

3.4

CULTURAL RESOURCES

3.4.1 Introduction

This section addresses potential impacts on archaeological and historical resources that could result from development of the proposed Project and its alternatives.

3.4.1.1 Relationship to 1992 Deep Draft Final EIS/EIR

The 1992 Deep Draft Final Environmental Impact Statement/Environmental Impact Report (FEIS/FEIR) evaluated at a project-specific level and recommended mitigation to the extent feasible for all significant impacts on cultural resources of navigation and landfill improvements resulting from the creation of Pier 400. This includes those portions of the current proposed Project that are located on Pier 400. In addition, the Deep Draft FEIS/FEIR evaluated at a general, or programmatic, level the foreseeable impacts of development and operation of terminal facilities planned for location on Pier 400, including a marine oil terminal and associated infrastructure. The Deep Draft FEIS/FEIR identified the cultural resources impacts of terminal development and operation as resulting from the possible disturbance of three known offshore submerged anomalous objects located within the proposed Project area that could represent potentially significant resources. Specific mitigation measures defined in the Deep Draft FEIS/FEIR to assess the significance and eligibility of the underwater anomalies (i.e., an underwater feature that appears to have conspicuous characteristics that could be cultural in origin, rather than natural) prior to construction activities include 1) diving on the anomalies to make specific recommendations regarding their significance; 2) and monitoring construction activities in the vicinity of the anomalies. The Deep Draft FEIS/FEIR concluded that there are no unavoidable impacts on cultural resources as a result of either terminal development or operation.

The current proposed Project would not affect these anomalies, and therefore the mitigation measures developed in the Deep Draft FEIS/FEIR do not apply to the proposed Project. The mitigations developed in the Deep Draft FEIS/FEIR are listed below, with specific reasons as to why they do not apply to the proposed Project.

1 **Mitigation Measures from the 1992 Deep Draft Final EIS/EIR that**
2 **are No Longer Applicable or are Not Applicable to the Proposed**
3 **Project**

4 The following mitigation measures were developed in the Deep Draft FEIS/FEIR to
5 reduce the significant impacts to cultural resources during construction. These
6 measures are not applicable to the proposed Project for the reasons stated:

7 **Mitigation Measure (MM) 4L-1** required that the eligibility of anomaly 18 be
8 clarified by diving to make specific recommendations regarding significance. If it
9 was determined significant, an appropriate data recovery plan was to be developed
10 and executed since it would be directly impacted. If additional resources were
11 encountered, dredging activity was to halt until the resources were assessed for
12 National Register of Historic Places (NRHP) eligibility.

13 ***Reason no longer applicable:** The proposed Project would not involve dredging and*
14 *would not impact any underwater anomaly.*

15 **MM 4L-2** required that the eligibility of anomaly 32 be clarified by diving on this
16 anomaly to make specific recommendations regarding its significance, since this
17 anomaly could be impacted by increasing the shallow water habitat during Increment
18 4. If the anomaly was determined to be significant, an appropriate data recovery plan
19 was to be developed and executed, since this potential resource would be directly
20 impacted. If other anomalies were found during additional survey work, their
21 significance was also to be assessed; again, significant resources required an
22 appropriate data recovery plan to mitigate impacts.

23 ***Reason no longer applicable:** The proposed Project would not involve dredging and*
24 *would not impact any underwater anomaly.*

25 **MM 4L-3** stated that the difficulty in determining the exact location and nature of
26 anomaly LA-17/LA-18 dictated that monitoring in the vicinity of this anomaly during
27 Increment 3 construction should be conducted. Again, any resources identified
28 during monitoring were to be assessed for significance, and significant resources
29 were to be mitigated through the execution of an approved data recovery plan.

