3.4

CULTURAL RESOURCES

3.4.1 Introduction

This section describes the affected environment and regulatory setting for cultural resources, as well as the impacts on cultural resources that would result from the proposed Project and its alternatives, and the mitigation measures that would reduce these impacts. Cultural resources customarily include archaeological resources, ethnographic resources, and those of the historical built environment (architectural resources). Though not specifically a cultural resource, paleontological resources (fossils pre-dating human occupation) are considered here because they are discussed in Appendix G of the State CEQA Guidelines (Environmental Checklist Form), in the context of Section V, Cultural Resources. A paleontological technical report was prepared for this project by Michael X. Kirby and Thomas A. Deméré of the Department of PaleoServices at the San Diego Natural History Museum, San Diego, California, and is attached as Appendix F.1 to this document. Information pertaining to prehistoric and historical archaeological resources is based in part upon the archaeological resources study conducted by ICF Jones & Stokes that is attached as Appendix F.2 to this document. Additionally, a technical report for the historical built environment (architectural resources) is attached as Appendix F.3 to this document.

CEQA Guidelines Section 15120(d) prohibits an EIR from including information about the location of archaeological sites or sacred lands: "No document prepared pursuant to this article that is available for public examination shall include… information about the location of archaeological sites and sacred lands." Therefore, the specific locations of archaeological sites have been omitted from this chapter and the cultural resources technical reports are a confidential appendix to this document.

3.4.2 Environmental Setting

3.4.2.1 Physical Setting

The proposed project area is located in the Los Angeles Basin, a broad, level expanse of land comprising more than 800 square miles that extends from Cahuenga Peak south to the Pacific coast, and from Topanga Canyon southeast to the vicinity of Aliso Creek. Prior to historical settlement of the area, the plain was characterized by extensive inland prairies and a lengthy coastal strand, with elevations approximately 500 feet above mean sea level (amsl). The Los Angeles plain is traversed by several large watercourses, most notably the Los Angeles, Rio Hondo, San Gabriel, and Santa Ana Rivers. Marshlands fed by fresh or salt water once covered many portions of the area. To the west, the coastal region encompasses approximately 375 square miles of varied terrain. West of Topanga Canyon the terrain is rugged; the steep, westward slopes of the Santa Monica Mountains reach 1,000 feet or more in elevation, except where stream-cut ravines and canyons drain onto narrow beaches at the water's edge. From Topanga Canyon southward to the Palos Verdes Peninsula, a distance of roughly 22 miles, the coast is flat and level; extensive marshlands once existed near the mouth of Ballona Creek in the area now known as Playa del Rey. The terrain becomes rugged once again along the Palos Verdes Peninsula for a distance of approximately 12 miles before reaching San Pedro Bay, which in prehistoric times was characterized by extensive mud flats and sand bars (Hamilton et al. 2004; McCawley 1996).

The proposed Project is located on the eastern side of the Palos Verdes Hills in the southwestern portion of the Los Angeles Basin. The proposed project area is located along the central coastal margin of the Los Angeles Basin just east of the Palos Verdes Hills. The Palos Verdes Peninsula is composed primarily of marine sedimentary rocks that have been uplifted about 1,300 feet in the past 1 million years. The Palos Verdes Hills consist of a Jurassic-age metamorphic basement complex (Catalina Shist) that is overlain by about 3000 feet of sedimentary rock formations of Miocene, Pliocene, and Pleistocene age (Woodring et al. 1946). The Miocene rocks (light-colored, well-bedded mudstones, siltstones, and shales) are underlain by older metamorphic rocks of the Catalina Schist. These rocks extend under the Los Angeles Harbor and form the base under the marine sediments (Schell et al. 2003).

The bedrock formations throughout the Palos Verdes Peninsula are overlain in various localities by Late Pleistocene marine and continental terrace deposits. The terrace deposits are primarily erosional debris deposited on ancient wave-cut platforms that formed near sea level. During the Late Pleistocene, these deposits were uplifted and now form the relatively flat beaches around the Palos Verdes Hills (Schell et al. 2003).

As mapped by Woodring et al. (1946), the geologic deposits underlying the proposed project area consist of Quaternary alluvium, non-marine terrace deposits, Pleistocene-age marine terrace deposits of Palos Verdes Sand, Pleistocene-age offshore marine deposits of San Pedro Sand and Timms' Point Silt, and Miocene-age marine deposits of the Malaga Mudstone member of the Monterey Shale (Appendix F.1). Artificial

fill materials also make up large portions of the proposed project area, as land has been built up during the historic development of the Port.

Around 11,000 years ago, a general warming trend, often referred to as the Altithermal, began in California (Carbone 1991; Arnold 1991). The Altithermal resulted in a rise in sea levels, which had an enormous impact on drainage patterns and the type and availability of food sources in various regions. During the Early Holocene (10,000 to 6,600 years ago), rapid sea level rise markedly altered land areas along the California coast. As a result of marine encroachment, large portions of the continental shelf were submerged. Therefore, sites located along the modern coast are, in some cases, far removed from Early Holocene shorelines. Furthermore, it is likely that most sites associated with the Early Holocene along the southern mainland coast were destroyed or obscured by sea level advance and sedimentation (Carbone 1991).

Humans occupying coastal southern California before sea levels rose would have partially subsisted on the limited amount of shellfish provided by the rocky foreshores. As sea levels began to rise, the environment transitioned to estuarine and lagoon configurations that fostered an increase in marine, avian, and small terrestrial species. The peak of alteration of both biotic and physical variables occurred approximately 8,000 to 7,300 years ago (Carbone 1991).

Historic topographic maps of San Pedro from the middle and late nineteenth century corroborate the environmental transition described above. Prior to modern development, the Los Angeles/Long Beach Harbor (LA/LB Harbor) area was a low-lying coastal marsh called Wilmington Lagoon or San Pedro Creek (Schell et al. 2003). The lagoon had a complex network of estuaries, stream channels, tidal channels, sand spits, beaches, and marshy inlands. Major streams draining the Los Angeles Basin, including the Los Angeles River, Compton Creek, and possibly the San Gabriel River, emptied into the lagoon primarily from the east. Smaller local creeks draining from the Palos Verdes Hills and the Torrance Plain entered the lagoon from the west (Schell et al. 2003).

3.4.2.1.1 Soil and Sediment Types

Although the present configuration of the Port partly reflects the natural configuration of the landscape, filling and dredging to form the existing network of wharves and shipping channels have extensively modified the area. Fill materials are sometimes difficult to differentiate from natural materials because both materials are essentially made up of the same constituents, but the fill was just redeposited (Schell et al. 2003).

Repeated Pleistocene and Holocene sea level changes have also resulted in complex stratiography. The shallow subsurface (upper 50 meters) at the site is made up of geologic formations representing the past few hundred thousand years. The principal unit is the Lakewood Formation, which underlies the Inner Harbor area. In addition, Pleistocene-age marine sands in the Los Angeles Harbor area have traditionally been referred to as the San Pedro Formation (Schell et al. 2003; USACE et al. 1984). The

Lakewood Formation in the Los Angeles Harbor is overlain by younger deposits such as the Terrace Deposits and Palos Verdes Sand, which date from approximately 80,000 years old to 12,000 years old. Below the proposed project area, the material overlying the Lakewood Formation consists of four basic units: 1) fill; 2) Late Holocene estuary, stream, and beach deposits; 3) Early Holocene-age soft clay; and 4) Early Holocene/Late Pleistocene sands and silts (Schell et al. 2003).

The clay appears to occupy a broad west-northwest- to east-southeast-trending channel that underlies the northeastern part of the proposed project area. The clays are soft because they were deposited in still water/back bay conditions and because they appear to have been bioturbated by marine organisms and plant roots. The Early Holocene clay is overlain by loose sand and silt mixtures deposited in a shallow-water bay or lagoon near the mouths of rivers and streams (Schell et al. 2003).

The geologic map of Woodring et al. (1946) indicates that artificial fill materials and/or Quaternary alluvium underlie most of the proposed project area (unfortunately, these authors did not differentiate artificial fill materials from Quaternary alluvium). The location of the historical shoreline in 1859 indicates that much of the area mapped by Woodring et al. (1946) as artificial fill materials and/or Quaternary alluvium was land in 1859. Therefore, it is inferred that artificial fill materials are only present in the areas between the original 1859 shoreline and the modern shoreline. Artificial fill materials were presumably used in these areas to enlarge Port facilities. These artificial fill materials presumably were derived from earlier channel dredging operations and were placed in such a way as to provide topographically high areas for development. The thickness of these fill materials is uncertain and therefore depth of cover to buried bedrock deposits is not known. No fossils of scientific interest are located in the artificial fill materials. Any contained organic remains have lost their original stratigraphic/geologic context due to the disturbed nature of the artificial fill materials (Appendix F.1).

3.4.2.2 Prehistoric Setting

The prehistoric occupation of southern California is divided chronologically into several temporal phases or horizons, as presented in Table 3.4-1, based on the work of William J. Wallace (Moratto 1984). Horizon I, or the Early Man Horizon, began at the first appearance of people in the region (perhaps approximately 11,000 years ago) and continued until about 5000 B.C. Although little is known about these people, it is assumed that they were semi-nomadic and subsisted primarily on game.

Horizon II, also known as the Millingstone Horizon or Encinitas Tradition, began around 5000 B.C. and continued until about 1500 B.C. The Millingstone Horizon is characterized by widespread use of milling stones (manos and metates), core tools, and few projectile points or bone and shell artifacts. This horizon appears to represent a diversification of subsistence activities and a more sedentary settlement pattern. Archaeological evidence suggests that hunting became less important and that reliance on collecting shellfish and vegetal resources increased (Moratto 1984).

Horizon III, the Intermediate Horizon or Campbell Tradition, began around 1500 B.C. and continued until about A.D. 600–800. Horizon III is defined by a shift from the use of milling stones to increased use of mortar and pestle, possibly indicating a greater reliance on acorns as a food source. Projectile points become more abundant and, together with faunal remains, indicate increased use of both land and sea mammals (Moratto 1984).

Horizon IV, the Late Horizon, which began around A.D. 600–800 and terminated with the arrival of Europeans, is characterized by dense populations; diversified hunting and gathering subsistence strategies, including intensive fishing and sea mammal hunting; extensive trade networks; use of the bow and arrow; and a general cultural elaboration (Moratto 1984).

Table 3.4-1. William J. Wallace's Chronological Horizons for Prehistoric Cultures (Moratto 1984)

Horizon	*Time Period*	*Description*
Horizon I/Early Man	11000 B.C. to 5000 B.C.	First appearance of people in the region
Horizon II/Millingstone Horizon	5000 B.C. to 1500 B.C.	Widespread use of millingstones (manos, metates), representing a more sedentary settlement pattern
Horizon III/Intermediate Horizon	1500 B.C. to A.D. 600–800	Shift from use of millingstones to increased use of mortar and pestle and more projectile points
Horizon IV/Late Horizon	A.D. 600–800 to arrival of Europeans	Dense populations, diversified hunting, intensive fishing, and extensive trade networks

3.4.2.3 Ethnographic Setting

When Spanish explorers and missionaries first visited the southern coastal areas of California, the indigenous inhabitants of the Los Angeles area were given the Spanish name "Gabrieliño." Gabrieliño/Tongva territory included the watersheds of the San Gabriel, Santa Ana, and Los Angeles Rivers; portions of the Santa Monica and Santa Ana Mountains; the Los Angeles Basin; the coast from Aliso Creek to Topanga Creek; and San Clemente, San Nicolas, and Santa Catalina Islands. The Gabrieliño language is classified as belonging to the Takic family (or "Cupan"), Uto-Aztecan stock, and is subdivided into four or more separate dialects (Shipley 1978). The proposed project area is in the region where the Fernandeño dialect of the Gabrieliño language was spoken. The names Gabrieliño and Fernandeño refer to the two major missions established in Gabrieliño territory: San Gabriel and San Fernando (Bean and Smith 1978).

The Gabrieliño/Tongva inhabited some 50 to 100 permanent villages in fertile lowlands along streams and rivers and in sheltered areas along the coast at the time of European contact. The larger permanent villages most likely had populations averaging 50 to 200 persons. Sedentary villages also had smaller satellite villages located at varying distances; these remained connected to the larger villages through economic, religious, and social ties (Bean and Smith 1978). Gabrieliño villages contained four basic types of structures. Houses were circular and domed, made of tule mats, fern, or carrizo (Kroeber 1925; Bean and Smith 1978). The Gabrieliño sweathouses were small, circular earth-covered buildings. Villages may have included menstrual huts and open-air ceremonial structures made with willows inserted wicker fashion among willow stakes (Bean and Smith 1978).

McCawley (1996) states that Gabrieliño place names reported for the peninsula include *Toveemonga, Chaawvenga, Swaanga, Aataveanga,* and *Xuuxonga*. These villages appear to have been occupied during the late 1700s and early 1800s as evidenced by notations in the baptismal registers of Mission San Gabriel (McCawley 1996). *Swaanga* was documented as one of the larger, more substantial village sites (Reid 1852; McCawley citing Reid 1996). However, there is some discrepancy as to the actual location of the village. McCawley (1996) cites Reid's (1852) notation that *Swaanga* was located at "Suang-na," suggesting that this was still a recognizable place by 1852. San Pedro historian Henry Silka (1993:12) provides a specific location for *Suang-na* as the side of the hill above what is now Anaheim Street between the Harbor Freeway and Gaffey Street. Silka adds that the village was located near a crossing of major Native American trails, which today is located at the intersection of Gaffey and Anaheim Streets, Vermont Avenue, and Palos Verdes Drive North, commonly called Five Points.

Additional place names are associated with the San Pedro region including *Chaawvenga, Tsauvinga, Sow-vingt-ha, Unavnga,* and *Navungna'a* (McCawley 1996). McCawley (1996) cites Reid (1852:8) stating that *Chaawvenga* is located on "Palos Verdes." McCawley also cites Jose Zalvidea that the name *Tsauvinga* applies to San Pedro and that the village of *Xuuxonga* was located on the shore below San Pedro (in Harrington 1986:R102 F384).

The Gabrieliño/Tongva had a rich and varied material culture. Technological and artistic items included shell set in asphaltum, carvings, paintings, an extensive steatite industry, baskets, and a wide range of stone, shell, and bone objects that were both utilitarian and decorative.

Gabrieliño/Tongva subsistence was based on a composite hunting and gathering strategy that included large and small land animals, sea mammals, river and ocean fish, and a variety of vegetal resources. Generally, Gabrieliño settlements were created at the intersection of several ecozones. The majority of the population drifted as families to temporary hillside or coastal camps throughout the year, returning to the central location on ritual occasions or when resources were low and it was necessary to live on stored foods.

Offshore fishing was accomplished from boats made of pine planks sewn together and sealed with asphaltum or bitumen. Much of the fishing, shellfish harvesting, and

fowling took place along the ocean shoreline or along freshwater courses. Sea mammals were taken with harpoons, spears, and clubs. River and ocean fishing was undertaken with the use of line and hook, nets, basket traps, spears, and poisons (Hudson and Blackburn 1982).

Land animals were hunted with bow and arrow and throwing sticks, and were trapped or clubbed. Smaller animals such as rabbits and ground squirrels were driven with grass fires and taken with deadfall traps. Seasonal grass fires may have had the additive effect of yielding new shoots attractive to deer. Burrowing animals could be smoked from their lairs. Transportation of plant and other resources was accomplished through the use of burden devices such as coiled and woven baskets and hammock carrying nets commonly made from grass and other plant fibers.

The Gabrieliño/Tongva were apparently first contacted by Europeans in 1542 when Juan Rodríguez Cabrillo entered the area. Following subsequent Spanish visits to the region, colonization began in 1769, precipitating the establishment of Missions San Gabriel (1771) and San Fernando (1797). Due in part to the introduction of Euro-American diseases and the harsh effects of mission life, the Gabrieliño population and culture suffered a gradual deterioration. Following the secularization of the missions, most surviving Gabrieliño became wage laborers on the ranchos of Mexican California. In the early 1860s, a smallpox epidemic nearly wiped out the remaining Gabrieliño. The combination of disease, forceful reduction, and poor diet contributed to the disappearance of the Gabrieliño as a culturally identifiable group in the 1900 federal census (Bean and Smith 1978). However, persons of Gabrieliño descent have continued to live in the Los Angeles area to the present time.

3.4.2.4 Historic Setting

3.4.2.4.1 Spanish Exploration, Settlement, and Early Trade

Spanish explorers reached the coast of California in the sixteenth century. The first explorer, Cabrillo, named the land he saw the *Bahia de los Fumos, or Bay of Smokes* (McCawley 1996; Silka 1993:11). In 1602, Sebastian Vizcaino explored the coast of California and developed a detailed map of the coastline. Vizcaino's survey data resulted in the confusion of two new names for Cabrillo's *Bahia de los Fumos*. The bay was referred to as both *San Pedro*, in honor of Saint Peter, Bishop of Alexandria, and *Ensenada de San Andres*, in honor of Saint Andrew. The confusion was resolved in 1734 by cosmographer Cabrera Bueno in his description of Vizcaino's visit. Bueno referred to the body of water as the San Pedro Bay, which remains the official name (Silka 1993:11).

In the eighteenth century the Spanish colonized present-day California, establishing a tripartite system consisting of missions, presidios, and pueblos that lasted from 1769 to 1822 (Bean and Rawls 1968). Under both Spanish and Mexican governments, missions were permitted to occupy and use land for the benefit of their neophytes but not to own land. Twenty-one missions were eventually established from San Diego

to Sonoma, each approximately one day's journey from the next (Hoover et. al 1990; Gudde 1998).

In 1784, California governor Pedro Fages granted the 75,000-acre Rancho San Pedro to Juan Jose Dominguez. Dominguez called his enterprise the Rancho San Pedro. When Juan Jose died in 1809, the land passed to his nephew Cristobal Dominguez, a soldier stationed at San Juan Capistrano (Silka 1993:14). During Cristobal's tenure in the service, the rancho was left in the care of Manuel Gutierrez its long time manager and executor of Juan Dominguez's will. In his will, Juan Jose also granted Gutierrez grazing rights. During Cristobal's absence, Gutierrez eventually assumed rights of ownership and extended the grazing right to Jose Dolores Sepulveda in 1810 (Gaffey 2001; Silka 1993:14). Sepulveda, who called his stake the Rancho de los Palos Verdes, was ordered to vacate by Governor Pablo Sola in 1817, the year when Cristobal Dominguez attempted to claim his inheritance. Sepulveda believed that he was legally entitled to the Rancho de los Palos Verdes. Although the legal battle over the land continued for another two decades, in 1846, Governor Pio Pico confirmed the Sepulveda family's right to the ranch (Silka 1993:15).

Despite the litigation occurring in this period, commerce and trade in San Pedro expanded. Under Spanish rule, merchant vessels were prohibited from trading directly at any California port other than Monterey. The annual supply ship sailed from San Blas, Mexico and delivered its cargo to the presidios from where it was distributed to the missions and pueblos. The supplies provided by Spain from this single ship were insufficient for the needs of the growing population, and sometimes did not appear at all. Unauthorized trading occurred as early as 1805. An American ship traveled into the bay and found a ready market for the European-manufactured and Oriental goods in its hold. Cattle hide and tallow were used as the primary currency (Silka 1993:16).

3.4.2.4.2 Mexican Independence and Experimental Commerce

Mexico proclaimed independence from Spain in 1821, and upon securing its independence in 1822, California officially opened its ports to foreign trade. That same year the firm of McCulloch, Hartnell and Company succeeded in contracting with the missions for cattle hides and tallow and the company was permitted to build warehouses at Monterey and San Pedro. In 1823, in the area that is now known as the Fort MacArthur Middle Reservation, the firm constructed the adobe hide warehouse where they kept cattle hides obtained from the San Gabriel and San Fernando Missions. In 1829, the hide warehouse was sold to the San Gabriel Mission. Upon secularization of the missions in 1833, ownership of the hide warehouse was acquired by Abel Stearns, who established himself in business at the pueblo. The hide warehouse came to be known as Casa de San Pedro, or the Hide House, and business flourished through the 1830s, although the region around San Pedro remained largely uninhabited. By 1830, San Pedro was the leading west coast center of hide production, the primary export of the Missions and, later, the ranchos (Queenan 1983:5). In 1835, Richard Henry Dana landed at San Pedro and described the region as isolated, a fact supported by the 1836 and 1844 census records, which record 75 and 28 people, respectively,

living on the Rancho San Pedro (Silka 1993:17). The hide business flourished through the 1830s, although the region around San Pedro remained largely uninhabited.

Stearns sold the Hide House to Los Angeles entrepreneurs John Temple and David W. Alexander in 1845. The following year, Governor Pio Pico confirmed the Sepulveda family's ownership of the Rancho de los Palos Verdes except for the lot now titled 500 Varas Square, the 41.2 acres around the Hide House that had come into use as an embarcadero. This act officially recognized 500 Varas Square as public land designated for port activities (Silka 1993:18). The San Gabriel Mission had embarcadero and storage rights to a smaller square of 100 varas (vara is the Spanish unit of length equivalent to about 1 yard) in the southeast corner of the 500 Varas Square (Weinman and Stickel 1978). Here the mission constructed a house that is believed to have been the first house in the San Pedro area. In 1901, historian James Guinn guessed the construction dates between 1815 and 1820 and stated that the ruins were still in existence. He located the house as halfway between Point Fermin and Timms' Point (Weinman and Stickel 1978). The ruins of this adobe were demolished during development of Fort MacArthur shortly before World War I.

