

# 3.4

## CULTURAL RESOURCES

1

### 2 **3.4.1 Introduction**

3 This chapter describes the environmental and regulatory setting for cultural  
4 resources, as well as the impacts on cultural resources that would result from the  
5 proposed Project and the mitigation measures that would reduce these impacts.  
6 Cultural resources customarily include archaeological resources, ethnographic  
7 resources, and those of the historic built environment (architectural resources).  
8 Though not specifically a cultural resource, paleontological resources (fossils pre-  
9 dating human occupation) are considered here because they are discussed in  
10 Appendix G of the State CEQA Guidelines (Environmental Checklist Form), within  
11 the context of Section V, Cultural Resources.

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

19 Mitigation has been proposed to reduce significant impacts on archaeological and  
20 paleontological resources to level-than-significant levels. After mitigation,  
21 construction and operation of the proposed Project would not result in a significant  
22 and unavoidable impact on cultural resources.

### 23 **3.4.2 Environmental Setting**

24 The proposed project site is generally bounded by Lagoon Avenue to the west, Broad  
25 Avenue to the east, C Street to the north, and Banning’s Landing to the south. The  
26 site includes the Waterfront Red Car and California Coastal Trail linkages beginning  
27 in the west at Swinford Street, moving along Front Street to John S. Gibson

1 Boulevard, and then along Harry Bridges Boulevard until it reaches Avalon  
2 Boulevard in the east. See Figure 2-2 for a map of the proposed project area.

### 3 **3.4.2.1 Physical Setting**

#### 4 **3.4.2.1.1 Geology and Soils**

5 The proposed project area is located within the Los Angeles Basin, a broad, level  
6 expanse of land comprising more than 800 square miles that extends from Cahuenga  
7 Peak south to the Pacific coast, and from Topanga Canyon southeast to the vicinity of  
8 Aliso Creek. Prior to historical settlement of the area, the plain was characterized by  
9 extensive inland prairies and a lengthy coastal strand, with elevations approximately  
10 500 feet above mean sea level. The Los Angeles plain is traversed by several large  
11 watercourses, most notably the Los Angeles, Rio Hondo, San Gabriel, and Santa Ana  
12 rivers. Marshlands fed by fresh or salt water also once covered many portions of the  
13 area. To the west, the coastal region encompasses approximately 375 square miles of  
14 varied terrain. West of Topanga Canyon the terrain is rugged; the steep, westward  
15 slopes of the Santa Monica Mountains reach 1,000 feet or more in elevation, except  
16 where stream-cut ravines and canyons drain onto narrow beaches at the water's edge.  
17 From Topanga Canyon southward to the Palos Verdes Peninsula, a distance of  
18 roughly 22 miles, the coast is flat and level; extensive marshlands once existed near  
19 the mouth of Ballona Creek in the area now known as Playa del Rey. The terrain  
20 becomes rugged once again as the coast follows Palos Verdes Peninsula for a  
21 distance of approximately 12 miles before reaching San Pedro Bay, which in  
22 prehistoric times was characterized by extensive mud flats and sand bars (Hamilton  
23 et al. 2004; McCawley 1996).

24 West of the proposed project area, the Palos Verdes Peninsula is composed primarily  
25 of marine sedimentary rocks that have been uplifted about 1,300 feet within the past  
26 1 million years. The Palos Verdes Hills consist of a Jurassic-age metamorphic  
27 basement complex (Catalina Schist) that is overlain by about 3,000 feet of sedimentary  
28 rock formations of Miocene, Pliocene, and Pleistocene age (Woodring et al. 1946).  
29 The Miocene rocks (light-colored, well-bedded mudstones, siltstones, and shales) are  
30 underlain by older metamorphic rocks of the Catalina Schist. These rocks extend  
31 under the Los Angeles Harbor and form the base under the marine sediments  
32 (Schell et al. 2003).

33 Geologic deposits underlying the proposed project area consist of Holocene-age,  
34 near-shore, marine and non-marine deposits, including beach, estuary, tidal flat,  
35 lagoon, shallow-water bay sediments, and shoreline terrace deposits (Figure 3.4-1).  
36 These younger alluvial deposits are overlain in many places by artificial fill  
37 materials, as land has been built up during the historic development of the Port.

38 As mapped by Dibblee (1999), surficial sediments within the proposed project area  
39 consist primarily of Quaternary deposits that are comprised of beach sediments  
40 ranging from sand to cobble-boulder gravel.



REFERENCE: 1999, THOMAS DIBBLEE, JR., GEOLOGIC MAP OF THE PALOS VERDES PENINSULA AND VICINITY, MAP #DF-70.



LEGEND	
	ARTIFICIAL FILL
	ALLUVIUM
	BEACH SEDIMENTS
	OLDER ALLUVIUM
	SAN PEDRO SAND

1 In the Avalon Waterfront District soils consist primarily of Quaternary soils except in  
2 the southeastern corner where they are comprised of artificial fill. However, fill  
3 materials are sometimes difficult to differentiate from natural materials because both  
4 are essentially made up of the same materials, but the fill was just redeposited (Schell  
5 et al. 2003).

6 The eastern extent of the Waterfront Red Car Line/California Coastal Trail along  
7 Harry Bridges Boulevard is also underlain by these Holocene beach sediments and  
8 artificial fill.

9 The western extent of the Waterfront Red Car Line/California Coastal Trail, west of  
10 Figueroa along John S. Gibson Boulevard, is underlain by Quaternary alluvium,  
11 Quaternary older alluvium, and Pleistocene-age offshore marine deposits of San  
12 Pedro Sand. The San Pedro Sand was deposited during the middle Pleistocene and  
13 dates to approximately 500,000 to 200,000 years ago (Kirby and Demere 2007).

14 Pleistocene-age San Pedro Sand is mapped at the surface between the Northwest Slip  
15 and the Southwest Slip, and in patches near the Vincent Thomas Bridge. These  
16 deposits are of fossil bearing age, and are of scientific interest if intact.

17 Although the present configuration of the Port partly reflects the natural arrangement  
18 of the landscape, filling and dredging activities have formed an extensive network of  
19 wharves and shipping channels along the waterfront. The Los Angeles–Long Beach  
20 Harbor was once a low-lying coastal marsh generally referred to as either the  
21 Wilmington Lagoon or San Pedro Creek. The lagoon had a complex network of  
22 estuaries, stream channels, tidal channels, sand spits, beaches, and marshy inlands.  
23 (Schell et al. 2003). Around 11,000 years ago, a general warming trend, often  
24 referred to as the Altithermal, began in California (Carbone 1991; Arnold 1991). The  
25 Altithermal resulted in a rise in sea levels, which had an enormous impact on  
26 drainage patterns and the type and availability of food sources in various regions.  
27 During the Early Holocene (10,000 to 6,600 years ago), rapid sea level rise markedly  
28 altered land areas along the California coast. As a result of marine encroachment,  
29 large portions of the continental shelf were submerged. Therefore, archaeological  
30 sites located along the modern coast are, in some cases, far removed from Early  
31 Holocene shorelines. Furthermore, it is likely that most archaeological sites  
32 associated with the Early Holocene along the southern mainland coast were destroyed  
33 or obscured by sea level advance and sedimentation (Carbone 1991).

### 34 3.4.2.1.2 Vegetation

35 Prior to modern development, the dominant vegetation community in the proposed  
36 project area consisted of coastal saltmarsh. Coastal saltmarsh communities are  
37 comprised of perennial graminoids and succulent forbs. Dominants include  
38 glasswort (*Salicornia virginica*) and cordgrass (*Spartina foliosa*) (Kuchler 1977). At  
39 the time of this study the proposed project area was covered in ruderal and  
40 ornamental vegetation.

### 3.4.2.2 Prehistoric Setting

The prehistoric occupation of southern California is divided chronologically into several temporal phases or horizons, as presented on 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 BC. 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 BC and continued until about 1500 BC. 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 BC and continued until about AD 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 AD 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 )

<i>Horizon</i>	<i>Time Period</i>	<i>Description</i>
Horizon I/Early Man	11000 BC to 5000 BC	First appearance of humans in the region
Horizon II/Millingstone Horizon	5000 BC to 1500 BC	Widespread use of millingstone (manos, metates), representing a more sedentary settlement pattern
Horizon III/Intermediate Horizon	1500 BC to AD 600–800	Shift from use of millingstones to increased use of mortar and pestle and more projectile points
Horizon IV/Late Horizon	AD 600–800 to arrival of Europeans	Dense populations, diversified hunting, intensive fishing, and extensive trade networks
Source: Moratto 1984		

### 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 (the Tongva) 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 Fernandeno dialect of the Gabrieliño language was spoken. The names Gabrieliño and Fernandeno 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 sweatshouses 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).

Ethnographic information indicates that the Gabrieliño occupied the area between the Palos Verdes Peninsula and the Los Angeles River as evidenced by the number of recorded village sites in each of these areas. McCawley (1996:56) provides Gabrieliño place names for the peninsula, including *Chaawvenga*, *Xuuxonga*, *Toveemonga*, *Aataveanga*, *Kiinkenga*, *Toveemonga*, and *Haraasnga*. McCawley also provides information for the village sites of *Swaanga* and *Ahwa Anga* as located along the Los Angeles River closest to its junction with the Pacific Ocean. These villages were occupied as late as the 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. A local San Pedro historian (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. McCawley (1996) cites Reid (1852:8), stating that *Chaawvenga* is located on “Palos Verdes.” McCawley also cites Jose Zalvidea, stating 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). As documented, none of

1 the recorded village sites are located within the proposed project area. However,  
2 given their proximity to the proposed project area, it was likely used by inhabitants of  
3 some or all of these villages

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

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

15 Offshore fishing was accomplished from boats made of pine planks sewn together  
16 and sealed with asphaltum or bitumen. Much of the fishing, shellfish harvesting, and  
17 fowling took place along the ocean shoreline or along freshwater courses. Sea  
18 mammals were taken with harpoons, spears, and clubs. River and ocean fishing was  
19 undertaken with the use of line and hook, nets, basket traps, spears, and poisons  
20 (Hudson and Blackburn 1982).

21 Land animals were hunted with bow and arrow and throwing sticks, and were trapped  
22 or clubbed. Smaller animals such as rabbits and ground squirrels were driven with  
23 grass fires and taken with deadfall traps. Seasonal grass fires may have had the  
24 additive effect of yielding new shoots attractive to deer. Burrowing animals could be  
25 smoked from their lairs.

26 Transportation of plants and other resources was accomplished through the use of  
27 burden devices such as coiled and woven baskets and hammock carrying nets  
28 commonly made from grass and other plant fibers.

29 The Gabrieliño/Tongva were apparently first contacted by Europeans in 1542 when  
30 Juan Rodríguez Cabrillo entered the area. Following subsequent Spanish visits to the  
31 region, colonization began in 1769, precipitating the establishment of Missions San  
32 Gabriel (1771) and San Fernando (1797). Due in part to the introduction of Euro-  
33 American diseases and the harsh effects of mission life, the Gabrieliño population  
34 and culture suffered a gradual deterioration. Following the secularization of the  
35 missions, most surviving Gabrieliño became wage laborers on the ranchos of  
36 Mexican California. In the early 1860s, a smallpox epidemic nearly wiped out the  
37 remaining Gabrieliño. The combination of disease, forceful reduction, and poor diet  
38 contributed to the disappearance of the Gabrieliño as a culturally identifiable group in  
39 the 1900 federal census (Bean and Smith 1978). However, persons of Gabrieliño  
40 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

Beginning in the sixteenth century, Spanish explorers sailed along the coast of California, starting with Juan Rodríguez Cabrillo in 1542. At the time of his voyage, Cabrillo named the San Pedro Bay the Bahía de los Fumos (McCawley 1996; Silka 1993). In 1602, Sebastian Vizcaino explored the coast of California and developed a detailed map of the coastline. Vizcaino's survey data created some confusion about two new names for Bahía de los Fumos. For many years the particular saint's day on which Vizcaino visited San Pedro Bay was an issue (Silka 1993). The bay was thus referred to as both San Pedro, in honor of Saint Peter, Bishop of Alexandria, and Ensenada de San Andres, in honor of Saint Andrew. However the confusion was resolved in 1734 by cosmographer Cabrera Bueno in his description of Vizcaino's visit, referring to the body of water as the San Pedro Bay, which has since remained the official name (Silka 1993).

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 they could not own land. Twenty-one missions were eventually established from San Diego to Sonoma, separated by a single day's journey (Hoover et. al 1990; Gudde 1998).

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, where it was distributed to the missions and pueblos. However, the supplies provided by Spain from this single ship were insufficient for the needs of the growing population. As a result, as early as 1805 unauthorized trading occurred when an American ship traveled into the bay and found a ready market for European-manufactured and Oriental goods—with cattle hide and tallow serving as the primary currency of exchange (Silka 1993).

During the Spanish occupation of California, a series of land grants were also established. Although typically referred to as "Mexican ranchos", many of the original grants were founded prior to Mexican independence. One example is the Rancho San Pedro, which was granted to Juan Jose Dominguez in 1784 by California governor Pedro Fages and encompassed the land around what was to become the Port of Los Angeles (Robinson 1939).

Upon Dominguez's death in 1809, the land passed to his nephew Cristobal Dominguez, a soldier stationed at San Juan Capistrano (Silka 1993). During Cristobal's tenure in the service, the rancho was left in the care of Manuel Guterrez, its long-time manager and executor of Juan Dominguez's will. In his will, Juan Jose also granted Guterrez grazing rights. During Cristobal's absence, Guterrez eventually assumed rights of ownership and extended the grazing right to Jose Dolores Sepulveda in 1810 (Gaffey 2001; Silka 1993). Sepulveda, who called his

1 stake the Rancho de los Palos Verdes, was ordered to vacate by Governor Pablo Sola  
2 in 1817—the year when Cristobal Dominguez attempted to claim his inheritance.  
3 Sepulveda believed that he was legally entitled to the Rancho de los Palos Verdes.

#### 4 **3.4.2.4.2 Mexican Independence**

5 Mexico proclaimed its independence from Spain in 1821 and became a federal  
6 republic in 1824, with both Baja and Alta California classified as territory (Starr  
7 2005). Through its federal constitution, the United Mexican states attempted to  
8 recreate itself as a federated republic modeled on the United States. However, the  
9 Mission system, an imperialist remnant, proved incompatible with a republican  
10 system of government and culminated in the passage of the Secularization Act of  
11 1833 by the Mexican Congress (Bean and Rawls 1993; Starr 2005). Although  
12 California’s governor at the time of secularization, José Figueroa, intended for the  
13 lands to be repatriated to the indigenous population, his manifesto was never realized  
14 as his untimely death combined with a new social institution, the land grant rancho,  
15 prevented the neophytes from ever recovering mission properties.

16 Between 1835 and 1846, more than six hundred land grants were made in California  
17 by the Mexican government. The dons dominated the economy and defined the  
18 society of Mexican California (Robinson 1948; Starr 2005). These men, often  
19 referred to as “Californios,” practiced an agricultural pattern that included mixed  
20 stock raising and commercial agriculture on their vast landholdings. Thousands of  
21 native inhabitants, separated from their missions and stripped of their lands, were  
22 forced to seek wage labor on the ranchos, many becoming accomplished vaqueros  
23 (Jelinek 1999; Starr 2005).

24 During this period the legal battle between Dominguez and Sepulveda over the  
25 Rancho San Pedro and Palos Verdes sustained. In 1827, Governor Figueroa made  
26 the Sepulveda’s a provisional concession of Rancho Los Palos Verdes. However, it  
27 wasn’t until 1846 that Governor Pio Pico confirmed Sepulveda’s right to Rancho  
28 (Robinson 1939; Silka 1993).

#### 29 **3.4.2.4.3 Commercial Hide Trade**

30 The year Mexico proclaimed independence from Spain, California ports were officially  
31 opened to foreign trade. That same year the firm of McCulloch, Hartnell and Company  
32 succeeded in contracting with the missions for cattle hides and tallow, and the company  
33 was permitted to build warehouses at Monterey and San Pedro. In 1823, in the area  
34 that is now known as the Fort MacArthur Middle Reservation, the firm constructed an  
35 adobe hide warehouse where they managed cattle hides obtained from the San Gabriel  
36 and San Fernando Missions. In 1829, the hide warehouse was sold to the San Gabriel  
37 Mission. Upon secularization of the missions in 1833, ownership of the Hide House  
38 was acquired by Abel Stearns, who established himself in business at the pueblo. The  
39 Hide House came to be known as Casa de San Pedro and business flourished through  
40 the 1830s, although the region around San Pedro remained largely uninhabited. In

1 1835, Richard Henry Dana landed at San Pedro and described the region as isolated, a  
2 fact that is supported by the 1836 and 1844 census records, which record 75 and 28  
3 people, respectively, living on the Rancho San Pedro (Silka 1993). The hide business  
4 flourished through the 1830s, although the region around San Pedro remained largely  
5 uninhabited. By 1830, San Pedro was the leading west coast center of hide production,  
6 the primary export of the Missions and, later, the Ranchos (Queenan 1986).

#### 7 **3.4.2.4.4 American Period and Experimental Capitalism**

8 With the granting of statehood in 1848, San Francisco was quickly established as the  
9 Port of Entry for California and all imported goods destined for Los Angeles had to  
10 be transported from there. In order to maintain economic independence and viability,  
11 Los Angeles had San Pedro also designated as an official Port of Entry in 1853. With  
12 ranching still the primary industry in southern California, the port at San Pedro  
13 remained underused. In addition, the combination of a rocky shoreline and a shallow  
14 harbor made accessibility challenging for ships.

15 Local entrepreneurs and economic boosters Phineas Banning and Augustus W.  
16 Timms capitalized upon the Port's new status. Banning, an entrepreneur from  
17 Delaware who arrived in the Los Angeles area in 1851, became the manager of Hide  
18 House and eventual partner of David W. Alexander; Timms, a German immigrant  
19 who purchased the Sepulveda landing in 1852, instigated a fierce competition for the  
20 local commission and freighting opportunities.

21 By this time, land disputes between Mexican ranchers and disgruntled forty-niners  
22 erupted. In an effort to try their hand at farming, unsuccessful miners squatted on  
23 rancho lands and demanded rights to them from the federal government. Later that  
24 year, Congress passed the Land Act of 1850, which placed the burden of proving title  
25 upon the Californios (Spanish speaking inhabitants of Alta California). Both the  
26 Dominguez and Sepulveda families' claims to their ranchos were confirmed by the  
27 Board of Land Commissioners. However, the determinations were appealed in court,  
28 and although the Dominguez family successfully fought the challenges and received  
29 the patent for Rancho San Pedro in 1858, the Sepulveda family came to be plagued  
30 by a series of lawsuits instigated from within as well as outside of the family (Silka  
31 1993). Ultimately, the combination of legal wrangling and the decimation of the  
32 cattle industry led the Californios to sell their landholdings.

#### 33 **3.4.2.4.5 New San Pedro**

34 During the 1850s, Phineas Banning became the leader in lightering and  
35 transportation. However, winds and storms in the unprotected harbor cost Banning  
36 losses of valuable shipments and forced him to consider another location from which  
37 to operate his enterprise. In 1858, Banning formed the firm of Banning & Company  
38 with David W. Alexander as a silent partner. However, after a short period, Banning  
39 took over sole leadership. That same year Banning and a team of investors including:  
40 J.G. Downey, Benjamin Wilson, William Sanford, Henry Myles, and Joseph

1 Lancaster Brent purchased 2,400 acres of estuary shore on the Dominguez Rancho  
2 San Pedro from Manuel Dominguez, and platted a town that they named New San  
3 Pedro (Gaffey 2001; McDowell 1993; Silka 1993). The partners divided up lots  
4 throughout the newly platted township, although Banning was also granted an  
5 additional 35-acre portion at the foot of Canal Street known as “Banning’s  
6 Reservation” and eventually “Banning’s Landing” (LeCouvreur N. D.; McDowell  
7 1993). Banning constructed docks, warehouses, a lumber yard, and stocked it with a  
8 fleet of shallow-bottomed boats to ferry goods and passengers from ships anchored  
9 outside the bay. He purchased stagecoaches and wagons to carry passengers and  
10 freight from San Pedro to Los Angeles, San Bernardino, and even as far as Yuma and  
11 Salt Lake City. In July of 1858, 100 invited guests watched as the first cargo of  
12 merchandise was delivered to the newly built wharf (Marquez and de Turenne 2007).