30 ***Reason no longer applicable:** The proposed Project would not involve dredging and*
31 *would not impact any underwater anomaly.*

32 **3.4.2 Environmental Setting**

33 The prehistoric and historic setting of the Port of Los Angeles (the Port or Los
34 Angeles Harbor Department [LAHD]) was documented in the Deep Draft Navigation
35 Improvements Project FEIS/FEIR (USACE) and LAHD 1992). More recent
36 information regarding cultural resources was summarized in the 1997 West Basin
37 Transportation Improvements Program EIR (LAHD 1997); the Channel Deepening
38 Supplemental EIS/EIR (USACE and LAHD 2000); and in recent historic evaluations
39 of buildings and structures (Jones & Stokes 2000a; 2000b; 2001). Current and past
40 reports are used here to describe baseline conditions and assess potential impacts.
41 These reports are on file at the Environmental Division of the Port.

1 The proposed Project site is located in the Outer Harbor of the Port on Pier 400
2 (Marine Terminal and Tank Farm Site 1), within the central portion of Terminal
3 Island (Tank Farm Site 2), and also along an alignment connecting Pier 400 to
4 Terminal Island to Mormon Island and onto the Ultramar/Valero Refinery and other
5 Plains pipeline systems nearby (pipeline route).

6 In addition to incorporation of the above referenced previous cultural resources
7 studies, the Native American Heritage Commission (NAHC) was contacted by letter
8 on October 1, 2004, to request information about traditional cultural properties such
9 as cemeteries and sacred places in the Project area. The NAHC record search of the
10 Sacred Lands file failed to indicate the presence of Native American cultural
11 resources in the immediate Project area. A letter dated November 3, 2004, was
12 received from the NAHC containing a list of Native American tribes and individuals
13 interested in consulting on development projects. An attempt was made to contact
14 each of these individuals/groups by phone in April 2008. Of those contacted, none
15 provided information about traditional cultural properties in the Project area.

16 3.4.2.1 Prehistoric Setting

17 Evidence of human occupation in Southern California extends at least 10,000 years
18 ago. A number of chronological schemes have been proposed for subdividing that
19 time span into developmental periods (King 1981; Wallace 1955; Warren 1968).
20 Cultural evolution has been consistently defined in four general periods: the Early
21 Period from 10,000 to 8,000 before present (BP); the Millingstone Period from
22 8,000 to 3,500 BP; the Intermediate Period from 3,500 to 800 BP; the Late
23 Prehistoric Period from 800 BP to the Spanish missionization of California, in this
24 case the founding of Mission San Gabriel in 1771, and the Historic Period from 1782
25 to the present. Occasionally, the period from AD 1542 (the date of initial European
26 contact with California Native Americans) to AD 1771 (the date of the founding of
27 Mission San Gabriel) is designated as Protohistoric in recognition of the profound
28 effects presumed to have occurred as a result of intermittent contact with European
29 explorers (CH2M HILL 2003).

30 The Early Period material culture is characterized by large, fluted projectile points
31 that imply heavy reliance on large game for subsistence that is mostly likely
32 supplemented with plants and small game. Sites dating to the Early Period appear
33 primarily along the eastern portions of southern California (China Lake, Lake Tulare,
34 and Borax Lake); however, the La Brea skeleton has been dated to 9,000 ±80 BP.

35 The Millingstone Period material culture is characterized by portable milling stones
36 and manos for processing its primary subsistence base of wild seeds. Some terrestrial
37 hunting was practiced during this period, and there is some evidence of marine
38 resources in Millingstone sites (Wallace 1978:28). Sites attributed to this complex
39 have been dated as early as 8,000 BP. In Los Angeles County, the best known site
40 from this period is the Topanga Culture defined by Treganza and Malamud (1950).

41 The subsistence base diversified during the Intermediate Period to include a wider
42 variety of plant foods, as evidenced by the appearance of mortars and pestles, and
43 greater reliance on marine resources within the small-animal protein dietary
44 component (Wallace 1978:30). The 1,250 BP (AD 700) modal radiocarbon date falls
45 toward the end of this period. The Ballona Creek sites, CA-LAN-64 (1860 BP), CA-

1 LAN-59 (620 to 1100 BP), CA-LAN-61 (1000 to 2900 BP), and CA-LAN-63 (1590
2 to 2120 BP) are among the few recognized Intermediate Period deposits (Dillon
3 1994).

