Cultural Resources Technical Report

Lopez Canyon Equestrian Trails and Trailhead Project

City of Los Angeles, Bureau of Sanitation
Angeles National Forest

USGS Quadrangles: San Fernando
Total Project Acres: 101
ARR#05-01-01267

June
2017

Prepared for:

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Contents

Appendices

Tables

Figures

Photographs

Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
ANF	Angeles National Forest
AD	Anno Domini
AMSL	Above Mean Sea Level
APE	Area of Potential Effects
BCE	Before Common Era
BP	Before Present
CEQA	California Environmental Quality Act
CRHR	California Register of Historical Resources
CE	Common Era
DPR	Department of Parks and Recreation
ft	feet
GIS	Geographic Information System
GPS	Global Positioning System
LASAN	City of Los Angeles Bureau of Sanitation
LAX	Los Angeles International Airport
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
m	meter(s)
PRC	Public Resources Code
RPA	Register of Professional Archaeologists
SLF	Sacred Lands File
SCCIC	South Central Coastal Information Center
SHPO	State Historic Preservation Officer
USGS	United States Geological Service

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1 Management Summary

The City of Los Angeles Bureau of Sanitation (LASAN) is proposing the Lopez Canyon Equestrian Trails and Trailhead Project (proposed project). The project area is near the community of Sylmar in northern San Fernando Valley in Los Angeles County, California. The project will consist of an equestrian trail loop and vehicle staging area. LASAN is proposing to operate the trail loop system within the Lopez Canyon Landfill, which closed in 1996, and City of Los Angeles owned "buffer lands." The proposed trail loop would extend approximately five miles and would incorporate a maintenance access road, segments of existing trail, the design and construction of two trail gap segments, and the trailhead staging area. Once constructed, the proposed project would provide a formal trail system for equestrians and hikers.

On May 23, 2016, the South Central Coastal Information Center (SCCIC) was contacted to perform a record search of all archaeological and historical resources within one-half mile of the project area of potential effects (APE). The records search completed by the SCCIC indicates that one known historic-age resource is within the Project APE, and one known historic-age resource within one-half mile of the Project APE. On May 31, 2017, HDR archaeologist Ben Volta conducted an in house records search at the Angeles National Forest Supervisors office

HDR contacted the Native American Heritage Commission (NAHC) on May 24, 2016, for a search of their Sacred Lands File (SLF). The NAHC indicates no areas of concern within the one-half mile radius. The SLF search includes a contact list of twelve Native American individuals or organizations that may have additional information regarding sacred resources in the area. Letters were mailed to each of the individuals/groups by the City of Los Angeles. Letters were sent June 20, 2016, to the Gabrieleño Band of Mission Indians-Kizh Nation, Soboba Band of Luiseño Indians, San Fernando Band of Mission Indians and the Fernandeño Tataviam Band of Mission Indians. To date the City has received one response from Andrew Salas, Chairman of the Gabrieleño Band of Mission Indians-Kizh Nation.

On June 10, 2016, an effort was made to reach out to the Los Angeles City Historical Society for any information regarding historical resources in the vicinity of the APE. There has been no response to date.

A field survey of the APE on June 22, 2016, resulted in the recording of one new historic resource, CA-LAN-4718H. The new historic resource consisted of two concrete foundations with two rock walls (Department of Parks and Recreation [DPR] forms for the recorded resource within the APE is included in Appendix B). Due to the disturbed nature of the historic resource and the absence of any associated surface artifacts, this new site is recommended as ineligible for listing in the California Register of Historical Resources (CRHR) and National Register of Historic Places (NRHP). During the field survey no other resources were observed within the APE. A determination of No Historic Properties Affected/No Impact is recommended for this Project. No further cultural resource considerations are recommended for the project.

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2 Introduction

2.1 Project Overview

LASAN is proposing the project, which would consist of an equestrian trail loop and vehicle staging area near the community of Sylmar in the northern San Fernando Valley, Los Angeles County. LASAN is proposing to operate the trail loop system within the Lopez Canyon Landfill, which closed in 1996, and City of Los Angeles owned "buffer lands." The proposed trail loop would extend approximately 5 miles. The trail loop would incorporate a maintenance access road, segments of an existing, disconnected trail network, and the design and construction of two trail gap segments, and the trailhead staging area. Once constructed, the proposed project would provide a formal trail system for equestrians and hikers. The proposed project would be constructed in three phases. Phase 1 would include the construction of the equestrian trailhead staging area and the backbone of the trail system (approximately 1.2 miles). The equestrian trailhead staging area is located on the south end of the project area at the intersection of Terra Vista Way and Terra Bella Street. Portions of the 1.2-mile Phase 1 trail segment would follow the existing maintenance access road that follows the western ridgeline up towards the closed landfill. Phase 2 involves the extension of the backbone trail approximately 0.9 miles along the eastern boundary of the closed landfill. Phase 3 involves construction of Future Connection 1 (0.1 miles), Future Connection 2 (0.3 miles), and improvement of the remaining existing trail network (1.9 miles) to accommodate equestrian use through the trail loop.

2.2 Regulatory Setting

This study was prepared to comply with requirements of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA) as they apply to cultural resources.

2.2.1 National Historic Preservation Act (NHPA)

Section 106 of the NHPA, 1966, as amended in 2000 36 Code of Federal Regulations (CFR) Part 800 requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment (ACHP 2013, CFR § 800.3). A historic property is defined as any "prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on, the NRHP, including artifacts, records, and material remains related to such a property or resource" [16 U.S.C. § 470w(5)]. If an undertaking could affect historic properties, the agency determines the scope of appropriate identification efforts and then proceeds to identify historic properties in the APE by applying the NRHP criteria (ACHP 2013, CFR § 800.4). If it is determined that there are any possible effects on a historic property, the agency, in consultation with the State Historic Preservation Officer (SHPO) makes an assessment of adverse effects on the identified historic properties based on criteria found in ACHP's regulations (ACHP 2013, CFR § 800.5). If it is determined there are adverse effects, the agency consults with the SHPO and others to resolve adverse effects through mitigation, and a Memorandum of Agreement outlining measures the agency will take to minimize adverse effects is executed (ACHP 2013, CFR § 800.6). Federal agencies are encouraged to coordinate compliance with Section 106 of the NHPA and the procedures with any steps taken to meet the requirements of the National Environmental Policy Act (NEPA) for project undertakings (ACHP 2013, CFR § 800.8).

2.2.2 National Register of Historic Places (NRHP)

NRHP eligibility determinations require an assessment of historic resources in relation to relevant historic contexts through criteria set forth in 36 CFR § 60. The ACHP's implementing regulations, "Protection of Historic Properties," are found in 36 CFR § 800. The NRHP criteria (36 CFR § 60.4) are used to evaluate resources when complying with Section 106 of the NHPA. Those criteria state that eligible resources comprise "districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association," and any of the following criteria:

A. That are associated with events that have made a significant contribution to the broad patterns of our history;

B. That are associated with the lives of persons significant in our past;

C. That embody the distinctive characteristics of a type, period, or method of construction. Or that represent the work of a master, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction;

D. That has yielded, or may be likely to yield, information important in prehistory or history.

2.2.3 National Environmental Protection Act (NEPA)

NEPA requires that federal agencies evaluate the environmental effects of their actions before proceeding with a project. Cumulative, direct, and indirect effects of a project undertaking are considered. "Cumulative effects" on the environment result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR § 1508.7). Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use (40 CFR § 1508.8).

2.2.4 California Environmental Quality Act (CEQA)

Under CEQA, a proposed project is considered to have a significant effect on the environment if it can be expected to "cause a substantial adverse change in the significance of an historical resource" (CEQA Guidelines, Section 15064.5[b]). A historical resource is a resource listed, or determined to be eligible for listing, in the CRHR, a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

Public Resources Code (PRC) section 5024.1(c)(1-4) states that a resource is considered historically significant if it retains "substantial integrity" and meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possess high artistic value; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

Determining integrity of a resource lies in the authenticity of that resource's physical identity. This is judged by the survival of characteristics that were present during the resource's period of significance. Integrity is evaluated with regard to the retention of location, design setting, materials, workmanship, feeling, and association.

2.3 Personnel

Professional services were performed by individuals that meet the *Secretary of the Interior's Professional Qualifications Standards* (*Federal Register Notice*, Vol. 48, No. 190, pp. 44738–44739, 1983). All cultural resource management work performed in association with this project was under the direct supervision of a member of the Register of Professional Archaeologists (RPA). The Principal Investigator was Wayne Glenny. Mr. Glenny meets the Secretary of Interior's qualifications for cultural resource professionals. HDR archaeologists James Whitaker and Michael Connolly conducted the cultural resources survey on June 22, 2016 and June 5, 2017. Each member of the field crew has a minimum of a Bachelor of Arts degree and at least five years of experience in archaeological field work within California. Resumes for key personnel can be found in Appendix A.

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3 Project Description

3.1 Project Location

The proposed project is located within the City of Los Angeles and the Angeles National Forest (ANF) adjacent to the Lopez Canyon Landfill near the community of Sylmar in the northern San Fernando Valley. The Project APE lies within the Township 2 North, Range 14 West, Section 6 and Township 3 North, Range 14 West, Section 31. The project covers the San Fernando USGS 7.5 minute topographic map as shown in Figure 3-1.

3.2 Project Area of Potential Effects

LASAN is proposing to operate the trail loop system within the Lopez Canyon Landfill, which closed in 1996, and City of Los Angeles owned "buffer lands." The proposed trail loop would extend approximately five miles. The trail loop would incorporate a maintenance access road, segments of an existing, disconnected trail network, and the design and construction of two trail gap segments, and the trailhead staging area. Once constructed, the proposed project would provide a formal trail system for equestrians and hikers.

HDR conducted a survey within the APE to assess the potential direct and indirect effects of the project. The APE includes all areas directly and indirectly affected by the project. The anticipated limits of construction (or direct effects) are further defined within the APE as shown in Figure 3-2. The APE measured approximately 200 feet wide (100 feet on each side of the proposed trail) for approximately 5 miles. Within the APE there are two trail gap segments; one in the north and one in the south section of the APE. The northern trail, future connection 1 measures approximately 640 feet long and the southern trail, future connection 2 measures approximately 970 feet long and 900 feet wide. The APE for the trail head staging area and associated trail measures approximately 1,800 feet long and is located adjacent to Terra Vista Way.

Figure 3-1. Area of potential effects shown on the San Fernando USGS 7.5' Quadrangle.

