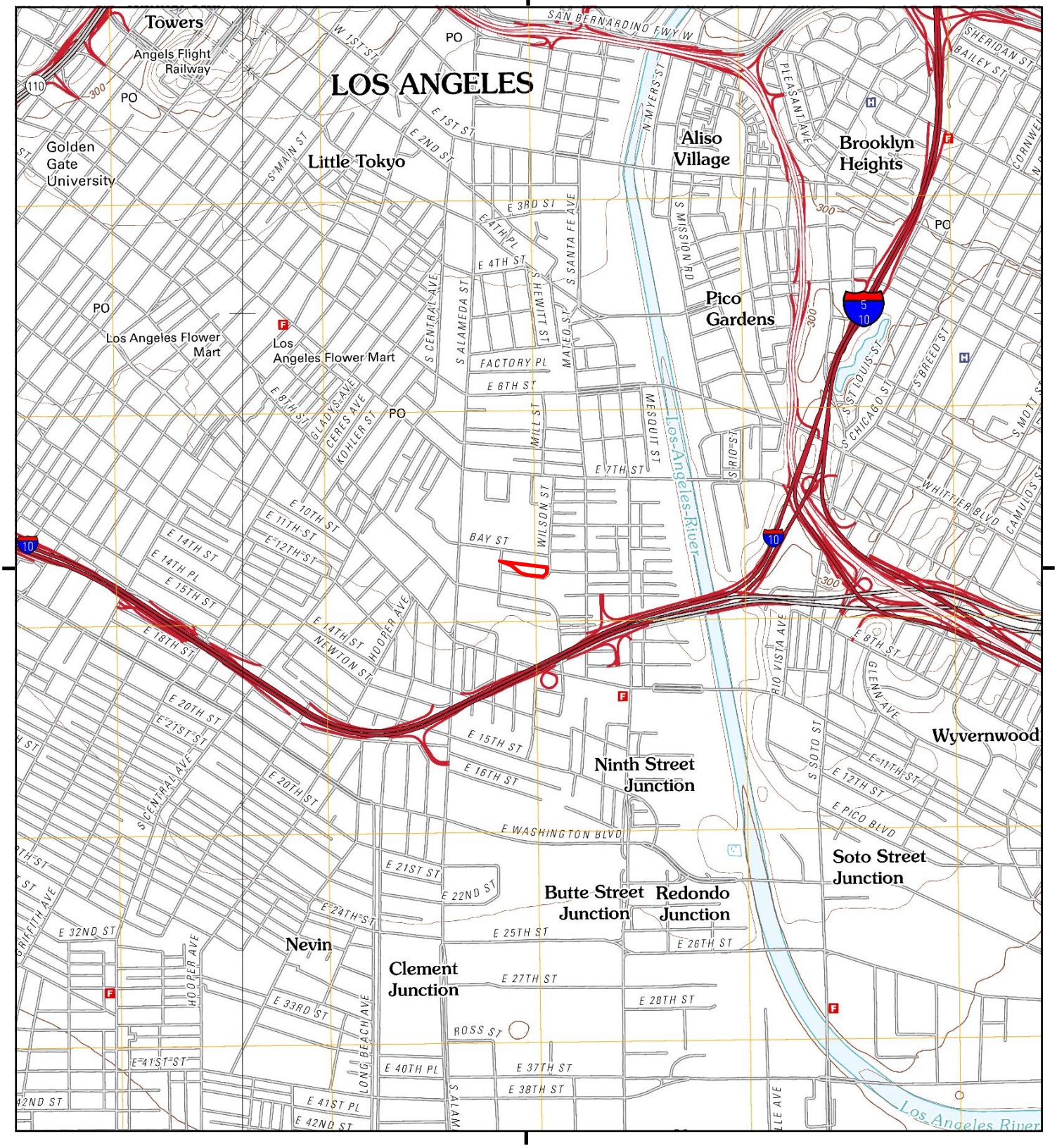
1896 Source Sheets

Santa Monica
1896
15-minute, 62500

Pasadena
1896
15-minute, 62500

1894 Source Sheets

Los Angeles
1894
15-minute, 62500



This report includes information from the following map sheet(s).