13 While the new harbor location was offered a measure of protection from wind and  
14 storms by Rattlesnake Island, much of the acreage was under water at the time of  
15 purchase. In 1850, Captain Amos Fries of the U.S. Army Corps of Engineers  
16 described what would become the new harbor location as:

17 Wilmington Lagoon begins near Deadman’s Island, a sand, clay and rock  
18 Promontory some fifty feet high and less than two acres in extent, located about  
19 three-quarters of a mile nearly due east of the Government Reservation. The  
20 Lagoon is generally low land, overflowed at high tide, but largely mud-flats at  
21 low tide, extending northward and eastward distances of three to four miles from  
22 Deadman’s Island. In all there are some 1,360 acres in the Lagoon. About one  
23 mile north of Deadman’s Island there were two or three channels leading to  
24 Wilmington having from two to six feet of water at low tide, though across the  
25 present entrance, west of the island, there were generally depths of only one to  
26 three feet (Weinman and Stickel 1978 citing *Out West* 1907).

27 Banning was able to carve a small, shallow working harbor from the vast slough by  
28 utilizing mud scows to dig the channel and hand pumps to siphon the water from the  
29 submerged land.

#### 30 **3.4.2.4.6 The Civil War Comes to Town**

31 As the Civil War erupted in 1861, political and military attention from both sides  
32 turned to California with its strategic harbors and abundant mineral wealth.  
33 Confederate strategists were aware of the strong southern sympathies of many  
34 residents of southern California. Many public officials and prominent business  
35 leaders were Southerners and it seemed plausible that California might secede should  
36 a war develop. Aware of the dangers of secession and the possibility of an internal  
37 invasion by southern forces, the Department of War established a series of military  
38 camps throughout the west, including a camp in New San Pedro near Banning’s  
39 Wharf (McDowell 1993). In addition to providing protection in the event of an  
40 attempted attack, the military presence also helped control Confederate agitators and  
41 supplied staff close to the harbor for receiving supplies and training volunteers. The  
42 encampment near Banning’s Wharf was officially designated as “Camp Drum” in  
43 honor of Lieutenant Colonel Richard Coulter Drum, who had provided major

1 assistance in establishing the camp. Camp Drum became the military headquarters  
2 for southern California in 1862, under the command of Colonel James Henry  
3 Carleton (McDowell 1993).

4 During the winter of 1861—1862, record rainfall flooded the low-lying Camp Drum,  
5 signifying the need for more permanent facilities. As a result, Banning donated a 60-  
6 acre portion of his landholdings to the federal government for the construction of the  
7 Wilmington Drum Barracks (California Historical Landmark No. 169 and Los  
8 Angeles City Historic-Cultural Monument No. 21). The Drum Barracks was the  
9 main staging area for troops bound for posts all over the West as well as a depot for  
10 arms, equipment, and supplies. The post was abandoned in 1870, and a few years  
11 later the land was transferred back to Banning. Eventually, the property was  
12 subdivided and the buildings gradually deteriorated or were demolished, except for  
13 the officer's quarters, which now house the Drum Barracks museum (McDowell  
14 1993).

15 In 1863, Banning transferred a second land title to the government for construction of  
16 a large depot near the wharf on his 35-acre reservation. A few years later, he again  
17 transferred additional lots near the wharf to the government for military use. The  
18 wharf and depot location offered a convenient port with existing warehouses and  
19 transportation system. The depot was originally located "...on the southwest corner  
20 of today's A Street and Avalon Boulevard, it covered 5.38 acres with a frontage of  
21 270 feet on Canal Street (Avalon Boulevard) and extended west almost 900 feet to  
22 present Fries Avenue. The depot consisted of a quartermaster's office and a  
23 warehouse facing Canal Street, shops and stables along each side, and a 270 by 70-  
24 foot, two-story forage barn at the rear on pilings to protect the fodder during high  
25 tides" (McDowell 1993:32).

26 In total, Banning conveyed 66 acres to the government during the war effort. Local  
27 military occupation proved a successful financial strategy for Banning, who managed  
28 the transportation of military goods and provisions and eventually accumulated a  
29 majority of the shipping business from San Pedro. Further prosperity was achieved  
30 via the thousands of soldiers stationed at the Drum Barracks who supported the local  
31 economy. Banning established the first telegraph, newspaper, and post office to the  
32 harbor area. At this time, New San Pedro was renamed Wilmington, in honor of  
33 Banning's Delaware roots (Marquez and de Turenne 2007; McDowell 1993; Silka  
34 1993).

#### 35 **3.4.2.4.7 Industrialization**

36 Banning realized that Wilmington would not become a successful port without  
37 breakwater protection. He also understood that a rail line was essential to the  
38 economic development of the port and community. Without an active railroad,  
39 competing communities, including San Diego and Anaheim, could potentially siphon  
40 large amounts of trade from both inland and coastal routes (Olesen 1982). Los  
41 Angeles was already losing international trade to Asia, which was carried almost  
42 entirely by foreign ships to other ports on the Pacific coast (Weinman and Stickel  
43 1978).

1 Banning successfully petitioned Congress to appropriate the necessary funds to  
2 construct a 6,700-foot sea-wall connecting Rattlesnake and Deadman’s Islands and  
3 for construction of a lighthouse at Point Fermin. In 1871, San Pedro’s first federal  
4 dredging project was undertaken, and the combination of the sea wall and dredging  
5 project proved transformative. Instead of anchoring outside the harbor and using  
6 smaller boats to move cargo ashore, the Main Channel, now with a 10-foot clearance  
7 at low tide, allowed ships to navigate directly to the wharfs. By the 1890s, the depth  
8 had increased to more than 15 feet, adequate for the lumber schooners that made up  
9 the majority of the large harbor traffic (Marquez and de Turenne 2007).

10 In 1869, Banning initiated the construction of the first railroad in southern California,  
11 seven years before the Southern Pacific (SP) Railroad would connect Los Angeles to  
12 the East Coast via rail. The Los Angeles and San Pedro Railroad operated between  
13 Los Angeles and Wilmington and represented the first reliable means of moving  
14 cargo from ships coming into San Pedro. In 1876, Banning sold his interests in the  
15 Los Angeles and San Pedro Railroad to the “Big Four” (Collis Huntington, Leland  
16 Stanford, Mark Hopkins, and Charles Crocker) as an inducement to the Southern  
17 Pacific Railroad to put Los Angeles on its main line (Weinman and Stickel 1978;  
18 Silka 1993; Vickery 1982). Soon after the purchase, the Southern Pacific extended  
19 its Los Angeles-San Pedro Railroad on pilings across the Wilmington Lagoon, to a  
20 new terminal near old Timms Landing. By the 1880s, tracks and wharves covered  
21 the tidelands up to about present-day First Street (Weinman and Stickel 1978).

22 With the establishment of a railroad and the completion of the sea-wall connecting  
23 Rattlesnake and Deadman’s Islands, the efforts of Phineas Banning were realized.  
24 All this stimulated a two-way flow of passengers and merchandise. The population  
25 of Wilmington began to solidify from a combination of disgruntled 49ers, Civil War  
26 veterans, and various passengers on both commercial and non-commercial vessels. In  
27 1872, Wilmington was incorporated and by 1874, Wilmington’s population was  
28 approximately 600, although the number would temporarily swell during steamer  
29 days when passengers were ferried in from the coastal steamers anchored off San  
30 Pedro Point, the headland of Cabrillo Beach (Olsen 1982; Silka 1993).

31 The population explosion in southern California in the 1880s and the extension of the  
32 railroad throughout the southwest increased the importance of the harbor as it  
33 provided an economic base on which the harbor could grow. The local newspaper,  
34 the *Wilmington Enterprise* (later *The Enterprise*), established in 1904 described the  
35 animated scene at the foot of Canal Street where the wharf was situated. Seamen and  
36 stevedores are described unloading schooners and lighters as ship and train  
37 passengers were arriving and departing (Olesen 1982). Like residents of neighboring  
38 San Pedro, laborers were employed to discharge ship’s cargoes. Workers also found  
39 employment loading rock or sand ballast in outbound vessels, repairing ship  
40 components, and performing construction work on docks, breakwaters, jetties, and  
41 railroad lines (Gaffey 2001).

42 With improved rail transportation, thousands of people immigrated to Los Angeles,  
43 and the increased population brought a need for more construction and living  
44 supplies, much of which came from ships destined for San Pedro’s shores. The  
45 demand for lumber, coal, and other goods spurred an increase in merchant vessels in

1 San Pedro Bay. This, in turn, created a demand for longshoremen, carpenters,  
2 shipfitters, laborers, merchant mariners, railroad workers, and men working  
3 supporting businesses such as shipyards. The town provided lodging and  
4 entertainment for seamen interested in spending their small salaries of \$25 to \$35 per  
5 month. Many of the men who chose to remain in San Pedro and Wilmington were of  
6 Scandinavian, Italian, and Portuguese descent (Gaffey 2001).

### 7 **3.4.2.4.8 Transportation**

#### 8 **Pacific Electric Railway**

9 The sleepy village at El Pueblo de Nuestra Señora Reina de los Ángeles sobre el Río  
10 Porciúncula had been founded in 1781, but even in the post Civil War era the  
11 population was small and the land area covered only the original four leagues  
12 (roughly the distance a man or a horse can travel in an hour). The City of Los  
13 Angeles is unique in world history in that it owes its growth to the evolution and  
14 perfection of the streetcar.

15 Real estate speculators in the 1870s began to lay out animal powered traction lines,  
16 suddenly bringing cheap agricultural land within the distance that a man could  
17 reasonably travel from home to work and home again in a single day. Animal  
18 traction was soon joined by capital intensive cable cars able to climb the hilly terrain  
19 and wide river at downtown Los Angeles. Before the investors could recoup their  
20 capital, the cable and horsecar systems were soon supplanted by electric traction.  
21 Electric street railways and long-distance electric interurbans were relatively cheap to  
22 construct and operate, and the technology was well perfected by the turn of the  
23 twentieth century.

24 In 1901 Henry E. Huntington, nephew of Southern Pacific magnate Collis P.  
25 Huntington, incorporated the Pacific Electric (PE) Railway capitalized with a not  
26 insubstantial \$100 million in cash. Huntington's first line was built between  
27 downtown Los Angeles and downtown Long Beach, followed almost immediately by  
28 extensions into the two ports. Huntington had made his own fortune running a  
29 number of railroads for his uncle, and he built the Pacific Electric to the engineering  
30 standards of any Class 1 American mainline railroad. This meant that in addition to  
31 offering first class passenger transportation to further profits from real estate  
32 development (the Huntington Land Company), and power and water profits (the  
33 Huntington-owned Southern California Edison Company), the PE could haul freight  
34 from the Port. After raising and spending a second \$100 million on further  
35 expansions, the PE was taken from Huntington family control in 1911 by none other  
36 than E.H. Harriman of the Southern Pacific and merged with seven other major  
37 regional electric traction empires to form a new and vastly bigger Pacific Electric  
38 Railway—the world's largest system with over 1200 route miles just in Southern  
39 California. All of this construction and merger activity left the PE with no less than  
40 five lines into the Port, two of which passed through the proposed project site.  
41 During WWII due to oil, gas, and tire rationing, the PE saw its heaviest passenger  
42 traffic in its entire 60 year history. A new line was hurriedly built by the United  
43 States Maritime Commission to bring war workers to Terminal Island to build

1 Liberty Ships. The PE built and operated this line under contract using second-hand  
2 equipment sourced from parent company SP's electric operations in the San  
3 Francisco Bay area. At the war's end, the cars and line were virtually given to the  
4 PE, which operated them until the final abandonment of service.

5 Passenger trains of the Long Beach-San Pedro line (via Wilmington) stopped running  
6 in 1949; trains of the Catalina Express service and those used by the San Pedro via  
7 Dominguez line ceased operation in December 1958.

### 8 **The San Pedro via Dominguez and West Basin Lines**

9 The Southern Pacific Railroad utilized long pile trestles over the tidelands that  
10 comprised what is today's West Basin. These trestles precluded all use of the West  
11 Basin by seagoing vessels and were much maligned by those interested in developing  
12 the West Basin. In mid-1907 the War Department ordered the construction of  
13 drawbridges of the double leaf bascule type to replace the trestles. Pacific Electric  
14 meanwhile requested a franchise to extend its tracks around the Bay, but action on  
15 the application was deferred. Things were at a standstill for several years as far as  
16 the bridges were concerned, but in 1911 the matter was resolved when one of the  
17 largest single-span drawbridges was constructed. The bridge was 187 feet long and  
18 afforded a clear channel of 185 feet for ships. It was of the type known as a "Strauss"  
19 trunnion and was sufficiently wide to accommodate two tracks. By this time the  
20 Pacific Electric was owned by the Southern Pacific, and the two former rivals were  
21 able to share the new span into San Pedro. Only the westerly track was electrified;  
22 therefore, PE had only a single track line across the bridge. From February 1942 to  
23 February 1947 the Coast Guard ordered the bridge to remain in the raised position in  
24 case an enemy attack might immobilize it and trap ships inside the West Basin. All  
25 PE trains were routed over the West Basin line during this time. In September 1955 a  
26 ship hit the bridge and it was declared too dangerous to use; it was removed soon  
27 after. (Heller 2007)

28 The San Pedro via Dominguez line had been in service since 1904 and followed the  
29 same route as the Long Beach line south through Watts and Compton to Dominguez  
30 Junction. From Dominguez Junction south the line extended to Wilmington station.  
31 From Wilmington the line continued through an industrial district and over the  
32 Southern Pacific's bascule-type bridge into San Pedro. From Dominguez Junction  
33 south, the line paralleled Alameda Street to just north of the Pacific Coast Highway,  
34 then veered in a straight line toward Wilmington. At East Wilmington the Long-  
35 Beach-San Pedro line joined, and at Anaheim Boulevard the Catalina Pier A Street  
36 line branched off. The Wilmington Station was reached at Avalon Boulevard.

37 From the intersection of the private way and Wilmington-San Pedro Road (Avenue  
38 "B," Wilmington), no fewer than three routes existed:

- 39 ■ the original route, which was on a mile-long trestle over marsh land;
- 40 ■ the route via the San Pedro drawbridge, built in 1911; and
- 41 ■ the West Basin Line, built by the PE Land Company in 1910.

1 Of these, the direct route via the drawbridge was by far the most important and more  
2 used; only during World War II (when the bridge had to remain open) and after its  
3 removal in 1955 was the West Basin Line route used by this line. The San Pedro  
4 Line survived Pacific Electric and Metropolitan Coach Lines ownership only to fall  
5 victim to the Los Angeles Metropolitan Transit Authority (LAMTA); due to a great  
6 decrease in patronage the LAMTA ordered the rail service to give way to buses. The  
7 conversion took place on December 7, 1958.

8 The second route followed a longer land route around the West Basin and remains  
9 intact today, although on a modified alignment. Formerly known as the West Basin  
10 Line, this route is a heavily traveled freight railroad corridor paralleled by streets  
11 with heavy truck volumes. From the Wilmington Station at Avalon Boulevard, the  
12 West Basin Line followed a meandering course along B Street to Figueroa Street,  
13 then veered its two tracks slightly to the west onto a private way alongside  
14 Wilmington-San Pedro Road, which it followed (joining the San Pedro via Torrance  
15 line near Channel Street) to Gaffey Street, then via a twisting route to 1<sup>st</sup> Street and a  
16 junction with the San Pedro via Dominguez line.

17 At B Street the West Basin Line branched off, continuing to Pacific Dock where it  
18 crossed the Southern Pacific's bascule-type bridge; then it entered San Pedro over a  
19 long double-track trestle, once again sharing track with the West Basin Line at 1<sup>st</sup>  
20 Street, and continued on to its terminus, the PE San Pedro Station at 5<sup>th</sup> Street.  
21 Electrified tracks continued to the Outer Harbor, but only local passenger service was  
22 operated beyond the PE Station.

### 23 **Harbor Belt Line**

24 Freight traffic to and from the Harbor typically consisted of canned goods, coke,  
25 sand, sulfur, lumber, wire, iron and steel, citrus fruits, bananas, and a great variety of  
26 manufactured products. For a number of years Pacific Electric was the dominant  
27 carrier at the harbor, but from a high of 51% of total carloads handled in 1924 it fell  
28 to 26% by 1938, mainly due to the establishment of the Harbor Belt Line Railroad.

29 In order to provide equal access to the harbor for all railroads (the Santa Fe had been  
30 frozen out) in 1929 a joint agency was formed that would operate the pooled trackage  
31 of the City and railroads as a single unit, run by an organization separate and distinct  
32 from those of the four railroads (PE, SP, Union Pacific, and Atchison, Topeka and  
33 Santa Fe Railway). Thus the Harbor Belt Line Railroad was begun, starting  
34 operations on June 1, 1929, the net result of which was the rise of the Santa Fe as a  
35 power at the Port, mostly at the expense of PE.

36 In addition to traffic to and from the harbor, other major originating points for freight  
37 on the San Pedro line are Watson, Dominguez Junction, and Compton. Both Watson  
38 and Dominguez are important oil centers, while the Compton traffic is of a general  
39 nature

### 3.4.2.4.9 Expansion

As the City and the Port at Los Angeles grew during the late nineteenth and early twentieth centuries, the U.S. 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, 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. In 1888, San Pedro was incorporated and took over the local lead of the port (Baker 1982). In 1909, San Pedro and Wilmington consolidated with Los Angeles in order to fund municipal services and development of the harbor (Marquez and de Turenne 2007; Silka 1993). The consolidation occurred during the completion of the Panama Canal, which would bring a windfall of commerce to the harbor. The new harbor commission spent \$5.5 million on new wharfs, warehouses, railroad spurs, and docks.

The City of Los Angeles built the first Municipal piers at Wilmington in 1914, making it the center of harbor activity. Two years later, improvements at Fish Harbor provided safe anchorage for fishing boats, sites for canneries, and housing for a multi-ethnic population of workers, including people of Japanese, Italian, Mexican, and Eastern European descent.

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 1986). 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 of Los Angeles 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 in reverse would occur at the destination.

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

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 harbor and used it as a training and submarine base.

1 During the war, the Port was one of the chief sources of employment for area  
2 residents. Shipbuilding enterprises, including Southwestern Shipbuilding Company,  
3 Los Angeles Shipbuilding and Drydock Corporation, and Ralph J. Chandler  
4 Shipbuilding, began turning out vessels by the dozens for the war effort. By 1918  
5 four shipbuilding yards located within the harbor attracted contracts worth over \$115  
6 million and employed over 20,000 people. The Port of Long Beach, established only  
7 two years before the onset of the war, offered the only Southern California shipping  
8 and shipbuilding competition to the Port of Los Angeles.

9 Following the end of World War I in 1918, the Port was increasingly used for the  
10 importation of lumber and other types of raw materials. As in the prewar period,  
11 approximately 98% of the inbound cargo consisted of lumber to satisfy the demand  
12 for housing and factories caused by the rapid growth of the Los Angeles area  
13 (Matson 1920). In exports, crude oil was the biggest product passing through the  
14 Port in the post-war years. The end of the war also generally meant the end of  
15 restrictions to trade. Although lumber and crude oil represented the largest volume  
16 of commodities to pass through the Port at that time, Los Angeles featured almost all  
17 types of industry, and new facilities were developed to handle products such as  
18 cotton, borax, citrus crops, and steel.