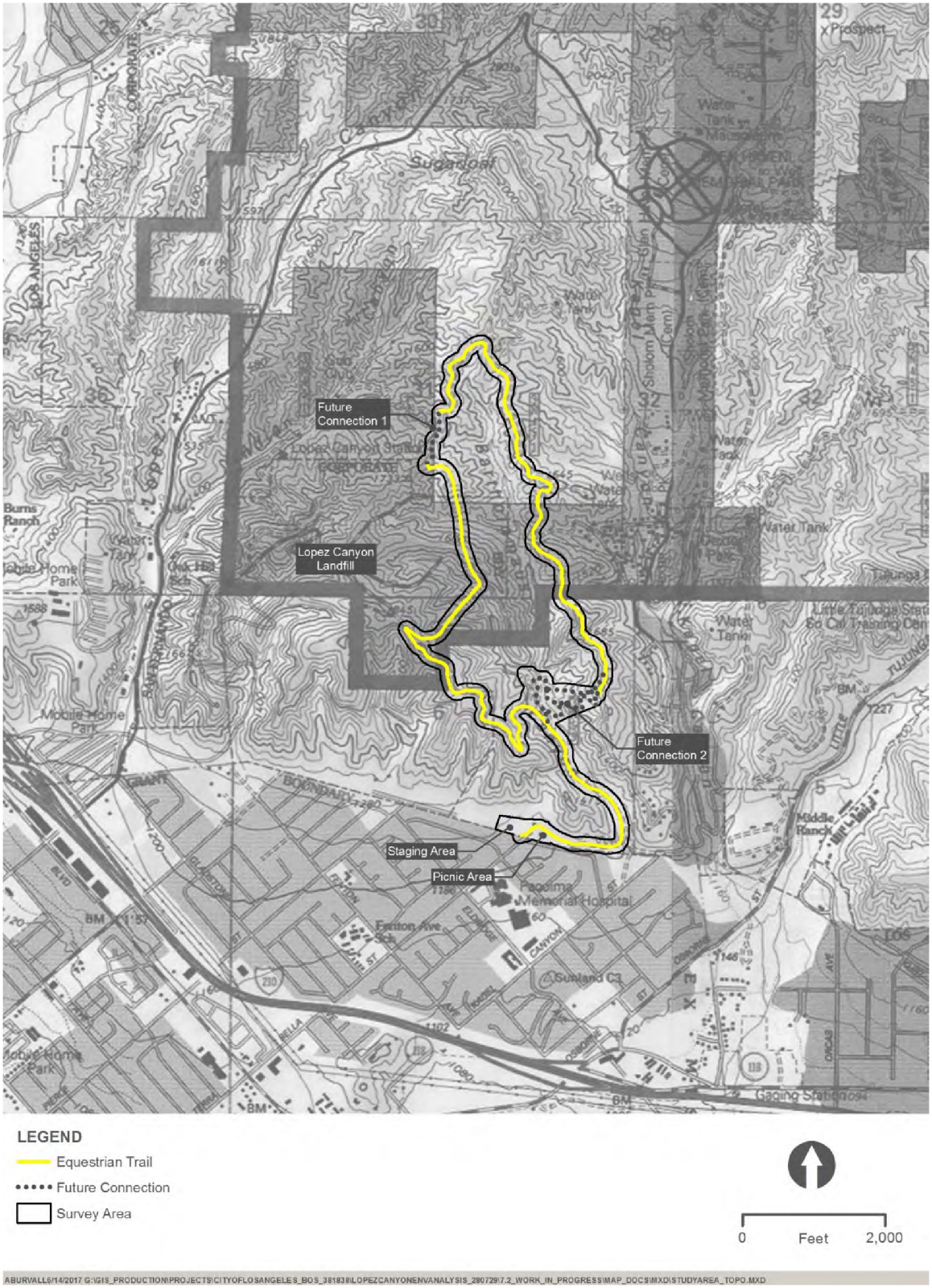
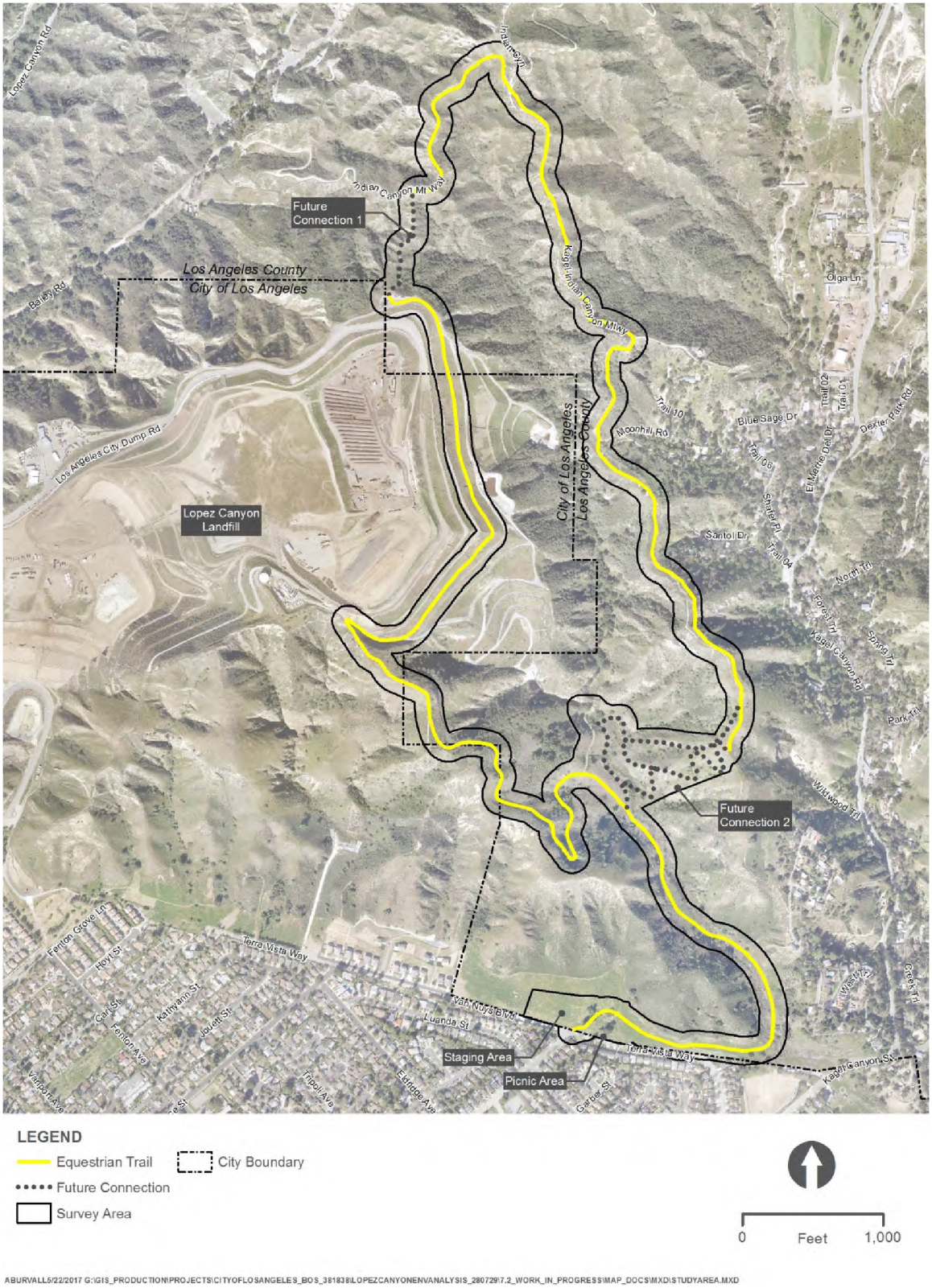


Figure 3-2. Aerial overview of area of potential effects.



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4 Background

4.1 Environment

The project area is within 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. It is drained by several major watercourses, including the Los Angeles, Rio Hondo, San Gabriel, and Santa Ana Rivers. The project area is at an elevation of 1,220 feet above mean sea level. The Project APE lies within the Township 2 North, Range 14 West, Section 6 and Township 3 North, Range 14 West, Section 31. The project covers the San Fernando USGS 7.5 minute topographic map.

The climate in the project area is typified by hot, dry summers, with moderate winter precipitation. Summers are influenced by a high-pressure zone associated with descending dry air from the upper atmosphere. This persistent high pressure generally prevents rain-bearing storms from entering the area, keeping summers dry. Summer temperatures can be hot, commonly reaching 90 degrees Fahrenheit. Autumn brings the Santa Ana winds, which blow from the Mojave Desert westward toward the Pacific Ocean. Winter is generally characterized by sporadic rainstorms alternating with warm and sunny days (Schoenherr 1992).

4.2 Paleoenvironmental Change

During the warming and cooling periods associated with the Miocene and Pliocene Epochs (23.03 to 2.6 million years ago), much of California went through periods of submersion. During the Pleistocene Epoch, from 2.6 million to 11,700 years ago, movement of and collision between tectonic plates formed hills and mountains where the ocean bottom and valleys once existed. Erosion cut through these older sediments as they were uplifted from the terrain that now exists, creating the valleys and the mountain ranges surrounding them. Additionally, the high degree of plate tectonics resulted in substantial volcanic activity evidenced by the presence of stratovolcanoes such as Mount Shasta and Lassen Peak.

Due to the combined effects of a rise in sea level and global climate fluctuation, dramatic environmental changes have occurred during the Holocene era (11,700 years ago to present). While the extent to which these changes affected human land use is still being investigated, research has shown that the effects of these environmental changes on the subsistence and settlement patterns of the prehistoric inhabitants of the area were significant. The effects of post-glacial sea level changes (Shumway et al. 1961; Warren and Pavesic 1963) and periods of high climatic variability (Larson and Michaelson 1989; Raab and Larson 1997; Jones et al. 1999) on ecosystems have been examined as possible causes of the broad scale changes observed in the cultural patterns of prehistoric groups in this area during the late Holocene. Some of the ways that these environmental changes appear to have affected the subsistence and settlement patterns of prehistoric and historic human populations are briefly discussed below.

The climate of the early Holocene in California was marked by pronounced warming and increased aridity between approximately 7,800 and 5,000 years before present (BP) (Carbone 1991), during the widely recognized climatic interval known as the Altithermal. It has long been recognized that Holocene climate shifts resulted in dynamic ecosystem changes. For coastal populations in the

region, perhaps the most important of these was the evolution of the coastal lagoon/estuary systems at the mouths of the major drainages. At the close of the Pleistocene, the coastal plain was crossed by a series of deeply incised drainages. As sea levels rose, these drainages began to flood, forming deep embayments that formed highly productive estuaries.

The warm and arid Altithermal period was followed by a cool, moist interval that persisted until about 2,000 BP. This period, known as the mid-Holocene, is documented by incursions of fresh water at San Joaquin Marsh at approximately 3800 BP, 2800 BP, and 2300 BP (Davis 1992). Climate changes in California during the last 2,000 years or the Late Holocene are better understood, due largely to the more recent and readily apparent nature of their impact on the local environment. The early period of the reconstructed climate produced by the tree ring study (Anno Domini [AD] 500 to 1000) documented a high degree of variability in yearly precipitation levels during this time period. Progressively lower yearly precipitation levels from AD 500 to 750 resulted in extreme drought conditions from AD 750 to 770. This drought period was followed by a 200-year period (AD 800 to 1000) that was characterized by the highest precipitation levels of the entire 1,600-year reconstruction (Larson and Michaelson 1989).

Paleo-climatic records from a wide variety of contexts consistently indicate that generally higher temperatures and extreme droughts characterized the period between AD 1000 and 1300. This event, known as the Medieval Warm period or the Medieval Climatic Anomaly, has interpretive importance because it coincides with important cultural changes observed in the archaeological record throughout California (Raab and Larson 1997; Jones et al. 1999; Stine 1990, 1994). These dry conditions may have contributed to the seasonal settlement shift to upland summer camps. The winter camps positioned along the lower flaks of the mountains would likely experience decreasing water supplies, forcing inhabitants to move to locales with a more reliable water supply.

These warm, dry conditions reversed sharply by about 600 years ago, correlating with the beginning of the climatic event known as the Little Ice Age (Grove 1986). A variety of data from California indicates both generally lower temperatures and increased precipitation during this interval. “South-easters,” intense extra-tropical cyclones, brought severe gales, high waves, and high levels of precipitation to the coastal region during the winter months of this period. For the Late Prehistoric and Early Historic occupants, this likely meant more frequent and severe floods than are seen today, as well as generally increased stream flow. Such climatic events may have reopened and kept some of the local estuaries open to the sea for sustained periods. Archaeological evidence for this phenomenon includes the presence of bay mollusks at several Late Prehistoric archaeological sites that are situated on what were the margins of several lagoons along the California coast (Masters and Gallegos 1997) and the presence of habitation areas along more inland water courses, which date to the Late Period.

4.3 Prehistoric Overview

The prehistoric chronology for the southern California coastal region has been divided into four periods: Early Man (ca. 11,000–6000 BP), Milling Stone (6000–3000 BP), Intermediate (3000 BP–AD 500), and Late Prehistoric (AD 500–Historic Contact) (Wallace 1955, 1978). Several revisions have been made to Wallace’s 1955 synthesis using radiocarbon dates and projectile point assemblages (Koerper and Drover 1983; Mason and Peterson 1994; Koerper et al. 2002).