3.4.2.4.3 Early San Pedro

Annexation by the United States in 1848 and the gold rush of 1849 brought landless Americans to the San Pedro area, but ranching remained its primary enterprise. Flint, Bixby & Company, one of the largest sheep ranchers, was headquartered in San Pedro, but the Port area remained underused. Ships generally anchored near the rocky shoreline along the western edge of the bay at San Pedro; the Los Angeles Harbor was not well protected or very deep. Eight major floods along the Los Angeles River between 1815 and 1876 caused tons of silt to be deposited into the river channel, also affecting San Pedro Bay.

Land disputes over San Pedro flared even before California was ceded to the United States following the Mexican-American War. The Gold Rush of 1848 initially resulted in economic benefits for the southern ranchos as herds were driven north for sale to the camps that were springing up all over mining country. However, disgruntled miners eventually drifted away from the gold fields to try their luck at agriculture. They squatted on the ranchos and demanded farming lands from the federal government. As a result, Congress passed the Land Act of 1850, which imposed on the California rancheros the burden of proving valid title to their own land. Both the Dominguez and Sepulveda family claims to their ranchos were confirmed by the Board of Land Commissioners. However, the determinations were appealed in court and although the Dominguez family successfully fought the challenges and received the patent for Rancho San Pedro in 1858, the Sepulveda family was plagued by a series of lawsuits instigated from within as well as outside of the family (Silka 1993:21).

With the granting of statehood, San Francisco was quickly established as the port of entry for California and all imported goods destined for Los Angeles had to be transported from there. In order to maintain economic independence and viability, Los Angles had San Pedro also designated as an official port of entry in 1853.

Local entrepreneurs and economic boosters Phineas Banning and Augustus W. Timms capitalized on the Port's new status. Banning, the manager of the Hide House and eventual partner of David W. Alexander, and Timms, a German immigrant who purchased the Sepulveda landing in 1852, instigated a fierce competition for the local commission and freighting opportunities. Timms improved the wharf, built a corral, warehouse, and other structures at his landing which resulted in the area receiving the name Timms' Point (California Historical Landmark No. 384 and Los Angeles City Historic-Cultural Monument No. 171) (Silka 1993:29). Similarly, Banning constructed new docks to capitalize on the increasing trade coming in and out of Los Angeles. He also purchased 2,400 acres of estuary shore on the Dominguez' Rancho San Pedro, built a small town, and named it New San Pedro (renamed Wilmington in 1863) (Gaffey 2001; Silka 1993:24-25). Banning also understood the importance of rail transportation between his operation on the bay and the growing City of Los Angeles. In 1869, Banning organized the Los Angeles and San Pedro Railroad (LA&SP), the first reliable means of moving cargo from the ships coming into San Pedro Harbor to the City of Los Angeles.

In 1871, federal funds were received for work on dredging and deepening the channel, removing sandbars and construction of the breakwater. In 1876, San Pedro became connected to the transcontinental railroad when the Southern Pacific Railroad completed its track through the city along the line from San Francisco to El Paso, Texas.

In 1874, a group of plaintiffs brought suit to partition Rancho Los Palos Verdes to remedy financial claims and defective land title transactions between members of the family (Gaffey 2001). As a result of this internal and external litigation, the Sepulveda family's Rancho de los Palos Verdes was officially partitioned in 1882. The partition created 14 "ranch lots" and also established a single 350-acre lot that was, for the first time, called the Town of San Pedro. Certain blocks were awarded to three of the adult children of Jose Diego Sepulveda: Maria Rudecinda, Aurelio G. Sepulveda, and Jose Dolores Roman Sepulveda (Gaffey 2001).

However, with the transition of California into the United States, rancho ownership and landholdings were called into question. Although the Sepulveda family continued to implement sales of land previously under their jurisdiction, including the newly identified Town of San Pedro, legal questions arose regarding the merit of the transactions. In 1874, Jotham Bixby filed a lawsuit to determine the legality of the entirety of the Sepulveda family holdings (Gaffey 2001). As a result of the lawsuit, a rancho perimeter survey was conducted by Charles T. Healey, an experienced surveyor who had inspected the rancho previously for Bixby. In 1882, Healey completed a map that included a 350-acre Town of San Pedro along the estuary in the same location as designated in the Sepulveda partition just a few years earlier (Gaffey 2001).

The town was platted in 98 blocks, each with 270-foot-by-600-foot rectangular dimensions, and 60-foot-wide streets (Gaffey 1998). The 98 blocks were distributed among 10 of the plaintiffs, except two lots that were reserved for a school site. The population explosion in southern California during the 1880s increased the importance of the Port at San Pedro and also resulted in a local population eruption (Silka 1993:35). With improved rail transportation, thousands of people immigrated

to Los Angeles, and the increased population brought a need for more construction and living supplies, much of which came from ships destined for San Pedro shores. The demand for lumber, coal, and other goods from the Los Angeles Basin spurred an increase in merchant vessels in San Pedro Bay. This, in turn, created a demand for dock workers, carpenters, ship fitters, laborers, merchant mariners, railroad workers, and men working supporting businesses such as shipyards. The town provided lodging and entertainment for seamen interested in spending their small salaries ($25 to $35 per month). If these workers chose to remain in San Pedro, they could buy lots, build homes, and raise their families close to their workplace. Many of these early San Pedro laborers and residents were Scandinavian, Italian, and Portuguese (Gaffey 2001).

By 1886, the population in San Pedro was around 400 residents; most were employed to discharge ship's cargoes. In addition to cargo discharge, workers found employment loading rock or sand ballast in outbound vessels, repairing ship components, and performing construction work on docks, breakwaters, jetties, and railroad lines. Despite ongoing merchant activity, the town showed little development interest until 1885, when George H. Peck purchased seven lots in the town and began building homes (Gaffey 2001).

3.4.2.4.4 Development of a City

San Pedro was incorporated in 1888 and managed to avoid the economic pitfalls of other communities in the subsequent economic bust. This was, in part, due to an 1897 federal decision to create a safe, sheltered harbor, with a substantial granite breakwater that would keep many people employed for years. The growth of commerce in Los Angeles demanded formal establishment of a shipping port. The federal government agreed to assist the City by establishing its official harbor in the region. Following the recommendation of several studies of possible alternatives, the San Pedro Harbor site won authorization from Congress in March 1897.

Prior to 1882, San Pedro did not have a year-round aboveground or underground annual water supply. Water had always been in short supply, and there were only two vernacular gravity-fed water systems, the Sepulveda Water System and the Banning Southern Pacific Industrial Water System (Gaffey 2001). The Sepulveda Water System was likely used when the town lots were put up for sale in 1882. The system was small, with many deficiencies and problems, and produced relatively low capacity amounts. However, with only a few hundred residents in the mid-1880s, there were probably less than 200 connections (Gaffey 2001). Sanborn maps show the Banning Southern Pacific Industrial Water System in place by 1888 (Sanborn 1888). Six-inch diameter, in-street piping was connected to a reservoir tank and extended from the area bounded by Palos Verdes Street, 4th Street, 8th Street, and the waterfront (Gaffey 2001).

3.4.2.4.5 Port Expansion and Continuing City Development

In 1899, construction began on the giant 2-mile breakwater in San Pedro Bay. This project required 3 million tons of rough granite and squared-cap rocks to be dumped from railway flatcars into the bay. The expansion of the harbor brought new residents to San Pedro and resulted in the extension of the Pacific Electric trolley service into the community in 1904. However, because San Pedro could not provide the tax base needed for the millions of dollars of bonds that were required, the California legislature consolidated the towns of San Pedro and Wilmington into the City of Los Angeles in 1909. Thus, San Pedro became a district of the larger city. The terms of the consolidation agreement promised San Pedro municipal services for the fast-growing communities. These services included fire and police protection, branch libraries, and sanitation and health services (Silka 1993:62). Additional immigrants—such as Portuguese, Scandinavians, and Greeks—poured into the area to become employees of the associated maritime industries. The fishing industry was dominated by Japanese immigrants from about 1900 to 1935, and canneries and a wholesale fish market were established in the area of Fish Harbor (Silka 1993:79-80; Beck and Haase 1974). The discovery of vast schools of Pacific sardines and tuna attracted Yugoslav and Italian immigrants. The native Mexican population had a long-standing presence in the Los Angeles Harbor since the days of the large ranchos (Silka 1993:80). Numerous industries, including oil, steel, and military companies, also flourished during this period.

As the city and the port at Los Angeles grew during the late nineteenth and early twentieth centuries, the United States War Department studied its existing defensive posture on the West Coast. Two panels of military experts, the Endicott Commission in 1885 and the Taft Commission in 1905, made recommendations for coastal defense, to be provided primarily through a system of large gun batteries. Initially, no defensive positions were established at San Pedro Bay; rather, coastal defenses focused on San Francisco Bay, which had the largest ports on the West Coast during the late nineteenth and early twentieth centuries. However, after formal establishment of the Port of Los Angeles in 1907, War Department planners realized the need for facilities in San Pedro.

With the growing importance of the Port of Los Angeles, the War Department expanded its presence at San Pedro Bay around the turn of the twentieth century. The Old Government Reservation near the harbor became property of the War Department in 1888, and with the addition of land in 1897 and 1910, the stage was set for the establishment of a new defense facility. In 1914, the property was named Fort MacArthur in honor of Lt. General Arthur MacArthur. The military reservation was geographically divided into the Lower Reservation, Middle Reservation, and the Upper Reservation.

The transitions at the Port during this time also had an effect on the development of the City of San Pedro. Between 1908 and 1921, Orizaba Boulevard was expanded from its original 60-foot width to 130 feet and was renamed Harbor Boulevard (Sanborn 1908, 1921). The business district shifted from Front Street to Beacon Street, Pacific Avenue, and 6th Street. By 1930, the census recorded 35,918 residents living in the city boundaries. The economic depression resulted in the loss of

thousands of jobs as shipping activities slowed and shipyards became idle. Only a few workers were able to find employment on the limited harbor improvements that were undertaken at this time. Economic recovery was slow and federal projects continued to provide employment for many. Despite the economic hard times, the rise in industrial and defense-related commerce during World War II began to provide financial stability, and the population in San Pedro increased to 43,000 by 1940 (Silka 1993:89).

3.4.2.4.6 Wartime Changes

World War I changed the principal uses of the Port considerably. The United States Navy, wishing to establish a significant presence on the Pacific coast, took possession of a portion of the Los Angeles Harbor and used it as a training and submarine base. During the war, the Port was one of the chief sources of employment for area residents. Shipbuilding enterprises, including Southwestern Shipbuilding Company, Los Angeles Shipbuilding and Drydock Corporation, and Ralph J. Chandler Shipbuilding, began turning out vessels by the dozens for the war effort. The Port of Long Beach, established only 2 years before the onset of the war, offered the only southern California shipping and shipbuilding competition to the Port of Los Angeles. Competition between the two ports continues to the present day.

Despite the previous use of the Port for the shipment of goods both into and out of California, it was not until 1915 that the Port completed its first warehouse. It was the completion of this building that symbolized the Port's transition from a small, poorly equipped landing to a significant seaport able to handle deep-sea ships with varied cargo (Queenan 1983:52-53). The transshipment of cargo during this era was a very different process from the current system of containerization. The movement of cargo required a series of labor- and space-intensive steps that in turn required certain buildings and facilities to ensure the most efficient and economical process. Raw or finished goods would be transported via train or truck from the distributor to the port terminal. Cargo destined for international or West Coast markets arrived at the Port from across the southeast and southwest, and via the Panama Canal from the entire eastern seaboard. If the goods arrived in sufficient quantity to justify immediate shipment, they would be loaded into one of the transit sheds located directly adjacent to the wharves. When the ship arrived, the goods would be manually transferred from the transit sheds into the cargo hold of the ship. The same process would occur in reverse at the destination.

Improvements to transportation systems in the Los Angeles Harbor area also facilitated the growth of trade. By 1917, a vast railroad network existed around the Los Angeles Harbor and the Los Angeles region, allowing for the efficient transfer of goods across the country (San Buenaventura Research Associates 1992).

Following the end of World War I in 1918, the Port was increasingly used for the importation of lumber and other raw materials. As in the prewar period, approximately 98% of the inbound cargo consisted of lumber to satisfy the demand for housing and factories caused by the rapid growth of the Los Angeles area (Matson 1920). In exports, crude oil was the most significant commodity passing

through the Port in the post-war years. The end of the war also generally meant the end of restrictions on trade. Although lumber and crude oil represented the largest volume of commodities to pass through the Port at that time, Los Angeles featured almost all types of industry, and new facilities were developed to handle products such as cotton, borax, citrus crops, and steel.

The significant increase in trade at the Port led to construction of a large number of new warehouses and sheds between 1917 and 1930. Improvements to transportation systems in the harbor area also facilitated the growth of the import and export trade. By 1917, a vast railroad network existed around the harbor and the city of Los Angeles, allowing for the efficient movement of goods throughout the country. In 1923, the City passed a bond measure for harbor improvement, which resulted in the construction of additional wharves to meet the demands of increased imports and exports (Queenan 1983:69; San Buenaventura Research Associates 1992). In 1928, 7,532 vessels entered the harbor and over 25 million tons of cargo were handled (Silka 1993:75). By 1929, in an effort to streamline the railroad portion of shipping within the harbor, the various railroad companies, including the Southern Pacific, Union Pacific, Santa Fe, and Pacific Electric Railway, consolidated their operations as the Harbor Belt Line Railroad (Queenan 1983:78; San Buenaventura Research Associates 1996).

During the Depression years, traffic in the Port slowed along with the rest of the American economy (Queenan 1983:78). During World War II, San Pedro Harbor, as one of the closest major ports to the Pacific theatre of military operations, was fully involved in defense activities. Between 1941 and 1945, workers at ship and aircraft production facilities in the harbor area worked day and night to produce more than 15 million tons of war equipment. Hundreds of thousands of military and civilian personnel shipped out through San Pedro in support of the war effort and returned through it when their tasks were done (Shettle 2003).

Following the war, LAHD launched a broad restoration program. Many of the facilities in the Los Angeles Harbor required maintenance that had been delayed during the war years. Although the adjacent Long Beach Harbor conducted its own improvements while battling subsidence (the sinking of the land from the many years of oil extraction), LAHD improved a number of its buildings and removed many temporary wartime buildings (Queenan 1983:93).

3.4.2.4.7 Post–World War II and Containerization

In 1945, defense contracts were cancelled and shipyards laid off thousands of workers. The Navy relinquished its control over shipping operations in the Port, and the Los Angeles Harbor returned to its peacetime patterns (Silka 1993:99). With the postwar population explosion occurring in southern California, developers began building homes in tracts along the Palisades, just south of 9th Street, and on the north side of town, respectively. Unlike their predecessors, new residents were moving to San Pedro not for employment, but for a desirable community in which to reside (Silka 1993:103).

Methods of shipping changed dramatically following World War II with the introduction of containerization. As discussed in Section 1.1.2, containerization is an integrated system of transport in which goods are shipped in standardized (20- or 40-foot-long), sealable metal boxes, designed for easy placement on compatible truck beds, railcars, and ships. Advantages of containerization include a reduced labor force necessary to load shipments, decreased loading and unloading time, and decreased loss via theft or damage. Additional efficiencies arise from the integration of transport by truck, train, and ship. The primary disadvantage is the large capital outlay necessary to produce the new ships, cranes, rail cars, truck trailers, and Port facilities designed to fit the containerization system.

International shipment through the Port increased during the latter half of the twentieth century as ocean-going vessels grew too large to negotiate the Panama Canal. Using a land-bridge system, shippers could transfer materials from Pacific region sources to Atlantic region markets by unloading at the Port of Los Angeles and trans-shipping via truck or train to vessels waiting at east coast ports (Queenan 1983:118-119).

During the following decades, the Port district fell into urban decay and became an area of unsavory reputation. Then, in 1969, the Los Angeles City Council approved the Beacon Street Redevelopment Project, and demolition of the area's buildings soon followed. The redevelopment area, including much of the current proposed project area, consisted of nearly 60 acres of empty lots that remained vacant until the 1970s (Silka 1993:109).

3.4.2.5 Methodology for Identifying Existing Cultural Resources

The identification of cultural resources in the proposed project area was based on the results of a record search, archival and historic map research, site visits, and consultation with the Native American Heritage Commission, local Native American representatives, and other interested parties. This information generated represents the cultural resources baseline for the impact analysis because cultural resources information does not change substantially over time. At the time of the study the majority of the proposed project area was paved and developed, precluding archaeological survey.

3.4.2.5.1 Paleontological Resources

A review was conducted of relevant published geologic reports, unpublished geotechnical reports, unpublished paleontological reports, and museum paleontological site records (San Diego Natural History Museum, Natural History Museum of Los Angeles County, and University of California Museum of Paleontology). This approach was followed in recognition of the direct relationship between paleontological resources and the geologic formations within which they are entombed. By knowing the geology of a particular area and the fossil productivity of

particular formations that occur in that area, it is possible to predict where fossils will, or will not, be encountered (Appendix F.1).

In order to infer where bedrock may exist in the subsurface relative to artificial fill materials, old navigational charts were examined that showed the original shoreline before development. Comparing the historical shoreline to the modern shoreline allowed determination of what portions of the proposed project area may have artificial fill materials relative to bedrock in the subsurface. Additional comparison with the geologic map of Woodring et al. (1946) allowed further inference as to where bedrock was formerly exposed during the 1940s. Figure 3.4-1 shows the historical shoreline present in 1859, prior to fill activities. The outline of pre-Holocene bedrock is also superimposed onto the proposed project area. This figure permits inferences to be made as to the nature of the subsurface in any given area and will be used for the impact analysis (Appendix F.1).

3.4.2.5.2 Records Search

Prehistoric and Historical Archaeology

A record search was conducted at the South Central Coastal Information Center of the California Historical Resources Information System located at California State University, Fullerton, on September 29, 2005, and updated on January 16, 2008. According to the records search, a total of 36 cultural resources studies have been previously conducted within a 0.5-mile radius of the proposed project area.

Two of these previous studies, Weinman and Stickel (1978) and USACE (1984), were conducted in the proposed project area. Weinman and Stickel (1978) conducted a program-level analysis to identify all known cultural resources within the Port that might be affected by future projects. USACE, in cooperation with the Ports of Los Angeles and Long Beach (1984), conducted a second cultural resources inventory in conjunction with two EIR/EIS reports generated for the Los Angeles/Long Beach Harbors Landfill Development and Channel Improvement Studies. This report discussed potential impacts on known cultural resources as a result of the proposed dredging and filling in of various parts of the two harbors. Weinman and Stickel (1978) state that 18 previously identified prehistoric sites are located within Port boundaries. They also state that none of these sites had been evaluated for eligibility for listing on a state or federal register. In addition, the USACE (1984) study also highlights the proposed project area as archaeologically sensitive.

According to the records search, no known archaeological sites are located in the proposed project area. However, 16 archaeological sites have been previously identified within 1 mile of the proposed project area (Table 3.4-2). Of these previously identified archaeological sites, three are located adjacent to the proposed project boundary including prehistoric archaeological sites CA-LAN-145 and CA-LAN-146, and historic archaeological site CA-LAN-1129H.

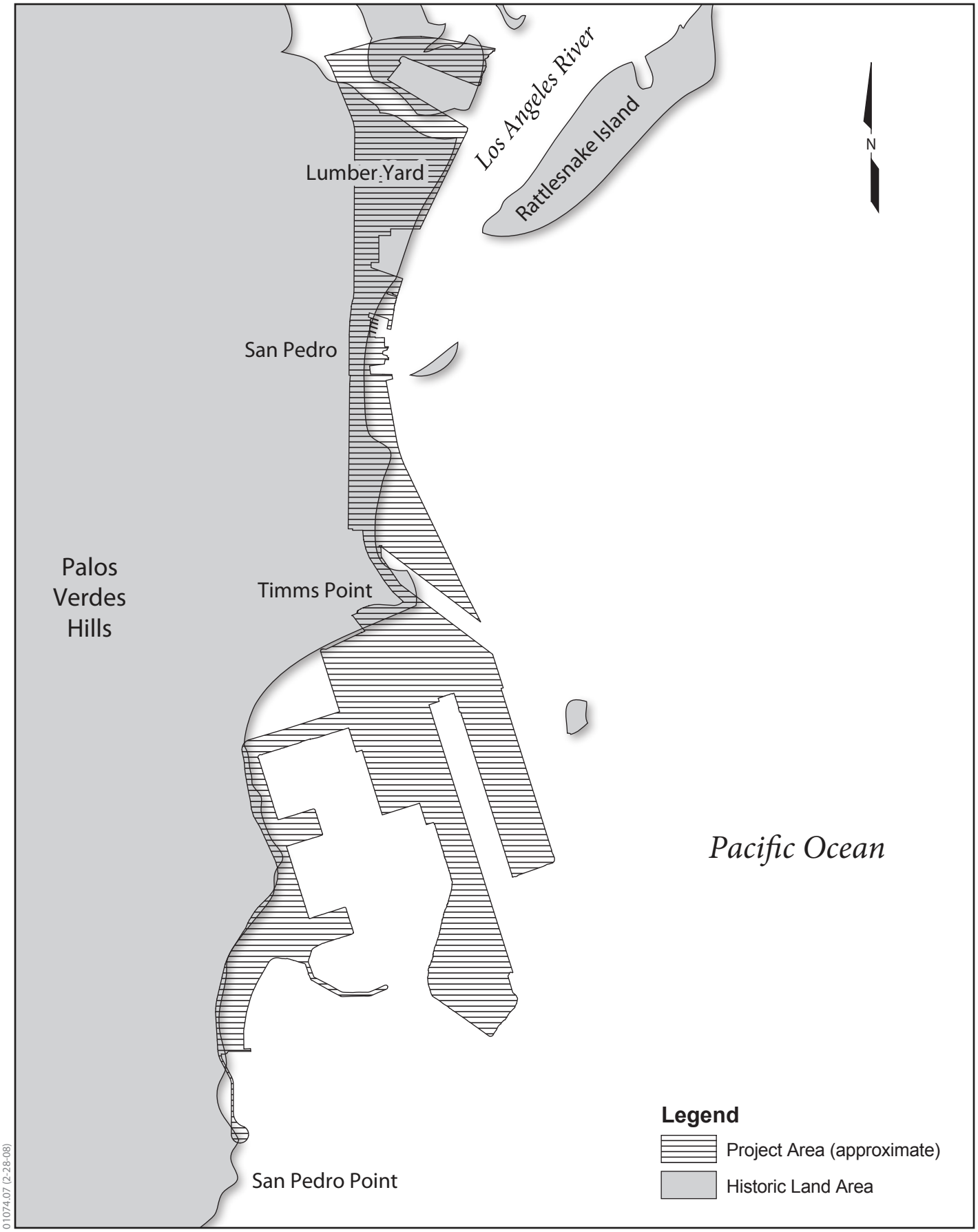

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Figure 3.4-1
San Pedro Waterfront—
Historical Shoreline

In addition, archaeological monitoring by Jones & Stokes in 2004 and 2005 for the Waterfront Gateway Development Project resulted in the identification of intact, subsurface historic archaeological deposits associated with previously unidentified early twentieth century Mexican colonia colloquially named "Mexican Hollywood" (Storey and Schmidt 2003; Jones & Stokes 2004).