4 By the Late Prehistoric Period, the southern coast of California was occupied by a
5 maritime-adapted people who lived in populous, semipermanent coastal villages and
6 had a high reliance on animal proteins, both terrestrial and marine (Rogers 1929).
7 These people used seagoing canoes that enabled them to deep sea fish, hunt for sea
8 mammals, and travel the coastal and channel island trade networks. Sites CA-LAN-
9 47 (Marina del Rey) and CA-LAN-43 (Encino) are among the Late Prehistoric
10 village sites identified in Los Angeles County (CH2M HILL 2003).

11 **3.4.2.2 Ethnographic Setting**

12 Ethnographic resources include sites, areas, and materials important to Native
13 Americans for religious, spiritual, or traditional uses. These can encompass the
14 sacred character of physical locations (mountain peaks, springs, and burial sites) or
15 particular native plants, animals, or minerals that are gathered for use in traditional
16 ritual activities. All prehistoric archaeological sites (including villages, burials, rock
17 art, and rock features) along with traditional hunting, gathering, or fishing sites are
18 generally considered by contemporary Native Californians as important elements of
19 their heritage.

20 Native Americans who prehistorically inhabited the Port of Los Angeles region at the
21 time of Spanish contact were ultimately baptized at Mission San Gabriel. These
22 Native Californians are known as the Gabrieliño. These people occupied a vast area
23 extending through the watersheds of Los Angeles, San Gabriel, and Santa Ana rivers;
24 several streams in the Santa Monica and Santa Ana mountains; all of the Los Angeles
25 basin, along the Pacific Coast from Aliso Creek to Topanga Creek; and on San
26 Clemente, San Nicholas, and Santa Catalina islands (Bean and Smith 1978). The
27 population was distributed over diverse environmental habitats, and strategies for
28 food collection, including hunting, fishing, and plant gathering, were varied.

29 Little is known about the Gabrieliño lifeways. It is probable that they, like the
30 Luiseño, lived in villages encompassing economically and politically autonomous
31 patrilineal clans who collectively owned specific territories that were actively
32 protected against trespass. Settlement patterns have been depicted as consisting
33 primarily of permanently inhabited village sites organized on the basis of clan
34 groupings, augmented by outlying satellite camps that were occupied on a temporary,
35 perhaps seasonal, basis. These temporary camps were used by small groups and were
36 located in areas of increased localized resource availability (Bean and Shipek
37 1978:551-552).

38 The social organization of the Gabrieliños is believed to be based on a moiety system
39 by which clans were paired through reciprocal marriage and ceremonial obligations
40 (Strong 1929; White 1963). Villages typically were located in valley bottoms, along
41 streams or near coastal strands, in protected defensible locations, often near their
42 reciprocating villages. The primary positions of power for each village—the chief,
43 shaman, or other specialist—was based on heredity. Specific tangible and intangible
44 resources were owned by families or individuals. Typically, inland groups

1 established rights to fishing and gathering sites on the coast, in contrast to coastal
2 groups that moved inland for brief periods of time, usually during the fall to collect
3 acorns and other resources. Most traveled within a one-day distance of the largely
4 sedentary villages to gather food. The diverse environment afforded access to varied
5 maritime and inland resources, offering not only food but raw materials necessary for
6 tools, clothing, housing and ceremonial structures, items of personal adornment, and
7 other goods. Predominant food sources for inhabitants for the island valleys and
8 foothills included acorns, sage, yucca, and deer. Shellfish and marine species
9 common to the estuaries, sandy beaches, and offshore kelp beds were food sources
10 for those who inhabited the coast (Bean and Shipek 1978: 551-552). The Gabrieliño
11 as a group were extremely wealthy and populous due to their access to a variety of
12 natural resources, such that their influence through trade extended as far as the San
13 Joaquin Valley, the Colorado River, and south into Baja California. In particular,
14 their use of shell inlay in asphaltum, rare minerals, stone carvings, and rock paintings
15 are considered of exceptional quality. Their steatite (soapstone) carvings of animals,
16 pipes, and other ritual ornaments are cultural trademarks. The Gabrieliño maintained
17 a sophisticated chiefdom level of social organization, with an elite (including the
18 chief and his family, and the very rich), middle class family lineages, and a lower
19 class involved in ordinary social activities (Bean and Smith 1978).