The earliest accepted date for the beginning of human occupation in southern California is approximately 13,000 years ago (Johnson et al. 2002). The economy during the Early Man period was a mixture of hunting and gathering, with an emphasis on aquatic resources in many coastal

areas (Jones et al. 2002). Subsistence patterns shifted ca. 6000 BP with the onset of a warm and dry climatic period that lasted approximately 3,000 years and coincided with the Horizon II, the Milling Stone period. Recent research indicates that Milling Stone horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions (Byrd and Raab 2007).

Horizon III, the Intermediate period, began ca. 3000 BP and saw a wider use of plant foods, including acorns. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment (Glassow et al. 1988; True 1993). Horizon IV, the Late Prehistoric period, began ca. 500 AD. This period saw an increase in the diversity of food procurement strategies and the complexity of material culture. This period witnessed an increase in population and the advent of larger, more permanent villages (Wallace 1955).

4.4 Ethnographic Overview

The project area is in the heart of Gabrieliño/Tongva territory (Bean and Smith 1978; Kroeber 1925). Surrounding native groups included the Chumash and Tatataviam/Alliklik to the north, the Serrano to the East, and the Luiseño/Juaneño to the south. There is well-documented interaction between the Gabrieliño and many of their neighbors in the form of intermarriage and trade.

The name Gabrieleño denotes those people who were administered by the Spanish from Mission San Gabriel. Native Americans in the sphere of influence of Mission San Fernando were historically referred to as Fernandeño (Kroeber 1925). This group is now considered to be a regional dialect of the Gabrieliño language, along with the Santa Catalina Island and San Nicolas Island dialects (Bean and Smith 1978). In the post-Contact period, Mission San Gabriel included natives of the greater Los Angeles area, as well as members of surrounding groups such as Kitanemuk, Serrano, and Cahuilla. Native words that have been suggested as labels for the broader group of Native Americans in the Los Angeles region include Tongva (Merriam 1955) and Kizh (Heizer 1968), 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 Gabrieliño.

4.5 Historic Overview

The post-Contact history of California is divided into three periods that are defined by the ruling national government: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each period is briefly described below. Some chronologies include the Mission period (1769–1834), defined by the active span of those Spanish, and later Mexican, Catholic institutions. The terms Protohistoric or Contact period are alternate names for the era of initial interaction between Native Americans and European explorers and settlers, ranging from 1542 through the early 1800s in outlying areas, where a mixture of native and non-native cultural traits can be observed archaeologically.

4.5.1 Spanish Period (1769–1822)

The first Europeans to observe what became southern California were members of the 1542–1543 expedition of Juan Rodriguez Cabrillo. When sailing past Santa Monica Bay, Cabrillo noted the numerous campfires of the Gabrieliño/Tongva and thus named the area the Bay of Smokes. Cabrillo and other early explorers sailed along the coast and made limited expeditions into Alta (upper) California between 1529 and 1769. Although Spanish, Russian, and British explorers briefly visited

Alta California during this nearly 250-year span, they did not establish permanent settlements (Starr 2007).

Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement in Alta California at San Diego in 1769. Mission San Diego de Alcalá was the first of 21 missions built by the Spanish between 1769 and 1823. Portolá continued north, passing through the project area on August 2, 1769, and reaching San Francisco Bay on October 31. The process of converting the local Native American population to Christianity through baptism and relocation to mission grounds was begun in this region by the Franciscan padres at the San Gabriel Mission, which was established in 1771 (Engelhardt 1927a). The San Fernando Mission was founded 26 years later, its location chosen as a stopping point between the San Gabriel and San Buenaventura Missions (Engelhardt 1927b). Most Native Americans from the Los Angeles Basin were persuaded to settle near the two missions. Although mission life gave the Native Americans the skills needed to survive in their rapidly changing world, the close quarters and regular contact with Europeans transmitted diseases for which they had no immunity, decimating their populations (McCawley 1996).

The Spanish Governor of California, Felipe de Neve, recognized the need to establish a pueblo north of the Mission San Gabriel to help supply Spain's military forts (presidios) in California and to help maintain Spain's control over the region. On September 4, 1781, 12 years after the Portolá's initial visit, 44 settlers from Sonora, Mexico, accompanied by the governor, soldiers, mission priests, and several Native Americans arrived at the site alongside the Rio de Porciúncula (later renamed the Los Angeles River) (Robinson 1979 and Ríos-Bustamante 1992). They founded a pueblo called La Reyna de los Angeles, or the town of the Queen of the Angels (Treutlein 2004). The site chosen for the new pueblo was elevated on a broad terrace 0.8 km (0.5 mile) west of the river (Gumprecht 1999).

4.5.2 Mexican Period (1822–1848)

After the end of the Mexican Revolution against the Spanish crown (1810–1821), all Spanish holdings in North America (including both Alta and Baja California) became part of the newly formed Mexican Empire, and shortly thereafter, a constitutionally based United Mexican States. Under Mexican rule, the authority of the California missions gradually declined, culminating with their secularization. Events leading up to the secularization of the California missions spanned many years and much political upheaval, after which the Mexican Congress passed the Secularization Act in August 1833. Not only did the action divest the Franciscans of property, it also opened both of the Californias to colonization. The first 10 of the missions were secularized in 1834, San Gabriel among them.

Former mission lands were quickly divided and granted to private citizens for use as agricultural and pastoral land. Most of the land grants to Californios were located inland, a policy intended to increase the population away from the coastal areas where the Spanish settlements were concentrated (Dakin 1978). If mission life was difficult for Native Americans, secularization was worse. After two generations of dependence upon the missions, they were suddenly disenfranchised. After secularization, "nearly all of the Gabrieliños went north while those of San Diego, San Luis, and San Juan overran this county, filling the Angeles and surrounding ranchos with more servants than were required" (Dakin 1978).

Alta California became a state in 1821, and Los Angeles selected its first town council (Ayuntamiento) the following year. Independence and the removal of economic restrictions attracted settlers to Los Angeles, and the town slowly grew in size, expanding to the south and west. The

population nearly doubled during this period, rising from 650 to 1,250 between 1822 and 1845 (Weber 1992). Until 1832, Los Angeles was essentially a military post, with all able-bodied males listed on the muster rolls and required to perform guard duty and field duty whenever circumstances required (Los Angeles County 1963). The Mexican Congress elevated Los Angeles from pueblo to city status in 1835, declaring it the new state capital (Robinson 1979).

After years of surreptitious commerce, the first party of American immigrants arrived in Los Angeles in 1841, including William Workman and John Rowland, who soon became influential landowners. As the possibility of a takeover of California by the United States loomed large in the 1840s, the Mexican government increased the number of land grants in an effort to keep the land in Mexican hands (Wilkman and Wilkman 2006). Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time (Gumprecht 1999). Trade in the region changed as well. British and American trade displaced supply ships from Mexico and, in 1841, the first party of American immigrants arrived at the Pueblo de Los Angeles.

4.5.3 American Period (1848–Present)

The United States took control of California in 1846, seizing Monterey, San Francisco, San Diego, and Los Angeles with little resistance. Los Angeles soon slipped from American control, however, and needed to be retaken in 1847. Approximately 600 United States sailors, marines, Army dragoons, and mountain men converged under the leadership of Colonel Stephen W. Kearney and Commodore Robert F. Stockton in early January of that year to challenge the California resistance, which was led by General Jose Maria Flores. The American party scored a decisive victory over the Californios in the Battle of the Rio San Gabriel and at the Battle of La Mesa the following day, effectively ending the war and opening the door for increased American immigration (Harlow 1992).

Hostilities officially ended with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico $15 million for the conquered territory, including California, Nevada, Utah, parts of Colorado, Arizona, New Mexico, and Wyoming. This represented nearly half of Mexico's pre-1846 holdings. California joined the Union in 1850 as the thirty-first state (Wilkman and Wilkman 2006). Surrounded by miles of ranchos, Los Angeles was the center of a vibrant cattle industry throughout the nineteenth century. The city served as a trading hub for southern California's "cow counties," and at mid-century the plaza was lined with the shops and town homes of ranch owners (Robinson 1979). Agricultural interests were gradually supplanted by more urban industries, with about a third of Los Angeles residents supporting themselves with non-agricultural pursuits by 1836 (Weber 1992).

On April 4, 1850, only 2 years after the Mexican American War and 5 months prior to California earning statehood, the City of Los Angeles was formally incorporated. Los Angeles maintained its role as a regional business center in the early American period and the transition of many former rancho lands to agriculture, as well as the development of citric culture 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). During the first three decades of the twentieth century, more than two million people moved to Los Angeles County, transforming it from a largely agricultural region into a major metropolitan area (Gumprecht 1999).

Los Angeles continued to grow in the twentieth century in part due to the discovery of oil in the area and its strategic location as a wartime port. The military presence led to the aviation and eventually

aerospace industries having a large presence in the city and region. Mines Field, which would become Los Angeles International Airport (LAX), was established in 1928. 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 four million residents, Los Angeles is the second largest populated city in the United States.

4.6 Project Area Historic Overview

The project area is located in the southern foothills of the San Gabriel Mountains with a history connected to the Mission San Fernando Rey de Espana (CSF 2017). From the founding of the mission in 1797 to the early nineteenth century, the arable portions of the project area contained grapevines and fruit trees which contributed to the mission's agricultural output. The mission was secularized in 1834 and the lands were divided into a series of ranchos, Rancho de San Fernando being the largest (CMRC 2017). During the Rancho Period, the small settlement surrounding the mission developed into a small trading center where a number of commodities such as wine, olives, and livestock were bought and sold (CSF 2017). One of the founding families of this growing settlement was the Lopez family, the namesake of Lopez Canyon, descended from Juan Bautista Lopez and Maria Salgado. The Lopez family worked and eventually owned a 40-acre portion of the ex-mission rancho lands and what would eventually become the City of San Fernando (HRI 2017).

Throughout the nineteenth century agriculture continued to dominate the area with very few people, other than the native Tongva people, residing outside of the San Fernando settlement. However, by the late nineteenth century a man known only as "Mr. Kagel" settled in what is now Kagel Canyon, and a German immigrant named Emil Bartholomaus settled near the entrance of what is now known as Bartholomaus Canyon. These homesteaders, as well as many others around the San Fernando Valley, expanded the long established ranching and farming traditions into the unclaimed areas outside of the ex-mission rancho lands. Mr. Kagel was a rancher and Mr. Bartholomaus established orchards and olive groves (Vradenburg 1969, MSFV 2013, FS 2014, CPLD 2017, DRMC 2017). While men like Kagel and Bartholomaus were settling the foothills of the San Gabriel Mountains, public concern was growing over the protection of the local watershed. To protect these endangered resources President Harrison created the San Gabriel Timberland Reserve in 1892 which was the forerunner of the Angeles National Forest (USDA 2017).

In 1915, the City of Los Angeles acquired nearly all of the ex-Rancho de San Fernando lands in what was described by Starr (2007) as "a kind of local Louisiana Purchase." The acquisition nearly doubled the size of the City and by the end of World War II the agrarian landscape was being transformed into a series of urban, suburban, and industrialized areas (Hayes 2007, Starr 2007). In the latter half of the twentieth century, the City continued to acquire small sections of unincorporated land that had fallen into disuse such as the "Sunland Addition" in 1976 (LADPW 2017). To the dismay of local residents, during the previous year the City created the Lopez Canyon Landfill on 399 acres of acquired land in Lopez Canyon. From 1975 to 1996 the landfill accumulated more than 19 million tons of residential and industrial debris from the greater Los Angeles area. Due to the overwhelming amount of debris, the landfill generates approximately 5 million cubic feet of hazardous methane gas a day. After the landfill closed in 1996, the City began working on a system to convert the hazardous gas to renewable energy and promised to create an open space park and recreation area when the landfill is deemed environmentally safe. Currently, gasses from the Lopez Canyon landfill produce enough energy to power 4,500 homes (LASAN 2017, LAT 2017).