Descriptions of all previously identified sites within 1 mile of the proposed project area are summarized in Table 3.4-2, and additional descriptions of CA-LAN-145, CA-LAN-146, CA-LAN-1129H, and Mexican Hollywood are also provided following Table 3.4-2.

Table 3.4-2. Previously Identified Prehistoric Sites within a 1-Mile Radius of the Proposed Project Area

Prehistoric Site	*Description*	*Location*
CA-LAN-115	Refuse heap	1 mile from proposed project area
CA-LAN-116	Traces of a campsite	1 mile from proposed project area
CA-LAN-144	Traces of a campsite	1 mile from proposed project area
CA-LAN-145	Traces of a campsite	Adjacent to proposed project area
CA-LAN-146	Refuse heap	Adjacent to proposed project area
CA-LAN-147	Refuse heap	0.5 mile from proposed project area
CA-LAN-148	Refuse heap	1mile from proposed project area
CA-LAN-149	Refuse heap/shellmound	1 mile from proposed project area
CA-LAN-150	Refuse heap. Note in file states site was destroyed by earthmoving activities prior to 1964.	1 mile from proposed project area
CA-LAN-283	San Pedro Harbor Site. An extensive shell midden deposit with artifacts including large points, manos and metates, animal bone, and a cogged stone.	0.5 mile from proposed project area
CA-LAN-285	Village site. Note in file states site was destroyed as of 1962.	1 mile from proposed project area

Prehistoric Site	*Description*	*Location*
CA-LAN-287	Lithic scatter. Note in file states site was destroyed as of 1962.	1 mile from proposed project area
CA-LAN-789	Recorded as habitation site, tested and determined to be non-cultural	1 mile from proposed project area
CA-LAN-790	Recorded as habitation site; tested and determined to be non-cultural.	1 mile from proposed project area
CA-LAN-1129H	Basal remains of a dump, railroad fill and bulkheads, and railroad trestle built and/or used by the U.S. Army between 1918 and 1938	West Cabrillo Marina, adjacent to the project area

CA-LAN-145

Recorded by N.C. "Nels" Nelson in 1912 and described as traces of a campsite. Because of the lack of artifacts, Nelson questioned the authenticity of this deposit as an actual archaeological site. In addition, the site is described in Nelson's notes as being located on top of a 50-foot bluff. All of the bluffs in and around the location of the site are plotted by the South Central Coastal Information Center. Development and redevelopment resulted in the grading of 40 to 50 feet of the original Palos Verdes Sand and San Pedro Sand (Deméré 2007) in this area.

CA-LAN-146

Recorded in 1912 by N.C. Nelson and described as a refuse heap consisting of pectin, abalone, oyster, and clamshells. CA-LAN-146 measured 75 feet by 150 feet with an estimated depth of 3 feet. A note in the Information Center's files dating to 1977 stated that CA-LAN-146 appeared to be completely destroyed by grading activities associated with the construction of the cruise terminal parking lot that currently covers the area.

Of primary concern is confusion regarding the location of CA-LAN-146. At the time of recordation, the site's location was described in relation to land formations and portions of the built environment; these have been significantly altered by construction projects over the past century. Urban and industrial development and redevelopment in San Pedro over the past century have removed extensive amounts of soil in portions of the proposed project area. In addition, there is the possibility that both CA-LAN-145 and CA-LAN-146 may have been fossil shell localities instead of archaeological sites. This is especially true in the case of CA-LAN-146, which may correspond to Arnold's (1903) "Lumberyard" paleontological site (Knudson 1982).

Archaeological and Native American mitigation monitoring efforts conducted by Jones & Stokes archaeologists and Mr. Anthony Morales, a representative of the Gabrieliño/Tongva Tribe, from January 2005–September 2005 and April 2007–present in the vicinity of CA-LAN-146 (for the LAHD's Waterfront Gateway Development Project) have not resulted in the identification of subsurface evidence of the site.

CA-LAN-1129H

CA-LAN-1129H is described as the basal remains of a dump, railroad fill and bulkheads, and railroad trestle built and/or used by the U.S. Army between 1918 and 1938 (Knudson 1983a). According to the site record, the site appears to be all that remains of Lower Fort MacArthur, built on a fill area at the foot of 22nd Street along the shoreline of San Pedro, in several major episodes between 1918 and 1938. An archaeological testing program was undertaken by Woodward-Clyde for the Port of Los Angeles under stipulations of a permit from USACE in preparation of an EIR for the West Channel Cabrillo Beach Recreational Complex (Knudson 1983b). Test excavations determined site measurements as 725 meters by 230 meters (166,750 square meters, or 0.40 acre). Multiple features were exposed, including a railroad bed made of sand and marine dredging, a retaining wall, dike trestle remains, and portions of footings for a 1920s pier. Artifacts uncovered included bricks, military china, bottles, and water heaters all dating from the 1920s and 1930s (Knudson 1983a). The testing program indicated that none of the archaeological resources appeared to be eligible for listing on the NRHP due to lack of data potential and lack of integrity (Knudson 1983b). CA-LAN-1129H was subsequently destroyed during construction of the West Channel Cabrillo Beach Recreational Complex.

Mexican Hollywood

Archaeological mitigation monitoring efforts conducted by Jones & Stokes from January 2005–September 2005 and April 2007–present for the LAHD's Waterfront Gateway Development Project conducted within a portion of the parking lot of the Los Angeles World Cruise Center (Berths 90 and 91) identified intact, subsurface historic archaeological sites associated with Mexican Hollywood (Storey and Schmidt 2001; Jones & Stokes 2004). The results of the mitigation monitoring and data recovery efforts were not finalized at the time of this study. The results of the study are anticipated upon completion of the analysis of recovered data, however, based on evidence assessed thus far, Mexican Hollywood is eligible for listing on the California Register of Historical Resources data.

"El Barrio," or "Mexican Hollywood" as it came to be known, existed on a 5-acre parcel at Berths 90 and 91, now occupied by the Cruise Center on the Main Channel of the harbor, just north of O'Farrell Street. It is believed that LAHD first leased the land to the Pacific Coal Company (Coulter 1985). The Pacific Coal Company, which employed predominantly Irish laborers, either constructed the homes for their employees or had the employees construct their homes in that area. Many of the homes had grounded boats for foundations, while others were built on stilts to avoid the surges of tides caused by ships moving down the channel (Coulter 1985).

El Barrio is believed to have developed around 1922, when first-generation Mexicans began to move into this area. Most of the men worked cleaning out boilers for the Coast Welding Company, a shipbuilding firm. Over the decades, adults worked either at the fish canneries, at the lumberyards on Terminal Island, for the Harbor Belt Railroad line, or as dock workers on the waterfront (Coulter 1985).

The neighborhood was the poorest section of San Pedro. At its peak, the neighborhood sustained 80 homes and approximately 400 residents. In 1952, the residents were removed from the area, and their homes were destroyed (Coulter 1985).

Historical Architectural Resources

A record search was conducted at the South Central Coastal Information Center of the California Historical Resources Information System located at California State University, Fullerton on September 29, 2005, and updated on January 16, 2008. The record search included a review of federal, state, and local historic registers.

According to the record search, California Historical Landmarks lists three properties within a 0.5- mile radius of the proposed project area, including Timms' Point and Landing (No. 384), Casa de San Pedro (Hide House) (No. 920), and the S.S. Catalina (No. 894). The NRHP lists six properties within the proposed project area and a 0.5-mile radius, including the S.S. Catalina, 500 Varas Square, the Ralph J. Scott, the Lane Victory, the San Pedro Municipal Ferry Building, and 839 S. Beacon Street. The California Register of Historical Resources (California Register) lists 55 properties within the proposed project area and a 0.5- mile radius. The City of Los Angeles Cultural Monuments lists 13 properties within the proposed project area and a 0.5- mile radius, including St. Peter's Episcopal Church (No. 53), the Municipal Ferry Building (No. 146), Timms' Landing (No. 171), Morgan House (No. 186), Korean Bell and Belfry of Friendship (No. 187), the U.S.S. Los Angeles Naval Monument (No. 188), Juarez Theatre (No. 251), Harbor View House (No. 252), Muller House (No. 253), a private residence at 383 10th Street (No. 514), Battery Osgood-Farley (No. 515), Wilbur F. Wood house (No. 557), and the Cabrillo Beach House (No. 571). The California Points of Historical Interest lists no properties within a 0.5- mile radius of the proposed project area. A review of the California Historic Resources Inventory indicates the following properties (with California Historical Resources status codes from 1-5) are located within the study area of the proposed Project: the Municipal Ferry Building (1S), the Ralph J. Scott Fireboat (1S), the San Pedro Breakwater (7J), Los Angeles Municipal Warehouse #1 (1S), and a district of commercial buildings from 301 through 481 6th Street and 305 through 401 7th Street (each 2D2).

Previous architectural historical resources surveys and inventories in the area were consulted.

The majority of the study area was included in the January 1997 *Phase II Cultural Resources Reconnaissance Survey of 7,500 Acres of Land and Water for the Port of Los Angeles*. The survey was prepared for the LAHD Environmental Management

Division by Fugro West, Inc., and it included documentation of historical resources on California Department of Parks and Recreation inventory forms (series DPR 523).

Some of the study area was previously surveyed in 1981 by the City of Los Angeles Department of Public Works Bureau of Engineering as part of the City-wide Historical and Cultural Resource Survey, a project undertaken to identify and document the visual assets and cultural resources of the City. The city-wide survey was conducted by volunteers and included southeast San Pedro: the buildings south of 9th Street to 22nd Street, and east of Gaffey Street. It identified nine buildings for potential Historic-Cultural Monument designation and 108 buildings worthy of preservation. Portions of the survey area were updated by the Community Redevelopment Agency in 2001 for the Pacific Corridor Redevelopment Area.

In 2000, the Vinegar Hill was designated a Historic Preservation Overlay Zone (HPOZ). The Vinegar Hill HPOZ extends from the south side of 9th Street to, and including, the north side of 10th Street between Palos Verdes Street on the east and Centre Street on the west. The historic context for the Historic Resources Survey for the Vinegar Hill HPOZ was consulted as background for the analysis for this EIR.

Another source consulted was *An Architectural Guidebook to Los Angeles* by David Gebhard & Robert Winter (2003).

3.4.2.5.3 Field Surveys

Paleontology

Published and unpublished geologic and paleontologic literature was reviewed to document the number and locations of previously recorded fossil sites at and near the proposed project site from each rock unit exposed at the proposed project site, and the types of fossil remains the rock unit has produced locally. No field survey of the proposed project site was conducted because the site is covered by extensive development and/or is underlain by non-fossiliferous artificial fill or undisturbed strata that are too young to contain remains old enough to be considered fossilized.

Prehistoric and Historical Archaeology

At the time of this study, the proposed project area was paved and developed, precluding an archaeological survey. Therefore, the identification of prehistoric and historic archaeological resources is based on the results of the record search, archival and historic map research, and consultations with the Native American Heritage Commission, local Native Americans, and other interested parties

Historical Architectural Resources

Field reconnaissance surveys of all the buildings in the study area were conducted by historians and architectural historians who meet the U.S. Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9) in their relevant disciplines on the following dates: October 7, 2005, October 28, 2005, November 7, 2005 and November 20, 2007.

3.4.2.5.4 Archival Research

Archival research consisted of a review of:

- published literature on San Pedro available at the San Pedro Bay Historical Society, previous cultural resources studies,
- regional prehistoric and ethnographic materials on file at Jones & Stokes,
- Sanborn fire insurance maps (1888, 1891, 1902, 1908, 1921, 1950),
- historic topographic maps (1896, 1925, 1944, 1951, 1964),
- U.S. Coast Survey Map of the California Coast (1859),
- LAHD Port annual reports (1920, 1925, 1926, 1927) and maps (1927, 1939, 1947), and
- historic aerial photographs.

Paleontology and Prehistoric Archaeology

The proposed project area is located along the central coastal margin of the Los Angeles Basin just east of the Palos Verdes Hills. The Palos Verdes Hills consist of a Jurassic-age metamorphic basement complex (Catalina Schist) that is overlain by 3000 feet of sedimentary rock formations of Miocene, Pliocene, and Pleistocene age. The geologic deposits underlying the proposed project area consist of artificial fill materials, Quaternary alluvium, non-marine terrace deposits, Pleistocene-age marine deposits of the Palos Verdes Sand, Pleistocene-age offshore marine deposits of the San Pedro Sand and Timms' Point Silt (Deméré 2007 citing Woodring et al. 1946; Schell et al. 2003; Schwartz 1983).

According to the paleontological study conducted for the proposed Project by the San Diego Natural History Museum (Deméré 2007), artificial fill materials and/or Quaternary alluvium underlie most of the proposed project area. The eastern portions of the proposed Downtown Harbor, Ports O'Call, 22nd Street Marina, and Beach districts are underlain by artificial fill materials. The Outer Harbor/Warehouse District is entirely underlain by artificial fill materials (Figure 3.4-2).

The soils typology provided by Deméré (2007) is corroborated by a review of historic maps of the coastline from the nineteenth and twentieth centuries (N.D. Lithograph

Source: Adapted from Deméré 2007.

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Figure 3.4-2
San Pedro Waterfront—Original Shoreline in 1859 and Contact between Bedrock and Quaternary Alluvium

of the San Pedro [pre-1900]; Sanborn Map Company 1888, 1891, 1902, 1908, 1921, 1950; USGS 1896, 1925, 1944, 1951, 1964) as well as from archaeological monitoring conducted for the Waterfront Gateway Development Project (Jones & Stokes 2004) and other projects (Doolittle 2007).

The LA/LB Harbor area was a low-lying coastal marsh called Wilmington Lagoon or San Pedro Creek. The lagoon had a complex network of estuaries, stream channels, tidal channels, sand spits, beaches, and marshy inlands. (Schell et al. 2003.) Around 11,000 years ago, a general warming trend, often referred to as the Altithermal, began in California (Carbone 1991; Arnold 1991). The Altithermal resulted in a rise in sea levels, which had an enormous impact on drainage patterns and the type and availability of food sources in various regions. During the Early Holocene (10,000 to 6,600 years ago), rapid sea level rise markedly altered land areas along the California coast. As a result of marine encroachment, large portions of the continental shelf were submerged. Therefore, archaeological sites located along the modern coast are, in some cases, far removed from Early Holocene shorelines. Furthermore, it is likely that most archaeological sites associated with the Early Holocene along the southern mainland coast were destroyed or obscured by sea level advance and sedimentation (Carbone 1991).

Archival (Gaffey 1998, 2001; Silka 1993) and historic map research (Sanborn Map Company 1888, 1891, 1902, 1908, 1921; USGS 1896, 1925, 1944, 1951, 1964) has also demonstrated that 40 to 50 feet of native soils (bluffs) along the coastline and inland were removed during the nineteenth and twentieth centuries, including along Harbor Boulevard.

The combination of rising sea levels during the Altithermal, shoreline modification and extension by the Port in the nineteenth and twentieth centuries, and extensive soil removal by the Port and the local community suggests a low potential to encounter previously identified and/or unidentified prehistoric archaeological sites in the proposed project area.

Consultation

The USACE is the federal agency responsible for identifying buildings, structures, sites, objects, and districts that are listed in or eligible for listing in the NRHP. The USACE's geographic jurisdiction is limited to waters of the United States, which in coastal areas encompasses the aquatic environment shoreward to the high tide line or the landward limit of any adjacent wetlands. On November 27, 2007 and December 12, 2007, LAHD consulted with the USACE about their procedures for complying with Section 106 of the National Historic Preservation Act, jurisdictional issues, preliminary findings, and USACE procedures for consultation with the State Historic Preservation Officer (SHPO) and Advisory Council on Historic Preservation. The USACE will coordinate its SHPO consultation with the NEPA process.

3.4.2.6 Site-Specific Setting

3.4.2.6.1 Prehistoric Resources Identified

According to the record search, two prehistoric sites (CA-LAN-145 and CA-LAN-146) have been previously identified and recorded adjacent to the proposed project area. A note in the site record file dating to 1977 stated that CA-LAN-146 appeared to be completely destroyed by grading activities associated with the construction of the cruise terminal parking lot that currently covers the area. There is the possibility that both CA-LAN-145 and CA-LAN-146 may have been fossil shell localities instead of archaeological sites. This is especially true in the case of CA-LAN-146, which may correspond to Arnold's (1903) "Lumberyard" paleontological site (Knudson 1982).

Recent ongoing archaeological mitigation monitoring efforts conducted by Jones & Stokes for LAHD's Waterfront Gateway Development Project, conducted in the vicinity of CA-LAN-146, have not resulted in the identification of subsurface evidence of CA-LAN-146 (Jones & Stokes 2003a, 2003b, 2004).

3.4.2.6.2 Historic Archaeological Resources Identified

According to the records search two prehistoric archaeological sites (CA-LAN-145 and CA-LAN-146) and one historic archaeological site (CA-LAN-1129H) are located adjacent to the proposed project area. Although the records search indicated that no known archaeological sites are located within the proposed project area, recent monitoring efforts by Jones & Stokes for LAHD's Waterfront Gateway Development Project (Berths 90 and 91) have resulted in the identification of intact, subsurface archaeological deposits associated with Mexican Hollywood. Mexican Hollywood is believed to have developed around 1922, when first-generation Mexicans began to move into this area. At its peak, the neighborhood sustained 80 homes and approximately 400 residents. In 1952, the residents were removed from the area, and their homes were destroyed (Coulter 1985).

3.4.2.6.3 Historical Architectural Resources Identified

Federal Criteria—National Register of Historic Places

The USACE is the federal agency responsible for identifying buildings, structures, sites, objects, and districts that are listed in or eligible for listing in the NRHP. The USACE's geographic jurisdiction is limited to the aquatic environment shoreward to the high tide line or the landward extent of any adjacent wetlands, but the USACE is considering effects in adjacent upland areas used to complete in-water activities and the site of the Outer Harbor cruise ship terminal, which would not be constructed without USACE authorization. Visual effects associated with activities in these areas on proximate historical resources are also considered. In accordance with 36 CFR

§800.4(a)(1), on December 12, 2007, the USACE preliminarily determined and documented an Area of Potential Effects (APE) on vicinity maps (Figure 3.4-3). The term *Area of Potential Effects* is specifically drawn from the Advisory Council on Historic Preservation's federal regulations implementing Section 106 and is defined as follows:

> Area of Potential Effects means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by an undertaking.

Table 3.4-3 identifies the eight properties within the APE that are listed in or determined eligible for listing in the NRHP.

Table 3.4-3. Properties within the APE That Are Listed in or Determined Eligible for Listing in the NRHP

Name	*Location*	*Status*	*Date Status Determined*
S.S. Lane Victory	Berth 94, Port of San Pedro	NRHP listed (National Landmark)	12/14/1990
Ralph J. Scott Fireboat	Berth 85	NRHP listed	6/30/1989
Municipal Warehouse No. 1	2500 Signal St.	NRHP listed	4/21/2000
San Pedro Municipal Ferry Building/LA Maritime Museum	Berth 84, foot of 6th St., San Pedro, CA	NRHP listed	4/12/1996
Vincent Thomas Bridge	Route 47 over the Main Channel	NRHP eligible under Criterion C and Criteria Consideration G.	Pending SHPO concurrence with USACE findings.
Municipal Wholesale Fish Market	Berth 75 and 76	NRHP eligible under Criterion A.	Pending SHPO concurrence with USACE findings.
Westway/Pan-American Oil Company Pump House.	Berth 70	NRHP eligible under Criterion A and Criterion B.	Pending SHPO concurrence with USACE findings.
Bethlehem Shipyard Historic District (also known as Southwest Marine Historic District)	Berth 240	NRHP eligible under Criterion A	Determined eligible in September 2000 in the Southwest Marine EIR.

In accordance with 36 CFR §800.4, the federal lead agency is required to seek and review information on historic properties in the APE, identify those that are listed on or meet the criteria for listing on the NRHP, and request concurrence with the identification of historic properties from SHPO. To seek information, letters were sent on December 13, 2007 to interested parties who may have knowledge about historic properties in the APE.