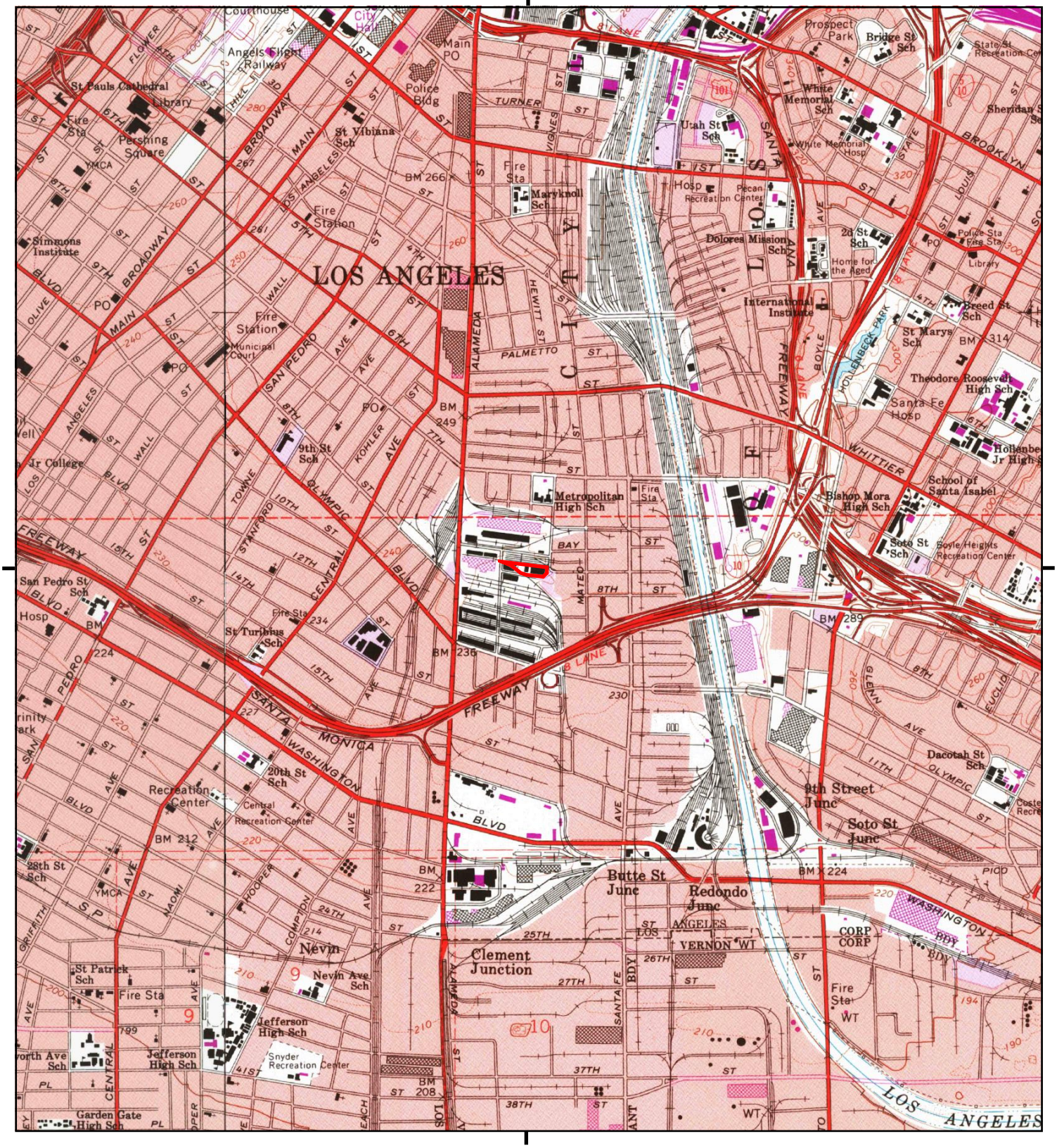
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 2012, 7.5-minute
NW, Hollywood, 2012, 7.5-minute

SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

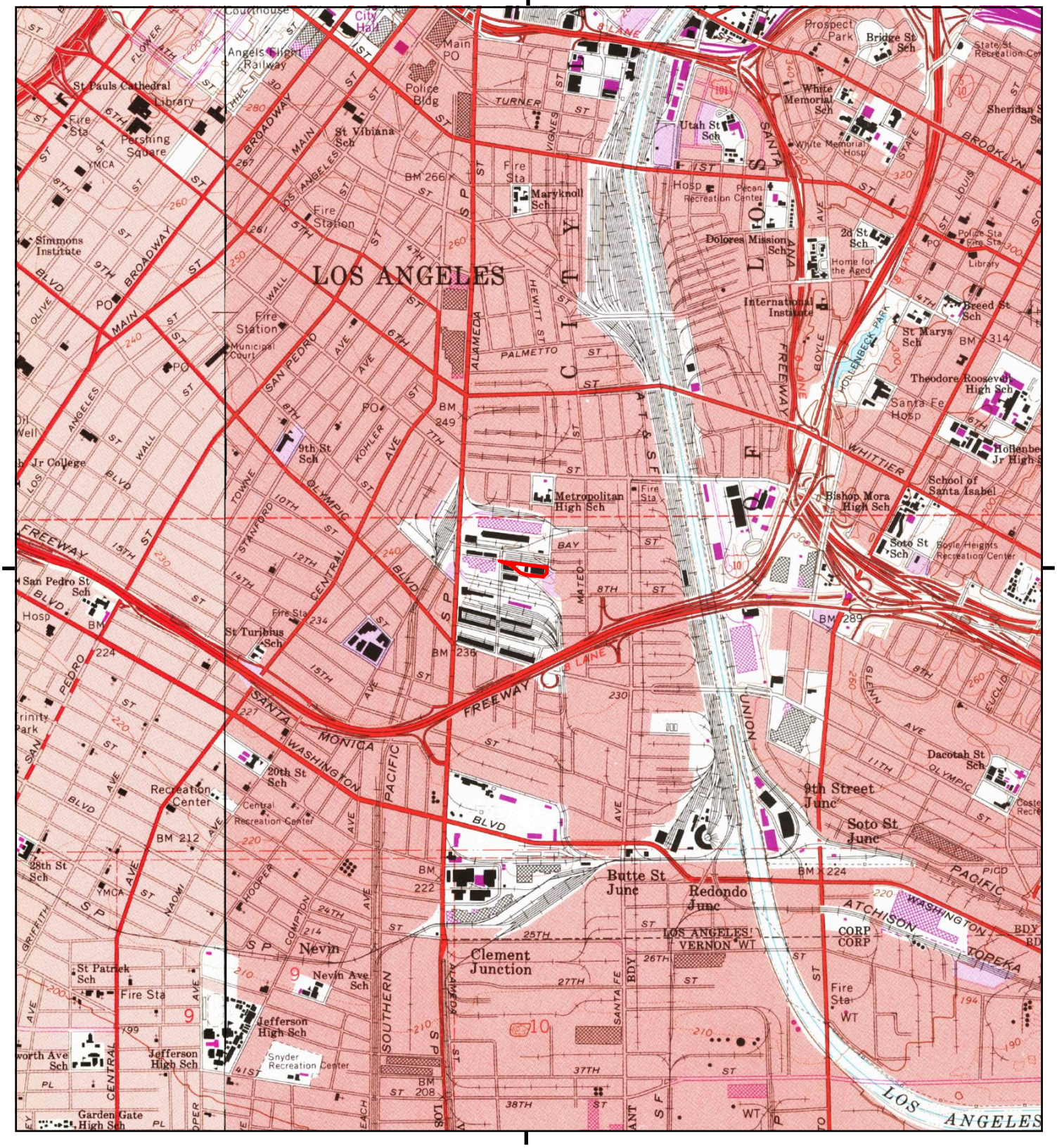
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1994, 7.5-minute
NW, Hollywood, 1991, 7.5-minute

SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

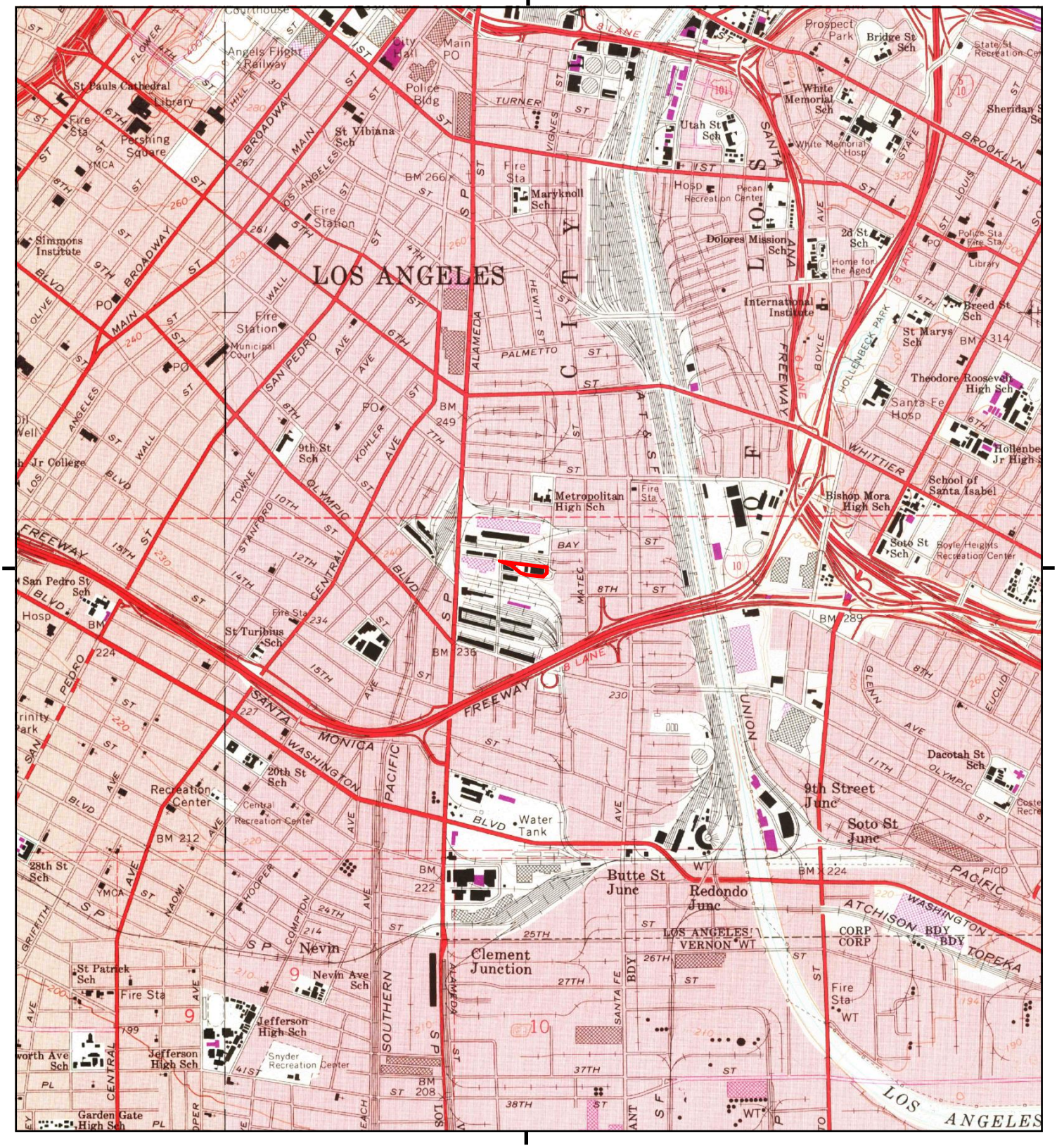
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1981, 7.5-minute
NW, Hollywood, 1981, 7.5-minute

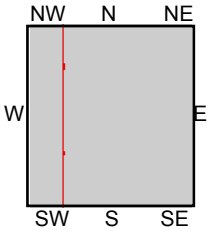
SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