5 Methods

5.1 Pre-Field Research

On May 23, 2016, a request was submitted to the SCCIC for a records search of all archaeological and historical resources within one-half mile of the Project APE (Figure 5-1). On May 24, 2016, a request was submitted by HDR to the NAHC for a search of their SLF. On May 31, 2017, HDR archaeologist Ben Volta conducted an in house records search at the Angeles National Forest Supervisors office (Figure 5-2). A review of an online database, Nationwide Environmental Title Research, LLC site (HistoricalAerials.com), was also completed. Aerial photographs (1960, 1993, 1998, 2005, 2009, 2010, and 2012) and United States Geological Service (USGS) maps (1935, 1943, 1948, 1956, 1958, 1960, 1964, 1965, 1968, 1986, and 2003) were reviewed. The results of these searches and the consultation with the appropriate Native American groups are discussed below.

5.1.1 Previously Recorded Resources

The records search completed by the SCCIC indicates that there is one known historic-age resources within the Project APE, and one known historic-age resource within one-half mile of the Project APE summarized in Table 5-1. CA-LAN-158 was originally recorded in 1967 and described as a sparse lithic scatter in an area measuring 200 feet by 100 feet (Johnson 1967). The site is located approximately 1,900 feet east of the proposed APE. P-19-186535 was originally recorded in 1979 as the Los Angeles National Forest (Arbuckle 1979) and is located within the northern portion of the proposed APE.

Table 5-1. Previously recorded resources within one-half mile of Project APE from SCCIC.

Primary Number	Trinomial	Description
P-19-000158	CA-LAN-158	Sparse Flaked Lithic Scatter
P-19-186535	N/A	Los Angeles National Forest

Figure 5-1. SCCIC overview of previously recorded resources within 0.5 mile of the area of potential effect.

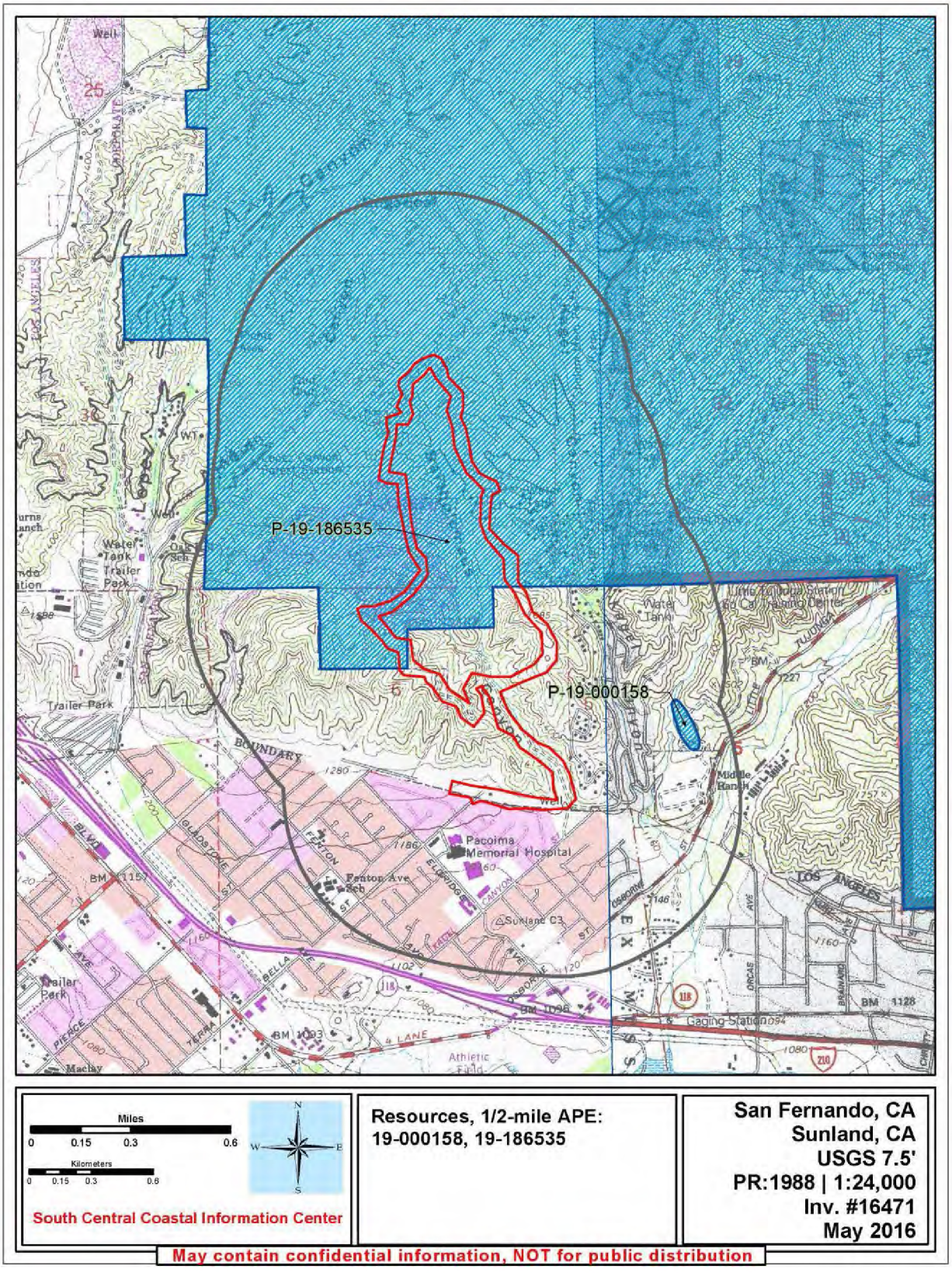
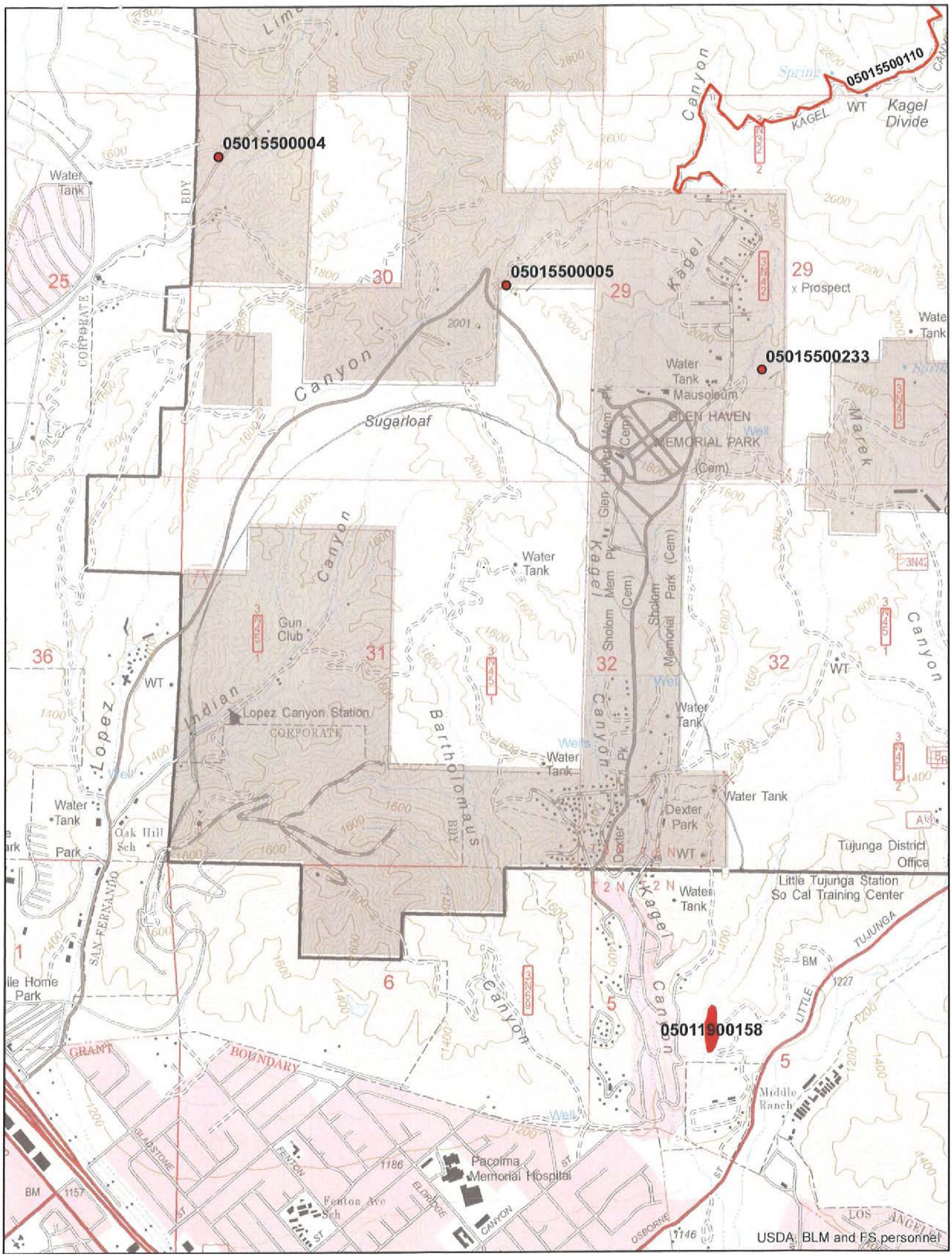


Figure 5-2. ANF overview of previously recorded resources within 0.5 mile of the area of potential effect



5.2 Initial Native American Coordination

HDR contacted the NAHC on May 24, 2016. The results of the NAHC SLF search indicated no areas of concern within the one-half mile radius. The SLF search includes a contact list of Native American individuals or organizations that may have additional information regarding sacred resources in the area. Letters were mailed to each of the individuals/groups. Native American consultation was conducted by the City of Los Angeles. Letters were sent on June 20, 2016 to the Gabrieleño Band of Mission Indians-Kizh Nation, Soboba Band of Luiseño Indians, San Fernando Band of Mission Indians and the Fernandeño Tataviam Band of Mission Indians. To date the City has received one response from Andrew Salas, Chairman of the Gabrieleño Band of Mission Indians-Kizh Nation.

5.3 Field Methods

HDR archaeologists James Whitaker and Michael Connolly conducted the cultural resource survey on June 22, 2016, and June 5, 2017. Preliminary efforts consisted of the review of records within the project area and the generation of a map of the recorded cultural resources using a geographic information system (GIS).

During the field investigation, HDR staff surveyed the entire APE. Survey methods consisted of the visual inspection of the area using parallel transects spaced in 10 to15 meter intervals across the corridor. HDR archaeologists used systematic detailed field inspections to identify any unknown cultural resources within the APE. HDR archaeologists provided an exhaustive ground inspection of the APE where ground visibility allowed. Newly recorded cultural resources were recorded, photographed with a digital camera and mapped with a sub meter accurate Trimble GeoTX global positioning system (GPS) unit.

Copies of the digital photographs, field notes, and GIS data are available at the HDR San Diego Balboa Avenue office. New California DPR 523 forms were completed for any newly recorded resources (Appendix B). HDR archaeologists submitted the new DPR form to the SCCIC.