In addition to the properties listed in the NRHP, the qualified field crews identified other properties that met NRHP criteria, which are discussed in this section. The USACE, under separate cover, will submit the results of its identification effort on historic properties to the SHPO in a time frame coordinated with the NEPA process.

There are other properties listed in or eligible for listing in the NRHP that are not within the APE, because they fall outside the USACE's federal jurisdiction for the proposed Project (Figure 3.4-4). Those properties are still subject to compliance under CEQA, and will be discussed in the next section.

State Criteria—Historical Resources per Section 15064.5(a) of the CEQA Guidelines

The CEQA historical resources study area includes areas that would be affected by the proposed Project, which extend well beyond the federal APE. The CEQA statute and guidelines provide five basic definitions as to what may qualify as a historical resource. Specifically, Section 21048.1 of the CEQA statute (Division 13 of the California Public Resources Code), in relevant part, provides a description for the first three of these definitions, as follows:

> …an historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources, as defined in subsection (k) of Section 5020.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource for purposes of this section.

To simplify the first three definitions provided in the CEQA statute, a historical resource is a resource that is:

- listed in the California Register;
- determined eligible for the California Register by the State Historical Resources Commission; or
- included in a local register of historical resources (see footnote 3).

SAN PEDRO WATERFRONT
PROPOSED PROJECT

N

0 500 1,000 1,500 2,000

Feet

Pacific Ave.

36th St. 30th St. 26th St. 22nd St. 20th St. 15th St. 13th St. 10th St. 5th St. 1st St. Santa Cruz St.

Grand Ave.

Pacific Ave.

Mesa St.

Centre St.

Palos Verdes St.

Beacon St.

Harbor Blvd.

Sampson Way

Miner St.

Via Cabrillo Marina

New Red Car Alignment

Red Car Maintenance Facility

WEST CHANNEL

EAST CHANNEL

MAIN CHANNEL

Fire Station 110

San Pedro Boat Works

Outer Harbor Cruise Terminal Bldgs.

Berths 45–47

Outer Harbor Park

Berths 49–50

City Dock #1

Mike's Fueling Station

Jankovich & Son Fueling Station

Berth 240 Marine Fuel Facility

TERMINAL ISLAND

Ports O' Call Development Opportunity (300,000 sf.) Conference Center (75,000 sf.) Fishermen's Park (3 acres) Location To Be Determined

7th Street Harbor

Downtown Harbor

Lane Victory

North Harbor

Berths 91–92

Berths 93A–93B

Catalina

Vincent Thomas Bridge

Legend

- San Pedro Waterfront Project Area
- Direct Impacts under Federal Jurisdiction
- Indirect Impacts under Federal Jurisdiction

San Pedro Boat Works: CEQA Impacts Only

Fort MacArthur: NRHP Listed

Warehouse No. 1: NRHP Listed

Transit Shed Berths 58–60: CEQA Impacts Only

Westway Terminal Berth 70: NRHP Eligible

Transit Shed Berth 57: CEQA Impacts Only

Pan-Am "China Clipper" Terminal: CEQA Impacts Only

U.S. Immigration Station: CEQA Impacts Only

Municipal Wholesale Fish Market: NRHP Eligible

Timm's Landing: CEQA Impacts Only

S.P. Slip No. 1: CEQA Impacts Only

Bethlehem Shipyard Historic District: NRHP Eligible

Fishermen's Cooperative Association/ Utros Restaurant: CEQA Impacts Only

Municipal Ferry Building/ Maritime Museum: NRHP Listed

New Location of Ralph J. Scott Fireboat: NRHP Listed

Present Location of Ralph J. Scott Fireboat: NRHP Listed

Proposed Relocation Site S.S. Lane Victory: NRHP Listed

Existing Site S.S. Lane Victory: NRHP Listed

Vincent Thomas Bridge: NRHP Eligible

Berth 96 Existing Location of Catalina Express Terminal & Former Site of S.S. Catalina: CEQA Impacts Only

Source: Port of Los Angeles, 9-4-08.

Graphics . . . 01074.07 (9-11-08) tm

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Figure 3.4-3
San Pedro Waterfront—Area of Potential Effects

Map 3.4-4
San Pedro Waterfront—Historical Resources

Historical Features

- Liberty Hill Site — Historic Sites
- Swinford St./Cruise Center — Red Car Stations

Proposed Project

- San Pedro Waterfront Project Area

Promenade	Proposed Parking Area
Proposed Buildings	Proposed Water Feature
Existing Buildings	City Dock No. 1
Proposed Park Area	Existing Port Facilities
Existing Park Area	Red Car Tracks
Proposed Parking Structure	

N

0 1,000 2,000 3,000 4,000 feet

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Graphics ... 01074.07 (9-7-08) tm

Section 15064.5 of the CEQA Guidelines (Title 14 CCR, Chapter 3) supplements the statute by providing two additional definitions of historical resources, which may be simplified in the following manner. An historical resource is a resource that is:

- identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g) [see footnote 4]; or
- determined by a lead agency to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, this category includes resources that meet the criteria for listing on the California Register (PRC §5024.1, Title 14 CCR, Section 4852).

For purposes of this EIS/EIR, all buildings, structures, objects, landscape elements and other features that could be considered historical resources are evaluated in light of each of the above five definitions under CEQA. Each CEQA definition is described in more detail below, along with a listing of those historical resources on, adjacent to, near, or historically related to the proposed project site that meet any of the CEQA definitions. If a historical resource meets more than one CEQA definition, it is listed only once, under the first applicable definition category.

Definition 1—Listed in the California Register

There are several ways in which a resource can be listed in the California Register, which are codified under Title 14 CCR, Section 4851.

- A resource can be listed in the California Register by the State Historical Resources Commission.
- If a resource is listed in or determined eligible for listing in the NRHP, it is automatically listed in the California Register.
- If a resource is a California State Historical Landmark, from No. 770 onward, it is automatically listed in the California Register.

Table 3.4-4 identifies 10 historical resources in the proposed project study area that are currently listed in the California Register.

Table 3.4-4. Historical Resources in the Proposed Project Study Area That Are Currently Listed in the California Register

Name	*Location*	*Status*	*Date Status Determined*
S.S. Lane Victory	Berth 94, Port of San Pedro	NRHP listed National Landmark	12/14/1990
Ralph J. Scott Fireboat	Berth 85	NRHP listed	6/30/1989
Municipal Warehouse No. 1	2500 Signal St.	NRHP listed	4/21/2000

Name	*Location*	*Status*	*Date Status Determined*
(Site of) S.S. Catalina	Berth 96, Los Angeles Harbor (Ship now in Ensenada, Mexico)	NRHP listed; California Historical Landmark No. 894.	9/1/1976
San Pedro Municipal Ferry Building/LA Maritime Museum	Berth 84, foot of 6th St., San Pedro, CA	NRHP listed	4/12/1996
US Post Office	San Pedro Main, 839 S. Beacon St.	NRHP listed	1/11/1985
Los Angeles Harbor Light Station/Angels Gate Lighthouse	Los Angeles Harbor on San Pedro Breakwater, Cabrillo Beach	NRHP listed	10/14/1980
Warner Grand Theater/ Juarez Theater	478 W. 6th Street	NRHP listed	1/21/1999
Casa de San Pedro	Middle Reservation, Fort MacArthur, 2400 block of Pacific Ave	California Historical Lanpdmark No. 920	N/A
Liberty Hill Site	Vicinity of 5th St. & Harbor Blvd.	California Historical Landmark No. 1021	N/A

Definition 2—Determined Eligible for the California Register

There are no historical resources on, adjacent to, or near the proposed project site that are known to have been determined eligible for the California Register by the State Historical Resources Commission.

Definition 3—Listed in a Local Register of Historical Resources

A property listed in a local register of historical resources is considered a historical resource for the purposes of CEQA. By definition, "local register of historical resources" is a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution. The City of Los Angeles has two such designations: Historic-Cultural Monuments and HPOZs.

Table 3.4-5 identifies 12 historical resources that are listed in a local register of historical resources.

Table 3.4-5. Historical Resources That Are Listed in a Local Register of Historical Resources

Name	*Location*	*Status*	*Date Status Determined*
San Pedro Municipal Ferry Building/LA Maritime Museum	Berth 84, foot of 6th Street	Los Angeles Historic Cultural Monument No. 146	Declared 9/17/1975
San Pedro Municipal Building/San Pedro Branch City Hall	638 S. Beacon Street	Los Angeles Historic Cultural Monument No. 732	Declared 10/22/2002
Cabrillo Beach Bath House	3800 Stephen White Drive	Los Angeles Historic Cultural Monument No. 571	Declared 12/18/1993
YMCA/Harbor View House	907-945 S. Beacon Street	Los Angeles Historic Cultural Monument No. 252	Declared 8/25/1982
Ralph J. Scott Fireboat	Berth 85	Los Angeles Historic Cultural Monument No. 154; NRHP listed	Declared 5/5/1976
U.S.S. Los Angeles Naval Monument	John Gibson Park at 5th Street and Harbor Boulevard	Los Angeles Historic Cultural Monument No. 188	Declared 5/3/1978
Vinegar Hill HPOZ	Bounded by Plaza Park on the east, Sixth St. on the north, Mesa St. on the west, and 17th St. on the south.	HPOZ	Adopted 4/4/2001
Danish Castle	324 W. 10th Street	Los Angeles Historic Cultural Monument No. 814	Declared 7/8/2005
Residential Home	383 W. 10th Street	Los Angeles Historic Cultural Monument No. 514	Declared 1/22/1990
Warner Grand Theater/ Juarez Theater	478 W. 6th Street	Los Angeles Historic Cultural Monument No. 251	Declared 8/25/1982
Site of Timm's Landing	Plaque located on parkway on the east side of Signal Street, north of 22nd Street	Los Angeles Historic Cultural Monument No. 171 California State Landmark No. 384	Declared 2/16/1977

Name	*Location*	*Status*	*Date Status Determined*
Muller House	1543 Beacon Street	Los Angeles Historic Cultural Monument No. 253	Declared 8/25/1982

Definition 4—Identified as Significant in an Historical Resources Survey

According to Section 15064.5(a)(2) of the CEQA Guidelines, a resource "identified as significant in a historical resource survey meeting the requirements [set forth in] section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant." The requirements set forth in PRC 5024.1(g) for historical resources surveys determine that a resource identified as significant in a historical resource survey may be listed in the California Register if the survey meets all of the following criteria:

1. the survey has been or will be included in the State Historical Resources Inventory;
2. the survey and the survey documentation were prepared in accordance with SHPO procedures and requirements;
3. the resource is evaluated and determined by SHPO to have a significance rating of Category 1 to 5 on DPR Form 523; and
4. if the survey is five or more years old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historical resources that have become eligible or ineligible due to changed circumstances or further documentation and those that have been demolished or altered in a manner that substantially diminishes the significance of the resource.

Table 3.4-6 presents historical resources that were identified in a survey to be significant.

Table 3.4-6. Historical Resources Determined to Be Significant in a Historical Resources Survey

Name	*Location*	*Survey*	*Statement of Significance*
United States Immigration Station (Cannetti's Sea Food Restaurant)	307–311 E. 22nd Street	Fugro West Survey (1997)	"This building may be eligible for listing on the NRHP under Criterion A (events) as the only extant building at the Port designed and used for civilian federal purposes. The building may also be eligible for listing on the NRHP under Criterion C (design); as a good example of the neoclassical

Name	*Location*	*Survey*	*Statement of Significance*
			architectural style."
Transit Shed, Berth 57	Berth 57	Fugro West Survey (1997)	"This building should be regarded as eligible for listing on the NRHP under Criterion A (events) as one of the earliest extant sheds built during the first period of Port expansion." The construction of such a huge building on Pier One indicates the importance of commercial activities in the Outer Harbor in the early years of the Port's development.
Transit Shed, Berth 58–60	Berth 58	Fugro West Survey (1997)	"This building appears to be eligible for individual listing on the NRHP under Criterion A (events). It was one of the first sheds built during the modern era of the Port of LA, and is the oldest known survivor from this period. It also appears to be eligible under Criterion C (design) for its interesting and ambitious use of neoclassical treatments."
American President Lines Terminal	Berth 153	Fugro West Survey (1997)	The 1997 Fugro West survey found the building potentially eligible for listing as a City of Los Angeles Historical-Cultural Monument, when it reached 50 years of age. Constructed in 1953, the building has now passed the age requirement. As an exact restoration of the original building in accordance with original plans of the Harbor Engineer's Office, it is eligible for listing as a Los Angeles Historic Cultural Monument for the importance of the Dollar Steamship Passenger line in the Port's economic and shipping history. It also is important architecturally for its landmark clock tower at the Harbor Main Channel crossing with the Cerritos channel, and West Basin.
Bethlehem Shipyard Historic District (also known as Southwest Marine Historic District)	Berth 240	Southwest Marine EIR, September 2000.	Determined eligible for the NRHP under Criterion A

1

Definition 5—Determined Significant by the Lead Agency

The fifth and final category of historical resources is those that are determined significant by a lead agency. This usually occurs during the CEQA compliance process, such as the preparation of this EIR. According to Section 15064.5(a)(3) of the CEQA Guidelines, "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register (PRC SS5024.1, Title 14 CCR, Section 4852)…"

Table 3.4-7 presents historical resources that were identified in a survey to be significant by the lead agency.

Table 3.4-7. Historical Resources Determined to Be Significant by the Lead Agency

Name	*Location*	*Criteria for Eligibility*
Vincent Thomas Bridge	Route 47 over the Main Channel	Built in 1961–1963, the Vincent Thomas Bridge meets the criteria for eligibility to the NRHP under Criterion C and the California Register under Criterion 3, Design/Construction, as the first major suspension bridge erected in southern California and the first bridge of its kind to be built on pilings. It meets NRHP Criteria Consideration G for having achieved significance within the last 50 years. The bridge promoted a large expansion of facilities on Terminal Island, making possible a direct route across the harbor after more than a century of the Port's existence. Gebhard & Winter included the bridge in their *Architectural Guidebook to Los Angeles* (2003:94).
Federal Breakwater	Outer Harbor	Meets the criteria for eligibility to the NRHP under Criterion A and the California Register under Criterion 1, events, as a significant structure in the transportation history of Los Angeles that led to the creation of a human-made harbor capable of expanding to a world-class port and a major cargo capital of the western hemisphere. (The Federal Breakwater is not located within the federal APE for the proposed Project.)
DWP #3 Building	708 N. Harbor Boulevard	Meets the criteria for eligibility to the California Register under Criterion 1 for its significant contribution to waterfront commercial development at the Port as a building distributing power sufficient for large municipal buildings and waterfront facilities.

Name	*Location*	*Criteria for Eligibility*
Seaman's Church Institute	101 S. Harbor Boulevard	Buildings from a dismantled United States Naval Base were moved to this site in 1925 for the purposes of social outreach to harbor seamen. The buildings meet the criteria for eligibility to the California Register under Criterion 1 as structures associated with the social and community history of the San Pedro community. The resources on the site potentially qualify as a Los Angeles Historic-Cultural Monument for the Institute's missionary efforts to seamen's welfare at the Port.
San Pedro Boat Works	Berth 44	Meets the criteria for eligibility to the California Register under Criterion 1 as the last building and site remaining at the Port associated with the repair, maintenance, and construction of small craft, principally wood boats, for recreation and small scale commercial fishing during the 1930s and the years before World War II.
Duffy's Ferry Landing	At the foot of 5th Street and Berths 84 and 85	May be eligible for the California Register under Criterion 1 as the site of the first ferry service in 1892, connecting Terminal Island to the central San Pedro waterfront. Historic archaeological site may possibly be present.
S.P. Slip No.1	Bounded by Timms' Way and Signal, near Berth 74	Appears eligible for the NRHP under Criterion A and California Register under Criterion 1, events, as the first large mooring facility for Pacific Coast lumber schooners in the early history of the Port of Los Angeles. The Slip now serves as the last remaining harbor anchorage for small scale fishing boats. (S.P. Slip No. 1 is not located in the federal APE for the proposed Project.)
Municipal Wholesale Fish Market	Berths 75 and 76	Appears eligible for listing in the NRHP under Criterion A and the California Register under Criterion 1 for its significant contribution to the fishing industry in San Pedro, as the receiving facility for the huge fish catch shipped from the Port of Los Angeles.
Westway/Pan-American Oil Company Pump House.	Berth 70	Built on Pier No. 1 at Berths 70–71, the Pump House is potentially eligible for listing in the NRHP under Criterion A and the California Register under Criterion 1 for its contribution to the broad patterns of local history through its association with the Pan-American Oil Company. It is also eligible under Criterion B and California Register Criterion 2 for its association with Los Angeles oil magnate Edward J. Doheny, who formed a consortium that constructed the tanks, wharves, and refineries that by 1922 made the Los Angeles Harbor the world's leading oil shipment point. The original large diameter tanks were replaced by smaller diameter tanks. Because of its late Mission Revival architectural style applied to an industrial building, it is eligible for the California Register under Criterion 3.

Name	*Location*	*Criteria for Eligibility*
Fishermen's Cooperative Association (Utro's Restaurant)	Berth 83	The Fisherman's Cooperative (Utro's) is eligible for listing in the California Register under Criterion 1 because after opening in 1951, it was the headquarters structure for the activities of an association of ships' captains who organized to negotiate with the area's fish canneries. The building is significant as a structure illuminating labor-management history at the Port as well as the era of the Port of San Pedro's importance in the local fishing and cannery industries.
Pan American Clipper Terminal	Berth 56	The Pan American Clipper Terminal is eligible for listing in the NRHP under Criterion A and the California Register under Criterion 1 as the last remaining portion of a complex that made a significant contribution to the transportation heritage of the region from 1935-1941 through its association with Pan American Airlines' pioneering long distance and transoceanic flight to China via Manila and later to New Zealand.
Cabrillo Marine Aquarium	3730 Stephen M. White Drive	Built in 1981, the aquarium is considered a historical resource because it was designed by one of southern California's most prominent architects, Frank O. Gehry. Gebhard & Winter included the bridge in their *Architectural Guidebook to Los Angeles* (2003, page 94) and describe the building as follows: "A pipe framework, open in part and covered in other areas by chain-link fencing, provides an introduction to a series of separate enclosed pavilions. Each pavilion is sheathed in corrugated metal and stucco." Enough time has passed to understand the significance of Gehry's early designs, and therefore, the Cabrillo Marine Aquarium is eligible for the California Register under Criterion 3.

3.4.3 Applicable Regulations

3.4.3.1 Federal Regulations

3.4.3.1.1 Archaeological and Historical Architectural Resources

Cultural resources that may be present in the proposed project area could include some or all of the following types of resources, which would be considered under the appropriate regulations:

- historic properties,
- Native American cultural items,

- Native American sacred sites,
- archaeological sites, and
- other cultural resources.

Archaeological and architectural resources (buildings and structures) are protected through NHPA of 1966 (16 USC 470f) and its implementing regulation, Protection of Historic Properties (36 CFR Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act (ARPA) of 1979 (16 USC §§ 469-469c). ARPA describes the requirements that must be met before federal authorities can issue a permit to excavate or remove any archaeological resource on federal or Native American lands. Requirements for curation of artifacts, other materials excavated or removed, and the records related to the artifacts and materials are described. The act provides detailed descriptions of prohibited activities including damage, defacement, and unpermitted excavation or removal of cultural resources on federal lands. Selling, purchasing, and other trafficking activities of cultural resources either within the United States or internationally is prohibited. ARPA also identifies stiff penalties that can be levied against convicted violators.

3.4.3.1.2 Section 106 of the National Historic Preservation Act

Section 106 of NHPA as amended (Section 106, 16 USC 470f) requires that impacts on significant cultural resources, hereafter called historic properties, be taken into consideration in any federal undertaking. "Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (National Register) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization that meet the National Register criteria" [36 CFR §800.16(l)].

The federal significance of an archaeological site or an architectural structure is defined in the NHPA implementing regulations (36 CFR §60.4). These criteria state that a resource must be at least 50 years old and meet one or more of the following:

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> A. is associated with events that have made a significant contribution to the broad patterns of history;
>
> B. is associated with the lives of persons significant in the past;
>
> C. embodies the distinctive characteristics of a type, period, or method of construction, represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or

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

If a particular resource meets one of these criteria, it is considered as an eligible historic property for listing in the NRHP.

Section 106 requires applicants to afford the Advisory Council on Historic Preservation (ACHP) and SHPO a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the NRHP. Section 101(d)(6)(A) of the NHPA allows properties of traditional religious and cultural importance to a Native American tribe to be determined eligible for inclusion in the NRHP. Under the NHPA, a find is significant if it meets the NRHP criteria listed in Title 36 CFR 60.4.

If a federal permit of any kind were needed, the NHPA and its implementing regulations (16 USC 470 et seq., 36 CFR 800, 36 CFR 60, and 36 CFR 63) would apply. The NHPA establishes the federal government policy on historic preservation and the programs, including the NRHP, through which this policy is implemented. Under the NHPA, historic properties include "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" (16 USC 470w [5]).

Cultural resources studies for the proposed Project are subject to the procedures of and review of LAHD and the USACE in consultation with SHPO. These studies are shaped by ACHP regulations (36 CFR Part 800) for implementing Section 106. Section 106 studies provide the information necessary to satisfy legal requirements for environmental documents under NEPA. The SHPO acts as a coordinator in the Section 106 process, but the final responsibility to carry out this regulation belongs to the USACE, the designated lead federal agency.