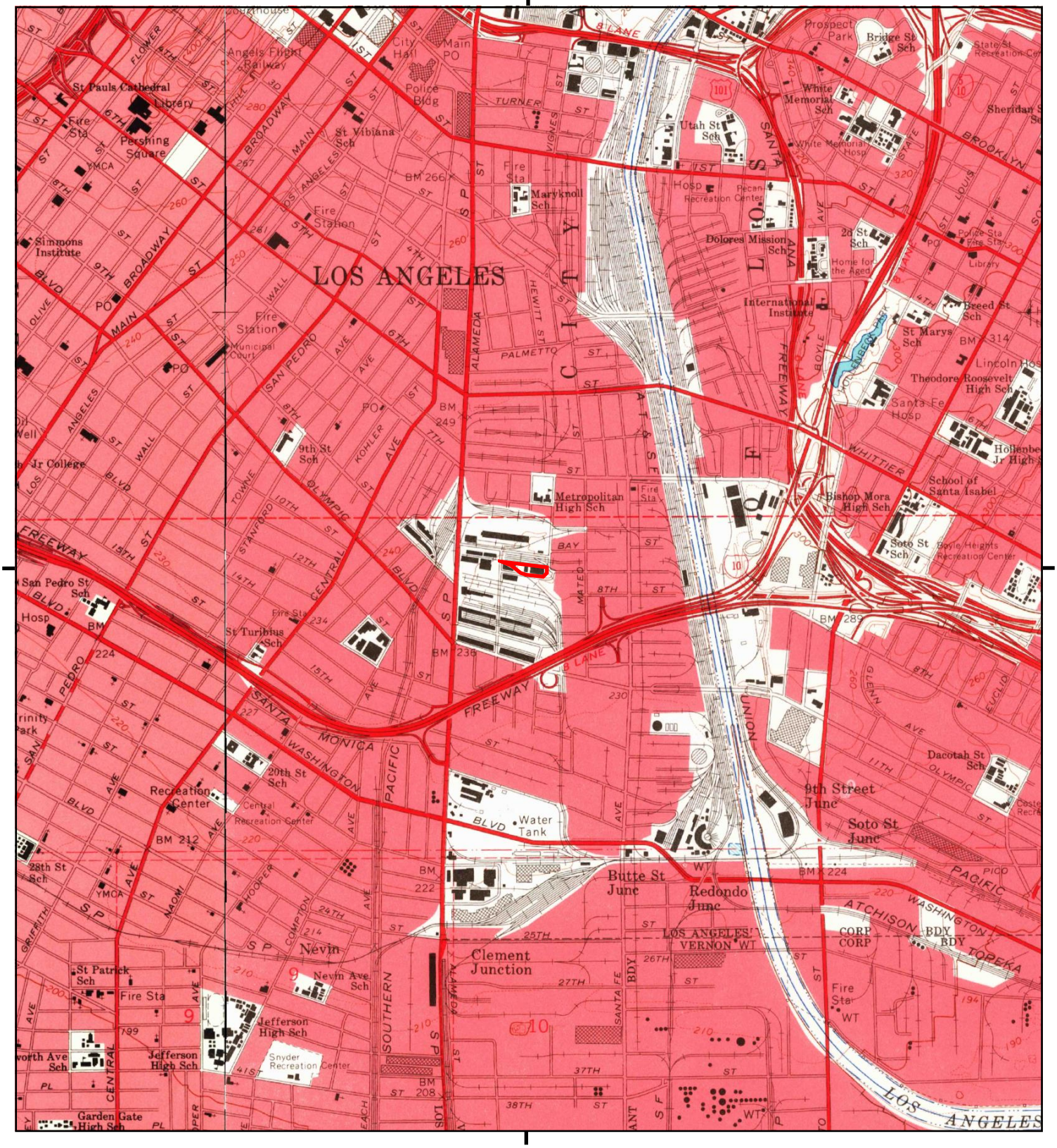
0 Miles 0.25 0.5 1 1.5



TP, Los Angeles, 1972, 7.5-minute
NW, Hollywood, 1972, 7.5-minute

SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

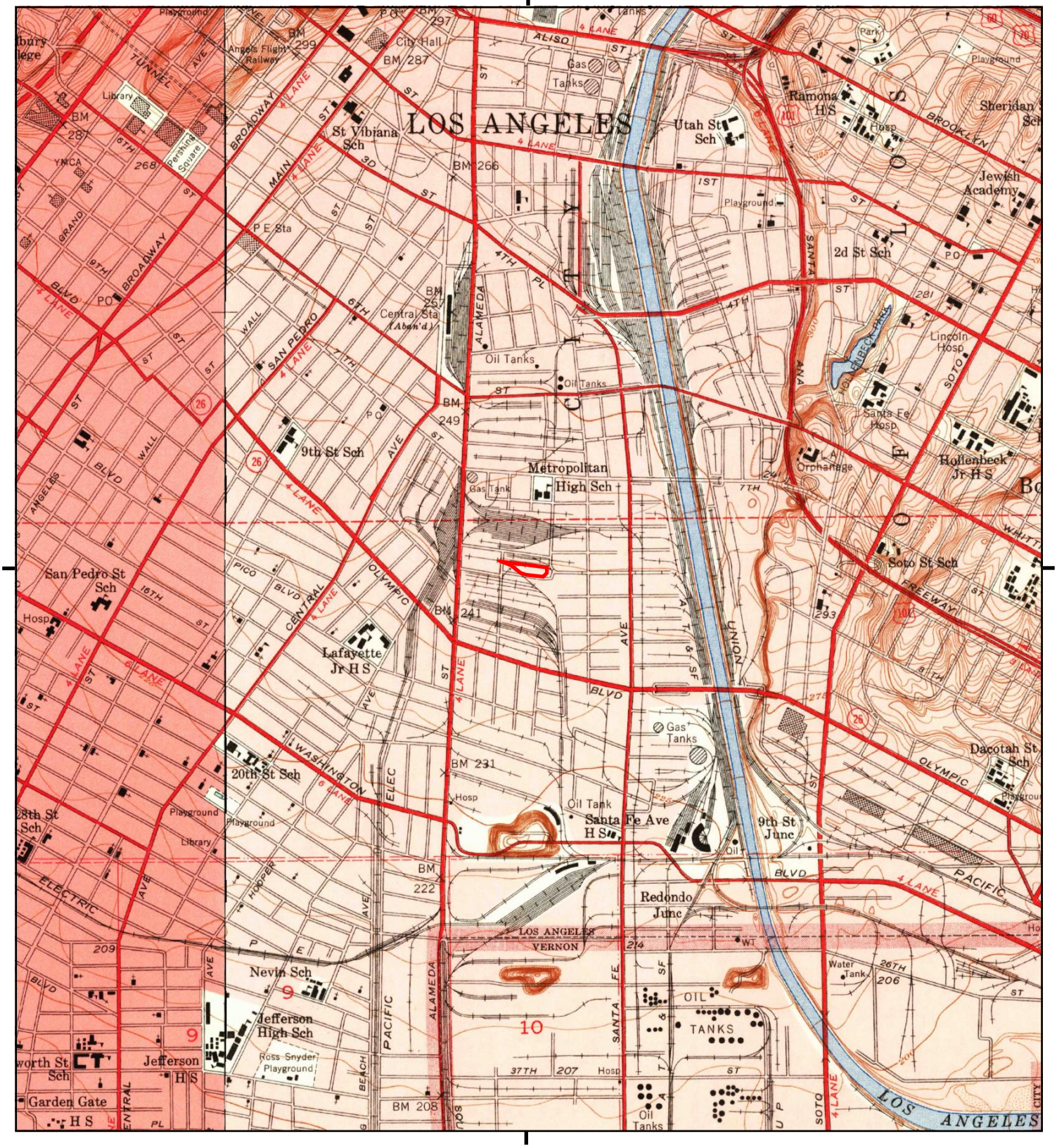
TP, Los Angeles, 1966, 7.5-minute
NW, Hollywood, 1966, 7.5-minute

SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N

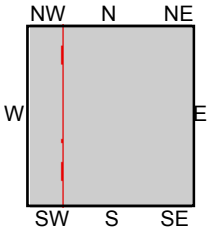
Historical Topo Map

1953



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



TP, Los Angeles, 1953, 7.5-minute
NW, Hollywood, 1953, 7.5-minute

SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N

This report includes information from the following map sheet(s).

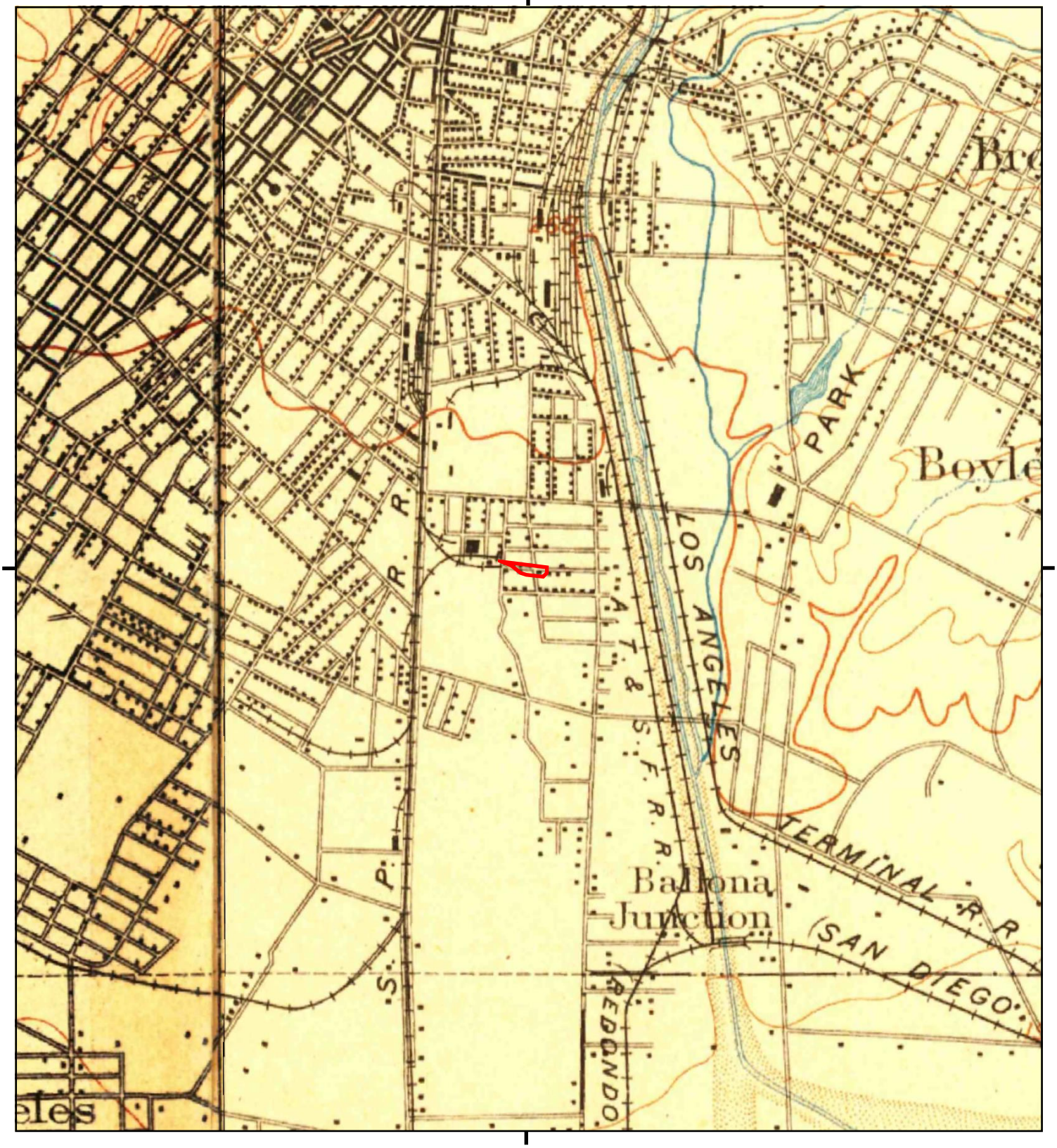
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1928, 7.5-minute

SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

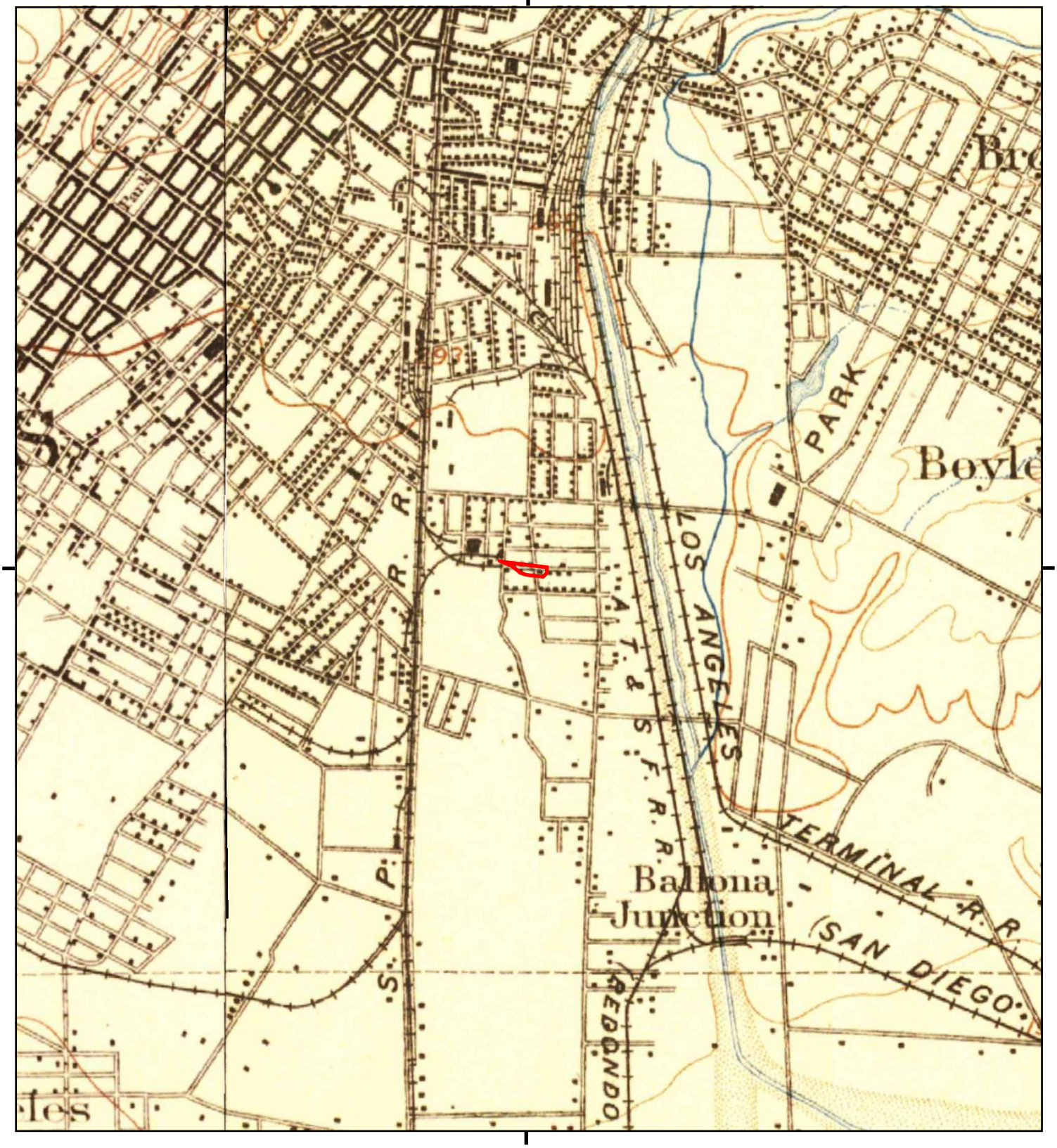
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Pasadena, 1900, 15-minute
TP, Los Angeles, 1900, 15-minute

SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

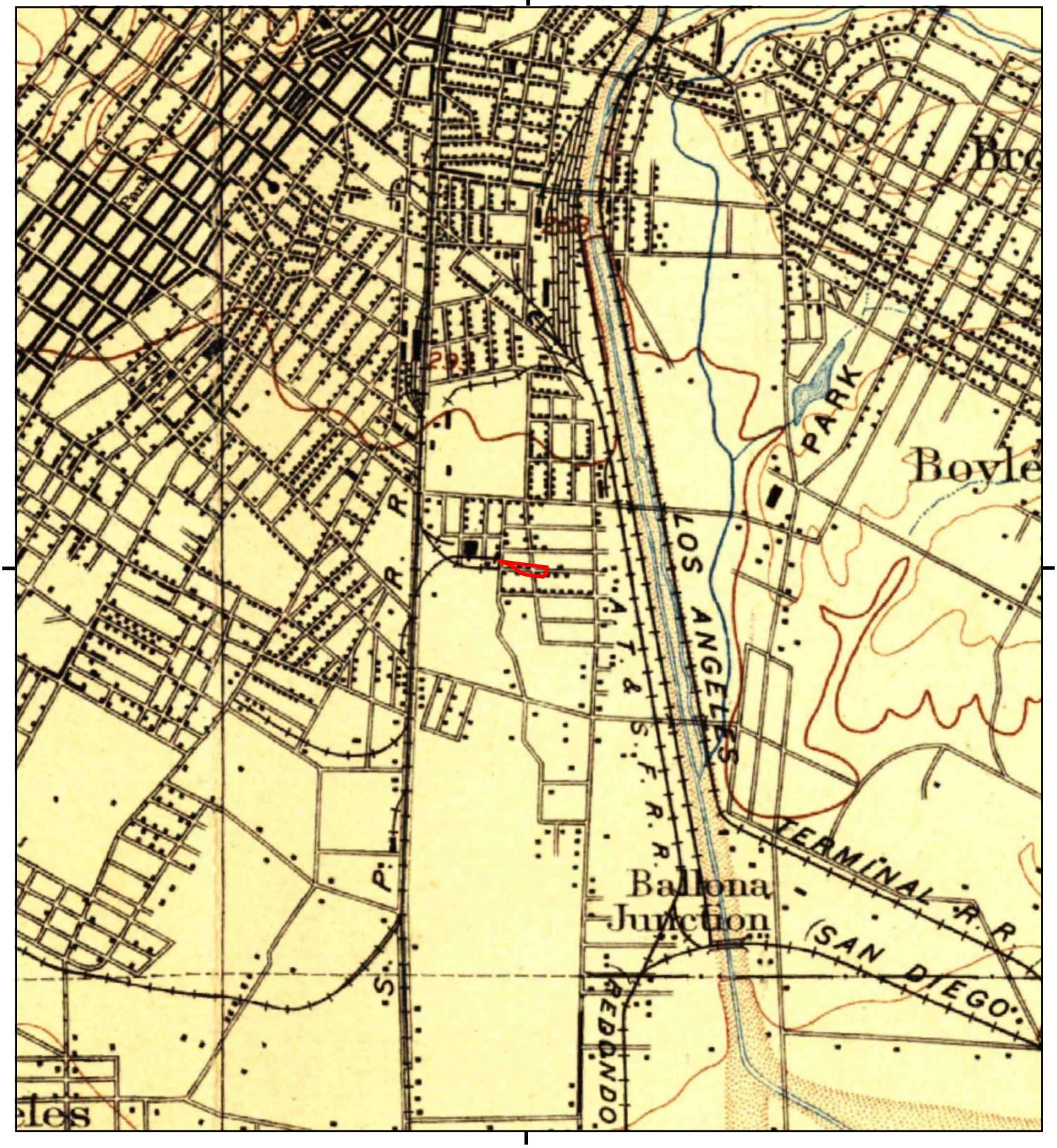
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Pasadena, 1896, 15-minute
NW, Santa Monica, 1896, 15-minute

SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1894, 15-minute

SITE NAME: 1811-1825 Sacramento Street
ADDRESS: 1811 Sacramento Street
Los Angeles, CA 90021
CLIENT: Haro Environmental, Inc.

N

1811-1825 Sacramento Street

1811 Sacramento Street

Los Angeles, CA 90021

Inquiry Number: 5993947.8

March 03, 2020

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

03/03/20

Site Name:

1811-1825 Sacramento Street
1811 Sacramento Street
Los Angeles, CA 90021
EDR Inquiry # 5993947.8

Client Name:

Haro Environmental, Inc.
PO Box 7002
Los Osos, CA 93412
Contact: Elliot Haro

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
2002	1"=500'	Flight Date: June 10, 2002	USDA
1994	1"=500'	Acquisition Date: May 31, 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August 22, 1989	USDA
1983	1"=500'	Flight Date: November 19, 1983	EDR Proprietary Brewster Pacific
1977	1"=500'	Flight Date: April 25, 1977	EDR Proprietary Brewster Pacific
1972	1"=500'	Flight Date: November 21, 1972	EDR Proprietary Brewster Pacific
1964	1"=500'	Flight Date: July 28, 1964	USGS
1952	1"=500'	Flight Date: April 12, 1952	USDA
1948	1"=500'	Flight Date: July 10, 1948	USGS
1938	1"=500'	Flight Date: May 22, 1938	USDA
1928	1"=500'	Flight Date: January 01, 1928	FAIR
1923	1"=500'	Flight Date: January 01, 1923	FAIR

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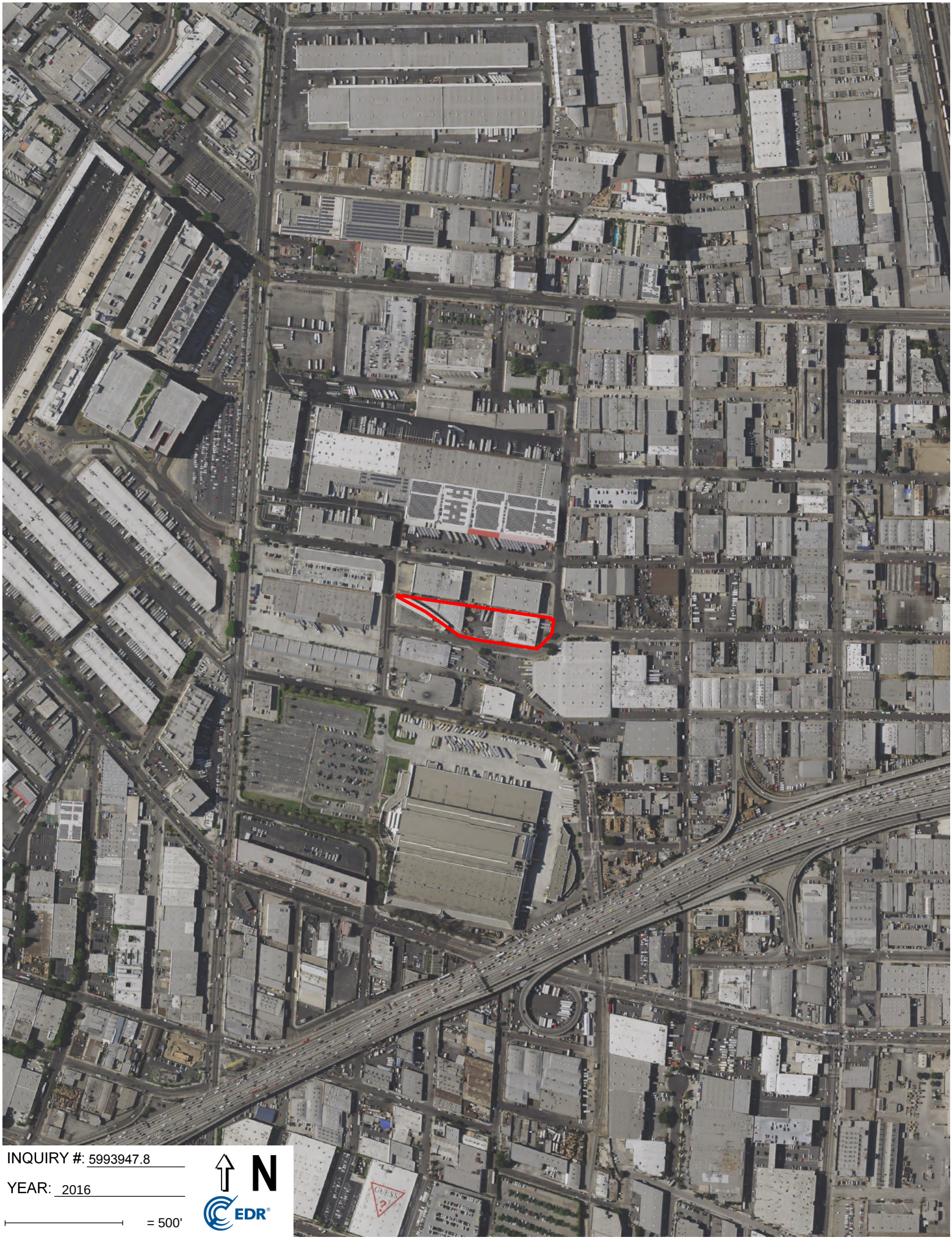