20 With the establishment of the mission system at Mission San Gabriel in 1771, the
21 Gabrieliño peoples were forcibly baptized and integrated into the economic sphere of
22 the Mission. Villages were abandoned, hunting and gathering activities were
23 disrupted as newly introduced agricultural practices altered the landscape, and large
24 segments of the native population were decimated by European diseases. By the time
25 mission lands were secularized in 1834, there were approximately 1,000 converts
26 (neophytes) living at Mission San Gabriel; however, the ancestral Gabrieliño lifestyle
27 had been destroyed.

28 A succession of administrators subsequently liquidated Mission holdings. By the
29 time the United States annexed California in 1848, most of the Native American
30 population had fled. The smallpox epidemic of 1862-1863, other introduced
31 diseases, starvation, and violence devastated the remaining Native Californian
32 population. By 1900, there were only a few scattered Gabrieliño survivors (Bean and
33 Smith 1978).

34 **3.4.2.3 Historic Setting**

35 **3.4.2.3.1 Early History**

36 The Port of Los Angeles, at the southernmost point of Los Angeles County, occupies
37 portions of three former historic ranchos that Governor Pedro Fages conferred on
38 veterans of the 1769 Portolá expedition. They were Rancho San Pedro, Rancho Los
39 Palos Verdes, and Rancho Los Cerritos, with a combined total of 84,000 acres (Beck
40 and Haase 1974; Cowan 1977). By 1830, San Pedro was the leading west coast
41 center of hide production, the primary export of the Missions and, later, the ranchos
42 (Queenan 1986). Annexation by the U.S. in 1848 and the gold rush of 1849 brought
43 landless Americans to the San Pedro area, but ranching remained its primary
44 enterprise. Flint, Bixby & Company, one of the largest sheep ranchers, was
45 headquartered in San Pedro. But the Port area remained underused. Ships generally

1 anchored near the rocky shoreline along the western edge of the bay at San Pedro; the
2 harbor was not well protected or very deep. Eight major floods along the Los
3 Angeles River between 1815 and 1876 caused tons of silt to be deposited into the
4 river channel, also affecting San Pedro Bay.

5 Modification of the harbor area began when the United States Army Corps of
6 Engineers (USACE) constructed two jetties in 1871 and deepened the channel
7 leading to the Wilmington landing in 1880. The USACE began construction on the
8 breakwater in 1900.

9 **3.4.2.3.2 Initial Commercial Shipping, 1857-1897**

10 Phineas Banning, one of the earliest residents of the area, recognized its potential as
11 a commercial shipping port. In 1857, he constructed new docks to capitalize on the
12 increasing trade coming in and out of Los Angeles along two of the primary routes to
13 the southwest goldfields, the Gila River Trail and the Old Spanish Trail. With his
14 base location up the bay at Wilmington, Banning shuttled materials on smaller boats
15 to and from the Rancho San Pedro waterfront.

16 Banning also understood the importance of rail transportation between his operation
17 on the bay and the growing City of Los Angeles. In 1869, Banning organized the
18 Los Angeles and San Pedro Railroad (LA&SP), the first reliable means of moving
19 cargo from the ships coming into San Pedro Harbor to the City of Los Angeles.

20 The first short rail line in Southern California, the LA&SP, was acquired by the
21 Southern Pacific Railroad (SPRR) in 1872. In an attempt to break the stranglehold
22 the SPRR had on shipping in the area, Senator John P. Jones from Nevada started the
23 Los Angeles and Independence Railroad (LA&I) (Los Angeles to Santa Monica Pier)
24 1 year prior to the acquisition of LA&SP by SPRR. However, the LA&I also was
25 absorbed quickly into the SPRR system (in 1877) (Queenan 1986).