To comply with Section 106 of NHPA, any effects of the proposed undertaking on properties listed in or determined eligible for inclusion in NRHP must be analyzed by applying the Criteria of Adverse Effect [36 CFR Part 800.5(a)], as follows:

> An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.
>
> Adverse effects on historic properties include, but are not limited to:
>
> (i) Physical destruction of or damage to all or part of the property;
>
> (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;

(iii) Removal of the property from its historic location;

(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;

(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

3.4.3.1.3 Ethnographic Resources

As prehistoric archaeological sites, artifacts, and human remains are considered important components of contemporary Native American heritage, two federal statutes apply. The American Indian Religious Freedom Act of 1978 (AIRFA) (42 USC §§ 1996-1996a) requires that locations identified as central to Native American religious practice be protected. The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 USC §§ 3001-3013) requires that prehistoric human remains and burial-related artifacts of individuals recovered during ground disturbances be provided to those contemporary Native Americans who are recognized as descendants.

3.4.3.1.4 Paleontological Resources

There is no federal legislation designed specifically for the management and protection of paleontological resources on non-federal lands.

3.4.3.2 State Regulations

3.4.3.2.1 Archaeological and Historical Architectural Resources

According to CEQA (PRC Section 21084.1), historical resources include any resource listed, or determined to be eligible for listing, in the California Register. Properties listed in or determined eligible for listing in the NRHP, such as those identified in the Section 106 process, are automatically listed in the California Register. Therefore, all "historic properties" under federal preservation law are automatically "historical resources" under state preservation law. Historical resources are also presumed to be significant if they are included in a local register of historical resources (e.g., City of Los Angeles Historic-Cultural Monuments) or identified as significant in a qualified historical resource survey. Section 15064.5 of

the CEQA Guidelines sets forth the criteria and procedures for determining significant historical resources, and the potential effects of a project on such resources.

Section 15064.5 of the CEQA Guidelines sets forth the criteria and procedures for determining significant historical resources and the potential effects of a project on such resources. Generally, a resource is considered by the lead state agency to be "historically significant" if the resource meets any of the criteria for listing on the California Register, including the following:

- the resource is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- the resource is associated with the lives of persons important in our past;
- the resource embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values; or
- the resource has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if an archaeological resource does not fall within the definition of a historical resource, but does meet the definition of a "unique archaeological resource" (PRC 21083.2), then the site must be treated in accordance with the special provisions for such resources. An archaeological resource is *unique* if it:

- is associated with an event or person of recognized significance in California or American history or recognized scientific importance in prehistory;
- can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
- has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind.

State CEQA Guidelines Section 15064.5(b)(1) and (2) identifies the threshold for a significant impact on a historical resource as the potential to cause a substantial adverse change in the significance of a historical resource. That means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. The significance of a historical resource is materially impaired when a project results in the following:

- demolition or material alteration in an adverse manner of those physical characteristics of a historical resource that convey its historical significance and justify its inclusion in, or eligibility for inclusion in, the California Register;
- demolition or material alteration in an adverse manner of those physical characteristics that account for its inclusion in a local register of historical resources pursuant to PRC Section 5020.1(k) or its identification in a historical resources survey meeting the requirements of PRC Section 5024.1(g), unless the

public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

- demolition or material alteration in an adverse manner of those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

3.4.3.2.2 Native American Human Remains

The disposition of Native American burials is governed by Section 7050.5 of the California Health and Safety Code, and PRC Sections 5097.94 and 5097.98, and falls within the jurisdiction of the Native American Heritage Commission (NAHC). Section 7052 of the Health and Safety Code establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

Penal Code Section 622.5 provides misdemeanor penalties for injuring or destroying objects of historical or archaeological interest located on public or private lands, but specifically excludes the landowner. PRC Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological or historical resources located on public lands.

3.4.3.2.3 Paleontological Resources

California PRC Section 5097.5 prohibits excavation or removal of any "vertebrate paleontological site or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands." PRC Section 30244 requires reasonable mitigation of adverse impacts on paleontological resources from development on public land. Penal Code Section 623 spells out regulations for the protection of caves, including their natural, cultural, and paleontological contents. It specifies that no "material" (including all or any part of any paleontological item) be removed from any natural geologically formed cavity or cave.

3.4.3.3 Local Regulations

3.4.3.3.1 Archaeology and Historical Architectural Resources

City guidelines for the protection of archeological resources are set forth in Section 3 of the City of Los Angeles General Plan Conservation Element, which, in addition to compliance with CEQA, requires the identification and protection of archaeological sites and artifacts as a part of local development permit processing.

Specifically, LAMC Section 91.106.4.5 states that the Building Department "shall not issue a permit to demolish, alter or remove a building or structure of historical,

archaeological or architectural consequence if such building or structure has been officially designated, or has been determined by state or federal action to be eligible for designation, on the National Register of Historic Places, or has been included on the City of Los Angeles list of historic cultural monuments, without the department having first determined whether the demolition, alteration or removal may result in the loss of or serious damage to a significant historical or cultural asset. If the department determines that such loss or damage may occur, the applicant shall file an application and pay all fees for the California Environmental Quality Act Initial Study and Check List, as specified in Section 19.05 of the Los Angeles Municipal Code. If the Initial Study and Check List identifies the historical or cultural asset as significant, the permit shall not be issued without the department first finding that specific economic, social or other considerations make infeasible the preservation of the building or structure."

Five types of historic protection designations apply in the city: (1) Historic-Cultural Monument designation by the Los Angeles Cultural Heritage Commission and approved by the City Council; (2) placement on the California Register ; (3) placement on NHRP (1980 NHPA); (4) designation by the Community Redevelopment Agency as being of cultural or historical significance within a designated redevelopment area; and (5) classification by the City Council (recommended by the planning commission) as an HPOZ These designations help protect structures and support rehabilitation fund requests (City of Los Angeles 2001).

The Los Angeles Cultural Heritage Commission was established by ordinance in 1962 to protect and/or identify architectural, historical, and cultural buildings, structures, and sites of importance in the city's history and/or cultural heritage. The Los Angeles Cultural Heritage Commission has designated over 700 sites as Historic-Cultural Monuments, including historic buildings, corridors (tree-lined streets), and geographic areas. Historical resources may also include resources listed in the State Historic Resources Inventory as significant at the local level or higher, and those evaluated as potentially significant in a survey or other professional evaluation (City of Los Angeles 2001). The HPOZ provision of the zone code, LAMC Section 12.20.3, was adopted in 1979, and was amended in 2001. It contains procedures for designation and protection of areas that have structures, natural features, or sites of historic, architectural, cultural, or aesthetic significance. HPOZ areas contain significant examples of architectural styles characteristic of different periods in the city's history. No area within the Port has been designated as part of an HPOZ (City of Los Angeles 2001).

The significance of a historical resource is also based on (1) whether the site has been coded by the Department of Building and Safety with a Zoning Instruction number in the 145 series (indicating prior identification of the property as historic); (2) whether the resource has been classified as historic in a historical resources survey conducted as part of the updating of the Community Plan, the adoption of a redevelopment area, or other planning project; (3) whether the resource is subject to other federal, state, or local preservation guidelines; (4) whether the resource has a known association with an architect, master builder or person or event important in history such that the resource may be of exceptional importance; and (5) whether the resource is over

50 years old and a substantially intact example of an architectural style significant in Los Angeles (City of Los Angeles 2006).

The City of Los Angeles CEQA guidelines (City of Los Angeles 2006) criteria for historical architectural resources are provided below.

City of Los Angeles Historic-Cultural Monument Designation

In the City of Los Angeles, resources may be designated as Historic-Cultural Monuments under LAMC Sections 22.120, et seq. An historical or cultural monument is defined as:

"Any site (including significant trees or other plant life located thereon), building or structure of particular historic or cultural significance to the City of Los Angeles, such as historic structures or sites in which the broad cultural, political, economic or social history of the nation, state or community is reflected or exemplified, or which are identified with historic personages or with important events in the main currents of national, state or local history, or which embody the distinguishing characteristics of an architectural-type specimen, inherently valuable for a study of a period style or method of construction, or a notable work of a master builder, designer, or architect whose individual genius influenced his age."

City of Los Angeles Historic Preservation Overlay Zones (HPOZs)

HPOZs are essentially locally designated historic districts or groupings of historical resources. As defined in §12.20.3.B.17 of the LAMC, a *Preservation Zone* is "any area of the City of Los Angeles containing buildings, structures, landscaping, natural features, or lots having historic, architectural, cultural, or aesthetic significance and designated as a Historic Preservation Overlay Zone under the provisions of this section." Subsection 12.20.3 of the LAMC, which establishes the regulations that apply to HPOZs, requires that a historical resources survey be prepared, identifying all contributing and noncontributing elements.

Under the HPOZ ordinance (LAMC Section 12.20.3.), to be significant, structures, natural features, or sites within the involved area or the area as a whole would meet one or more of the following criteria:

(A) have substantial value as part of the development, heritage, or cultural characteristics of, or is associated with the life of a person important in the history of the city, state, or nation;

(B) are associated with an event that has made a substantial contribution to the broad patterns of our history;

(C) are constructed in a distinctive architectural style characteristic of an era of history;

(D) embody those distinguishing characteristics of an architectural type or engineering specimen;

(E) are the work of an architect or designer who has substantially influenced the development of the City;

(F) contain elements of design, details, materials or craftsmanship which represent an important innovation;

(G) are part of or related to a square, park or other distinctive area and should be developed or preserved according to a plan based on a historic, cultural, architectural or aesthetic motif;

(H) owing to its unique location or singular physical characteristics, represent an established feature of the neighborhood, community or City; or

(I) retaining the structure would help preserve and protect a historic place or area of historic interest in the City.

A contributor is "any building, structure, landscaping, [or] natural feature identified on the Historic Resources Survey as contributing to the historic significance of the Historic Preservation Overlay Zone, including a building or structure which has been altered, where the nature and extent of the alterations are determined reversible by the Historic Resources Survey" (LAMC §12.20.3 B.6). To be contributing, a building, structure, landscaping, or natural feature will meet one or more of the following criteria set forth in subsection 12.20.3 F.3(c)(1)-(3) of the LAMC:

1. adds to the historic architectural qualities or historic associations for which a property is significant because it was present during the period of significance, and possesses historic integrity reflecting its character at that time.
2. owing to its unique location or singular physical characteristics, [it] represents an established feature of the neighborhood, community, or city.
3. retaining the building, structure, landscaping, or natural feature, would contribute to the preservation and protection of a historic place or area of historic interest in the City.

The *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006) sets forth specific thresholds to be used in determining the significance of cultural resource impacts. These thresholds are grouped under three topics: paleontological resources, archaeological resources, and historical resources. In accordance with the *L.A. CEQA Thresholds Guide*:

- A project will have a significant impact on paleontological resources if it results in the permanent loss of, or loss of access to, a paleontological resource of regional or statewide significance.
- An impact on archaeological resources will be considered significant if it would disturb, damage, or degrade an archaeological resource or its setting that is found to be important under the criteria of CEQA because it:
    1. is associated with an event or person of recognized importance in California or American history or of recognized scientific importance in prehistory;

2. can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions;
3. has a special or particular quality, such as the oldest, best, largest, or last surviving example of its kind;
4. is at least 100 years old and possesses substantial stratigraphic integrity; or
5. involves important research questions that historical research has shown can be answered only with archaeological methods.

- An impact on historical architectural resources will be considered significant if it would result in a substantial adverse change that would impair the significance of a historical resource that is found to be important because it:
  1. is associated with an event or person of recognized importance in California or American history;
  2. has associations with an architect, master builder, or person or event important in history such that the resource may be of exceptional importance; or
  3. is over 50 years old and is a substantially intact example of an architectural style significant in Los Angeles;
- A substantial adverse change in significance would occur if the project involves:
  1. demolition of a significant resource;
  2. relocation that does not maintain the integrity and significance of a significant resource;
  3. conversion, rehabilitation, or alteration that does not conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; or
  4. construction that reduces the integrity or significance of important resources on the site or in the vicinity.

3.4.3.3.2 Ethnographic Resources

Relative to ethnographic resources, the *L.A. CEQA Thresholds Guide* (2006) states: "Consider compliance with guidelines and regulations such as the California Public Resources Code." No specific local regulations mandating the protection of ethnographic resources exist.

3.4.3.3.3 Paleontological Resources

City guidelines for the protection of paleontological resources are specified in Section 3 of the City of Los Angeles General Plan Conservation Element. The policy requires that the City's paleontological resources be protected for research and/or educational purposes. It mandates the identification and protection of significant

paleontological sites and/or resources known to exist or that are identified during land development, demolition, or property modification activities.

3.4.4 Impacts and Mitigation Measures

3.4.4.1 Methodology

Impacts on cultural resources from the proposed Project and alternatives were evaluated by determining whether demolition or ground disturbance activities would affect areas that contain or could contain any archaeological or historical sites listed in or eligible for listing in the NRHP or the California Register, or that are designated as a City of Los Angeles Historic-Cultural Monument, or that are included within a City of Los Angeles HPOZ, or that are otherwise considered a unique or important archaeological resource under CEQA (City of Los Angeles 2006).

3.4.4.2 Thresholds of Significance

Thresholds of significance for cultural resources, as described below, are developed from both federal (Section 106 of the NHPA) and state (CEQA) regulations. These two sets of regulations overlap in terms of known prehistoric and historic archaeological resources, unknown prehistoric and historic archaeological resources, and in terms of historical architectural resources. Because of this overlap, thresholds for adverse effects (federal) or impacts (state) on known archaeological resources, unknown archaeological resources, and historical architectural resources are numbered in both cases CR-1, CR-2, and CR-3 respectively. This allows for a streamlined discussion of impacts. Paleontological resources are protected only under state regulations, and therefore, this threshold is numbered CR-4.

3.4.4.2.1 CEQA Criteria

CR-1: An impact on known prehistoric and/or historic archaeological resources will be considered significant if it would result in a substantial adverse change that would impair the significance of a known prehistoric and/or historic archaeological resource.

CR-2: An impact on unknown prehistoric and/or historic archaeological resources will be considered significant if it would result in a substantial adverse change that would impair the significance of an unknown prehistoric and/or historic archaeological resource:

An impact on prehistoric and/or historic archaeological resources will be considered significant if:

- it would disturb, damage, or degrade an archaeological resource or its setting that is found to be a historical resource for the purposes of CEQA because it:
  - is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
  - is associated with the lives of persons important in our past;
  - embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values; or
  - has yielded, or may be likely to yield, information important in prehistory or history.
- or the resource is determined to be a unique archaeological resource because it:
  - is associated with an event or person of recognized significance in California or American history or recognized scientific importance in prehistory;
  - can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions; or
  - has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind.

CR-3: An impact on historical architectural resources will be considered significant if it would result in a substantial adverse change that would impair the significance of a historical resource that is found to be important because it:

- is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- is associated with the lives of persons important in our past; or
- embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values.

PRC Section 5020.1 establishes the threshold of "substantial adverse change" as demolition, destruction, relocation, or alteration activities that would impair the significance of the historic resource. Properties listed in or determined eligible for the NRHP, such as those identified in the Section 106 process, are automatically placed on the California Register (PRC 5024.1.) Properties are eligible for placement on the Los Angeles Historic-Cultural Monument List if they have similar associative and architectural criteria and are significant in the City's cultural and architectural history (City of Los Angeles 2006).

CR-4: A project will have a significant impact on paleontological resources if it results in the permanent loss of, or loss of access to, a paleontological resource of regional or statewide significance (City of Los Angeles 2006).

3.4.4.2.2 NEPA Criteria

CR-1: An adverse effect on known prehistoric and/or historic archaeological resources will be considered significant if it would alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP.

CR-2: An adverse effect on unknown prehistoric and/or historic archaeological resources will be considered significant if it would alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP.

CR-3: An adverse effect on historical architectural resources will be considered significant if it would alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP.

An adverse effect is found on cultural resources when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP because it:

- is associated with events that have made a significant contribution to the broad patterns of history;
- is associated with the lives of persons significant in the past;
- embodies the distinctive characteristics of a type, period, or method of construction, represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or
- has yielded, or may be likely to yield, information important in prehistory or history.

3.4.4.3 Impacts and Mitigation

3.4.4.3.1 Proposed Project

Impact CR-1: Construction of the proposed Project would not disturb, damage, or degrade known prehistoric and historic archaeological resources.

Grading, trenching, and other ground-disturbing actions have the potential to damage or destroy known, previously recorded prehistoric or historic archaeological sites, including human remains, within the proposed project area.

CEQA Impact Determination

According to the records search, no known prehistoric or historic archaeological sites are located in the proposed project area. However, construction of the proposed Project would potentially result in impacts adjacent sites and Mexican Hollywood, a non-listed historic archaeological site.

CA-LAN-145 and CA-LAN-146

In addition, two prehistoric archaeological sites, CA-LAN 145 and CA- LAN 146, are located adjacent to the proposed project area. At the time of recordation, the location of CA-LAN-146 was described in relation to land formations and portions of the built environment, both of which have been significantly altered by construction projects over the past century. In addition, there is the possibility that both CA-LAN-145 and CA-LAN-146 may have been fossil shell localities instead of archaeological sites. This is especially true in the case of CA-LAN-146, which may correspond to Arnold's (1903) lumberyard paleontological site (Knudson 1982). Archaeological and Native American mitigation monitoring efforts were conducted by Jones & Stokes and Mr. Anthony Morales, a representative of the Gabrieliño/Tongva tribe from January 2005–September 2005 and April 2007–present for the Waterfront Gateway Development Project within the vicinity of CA-LAN-146. This monitoring effort has not resulted in the identification of subsurface evidence of the site. Construction of the proposed Project would potentially result in significant impacts on this site.

CA-LAN-1129H

CA-LAN-1129H is described as the basal remains of a dump, railroad fill, and bulkheads, and railroad trestle built and/or used by the U.S. Army between 1918 and 1938 (Knudson 1983a). This site was located adjacent to the proposed project area and within Lower Fort MacArthur. An archaeological testing program was undertaken for CA-LAN-1129H by Woodward-Clyde for the Port of Los Angeles under stipulations of a permit from the USACE in preparation of an EIR for the West Channel Cabrillo Beach Recreational Complex (Knudson 1983b). The testing program indicated that none of the archaeological resources appeared to be eligible for listing to the NRHP or California Register due to lack of data potential and a lack of integrity (Knudson 1983b), and CA-LAN-1129H was subsequently destroyed during construction of the West Channel Cabrillo Beach Recreational Complex. Therefore, no additional work is recommended regarding CA-LAN-1129H.

Mexican Hollywood

While not a listed site, recent work by ICF Jones & Stokes on the Waterfront Gateway Development Project has resulted in the identification of intact deposits associated with Mexican Hollywood (Jones & Stokes) in the vicinity of the Inner Harbor (Berths 91–93). "El Barrio," or "Mexican Hollywood" as it came to be known, existed on a 5-acre parcel at Berths 90 and 91, now occupied by the Cruise Center on the Main Channel of the harbor, just north of O'Farrell Street. El Barrio, which was developed around 1922, sustained up to 80 homes and approximately 400

residents at its peak. In 1952, the residents were removed from the area, and their homes were destroyed (Coulter 1985). This site appears to be eligible for listing in the California Register and therefore, impacts would be significant. Construction of the proposed Project would potentially result in significant impacts on this site.

Summary

Construction of the proposed Project would result in significant impacts that would potentially damage or destroy Mexican Hollywood. Implementation of Mitigation Measures MM CR-1 and MM CR-2 would reduce impacts to less-than-significant levels. Additionally, construction of the proposed Project would potentially result in damage or destruction to two prehistoric archaeological sites CA-LAN 145 and CA-LAN 146 located adjacent to the proposed project area. The potential to encounter either prehistoric site would be significant impact; therefore, implementation of Mitigation Measure MM CR-3 would reduce impacts to less-than-significant levels.

Mitigation Measures

MM CR-1: Generate treatment plan and conduct archaeological testing for Mexican Hollywood prior to construction. Potential additional intact, subsurface historic archaeological deposits associated with Mexican Hollywood should be characterized and evaluated for eligibility for inclusion in the California Register by a qualified archaeologist. A testing plan will be developed that will describe evaluation methods for determining the eligibility of new finds in Mexican Hollywood for listing in the California Register. Should the identification and evaluation efforts reveal that newly identified deposits do not meet the criteria for inclusion in the California Register, no further mitigation would be required. However, if newly discovered portions of Mexican Hollywood are determined eligible for listing in the California Register, implementation of Mitigation Measures MM CR-2a and/or MM CR-2b will reduce impacts to less-than-significant levels.

MM CR-2a: If additional California Register–eligible deposits associated with Mexican Hollywood are identified, redesign project to ensure preservation in place. If identification and evaluation efforts result in the determination that Mexican Hollywood meets the criteria for inclusion in the California Register, efforts will be made to avoid these deposits during project development and preserve them in place, which is the preferred mitigation measure under CEQA. Options for preservation in place include, but are not limited to, incorporating the site into park or open space land, avoiding the site during construction, burying the site with sterile sediment, or placing the site within a permanent conservation easement. If preservation in place is not feasible, conduct data recovery as defined in Mitigation Measure MM CR-2b below.

MM CR-2b: Conduct Data Recovery. If avoidance or redesign of the proposed Project is not feasible, then research and fieldwork to recover and analyze the data contained in that site will be conducted. This work may involve additional archival and historical research; excavation; analysis of the artifacts, features, and other data discovered; presentation of the results in a technical report; and curation of the

recovered artifacts and accompanying data. Consultation with ACHP, SHPO, and other interested or knowledgeable parties may also be required or appropriate.