#### 19 **3.4.2.4.10 Recreation**

20 In addition to industrial facilities, the early twentieth century also saw the  
21 development of recreation at the Port. Rattlesnake Island was converted into  
22 Brighton Beach, a major vacation resort, and was quickly followed by improvements  
23 at Point Fermin. In 1893, the Banning Company, now managed by Phineas  
24 Banning's three sons, purchased Catalina Island and founded the Catalina Yacht  
25 Club. The Banning Company also created the Wilmington Transportation Company  
26 in 1884 to provide regular crossing of passengers and goods between the mainland at  
27 the "Water Street Wharf" and Catalina Island (Board of Harbor Commissioners 1920;  
28 Channel Crossings 2006). In 1919, William Wrigley, of chewing-gum fame,  
29 purchased Catalina Island from the Banning Company for 3 million dollars. Wrigley  
30 also purchased the Wilmington Transportation Company and reinvented transport  
31 between the island and the mainland. Reinvented as the Catalina Island Steamer  
32 Terminal, Wrigley rehabilitated and constructed a series of steamers including the  
33 *Avalon*, *Cabrillo*, and the *Catalina* to make the journey to and from the mainland  
34 (Channel Crossings 2006; Marquez and de Turenne 2007). Wrigley also remodeled  
35 the existing warehouse "so as to provide every facility and convenience for the  
36 handling of passengers and freight" (Board of Harbor Commissioners 1920:56).

37 Wrigley's son, Philip, developed an airline that transported vacationers from the  
38 Wilmington Terminal dock at Berth 185 to the Hamilton Cove airport just offshore of  
39 Catalina Island. The amphibious Douglas Dolphin seaplanes flew across the channel  
40 38,000 times, carrying more than 200,000 passengers (Marquez and de Turenne  
41 2007).

### 3.4.2.4.11 World War II

During World War II, the Port of Los Angeles, including Wilmington Harbor, as one of the closest major ports to the Pacific Theatre of Operations, was fully involved in defense activities. The US Navy immediately assumed control over all ship operations after the Japanese attack on Pearl Harbor in 1941. An official Point of Embarkation was established near the intersection of Fries and Water Streets and Port facilities were turned over to the war effort. Ship building at the Port increased dramatically and over 90,000 ship workers were employed locally. Even contentious labor relations were put on hold after organized labor declared a “no-strike” pledge for the duration of the war (Queenan 1986). Between 1941 and 1945, 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).

### 3.4.2.4.12 Post WW-II 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 harbor returned to its peacetime patterns (Silka 1993). Following the war, LAHD launched a broad restoration program. Many of the facilities in the 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 1986). New and extended breakwaters allowed for increased berths and terminals. By 1953, cargo through the Port exceeded 26 million tons in 4,707 vessels (Silka 1993).

Containerization was introduced in 1958 when the vessel *Hawaiian Merchant* made the first shipment of containers from the Port, beginning a revolution in cargo transport. 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 reduction of the 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.

Modernization and infrastructure changes continued to transform the geography of the waterfront, including the building of the Vincent Thomas Bridge in 1963 and the dredging of the West Basin to 35 feet in 1964. By 1965, a leading edge, intermodal container transfer facility was opened. Three years later, total cargo hit a new peak at over 28 million tons. International shipment through the Port increased during the latter half of the twentieth century as ocean-going vessels grew too large to negotiate

1 the Panama Canal. Using a land-bridge system, shippers could transfer materials  
2 from Pacific region sources to Atlantic region markets by unloading at the Port of  
3 Los Angeles and trans-shipping via truck or train to vessels waiting at east coast ports  
4 (Queenan 1986).

## 5 **3.4.2.5 Site-Specific Methodology**

### 6 **3.4.2.5.1 Records Search**

#### 7 **Archaeology**

8 ICF Jones & Stokes cultural resources staff conducted a records search at the South  
9 Central Coastal Information Center of the California Historical Resources  
10 Information System located at California State University, Fullerton, on April 8,  
11 2008. The records search included a review of all recorded cultural resources within  
12 a 1-mile radius of the proposed project area. In addition, a review of historic  
13 registers was conducted including: *California Historical Landmarks, the National*  
14 *Register of Historic Places, California Register of Historical Resources, California*  
15 *Points of Historical Interest, California Inventory of Historic Resources, California*  
16 *Place Names, and Los Angeles Historic-Cultural Monuments.*

17 According to the records search, no known prehistoric and/or historical  
18 archaeological sites are located within the proposed project area. However, the  
19 records search indicates that the project area is sensitive for both prehistoric and  
20 historical archaeological resources. Sixteen archaeological sites have been  
21 previously identified within a 1-mile radius of the proposed project area (see Table  
22 3.4-2). All of these sites are located at least 1 mile from the Avalon Waterfront  
23 District and the Avalon Development District. However, nine of the sixteen  
24 archaeological sites have been recorded within less than ¼ mile of the proposed  
25 Waterfront Red Car Line/California Coastal Trail (CA-LAN-116, -146, -147, -150, -  
26 283, -285, -2135H, -2873, and -2874). Of these 9 sites, CA-LAN-150 is located  
27 adjacent to the California Coastal Trail, CA-LAN-283 is located 0.06 of a mile from  
28 California Coastal Trail and CA-LAN-2135H is located approximately 0.04 of a mile  
29 from the California Coastal Trail. Descriptions of the nine sites located less than ¼  
30 of a mile from the CCT are provided following Table 3.4-2. While a majority of  
31 these sites would not be impacted by the proposed Project, they provide a general  
32 reference and understanding of the nature and types of archaeological sites previously  
33 found in the vicinity of the proposed project area. However, because previously  
34 identified sites CA-LAN-150 and/or CA-LAN-283 are located within such close  
35 proximity to the proposed project area, potential impacts on these two sites are  
36 discussed in detail in this section.

37

1 **Table 3.4-2.** Previously Identified Archaeological Resources within a One-Mile Radius of the Project  
 2 Area

<i>Site Number</i>	<i>Resource Type</i>	<i>Relationship to Project Area(PA)</i>	<i>Notes</i>
CA-LAn-91	Shell midden	0.71 mile from PA	N/A
CA-LAn-116	Unknown	0.12 mile from PA	N/A
CA-LAn-146	Shell midden, possibly natural shell.	0.05 mile from PA	Note in file indicates site was destroyed prior to 1977. No evidence of site found during ICF Jones & Stokes monitoring from 2006 to 2008
CA-LAn-147	Shell midden	0.15 mile from PA	N/A
CA-LAn-148	Shell midden	0.39 mile from PA	N/A
CA-LAn-149	Shell midden, possibly natural shell.	0.15 mile from PA	Note in file indicates site was destroyed prior to 1964.
CA-LAn-150	Refuse heap	Adjacent to PA on east side of CCT	Note in file states site was destroyed by earthmoving activities prior to 1964.
CA-LAn-283	Shell midden & lithic scatter	0.06 mile from PA	Salvage excavation conducted in 1968 at Vincent Thomas Bridge
CA-LAn-284	Shell midden & lithic scatter	0.36 mile from PA	N/A
CA-LAn-285	Village site, shell midden,	0.10 mile from PA	Note in file indicates site was destroyed prior to 1964.
CA-LAn-287	Lithic scatter	0.34 mile from PA	N/A
CA-LAn-789	Shell midden & lithic scatter	0.44 mile from PA	Site tested in 1989, determined to be paleontological location.
CA-LAn-2135H	Los Angeles Union Oil Refinery	0.04 mile from PA	N/A
CA-LAn-2873	Lithic scatter	0.16 mile from PA	N/A
19-002874	Lithic scatter	0.39 mile from PA	N/A
19-002875	Shell midden & lithic scatter	0.37 mile from PA	N/A

3

4

#### **CA-LAn-116**

5

6

7

8

9

No site description is provided in the site record. The site location is described as 1/8<sup>th</sup> of a mile northeast of corner of Cabinet Drive and Capitol Drive in San Pedro. A handwritten note on the record states that the site is located 3/4 of a mile from the Bixby Slough. The site was recorded by H. Eberhart in 1952 based on notes from N.C. Nelson.

**CA-LAn-146**

Recorded in 1912 by N.C. Nelson and described as a refuse heap consisting of pecten, 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 re-development in San Pedro over the past century has included the removal of extensive amounts of soil in portions of the 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).

From 2004 to 2008, ICF Jones & Stokes conducted archaeological monitoring for the Port of Los Angeles *Waterfront Gateway* project. The monitoring efforts focused on both the identification of CA-LAN-146 as recorded by the regional information center (based on Nelson's notes) and the identification of subsurface historical archaeological deposits associated with a Mexican colonia, locally recognized as *Mexican Hollywood*. Native American monitoring of the project area was conducted by Mr. Anthony Morales, Chairman of the Gabrieliño/Tongva San Gabriel Band of Mission Indians. While intact trash deposits associated with *Mexican Hollywood* were identified during monitoring, no subsurface evidence of CA-LAN-146 was identified. The monitoring report for this project is in production by ICF Jones & Stokes.

**CA-LAn-147**

Recorded in 1912 by N. C. Nelson, CA-LAn-147 is described as a refuse heap. No specific site dimensions or contents were provided in the site record. Nelson stated that most of the refuse (site) was removed during the grading of the straight boulevard running from Pt. Fermin past San Pedro to Wilmington.

**CA-LAn-149**

Recorded in 1912 by N. C. Nelson, CA-LAn-149 is described as a refuse heap. Nelson notes that despite the fact that nearby residents informed him that they believe the site, like others in the immediate vicinity, are of natural origin, he argued the site is characteristic shellmound material with soil interdispersed throughout the matrix, and argues that this is likely a prehistoric site despite any lack of associated artifacts.

**CA-LAn-150**

In 1912, N. C. “Nels” Nelson recorded CA-LAn-150 as a refuse heap (shell midden) measuring 600 by 75 feet and “located at the western end of the Wilmington Lagoon on the bluff at the left hand side of Wilmington Road.” Nelson estimated the site depth at 4 feet and noted that no associated artifacts were observed. Nelson had established himself as one of the foremost experts in the identification and stratigraphic analysis of shell middens along the California coast. In northern California, his work on the substantial shellmounds of the coastal region yielded extensive archaeological data (Nelson 1910; Willey and Sabloff 1993). Unfortunately, the same level of study and analysis has not been conducted on the shell midden sites identified by Nelson in southern California (Erlandson and Colton 1991).

A note in the site record file dating from 1981 stated that CA-LAn-150 appeared to be completely destroyed as a result of earthmoving activities subsequent to 1964 (Dillon 1981). However, because no subsurface investigation was conducted at CA-LAn-150 prior to the reported earthmoving activities, it is not possible to use the information from the 1912 site record to determine the exact location, horizontal extent, or depth of the site. In addition, the 1981 note does not provide a description of the methods the author used to make the determination that the site was completely destroyed. Therefore, it cannot be determined using the information currently available whether any portion of CA-LAn-150 remains intact and if any identified deposits would meet significance criteria.

**CA-LAn-283 (San Pedro Harbor Site)**

The San Pedro Harbor Site was a large shell midden on the eastern slope of the Palos Verdes Peninsula overlooking what are now the West Basin and the Southwest Slip of the San Pedro Harbor. The site was first recognized in 1939 by D. L. True who designated it as Torrance 8; it was re-surveyed in 1960 by Paul Chace. The site was located on a terrace approximately 120 feet above sea level, and the midden averaged 30 inches deep over an area of approximately six acres (Butler 1974).

In 1968, archaeology students from California State University, Long Beach and an archaeology crew from the California Department of Parks and Recreation conducted salvage excavations at prehistoric site CA-LAn-283, the San Pedro Harbor Site, during the construction of an extension of the Vincent Thomas Bridge that connected the bridge to the Harbor Freeway. The excavators recovered a substantial amount of artifacts that indicated the site was occupied initially during the Millingstone Horizon (ca. 8000–3500 BP), through the Intermediate Period (ca. 3500–1200 BP) and into the Late Prehistoric Period, with a termination date of sometime between AD 1000 and AD 1500 (Desautels 1968). In addition to recovering a large number of artifacts, an unusual cogged stone with a platform base and vertical side notching at regular intervals was also identified (Desautels 1968; Butler 1974).

Although 57% (n=98) of the 172 five-by-five foot pits excavated revealed disturbance related to urban development, CA-LAn-283 yielded important scientific information relevant to the prehistory of coastal southern California. Laboratory

1 analysis of the artifacts indicated that the site exhibited a long period of repeated  
2 seasonal occupation, broad resource exploitation, and an easily accessible supply of  
3 Monterey Chert for chipped stone implements. The overall assemblage indicates that  
4 the site might represent a primary subsistence village of a centrally based, wandering  
5 community.

### 6 **3/CA-LAn-285**

7 This site was recorded in 1939 by F. H. Racer as a village site consisting of a shallow  
8 shell midden composed primarily of pecten. Associated artifacts included: worked  
9 shell ornaments, scarce amount of shell beads, several mutates, three manos, two  
10 double-pointed, chipped, flint arrowheads, and several cobble spheres. At the time of  
11 recordation, the site was being utilized for flora (flower) cultivation although no  
12 assessment of disturbance to the site was provided.

### 13 **3/CA-LAn-2135H**

14 This site was recorded in 1993 as the location of the Los Angeles Union Oil  
15 Refinery, which was constructed in 1917. The site encompasses 424 acres and  
16 consists primarily of tanks, refinery and maintenance facilities, office structures,  
17 utilities, and roads.

### 18 **3/CA-LAn-2837**

19 This site was recorded in 2001 as a low density lithic scatter with unknown size and  
20 boundaries and little research potential. The artifacts were identified during grading  
21 monitoring and the site was determined destroyed by grading for the Port of Los  
22 Angeles's Distribution Center.

## 23 **Historic Architectural Resources**

24 A cultural resources record search was conducted at the South Central Coastal  
25 Information Center (SCCIC) of the California Historical Resources Information  
26 System (CHRIS) located at California State University, Fullerton on April 8, 2008.  
27 The record search included a review of all recorded cultural resources within a half-  
28 mile radius of the proposed project area. In addition, a review of historic registers  
29 was conducted including: California Historic Landmarks (CHL), the National  
30 Register of Historic Places (NRHP), California Register of Historic Resources  
31 (CRHRs), California Points of Historical Interests (PHI) and California Historic  
32 Resources Inventory (HRI).

33 According to the record search, there are 33 cultural resources sites, 19 built  
34 environment resources, and 16 archaeological sites located within the half-mile  
35 radius of the proposed project area; however, none of the listed architectural  
36 resources are within the proposed project boundary. The CHL lists two properties  
37 located within a half-mile radius of the proposed project area: CHL #380/19-174912  
38 Site of the Home of Diego Sepulveda; and CHL#894 S.S. Catalina, original location

1 at the Port of Los Angeles, Catalina Island Terminal, Berth 96, new location at the  
2 Ensenada Harbor, Ensenada, Mexico.

3 There were no NRHPs, CRHRs, or PHIs recorded within a half-mile radius of the  
4 proposed project area.

5 Another source consulted was *Los Angeles: An Architectural Guide* by David  
6 Gebhard and Robert Winter (2003). There are no historical resources, within the  
7 proposed project boundary, identified in the guidebook.

## 8 **3.4.2.5.2 Field Surveys**

### 9 **Paleontology**

10 Published and unpublished geologic and paleontologic literature was reviewed to  
11 document each rock unit exposed at the proposed project site and the types of fossil  
12 remains the rock unit has produced locally. No field survey of the proposed project  
13 site was conducted because the site is covered by extensive development, or is  
14 underlain by non-fossiliferous artificial fill or undisturbed strata that are too young to  
15 contain fossilized remains.

### 16 **Archaeology**

17 A Phase I pedestrian survey of portions of the proposed project area was conducted  
18 by ICF Jones & Stokes archaeologists on several occasions over the Spring and  
19 Summer of 2008. The survey area was confined to portions of the proposed project  
20 area where construction-related direct impacts are anticipated as a result of the  
21 proposed Project. This includes the Railroad Green portion of the Avalon  
22 Development District, the visible ground/open space within the Avalon Waterfront  
23 District and Avalon Development District Area B, and portions of the California  
24 Coastal Trail. The field survey resulted in the identification of six cultural resources.

### 25 **Historic Architectural Resources**

26 A field investigation was conducted on April 2 and May 14, 2008, to identify existing  
27 buildings within and adjacent to the proposed project area that meet the 50-year age  
28 criterion for evaluation. The team of architectural historians conducted the site  
29 analysis, applying the California Register of Historical Resources Criteria for  
30 Evaluation. For consideration as a potential historical resource, a property must be  
31 shown to be significant under one or more of the three criteria for evaluation:

- 32 ■ Criterion 1 consideration is for a property that may be eligible under an  
33 association with events that made a significant contribution to the broad patterns  
34 of local or regional history or the cultural heritage of California or the United  
35 States.

- 1 ■ Criterion 2 consideration is for a property that may be eligible through its  
2 association with the lives of persons important to local, California, or national  
3 history.
- 4 ■ Criterion 3 consideration is for a property that may be eligible if it embodies  
5 distinctive characteristics of a type, period, region, or method of construction or  
6 represents the work of a master or possesses high artistic value.

7 For this field investigation and site analysis, architectural historians evaluated  
8 properties under Criterion 3, which is defined as a building having distinctive  
9 architectural design characteristics, a unique construction type, that represents the  
10 work of a master, or possess high artistic value. For identifying resources under  
11 Criterion 1, which is defined as a building having significance because of its  
12 association with an important event, an oral interview with Hank and Jane  
13 Osterhoudt, curators of the Wilmington Historical Society, was conducted. For  
14 association with an important person (Criterion 2), building permits were reviewed,  
15 data was searched within the California Index<sup>1</sup>, and an oral interview with Hank and  
16 Jane Osterhoudt was conducted. The Osterhoudts explained that there are no existing  
17 buildings 50 years of age or older within the proposed project area that are associated  
18 with important events or persons, other than the previously identified listed resources  
19 (see Tables 3.4-3 through 3.4-7). No other additional research was conducted to  
20 identify potential historical resources under Criteria 1 or 2.

### 21 **3.4.2.5.3 Archival Research**

#### 22 **Archaeology and Historic Architecture**

23 Archival research consisted of a review of primary and secondary documents  
24 available at the Wilmington and San Pedro Bay Historical Societies and the Los  
25 Angeles Public Library, the photo archives at the Port, regional prehistoric and  
26 ethnographic materials on file at ICF Jones & Stokes, and the following:

- 27 ■ Sanborn fire insurance maps (1888, 1891, 1902, 1908, 1921, 1950, 1969)
- 28 ■ Historic topographic maps (1896, 1925, 1944, 1951, 1964)
- 29 ■ LAHD port annual reports (1918-1920, 1924-1925, 1925-1926, 1926-1927)
- 30 ■ U.S. Coast Survey Map of the California Coast (1859)
- 31 ■ Historic Aerial Photographs (LAPL, LAHD, Wilmington Historical Society)
- 32 ■ General Land Office Plat Maps (1859, 1862, 1867)
- 33 ■ Birds Eye View (lithograph) of Wilmington (1880)
- 34 ■ Historical Assessment of 236 North Avalon, 131 North Avalon, and 133 North  
35 Avalon Boulevards, Wilmington, California, by ICF Jones & Stokes

<sup>1</sup> California Index (LA Public Library): indexes information about people, places, and events that have had a significant impact on life in Southern California.