26 Improved transportation to and from the harbor facilitated the burgeoning growth of
27 Los Angeles. Between 1880 and 1890, the population of the city grew from 11,000
28 to 50,000. By 1900, it had reached 102,000 (Matson 1920). This boom fueled
29 increased demand for construction supplies and consumer goods, much of which
30 arrived on ships that docked at San Pedro. By 1913, the Port of Los Angeles was the
31 largest lumber importer in the world.

32 **3.4.2.3.3 Founding of Port of Los Angeles, 1897-1913**

33 The growth of commerce in Los Angeles demanded formal establishment of a
34 shipping port. The federal government agreed to assist the city by establishing its
35 official harbor in the region. Following the recommendation of several studies of
36 possible alternatives, the San Pedro Harbor site won authorization from Congress in
37 March 1897.

38 In preparation for the opening of the Panama Canal (which occurred in 1914), the
39 City of Los Angeles extended its boundaries to coastal tidewaters when it annexed a
40 strip of San Pedro in 1906. The Port of Los Angeles and the Los Angeles Harbor
41 Department were officially created in December 1907, and numerous harbor

1 improvements followed. These improvements included completing the 2.22-mile
2 breakwater, broadening and dredging of the main channel, completing the first major
3 wharf by the Southern Pacific Railroad (SPRR), constructing the Angel's Gate
4 lighthouse, and constructing the first municipal pier and wholesale fish market. By
5 1909, both Wilmington and San Pedro had been absorbed into the City of Los
6 Angeles (Matson 1920).

7 The opening of the Panama Canal in August 1914 significantly reduced the
8 transshipment time between eastern and western U.S. ports. The canal also promised
9 to open up new trade opportunities worldwide. In anticipation of increased trade, the
10 City of Los Angeles completed one of many large municipal terminals in the Harbor.
11 With the outbreak of World War I, the promise of increased trade and expansion
12 possibilities was put on hold (Queenan 1986).

13 **3.4.2.3.4 Wartime Changes, 1914-1950**

14 World War I changed the principal uses of the Port considerably. The U.S. Navy,
15 wishing to establish a significant presence on the Pacific coast, took possession of a
16 portion of the harbor and used it as a training and submarine base.

17 During the war, the Port was one of the chief sources of employment for residents.
18 Shipbuilding enterprises, including Southwestern Shipbuilding Company, Los
19 Angeles Shipbuilding and Drydock Corporation, and Ralph J. Chandler Shipbuilding,
20 began turning out vessels by the dozens for the war effort. The Port of Long Beach,
21 established only 2 years before the onset of the war, offered the only southern
22 California shipping and shipbuilding competition to the Port of Los Angeles. That
23 competition continues to the present day.

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

28 Following the end of World War I in 1918, the Port was increasingly used for the
29 importation of lumber and other types of raw materials. As in the pre-war period,
30 approximately 98 percent of the inbound cargo consisted of lumber to satisfy the
31 demand for housing and factories caused by the rapid growth of the Los Angeles area
32 (Matson 1920). The dominant export in the post-war years was crude oil.

33 In 1923, the City of Los Angeles passed a harbor improvement bond measure for
34 construction of additional wharves to meet the demands of increased trade (Queenan
35 1986; San Buenaventura Research Associates 1992). During the Depression years,
36 traffic within the Port slowed along with the rest of the American economy (Queenan
37 1986).

38 During World War II, San Pedro Harbor, as one of the closest major ports to the
39 Pacific Theatre of Operations, was fully involved in defense activities. Between
40 1941 and 1945, ship and aircraft production facilities in the harbor area worked day
41 and night to produce more than 15 million tons of war equipment. Hundreds of
42 thousands of military and civilian personnel shipped out through San Pedro in

1 support of the war effort and returned through it when their tasks were done (Shettle
2 2003).