A standard data recovery report will be prepared when all the fieldwork is concluded. The consultant will prepare a comprehensive technical report that will describe the archaeological project's goals and methods, as well as present the project's findings and interpretations. The report will synthesize both the archival research and important archaeological data in an attempt to address the research questions presented in the research design/testing plan. The report will be submitted to the client and any reviewing agencies, and it ultimately will be filed with the Eastern Information Center, located at California State University, Fullerton. The final data recovery report will include the following elements:

- executive summary;
- statement of scope, including proposed project location and setting;
- background contexts or summaries;
- summary of previous research, historical and archaeological;
- research goals and themes;
- field and laboratory methodologies;
- description of recovered materials;
- findings and interpretations, referencing research goals;
- conclusions;
- references cited; and
- appendices such as artifact catalogs, special studies, and other information relevant to the proposed project and findings.

MM CR-3: Monitor ground disturbance in the vicinity of known archaeological sites CA-LAN-145 and CA-LAN-146. Archaeological and Native American monitoring will be conducted during ground-disturbing activities within the vicinity of CA-LAN-145 and CA-LAN-146. In addition:

- An archaeological monitoring plan will be generated in accordance with professional standards. The plan will be generated by an archaeologist who meets the Secretary of Interior's Standards for education, training, and experience.
- The archaeological monitor will ensure that any portions of previously identified significant resources exposed during construction are avoided and protected. In addition, the monitor will determine whether any previously unknown historical resources are uncovered as a result of construction activities. If potentially important historical resources are discovered, the archaeological monitor will immediately ask the Construction Manager to divert construction activity within 100 feet of the find and report the discovery so that appropriate notifications can be issued and treatment measures planned and implemented.

- Upon completion of the monitoring, a final archaeological monitoring report will be prepared for LAHD in accordance with professional standards.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

No prehistoric or historic archaeological resources have been previously recorded within the federal APE. Because a majority of the shoreline was constructed of imported fill dating from the late nineteenth through the twentieth century, there is limited potential to encounter previously unidentified, subsurface deposits in the APE. However, one historical archaeological resource, Mexican Hollywood, has been recently found within the federal APE. This resource has been analyzed adequately under the CEQA discussion above. This historic neighborhood located in the vicinity of the Inner Harbor would potentially be disturbed by construction associated with the Inner Harbor parking structure, which is an indirect impact under federal jurisdiction. Therefore, the proposed Project would result in significant impacts on known archaeological resources for the purposes of NEPA.

Mitigation Measures

Implement Mitigation Measures MM-CR-1, MM-CR-2a, and MM-CR-2b, as described above.

Residual Impacts

Impacts would be less than significant.

Impact CR-2: Construction of the proposed Project would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.

Buried cultural resources that were not identified during field surveys, potentially including human remains, could be inadvertently unearthed during ground-disturbing activities, which would potentially result in the demolition or substantial damage to significant cultural resources. In addition, submerged sites could also be located during dredging activities. However, the potential for underwater resources is considered to be low due to the disturbed nature of the harbor from previous dredging.

CEQA Impact Determination

Under the proposed Project, the following project elements would be built:

Elements: Proposed Project	*Prehistoric Sensitivity*	*Historic Archaeological Sensitivity*

Elements: Proposed Project	*Prehistoric Sensitivity*	*Historic Archaeological Sensitivity*
Harbors, Promenade and Open Space	----	---
North Harbor	Moderate	Low
Downtown Harbor	Moderate	Low
7th Street Harbor and Pier	Moderate	Low
Town Square	Low	Low
Downtown Civic Fountain	Low	Low
John S. Gibson Jr. Park	Low	Low
Waterfront Promenade	Low	Low
Pedestrian and waterfront access linkages	Moderate (at 13th Street)	Low
Fishermen's Park	Low	Low
Outer Harbor Park	Low	Low
Expanded 22nd Street Landing Park	Low	Low
Reuse of Warehouse Nos. 9 and 10	None*	None
Cruise Ship Facilities	----	----
Berths, terminal and parking: Berths 45–47 and 49–50	Low	Low
Inner Harbor parking: Berths 91–93	Low	High. Potential for California Register-eligible deposits associated with Mexican Hollywood
Outer Harbor parking	Low	Low
New Development and Existing Tenants	----	----
Ports O'Call redevelopment & parking elements	Low	Low
SP Railyard demolition	Low	Low
Waterfront Red Car Maintenance Facility	Low	Low
Ralph J. Scott Fireboat Museum	Low	Low
Demolition of Westway Terminal	Low	Low
Tugboats	None*	Low

Elements: Proposed Project	*Prehistoric Sensitivity*	*Historic Archaeological Sensitivity*
Los Angeles Maritime Institute	None*	Low
S.S. Lane Victory	Low	Low
Jankovich fueling station	Low	Low
Mike's fueling station	Low	Low
Catalina Express	None*	Low
Transportation Improvements	----	----
Expansion of Sampson Way	Low	Low
7th Street/Sampson Way intersection improvements	Low	Low
Harbor Boulevard	Moderate LAN-145 @ 15th Street	Low
Surface Parking adjacent to Acapulco restaurant	Low	Low
Waterfront Red Car extension	Low	Low
Dredge and fill activities	Low	Low
Note: *If proposed project activities are limited to building alterations and do not involve ground disturbance		

Buried cultural resources that were not identified during field surveys could be inadvertently unearthed during ground-disturbing activities associated with construction. Because of the high potential to encounter unknown significant historic cultural resources in the Inner Harbor parking area, this impact would be significant. To avoid or reduce impacts on buried or otherwise unidentified cultural resources, implement Mitigation Measure MM CR-4.

Mitigation Measures

MM CR-4: Stop work if cultural resources are discovered during ground-disturbing activities. In the event that any artifact or an unusual amount of bone, shell, or non-native stone is encountered during construction, work will be immediately stopped and relocated from that area. The contractor will stop construction within 100 feet of the exposure of these finds until a qualified archaeologist**,** retained by LAHD in advance of construction, can be contacted to evaluate the find (see 36 CFR 800.11.1 and pertinent CEQA regulations). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology such as obsidian or fused shale; trash pits containing bottles and/or ceramics; or structural remains. If

the resources are found to be significant, they will be avoided or will be mitigated consistent with SHPO guidelines. All construction equipment operators will attend a pre-construction meeting presented by a professional archaeologist retained by LAHD to review types of cultural resources and artifacts that would be considered potentially significant, to ensure operator recognition of these materials during construction.

If human remains are encountered, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Los Angeles County Coroner will be contacted to determine the age and cause of death. If the remains are not of Native American heritage, construction in the area may recommence. If the remains are of Native American origin, the most likely descendants of the deceased will be identified by the NAHC. LAHD and the USACE will consult with the Native American most likely descendant(s) to identify a mutually acceptable strategy for treating and disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. If the NAHC is unable to identify a most likely descendant; if the descendant fails to make a recommendation within 24 hours of being notified by the NAHC, LAHD, or the USACE; and if the descendant is not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods will be reburied with appropriate dignity on the proposed project site in a location not subject to further subsurface disturbance.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

No prehistoric or historic archaeological resources have been previously recorded within the federal APE. Because a majority of the shoreline was constructed of imported fill dating from the late nineteenth through the twentieth centuries, there is little potential to encounter previously unidentified subsurface deposits in the APE. Therefore, there would be less-than-significant impacts on archaeological resources for the purposes of NEPA. However, because there is always the potential to encounter previously unidentified archaeological resources, implementation of Mitigation Measure MM CR-4 would ensure that impacts remain less than significant.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

Impact CR-3: The proposed Project would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.

The following eight properties located in the federal APE are listed in or determined eligible for the NRHP, the California Register, and the Los Angeles Historic-Cultural Monument List.

- **S.S. Lane Victory (Berth 94).** The proposed Project involves relocation of the S.S. Lane Victory from Berth 94 to the North Harbor water cut. A new building up to 10,000-square-feet would be constructed in the North Harbor area to support the S.S. Lane Victory visitors' center, and the lease would be renewed for this operation. No impact would occur.
- **Ralph J. Scott Fireboat Museum (Berth 85).** The Ralph J. Scott Fireboat Museum would comprise an approximately 10,000-square-foot site within a multilevel display structure that would be approximately 50 feet high. The proposed structure would be built on the south side of existing Fire Station #112 and would be incorporated into the existing pile-supported plaza. Portions of the existing plaza structure may be removed to construct the museum's pile-supported foundation. No impact would occur.
- **Municipal Warehouse No. 1.** The proposed Project includes a new public pile-supported promenade along the eastern side of City Dock No. 1. This new walkway would provide public access to the waterfront. No impact would occur.
- **Vincent Thomas Bridge.** The Vincent Thomas Bridge is not proposed for any alteration or modification. No impact would occur.
- **Municipal Ferry Building/Los Angeles Maritime Museum.** The proposed Project would have an indirect impact on the Municipal Ferry Building/Los Angeles Maritime Museum, an NRHP-eligible property, because the proximity of the new landside promenade would be directly adjacent to the northeast and southeast corners of the museum. In addition, new water would be constructed more than 50 feet to the north (Downtown Harbor water cut) and approximately 75 feet to the south (7th Street Harbor water cut) of the museum building. This would change the existing adjacent setting north and south of the museum but would not result in a direct impact. These indirect impacts would not constitute a substantial adverse change that would affect the significance of the resources; therefore, impacts would be less than significant.
- **Westway Terminal/Pan American Oil Co. Pump House.** The proposed Project includes the demolition of the 14.3-acre Westway Liquid Bulk Marine Terminal at Berths 70–71. The Westway Terminal has historically operated as a liquid bulk terminal, handling and storing a variety of petroleum chemical commodities with a capacity to store approximately 29,391,000 gallons and 699,786 barrels of liquid bulk materials. Materials are typically received by waterborne vessels and rail cars, and depart the facilities by rail cars and trucks.

Westway currently uses the SP Railyard, which is proposed for removal under the proposed Project. The proposed Project would demolish the tanks and equipment on the Westway Terminal site, but would maintain the historic Pump House. This would not be an impact since it appears that existing tanks are replacements for historic tanks and are not considered significant historic resources. There would be an indirect impact on the Pump House since the removal of the tanks would change the historic context and setting of the Pump House. However, these indirect impacts would not constitute a substantial adverse change that would affect the significance of the resources; therefore, impacts would be less than significant.

- **Municipal Wholesale Fish Market.** The proposed Project would have an indirect impact on the Municipal Wholesale Fish Market, an NRHP-eligible property, since the proximity of the new landside promenade, approximately 15 feet from the west elevation of the truck loading area, could impair vehicular circulation to the market. This indirect impact would not constitute a substantial adverse change that would affect the significance of the resources; therefore, impacts would be less than significant.

- **Bethlehem Shipyard Historic District.** The proposed construction of the Berth 240 Marine Fuel Facility within the boundary of the historic district is compatible in use with the district's industrial character. New tanks, equipment, and infrastructure would be built for the proposed fuel facility. The compressor building would be demolished, but this would not constitute an adverse effect since it is a non-contributor to the district. The proposed fuel facility equipment and infrastructure would be low in profile and would not block views to any district contributors. The four proposed fuel facility tanks would be 25 feet in diameter and would be located on an open, currently undeveloped portion of the district. The tanks would be located to the west of the contributing administration building, where public views from Ports O'Call are currently blocked by the existing Exxon Mobil site. The tanks would not block public views to the administration building from Ports O'Call east of the Exxon Mobil site. Therefore, the proposed fuel facility would constitute an effect because it would be constructed within the district boundary, but it would not be adverse under example (v), introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features, or any other criteria. The Berth 240 fueling station would be developed on vacant land and would not affect any of the contributing resources. Impacts to this historic district would be less than significant because the proposed Berth 240 fueling station would be compatible with the district's industrial character.

The following impacts would occur for properties that are determined eligible for the California Register and/or are Los Angeles City Historic Cultural Monuments:

- **U.S. Post Office.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.

- **Los Angeles Harbor Light Station/Angels Gate Lighthouse.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.

- **Warner Grand Theater/Juarez Theater.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **Casa de San Pedro (Hide House).** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **Liberty Hill Site.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **Cabrillo Beach Bath House.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **YMCA/Harbor View House.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **U.S.S. Los Angeles Naval Monument.** The proposed Project includes landscaping improvements to John S. Gibson Jr. Park, in which this monument is located. No significant impact would occur on the monument resource from these improvements unless the landscaping impedes access to the monument.
- **Vinegar Hill HPOZ.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **Danish Castle.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **Residential Home.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **Timms' Point and Landing Plaque.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **Muller House.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.

The following impacts would occur for properties that have been determined to be significant in a historical resources survey.

- **U.S. Immigration Station.** The proposed Project would not impact the U.S. Immigration Station due to its distance from new public land-side promenades proposed at City Dock No. 1.
- **Transit Shed Berth 57.** The proposed Project would have an indirect impact on Transit Shed Berth 57since the promenade proposed at City Dock No. 1 would affect warehouse access from the water to the loading dock area of the Transit Shed. This indirect impact would not constitute a substantial adverse effect to a historic resource. Therefore, impacts would be less than significant.
- **Transit Shed Berths 58–60.** The proposed Project would have an indirect impact on Transit Shed Berth 58–60 since new land-side promenades would be

constructed adjacent to the resource proposed at City Dock No. 1. This indirect impact would not constitute a substantial adverse effect to a historic resource. Therefore, impacts would be less than significant.

- **American President Lines Terminal.** The proposed Project would not affect this resource since the terminal is located on the north side of Terminal Island in the Turning Basin, outside of the proposed project area.

The following impacts are described for properties that have been determined to be significant by the lead agency.

- **Federal Breakwater.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.
- **Department of Water & Power Station No. 3.** This structure is in the proposed project area and near the Catalina Terminal, but not near any construction that would affect this resource.
- **Seaman's Church Institute.** Harbor Boulevard would remain in place at its current capacity with two lanes in each direction. Landscape and hardscape improvements are proposed along the west side of Harbor Boulevard south of 7th Street, as well as in the median of Harbor Boulevard starting at the Swinford Street intersection and extending south to 22nd Street. This resource is adjacent to the proposed project area, but would not be affected by any proposed construction. In addition, the building was previously moved, so it is not in its original historic setting, reducing the sensitivity of the setting.
- **San Pedro Boatworks.** The proposed Project would have an indirect visual impact on the San Pedro Boatworks due to the size of the ships docking at the proposed Cruise Terminal; however, the proposed changes would be in character with the historic setting, and would not result in a significant impact.
- **Southern Pacific Slip No. 1.** The proposed Project would have an indirect impact on Southern Pacific Slip No. 1 since new land-side promenades would be constructed adjacent to the resource, but the effect would be less than significant because the fishing operations that form the basis for significance of the historic resource would not be affected.
- **Fisherman's Cooperative Association/Utro's.** The proposed Project would have an indirect impact on the Fisherman's Cooperative Association/Utro's due to its proximity to the proposed parking structure and Red Car maintenance facility projects, but the effect would be less than significant because the building and the character of its immediate setting would not be altered.
- **Pan American Airways Terminal Facilities.** The proposed walkway would wrap around the existing structure's dock area. This dock area has already been altered, and the building that remains would not be demolished or altered. Therefore, no significant impact would result.
- **Cabrillo Marine Aquarium.** The proposed Project would not affect this resource due to its distance from the proposed project area. No impact would occur.

CEQA Impact Determination

The following impacts would occur under CEQA:

S.S. Lane Victory. The S.S. Lane Victory is a moveable object, and Berth 94 is its current mooring, not its historic location. The relocation would not result in a significant effect because it would not materially impair the significance of the historical resource.

Ralph J. Scott Fireboat. The Ralph J. Scott Fireboat is drydocked at the present time. It has been moved from a previous location and is now situated at a site adjacent to Fire Station #112 at Berth 87, not its historic location. The relocation would not result in a significant effect because it would not materially impair the character-defining features of the historical resource.

The proposed Project would have an indirect but less-than-significant impact on the following resources since there are *no effects that will cause a substantial adverse change in the significance of the resources or alteration of the immediate surroundings that will impair the significance of the resources:*

- Bethlehem Shipyard Historic District,
- Vincent Thomas Bridge,
- Municipal Ferry Building/Los Angeles Maritime Museum, and
- Municipal Wholesale Fish Market.

Westway Terminal/Pan American Oil Co. Pump House. The proposed Project would maintain the historic Pump House and demolish the tanks, which are replacement structures. There would be an indirect impact on the Pump House since the removal of the tanks would change the historic context and setting of the Pump House, but this would be a less-than-significant impact on the historical resource.

The proposed Project would not result in a significant impact on the following resources because the new promenade would not *alter in an adverse manner those physical characteristics of a historical resource that convey its historical significance*:

- Municipal Warehouse No. 1,
- U.S. Immigration Station,
- Transit Shed Berth 57, and
- Pan American Terminal.

The proposed Project would not result in a significant effect on the following resources because there is no direct *physical change in the environment which is caused by and immediately related to the proposed Project:*

- U.S. Post Office;

- Los Angeles Harbor Light Station/Angels Gate Lighthouse;
- Warner Grand Theater/ Juarez Theater;
- Casa de San Pedro;
- Liberty Hill Site;
- Cabrillo Beach Bath House;
- YMCA/Harbor View House;
- U.S.S. Los Angeles Naval Monument;
- Vinegar Hill HPOZ;
- Danish Castle;
- Residential Home at 383 W. 10th Street, San Pedro, CA;
- Timms' Point and Landing Plaque; and
- Muller House.

The proposed Project would result in indirect impacts on the following resources that are considered less than significant because the proposed Project *does not materially alter in an adverse manner those physical characteristics of a historical resource that convey its historic significance and justifies its eligibility for inclusion in the California Register:*

- Transit Shed Berth 58–60,
- American President Lines Terminal,
- Federal Breakwater,
- Department of Water & Power Station No. 3,
- Seaman's Church Institute,
- San Pedro Boatworks,
- Southern Pacific Slip No. 1,
- Fisherman's Cooperative Association/Utro's, and
- Cabrillo Marine Museum.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The following seven historic properties are located in the NEPA/Section 106 APE. The remaining historical resources are subject to CEQA impact determinations, but are not subject to NEPA impact determinations.

The proposed Project would not result in adverse effect on the following resources because the resources are moveable objects, and they are not currently in their historic location:

- S.S. Lane Victory, and
- Ralph J. Scott Fireboat.

No adverse effects would occur on the following resources because there would be no c*hange of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.*

- Bethlehem Shipyard Historic District,
- Municipal Warehouse No. 1,
- Vincent Thomas Bridge, and
- Municipal Ferry Building.

Westway Terminal/Pan American Oil Co. Pump House. The proposed Project would demolish the tanks and equipment on the Westway Terminal site, but retain the historic property, which is the Pump House. This would not be an adverse effect since the existing tanks are replacements for historic tanks. The Pump House, a National Register property, is significant under Criterion Design/Architecture.

There could be some change in the historic setting of the Pump House due to the loss of the tanks, but this would be an indirect effect and a less-than- significant impact on the historical resource.

Municipal Wholesale Fish Market. The proposed Project would not result in adverse effects on the Municipal Wholesale Fish Market because the promenade would not introduce visual elements out of character with the property or its setting.

Mitigation Measures

No mitigation is required.

Residual Impact

Impacts would be less than significant.

Impact CR-4: The proposed Project would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.

Grading, trenching, and the North Harbor cut, as well as other ground-disturbing actions, have the potential to damage or destroy significant paleontological resources within the proposed project area. Paleontological resources are analyzed in four subareas of the proposed project area, from north to south:

- Vincent Thomas Bridge to Ports O'Call-7th Street,
- Ports O'Call-7th Street to 22nd Street,
- East and West Channel Area, and
- Cabrillo Beach Area.

Vincent Thomas Bridge to Ports O' Call-7th Street. In this area, the proposed Project involves relatively extensive dredging, excavation, and modification of the shoreline, as well as excavations associated with modifications to Harbor Boulevard and with the addition of a structured parking lot. Excavations for buildings and other structures are also proposed. The North Harbor cut would potentially impact Quaternary Alluvium, which has been evaluated as having a moderate potential for vertebrate fossil resources. Potentially, the northern portion of the proposed project area may be underlain by the San Pedro Sand and Timms' Point Silt, based on the position of the shoreline in 1859 and the geologic interpretations presented by Woodring et al. (1946) (Figure 3.4-2). As the position of the 1859 shoreline is similar to the position of today's shoreline in this portion of the proposed project area, there is a high potential for the existence of bedrock (i.e., San Pedro Sand and Timms' Point Silt) subsurface. Additionally, sites that were considered archaeological, CA-LAN-145 and CA-LAN-146, may be fossil shell localities exposed on the natural shoreline. Without being able to review site-specific excavation plans and a more comprehensive geotechnical report of subsurface conditions in the areas of excavation, it is not possible to assess the extent (i.e., depth of bedrock, depth of excavations, etc.) of proposed project impacts on paleontological resources. However, any excavation operations located in deposits of the San Pedro Sand and Timms' Point Silt have the potential to temporarily unearth and permanently destroy sensitive paleontological resources. This is considered a significant impact.