- 1 ■ Historical Assessment of Bekins Warehouses, Wilmington, California, by ICF  
2 Jones & Stokes
- 3 ■ Historical Assessment of National Polytechnic College of Engineering and  
4 Oceaneering Wilmington, California, by ICF Jones & Stokes

5 Archival research has demonstrated that a majority of the proposed project area was  
6 extensively developed by the nineteenth century and may contain significant  
7 historical archaeological deposits that are representative of multiple periods of  
8 occupation. Specifically, the Wilmington Waterfront portion of the proposed project  
9 area was once the location of Phineas Banning's Landing, which was the center of his  
10 early commercial activities and efforts that led to the development of the Port.

11 In addition, the Avalon Development District and the Avalon Triangle Park portions  
12 of the proposed project area are located in what was historically Wilmington's  
13 downtown area during the middle/late nineteenth century into the twentieth century  
14 as the community began to expand. This area contained a variety of public buildings,  
15 storefronts, and boarding houses (Sanborn 1885, 1888, 1891, 1900, 1907, 1913,  
16 1921, 1950).

## 17 **Paleontology**

18 A review was conducted of relevant geotechnical reports and geological maps, and  
19 unpublished paleontological reports prepared for projects in Los Angeles Harbor.  
20 This approach was followed in recognition of the direct relationship between  
21 paleontological resources and the geologic formations within which they are  
22 enclosed. By knowing the geology of a particular area and the fossil productivity of  
23 particular formations that occur in that area, it is possible to predict where fossils will  
24 or will not be encountered (Kirby and Demere 2007).

25 Figure 3.4-1 distinguishes recent deposits, both fill and beach sediments, in relation  
26 to older Quaternary deposits, including Older Alluvium and the San Pedro Sand.  
27 These Older Alluvium deposits and the San Pedro Sand are known to be fossil-  
28 bearing. This figure permits inferences to be drawn as to the nature of the subsurface  
29 in any given area and has been used for the impact analysis. Surface sediments are  
30 present throughout the Avalon Waterfront District and Avalon Development District  
31 as well as eastern extent of the Waterfront Red Car Line/California Coastal Trail  
32 from Avalon Boulevard along Harry Bridges Boulevard, are underlain by Holocene-  
33 age beach sediments and artificial fill. These are young sediments with a low  
34 potential to contain fossil resources. The depth at which older deposits with a high  
35 potential to contain paleontological resources are present beneath these younger  
36 sediments is not known and cannot be determined from this surface mapping.

37 The western extent of the Waterfront Red Car Line/California Coastal Trail west of  
38 Figueroa Street along John S. Gibson Boulevard to Swinford Street is underlain by  
39 Quaternary alluvium, Quaternary older alluvium, and Pleistocene-age offshore  
40 marine deposits of San Pedro Sand. The Pleistocene-age San Pedro Sand is mapped  
41 at the surface between the Northwest and Southwest Slips, and in patches near the

1 Vincent Thomas Bridge. These deposits are of fossil-bearing age, and are of  
2 scientific interest.

### 3 **3.4.2.5.4 Native American Correspondence**

4 ICF Jones & Stokes contacted the Native American Heritage Commission (NAHC)  
5 on June 4, 2008, to request a search of their sacred lands file and a list of Native  
6 American representatives to contact for additional information. The NAHC  
7 responded on June 5, 2008, stating that no known sacred lands are located within or  
8 adjacent to the proposed project area. The NAHC also provided a list of seven  
9 Native American representatives to be contacted for information on the proposed  
10 project area. ICF Jones & Stokes sent a letter describing the proposed Project to each  
11 representative. The responses are contained in Appendix E.

12 ICF Jones & Stokes received an email response from Mr. John Tommy Rosas, Tribal  
13 Administrator for the Tongva Ancestral Territorial Tribal Nation (TATTN). Mr.  
14 Rosas stated that the TATTN objects to the proposed Project as it is located on  
15 indigenous tribal lands (Rosas pers. comm.). ICF Jones & Stokes responded by  
16 email asking for additional information and clarification of the TATTN's concerns  
17 regarding cultural resources and/or resources of importance to Native Americans  
18 within the proposed project area. No response has been received. Mr. Rosas as well  
19 as the NAHC will be included in the standard mailing list of this project to solicit  
20 further comments and communication.

21 ICF Jones & Stokes was also contacted by Mr. Anthony Morales, Chairman of the  
22 Gabrieliño/Tongva San Gabriel Band of Mission Indians, via telephone. Mr. Morales  
23 stated that the proposed project area was traditionally utilized by the Gabrieliño and  
24 requested that he be contacted should the proposed Project warrant monitoring by  
25 Native Americans. In addition, he requested that he be contacted in the event that  
26 subsurface archaeological deposits and/or human remains are unearthed during  
27 ground disturbing activities (Morales pers. comm.).

### 28 **3.4.2.6 Site-Specific Setting**

#### 29 **3.4.2.6.1 Archaeological Resources Identified**

30 According to the record search, no known prehistoric and/or historical archaeological  
31 sites are located within the proposed project area. However, 16 archaeological  
32 resources have been previously identified within a 1-mile radius of the proposed  
33 project area, all of which are located at least 1 mile from the areas where direct  
34 impacts through construction activities are anticipated: the Avalon Waterfront  
35 District and the Avalon Development District. No human remains have been  
36 reported from any of these 16 archaeological sites.

1 However, 9 of the 16 archaeological sites have been recorded within less than ¼ mile  
2 of the proposed Waterfront Red Car Line/California Coastal Trail (CA-LAN-116, -  
3 146, -147, -150, -283, -285, -2135, -2873, -2874). Of these nine sites, one (CA-LAN-  
4 2135H) is located approximately ⅛<sup>th</sup> of a mile from the proposed Waterfront Red Car  
5 Line/California Coastal Trail, and 2 prehistoric sites (CA-LAN-150 and CA-LAN-  
6 283) are located adjacent to the proposed Project's location.

7 A field survey of portions of the proposed project area was conducted by ICF Jones  
8 & Stokes archaeologists. The survey area was confined to portions of the proposed  
9 project area where construction-related direct impacts are anticipated as a result of  
10 the proposed Project. This includes the Railroad Green portion of the Avalon  
11 Development District, visible ground/open space within the Avalon Waterfront  
12 District, and portions of the California Coastal Trail. The field survey resulted in the  
13 identification of six cultural resources. Impact CR-1 will discuss whether the  
14 following resources are considered significant prehistoric or historic archaeological  
15 resources within the context of CEQA (see also section 3.4.3.1.1).

### 16 **Avalon Development District**

17 One cultural resource, ICFJSA-NS-1, was identified within the Railroad Green  
18 portion of the Avalon Development District.

### 19 **ICFJSA-NS-1/Pacific Electric Railway**

20 This resource consists of three abandoned segments of Pacific Electric Railway track.  
21 The tracks are standard gauge, which is the gauge to which approximately 60% of the  
22 world's existing railway lines are built. The distance between the inside edges of the  
23 rails of standard gauge track is 1,435 millimeters (4 feet, 8½ inches). Intact 8-inch  
24 redwood ties of unknown length are visible only at Segments 1 and 3; ties vary  
25 according to standard railroad construction practices of the time. Also in evidence  
26 are standard switches and curves for rail sidings, bolted splice joints, and railroad  
27 spikes. Evidence was also noted of heavy braided steel wire ground return loops  
28 welded at each rail joint, a feature unique to electric railroads such as the Pacific  
29 Electric. Overall length of exposed track segment varies; portions of the alignment  
30 have been covered by modern asphalt paving and were not surveyed due to lack of  
31 accessibility (primarily from locked security fences).

### 32 **Avalon Waterfront District**

33 Five cultural resources were identified within the Avalon Waterfront District portion  
34 of the proposed project area.

**ICFJSA-NS-2/Harbor Belt Line Railroad**

This resource consists of operational railroad line segments currently utilized by the Harbor Belt Line railroad. The tracks are standard gauge. Intact 8-inch redwood ties of varying lengths are visible. While this track is more or less on the original, historic, alignment of the Southern Pacific into San Pedro (now Union Pacific), the original right-of-way easement in this section was 200 feet wide. A tank farm has encroached somewhat on this easement, and some of the more recent Harbor Belt track was in the same vicinity and the track has been realigned to support modern operating conditions. It is therefore difficult to determine exactly where the original track alignment was within this corridor. Currently, this segment of track forms one of the main leads into the Pacific Harbor Lines Pier A Yard complex and is in active service (Signor pers. comm.)

**ICFJSA-NS-3/Drainage Swale**

This resource is a possible drainage swale comprised of rectangular, granitic stones of varying sizes sealed in place with concrete. The width of the segment measures 18 inches (four courses wide) and is situated within the road gutter on the north side of North Water Street. Although no other portions were visible during the survey, it is possible that modern asphalt paving covers additional, intact sections.

**ICFJSA-NS-4/Pacific Electric Railway "Channel Track"**

This resource consists of one 18-foot and one 20-foot segment of the "channel rail" track used by the Pacific Electric to access the Catalina Steamer Dock located at Berths 184–185 at the foot of Avalon Boulevard on Slip 5. Although the segments are partially covered in asphalt and appear disconnected, the alignment may be intact under the existing roadway. Both segments are standard gauge.

This Pacific Electric line was built from a junction with the San Pedro via Dominguez PE Line at Anaheim Street and McFarland Avenue, Wilmington, via McFarland Avenue and a private way to the Catalina Terminal on Water Street, a distance of approximately 1.19 miles. It was placed in service in March 1920, coincident with the opening of the new Catalina Dock. It operated continuously (except for a period during World War II when the island was closed) during summer sessions until October 12, 1958. The track was 90-pound rail on redwood ties, with gravel ballast on unpaved portions; those portions in McFarland Avenue and Water Street were 90-pound rail on redwood ties, gravel ballast, and asphalt paving. As was the custom, "channel rail" was used in street running. Two tracks at the Catalina Dock on Water Street each held six large interurban cars.

Considerable freight traversed the line, all of which was operated by Harbor Belt Line after June 1929, and the track on Water Street was used to access certain industries in the area. With the abandonment of the San Pedro-Dominguez Line on December 8, 1958, this line was also closed to passenger service. It appears that some, or all of this line was in place as late as 1981, but it is unclear when the rest of the line was dismantled. Portions of the former private right-of-way northeast of the

1 resource site are now occupied by DAS, an automobile import storage facility  
2 (Signor pers. comm.).

### 3 **ICFJSA-NS-5 Water Street Wharf /Catalina Steamer Terminal**

4 This resource consists of a 306-foot concrete and wood post foundation for the Water  
5 Street Wharf that eventually supported the Catalina Steamer Terminal. The Water  
6 Street Wharf/Catalina Steamer Terminal Wharf and warehouse were demolished in  
7 the early 1990s by the LAHD (Hagner pers. comm. 2008). Today, all that remains of  
8 the wharf is a concrete and wood post foundation along the waterfront of Berth 185.  
9 The foundation is presently 7½ feet below grade/the existing sidewalk. The concrete  
10 matrix contains numerous cobbles, possibly from a local riverine source. Remnants  
11 of wood support posts are visible at intervals along the alignment. In general, the  
12 wood support posts measure 1 foot in diameter, although other sizes were noted. The  
13 posts are placed 7½ feet from one another on average. The top width of the concrete  
14 measures 2 feet while the base, which extends at an angle underwater, is estimated to  
15 measure 18 feet.

### 16 **ICFJSA-NS-6/Stacked Stone Breakwater**

17 This resource consists of a hand-stacked stone breakwater sealed with concrete  
18 mortar. The breakwater consists of eight courses of brick and measures  
19 approximately 4 to 5 feet throughout the length of the structure. Directly above the  
20 breakwater, and continuing for the entire length of the structure, is a second 3-foot  
21 tall (grayish) wall constructed of reinforced, poured concrete. A third concrete wall  
22 measuring 3.5 feet, and painted white at the time of recordation, rests on top of the  
23 other two walls and also extends along the entire length of the structure.

24 Approximately 2 feet in front of the western end of the breakwater is a second,  
25 smaller breakwater comprised of polypropelene bags filled with cement. The  
26 remainder of the stone and cement breakwater is protected by adjacent riprap. A  
27 ceramic pipe sealed in 2 feet of brick and concrete was identified embedded near the  
28 western end of the structure. The ceramic pipe had an inside diameter of 8 inches  
29 and an outside diameter of 10 inches. It appeared that the pipe and surrounding brick  
30 and concrete were placed within the wall after it was constructed, possibly to replace  
31 an earlier runoff or waste disposal system. Two additional metal pipes were  
32 identified embedded in the wall at the east end of the structure.

## 33 **3.4.2.6.2 Historic Architectural Resources Identified**

34 For the purposes of this draft EIR, all buildings, structures, objects, landscape  
35 elements, and other features that could be considered historical resources are  
36 evaluated in light of each of the above five definitions under CEQA. Each definition  
37 is described in more detail below, along with a listing of those historical resources  
38 on, adjacent to, near, or historically related to the proposed project site that meet any  
39 of the definitions. If a historical resource meets more than one definition, it is listed  
40 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 14 CCR 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 3.4-3 identifies one historical resource adjacent to the proposed project area that is currently listed in the California Register.

**Table 3.4-3.** Historical Resources Adjacent to the Project Study Area Currently Listed in the California Register

<i>Name</i>	<i>Location</i>	<i>Status</i>	<i>Date Status Determined</i>
Harbor Generating Station	161 N. Island Avenue	NRHP eligible by Office of Historic Preservation (OHP), CRHR listed	February 9, 2004

### 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 historic resources is considered an historical resource for the purposes of CEQA. By definition, “local register of historic 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 (HCMs) and Historic Preservation Overlay Zones.

Table 3.4-4 identifies one historical resource that is listed in a local register of historical resources.

**Table 3.4-4.** Historical Resources Listed in a Local Register of Historical Resources Outside the Project Area of Effect

<i>Name</i>	<i>Location</i>	<i>Status</i>	<i>Date Status Determined</i>
Masonic Temple (composed of two buildings side by side).	221–227 N. Avalon Boulevard	Los Angeles Historic Cultural Monument No. 342	Declared January 22, 1988

#### **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 an 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.”

A resource identified as significant in an 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 Historic Resources Inventory.
2. The survey and the survey documentation were prepared in accordance with office [of Historic Preservation] procedures and requirements.
3. The resource is evaluated and determined by the office [of Historic Preservation] to have a significance rating of Category 1 to 5 on DPR Form 523.
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 which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource.

Table 3.4-5 presents historical resources that were identified as significant in a survey.

1 **Table 3.4-5.** Historical Resources Determined Significant or Analysis Pending in a Historical Resources  
2 Survey

<i>Name</i>	<i>Location</i>	<i>Survey</i>	<i>Statement of Significance</i>
Wilmington Iron Works	432 W. C Street	HRG Survey (2006)	“The Wilmington Iron Works building is a good example of the small industrial buildings erected around the Wilmington Waterfront during the early decades of the twentieth century. It is representative of the increasingly diversified industrial economy surrounding the harbor area during its development into an important national and international port.”
Bekins Storage Property	245 N. Fries Avenue and 312–316 W. C Street	Jones & Stokes Survey (2007a)	The Bekins building at 245 North Fries Avenue is a unique example of storage warehousing built in Los Angeles during the early years of the twentieth century. The multi-story structure retains considerable integrity and evokes the historic period of significance from when it was built. Located adjacent to the Pacific Electric tracks along North Fries Avenue, the warehouse still reflects the character of the neighboring structures used for warehousing and light industry, and its historic use has remained essentially the same. The structure has undergone minimal interior alterations and virtually no exterior alterations. The integrity of design, location, workmanship, and feeling of this building make it eligible for consideration for the California Register under Criterion 3 as well as a Los Angeles Historic-Cultural Monument.
233 N. Avalon Boulevard	233 N. Avalon Boulevard	HRG Survey (2006)	“233 North Avalon is a rare example of multi-unit residential buildings from the early decades of the twentieth century. This building most likely provided housing for local workers and merchant seamen. Further research of this property may reveal additional information on the social history and housing of Waterfront workers.” (FINDING SUBJECT TO CHANGE, PENDING FURTHER RESEARCH)
Coastal Recovery Center	117 Harry Bridges Boulevard	HRG Survey (2006)	“A good example of an industrial building from the early decades of the twentieth century, the structure exemplifies the size, scale and design of the utilitarian port infrastructure.” (FINDING SUBJECT TO CHANGE, PENDING FURTHER RESEARCH)
National Polytechnic College of Engineering and Oceaneering	272 S. Fries Avenue	Jones & Stokes Survey (2007c)	The National Polytechnic College of Engineering and Oceaneering building does not appear to satisfy the requirements for eligibility in the National Register of Historic Places or the California Register of Historic Resources. National Polytechnic College of Engineering and Oceaneering may be potentially eligible for consideration as a Los Angeles Historic-Cultural Monument. While each of the occupants have made some interior changes that would preclude National Register or California Register designation, the National Polytechnic College of Engineering and Oceaneering may still qualify under the Cultural Heritage Ordinance of the City of Los Angeles as a structure that exemplifies or reflects special elements of the City’s architectural and marine history.
Note: Some resources are pending further research and evaluation by the lead agency to determine historical resource eligibility (see note in Statement of Significance). Until proved otherwise, the analysis assumes resources under study are historically significant.			

3

## Definition 5—Determined Significant by the Lead Agency

The fifth and final category of historical resources covers those that are determined significant by a lead agency. This usually occurs during the CEQA compliance process, such as the preparation of an 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 an 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 of Historical Resources (PRC SS5024.1, 14 CCR 4852).

Table 3.4-6 lists one historical resource that was identified to be significant, by the Lead Agency, within the proposed project site.

**Table 3.4-6.** Historical Resource Determined to be Significant by the Lead Agency

<i>Name</i>	<i>Location</i>	<i>Criteria for Eligibility</i>
Wilmington Iron Works Building	432 West C Street	“This structure is a good example of the small industrial buildings constructed in support of local crafts and trades such as boat building, small manufacturing and fishing at the Port of Los Angeles in the early decade of the twentieth century. The original building permit lists the date of construction as September 26, 1927. While the building has sustained some alteration with a change in cladding and roofing from the original corrugated iron, and window loss along the north elevation, its footprint and original configuration are still intact, conveying its significance as a small industrial facility. Within the context of the development of Wilmington as an important location for industry at the Port of Los Angeles, the building is <i>eligible for the California Register of Historical Resources under Criterion 1: Association with events that have made a significant contribution to the broad patterns of local or regional history and warrants a 3CS Status Code: “appears eligible for the California Register as an individual property through survey evaluation.”</i> ”

### Wilmington Iron Works Building

The Wilmington Iron Works Building, located at 432 West C Street, is a one-story industrial building that was constructed in 1927. The building has been re-clad with rough textured stucco and features a decorative parapet on the primary (north) façade. The primary elevation consists of a wood garage door that has been replaced, which

1 includes a walkthrough entrance with windows above. This elevation retains a pair  
2 of six-over-six original wood frame windows in a wood surround to the east of the  
3 garage opening; an aluminum sliding window is centered within the parapet.  
4 Windows were most likely located east of the garage door but have been covered by  
5 the stucco.

6 Within the context of the development of Wilmington as an important location for  
7 industry at the Port of Los Angeles, the building is eligible for the California Register  
8 of Historical Resources under Criterion 1: Association with events that have made a  
9 significant contribution to the broad patterns of local or regional history and warrants  
10 a 3CS Status Code “appears eligible for the California Register as an individual  
11 property through survey evaluation.”

### 12 **3.4.3 Applicable Regulations**

13 The proposed Project is not associated with any federal agencies or undertakings;  
14 therefore, it is not subject to the Section 106 process and review, or regulatory federal  
15 regulations. The lead local agency for the proposed Project is the LAHD. No other  
16 federal agencies, such as the Federal Transit Administration (FTA), have been  
17 identified as being involved with the proposed Project. In addition, there are no  
18 identified federal undertakings that will be associated with the proposed Project.