3 Following the war, the Los Angeles Harbor Department (LAHD) launched a broad
4 restoration program. Many of the facilities in the harbor required maintenance that
5 had been delayed during the war years. Although the adjacent Long Beach Harbor
6 conducted its own improvements while battling subsidence (the sinking of the land
7 from the many years of oil extraction), LAHD improved a number of its buildings
8 and removed many temporary wartime buildings (Queenan 1986).

9 **3.4.2.3.5 Containerization, 1950 to Present**

10 Methods of shipping changed dramatically following World War II with the
11 introduction of containerization. Containerization is an integrated system of transport
12 in which goods are shipped in standardized (20- or 40-ft-long), sealable metal boxes,
13 designed for easy placement on compatible truck beds, railcars, and ships.
14 Advantages of containerization include reduction of the labor force necessary to load
15 shipments, decreased loading and unloading time, and decreased loss via theft or
16 damage. Additional efficiencies arise from the integration of transport by truck,
17 train, and ship. The primary disadvantage is the large capital outlay necessary to
18 produce the new ships, cranes, rail cars, truck trailers, and port facilities designed to
19 fit the containerization system.

20 International shipment through the Port increased during the latter half of the
21 twentieth century as ocean-going vessels grew too large to negotiate the Panama
22 Canal. Using a land-bridge system, shippers could transfer materials from Pacific
23 region sources to Atlantic region markets by unloading at the Port of Los Angeles
24 and trans-shipping via truck or train to vessels waiting at east coast ports (Queenan
25 1986).

26 **3.4.2.3.6 Historic Resources**

27 The historic built environment of the Port area includes buildings such as houses,
28 barns, stores, and post offices that are greater than 50 years old. It also includes
29 structures greater than 50 years old such as bridges, industrial machinery, marine
30 vessels, and agricultural structures such as silos and granaries.

31 The Port was created in 1907 with the establishment of the Los Angeles Harbor
32 Commission (San Buenaventura Research Associates 1992). Port growth was slow
33 until after the close of World War I, when numerous warehouses and sheds were
34 constructed between 1917 and 1930. Export of local oil and lumber, shipbuilding,
35 fishing, and cannery activities contributed to this development. An extensive railroad
36 established in 1917 transported goods from the harbor throughout the U.S. Port
37 growth continued during the Depression of the 1930s with new cargo and passenger
38 terminal construction, in some cases replacing already outdated wooden cargo
39 structures.

3.4.2.4 Paleontological Setting

Any rock material that contains fossils has the potential to yield fossils that are unique or significant to science. However, paleontologists consider geological formations having the potential to contain *vertebrate* fossils more sensitive than those likely to contain only invertebrate fossils. Invertebrate fossils found in marine alluvial sediments from the Holocene Period are usually not considered by paleontologists to be significant resources because they are often widespread, found in predictable locations, abundant, and well preserved.

Vertebrate fossils are much rarer than invertebrate fossils and are often poorly preserved. Therefore, vertebrate fossils are generally considered more likely to be a significant resource than invertebrate fossils, and geologic formations having the potential to contain vertebrate fossils are considered the most sensitive.

3.4.2.5 Proposed Project Site

3.4.2.5.1 Archaeological Resources

Background research was completed to evaluate the potential for encountering unknown prehistoric resources within the proposed Project site areas. Research included a cultural resource site record and literature search, and review of previous archaeological studies. Results of a records search conducted at the South Central Coast Information Center (SCCIC), California Historical Resources Information System, California State University Fullerton indicate that no archaeological sites are located in or within 0.25 mile (0.40 km) of the proposed Project site areas that were evaluated (SCCIC 2004). Eleven cultural resource investigations have been conducted within the proposed Project area, and an additional ten have been conducted within 0.25 mile (0.40 km) of the proposed Project area. No archaeological resources have been identified during any of these investigations. A record search of the California Native American Heritage Commission Sacred Lands File indicated that no Native American heritage resources exist within the proposed Project area or immediate vicinity (NAHC 2004).