6 Results

The project area varied from level to steep canyon slopes. The eastern segment consisted mostly of well maintained dirt access roads associated with the now closed Lopez Canyon Landfill (Photographs 6-1 and 6-2). The majority of these dirt access roads were located on the west side of the canyon with steep slopes above and below the roads. The northern and western segments were located on the ridge line of the canyon and consisted of segments of an existing, disconnected hiking trail as well as unmaintained dirt access roads (Photographs 6-3 and 6-4). The proposed future trail segment connections in the northern and southern segment of the APE were within the canyon starting and ending on opposite sides of the ridge (Photographs 6-5 and 6-6). The southern segment consisted of a well maintained dirt access road leading out of the canyon to Terra Vista Way (Photographs 6-7 and 6-8). The APE adjacent to Terra Vista Way consisted of a disturbed plowed field (Photographs 6-9 and 6-10). Ground visibility varied from good to poor throughout the APE. Vegetation consisted primarily of tall non-native grasses with a few shrubs and oak trees. All exposed ground surfaces were carefully examined for evidence of cultural materials (e.g., artifacts, ecofacts, midden soil, and features). One new historical resource was recorded within the APE for this project (Appendix B). No prehistoric sites were observed within the APE.

Photograph 6-1. Overview of conditions at the western segment of the APE. View north.

Photograph 6-2. Overview of conditions at the western segment of the APE. View south.

Photograph 6-3. Overview of conditions at the eastern segment of the APE. View north.

Photograph 6-4. Overview of conditions at the eastern segment of the APE. View north.

Photograph 6-5. Overview of the proposed future connection 1, northern trail segment connection. View south.

Photograph 6-6. Overview of the proposed future connection 1, northern trail segment connection. View south.

Photograph 6-7. Overview of the proposed future connection 2, southern trail segment connection. View west.

Photograph 6-8. Overview of the proposed future connection 2, southern trail segment connection. View east.

Photograph 6-9. Overview of conditions at the southern segment of the APE. View northwest.

Photograph 6-10. Overview of conditions at the southern segment of the APE. View southeast.

Photograph 6-11. Overview of conditions at the proposed trailhead staging yard. View west.

Photograph 6-12. Overview of conditions at the proposed trailhead staging yard. View east.

During the survey, one new historic resource was recorded (CA-LAN-4718H) (Figures 6-1 and 6-2; Photographs 6-13 and 6-14) in the southern area of the APE adjacent to Terra Vista Way. CA-LAN-4718H (Appendix B) consists of a single family property with two historic concrete foundations and two rock walls within an area that measures approximately 180 feet east/west by 235 feet north/south. The first concrete foundation measures 14 feet north/south by 60 feet east/west. The second concrete foundation measures 22 feet north/south by 30 feet east/west. Both concrete foundations were in poor shape. The rock wall south of the foundations measures 205 feet long, 2 feet wide and ranged from 1 to 3 feet high. A smaller rock wall is also located immediately west of the smaller concrete foundation. This rock wall measures 20 feet long, 1 foot wide, and 1 to 2 feet high. The rock walls consisted of large cobbles and concrete and parts of the rock wall are in various states of disarray. No surface artifacts were observed within the surrounding area. The site has been disturbed from modern activities; modern trash was found throughout the site. The site is adjacent to a residential neighborhood near the intersection of Terra Vista Way and Terra Bella Street.

CA-LAN-4718H is the original location of the Emil Bartholomaus homestead near the southern extent of Bartholomaus Canyon. According to early voter registration records, Emil Bartholomaus was a German immigrant who arrived in the San Fernando Valley during the late nineteenth century. The 1900 USGS topographic map shows a structure on site with a federal land patent for the property filed in February 1905 and again in March 1916. Historic aerial photographs depict a series of cultivated fields and groves surrounding the house with the groves being transformed into cultivated fields in the late 1950s and early 1960s. Early photographic evidence of the house is lacking; however, mid to late twentieth century aerial photographs show that two secondary structures were added between 1964 and 1972. One structure adjacent east of the original house and one approximately 20 meters to the southeast. The rock wall on the southern edge of the site also appears to have been added during the same time period. The last time the house and outbuildings appear on aerial photographs is 1982; by 1994 all structures on the property were removed. Based on the historic aerial photographs and field inspection, no evidence of the original structure exists. The concrete foundations and rock wall are remnants of later additions to the property (NETR 2015 and LADPW 2017).

Figure 6-1. Aerial overview of CA-LAN-4718H.

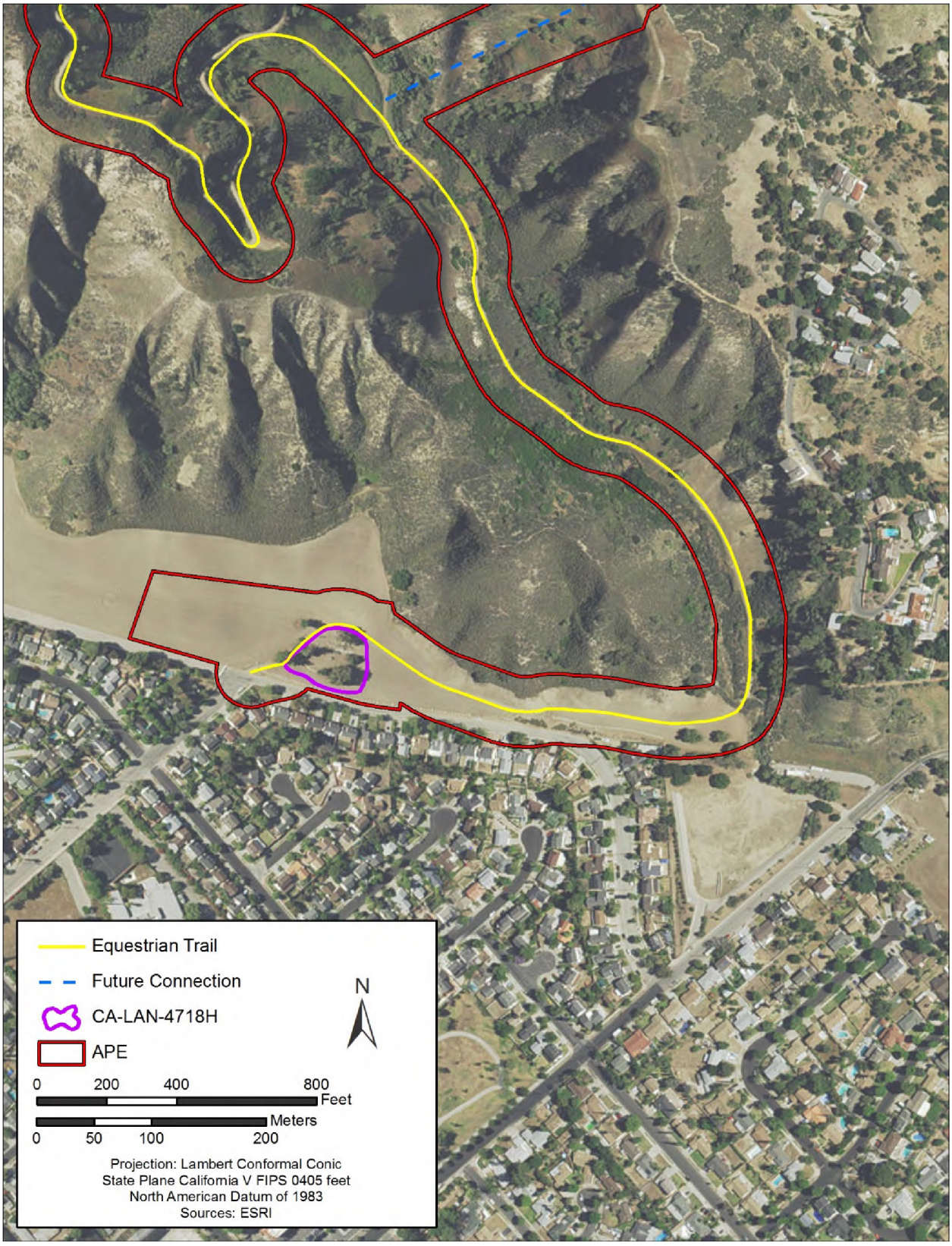


Figure 6-2. Aerial overview of CA-LAN-4718H.

Photograph 6-13. Overview of CA-LAN-4718H. View southwest.

Photograph 6-14. Overview of CA-LAN-4718H. View west.

7 Recommendations

A project is considered to have significant impact on the environment if it

- causes a substantial adverse change in the significance of an historical resource;
- causes a substantial adverse change in the significance of an archaeological resource;
- disturbs any human remains, including those interred outside of formal cemeteries.

CEQA Guidelines Section 15064.5 defines a substantial adverse change to mean physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource is materially impaired. To avoid an adverse change, CEQA recommends preservation of the historical resource through avoidance; when a resource can not be avoided by project activities, the effects must be addressed and mitigated as outlined in PRC 15126.4 and 15331. The criteria applied to determine impacts are:

- potentially significant impact
- less than significant impact with mitigation
- less than significant impact
- no impact

Eligibility recommendations for sites are made based on NRHP criteria (NPS 1997). Sites that are considered eligible for the NRHP must meet at least one of the four following criteria:

A. The resource is associated with events that have made a significant contribution to the broad pattern of history.

B. The resource is associated with the lives of people significant in the past.

C. The resource embodies distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic value; or represents a significant and distinguishable entity whose components may lack individual distinction.

D. The resource has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting at least one of the above criteria, a site must retain several, if not most, of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Integrity is defined as the authenticity of a property's historic identity, as evidenced by the survival of physical characteristics it possessed in the past, and its capacity to convey information about a culture or people, historic patterns, or architectural or engineering design or technology. Location refers to the place where an event occurred or a property was constructed. Design considers elements such as the plan, form, and style of a property. Setting is the property's physical environment. Materials refer to the physical elements used to construct the property. Workmanship refers to the craftsmanship of the property's builders. Feeling is the property's ability

to convey a sense of historical time and place. Association refers to the link between the property and a historic event, pattern of events, or person.

Both direct and indirect impacts were considered for this project. Direct impacts result from construction related activities such as vegetation clearing, trenching, and installing structures, among other activities. Indirect impacts can occur as a result of changing the use of the landscape. For example, increased public access to a remote location can result in unauthorized recreational use and vandalism. Although the project location is not remote and the public currently has access to the property, therefore no indirect impacts are expected for this project.

Potential direct impacts of the Lopez Canyon Trail Project on cultural resources would generally be related to physical destruction of a resource or changes in the visual setting. Although physical destruction can occur to both archaeological and architectural resources, visual impacts are typically only considered for architectural resources. No architectural resources lie within the Project APE. Additionally, no archaeological resources or historic properties lie within the Project APE that could be impacted by physically destruction.

During the pedestrian survey one new historical resource (CA-LAN-4718H) was recorded within the APE for this project. CA-LAN-4718H (Appendix B) is unlikely to yield information important to the past, and does not meet the criteria established for a unique archaeological resource under CEQA. According to Subdivision (h) of PRC Section 21083.2, “a non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects.” Due to the disturbed nature of the historic resource and the absence of any associated surface artifacts, this new site is recommended as ineligible for listing in the CRHR. No other resources were observed within the APE. The one previously recorded prehistoric resource CA-LAN-158, is located outside the APE and will not be impacted by the proposed project.

Based on the lack of resources identified in the pre-field research, the lack of resources identified in the pedestrian survey, and the minimal likelihood of any potential subsurface, unidentified resources the project is given a determination of No Impact under CEQA and No Historic Properties Affected under NHPA.

8 References

Arbuckle Jim
1979 Department of Parks and Recreation, Site form for P-19-186535. On file at the South Central Coastal Information Center.

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

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

California Land Patents Database (CLPD)
2017 Los Angeles County, CA – Index to Federal Land Patents. http://files.usgwarchives.net/ca/losangeles/land/la.txt. Accessed on 8 June 2017.

California Missions Resource Center (CMRC)
2017 San Fernando Rey de Espana. http://www.missionscalifornia.com/keyfacts/san-fernando-rey.html. Accessed on 8 June 2017.

Calloway, Colin. N.
2008 American Indians and the New Nation 1783-1838. In *First Peoples* 3rd edition, Bedford/St. Martin's, Boston, pp. 218–289.

Carbone, L.
1991 Early Holocene Environments and Paleoecological Contexts on the Central and Southern California Coast. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by Jon M. Erlandson and Roger H. Colten, pp. 11-18. Institute of Archaeology, University of California, Los Angeles, CA.