#### 19 **3.4.3.1 State**

##### 20 **3.4.3.1.1 Archaeological Resources**

21 CEQA Guidelines define a significant cultural resource as “a resource listed in or  
22 eligible for listing in the California Register of Historical Resources” (PRC Section  
23 5024.1). A resource may be eligible for inclusion in the CRHR if it meets any one of  
24 the following criteria:

- 25 1. It is associated with events that have made a significant contribution to the broad  
26 patterns of California’s history and cultural heritage.
- 27 2. It is associated with the lives of important historical figures.
- 28 3. It embodies the distinctive characteristics of a type, period, region, or method of  
29 construction, represents the work of an important creative individual, or  
30 possesses high artistic value.
- 31 4. It has yielded, or may be likely to yield, important prehistoric or historic  
32 information.

33 If an archaeological resource does not fall within the definition of an historical  
34 resource, but does meet the definition of a *unique archaeological resource* (PRC  
35 21083.2), then the site must be treated in accordance with the special provisions for  
36 such resources. An archaeological resource will be *unique* if it:

- 1 ■ contains information needed to answer important scientific research questions  
2 and there is a demonstrable public interest in that information;
- 3 ■ has a special and particular quality such as being the oldest of its type or the best  
4 available example of its type; or
- 5 ■ is directly associated with a scientifically recognized important prehistoric or  
6 historic event or person.

7 Should an archaeological resource be determined potentially eligible for listing in the  
8 CRHR based on one or more of the criteria, the integrity of the resource then comes  
9 into question. For archaeological resources integrity is most commonly defined as  
10 the ability to address important research questions outlined in a formal research  
11 design. For prehistoric and historic archaeological sites, integrity of location,  
12 materials, and association are generally most crucial. To address important research  
13 topics, archaeological deposits usually must be in their original location, retain  
14 depositional integrity, contain adequate quantities and types of materials in suitable  
15 condition to address important research topics, and have a clear association.  
16 Associations may be defined at different social scales (household or specific activity,  
17 region, or even city) and across various temporal spans (brief or longer term).  
18 Cultural sites that have been affected by ground-disturbing activities such as grazing,  
19 off-road vehicle use, trenching, and vandalism often lack the integrity to answer  
20 important questions. This is because spatial or depositional relationships have been  
21 lost, deposits or sites from widely different periods and associations have been  
22 mixed, or the contents of the deposits have been skewed by selective removal of  
23 materials.

24 Even without a formal determination of significance and nomination for listing in the  
25 CRHR, the lead agency can determine that a resource is potentially eligible for such  
26 listing to assist in determining whether a significant impact would occur. The fact  
27 that a resource is not listed in the CRHR, or has not been determined eligible for such  
28 listing, and is not included in a local register of historic resources does not preclude  
29 an agency from determining that a resource may be a historical resource for the  
30 purposes of CEQA.

### 31 **3.4.3.1.2 Native American Human Remains**

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

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

### 3.4.3.1.3 Paleontological Resources

For purposes of CEQA, paleontological resources are treated as cultural resources. The CEQA Environmental Checklist (CEQA Guidelines Appendix G), under the Cultural Resources heading, includes the question would the project “Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.” 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.

### 3.4.3.1.4 Historic Architectural Resources

CEQA Guidelines Section 15064.5(a.3) and California PRC Section 21084.1 define the criteria used to determine the significance of cultural resources, characterized as “historic resources” as follows:

Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (PRC SS5024.1, Title 14 CCR., Section 4852).

CEQA Guidelines (Section 15064.5(b) (revised October 26, 1998) state that “a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” To this end, the Guidelines list the following definitions:

1. Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
2. The significance of an historical resource is materially impaired when a project:
  - A. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

- 1 B. Demolishes or materially alters in an adverse manner those physical  
 2 characteristics that account for its inclusion in a local register of historical  
 3 resources pursuant to section 5020.1(k) of the Public Resources Code or its  
 4 identification in an historical resources survey meeting the requirements of  
 5 section 5024.1(g) of the Public Resources Code, unless the public agency  
 6 reviewing the effects of the project establishes by a preponderance of  
 7 evidence that the resource is not historically or culturally significant; or
- 8 C. Demolishes or materially alters in an adverse manner those physical  
 9 characteristics of a historical resource that convey its historical significance  
 10 and that justify its eligibility for inclusion in the California Register of  
 11 Historical Resources as determined by a lead agency for purposes of CEQA.

12 PRC Section 21083.2(j) states that an historical resource is a resource listed in, or is  
 13 determined to be eligible for listing in, the California Register of Historical  
 14 Resources, or listed in a local register of historical resources, or deemed significant  
 15 pursuant to criteria identified in PRC Section 5024.1(g) defined above, unless the  
 16 preponderance of the evidence demonstrates that the resource is not historically or  
 17 culturally significant. The fact that a resource is not listed in, or is determined not to  
 18 be eligible for listing in, the California Register of Historical Resources, not included  
 19 in a local register of historical resources, or not deemed significant pursuant to  
 20 criteria set forth in subdivision (g) of Section 5024.1 does not preclude a lead agency  
 21 from determining whether the resource may be an historical resource. CEQA  
 22 Guidelines Sections 15064.5 and 15126.4 guide the evaluation of impacts on  
 23 prehistoric and historic archaeological resources. Section 15064.5(c) provides that,  
 24 to the extent an archaeological resource is also a historical resource, the provisions  
 25 regarding historical resources apply. These provisions endorse the first set of  
 26 standardized mitigation measures for historic resources by providing that projects  
 27 following the Secretary of the Interior's Standards for Treatment of Historic  
 28 Properties be considered as mitigated to a less-than-significant level.

## 29 **3.4.3.2 Regional and Local**

### 30 **3.4.3.2.1 Archaeological Resources**

31 City guidelines for the protection of archaeological resources are set forth in Section  
 32 3 of the General Plan of the City of Los Angeles Conservation Element, which, in  
 33 addition to compliance with CEQA, requires the identification and protection of  
 34 archaeological sites and artifacts as a part of local development permit processing.  
 35 Specifically, Los Angeles Municipal Code section 91.106.4.5 states the following:

36 The building department shall not issue a permit to demolish, alter or remove a  
 37 building or structure of historical, archaeological or architectural consequence if  
 38 such building or structure has been officially designated, or has been determined  
 39 by state or federal action to be eligible for designation, on the National Register  
 40 of Historic Places, or has been included on the City of Los Angeles list of  
 41 historic cultural monuments, without the department having first determined  
 42 whether the demolition, alteration or removal may result in the loss of or serious

1 damage to a significant historical or cultural asset. If the department determines  
2 that such loss or damage may occur, the applicant shall file an application and  
3 pay all fees for the California Environmental Quality Act Initial Study and  
4 Check List, as specified in Section 19.05 of the Los Angeles Municipal Code. If  
5 the Initial Study and Check List identifies the historical or cultural asset as  
6 significant, the permit shall not be issued without the department first finding  
7 that specific economic, social or other considerations make infeasible the  
8 preservation of the building or structure.

### 9 **3.4.3.2.2 Ethnographic Resources**

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

### 14 **3.4.3.2.3 Paleontological Resources**

15 City guidelines for the protection of paleontological resources are specified in  
16 Section 3 of the City of Los Angeles General Plan Conservation Element. The policy  
17 requires that the City’s paleontological resources be protected for research and/or  
18 educational purposes. It mandates the identification and protection of significant  
19 paleontological sites and/or resources known to exist or that are identified during  
20 land development, demolition, or property modification activities.

### 21 **3.4.3.2.4 Historic Architectural Resources**

22 City guidelines for the protection of historic architectural resources are also set forth  
23 in Section 3 of the General Plan of the City of Los Angeles Conservation Element  
24 (see Section 3.4.3.2.1, “Archaeological Resources,” above for details).

25 Five types of historic protection designations apply in the City: (1) Historic-Cultural  
26 Monument designation by the City's Cultural Heritage Commission and approved by  
27 the City Council; (2) placement on the California Register of Historical Resources or  
28 (3) the National Register of Historic Places (1980 National Historic Preservation  
29 Act); (4) designation by the Community Redevelopment Agency (CRA) as being of  
30 cultural or historical significance within a designated redevelopment area; and (5)  
31 classification by the City Council (recommended by the planning commission) as an  
32 Historic Preservation Overlay Zone (HPOZ). These designations help protect  
33 structures and support rehabilitation fund requests (City of Los Angeles 2001b).

34 The City Cultural Heritage Commission (CHC) was established by ordinance in 1962  
35 to protect and/or identify architectural, historical, and cultural buildings; and  
36 structures and sites of importance in the City's history and/or cultural heritage. The  
37 CHC has designated over 700 sites as Historic-Cultural Monuments, including

1 historic buildings, corridors (tree-lined streets), and geographic areas. Historical  
2 resources may also include resources listed in the State Historic Resources Inventory  
3 as significant at the local level or higher, and those evaluated as potentially  
4 significant in a survey or other professional evaluation (City of Los Angeles 2001b).  
5 The HPOZ provision of the zone code, Los Angeles Municipal Code (LAMC)  
6 Section 12.20.3, was adopted in 1979, and was amended in 2001. It contains  
7 procedures for designation and protection of areas that have structures, natural  
8 features, or sites of historic, architectural, cultural, or aesthetic significance. HPOZ  
9 areas contain significant examples of architectural styles characteristic of different  
10 periods in the City's history. No area within the Port has been designated as part of  
11 an HPOZ (City of Los Angeles 2001b).

12 The significance of an historical resource is also based on (1) whether the site has  
13 been coded by the Department of Building and Safety with a Zoning Instruction  
14 number in the 145 series (which indicates prior identification of the property as  
15 historic); (2) whether the resource has been classified as historic in an historical  
16 resources survey conducted as part of the updating of the Community Plan, the  
17 adoption of a redevelopment area, or other planning project; (3) whether the resource  
18 is subject to other federal, state, or local preservation guidelines; (4) whether the  
19 resource has a known association with an architect, master builder, or person or event  
20 important in history such that the resource may be of exceptional importance; and (5)  
21 whether the resource is over 50 years old and a substantially intact example of an  
22 architectural style significant in Los Angeles (*L.A. CEQA Thresholds Guide* 2006).

### 23 **City of Los Angeles Historic-Cultural Monument Designation**

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

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

### 37 **City of Los Angeles Historic Preservation Overlay Zones**

38 HPOZs are essentially locally designated historic districts or groupings of historical  
39 resources. Under the HPOZ ordinance (LAMC Section 12.20.3), to be significant,  
40 structures, natural features, or sites within the involved area or the area as a whole  
41 must meet one or more of the following criteria:

- 1 (A) have substantial value as part of the development, heritage or cultural  
2 characteristics of, or is associated with the life of a person important in the  
3 history of the city, state, or nation;
- 4 (B) are associated with an event that has made a substantial contribution to the broad  
5 patterns of our history;
- 6 (C) are constructed in a distinctive architectural style characteristic of an era of  
7 history;
- 8 (D) embody those distinguishing characteristics of an architectural type or  
9 engineering specimen;
- 10 (E) are the work of an architect or designer who has substantially influenced the  
11 development of the City;
- 12 (F) contain elements of design, details, materials or craftsmanship which represent an  
13 important innovation;
- 14 (G) are part of or related to a square, park or other distinctive area and should be  
15 developed or preserved according to a plan based on a historic, cultural,  
16 architectural or aesthetic motif;
- 17 (H) owing to its unique location or singular physical characteristics, represent an  
18 established feature of the neighborhood, community or City; or
- 19 (I) retaining the structure would help preserve and protect an historic place or area  
20 of historic interest in the City.

## 21 **3.4.4 Impact Analysis**

### 22 **3.4.4.1 Methodology**

23 Impacts on cultural resources from the proposed Project were evaluated by  
24 determining whether demolition or ground disturbance activities would affect areas  
25 that contain or could contain any archaeological or historical sites listed in or eligible  
26 for listing in the NRHP or the CRHR, that are designated as a City of Los Angeles  
27 Historic-Cultural Monument or that are included within a City of Los Angeles  
28 HPOZ, or that are otherwise considered a unique or important archaeological  
29 resource under CEQA (City of Los Angeles 2006). A project that follows the  
30 Secretary of the Interior's *Standards for the Treatment of Historic Properties with*  
31 *Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic*  
32 *Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and*  
33 *Guidelines for Rehabilitating Historic Buildings* (Weeks and Grimmer 1995) would  
34 be considered as mitigated to a level of less than significant. Impacts on  
35 paleontological resources were evaluated similar to buried archaeological resources,  
36 that is, by determining whether ground disturbance activities would affect areas that  
37 contain or could contain any a unique paleontological resource or site or unique  
38 geologic feature.

1 Furthermore, the impact analysis assumed that the proposed Project would comply  
2 with all applicable local, state, and federal laws, including those mentioned in the  
3 following paragraphs.

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

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

14 If human remains are discovered or recognized during site preparation, grading, or  
15 construction, there will be no further excavation or disturbance of the site or any  
16 nearby area reasonably suspected to overlie adjacent human remains until the County  
17 coroner has been informed and has determined that no investigation of the cause of  
18 death is required. If the remains are determined by the coroner to be of Native  
19 American origin, the descendants will be identified and notified through the Native  
20 American Heritage Commission.

21 If the remains are of Native American origin:

- 22 a. the descendants of the deceased Native Americans will make a recommendation  
23 to the person responsible for the excavation work as to the means of treating or  
24 disposing of, with appropriate dignity, the human remains and any associated  
25 grave goods, as provided in Public Resources Code 5097.98. Upon discovery of  
26 human remains, the landowner shall ensure that the immediate vicinity is not  
27 damaged or disturbed until specific conditions are met through discussions with  
28 the descendants regarding their preferences for treatment (PRC 5097.98 as  
29 amended); or
- 30 b. if the Native American Heritage Commission is unable to identify a descendant,  
31 or the descendant fails to respond within 48 hours after being notified by the  
32 commission, the landowner is required to reinter the human remains and to  
33 protect the site where the remains are reinterred from further and future  
34 disturbance.

35 According to the California Health and Safety Code, six or more human burials at  
36 one location constitute a cemetery (Section 8100), and disturbance of Native  
37 American cemeteries is a felony (Section 7052). Section 7050.5 requires that  
38 excavation be stopped in the vicinity of discovered human remains until the coroner  
39 can determine whether the remains are those of a Native American. If the remains  
40 are determined to be Native American, the coroner will contact the California Native  
41 American Heritage Commission.

## 3.4.4.2 Thresholds of Significance

The *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006) provides specific thresholds of significance to address potential impacts on cultural resources resulting from implementation of a project. The proposed Project would have a significant impact on cultural resources if it would:

**CR-1:** Disturb, damage, degrade a known prehistoric and/or historical archaeological resource resulting in a reduction of its integrity or significance as an important resource

**CR-2:** Disturb, damage, degrade an unknown prehistoric and/or historical archaeological resource resulting in a reduction of its integrity or significance as an important resource

**CR-3:** Disturb, damage, or degrade unknown human remains.

**CR-4:** Result in the permanent loss of, or loss of access to, a paleontological resource of regional or statewide significance.

**CR-5:** Result in a substantial adverse change in the significance of an 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.

## 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 a known prehistoric and/or historical archaeological resource resulting in a reduction of its integrity or significance as an important resource.**

Excavation and trenching, as well as other ground-disturbing actions, have the potential to damage or destroy significant archeological resources within the proposed project area. Archaeological resources were analyzed for the following components of the proposed Project: the project-level impact analysis for the Railroad Green and commercial portion of the Avalon Development District, the Avalon Waterfront District; the California Coastal Trail, and the program-level impact analysis for the remaining portions of the Avalon Development District, the Avalon Triangle Park, and the Waterfront Red Car Line.

## Avalon Development District

Proposed project infrastructure improvements and enhancements within the Avalon Development District include the potential development of industrial and commercial space, a 1-acre park located on the vacated Railroad Green, and adaptive reuse of the historic 14,500-square-foot Bekins Storage property for a Waterfront Red Car Museum. Several streets would be vacated or realigned. Archival research has indicated that this portion of the proposed project area is located within the center of the historic community of Wilmington. In addition, the following historic resource would be eligible for inclusion in the California Register of Historical Resources:

### ICFJSA-NS-1/Pacific Electric Railway

Three segments of the Pacific Electric tracks were identified in the Railroad Green portion of the proposed project area and are eligible for inclusion in the California Register of Historical Resources by meeting Criteria 1, 2, and 3 as follows:

1. Southern California's regional settlement and patterns of urban topography can be laid to the development and routes of the Pacific Electric Railway. The line segment through Wilmington connected the Los Angeles Harbor and town site of San Pedro with the rest of the City of Los Angeles, brought millions of tourists to the docks of the Catalina Steamers, and ferried World War II workers to and from ship building and aircraft plants during the conflict. *Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.*
2. The Pacific Electric Railway was the culmination of the life work of Henry Edwards Huntington and his vision of developing Southern California along a network of high-speed steel-railed routes. This line is also important for its role in fulfilling the dream of William Wrigley Jr., the chewing gum magnate. He owned Catalina Island from 1919 until his death in 1932. The Wrigley family placed the island in trust with the Catalina Island Conservancy in 1972, and Wrigley played an instrumental role in the history of Catalina Island, bringing improvements such as public utilities, new steamships, a hotel, the Casino building, and extensive plantings of trees, shrubs and flowers. Nearly every visitor to Catalina began and ended their trip with rides on the "Big Red Cars" of the Pacific Electric. *Associated with the lives of important historical figures.*
3. The Pacific Electric Railway was an electric railway. Although it shares conventional steel rails set at a U.S. standard gauge of 4 foot, 8½ inches, the rails feature a special rail bond made by welding large diameter braided steel cables to each rail at each rail joint. This bonding allowed the rails to be the ground return circuit of a 600v DC electrical power system that was clean, quiet, and energy efficient. Power for the system was primarily renewable hydroelectric; the cars and locomotives emitted no local noise or air pollution; and by means of regenerative braking they were able to convert potential energy and the weight of the cargos and passengers back into electricity for use elsewhere on the system. *Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic value.*

1 Because this resource is eligible for listing in the CRHR, it is recommended that the  
2 original tracks be kept in place and worked into the landscape scheme for the new  
3 park and promenade contemplated as part of the proposed Project. Removal of the  
4 tracks would constitute a significant impact to this historical resource.

#### 5 Potential for subsurface historical archaeological deposits

6 Archival and historic map research (Sanborn 1885, 1888, 1900, 1907, 1913, and  
7 1921) indicates portions of the proposed project area, specifically the commercial  
8 portion of the Avalon Development District Area B, is located within historic  
9 Wilmington. Banning's development of shipping in the 1880s attracted people to the  
10 area to fill the new employment needs. Businesses to service this new population  
11 established themselves in the area now proposed for the commercial development.  
12 The types of services in this area included a boardinghouse, a Chinese laundry, and a  
13 public hall (Sanborn 1885, 1888). The delineation of businesses on historic maps  
14 indicates the area has a very high potential for extant subsurface archaeological  
15 deposits. Proposed project-related demolition of existing structures, utilities, and  
16 landscape features in the area has the potential to encounter and disturb these  
17 deposits. Disturbance of any deposits that have the potential to provide data  
18 important in history regarding consumerism, class and ethnicity, urban geography,  
19 and labor relations would be considered significant under CEQA. Implementation of  
20 Mitigation Measure MM CR-3 below would reduce potential impacts on  
21 archaeological resources associated with the commercial portion of the proposed  
22 project to less-than-significant levels.