One previous archaeological survey has completely evaluated the proposed tank farm site locations; the vicinity of proposed Pipeline Segments 2a, 2b, and 2c; and temporary construction yards on Terminal Island with negative results (Hector, Manley, and Rosen 1994). The proposed Pipeline Segment 1 extending to Pier 400 has also been completely investigated with negative results (USACE and LAHD 1984). Therefore, the presence of unknown archaeological sites in these locations is extremely unlikely.

The Tank Farm Site 2 location has been occupied since the 1920s, and artifacts from the airfield and later Navy occupation may exist in the area. However, later reuse of the area most likely disturbed/destroyed any intact historic deposit or significant historic feature, and no evidence of historic archaeological material has been recorded (Hector, Manley, and Rosen 1994). Therefore, the likelihood of the presence of unknown historic archaeological sites at the Tank Farm Site 2 location is considered low.

1 Piers 300 and 400 are landforms resulting from placement of modern fill within the
2 ancestral San Pedro Bay. Due to their modern origin, no prehistoric or historical
3 archaeological resources are recorded or would be expected within the proposed
4 Marine Terminal, Tank Farm Site 1, or temporary construction yard locations.

5 Portions of the proposed Project located north of the Cerritos Channel (i.e., proposed
6 Pipeline Segments 3 through 5, proposed and alternative pigging station sites,
7 pipeline laydown areas, HDD work areas, TCY 425), and areas immediately adjacent
8 to this proposed Project area have been surveyed during eleven different
9 investigations (Clelow 1974; Weinmann and Stickel 1978; Govean and Padon 1992;
10 McKenna 1995; Weil 1981; Wlodarski 1992, 1999; King 1992; Lander 1997; Maki
11 2000; and Horne 2002). These investigations are distributed throughout the length of
12 the proposed pipeline routes, and no archaeological resources have been identified
13 during any of these investigations.

14 Soils within portions of the proposed Project located north of the Cerritos Channel
15 are characterized as “Recent Alluvium” consisting of alluvial sands and silts
16 deposited from Recent and Pleistocene river action as outwash from the Los Angeles
17 Basin (LAHD 1997). Nearly half of the pipeline corridor appears to have been
18 subject to tidal inundation as recently as the 20th century. Maps from 1896 (USGS
19 1896) and 1908 (USDLC 1908) indicate that the proposed Pipeline Segment 3
20 corridor north of Mormon Island would be located within the Wilmington Lagoon, a
21 very low sensitivity area for prehistoric occupation. Native Americans used marsh
22 and mudflat areas for collecting food sources such as shellfish, but did not consider
23 them a suitable location for habitation. Some portions of the proposed corridor
24 adjacent to an existing Southern Pacific Railroad San Pedro Branch spur would be
25 located within the historic landform above the marsh area. Additionally, artificial
26 hydraulic fill, 5 to 20 feet deep, underlies the Valero Refinery and Air Products
27 facility, where the majority of proposed trenching would occur for proposed Pipeline
28 Segments 4 and 5 (Environmental Engineering & Contracting, Inc. 1999). Overall,
29 the predominance of data confirm that the archaeological sensitivity of the proposed
30 Project area located north of the Cerritos Channel is low. Even though the entire
31 pipeline corridor has not been surveyed, the distribution of the investigations
32 throughout its extent suggests that the likelihood of the presence of unknown
33 archaeological sites is considered low.

34 The majority of the Outer Harbor area, including the area adjacent to the western
35 edge of Pier 400, was dredged to minus 81 ft (24.7 m) mean lower low water
36 (MLLW) between 1994 and 1997 to provide deeper channels and turning basins to
37 allow for larger container vessels to call at Pier 300. Existing channels within the
38 Outer Harbor were also deepened to minus 75 ft (22.9 m) MLLW and a turning basin
39 was constructed during the late 1990s to provide access to the eastern portion of Pier
40 400. Dredge and fill impacts in the Outer Harbor were previously assessed in the
41 Deep Draft Navigation Improvements Project FEIS/FEIR, which concluded there are
42 no underwater prehistoric archaeological sites in the proposed Project area that would
43 be affected during construction of navigation improvements (USACE and LAHD
44 1992). The California Office of Historic Preservation concurred with this assessment
45 (USACE and LAHD 1992). However, the Deep Draft Navigation Improvements
46 Project FEIS/FEIR also concluded that dredging within the Outer Harbor would
47 potentially impact known anomalies in the proposed Project area, but impacts would
48 be less than significant with implementation of a diving program, and if necessary, a

1 data recovery program (USACE and LAHD 1992). Consequently, neither the Outer
2 Harbor nor the waters along Pier 400 would likely contain significant marine cultural
3 resources.