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

City of San Fernando (CSF)
2017 Our City. http://ci.san-fernando.ca.us/our-city/history/. Accessed on 8 June 2017.

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

David Rumsey Map Collection (DRMC)
2017 http://www.davidrumsey.com. Accessed on 8 June 2017.

Davis, O. K.
1992 Rapid Climatic Change in Coastal Southern California Inferred from Pollen Analysis of San Joaquin Marsh. *Quaternary Research* 37:89-100.

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

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

1927b *San Fernando Rey, the Mission of the Valley.* Franciscan Herald Press, Chicago.

Family Search (FS)
2014 California Great Registers, 1866-1910: Emil Bartholomaus 20 Oct 1894; Voter Registration, San Fernando, Los Angeles, California, United States, county clerk offices, California; FHL microfilm 976,929. https://familysearch.org/ark:/61903/1:1:VNFB-6B1. Accessed on 8 June 2017.

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

Grove, J. Mikiyou
1986 *The Little Ice Age*. Methuen, NY.

Gumprecht, Blake
1999 *The Los Angeles River: Its Life, Death, and Possible Rebirth*. The Johns Hopkins University Press, Baltimore, Maryland.

Harlow, Neal
1992 *California Conquered: The Annexation of a Mexican Province 1846-1850.* University of California Press, Berkeley.

Hayes, Derek
2007 *Historical Atlas of California*, University of California Press, Berkeley.

Heizer, Robert F.
1968 *Village Names in Twelve California Mission Records.* Reports of the University of California Archaeological Survey, no. 74.

Historical Resources Inc. (HRI)
2017 The Lopez Adobe: Chronicling the past, present, and future of a City of San Fernando landmark. https://lopezadobe.wordpress.com/tag/casa-de-lopez/. Accessed on 8 June 2017.

Johnson, Darrell
1979 Department of Parks and Recreation, Site form for CA-LAN-158. On file at the South Central Coastal Information Center.

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

Jones, T., G.M. Brown, L.M. Raab, J.L. McVickar, W.G. Spaulding, D.J. Kennet, A. York, and P.L. Walker
1999 Demographic Crisis in Western North America During the Medieval Climatic Anomaly. *Current Anthropology*, (2):137-170.

Jones, T., R. Fitzgerald, D. Kennett, C. Miksicek, J. Fagan, J. Sharp, and J. Erlandson
2002 The Cross Creek Site and Its Implications for New World Colonization. *American Antiquity* 67:213–230.

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

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

Kroeber, A.L.
1925 *Handbook of the Indians of California.* Dover Publications, New York. (consulted as a primary source).

Larson, D. O. and J. Michaelson
1989 Climatic Variability: A Compounding Factor Causing Culture Change Among Prehistoric Coastal Populations. Unpublished manuscript on file, Department of Anthropology, California State University Long Beach.

Los Angeles County Department of Public Works (LADPW)
2017 Land Records Information: Tract Maps, Parcel Maps, Records of Survey, City Annexations. http://dpw.lacounty.gov/smpm/landrecords/. Accessed on 8 June 2017.

Los Angeles Sanitation (LASAN)
2017 Lopez Canyon (Lopez Canyon Environmental Center), Fact Sheet. https://www.lacitysan.org/san/faces/wcnav_externalId/. Accessed on 8 June 2017.

Los Angeles Times (LAT)
2017 In the News: Lopez Canyon. http://articles.latimes.com/keyword/lopez-canyon. Accessed on 8 June 2017.

Los Angeles County
1963 *The First Los Angeles City and County Directory 1872*. Facsimile reprint. Ward Richie Press, Los Angeles.

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

Masters, P. M. and D. Gallegos
1997 Environmental Change and Coastal Adaptations in San Diego County During the Middle Holocene. In *Archaeology of the California Coast During the Middle Holocene*, edited by J.M. Erlandson and M.A. Glassow. Perspectives in California Archaeology 4. University of California, Los Angeles, CA.

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

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

Museum of the San Fernando Valley (MSFV)
2013 Rare Kagel Canyon Photo Discovered: Cherishing Our Valley. http://museumsanfernandovalley.blogspot.com/2013/02/rare-kagel-canyon-photo-discovered.html. Accessed on 8 June 2017.

Nationwide Environmental Title Research, LLC (NETR)
2015 http://www.historicaerials.com/. Aerials 1960- current. Topographic Maps 1935-current.

Raab, L.M., and D.O. Larson
1997 Medieval Climatic Anomaly and Punctuated Cultural Evolution in Coastal Southern California. *American Antiquity* 62(2):319-336.

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

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

Schoenherr, A. A.
1992 *A Natural History of California.* University of California Press, Berkeley.

Shumway, G., C. L. Hubbs, and J. R. Moriarty
1961 Scripps Estates site, San Diego California: a La Jolla Site Dated 5460 to 7370 Years Before the Present. *Annals of the New York Academy of Sciences* 93 (3), 37-132. New York.

Starr, Kevin
2007 *California: A History.* Modern Library, New York.

Stine, S.
1990 Late Holocene fluctuations of Mono Lake, Eastern California. *Paleogeography, Paleoclimatology, and Paleoecology* 78:333-381.

1994 "Extreme and Persistent Drought in California and Patagonia During Medieval Time." *Nature* 369:546-549.

Treutlein, Theodore E.
2004 Los Angeles, California: The Question of the City's Original Spanish Name. In *The Founding Documents of Los Angeles: A Bilingual Edition,* edited by Doyce B. Nunis Jr. Historical Society of Southern California. Los Angeles, California.

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

United States Department of Agriculture (USDA)
2017 Forest Service, Angeles National Forest, San Gabriel Mountains National Monument. History and Culture. https://www.fs.usda.gov/main/angeles/learning/history-culture. Accessed on 8 June 2017.

Vradenburg, Ralph
1969 Kagel Canyon. http://www.kagelcanyon.com/kagelcanyon/Misc_files/Canyon%20History.pdf. Accessed on 8 June 2017.

Wallace, William J.
1955 A Suggested Chronology for Southern California. *Southwestern Journal of Anthropology* 11(3):215–230.

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

Warren, C. N. and M. Pavesic
1963 Shell Midden Analysis of Site CA-SDI-603 and Ecological Implications for Cultural Development of Batiquitos Lagoon, San Diego County. In *University of California Archaeological Survey Annual Report*, Vol. 5, pp. 411-438. University Press, Los Angeles,CA.

Weber, David J.
1992 *The Spanish Frontier in North America*. Yale University Press, New Haven, Connecticut.

Wilkman, Jon and Nancy Wilkman
2006 *Picturing Los Angeles*. Gibbs Smith, Salt Lake City.

A

Resumes of Key Personnel

James Whitaker

Archaeology Crew Chief

Mr. Whitaker has 14 years of cultural resources management experience. Mr. Whitaker has participated in over 185 survey, testing and mitigation level cultural resources inventory projects (data recovery and monitoring) in compliance with various city requirements, county requirements, CEQA, NEPA, NAGPRA, and Sections 106 and 110 of the National Preservation Act (NHPA) for federal, state, and local agencies primarily in southern California. His experience includes many phases of project planning and execution including record searches, project management, survey, excavation and monitoring, management recommendations, report preparation, and curation. Documents he has prepared have been reviewed by local, State and Federal agencies. As the Lead Collections Specialist at the San Diego Archaeological Center (a federally recognized repository for DOD collections), he gained invaluable experience in collection curation and NAGPRA assessment of numerous orphan collections donated to the repository. His NAGPRA experience includes private archaeological collections from San Diego County and federally acquired archaeological collections. Collection evaluations were undertaken under CEQA guidelines or as stipulated by the National Park Service. In addition to his review and rehabilitation of archaeological collections, as the Education Specialist at the San Diego Archaeological Center he was involved in public outreach programs, such as the National Heritage Education Program, Project Archaeology designed to educate students regarding the importance of cultural resources management. Mr. Whitaker has instructed more than 4,000 students from various public and private institutions, focusing on cultural and natural resources.

EDUCATION
Bachelor of Arts, Anthropology, State University of NY Oneonta, 2001

PROFESSIONAL MEMBERSHIPS
San Diego Archaeological Center

San Diego County Archaeological Society

INDUSTRY TENURE
14 years

HDR TENURE
11 years

OFFICE LOCATION
San Diego, CA

RELEVANT EXPERIENCE

San Diego Gas & Electric (SDG&E), On Call Cultural Resources, 2009-Present. Supports the undertakings of SDG&E for new construction, ongoing maintenance, and repair projects by conducting cultural resources inventories for various projects throughout the company service territory. As a Staff Archaeologist, specific responsibilities included records search review, survey, field excavations, laboratory analysis, monitoring, preparation of final report, and recommendations for resource significance and stewardship. Coordinates with other cultural resources staff, clients, and their subcontractors to implement, organize, conduct, and complete numerous small- to large-scale projects with overlapping schedules for Sempra Energy/SDG&E. Applied knowledge of local archaeological and Native American monitoring guidelines to assist Sempra Energy/SDG&E in completing projects within archaeologically sensitive areas. Value: $1,250,000 (2014-2019). Examples of projects include:

- Archaeological Survey for Transmission Line Projects throughout San Diego County
- Archeological Survey and Monitoring aboard Marine Corps Base Camp Pendleton
- Archaeological Monitoring within USFWS Refuge
- Constraints Study for Proposed Otay Ranch Substation
- Constraints Study for Borrego Substation Emergency Generator
- Constraints Study for Four Prospective Photo Voltaic Substations

JAMES WHITAKER

NAVFAC SWDIV, Archaeological Monitoring to Support the P-1014 Project (Truck Company Operations Complex) MCB Camp Pendleton, San Diego County, California (N62473-11-D-2221, Task Order 0006), 6/2012-Ongoing. Project Manager. Studies included review of available data, project management and primary author of work plan and final report. . Value: $497,019

NAVFAC SWDIV, Archaeological Monitoring to Support the P-1048 Project (Upgrades to Electrical Systems and Associated Facilities), MCB Camp Pendleton, San Diego County, California (N62473-11-D-2221, Task Order 0009), 9/2012-Ongoing. Project Manager. Studies included review of available data, project management and primary author of work plan and final report. Value: $1,291,385

NAVFAC SWDIV, Archaeological Monitoring to Support the Range 409A Improvements Project, MCB Camp Pendleton, San Diego County, California (N62473-11-D-2221, Task Order 0010), 10/2013-Ongoing. Project Manager. Studies included review of available data, project management and primary author of work plan and final report. Value: $44.148

NAVFAC SWDIV, Archaeological Monitoring to Support the Ysidora Basin Mitigation Project, MCB Camp Pendleton San Diego County, California (N62473-11-D-2221, Task Order 0022), 10/2012-7/2015. Project Manager. Studies included review of available data, project management and primary author of work plan and final report. Value: $44,148

E.ON Climate & Renewables Inc., Archaeological Monitoring for the Alamo Solar Project, San Bernardino County, California, 11/2014-7/2015. Project Manager. Studies included review of available data, worker training program development and implementation, project management and primary author of work plan and final report. Value: $227,000

NAVFAC SWDIV, Archaeological Monitoring to Support the P-310 Project (Small Arms Magazine, Edson Range), MCB Camp Pendleton, San Diego County, California (N62473-11-D-2221, Task Order 0008), 8/2012-8/2014. Project Manager. Studies included review of available data, project management and primary author of work plan and final report. Value: $67,223

NAVFAC SWDIV, Archaeological Monitoring to Support the P-1040 Project (Wire Mountain Road/ Vandegrift Boulevard Intersection Improvements), MCB Camp Pendleton, San Diego County, California (N62473-11-D-2221, Task Order 0004), 1/2012-10/2014. Project Manager. Studies included review of available data, project management and primary author of work plan and final report. Value: $346,709