#### 23 **Avalon Waterfront District**

24 Proposed project features and improvements in the Avalon Waterfront District  
25 include a waterfront promenade with restaurant/visitor-serving retail development, a  
26 pedestrian bridge and observation tower, 61,100 square feet of new viewing piers of  
27 which approximately 17,880 square feet would be replacement existing piers (netting  
28 approximately 43,000 square feet of new area), two floating docks totaling 5,870  
29 square feet for transient boats (Phase I), and a 10-acre landscaped bridge providing  
30 the Wilmington Community safe access to the waterfront. Five cultural resources  
31 have been identified in this portion of the proposed project area:

#### 32 ICFJSA-NS-2/Harbor Belt Line Railroad

33 Currently, this segment of track forms one of the main leads into the Pacific Harbor  
34 Line's Pier A Yard complex and is in active service. While this track is more or less  
35 on the original, historic, alignment of the Southern Pacific into San Pedro (now  
36 Union Pacific), it must be remembered that the right-of-way easement in this section  
37 is 200 feet wide. A tank farm has encroached somewhat on this easement. Also  
38 some of the more recent Harbor Belt track was in the same vicinity, and the track has  
39 been realigned to support modern operating conditions. Because of this, it is difficult  
40 to determine exactly where the original track alignment was within this corridor. In  
41 addition, the track structure itself has been recently upgraded with heavy rail of  
42 recent vintage.

1 The track does not appear to be associated with any persons or events that would  
2 qualify for listing under Criteria 1 or 2. Furthermore, the track segment does not rise  
3 to the level of historical significance because it does not possess a distinctive  
4 architectural design characteristic or unique construction type, nor does it represent  
5 the work of a master or possess high artistic value under Criterion 3. Finally, the  
6 resource does not appear to contain any potential to answer important questions in  
7 prehistory and/or history and therefore is not eligible under Criterion 4 (Signor pers.  
8 comm.). Therefore, ICFJSA-NS-2 is not considered a significant historic  
9 archaeological resource.

#### 10 ICFJSA-NS-3/Drainage Swale

11 This resource appears to have undergone alterations that include asphalt paving. The  
12 drainage swale does not rise to the level of historical significance because it does not  
13 possess a distinctive architectural design characteristic or unique construction type,  
14 nor does it represent the work of a master or possess high artistic value under  
15 Criterion 3. Furthermore, the drainage swale does not appear to be associated with  
16 any persons or events that would qualify for listing under Criteria 1 or 2. Finally, the  
17 resource does not appear to contain any potential to answer important questions in  
18 prehistory and/or history and therefore is not eligible under Criterion 4. Therefore,  
19 ICFJSA-NS-3 is not considered a significant historic archaeological resource.

#### 20 ICFJSA-NS-4/Pacific Electric Railway "Channel Track"

21 This resource consists of one 18-foot and one 20-foot segment of the "channel rail"  
22 track used by the Pacific Electric to access the Catalina Steamer Dock located at  
23 Berths 184–185 at the foot of Avalon Boulevard on Slip 5. The Pacific Electric  
24 tracks within the proposed project area are eligible for inclusion in the CRHR by  
25 meeting Criteria 1, 2 and 3 as follows:

- 26 1. Southern California's regional settlement and patterns of urban topography can  
27 be laid to the development and routes of the Pacific Electric Railway. The line  
28 segment through Wilmington connected the Los Angeles Harbor and town site of  
29 San Pedro with the rest of the City of Los Angeles, brought millions of tourists to  
30 the docks of the Catalina Steamers, and ferried World War II workers to and  
31 from ship building and aircraft plants during the conflict. *Associated with events*  
32 *that have made a significant contribution to the broad patterns of California's*  
33 *history and cultural heritage.*
- 34 2. The Pacific Electric Railway was the culmination of the life work of Henry  
35 Edwards Huntington and his vision of developing Southern California along a  
36 network of high-speed steel-railed routes. This line is also important for its role  
37 in fulfilling the dream of William Wrigley Jr., the chewing gum magnate. He  
38 owned Catalina Island from 1919 until his death in 1932. The Wrigley family  
39 placed the island in trust with the Catalina Island Conservancy in 1972, and  
40 Wrigley played an instrumental role in the history of Catalina Island, bringing  
41 improvements such as public utilities, new steamships, a hotel, the Casino  
42 building, and extensive plantings of trees, shrubs and flowers. Nearly every  
43 visitor to Catalina began and ended their trip with rides on the 'Big Red Cars' of  
44 the Pacific Electric. *Associated with the lives of important historical figures.*

- 1 3. The Pacific Electric Railway was an electric railway. Although it shares  
2 conventional steel rails set at a U.S. standard gauge of 4 foot, 8½ inches, the rails  
3 feature a special rail bond made by welding large diameter braided steel cables to  
4 each rail at each rail joint. This bonding allowed the rails to be the ground return  
5 circuit of a 600v DC electrical power system that was clean, quiet, and energy  
6 efficient. Power for the system was primarily renewable hydroelectric; the cars  
7 and locomotives emitted no local noise or air pollution; and by means of  
8 regenerative braking they were able to convert potential energy and the weight of  
9 the cargos and passengers back into electricity for use elsewhere on the system.  
10 *Embodies the distinctive characteristics of a type, period, region, or method of*  
11 *construction, represents the work of an important creative individual, or*  
12 *possesses high artistic value.*

13 Because this resource is eligible for listing in the CRHR, it is recommended that the  
14 original tracks be kept in place and worked into the landscape scheme for the  
15 Railroad Green park as part of the proposed Project. Prior to mitigation, the  
16 proposed project impact on ICFJSA-NS-4 would be significant. Implementation of  
17 Mitigation Measure MM CR-2 below would reduce impacts to less than significant.

#### 18 ICFJSA-NS-5 Water Street Wharf/Catalina Steamer Terminal Wharf

19 The Water Street Wharf/Catalina Steamer Terminal Wharf and warehouse were  
20 demolished in the early 1990s by the LAHD. Today, all that remains of the wharf is  
21 a concrete and wood post foundation along the waterfront of Berth 185. This  
22 resource was previously evaluated for eligibility for listing in the NRHP by  
23 McKenna et al. (1994) as part of a cultural resources investigation conducted at  
24 Banning's Landing for the Port's proposed *Banning's Landing Waterfront Access*  
25 *and Office Development Project*. The research in McKenna et al.'s report  
26 specifically focused on the history of development of the Wilmington Basin,  
27 including Slip 5, in the 19<sup>th</sup> and 20<sup>th</sup> centuries. In addition to researching the history  
28 of development of Slip 5, McKenna attempted to address the potential for a resource  
29 locally known as "Banning's Wall" to be located in Slip 5. According to the report,  
30 the concrete wall located behind the Water Street Wharf was constructed after 1913,  
31 as part of the general improvements to this portion of the port. Although the wall is  
32 over 50 years, it was determined not eligible for listing in local, state, or federal  
33 registers. ICF Jones & Stokes concurs with this determination and extends the  
34 evaluation to include the remnant of the wharf as it appears the wall was constructed  
35 in tandem with the improved Water Street Wharf in the early 20<sup>th</sup> century. Although  
36 the resource is eligible for listing under Criteria 1 and 2 for its association with  
37 important historical persons (H. Banning [son of Phineas] and William Wrigley Jr.)  
38 and important historical events (development of recreation at the Port of Los Angeles  
39 and Catalina Island), it does not retain the integrity to convey its period of  
40 significance. The resource does not appear eligible under Criterion 3 as it does not  
41 possess a distinctive architectural design characteristic or unique construction type,  
42 nor does it represent the work of a master or possess high artistic value. Finally, the  
43 resource does not appear to contain any potential to answer important questions in  
44 prehistory and/or history and therefore is not eligible under Criterion 4. Therefore,  
45 no additional work is recommended.

### ICFJSA-NS-6/Stacked Stone Breakwater

Although McKenna et al.'s 1994 study included an evaluation of the concrete wall located directly west of the stacked stone breakwater (part of ICFJSA-NS-5), the report did not specifically address the stacked stone breakwater. During historical research, interviews with members of the local historical society determined that the breakwater was referred to as "Banning's Wall." Therefore, ICF Jones & Stokes researched the possibility that the stacked stone breakwater was a remnant of an earlier occupation, and possibly associated with Phineas Banning and/or the Banning Company at Banning's Landing. Specific research methods included oral interviews with the local historical societies, a review of published literature on the history of Banning's enterprises, and review of historic maps and LAHD engineers' plans. In addition, previous research conducted by McKenna (1994) was reviewed.

Research did not indicate an association of the wall with Phineas Banning, the Banning family, or the Banning company. The research did find that the general area of Berth 186 was not developed until 1919. By 1927, the wharf (boat landing) was gone and the area directly north was referred to as a park. In 1942, a new boat landing was designed and in 1943 the Harbor Department constructed a public restroom building. During World War II, the Water Taxi Company transported workers from Berth 186 to the Cal Shipyards and to various sport-fishing excursions (personal communication Wilmington Historical Society). This research indicates the stone wall could be a remnant of the dyke placed across the mouth of the Wilmington Basin in 1918, which encouraged the development of Berth 186 by the Los Angeles Harbor Department. It is also possible that the stacked stone breakwater is representative of later developments at Berth 186, including the taxi and sport-fishing.

Therefore, although the resource is over 50 years old, it does not rise to the level of significance as it cannot be clearly demonstrated to be associated with any important events in history (Criterion 1) or individuals (Criterion 2). For a resource to be eligible under Criterion 2 it must clearly be associated with a significant person and documentation must support the association. It also needs to be the best resource to reflect the person's contributions in their fields of endeavor. Phineas Banning made significant contributions in the areas of transportation, commerce, and community development when he built his wharf and expanded the Port. These efforts resulted in accessibility for larger ships and more trade. He is further recognized for initiating the construction of the first railroad in Southern California which was the first reliable means of moving cargo from ships coming into San Pedro. Extant resources associated with these achievements will better represent Banning's contributions to California history. The stone breakwater does not clearly represent Banning's contributions within the larger historic context of the harbor's development. Furthermore, resources eligible under Criterion 2 must also retain integrity from the period of its significant association. If this resource were directly linked to Banning, it does not retain integrity to the 1870s, its period of significance. The resource has been altered and changed over time and can no longer convey any possible historical association with Banning. It no longer retains integrity of design, setting, materials, and workmanship which would be the key aspects to understand the significance of the stone breakwater. The resource does not appear eligible under Criterion 3 as it

1 does not possess a distinctive architectural design characteristic or unique  
2 construction type, nor does it represent the work of a master or possess high artistic  
3 value. Finally, the resource does not appear to contain any potential to answer  
4 important questions in prehistory and/or history and therefore is not eligible under  
5 Criterion 4. Therefore, ICFJSA-NS-6 is not considered a significant historic  
6 archaeological resource.

#### 7 Potential for Subsurface Historical Archaeological Deposits

8 In addition to the six cultural resources identified during the field survey of this  
9 portion of the proposed project area, archival research has indicated the potential for  
10 subsurface historical archaeological deposits associated a Civil War Government  
11 Depot at Banning's Landing within the Avalon Waterfront District portion of the  
12 proposed project area. Because of the potential of encountering associated  
13 subsurface deposits, impacts would be considered significant for the purposes of  
14 CEQA, implementation of MM CR-4 will reduce this impact to less-than-significant.

#### 15 **Avalon Triangle Park**

16 At the program level, the proposed Project includes extending the Port Plan boundary  
17 and PMP boundary to Harry Bridges Boulevard, which would include the Avalon  
18 Triangle Park, resulting in a corresponding retraction of the Wilmington-Harbor City  
19 Community Plan boundary. No physical changes are proposed in this area.

#### 20 **Waterfront Red Car Line/California Coastal Trail**

21 At the program level, the proposed Project includes extension of the Waterfront Red  
22 Car Line and, and at the project-level, the continuation of the California Coastal Trail  
23 from Avalon Boulevard to Swinford Street. The eastern portion of the Waterfront  
24 Red Car Line/California Coastal Trail extends from Avalon Boulevard along Harry  
25 Bridges Boulevard. The western portion of the Waterfront Red Car Line/California  
26 Coastal Trail extends west of Figueroa Street along John S. Gibson Boulevard to  
27 Swinford Street. The California Coastal Trail alignment is entirely within the  
28 existing Public Right-of-Way and is mostly paved over with sidewalk for pedestrian  
29 use. The Waterfront Red Car Line's exact alignment is unknown and thus discussed  
30 programmatically.

31 According to the records search, the Waterfront Red Car Line/California Coastal  
32 Trail portions of the proposed project area are sensitive for both prehistoric and  
33 historical archaeological resources. Sixteen archaeological sites have been  
34 previously identified within a 1-mile radius of the proposed alignment. Nine of the  
35 sixteen archaeological sites have been recorded within less than ¼ mile of the  
36 proposed alignment (CA-LAN-116, -146, -147, -150, -283, -285, -2135H, -2873, and  
37 -2874). Of these nine sites, CA-LAN-150 is located adjacent to the alignment, CA-  
38 LAN-283 is located 0.06 of a mile from the alignment, and CA-LAN-2135H is  
39 located approximately 0.04 of a mile from the alignment. CA-LAN-150 is the only  
40 previously recorded site located adjacent to the current alignment, along the western  
41 side of John S. Gibson Blvd. within a paved parking lot utilized by the West Basin

1 Container Terminal, which currently serves China Shipping, Yang Ming, K-Line,  
2 Cosco, Hanjin, Sinotrans, Zim (Berths 121–131).

3 In 1912, N. C. “Nels” Nelson recorded CA-LAN-150 as a refuse heap (shell midden)  
4 measuring 600 by 75 feet and “located at the western end of the Wilmington Lagoon  
5 on the bluff at the left hand side of Wilmington Road.” Nelson estimated the site  
6 depth at 4 feet and noted that no associated artifacts were observed.

7 According to the Phase I Historical Resources Study (ICF Jones & Stokes 2008), the  
8 Phase I pedestrian survey of this portion of the proposed project area did not result in  
9 the identification of any portion of CA-LAN-150 on the surface. In addition, a note  
10 in the site record file dating from 1981 stated that CA-LAN-150 appeared to be  
11 completely destroyed as a result of earthmoving activities subsequent to 1964 (Dillon  
12 1981). However, because no subsurface investigation was conducted at CA-LAN-  
13 150 prior to the reported earthmoving activities, it is not possible to use the  
14 information from the 1912 site record to determine the exact location, horizontal  
15 extent, or depth of the site. In addition, the 1981 note does not provide a description  
16 of the methods the author used to make the determination that the site was  
17 completely destroyed. Therefore, it cannot be determined using the information  
18 currently available whether any portion of CA-LAN-150 remains intact and if any  
19 identified deposits would meet significance criteria.

20 CA-LAN-283 is a significant prehistoric habitation site that was partially salvage  
21 excavated in 1968 during the construction of the Vincent Thomas Bridge. The  
22 excavators recovered a substantial amount of artifacts that indicated the site was  
23 occupied initially during the Millingstone Horizon (ca. 8000–3500 BP), through the  
24 Intermediate Period (ca. 3500–1200 BP) and into the Late Prehistoric Period, with a  
25 termination date of sometime between AD 1000 and AD 1500 (Desautels 1968). In  
26 addition to recovering a large number of artifacts, an unusual coggled stone with a  
27 platform base and vertical side notching at regular intervals was also identified. CA-  
28 LAN-283 yielded important scientific information relevant to the prehistory of coastal  
29 southern California. Laboratory analysis of the artifacts indicated that the site  
30 exhibited a long period of repeated seasonal occupation, broad resource exploitation,  
31 and an easily accessible supply of Monterey Chert for chipped stone implements.  
32 The overall assemblage indicates that the site might represent a primary subsistence  
33 village of a centrally based, wandering community. Although no evidence of the site  
34 was encountered during the Phase I pedestrian survey (ICF Jones & Stokes 2008), the  
35 possibility exists that subsurface deposits may be present in this portion of the  
36 proposed project area.

37 While the extent of development and re-development indicates a low potential to  
38 encounter subsurface archaeological deposits associated with CA-LAN-150 and/or  
39 CA-LAN-283 during ground disturbing activities, implementation of Mitigation  
40 Measure MM CR-4 would reduce impacts on potentially significant archaeological  
41 resources associated with the CCT portion of the proposed project to less-than-  
42 significant levels. In addition, because the Waterfront Red Car Line portion of the  
43 proposed project was analyzed programmatically, implementation of Mitigation  
44 Measure MM CR-1 would reduce future impacts in this portion of the proposed  
45 project area.

## 1                   **Impact Determination**

2                   Because proposed changes to the Avalon Triangle Park portion of the project is  
3                   limited to administrative changes resulting from various planning document  
4                   boundary adjustments, the identification of cultural resources in these areas was  
5                   confined to the records search, correspondence with interested parties, and archival  
6                   research. Likewise, because the exact placement of the Waterfront Red Car Line is  
7                   not known at the time of this study, the identification of cultural resources in these  
8                   areas was confined to the records search, correspondence with interested parties, and  
9                   archival research.

10                  Archival research has indicated that the proposed Avalon Development District is  
11                  located within the center of the historic community of Wilmington. Therefore, future  
12                  developments in this area have the potential to temporarily unearth and permanently  
13                  destroy sensitive historical archaeological resources associated with the early  
14                  development of Wilmington. Impacts on archaeological resources related to  
15                  proposed project construction in the Avalon Development District would be  
16                  significant. The Phase I historical resources study (ICF Jones & Stokes 2008) has  
17                  resulted in the identification of six cultural resources within the proposed project  
18                  area: ICFJSA-NS-1/Pacific Electric Railway, ICFJSA-NS-2/Harbor Belt Line  
19                  Railroad, ICFJSA-NS-3/Drainage Swale, ICFJSA-NS-4/Pacific Electric Railway  
20                  “Channel Track”, ICFJSA-NS-5 Water Street Wharf /Catalina Steamer Terminal, and  
21                  ICFJSA-NS-6/Stacked Stone Breakwater. Of these resources, only ICFJSA-NS-1  
22                  (Pacific Electric Railway) was determined significant (eligible for listing in the  
23                  CRHR). Impacts on this resource would be considered significant without  
24                  mitigation.

25                  Within the Avalon Waterfront District, excavation and trenching, as well as other  
26                  ground-disturbing actions, have the potential to damage or destroy significant  
27                  historical archeological resources associated with (1) Phineas Banning, Banning’s  
28                  Landing, and the early development of the port; and (2) a portion of Banning’s  
29                  Landing utilized by Northern forces during the Civil War for a depot to supply forces  
30                  at the Drum Barracks. It is recommended that these areas be avoided during  
31                  construction to avoid impacts on significant archaeological resources. Without  
32                  mitigation, a significant impact would occur.

33                  Because there appears to be a high potential to encounter subsurface historical  
34                  archaeological deposits associated with important themes and individuals in history  
35                  (Banning’s Landing and the Civil War) within the Avalon Waterfront District portion  
36                  of the proposed project area, the proposed Project could potentially adversely impact  
37                  historical resources under CEQA. CEQA provides explicit guidelines for the  
38                  treatment of archaeological sites whether those sites are known or have a high  
39                  probability to be located within a project area. According to Section 15126.4 (b)(3),  
40                  public agencies should consider (1) preserving sites in place, (2) conducting data  
41                  recovery which requires the preparation and adoption of a data recovery plan prior to  
42                  any excavation, or (3) determining that, based upon archaeological testing or existing  
43                  studies, all scientifically consequential information has been gleaned from the site  
44                  and that the determination is documented in the environmental document.

1 No physical changes are proposed at the Avalon Triangle Park site. Extending the  
2 boundary of the Port Plan to Harry Bridges Boulevard, which would include the  
3 Avalon Triangle Park site (and retracting the Wilmington Harbor-City Plan  
4 boundary), would have no impact on archaeological resources.

5 Any excavation operations for the Waterfront Red Car Line/California Coastal Trail  
6 have the potential to temporarily unearth and permanently destroy sensitive  
7 archaeological resources. Impacts on archaeological resources in this area would be  
8 significant.