Ports O' Call-7th Street south to 22nd Street. The proposed Project involves excavations associated with modifications to Harbor Boulevard and Samson Way in the Ports O' Call area, and modifications to Crescent Avenue and 22nd Street. Excavations for buildings and other structures would also occur under the proposed Project. Potentially, the western margin of this portion of the proposed project area is underlain by the San Pedro Sand, Timms' Point Silt, and Malaga Mudstone, based on the position of the shoreline in 1859 and the geologic interpretations presented by Woodring et al. (1946) (Figure 3.4-2). As the position of the 1859 shoreline is within this area, there is a high potential for the existence of bedrock (i.e., San Pedro Sand, Timms' Point Silt, and Malaga Mudstone) in the subsurface in the 22nd Street/Marina

District. In addition, the original Timms' Point, which is the type of locality for the Timms' Point Silt, is located near 22nd Street. Without being able to review site-specific excavation plans and a more comprehensive geotechnical report of subsurface conditions in the areas of excavation, it is not possible to assess the extent (i.e., depth of bedrock, depth of excavations, etc.) of proposed project impacts on paleontological resources in this portion of the proposed Project. However, any excavation operations located in deposits of the San Pedro Sand, Timms' Point Silt, and Malaga Mudstone have a high potential to temporarily unearth and permanently destroy sensitive paleontological resources. This is considered a significant impact.

East and West Channel Area. The proposed Project involves extensive development in the areas surrounding the East and West Channels. However, any construction-related excavations would be confined to areas underlain by artificial fill materials. Such work would not result in any significant impacts on sensitive paleontological resources.

Cabrillo Beach Area. The proposed Project involves excavations associated with modifications to Harbor Boulevard and with buildings and other structures in the Beach area. The western margin of the Cabrillo Beach area is potentially underlain by Palos Verdes Sand and Malaga Mudstone, based on the position of the shoreline in 1859 and the geologic interpretations presented by Woodring et al. (1946) (Figure 3.4.2). As the position of the 1859 shoreline is near the western margin of the Cabrillo Beach area, there is a high potential for the existence of bedrock (i.e., Palos Verdes Sand and Malaga Mudstone) in the subsurface in the Cabrillo Beach area. Without being able to review site-specific excavation plans and a more comprehensive geotechnical report of subsurface conditions in the areas of excavation, it is not possible to assess the extent (i.e., depth of bedrock, depth of excavations, etc.) of proposed project impacts on paleontological resources. However, any excavation operations located in deposits of the Palos Verdes Sand and Malaga Mudstone have the potential to temporarily unearth and permanently destroy sensitive paleontological resources. This is considered a significant impact.

CEQA Impact Determination

The geologic assessment and literature review demonstrate that excavation in association with development of the proposed Project has the potential to impact significant nonrenewable fossil resources. Excavation into undisturbed geologic deposits underlying the proposed project area, which include Quaternary alluvium, non-marine terrace deposits, Pleistocene-age marine deposits of Palos Verdes Sand, Pleistocene-age offshore marine deposits of San Pedro Sand, and Timms' Point Silt would potentially impact fossil resources.

Construction of the proposed Project would result in significant impacts because of the potential to damage or destroy significant nonrenewable fossil resources. Implementation of Mitigation Measure MM CR-5 by a qualified vertebrate paleontologist would reduce impacts to less-than-significant levels.

Mitigation Measures

MM CR-5: Develop a program to mitigate impacts on nonrenewable paleontologic resources prior to excavation or construction of any proposed project components. This mitigation program should be conducted by a qualified vertebrate paleontologist and should be consistent with the provisions of CEQA, as well as the proposed guidelines of the Society of Vertebrate Paleontology. This program should include, but not be limited to:

1. Assessment of site-specific excavation plans to determine areas that will be designated for paleontological monitoring during initial ground disturbance.
2. Development of monitoring protocols for these designated areas. Areas consisting of artificial fill materials will not require monitoring. Paleontologic monitors should be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if some of the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.
3. Preparation of all recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils are essential in order to fully mitigate adverse impacts on the resources.
4. Identification and curation of all specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance (Scott and Springer 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts on significant paleontologic resources is not considered complete until such curation into an established museum repository has been fully completed and documented.
5. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate lead agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontologic resources.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Paleontological resources are not protected under NEPA; therefore, there would be no NEPA impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

3.4.4.3.2 Alternative 1—Alternative Development Scenario 1

Impact CR-1: Construction of Alternative 1 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.

CEQA Impact Determination

Similar to the proposed Project, construction of Alternative 1 would result in significant impacts that would potentially damage or destroy Mexican Hollywood, a site that is eligible for listing in the California Register. Additionally, construction of the proposed Project would potentially result in damage or destruction to two prehistoric archaeological sites, CA-LAN 145 and CA- LAN 146, which are located adjacent to the proposed project area.

Mitigation Measures

Implement Mitigation Measures MM CR-1, MM CR-2a or MM CR-2b, and MM CR-3.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Similar to the proposed Project, no prehistoric or historic archaeological resources have been previously recorded in the federal APE. Because a majority of the shoreline was constructed of imported fill dating from the late nineteenth through the twentieth century, there is limited potential to encounter previously unidentified, subsurface deposits in the APE. However, one historical archaeological resource, Mexican Hollywood, has been recently found within the federal APE. This resource has been analyzed adequately under the CEQA discussion above. This historic neighborhood located in the vicinity of the Inner Harbor could be disturbed by construction associated with the Inner Harbor parking structure, which is an indirect impact under federal jurisdiction. Therefore, Alternative 1 would result in significant impacts on known archaeological resources for the purposes of NEPA.

Mitigation Measures

Implement Mitigation Measures MM-CR-1, MM-CR-2a, and MM-CR-2b, as described above.

Residual Impacts

Impacts would be less than significant.

Impact CR 2: Construction of Alternative 1 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.

CEQA Impact Determination

Similar to the proposed Project, Alternative 1 would result in significant impacts on previously unidentified subsurface archaeological deposits that were not identified during field surveys, which could be inadvertently unearthed during ground-disturbing activities. These activities would potentially result in the demolition or substantial damage to significant cultural resources.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Similar to the proposed Project, no prehistoric or historic archaeological resources have been previously recorded in the federal APE. Because a majority of the shoreline is constructed of imported fill from the late nineteenth through the twentieth centuries, there is limited potential to encounter previously unidentified, subsurface deposits in the APE. Therefore, there would be less-than-significant impacts on archaeological resources for the purposes of NEPA. However, because there is always the potential to encounter previously unidentified archaeological resources, implementation of Mitigation Measure MM CR-4 would ensure that impacts remain less than significant.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

Impact CR-3: Alternative 1 would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.

Impacts for Alternative 1 would be the same as those identified for the proposed Project.

CEQA Impact Determination

Impacts would be the same for Alternative 1 as identified for the proposed Project.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

No impacts under NEPA that would result in a substantial adverse change in a historical resource were noted in Alternative 1. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact CR-4: Alternative 1 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.

Similar to the proposed Project (see discussion in Section 3.4.4.3.1 above), Alternative 1 proposes relatively extensive dredging, excavation, and modification of the shoreline in the extent of the proposed Project from the Vincent Thomas Bridge to Ports O'Call-7th Street, south from Ports O'Call-7th Street to 22nd Street, and in the Cabrillo Beach Area. Development in the East and West Channel Area would be confined to areas underlain by artificial fill materials.

Similar to the proposed Project (see discussion in Section 3.4.4.3.1 above), Alternative 1 has the potential to unearth and permanently destroy sensitive paleontological resources in the area of the proposed Project near the original shore line, which would be a significant impact under CEQA.

CEQA Impact Determination

Similar to the proposed Project, excavation into undisturbed geologic deposits underlying the proposed project area would constitute a significant impact and would require Mitigation Measure MM CR-5. This mitigation incorporates a qualified vertebrate paleontologist and a program to mitigate impacts on nonrenewable paleontologic resources.

Mitigation Measures

Implement Mitigation Measure MM CR-5.

Residual Impacts

Impacts would be less than significant**.**

NEPA Impact Determination

Paleontological resources are not protected under NEPA; therefore, there would be no NEPA impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

3.4.4.3.3 Alternative 2—Alternative Development Scenario 2

Impact CR-1: Construction of Alternative 2 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.

CEQA Impact Determination

Impacts for Alternative 2 would be the same as described for the proposed Project. Two prehistoric archaeological sites (CA-LAN-145 and CA-LAN-146) have been previously identified adjacent to the proposed project area. In addition, one historic archaeological site (Mexican Hollywood) has been identified in the proposed

Alternative 2 project area. Construction of Alternative 2 would result in significant impacts.

Mitigation Measures

Implement Mitigation Measures MM CR-1, MM CR-2a or MM CR-2b, and MM CR-3.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Similar to the proposed Project, no prehistoric or historic archaeological resources have been previously recorded in the federal APE. Because a majority of the shoreline was constructed of imported fill dating from the late nineteenth through the twentieth century, there is limited potential to encounter previously unidentified, subsurface deposits in the APE. However, one historical archaeological resource, Mexican Hollywood, has been recently found within the federal APE. This resource has been analyzed adequately under the CEQA discussion above. This historic neighborhood located in the vicinity of the Inner Harbor could be disturbed by construction associated with the Inner Harbor parking structure, which is an indirect impact under federal jurisdiction. Therefore, Alternative 2 would result in significant impacts on known archaeological resources for the purposes of NEPA.

Mitigation Measures

Implement Mitigation Measures MM-CR-1, MM-CR-2a, and MM-CR-2b, as described above.

Residual Impacts

Impacts would be less than significant.

Impact CR-2: Construction of Alternative 2 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.

CEQA Impact Determination

Similar to the proposed Project, Alternative 2 would result in significant impacts on previously unidentified subsurface archaeological deposits, which could be inadvertently unearthed during ground-disturbing activities. These activities would potentially result in the demolition or substantial damage to significant cultural resources.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Similar to the proposed Project, no prehistoric or historic archaeological resources have been previously recorded in the federal APE. Because a majority of the shoreline is constructed of imported fill from the late nineteenth through the twentieth centuries, there is limited potential to encounter previously unidentified subsurface deposits in the APE. Therefore, there would be less-than-significant impacts on archaeological resources for the purposes of NEPA. However, because there is always the potential to encounter previously unidentified archaeological resources, implementation of Mitigation Measure MM CR-4 would ensure that impacts remain less than significant.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

Impact CR-3: Alternative 2 would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.

CEQA Impact Determination

Alternative 2 only alters Harbor Boulevard and various Red Car alignments, and does not affect any of the historical resources along the new right-of-way. Impacts under CEQA that would result in a substantial adverse change in a historical resource would be the same as under the proposed Project. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Impacts under NEPA that would result in a substantial adverse change in a historical resource were noted in the proposed Project. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact CR-4: Alternative 2 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.

Similar to the proposed Project (see discussion in Section 3.4.4.3.1 above), Alternative 2 proposes relatively extensive dredging, excavation, and modification of the shoreline from the Vincent Thomas Bridge to Ports O'Call-7th Street, south from Ports O'Call-7th Street to 22nd Street, and in the Cabrillo Beach Area. Development in the East and West Channel Area would be confined to areas underlain by artificial fill materials.

Similar to the proposed Project (see discussion in Section 3.4.4.3.1 above), Alternative 2 has the potential to unearth and permanently destroy sensitive paleontological resources near the original shore line, which would be a significant impact under CEQA.

CEQA Impact Determination

Similar to the proposed Project, Alternative 2 excavation into undisturbed geologic deposits underlying the proposed project area would constitute a significant impact and would require a qualified vertebrate paleontologist to develop a program to mitigate impacts on nonrenewable paleontologic resources.

Mitigation Measures

Implement Mitigation Measure MM CR-5.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Paleontological resources are not protected under NEPA; therefore, there would be no NEPA impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

3.4.4.3.4 Alternative 3—Alternative Development Scenario 3 (Reduced Project)

Impact CR-1: Construction of Alternative 3 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.

CEQA Impact Determination

Impacts would be the same for Alternative 3 as described for the proposed Project. Construction of Alternative 3 would result in significant impacts.

Mitigation Measures

Implement Mitigation Measures MM CR-1, MM CR-2a or MM CR-2b, and MM CR-3.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Similar to the proposed Project, no prehistoric or historic archaeological resources have been previously recorded in the federal APE. Because a majority of the shoreline was constructed of imported fill dating from the late nineteenth through the twentieth century, there is limited potential to encounter previously unidentified, subsurface deposits in the APE. However, one historical archaeological resource, Mexican Hollywood, has been recently found within the federal APE. This resource has been analyzed adequately under the CEQA discussion above. This historic neighborhood located in the vicinity of the Inner Harbor could be disturbed by construction associated with the Inner Harbor parking structure, which is an indirect

impact under federal jurisdiction. Therefore, Alternative 3 would result in significant impacts on known archaeological resources for the purposes of NEPA.

Mitigation Measures

Implement Mitigation Measures MM-CR-1, MM-CR-2a, and MM-CR-2b, as described above.

Residual Impacts

Impacts would be less than significant.

Impact CR-2: Construction of Alternative 3 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.

CEQA Impact Determination

Impacts would be the same for Alternative 3 as identified for the proposed Project. Construction of Alternative 3 would potentially result in significant impacts to previously unidentified subsurface archaeological deposits that were not identified during field surveys, which could be inadvertently unearthed during ground-disturbing activities. These activities would potentially result in the demolition or substantial damage to significant cultural resources.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Similar to the proposed Project, no prehistoric or historic archaeological resources have been previously recorded in the federal APE. Because a majority of the shoreline is constructed of imported fill from the late nineteenth through the twentieth centuries, there is limited potential to encounter previously unidentified subsurface deposits in the APE. Therefore, there would be less-than-significant impacts on archaeological resources for the purposes of NEPA. However, because there is always the potential to encounter previously unidentified archaeological resources, implementation of Mitigation Measure MM CR-4 would ensure that impacts remain less than significant.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

Impact CR-3: Alternative 3 would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.

CEQA Impact Determination

Alternative 3 reduces Harbor Boulevard to one lane each way with a greenbelt and provides no Crescent Avenue/Sampson Way connection. The proposed Project would retain Harbor Boulevard at existing capacity with two lanes in each direction and provide a Red Car transition to the median between 3rd and 5th Streets. Landscaping improvements would be the same under both projects. Since Alternative 3 would not affect historical resources along the new right-of-way, no impacts under CEQA that would result in a substantial adverse change in a historical resource were noted. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

No impacts under NEPA that would result in a substantial adverse change in a historical resource were noted in proposed Alternative 3. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact CR-4: Alternative 3 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.

Impacts would be the same for Alternative 3 as described for the proposed Project.

CEQA Impact Determination

Impacts would be the same for Alternative 3 as described for the proposed Project. Therefore, loss to a regional or statewide paleontological resource would be significant.

Mitigation Measures

Implement Mitigation Measure MM CR-5.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Paleontological resources are not protected under NEPA; therefore, there would be no NEPA impacts

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

3.4.4.3.5 Alternative 4—Alternative Development Scenario 4

Impact CR-1: Construction of Alternative 4 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.

CEQA Impact Determination

Impacts would be the same for Alternative 4 as described for the proposed Project. However, impacts to Mexican Hollywood may be slightly reduced as a result of a smaller parking structure in the Inner Harbor. Therefore, construction of Alternative 4 would result in significant impacts.

Mitigation Measures

Implement Mitigation Measures MM CR-1, MM CR-2a or MM CR-2b, and MM CR-3.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Similar to the proposed Project, no prehistoric or historic archaeological resources have been previously recorded in the federal APE. Because a majority of the shoreline is constructed of imported fill from the late nineteenth through the twentieth centuries, there is limited potential to encounter previously unidentified subsurface deposits in the APE. The Inner Harbor parking structure proposed under this alternative is the same as the NEPA baseline and thus would not result in potential impacts on Mexican Hollywood under NEPA. Therefore, there would be less-than-significant impacts on archaeological resources for the purposes of NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact CR-2: Construction of Alternative 4 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.

CEQA Impact Determination

Impacts would be the same for Alternative 4 as identified for the proposed Project. Construction of Alternative 4 would potentially result in significant impacts to previously unidentified subsurface archaeological deposits that were not identified during field surveys, which could be inadvertently unearthed during ground-disturbing activities. These activities would potentially result in the demolition or substantial damage to significant cultural resources.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Similar to the proposed Project, no prehistoric or historic archaeological resources have been previously recorded in the federal APE. Because a majority of the shoreline is constructed of imported fill from the late nineteenth through the twentieth centuries, there is limited potential to encounter previously unidentified subsurface deposits in the APE. Therefore, there would be less-than-significant impacts on archaeological resources for the purposes of NEPA. However, because there is always the potential to encounter previously unidentified archaeological resources, implementation of Mitigation Measure MM CR-4 would ensure that impacts remain less than significant.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

Impact CR-3: Alternative 4 would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.

CEQA Impact Determination

Impacts of Alternative 4 would be the same as described for the proposed Project. No impacts under CEQA that would result in a substantial adverse change in a historical resource were noted. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

No impacts under NEPA that would result in a substantial adverse change in a historical resource were noted in Alternative 4. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Impact CR-4: Alternative 4 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.

CEQA Impact Determination

Impacts would be the same for Alternative 4 as described for the proposed Project. Therefore, loss to a regional or statewide paleontological resource would be significant.

Mitigation Measures

Implement Mitigation Measure MM CR-5.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Paleontological resources are not protected under NEPA; therefore, there would be no NEPA impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

3.4.4.3.6 Alternative 5—No-Federal-Action Alternative

Impact CR-1: Construction of Alternative 5 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.

Impacts for Alternative 5 would be similar to those as described under the proposed Project. None of the archaeological sites are located in the waterside construction areas, so this alternative would not avoid impacts on archaeological resources previously identified. However, impacts to Mexican Hollywood may be slightly reduced as a result of a smaller parking structure in the Inner Harbor.

CEQA Impact Determination

Impacts would be the same for Alternative 5 as described for Alternative 4. Therefore, construction of Alternative 5 would result in significant impacts.

Mitigation Measures

Implement Mitigation Measures MM CR-1, MM CR-2a or MM CR-2b, and MM CR-3.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because the No-Federal-Action Alternative is identical to the NEPA baseline, this alternative would have no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact CR-2: Construction of Alternative 5 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.

Impacts for Alternative 5 would be slightly less than those described under the proposed Project. Impacts to Mexican Hollywood may be slightly reduced as a result of a smaller parking structure in the Inner Harbor. None of the archaeological sites

are located in the waterside construction areas, so this alternative would not avoid impacts on archaeological resources previously identified.

CEQA Impact Determination

Impacts would be slightly less for Alternative 5 as identified for the proposed Project. Construction of Alternative 5 would potentially result in significant impacts to previously unidentified subsurface archaeological deposits that were not identified during field surveys, which could be inadvertently unearthed during ground-disturbing activities. These activities would potentially result in the demolition or substantial damage to significant cultural resources.

Mitigation Measures

Implement Mitigation Measure MM CR-4.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because the No-Federal-Action Alternative is identical to the NEPA baseline, this alternative would have no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact CR-3: Alternative 5 would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.

CEQA Impact Determination

No harbors, promenades, or open spaces would be constructed under Alternative 5. Impacts to historical resources under Alternative 5 would be the same as described for the proposed Project. No impacts under CEQA that would result in a substantial adverse change in a historical resource were noted. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because the No-Federal-Action Alternative is identical to the NEPA baseline, this alternative would have no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact CR-4: Alternative 5 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.

Impacts would be slightly less for Alternative 5 than as described for the proposed Project. This alternative would avoid potential impacts to fossil resources from the North Harbor cut. However, most areas of intact bedrock and Quaternary Alluvium that have the potential to contain fossilized remains are located farther inland within the proposed project area; therefore, significant impacts on fossil resources would occur.

CEQA Impact Determination

Impacts would be the same for Alternative 5 as described for the proposed Project and significant impacts would occur.

Mitigation Measures

Implement Mitigation Measure MM CR-5, as described for the proposed Project.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because the No-Federal-Action Alternative is identical to the NEPA baseline, this alternative would have no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

3.4.4.3.7 Alternative 6—No-Project Alternative

Impact CR-1: Alternative 6 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.

CEQA Impact Determination

As Alternative 6 proposes no action, there will be no impact to sensitive archaeological resources. Archaeological resources that may be present within the proposed project area are currently preserved in place under streets and structures, and will not be adversely impacted or degraded if no action is undertaken.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

This alternative is not applicable to NEPA.

Mitigation Measures

Not applicable.

Residual Impacts

Not applicable.

Impact CR 2: Alternative 6 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.

CEQA Impact Determination

As Alternative 6 proposes no action, there will be no impact to sensitive archaeological resources or ethnographic cultural resources.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

This alternative is not applicable to NEPA.

Mitigation Measures

Not applicable.

Residual Impacts

Not applicable.

Impact CR-3: Alternative 6 would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.

CEQA Impact Determination

No significant impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

This alternative is not applicable to NEPA.

Mitigation Measures

Not applicable.

Residual Impacts

Not applicable.

Impact CR-4: Alternative 6 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.

As Alternative 6 proposes no action, there will be no impact to sensitive fossil resources.

CEQA Impact Determination

No impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

This alternative is not applicable to NEPA.

Mitigation Measures

Not applicable.

Residual Impacts

Not applicable.

3.4.4.3.8 Summary of Impact Determinations

Table 3.4-8 summarizes the CEQA and NEPA impact determinations of the proposed Project and its alternatives related to cultural resources, as described in the detailed discussion in Sections 3.4.4.3.1 through 3.4.4.3.7. This table is meant to allow easy comparison between the potential impacts of the proposed Project and its alternatives with respect to this resource. Identified potential impacts may be based on federal, state, and City of Los Angeles significance criteria, LAHD criteria, and the scientific judgment of the report preparers.