SANBAG, Downtown San Bernardino Passenger Rail Project, San Bernardino County, California, 2014. As a Staff Archaeologist, studies included review of available data, project management and primary author of final report for the Federal Transit Administration and San Bernardino Associated Governments. Value: $10,000

City of Riverside Public Utilities Department, Pellissier Ranch Solar Photovoltaic Project, Riverside County, California, 2014. As a Staff Archaeologist, studies included review of available data, survey and contribution to final report. Value: $250,000

Metrolink, Perris Valley Commuter Rail Project, Riverside County Transportation Commission, Riverside County, California, 2014. Archaeological monitor who provided an immediate on-site response in the event that cultural material was discovered during excavation work. Duties included identification and significance assessment of any unrecorded, subsurface resources identified during ground disturbance activities. Value: $140,000

Union Pacific Railroad, Phase I Environmental Site Assessment, Kern Junction Track Expansion, Bakersfield, Kern County, California, 2014. As a Staff Archaeologist, studies included review of available data, survey and contribution to final report. Value:$10,000

Valley Center Municipal Water District, North Village Wastewater Infrastructure Project, San Diego County, California, 2014. As a Staff Archaeologist, studies included review of available data, survey and primary author of final report. Value: $15,000

Valley Center Municipal Water District, Proposed Seasonal Storage Ponds Constraints Project, San Diego County, California, 2014. As a Staff Archaeologist, studies included review of available data, survey and contribution to final report. Value: $5,000

NAVFAC SWDIV, Archaeological Monitoring to Support the 62 and 63 Area Power Line Project, MCB Camp Pendleton San Diego County, California (N62473-11-D-2221, Task Order 0007), 9/2012-12/2013. As a Staff Archaeologist, studies included review of available data, project management and primary author of work plan and final report. Value:$32,373

NAVFAC SWDIV, Archaeological Monitoring to Support the P-109 Project (CNATT-Naval Aviation Training Complex), MCB Camp Pendleton San Diego County, California (N62473-11-D-2221, Task Order 0003), 1/2012-12/2013. As a Staff Archaeologist, studies included review of available data, project management and primary author of work plan and final report. Value: $179,476

NAVFAC SWDIV, Archaeological Monitoring to Support the P-1045 Geotechnical Boring and Potholing Project (Connection of Northern and Southern Water Systems), MCB Camp Pendleton San Diego County, California (N62473-11-D-2221, Task Order 0013), 6/2012-12/2013. As a Staff Archaeologist, studies included review of available data, project management and primary author of work plan and final report. Value: $97,981

NAVFAC SWDIV, Archaeological Monitoring to Support the P-1046 Geotechnical Boring Project (Northern Tertiary Treatment Plant) Project, MCB Camp Pendleton San Diego County, California (N62473-11-D-2221, Task Order 0012), 6/2012-4/2013. As a Staff Archaeologist, studies included review of available data and primary author of work plan and final report. Value: $32,373

NAVFAC SWDIV, Archaeological Monitoring to Support the Wilcox Range Ditch Drainage Clearance Project, MCB Camp Pendleton San Diego County, California (N62473-11-D-2221, Task Order 0026), 9/2012-10/2013. As a Staff Archaeologist, studies included review of available data, project management and primary author of work plan and final report for

NAVFAC Southwest Division. Value: $31,687

Cultural Resources Survey for the FRV Orion Solar Project Near Arvin, Kern County, California, 2013 As a Staff Archaeologist, studies included review of available data, project management, survey and primary author of letter report. Value: $8,000

U.S Customs and Border Protection (CBP), Bureau of Land Management (BLM), Cultural Resources Monitoring for the Tower Replacement at BP Hill, Imperial County, California, 2012. Staff Archaeologist that provided an immediate on-site response in the event that cultural material was discovered during excavation work. Duties included identification and significance assessment of any unrecorded, subsurface resources identified during ground disturbance activities and primary author of letter report.

Cultural Resources Testing for the Polo Club at Vista Valley Project, San Diego County, CA, 2012. As a Staff Archaeologist, studies included review of available data, subsurface testing and contribution to final report in support of a proposal by U.S. Army Corps of Engineers in the community of Bonsall, San Diego County, CA.

Phase III Data Recovery 1900/1912 Spindrift Drive Projects, City of San Diego, California, 2012. As a Staff Archaeologist, studies included excavation, dry screening, wet screening and monitoring within the boundary of site CA-SDI-39 in the community of La Jolla, City of San Diego, California.

Lake Elsinore Boat Launch Facility Improvements Project, City of Lake Elsinore, Riverside County, CA, 2011. Archaeological monitor that provided an immediate on-site response in the event that cultural material was discovered during excavation work. Duties included identification and significance assessment of any unrecorded, subsurface resources identified during ground disturbance activities.

A Class III Cultural Resources Survey of Access Roads in Two Locations near Andrade in Imperial County, California U.S. Border Patrol, Yuma Sector, 2011. As a Staff Archaeologist, studies included review of available data, survey and contribution to final report in support of a proposal by the Department of Homeland Security (DHS), United States Border Patrol (USBP), Yuma Sector for maintenance and repair work on access roads administered by the BLM along the U.S./Mexico international border.

U.S Customs and Border Protection (CBP), Bureau of Land Management (BLM), Cultural Resources Monitoring for the Geotechnical Testing and Data Collection at BP Hill, Imperial County, California, 2011. Archaeological monitor that provided an immediate on-site response in the event that cultural material was discovered during excavation work. Duties included identification and significance assessment of any unrecorded, subsurface resources identified during ground disturbance activities and primary author of letter report.

Southwest Intertie Project, Southern Portion, 500 kV Transmission Line Project, Ely, Nevada, 2011. Archaeological monitor that provided an immediate on-site response in the event that cultural material was discovered during ground disturbance. Duties included identification and significance assessment of any unrecorded, surface or subsurface resources

JAMES WHITAKER

identified during construction of a new 230-mile long 500 kV transmission line on land administered by the BLM.

Class I and III Cultural Resources Inventory for the Polo Club at Vista Valley Project, San Diego County, California, 2011. As a Staff Archaeologist, studies included review of available data, survey and contribution to final report in support of a proposal by U.S. Army Corps of Engineers in the community of Bonsall, San Diego County, CA.

Cultural Resources Survey for the Calexico Border Patrol Station Off-Site Improvements Project, City of Calexico, Imperial County, California, 2010. As a Staff Archaeologist studies included review of available data, survey, and contribution to final report in support of an off-site utility improvements related to the Calexico Border Patrol Station development.

Cultural Resources Survey for the Cole Boulevard Eastside Widening Project, City of Calexico, Imperial County, California, 2010. As a Staff Archaeologist studies included review of available data, survey, and contribution to final report in support of a proposal by City of Calexico to widen Cole Boulevard from two to four lanes to alleviate traffic congestion.

Cultural Monitoring for the Fallbrook Community Library Project, City of Fallbrook, San Diego, California, 2009. Archaeological monitor that provided an immediate on-site response in the event that cultural material was discovered during excavation work. Duties included identification and significance assessment of any unrecorded, subsurface resources identified during ground disturbance activities.

NON-HDR EXPERIENCE

Cultural Resources Monitoring Results for the Proposed Remote Video Surveillance System Tower W-15 at Monument Mesa, San Diego County, 2010. As a Staff Archaeologist, studies included review of available data, monitoring during construction activities and preparation of final report in support of a proposal by the Department of Homeland Security (DHS), United States Border Patrol (USBP), San Diego Sector to install security cameras along the United States/Mexico International Border fence.

Cultural Resources Monitoring Results for the Proposed Remote Video Surveillance System Tower W-9 at Russian Hill, San Diego County, 2010. As a Staff Archaeologist, studies included review of available data, monitoring during construction activities and preparation to final report in support of a proposal by the Department of Homeland Security (DHS), United States Border Patrol (USBP), San Diego Sector to install security cameras along the United States/Mexico International Border fence.

Cultural Resources Survey and Testing for the Proposed Remote Video Surveillance System Tower W-15 at Monument Mesa, San Diego County, 2010. As a Staff Archaeologist, studies included review of available data, survey and field excavations, laboratory analysis, and contribution to final report in support of a proposal by the Department of Homeland Security (DHS), United States Border Patrol (USBP), San Diego Sector to install security cameras along the United States/Mexico International Border fence.

Cultural Resources Survey and Testing for the Proposed Remote Video Surveillance System Tower W-9 at Russian Hill, San Diego County, 2010. As a Staff Archaeologist, studies included review of available data,

survey and field excavations, laboratory analysis, and contribution to final report in support of a proposal by the Department of Homeland Security (DHS), United States Border Patrol (USBP), San Diego Sector to install security cameras along the United States/Mexico International Border fence.

Cultural Resources Survey for the Proposed Broadband Technology Opportunities Program, Fiber Optic Network Infrastructure Project, California, 2010. As a Staff Archaeologist studies included review of available data, survey, and preparation of final report in support of a proposal by Level 3 Eon, LLC to establish new wireless and hardwired broadband access points on the communications network at 11 locations within the state of California; Burney (Shasta County), Button Willow (Kern County), Colusa (Colusa County), Corning (Tehama County), Hanford (Kings County), Merced (Merced County), Monolith (Tehachapi, Kern County), Palo Cedro (Shasta County), Pine Valley (San Diego County), Sandrini (Delano, Kern County), and Tulelake (Modec County).

National Register Eligibility Determinations at CA-SDI-21052 (Victor Training Area) and CA-SDI-6053 and CA-SDI-6054 (Juliet Training Area) Marine Corps Base, Camp Pendleton, California, 2010. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field excavations, laboratory analysis, and contribution to final report. Organized and prepared artifacts for curation at the San Diego Archaeological Center.

National Register Eligibility Determinations of 18 Archaeological Sites in Selected Training Areas, MCB Camp Pendleton, California, 2009. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field excavations, laboratory analysis, and contribution to final report. Organized and prepared artifacts for curation at the San Diego Archaeological Center.

National Register Eligibility Determination and Conservation Plan for CA-SDI-15610, An Early Archaic Site in Oscar One Training Area, MCB Camp Pendleton, California, 2008. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field excavations including two human burials, laboratory analysis, and contribution to final report. Organized and prepared artifacts for curation at the San Diego Archaeological Center.

National Register Eligibility Determinations at 15 Archaeological Sites in Selected Training and Cantonment Areas, MCB Camp Pendleton, California, 2008. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field excavations, laboratory analysis, contribution to final report. Organized and prepared artifacts for curation at the San Diego Archaeological Center.

National Register Eligibility Determinations of Twenty Archaeological Sites, Echo, Delta, Juliett, and the Bravo Training Areas, MCB Camp Pendleton, California, 2008. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field excavations, laboratory analysis, and contribution to final report. Organized and prepared artifacts for curation at the San Diego Archaeological Center.

Navy Criminal Investigative Service (NCIS) and the Criminal Investigation Division (CID), MCB Camp Pendleton, 2008. At the request of Camp Pendleton Base Archaeologist, assisted in the investigation and

collection of evidence from a potential crime scene involving the discovery of recent human remains. The HDR team established a one acre collection grid area for the NCIS team to facilitate the systematic recovery of human remains and other possible evidence. Additional responsibilities included excavation and screening for human remains and potential evidence within a controlled search area.

Cultural Resources Study: San Diego Gas & Electric (SDG&E) 500/230/69 kV Substation Project, San Diego County, 2008. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field surveys resulting in the recording of new sites, submitting new and updated State of California Department of Parks and Recreation site forms, and contribution to final report.

Cultural Resources Study for Construction, Maintenance, and Operation of Tactical Infrastructure: El Centro Sector, California, 2007. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field excavations, laboratory analysis, and contribution to final report.

Cultural Resources Study for Construction, Maintenance, and Operation of Tactical Infrastructure: San Diego Sector, California, 2007. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, survey, and contribution to final report.