### 9 Mitigation Measures

#### 10 **MM CR-1: Conduct Future Cultural Resources Studies along the Waterfront** 11 **Red Car Line**

12 The analysis of cultural resources along the Waterfront Red Car Line is in the  
13 program level of analysis. Archival research indicates that archaeological resources  
14 may be located within the Waterfront Red Car Line proposed project area.  
15 According to the records search, two prehistoric sites (CA-LAN-150 and CA-LAN-  
16 283) are located adjacent to the proposed Waterfront Red Car Line location and one  
17 archaeological site, CA-LAN-2135H, is located less than 1/8<sup>th</sup> of a mile from the  
18 proposed approximate alignment. In addition, archival and historic map research has  
19 indicated the potential for subsurface archaeological deposits associated with the  
20 early development of Wilmington within the Avalon Development District and the  
21 Waterfront Red Car Line.

22 Therefore, LAHD will ensure that, prior to final design approval for affected parcels,  
23 a qualified archaeologist will be retained to perform additional Phase I level  
24 archaeological surveys and research to determine the potential for prehistoric and  
25 historical archaeological deposits within these portions of the proposed project area  
26 in accordance with professional standards and guidelines.

#### 27 **MM CR-2: Incorporate the Tracks into the Design Plan**

28 The proposed Project will incorporate the Pacific Electric Railway (PERy) tracks into  
29 the project design in accordance with the Secretary of the Interior's Standards for the  
30 Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating,  
31 Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's  
32 Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings  
33 (Weeks and Grimmer 1995). A substantial portion of the track will be preserved in  
34 place, which may include compatible alterations consistent with original PERy  
35 practice and intent. Examples of such alternations include raising or lowering track  
36 elevation to maintain its relationship to adjacent grade or removing or relocating  
37 sections to make repairs, fill in gaps, or to realign the public right-of-way. Where it  
38 is determined portions of the track will be reconnected, rail bonding shall be repaired  
39 and trackwork will be executed by an experienced railway construction contractor.  
40 Portions of the track where in place preservation is not feasible, such as the track  
41 within the Waterfront Red Car Line and California Coastal Trail alignment, will be  
42 statically incorporated into the Railroad Green Park landscape and hardscape design  
43 by a qualified landscape architect so as to memorialize the historical significance of

1 the PERy. Any portion of the track not incorporated into the park design will be  
2 preserved for reuse in a storage facility determined suitable for long-term  
3 preservation.

4 **MM CR-3: Develop and Implement Historical Resources Treatment Plan Prior**  
5 **to Demolition and/or Ground Disturbing Activities**

6 Disturbance of these archaeological deposits would be considered a significant  
7 impact under CEQA, which would require mitigation. Avoidance and/or  
8 preservation in place is the preferred mitigation for archaeological deposits.  
9 However, when this is not possible, the excavation of archaeological deposits to  
10 recover the data they contain is also appropriate (Section 15126.4 (b)(3)). Such data  
11 recovery excavation requires careful planning in the form of a Treatment Plan. Prior  
12 to any ground-disturbing activities and/or demolition, a treatment plan would be  
13 developed and implemented. This document would address areas where potentially  
14 significant historical archaeological deposits are likely to be located within the  
15 proposed commercial portion of the proposed project area. The treatment plan would  
16 also include methods for: (1) archaeological monitoring during demolition of  
17 existing buildings, (2) subsurface testing after demolition, and (3) data recovery of  
18 archaeological deposits. A detailed historic context that clearly demonstrates the  
19 themes under which any identified subsurface deposits would be determined  
20 significant would be included in the document as well as anticipated artifact types,  
21 artifact analysis, report writing, repatriation of human remains and associated grave  
22 goods, and curation. Implementation of Mitigation MM CR-3 would reduce potential  
23 impacts on archaeological resources associated with the commercial portion of the  
24 proposed project to less-than-significant levels.

25 **MM CR-4: Develop an Archaeological and/or Native American Research**  
26 **Design and Treatment Plan**

27 The Phase I historical resources study (ICF Jones & Stokes 2008) has identified a  
28 low potential for historical archaeological deposits associated with a Civil War-era  
29 Government Depot within a portion of the Wilmington Waterfront District. In  
30 addition, the Phase I historical resources study identified a low potential for  
31 prehistoric archaeological deposits associated with CA-LAN-150 and CA-LAN-283.  
32 However, because there is potential for ground-disturbing activities to impact  
33 potentially CRHR and/or NRHP-eligible historical archaeological deposits, the  
34 following steps will be taken prior to any ground-disturbing activities:

- 35 ■ A research design and treatment plan will be generated that would address areas  
36 where potentially significant archaeological deposits are likely to be located  
37 within this portion of the project area and clearly demonstrates the themes under  
38 which any deposits would be determined significant.
- 39 ■ LAHD will require at least one pre-field meeting with environmental  
40 management staff, project engineers, construction contractors, and construction  
41 inspectors to discuss protocols and procedures related to treatment of identified  
42 archaeological resources.
- 43 ■ A qualified archaeologist shall monitor all ground-disturbing activities in the  
44 vicinity of the Government Depot within the Wilmington Waterfront District

1 portion of the project area. The qualified archaeological monitor will have  
2 demonstrated knowledge of, and experience with the treatment of historical  
3 archaeological resources.

- 4 ■ A qualified archaeologist and Native American monitor will monitor all ground-  
5 disturbing activities within the vicinity of CA-LAn-150 and CA-LAn-283 along  
6 the California Coastal Trail portion of the proposed project area. The qualified  
7 archaeologist will have demonstrated knowledge of, and experience with, the  
8 treatment of prehistoric archaeological resources.
- 9 ■ Due to potentially hazardous soil conditions associated with the DWP facility (as  
10 included in the project description), a safety plan will be generated in conjunction  
11 with the LAHD that addresses all issues associated with contamination and  
12 remediation. It is further recommended that the qualified archaeological monitor  
13 also be 40-hour Hazwoper certified.
- 14 ■ In the event that subsurface deposits are identified during monitoring, ground  
15 disturbing activities will halt within 100 feet of the find to allow the qualified  
16 archaeologist to assess the find(s) and determine if treatment of the resource(s) is  
17 required.

#### 18 Residual Impacts

19 With implementation of mitigation measures MM CR-1, MM CR-2, MM CR-3, and  
20 MM CR-4, impacts on known or suspected archaeological resources would be less  
21 than significant.

#### 22 **Impact CR-2: Construction of the proposed Project would 23 not disturb, damage, or degrade an unknown prehistoric 24 and/or historical archaeological resource resulting in a 25 reduction of its integrity or significance as an important 26 resource.**

27 Excavation and trenching, as well as other ground-disturbing actions, have the  
28 potential to damage or destroy previously unidentified, significant archeological  
29 resources within the proposed project area. Archaeological resources were analyzed  
30 for the five components of the proposed Project: the project-level impact analysis for  
31 the Railroad Green portion of the Avalon Development District, the Avalon  
32 Waterfront District, and the California Coastal Trail; and the program-level impact  
33 analysis for the remaining portions of the Avalon Development District, the Avalon  
34 Triangle Park, and the Waterfront Red Car Line.

#### 35 **Impact Determination**

36 Because portions of the site are covered by existing pavement, structures, or  
37 buildings that may be demolished at a future time, a field survey and/or soil testing at  
38 these locations was not feasible. However, based upon archival research and known  
39 archaeological resources in the area, it is likely unknown prehistoric and/or historical  
40 archaeological resources are contained with the ground. In most cases,

1 implementation of mitigation measures MM CR-1 and MM CR-3 would preclude the  
2 potential for a significant impact. However, in the event these mitigation measures  
3 do not identify all archaeological resources in the area and construction activities  
4 commence, any unidentified resources would have the potential to be destroyed.  
5 Impacts on unidentified archaeological resources would be significant.

#### 6 Mitigation Measures

##### 7 **MM CR-5: Stop Work if Previously Unidentified Resources Are Encountered** 8 **during Ground Disturbing Activities**

9 In the event that any artifact or an unusual amount of bone, shell, or nonnative stone  
10 is encountered during construction, work will be immediately stopped and relocated  
11 to another area. The contractor will stop construction within 100 feet of the exposed  
12 resource until a qualified archaeologist can be retained by the Port to evaluate the  
13 find (see 36 CFR 800.11.1 and CCR, Title 14, Section 15064.5(f)). Examples of  
14 such cultural materials might include concentrations of ground stone tools such as  
15 mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or  
16 choppers; flakes of stone not consistent with the immediate geology such as obsidian  
17 or fused shale; historic trash pits containing bottles and/or ceramics; or structural  
18 remains. If the resources are found to be significant, they will be avoided or will be  
19 mitigated consistent with SHPO Guidelines. All construction equipment operators  
20 will attend a preconstruction meeting presented by a professional archaeologist  
21 retained by the Port that will review types of cultural resources and artifacts that  
22 would be considered potentially significant, to ensure operator recognition of these  
23 materials during construction.

24 Prior to beginning construction, the Port will meet with applicable Native American  
25 Groups, including the Gabrieliño/Tongva Tribal Council to identify areas of concern.  
26 In addition to monitoring, a treatment plan will be developed in conjunction with the  
27 Native American Groups to establish the proper way of extracting and handling all  
28 artifacts in the event of an archaeological discovery.

#### 29 Residual Impacts

30 Implementation of mitigation measures MM CR-1 for the program-level portions of  
31 the proposed project and MM CR-5 for the project-level portions of the proposed  
32 project would reduce impacts to unknown resources to less than significant.

##### 33 **Impact CR-3: Construction of the proposed Project would** 34 **not disturb, damage, or degrade unknown human remains.**

35 The results of the proposed project technical analysis has indicated a low potential to  
36 encounter buried prehistoric and/or historic period human remains within the  
37 proposed project area. According to the Phase I historical resources study (ICF Jones  
38 & Stokes 2008) no known prehistoric burials have been encountered within a one-  
39 mile radius of the proposed project area. In addition, no historic period cemeteries  
40 have been documented within the proposed project boundaries. However, there is a  
41 possibility to encounter previously unidentified, buried human remains.

1 In the event human remains are discovered, the Port would be required to comply  
2 with state law which states that there shall be no further excavation or disturbance of  
3 the site or any nearby area reasonably suspected to overlie adjacent remains until the  
4 coroner is contacted and the appropriate steps taken pursuant to Health and Safety  
5 Code §7050.5 and Public Resource Code §5097.98.

### 6 **Impact Determination**

7 While the possibility of encountering unidentified buried human remains is low, the  
8 possibility cannot be ruled out. Impacts related to the possible disturbance, damage,  
9 or degradation of unknown human remains would be significant.

### 10 Mitigation

11 Implement MM CR-1, MM CR-3, MM CR-4, and MM CR-5 (see Impacts CR-1 and  
12 CR-2 for the full text of the mitigation measures).

### 13 Residual Impacts

14 Implementation of mitigation measures MM CR-1, MM CR-3, MM CR-4, and MM  
15 CR-5 would substantially reduce the potential of impacting unknown buried human  
16 remains. With mitigation, impacts would be less than significant.

### 17 **Impact CR-4: The proposed Project would not result in the** 18 **permanent loss of, or loss of access to, a paleontological** 19 **resource of regional or statewide significance.**

20 Excavation, trenching, and pile driving, as well as other ground-disturbing actions,  
21 have the potential to damage or destroy significant paleontological resources within  
22 the proposed project area. Paleontological resources were analyzed for the five  
23 components of the proposed Project: the project-level impact analysis for the Avalon  
24 Waterfront District, California Coastal Trail, and the Avalon Development District  
25 and the program-level impact analysis for Avalon Triangle Park and the Waterfront  
26 Red Car Line. Figure 3.4-1 depicts the surface geology in the proposed project  
27 vicinity.

### 28 **Avalon Waterfront District**

29 Proposed project features and improvements in the Avalon Waterfront District  
30 include a waterfront promenade with restaurant/visitor-serving retail development, a  
31 pedestrian bridge and observation tower, 44,000 square feet of new viewing piers,  
32 replacement of approximately 17,000 square feet of existing piers, two floating dock  
33 totaling 5,870 square feet for transient boats (Phase I), and a 10-acre landscaped  
34 bridge providing the Wilmington Community safe access to the waterfront.  
35 Excavation in the Avalon Waterfront District and removal of the LADWP oil tanks  
36 and remediation of the site would encounter Holocene-age sediments and artificial  
37 fill. The thickness of these overlying Holocene sediments, which are unlikely to  
38 contain paleontological resources, above geologic deposits that may contain

1 paleontological resources is not known. Any excavation operations within the  
2 LADWP Marine Tank Farm that reach underlying deposits of older Quaternary  
3 Alluvium or the San Pedro Sand have the potential to temporarily unearth and  
4 permanently destroy sensitive paleontological resources. These features would  
5 involve excavation for bridge footing in some areas, and for buildings and other  
6 structures.

7 Artificial fill materials presumably were derived from earlier channel dredging  
8 operations and were placed in such a way as to provide topographically high areas for  
9 development. No fossils of scientific interest are located in the artificial fill  
10 materials. Any organic remains have lost their original stratigraphic and geologic  
11 context due to the disturbed nature of the artificial fill materials.

12 In specific locations, during a proposed project-related excavation, the thickness of  
13 fill materials is as yet unknown, as is the thickness of the Holocene-age younger  
14 alluvium; therefore, depth of cover to buried geologic deposits that may contain  
15 paleontological resources is not known. Without comprehensive geotechnical  
16 reporting of subsurface conditions in areas of deep excavation, based on geotechnical  
17 boring, it is not possible to assess the extent (i.e., depth of sensitive units in  
18 comparison to depth of excavations) of proposed project impacts on paleontological  
19 resources. However, any excavation operations that reach underlying deposits of  
20 older Quaternary Alluvium or the San Pedro Sand have the potential to temporarily  
21 unearth and permanently destroy sensitive paleontological resources.

22 It is possible that pile-driving may impact paleontological resources. This impact is  
23 unlikely, however, due to the small impact footprint of pile-driving.

#### 24 **Avalon Development District**

25 Proposed project infrastructure improvements and enhancements within the Avalon  
26 Development District include the potential development of industrial and commercial  
27 space, a 1-acre park located on the vacated Railroad Green, and adaptive reuse of the  
28 historic 14,500-square-foot Bekins Storage property for a Waterfront Red Car  
29 Museum. Several streets will be vacated or realigned.

30 In this area, near-surface excavations will encounter Holocene-age sediments and  
31 artificial fill, and, again, the depth to buried geologic deposits that may contain  
32 paleontological resources is not known. Any excavation operations within the  
33 Avalon Development that reach underlying deposits of older Quaternary Alluvium  
34 or the San Pedro Sand have the potential to temporarily unearth and permanently  
35 destroy sensitive paleontological resources.

#### 36 **Avalon Triangle Park**

37 At the program level, the proposed Project includes extending the Port Plan boundary  
38 to Harry Bridges Boulevard, which would include Avalon Triangle Park, resulting in  
39 a corresponding retraction of the Wilmington–Harbor City Community Plan  
40 boundary. At the program level, this action will have no impact or effect on  
41 paleontological resources. However, future developments in this area have the

1 potential to temporarily unearth and permanently destroy sensitive paleontological  
2 resources.

3 In this area, near-surface excavations will encounter Holocene-age sediments and  
4 artificial fill, and, again, the depth to buried geologic deposits that may contain  
5 paleontological resources is not known. Any excavation operations within the  
6 Avalon Triangle Park that reach underlying deposits of older Quaternary Alluvium or  
7 the San Pedro Sand have the potential to temporarily unearth and permanently  
8 destroy sensitive paleontological resources.

### 9 **Waterfront Red Car Line/California Coastal Trail**

10 At the program level, the proposed Project includes extension of the Waterfront Red  
11 Car Line and, at the project level, the continuation of the California Coastal Trail  
12 from Avalon Boulevard to Swinford Street.

13 The eastern extent of the Waterfront Red Car Line/California Coastal Trail from  
14 Avalon Boulevard along Harry Bridges Boulevard is underlain by Holocene-age  
15 beach sediments and artificial fill. The thickness of these overlying sediments above  
16 geologic deposits that may contain paleontological resources is not known.

17 The western extent of the Waterfront Red Car Line/California Coastal Trail west of  
18 Figueroa Street along John S. Gibson Boulevard to Swinford Street is underlain by  
19 Quaternary alluvium, Quaternary older alluvium, and Pleistocene-age offshore  
20 marine deposits of San Pedro Sand. The Pleistocene-age San Pedro Sand is mapped  
21 at the surface between the Northwest and Southwest Slips, and in patches near the  
22 Vincent Thomas Bridge. These deposits are of fossil-bearing age, and are of  
23 scientific interest if intact.

24 Any excavation operations for the Waterfront Red Car Line/California Coastal Trail  
25 that reach underlying deposits of older Quaternary Alluvium or the San Pedro Sand  
26 have the potential to temporarily unearth and permanently destroy sensitive  
27 paleontological resources.

### 28 **Impact Determination**

29 The geologic assessment and literature review demonstrate that excavation in  
30 association with development of the proposed Project has the potential to impact  
31 significant nonrenewable fossil resources. Excavation into undisturbed geologic  
32 deposits underlying the proposed project area, which include Quaternary alluvium,  
33 Pleistocene-age marine deposits of Palos Verdes Sand, and Pleistocene-age offshore  
34 marine deposits of San Pedro Sand, would potentially impact fossil resources.  
35 Construction of the proposed Project would result in significant impacts because of  
36 the potential to damage or destroy significant nonrenewable fossil resources.

37

## Mitigation Measures

### **MM CR-6: Develop a Program to Mitigate Impacts on Nonrenewable Paleontologic Resources prior to Excavation or Construction of any Proposed Project Components.**

This mitigation program will be conducted by a qualified vertebrate paleontologist and will be consistent with the provisions of CEQA, as well as the proposed guidelines of the Society of Vertebrate Paleontology. This program will 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 qualified to Society of Vertebrate Paleontology standards will 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 to a level less than significant.

## Residual Impacts

Implementation of mitigation measure MM CR-6 by a qualified vertebrate paleontologist would reduce impacts to less-than-significant levels.

1                   **Impact CR-5: The proposed Project would not result in a**  
2                   **substantial adverse change in the significance of an**  
3                   **historical resource, involving demolition, relocation,**  
4                   **conversion, rehabilitation, alteration, or other construction**  
5                   **that reduces the integrity or significance of important**  
6                   **resources on the site or in the vicinity.**

7                   The following four properties are within the proposed Project’s Area of Potential  
8                   Effects (APE) that are listed in or determined eligible for the NRHP, the CRHR, and  
9                   the Los Angeles Historic-Cultural Monument List.

- 10                   ■ **Masonic Temple, 221–227 N. Avalon Boulevard, HCM No. 342, listed on the**  
11                   **CRHR.** The proposed Project includes street and sidewalk landscaping along  
12                   Avalon Boulevard. This new sidewalk landscaping could slightly obscure the  
13                   primary east elevation of the building, but no impact would occur.
- 14                   ■ **Bekins Storage Facilities, 245 N. Fires Avenue, CRHR eligible under**  
15                   **Criterion 3.** The proposed Project includes street and sidewalk landscaping on  
16                   the north and primary east elevation, and a railroad screen along the southeast  
17                   elevation. The new street sidewalk landscaping, and railroad screen, may slightly  
18                   obscure building elevations, but no impact would occur.
- 19                   ■ **College of Engineering and Oceaneering, 272 S. Fries Avenue, HCM eligible.**  
20                   The proposed Project includes landscaping and green lawn to be placed north of  
21                   the building. No impact would occur.
- 22                   ■ **Wilmington Iron Works Building, 432 West C Street, CRHR eligible under**  
23                   **Criterion 1.** The proposed Project includes street and sidewalk landscaping  
24                   along C Street and Lagoon Avenue. This new sidewalk landscaping could  
25                   slightly obscure the west and north elevations of the building, but no impact  
26                   would occur.