INQUIRY #: 5993947.8
YEAR: 2016
= 500'
N
EDR

INQUIRY #: 5993947.8

YEAR: 2012

= 500'

N

EDR

INQUIRY #: 5993947.8

YEAR: 2009

= 500'

N

EDR

INQUIRY #: 5993947.8

YEAR: 2005

= 500'

N

EDR


INQUIRY #: 5993947.8
YEAR: 2002
= 500'
N
EDR


INQUIRY #: 5993947.8
YEAR: 1994
= 500'
N
EDR

INQUIRY #: 5993947.8

YEAR: 1989

= 500'

N

EDR

INQUIRY #: 5993947.8

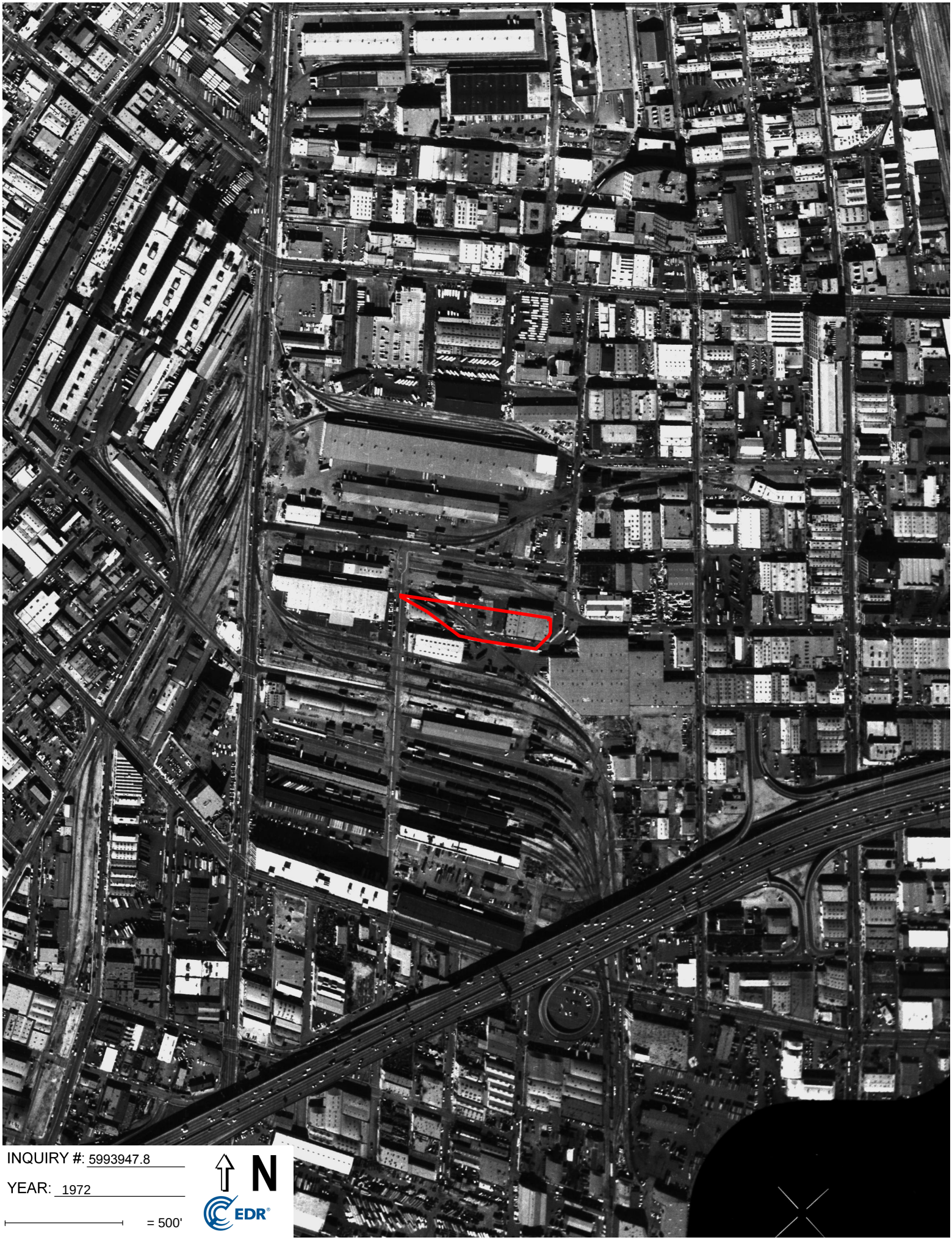
YEAR: 1983

= 500'

N

EDR


INQUIRY #: 5993947.8
YEAR: 1977
= 500'
N
EDR



INQUIRY #: 5993947.8

YEAR: 1972

= 500'

N

EDR

INQUIRY #: 5993947.8

YEAR: 1964

= 500'

N

EDR


INQUIRY #: 5993947.8
YEAR: 1952
= 500'
N
EDR

INQUIRY #: 5993947.8

YEAR: 1948

= 500'

N

EDR


INQUIRY #: 5993947.8
YEAR: 1938
= 500'
N
EDR

INQUIRY #: 5993947.8

YEAR: 1928

= 500'

N

EDR

INQUIRY #: 5993947.8

YEAR: 1923

= 500'

N

EDR