Cultural Resources Study: Southern California Gas Company, Imperial Valley Loop Pipeline Project, Imperial County, California, 2007. As a Staff Archaeologist, studies included preparation of draft work plan, review of available data, survey, and preparation of final report for this twenty-six mile project.

National Register Eligibility Determinations for Six Sites in the Case Springs Training Area, MCB Camp Pendleton, California, 2007. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field excavations, laboratory analysis, and contribution to final report. Organized and prepared artifacts for curation at the San Diego Archaeological Center.

National Register Eligibility Determinations for Thirteen Prehistoric Sites in the Las Pulgas Management Area, MCB Camp Pendleton, California, 2007. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field excavations, laboratory analysis, and contribution to final report. Organized and prepared artifacts for curation at the San Diego Archaeological Center.

National Register Eligibility Determinations: Selected Archaeological Sites in TARS 14 and 15 San Clemente Island, North Island Naval Station, 2007. As a Staff Archaeologist, studies included contribution to draft work plan, review of available data, field excavations, laboratory analysis, and contribution to final report.

Marine Corps Air Ground Combat Center, Barstow, CA, 2005. As a Staff Archaeologist, performed intensive pedestrian survey of over five hundred acres within the Mojave Desert. Crew member responsible for identification of prehistoric artifacts, site recordation and sketch mapping of over a dozen prehistoric sites.

Collection Rehabilitation and NAGPRA Review, San Diego

JAMES WHITAKER

Archaeological Center, 2002-2007. Collection curation included assessment, physical examination, cataloguing, and digital documentation of federal and state archaeological collections curated at this Department of Defense approved facility.

8

B

DPR 523 Forms

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

Primary # P-19-004718
HRI #
Trinomial CA-LAN-4718H
NRHP Status Code

Other Listings
Review Code **Reviewer** **Date**

Page 1 **of** 4 ***Resource Name or #:** Site 1

P1. Other Identifier:
***P2. Location:** ■ **Not for Publication** ☐ **Unrestricted** ***a. County:** Los Angeles
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad:** San Fernando **Date:** 1988 **T** 2N ; **R** 14W; NE ¼ **of** SE ¼ **of Sec** 6 ; M.D. **B.M.**
c. Address: City: Zip:
d. UTM: Zone: 11 ; 372779 mE/ 3794537 mN (G.P.S.)
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 1220 ft

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The site consists of a single family property with two historic concrete foundations and two rock walls within an area that measures 180 feet east/ west by 235 feet north/ south. The first concrete foundation measures 14 feet north/ south by 60 feet east/ west. The second concrete foundation measures 22 feet north/ south by 30 feet east/ west. The rock wall south of the foundations measures 205 feet long, 2 feet wide and ranged from 1 to 3 feet high. A smaller rock wall is also located immediately west of the smaller concrete foundation. This rock wall measures 20 feet long, 1 foot wide and 1 to 2 feet high. The rock walls consisted of large cobbles and concrete. No surface atrifacts were observed within the surrounding area. The site has been disturbed from modern activities, modern trash was found throughout the site. The site is adjacent to a residential neighborhood near the intersection of Terra Vista Way and Terra Bella Street.

***P3b. Resource Attributes:** (List attributes and codes) HP2: Single Family Property, AH2: Foundations, AH5: Rock Wall
***P4. Resources Present:** ☐Building ☐Structure ☐Object ■Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #) Site Overview, View South

***P6. Date Constructed/Age and Sources:** ■Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**
Lopez Canyon Landfill
11950 Lopez Canyon Road
Lake View Terrace, CA 91342

***P8. Recorded by:** (Name, affiliation, and address)
J. Whitaker
HDR, Inc.
8690 Balboa Ave. Ste. 200
San Diego, CA 92123

***P9. Date Recorded:** 06/ 22/ 16

***P10. Survey Type:** (Describe)
General Reconnaissance

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Cultural Resources Survey for the Lopez Canyon Equestrian Trails and Trailhead Project, Los Angeles County, California (J. Whitaker)

***Attachments:** ☐NONE ■Location Map ■Sketch Map ☐Continuation Sheet ☐Building, Structure, and Object Record ■Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

DPR 523A (1/95) ***Required information**

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary # P-19-004718
Trinomial CA-LAN-4718H

Page 2 of 4 ***Resource Name or #:** Site 1

***A1. Dimensions: a. Length:** 180 ft. (E/ W) x **b. Width:** 235 ft. (N/ S)
Method of Measurement: ☐ Paced ■ Taped ☐ Visual estimate ☐ Other:
Method of Determination (Check any that apply.): ☐ Artifacts ■ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (Explain):

Reliability of Determination: ☐ High ■ Medium ☐ Low Explain:

Limitations (Check any that apply): ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined ■ Disturbances ☐ Vegetation ☐ Other (Explain):

A2. Depth: ☐ None ■ Unknown Method of Determination:
***A3. Human Remains:** ☐ Present ■ Absent ☐ Possible ☐ Unknown (Explain):

***A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.):
Two concrete foundations and two rock walls. The first concrete foundation measures 14 feet north/ south by 60 feet east/ west. The second foundation measures 22 feet north/ south by 30 feet east/ west. The rock wall south of the foundations measures 205 feet long, 2 feet wide and ranged from 1 to 3 feet high. A smaller rock wall is also located immediately west of the smaller concrete foundation. This rock wall measures 20 feet long, 1 foot wide and 1 to 2 feet high. The rock walls consisted of large cobbles and concrete.

***A5. Cultural Constituents** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.):
No surface artifacts were observed
***A6. Were Specimens Collected?** ■ No ☐ Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

***A7. Site Condition:** ☐ Good ☐ Fair ■ Poor (Describe disturbances.): The site has been disturbed by modern activities.

***A8. Nearest Water** (Type, distance, and direction.): Hansen Lake, approximately 1 mile south of the site.

***A9. Elevation:** 1220 feet
A10. Environmental Setting (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.): The single family property has been disturbed by modern activities; only the foundations and rock walls remain

A11. Historical Information: CA-LAN-4718H is the location of the Emil Bartholomaus homestead near the southern extent of Bartholomaus Canyon. According to early voter registration records, Emil Bartholomaus was a German immigrant who arrived in the San Fernando Valley during the late nineteenth century. The 1900 USGS topographic map shows a structure on site with a federal land patent for the property filed in February 1905 and again in March 1916. Historic aerial photographs depict a series of cultivated fields and groves surrounding the house with the groves being transformed into cultivated fields during the late 1950s and early 1960s. Early photographic evidence of the house is lacking; however, mid to late twentieth century aerial photographs show that two secondary structures were added between 1964 and 1972. One structure adjacent east of the original house and one approximately 20 meters to the southeast. The rock retaining wall on the southern edge of the site also appears to have been added during the same time period. The last time the house and outbuildings appear on aerial photographs is 1982; by 1994 all structures on the property were removed. Based on the historic aerial photographs and field inspection, no evidence of the original structure exists. The concrete foundations and retaining wall are remnants of later additions to the property (NETR 2015 and LADPW 2017).

***A12. Age:** ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945 ■ Post 1945 ☐ Undetermined **Describe position in regional prehistoric chronology or factual historic dates if known:**

A13. Interpretations (Discuss data potential, function[s], ethnic affiliation, and other interpretations):

A14. Remarks:

A15. References (Documents, informants, maps, and other references):

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.):
Original Media/Negatives Kept at: HDR, 8690 Balboa Avenue, Suite 200, San Diego, CA 92123
***A17. Form Prepared by:** J. Whitaker **Date:** June 2016

Affiliation and Address: HDR, 8690 Balboa Avenue, Suite 200, San Diego, CA 92123

DPR 523C (1/95) ***Required information**

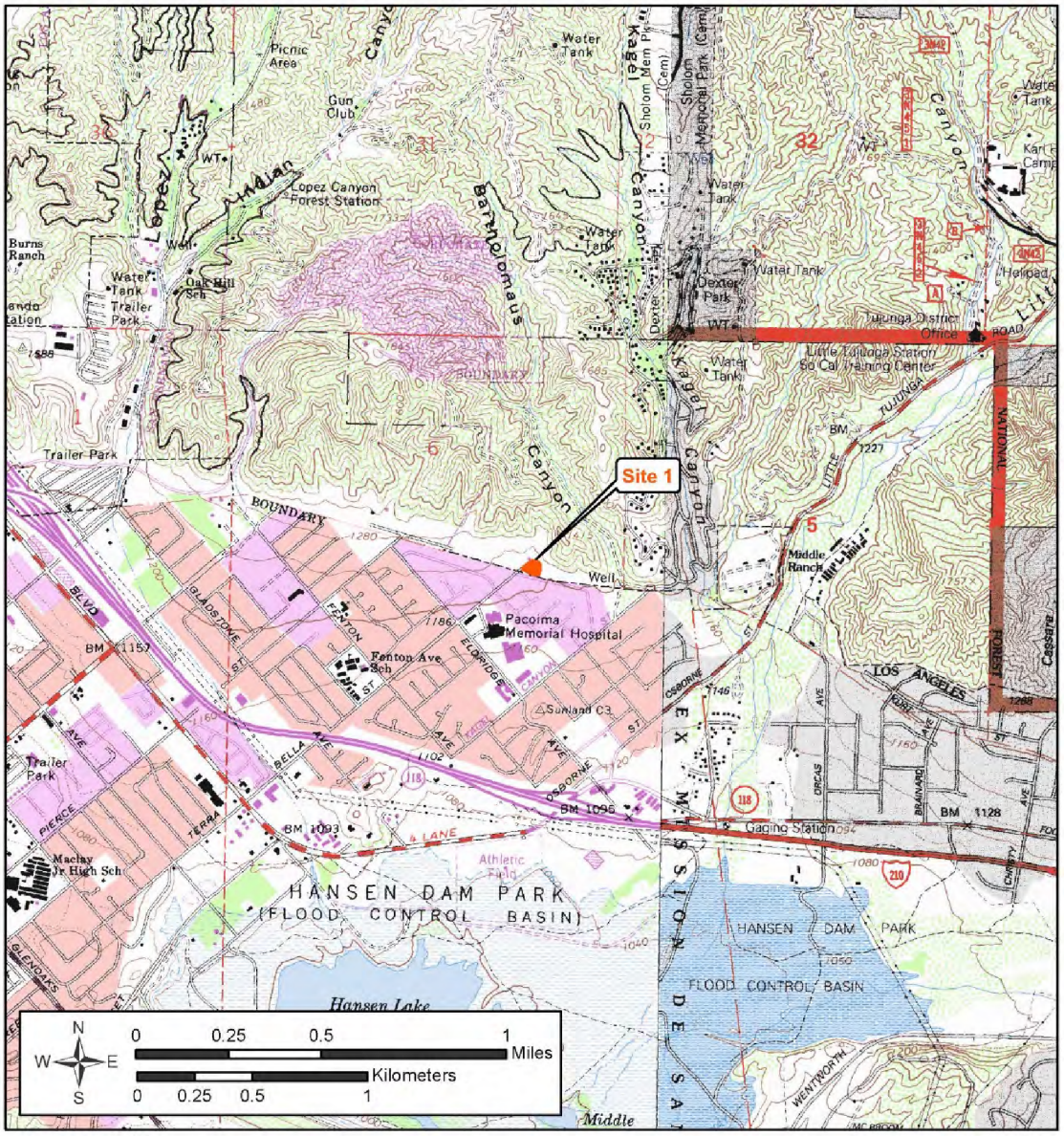
State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # P-19-004718
HRI#
Trinomial: CA-LAN-4718H

Page 3 of 4 ***Resource Name or #: Site 1**

***Map Name: San Fernando, CA 7.5 min Quadrangle** ***Scale: 1:24,000** ***Date of Map: 1988**



DPR 523K (1/95) ***Required information**

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # P-19-004718
HRI#
Trinomial: CA-LAN-4718H

Page 4 of 4 *Resource Name or #: Site 1
*Drawn By: N. Stadille *Scale: 1:500

DPR 523K (1/95)

*Required information