27                   As discussed in the Methodology section, a rehabilitation project that follows the  
28                   Secretary of the Interior’s *Standards for the Treatment of Historic Properties with*  
29                   *Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic*  
30                   *Buildings* or the Secretary of the Interior’s *Standards for Rehabilitation and*  
31                   *Guidelines for Rehabilitating Historic Buildings* (Weeks and Grimmer 1995) would  
32                   be considered as mitigated to a level of less than significant. As part of the proposed  
33                   Project, the Bekins Storage buildings would undergo rehabilitation in accordance  
34                   with the Secretary of the Interior’s *Standards for Rehabilitation and Guidelines for*  
35                   *Rehabilitating Historic Buildings*. While exact details of the rehabilitation are still  
36                   being deliberated, rehabilitation consistent with these standards and guidelines would  
37                   assure a significant impact would not occur from the rehabilitation process.

38                   To accommodate the Avalon Boulevard alignment, the street would be straightened  
39                   to a north–south axis into parcels with existing buildings. The straightening of  
40                   Avalon Boulevard would require the demolition of three buildings, located in the  
41                   Avalon Development District, that were found to be 50 years of age or older (listed in  
42                   Table 3.4-7).

**Table 3.4-7.** Historical Resources Determined Not to Be Significant by the Lead Agency that Meet the 50-Year Age Criteria for Evaluation and Are Proposed for Demolition.

<i>Address</i>	<i>APN</i>	<i>Year Built</i>	<i>Recommendation</i>
133 N. Avalon Boulevard	7440-066-011	1947	Not eligible for CRHR under Criterion 3, and not eligible under Criteria 1 or 2, as identified by research and local historical society.
131 N. Avalon Boulevard	7440-006-012	1954	Not eligible for CRHR under Criterion 3, and not eligible under Criteria 1 or 2, as identified by research and local historical society.
115 N. Avalon Boulevard	7440-006-015	1957	Not eligible for CRHR under Criterion 3, and not eligible under Criteria 1 or 2, as identified by research and local historical society.

These structures were evaluated under the CRHR criteria by a professional architectural historian for potential eligibility under Criterion 3, which is defined as a building having distinctive architectural design characteristics, a unique construction type, that represents the work of a master, or that possesses high artistic value. For identifying resources under Criterion 1, which is defined as a building having significance because of its association with an important event, an oral interview with Hank and Jane Osterhoudt, curators of the Wilmington Historical Society, was conducted. For association with an important person (Criterion 2), building permits were reviewed, data searched within the California Index, and an oral interview with the Osterhoudts was conducted on May 14, 2008. They reported that they were unaware of any associations with important persons in regards to the three resources located along the 100 N. block of Avalon Boulevard.

No other additional research was conducted to identify potential historical resources under Criteria 1 or 2. These three buildings were found to be ineligible for CRHR consideration as historically significant resources, as discussed below.

### **133 N. Avalon Boulevard**

The building located at 133 N. Avalon Boulevard is a one-story commercial facility, rectangular in plan. It was designed in a minimal-traditional style and is simplistic in plan. The building has a flat roof, and the elevations contain a stucco finish with a belt course located below the roof line. The primary façade, which faces east, features a wooden garage door and a picture window in a wood frame. There is an off-center inset entryway that provides primary access into the building through what appears to be a replaced door. To the north of the entrance on the primary elevation there are two smaller one-over-one double-hung wood-frame windows.

1 This building has undergone alterations that include refinishing with stucco and  
2 replacement of its primary entrance. It does not rise to the level of historical  
3 significance because it does not possess a distinctive architectural design  
4 characteristic or unique construction type, nor does it represent the work of a master  
5 or possess high artistic value under Criterion 3 of the California Register.  
6 Furthermore, this building is not associated with any persons or events that would  
7 qualify for listing in the California Register under Criteria 1 or 2.

### 8 **131 N. Avalon Boulevard**

9 The two buildings located at 131 N. Avalon Boulevard are one-story commercial  
10 facilities, rectangular in plan. The buildings are almost identical in their minimalist  
11 design and have been refinished in stucco. The primary façades, which face east,  
12 contain original casement windows in wood frames and a wood door, which has been  
13 replaced on the southern building. The northern building contains one-over-one  
14 double-hung wood frame windows. Both buildings feature a projecting cornice line  
15 that is located on all of the elevations below the flat roof. Circular vents are  
16 positioned below the cornice line and are located on all elevations.

17 These buildings have undergone alterations that include refinishing with stucco and  
18 replacement of primary entrances. They do not rise to the level of historical  
19 significance because they do not possess a distinctive architectural design  
20 characteristic or unique construction type, nor do they represent the work of a master  
21 or possess high artistic value under Criterion 3 of the California Register.  
22 Furthermore, the buildings are not associated with any persons or events that would  
23 qualify for listing in the California Register under Criteria 1 or 2.

### 24 **115 N. Avalon Boulevard**

25 The building located at 115 North Avalon Boulevard is a one-story commercial  
26 facility, rectangular in plan. The building is set back from the street, where it faces  
27 east. It contains a stucco finish and a flat roof, with a projecting roof line above the  
28 primary façade that has a series of slightly protruding vertical metal bands. The  
29 primary façade consists of a primary entrance that is accessed via a concrete step and  
30 covered from the cornice line protrusion. The door appears to be replaced and  
31 surrounded by concrete. It is flanked to the south on the main elevation by a band of  
32 projecting windows, below which is a garden wall composed of field stone. An  
33 elevation clad in field stone is to the north of the off-center entrance. The property  
34 line is bounded by a tall metal fence and there is asphalt between the subject building  
35 and Avalon Boulevard.

36 This building has undergone alterations that include the field stone cladding and a  
37 replaced primary entrance. It does not rise to the level of historical significance  
38 because it does not possess a distinctive architectural design characteristic or unique  
39 construction type, nor does it represent the work of a master or possess high artistic  
40 value under Criterion 3 of the California Register. Furthermore, this building is not  
41 associated with any persons or events that would qualify for listing in the California  
42 Register under Criteria 1 or 2.

## Impact Determination

The proposed Project would not result in significant direct impacts on the following historical resources because the new development would be approximately 300 feet from the historical resources, and would not alter in an adverse manner those physical characteristics that convey their historical significance.

- Harbor Generating Station, 161 N. Island Avenue
- Masonic Temple, 221–227 N. Avalon Boulevard, HCM No. 342
- Bekins Storage Facilities, 245 N. Fires Avenue and 312–316 W. C Street, CRHR eligible under Criteria 3
- Wilmington Iron Works Building, 432 West C Street, HCM eligible.
- National Polytechnic College of Engineering and Oceanering, 272 S. Fries Avenue, HCM eligible.

The proposed Project would result in less-than-significant indirect impacts on the following resources; however, the proposed Project does not materially alter in an adverse manner those physical characteristics that convey these historical resources' significance and that justify their eligibility for inclusion in the CRHR and HCM Lists:

- Masonic Temple, 221–227 N. Avalon Boulevard, HCM No. 342
- Bekins Storage Facilities, 245 N. Fires Avenue and 312–316 W. C Street, CRHR eligible under Criterion 3
- Wilmington Iron Works Building, 432 West C Street, HCM eligible

### Mitigation Measures

No mitigation is required.

### Residual Impacts

Impacts would be less than significant.

## 3.4.4.3.2 Summary of Impact determinations

Table 3.4-8 summarizes the impact determinations of the proposed Project related to Cultural Resources, as described in the detailed discussion in Section 3.4.4.3.1. Identified potential impacts may be based on Federal, State, or City of Los Angeles significance criteria, Port criteria, and the scientific judgment of the report preparers.

For each type of potential impact, the table describes the impact and impact determinations, describes any applicable mitigation measures, and notes the residual

1 impacts (i.e., the impact remaining after mitigation). Impacts, whether significant or  
 2 not, are included in this table.

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

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
3.4 Cultural Resources			
<b>CR-1:</b> Construction of the proposed Project would not disturb, damage, or degrade a known prehistoric and/or historical archaeological resource resulting in a reduction of its integrity or significance as an important resource.	Significant	<p><b>MM CR-1: Conduct Future Cultural Resources Studies along the Waterfront Red Car Line</b></p> <p>The analysis of cultural resources along the Waterfront Red Car Line is in the program level of analysis. Archival research indicates that archaeological resources may be located within the Waterfront Red Car Line proposed project area. According to the records search, two prehistoric sites (CA-LAn-150 and CA-LAn-283) are located adjacent to the proposed Waterfront Red Car Line location and one archaeological site, CA-LAn-2135H, is located less than 1/8<sup>th</sup> of a mile from the proposed approximate alignment. In addition, archival and historic map research has indicated the potential for subsurface archaeological deposits associated with the early development of Wilmington within the Avalon Development District and the Waterfront Red Car Line.</p> <p>Therefore, the LAHD will ensure that, prior to final design approval for affected parcels, a qualified archaeologist will be retained to perform additional Phase I level archaeological surveys and research to determine the potential for prehistoric and historical archaeological deposits within these portions of the proposed</p>	Less than significant

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
		<p>project area in accordance with professional standards and guidelines.</p> <p><b>MM CR-2: Incorporate the Tracks into the Design Plan</b></p> <p>The proposed Project will incorporate the Pacific Electric Railway (PERy) tracks into the project design in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Weeks and Grimmer 1995). A substantial portion of the track will be preserved in place, which may include compatible alterations consistent with original PERy practice and intent. Examples of such alternations include raising or lowering track elevation to maintain its relationship to adjacent grade or removing or relocating sections to make repairs, fill in gaps, or to realign the public right-of-way. Where it is determined portions of the track will be reconnected, rail bonding shall be repaired and trackwork will be executed by an experienced railway construction contractor. Portions of the track where in place preservation is not feasible, such as the track within the Waterfront Red Car Line and California Coastal Trail alignment, will be statically incorporated into the Railroad Green Park landscape and hardscape design by a qualified landscape architect so as to memorialize the historical significance of the PERy. Any</p>	

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
		<p>portion of the track not incorporated into the park design will be preserved for reuse in a storage facility determined suitable for long-term preservation.</p> <p><b>MM CR-3: Develop and Implement Historical Resources Treatment Plan Prior to Demolition and/or Ground Disturbing Activities</b></p> <p>Disturbance of these archaeological deposits would be considered a significant impact under CEQA, which would require mitigation. Avoidance and/or preservation in place is the preferred mitigation for archaeological deposits. However, when this is not possible, the excavation of archaeological deposits to recover the data they contain is also appropriate (Section 15126.4 (b)(3)). Such data recovery excavation requires careful planning in the form of a Treatment Plan. Prior to any ground-disturbing activities and/or demolition, a treatment plan would be developed and implemented. This document would address areas where potentially significant historical archaeological deposits are likely to be located within the proposed Commercial portion of the proposed project area. The treatment plan would also include methods for: (1) archaeological monitoring during demolition of existing buildings, (2) subsurface testing after demolition, and (3) data recovery of archaeological deposits. A detailed historic context that clearly demonstrates the themes under which any identified subsurface deposits would be determined significant</p>	

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
		<p>would be included in the document as well as anticipated artifact types, artifact analysis, report writing, repatriation of human remains and associated grave goods, and curation. Implementation of Mitigation MM CR-3 would reduce potential impacts on archaeological resources associated with the Commercial portion of the proposed project to less-than-significant levels.</p> <p><b>MM CR-4: Develop an Archaeological and/or Native American Research Design and Treatment Plan</b></p> <p>The Phase I historical resources study (ICF Jones &amp; Stokes 2008) has identified a low potential for historical archaeological deposits associated with a Civil War-era Government Depot within a portion of the Wilmington Waterfront District. In addition, the Phase I historical resources study identified a low potential for prehistoric archaeological deposits associated with CA-LAN-150 and CA-LAN-283. However, because there is some potential for ground-disturbing activities to impact potentially CRHR and/or NRHP-eligible historical archaeological deposits, the following steps will be taken prior to any ground-disturbing activities:</p> <ul style="list-style-type: none"> <li>■ A research design and treatment plan will be generated that would address areas where potentially significant archaeological deposits are likely to be located within this portion of the project area and clearly demonstrates the themes under which any deposits would be determined</li> </ul>	

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
		<p>significant.</p> <ul style="list-style-type: none"> <li data-bbox="786 361 1133 659">■ LAHD will require at least one pre-field meeting with environmental management staff, project engineers, construction contractors, and construction inspectors to discuss protocols and procedures related to treatment of identified archaeological resources.</li> <li data-bbox="786 709 1133 1129">■ A qualified archaeologist shall monitor all ground-disturbing activities in the vicinity of the Government Depot within the Wilmington Waterfront District portion of the project area. The qualified archaeological monitor will have demonstrated knowledge of, and experience with the treatment of historical archaeological resources.</li> <li data-bbox="786 1180 1133 1633">■ A qualified archaeologist and Native American monitor will monitor all ground-disturbing activities within the vicinity of CA-LAn-150 and CA-LAn-283 along the California Coastal Trail portion of the proposed project area. The qualified archaeologist will have demonstrated knowledge of, and experience with, the treatment of prehistoric archaeological resources.</li> <li data-bbox="786 1684 1133 1873">■ Due to potentially hazardous soil conditions associated with the DWP facility (as included in the project description), a safety plan will be generated in conjunction with the LAHD</li> </ul>	

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
		<p>that addresses all issues associated with contamination and remediation. It is further recommended that the qualified archaeological monitor also be 40-hour Hazwoper certified.</p> <ul style="list-style-type: none"> <li>■ In the event that subsurface deposits are identified during monitoring, ground disturbing activities will halt within 100 feet of the find to allow the qualified archaeologist to assess the find(s) and determine if treatment of the resource(s) is required.</li> </ul>	
<p><b>CR-2:</b> Construction of the proposed Project would not disturb, damage, or degrade an unknown prehistoric and/or historical archaeological resource resulting in a reduction of its integrity or significance as an important resource.</p>	<p>Significant</p>	<p><b>MM CR-1, MM CR-3, MM CR-4 and</b></p> <p><b>MM CR-5: Stop Work if Previously Unidentified Resources Are Encountered during Ground Disturbing Activities</b></p> <p>In the event that any artifact or an unusual amount of bone, shell, or nonnative stone is encountered during construction, work will be immediately stopped and relocated to another area. The contractor will stop construction within 100 feet of the exposed resource until a qualified archaeologist can be retained by the Port to evaluate the find (see 36 CFR 800.11.1 and CCR, Title 14, Section 15064.5(f)). 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; historic trash pits containing bottles and/or</p>	<p>Less than significant</p>

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
		<p>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 preconstruction meeting presented by a professional archaeologist retained by the Port that will review types of cultural resources and artifacts that would be considered potentially significant, to ensure operator recognition of these materials during construction.</p> <p>Prior to beginning construction, the Port will meet with applicable Native American Groups, including the Gabrieliño/Tongva Tribal Council to identify areas of concern. In addition to monitoring, a treatment plan will be developed in conjunction with the Native American Groups to establish the proper way of extracting and handling all artifacts in the event of an archaeological discovery.</p>	
<b>CR-3:</b> Construction of the proposed Project would not disturb, damage, or degrade unknown human remains.	Significant	Implement <b>MM CR-1, MM CR-3, MM CR-4, and MM CR-5</b>	Less than significant
<b>CR-4:</b> The proposed Project would not result in the permanent loss of, or loss of access to, a paleontological resource of regional or statewide significance.	Significant	<p><b>MM CR-6: Develop a Program to Mitigate Impacts on Nonrenewable Paleontologic Resources prior to Excavation or Construction of any Proposed Project Components</b></p> <p>This mitigation program will be conducted by a qualified vertebrate paleontologist and will be consistent with the provisions of CEQA, as well as the proposed guidelines of the Society of Vertebrate Paleontology. This program will include, but not be limited to:</p>	Less than significant

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
		<ol style="list-style-type: none"> <li data-bbox="782 296 1120 506">1. Assessment of site-specific excavation plans to determine areas that will be designated for paleontological monitoring during initial ground disturbance.</li> <li data-bbox="782 527 1136 1402">2. Development of monitoring protocols for these designated areas. Areas consisting of artificial fill materials will not require monitoring. Paleontologic monitors qualified to Society of Vertebrate Paleontology standards will 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.</li> <li data-bbox="782 1423 1130 1787">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.</li> <li data-bbox="782 1808 1133 1890">4. Identification and curation of all specimens into an established, accredited</li> </ol>	

<i>Environmental Impacts</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
		<p>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.</p> <p>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 to a level less than significant.</p>	
<p><b>CR-5:</b> The proposed Project would not result in a substantial adverse change in the significance of an 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.</p>	Less than significant	No mitigation is required	Less than significant

### 1 3.4.4.4 Mitigation Monitoring

2 **Table 3.4-9.** Mitigation Monitoring for Cultural Resources

<b>CR-1:</b> Construction of the proposed Project would not disturb, damage, or degrade a known prehistoric and/or historical archaeological resource resulting in a reduction of its integrity or significance as an important resource..	
Mitigation Measure	<b>MM CR-1: Conduct Future Cultural Resources Studies along the Waterfront Red Car Line</b>
Timing	Prior to approval of the final map
Methodology	Require additional study for areas with a high sensitivity for archaeological resources
Responsible Parties	LAHD and contractor
Residual Impacts	Less than significant
Mitigation Measure	<b>MM CR-2: Incorporate the Tracks into the Design Plan</b>
Timing	Show in final design
Methodology	Incorporate historic tracks into the final design plan
Responsible Parties	LAHD and contractor
Residual Impacts	Less than significant
Mitigation Measure	<b>MM CR-3: Develop and Implement Historical Resources Treatment Plan Prior to Demolition and/or Ground Disturbing Activities</b>
Timing	Prior to any ground-disturbing activities
Methodology	Test for subsurface artifacts, develop a plan for treatment
Responsible Parties	LAHD, contractor, and consulting archaeologist
Residual Impacts	Less than significant
Mitigation Measure	<b>MM CR-4: Develop an Archaeological and/or Native American Research Design and Treatment Plan</b>
Timing	During any ground-disturbing activities in Vicinity of Government Depot Portion
Methodology	Monitor for subsurface artifacts
Responsible Parties	LAHD, contractor, and consulting archaeologist
Residual Impacts	Less than significant
<b>CR-2:</b> Construction of the proposed Project would not disturb, damage, or degrade an unknown prehistoric and/or historical archaeological resource resulting in a reduction of its integrity or significance as an important resource.	
Mitigation Measure	<b>MM CR-1 and MM CR-5: Stop Work if Previously Unidentified Resources Are Encountered during Ground Disturbing Activities.</b>
Timing	During excavation if resources unearthed
Methodology	Stop work and implement treatment plan based on CR-1
Responsible Parties	LAHD, contractor, and monitoring archaeologist
Residual Impacts	Less than significant
<b>CR-3:</b> Construction of the proposed Project would not disturb, damage, or degrade unknown human remains.	
Mitigation Measure	Implement <b>MM CR-1, MM CR-3, MM CR-4, and MM CR-5.</b>
Timing	See above
Methodology	Monitor for human remains during construction
Responsible Parties	LAHD
Residual Impacts	Less than significant
<b>CR-4:</b> The proposed Project would not result in the permanent loss of, or loss of access to, a paleontological resource	

of regional or statewide significance.	
Mitigation Measure	<b>MM CR-6: Develop a Program to Mitigate Impacts on Nonrenewable Paleontologic Resources prior to Excavation or Construction of any Proposed Project Components.</b>
Timing	Prior to ground disturbing activities including excavation or construction
Methodology	Put a monitoring program into place and design a treatment plan if fossils are discovered
Responsible Parties	LAHD, contractor, and monitoring paleontologist
Residual Impacts	Less than significant

1

2

### 3.4.5 Significant Unavoidable Impacts

3

With the required mitigation, construction and operation of the proposed Project would not result in significant unavoidable impacts on cultural resources.

4

5