For paleontology, based on the proposed developments for each alternative and on the presumed different levels of earthwork, each proposed alternative is ranked according to the level of impact on sensitive paleontological resources, from highest to lowest: (1) Proposed Project, (2) Alternative 1, (3) Alternative 3, (4) Alternative 2, (5) Alternative 4, (6) Alternative 5, and (7) Alternative 6. For each case, implementation of Mitigation Measure MM CR-5 will mitigate the impacts on paleontological resources.

For each type of impact, the table describes the impact, notes the CEQA and NEPA impact determinations, describes any applicable mitigation measures, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table.

Table 3.4-8. Summary Matrix of Potential Impacts and Mitigation Measures for Cultural Resources Associated with the Proposed Project and Alternatives

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.4 Cultural Resources				
Proposed Project	**CR-1:** Construction of the proposed Project would not disturb, damage, or degrade known prehistoric and historic archaeological resources.	CEQA: Significant	**MM CR-1: Generate treatment plan and conduct archaeological testing for Mexican Hollywood prior to construction.** Potential additional intact, subsurface historic archaeological deposits associated with Mexican Hollywood should be characterized and evaluated for eligibility for inclusion in the California Register by a qualified archaeologist. A testing plan will be developed that will describe evaluation methods for determining the eligibility of new finds in Mexican Hollywood for listing in the California Register. Should the identification and evaluation efforts reveal that newly identified deposits do not meet the criteria for inclusion in the California Register, no further mitigation would be required. However, if newly discovered portions of Mexican Hollywood are determined eligible for listing in the California Register, implementation of Mitigation Measures MM CR-2a and/or MM CR-2b will reduce impacts to less-than-significant levels. **MM CR-2a: If additional California Register–eligible deposits associated with Mexican Hollywood are identified, redesign project to ensure preservation in place.** If identification and evaluation efforts result in the determination that Mexican Hollywood meets the criteria for inclusion in the California Register, efforts will be made to avoid these deposits during project	CEQA: Less than significant

Alternative	Environmental Impacts*	Impact Determination	Mitigation Measures	Impacts after Mitigation
			development and preserve them in place, which is the preferred mitigation measure under CEQA. Options for preservation in place include, but are not limited to, incorporating the site into park or open space land, avoiding the site during construction, burying the site with sterile sediment, or placing the site within a permanent conservation easement. If preservation in place is not feasible, conduct data recovery as defined in MM CR-2b below. **MM CR-2b: Conduct Data Recovery.** If avoidance or redesign of the proposed Project is not feasible, then research and fieldwork to recover and analyze the data contained in that site will be conducted. This work may involve additional archival and historical research; excavation; analysis of the artifacts, features, and other data discovered; presentation of the results in a technical report; and curation of the recovered artifacts and accompanying data. Consultation with ACHP, SHPO, and other interested or knowledgeable parties may also be required or appropriate. A standard data recovery report will be prepared when all the fieldwork is concluded. The consultant will prepare a comprehensive technical report that will describe the archaeological project's goals and methods, as well as present the project's findings and interpretations. The report will synthesize both the archival research and important archaeological data in an attempt to address the research questions presented in the research design/testing plan. The report will	

Alternative	Environmental Impacts*	Impact Determination	Mitigation Measures	Impacts after Mitigation
			be submitted to the client and any reviewing agencies, and it ultimately will be filed with the Eastern Information Center, located at California State University, Fullerton. The final data recovery report will include the following elements: ■ executive summary; ■ statement of scope, including proposed project location and setting; ■ background contexts or summaries; ■ summary of previous research, historical and archaeological; ■ research goals and themes; ■ field and laboratory methodologies; ■ description of recovered materials; ■ findings and interpretations, referencing research goals; ■ conclusions; ■ references cited; and ■ appendices such as artifact catalogs, special studies, and other information relevant to the proposed project and findings. **MM CR-3: Monitor ground disturbance in the vicinity of known archaeological sites CA-LAN-145 and CA-LAN-146.** Archaeological and Native American monitoring will be conducted during ground-disturbing activities within the vicinity of CA-LAN-145 and CA-LAN-146. In	

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
			addition: ■ An archaeological monitoring plan will be generated in accordance with professional standards. The plan will be generated by an archaeologist who meets the Secretary of Interior's Standards for education, training, and experience. ■ The archaeological monitor will ensure that any portions of previously identified significant resources exposed during construction are avoided and protected. In addition, the monitor will determine whether any previously unknown historical resources are uncovered as a result of construction activities. If potentially important historical resources are discovered, the archaeological monitor will immediately ask the Construction Manager to divert construction activity within 100 feet of the find and report the discovery so that appropriate notifications can be issued and treatment measures planned and implemented. ■ Upon completion of the monitoring, a final archaeological monitoring report will be prepared for LAHD in accordance with professional standards.	
		NEPA: Significant	Implement Mitigation Measures MM-CR-1, MM-CR-2a, and MM-CR-2b.	NEPA: Less than significant
	CR-2: Construction of the proposed Project would not disturb, damage, or degrade unknown archaeological	CEQA: Significant	**MM CR-4: Stop work if cultural resources are discovered during ground-disturbing activities.** In the event that any artifact or an unusual amount of bone, shell, or non-native	CEQA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	and ethnographic cultural resources.		stone is encountered during construction, work will be immediately stopped and relocated from that area. The contractor will stop construction within 100 feet of the exposure of these finds until a qualified archaeologist, retained by LAHD in advance of construction, can be contacted to evaluate the find (see 36 CFR 800.11.1 and pertinent CEQA regulations). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology such as obsidian or fused shale; trash pits containing bottles and/or ceramics; or structural remains. If the resources are found to be significant, they will be avoided or will be mitigated consistent with SHPO guidelines. All construction equipment operators will attend a pre-construction meeting presented by a professional archaeologist retained by LAHD to review types of cultural resources and artifacts that would be considered potentially significant, to ensure operator recognition of these materials during construction. If human remains are encountered, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Los Angeles County Coroner will be contacted to determine the age and cause of death. If the remains are not of Native American heritage, construction in the area may recommence. If the remains are of Native American origin, the most likely descendants of the deceased	

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
			will be identified by the NAHC. LAHD and the USACE will consult with the Native American most likely descendant(s) to identify a mutually acceptable strategy for treating and disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. If the NAHC is unable to identify a most likely descendant; if the descendant fails to make a recommendation within 24 hours of being notified by the NAHC, LAHD, or the USACE; and if the descendant is not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods will be reburied with appropriate dignity on the proposed project site in a location not subject to further subsurface disturbance.	
		NEPA: Less than significant	Implement Mitigation Measure MM CR-4.	NEPA: Less than significant
	CR-3: The proposed Project would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	No mitigation is required.	NEPA: Less than significant
	CR-4: The proposed	CEQA: Significant	**MM CR-5: Develop a program to mitigate**	CEQA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	Project would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.		**impacts on nonrenewable paleontologic resources prior to excavation or construction of any proposed project components**. This mitigation program should be conducted by a qualified vertebrate paleontologist and should be consistent with the provisions of CEQA, as well as the proposed guidelines of the Society of Vertebrate Paleontology. This program should include, but not be limited to: 1. Assessment of site-specific excavation plans to determine areas that will be designated for paleontological monitoring during initial ground disturbance. 2. Development of monitoring protocols for these designated areas. Areas consisting of artificial fill materials will not require monitoring. Paleontologic monitors should be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if some of the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources. 3. Preparation of all recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered	

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
			fossils are essential in order to fully mitigate adverse impacts on the resources. 4. Identification and curation of all specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance (Scott and Springer 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts on significant paleontologic resources is not considered complete until such curation into an established museum repository has been fully completed and documented. 5. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate lead agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontologic resources.	
		NEPA: No impacts would occur.	No mitigation is required.	NEPA: No impacts would occur.
Alternative 1	**CR-1:** Construction of Alternative 1 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.	CEQA: Significant	Implement Mitigation Measures MM CR-1, MM CR-2a or MM CR-2b, and MM CR-3.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measures MM-CR-1, MM-CR-2a, and MM-CR-2b.	NEPA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	CR-2: Construction of Alternative 1 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.	CEQA: Significant	Implement Mitigation Measure MM CR-4.	CEQA: Less than significant
		NEPA: Less than significant	Implement Mitigation Measure MM CR-4.	NEPA: Less than significant
	CR-3: Alternative 1 would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	No mitigation is required.	NEPA: Less than significant
	CR-4: Alternative 1 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.	CEQA: Significant	Implement Mitigation Measure MM CR-5.	CEQA: Less than significant
		NEPA: No impacts would occur.	No mitigation is required.	NEPA: No impacts would occur.
Alternative 2	**CR-1:** Construction of Alternative 2 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.	CEQA: Significant	Implement Mitigation Measures MM CR-1, MM CR-2a or MM CR-2b, and MM CR-3.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measures MM-CR-1, MM-CR-2a, and MM-CR-2b.	NEPA: Less than significant
	CR-2: Construction of	CEQA: Significant	Implement Mitigation Measure MM CR-4.	CEQA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	Alternative 2 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.	NEPA: Less than significant	Implement Mitigation Measure MM CR-4.	NEPA: Less than significant
	CR-3: Alternative 2 would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	No mitigation is required.	NEPA: Less than significant
	CR-4: Alternative 2 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.	CEQA: Significant	Implement Mitigation Measure MM CR-5.	CEQA: Less than significant
		NEPA: No impacts would occur.	No mitigation is required.	NEPA: No impacts would occur.
Alternative 3	**CR-1:** Construction of Alternative 3 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.	CEQA: Significant	Implement Mitigation Measures MM CR-1, MM CR-2a or MM CR-2b, and MM CR-3.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measures MM-CR-1, MM-CR-2a, and MM-CR-2b.	NEPA: Less than significant
	CR-2: Construction of Alternative 3 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.	CEQA: Significant	Implement Mitigation Measure MM CR-4.	CEQA: Less than significant
		NEPA: Less than significant	Implement Mitigation Measure MM CR-4.	NEPA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	CR-3: Alternative 3 would not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Less than significant	No mitigation is required.	NEPA: Less than significant
	CR-4: Alternative 3 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.	CEQA: Significant	Implement Mitigation Measure MM CR-5.	CEQA: Less than significant
		NEPA: No impacts would occur.	No mitigation is required.	NEPA: No impacts would occur.
Alternative 4	**CR-1:** Construction of Alternative 4 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.	CEQA: Significant	Implement Mitigation Measures MM CR-1, .MM CR-2a or MM CR-2b, and MM CR-3.	CEQA: Less than significant
		NEPA: Less than significant	No mitigation is required.	NEPA: Less than significant
	CR-2: Construction of Alternative 4 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.	CEQA: Significant	Implement Mitigation Measure MM CR-4.	CEQA: Less than significant
		NEPA: Less than significant	Implement Mitigation Measure MM CR-4.	NEPA: Less than significant
	CR-3: Alternative 4 would	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.	NEPA: Less than significant	No mitigation is required.	NEPA: Less than significant
	CR-4: Alternative 4 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.	CEQA: Significant	Implement Mitigation Measure MM CR-5.	CEQA: Less than significant
		NEPA: No impacts would occur.	No mitigation is required.	NEPA: No impacts would occur.
Alternative 5	**CR-1:** Construction of Alternative 5 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.	CEQA: Significant	Implement Mitigation Measures MM CR-1, MM CR-2a or MM CR-2b, and MM CR-3.	CEQA: Less than significant
		NEPA: No impacts would occur.	No mitigation is required.	NEPA: No impacts would occur.
	CR-2: Construction of Alternative 5 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.	CEQA: Significant	Implement Mitigation Measure MM CR-4.	CEQA: Less than significant
		NEPA: No impacts would occur.	No mitigation is required.	NEPA: No impacts would occur.
	CR-3: Alternative 5 would	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	not result in a substantial adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.	NEPA: No impacts would occur.	No mitigation is required.	NEPA: No impacts would occur.
	CR-4: Alternative 5 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.	CEQA: Significant	Implement Mitigation Measure MM CR-5.	CEQA: Less than significant
		NEPA: No impacts would occur.	No mitigation is required.	NEPA: No impacts would occur.
Alternative 6	**CR-1:** Construction of Alternative 6 would not disturb, damage, or degrade known prehistoric and historic archaeological resources.	CEQA: No impacts would occur.	No mitigation is required.	CEQA: No impacts would occur.
		NEPA: Not applicable†	Not applicable†	NEPA: Not applicable†
	CR-2: Construction of Alternative 6 would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources.	CEQA: No impacts would occur.	No mitigation is required.	CEQA No impacts would occur.
		NEPA: Not applicable†	Not applicable†	NEPA: Not applicable†
	CR-3: Alternative 6 would not result in a substantial	CEQA: No impacts would occur.	No mitigation is required.	CEQA: No impacts would occur.

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	adverse change in the significance of a historical resource, involving demolition, relocation, conversion, rehabilitation, alteration, or other construction that reduces the integrity or significance of important resources on the site or in the vicinity.	NEPA: Not applicable†	Not applicable†	NEPA: Not applicable†
	CR-4: Alternative 6 would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance.	CEQA: No impacts would occur.	No mitigation is required.	CEQA: No impacts would occur.
		NEPA: Not applicable†	No mitigation is required.	NEPA: Not applicable†

Notes:

* Impact descriptions for each of the alternatives are the same as for the proposed Project, unless otherwise noted.

† The term *not applicable* is used in cases where a particular impact is not identified as a CEQA- or NEPA-related issue in the threshold of significance criteria, or where there is no federal action requiring a NEPA determination of significance.

3.4.4.4 Mitigation Monitoring

Table 3.4-9. Mitigation Monitoring for Cultural Resources

Impact CR-1: Construction of the proposed Project would not disturb, damage, or degrade known prehistoric and historic archaeological resources. *(Also applies to Impact CR-1 for Alternatives 1–5.)*	
Mitigation Measure	**MM CR-1. Generate treatment plan and conduct archaeological testing for Mexican Hollywood prior to construction.** Potential additional intact, subsurface historic archaeological deposits associated with Mexican Hollywood should be characterized and evaluated for eligibility for inclusion in the California Register by a qualified archaeologist. A testing plan will be developed that will describe evaluation methods for determining the eligibility of new finds in Mexican Hollywood for listing in the California Register. Should the identification and evaluation efforts reveal that newly identified deposits do not meet the criteria for inclusion in the California Register, no further mitigation would be required. However, if newly discovered portions of Mexican Hollywood are determined eligible for listing in the California Register, implementation of Mitigation Measures MM CR-2a and/or MM CR-2b will reduce impacts to less-than-significant levels.
Timing	One year prior to construction
Methodology	Research, planning, backhoe, and manual excavations
Responsible Parties	LAHD, archaeological consultants (ICF Jones & Stokes)
Mitigation Measure	**MM CR-2a. If additional California Register–eligible deposits associated with Mexican Hollywood are identified, redesign project to ensure preservation in place**. If identification and evaluation efforts result in the determination that Mexican Hollywood meets the criteria for inclusion in the California Register, efforts will be made to avoid these deposits during project development and preserve them in place, which is the preferred mitigation measure under CEQA. Options for preservation in place include, but are not limited to, incorporating the site into park or open space land, avoiding the site during construction, burying the site with sterile sediment, or placing the site within a permanent conservation easement. If preservation in place is not feasible, conduct data recovery as defined in MM CR-2b below.
Timing	Following Mitigation Measure MM CR-1
Methodology	Project redesign
Responsible Parties	LAHD, archaeological consultants (ICF Jones & Stokes), CA SHPO
Mitigation Measure	**MM CR-2b. Conduct Data Recovery.** If avoidance or redesign of the proposed Project is not feasible, then research and fieldwork to recover and analyze the data contained in that site will be conducted. This work may involve additional archival and historical research; excavation; analysis of the artifacts, features, and other data discovered; presentation of the results in a technical report; and curation of the recovered artifacts and accompanying data. Consultation with ACHP, SHPO, and other interested or knowledgeable parties may also be required or appropriate. A standard data recovery report will be prepared when all the fieldwork is concluded. The consultant will prepare a comprehensive technical report that will describe the archaeological project's goals and methods, as well as present the project's findings and interpretations. The report will synthesize both the archival research and important

	archaeological data in an attempt to address the research questions presented in the research design/testing plan. The report will be submitted to the client and any reviewing agencies, and it ultimately will be filed with the Eastern Information Center, located at California State University, Fullerton. The final data recovery report will include the following elements: ■ executive summary; ■ statement of scope, including proposed project location and setting; ■ background contexts or summaries; ■ summary of previous research, historical and archaeological; ■ research goals and themes; ■ field and laboratory methodologies; ■ description of recovered materials; ■ findings and interpretations, referencing research goals; ■ conclusions; ■ references cited; and ■ appendices such as artifact catalogs, special studies, and other information relevant to the proposed project and findings.
Timing	Following Mitigation Measure MM CR-1
Methodology	Excavations, laboratory processing, reporting, SHPO consultation
Responsible Parties	LAHD, archaeological consultants (ICF Jones & Stokes)
Mitigation Measure	**MM CR-3. Monitor ground disturbance in the vicinity of known archaeological sites CA-LAN-145 and CA-LAN-146.** Archaeological and Native American monitoring will be conducted during ground-disturbing activities within the vicinity of CA-LAN-145 and CA-LAN-146. In addition: ■ An archaeological monitoring plan will be generated in accordance with professional standards. The plan will be generated by an archaeologist who meets the Secretary of Interior's Standards for education, training, and experience. ■ The archaeological monitor will ensure that any portions of previously identified significant resources exposed during construction are avoided and protected. In addition, the monitor will determine whether any previously unknown historical resources are uncovered as a result of construction activities. If potentially important historical resources are discovered, the archaeological monitor will immediately ask the Construction Manager to divert construction activity within 100 feet of the find and report the discovery so that appropriate notifications can be issued and treatment measures planned and implemented. ■ Upon completion of the monitoring, a final archaeological monitoring report will be prepared for LAHD in accordance with professional standards.
Timing	Following Mitigation Measure MM CR-1
Methodology	Excavations, laboratory processing, reporting, SHPO consultation
Responsible Parties	LAHD, archaeological consultants (ICF Jones & Stokes)
Residual Impacts for	Less than significant

Impact CR-1	
Impact CR-2: Construction of the proposed Project would not disturb, damage, or degrade unknown archaeological and ethnographic cultural resources. *(Also applies to Impact CR-2 for Alternatives 1–5.)*	
Mitigation Measure	**MM CR-4. Stop work if cultural resources are discovered during ground-disturbing activities.** In the event that any artifact or an unusual amount of bone, shell, or non-native stone is encountered during construction, work will be immediately stopped and relocated from that area. The contractor will stop construction within 100 feet of the exposure of these finds until a qualified archaeologist, retained by LAHD in advance of construction, can be contacted to evaluate the find (see 36 CFR 800.11.1 and pertinent CEQA regulations). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology such as obsidian or fused shale; trash pits containing bottles and/or ceramics; or structural remains. If the resources are found to be significant, they will be avoided or will be mitigated consistent with SHPO guidelines. All construction equipment operators will attend a pre-construction meeting presented by a professional archaeologist retained by LAHD to review types of cultural resources and artifacts that would be considered potentially significant, to ensure operator recognition of these materials during construction. If human remains are encountered, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains. The Los Angeles County Coroner will be contacted to determine the age and cause of death. If the remains are not of Native American heritage, construction in the area may recommence. If the remains are of Native American origin, the most likely descendants of the deceased will be identified by the NAHC. LAHD and the USACE will consult with the Native American most likely descendant(s) to identify a mutually acceptable strategy for treating and disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. If the NAHC is unable to identify a most likely descendant; if the descendant fails to make a recommendation within 24 hours of being notified by the NAHC, LAHD, or the USACE; and if the descendant is not capable of reaching a mutually acceptable strategy through mediation by the NAHC, the Native American human remains and associated grave goods will be reburied with appropriate dignity on the proposed project site in a location not subject to further subsurface disturbance.
Timing	During initial ground disturbance during construction
Methodology	Excavations, laboratory processing, reporting, SHPO consultation
Responsible Parties	LAHD, archaeological consultants (ICF Jones & Stokes)
Residual Impacts for Impact CR-2	Less than significant
Impact CR-4: The proposed Project would not result in the permanent loss of or loss of access to a paleontological resource of regional or statewide significance. *(Also applies to Impact CR-4 for Alternatives 1–5.)*	
Mitigation Measure	**MM CR-5. Develop a program to mitigate impacts on nonrenewable paleontologic resources prior to excavation or construction of any proposed project components.** This mitigation program should be conducted by a qualified vertebrate paleontologist and should be consistent with the provisions of CEQA, as well as the proposed guidelines of the Society of Vertebrate Paleontology. This program should include, but not be limited to:

	1. Assessment of site-specific excavation plans to determine areas that will be designated for paleontological monitoring during initial ground disturbance. 2. Development of monitoring protocols for these designated areas. Areas consisting of artificial fill materials will not require monitoring. Paleontologic monitors should be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if some of the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources. 3. Preparation of all recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils are essential in order to fully mitigate adverse impacts on the resources. 4. Identification and curation of all specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance (Scott and Springer 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts on significant paleontologic resources is not considered complete until such curation into an established museum repository has been fully completed and documented. 5. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate lead agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontologic resources.
Timing	One year prior to construction
Methodology	Research, planning
Responsible Parties	LAHD, paleontogical consultants (ICF Jones & Stokes)
Residual Impacts for Impact CR-4	Less than significant

3.4.5 Significant Unavoidable Impacts

There would be no significant unavoidable impacts if mitigation is implemented as described.