4 **3.4.2.5.2 Historical Architectural Resources**

5 The Port was created in 1907 with the establishment of the Los Angeles Harbor
6 Commission (LAHD 1997; San Buenaventura Research Associates 1992). Growing
7 exports of local oil and lumber, shipbuilding, fishing, and cannery activities resulted
8 in the construction of numerous warehouses and sheds between 1917 and 1930. In
9 1917, an extensive railroad was established for transporting goods from the harbor
10 throughout the U.S. The majority of the proposed Project area is vacant, with the
11 exception of Tank Farm Site 2 (see Figure 2-1). Construction of tanks at Tank Farm
12 Site 2 would require relocation of an existing active railroad track constructed in
13 1997 as part of the Terminal Island Container Transfer Facility. Due to their recent
14 age, the railroad and transfer facility are not significant under federal or state
15 eligibility criteria (see Section 3.4.3).

16 Construction of the 590-acre (239-hectare) Pier 400 landfill was completed in 2002.
17 Construction at the Maersk Sealand Container Terminal on Pier 400 was completed
18 in September 2004. The proposed Marine Terminal and Tank Farm Site 1 areas on
19 Pier 400 are vacant.

20 Proposed pipeline right-of-ways would primarily be located along existing
21 transportation networks (i.e., roads/railroads) and within existing utility corridors
22 designated by the Port. Proposed pipelines would cross currently undeveloped areas.

23 The proposed Project area, therefore, does not contain eligible or potentially eligible
24 historic architectural resources.

25 **3.4.2.5.3 Paleontological Resources**

26 Invertebrate fossils found in marine alluvial sediments from the Holocene Period,
27 such as those under the imported fill within the proposed Project site area, are usually
28 not considered by paleontologists to be significant resources.

29 Vertebrate fossils are generally considered more likely to be a significant resource
30 than invertebrate fossils. Approximately 14 vertebrate fossil localities have been
31 recorded in Pleistocene sediments in the eastern San Pedro area located
32 approximately 0.75 mile (1.2 km) or greater west of the proposed Project area
33 (personal communication, J.D. Powers 2004).

34 Pier 400 and the related proposed Project areas are underlain primarily by fill
35 material. The fill material may have been excavated from Pleistocene sediments in
36 which vertebrate fossils can be found. However, once they have been removed from
37 their original depositional context, the significance of any fossil has been
38 compromised. Therefore, there is no potential that intact, significant vertebrate
39 paleontological resources are present in near-surface fill soils within the proposed
40 Project site. There is no potential for significant vertebrate fossils to have been
41 deposited in alluvial, marine sediments underlying the fill soils.

3.4.3 Applicable Regulations

3.4.3.1 Federal Regulations

The federal significance of an archaeological site or an architectural structure is determined by applying the eligibility criteria for the National Register of Historic Places (NRHP) (36 CFR 800 and 36 CFR Section 60.4) These criteria state that a resource must be at least 50 years old and meet one or more of the following:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

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

If a property is less than 50 years old, it could be eligible for listing on the NRHP if it meets Criterion G that requires a property to be “exceptionally significant.” A property is of extraordinary importance if it is associated with an event or to an entire category of resources so fragile that survivors of any age are unusual (NPS, NRHP Bulletin 15). Examples of properties that are listed on the NRHP under Criterion G include the launch pad at Cape Canaveral, playwright Eugene O’Neill’s home, and the Chrysler Building in New York.

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

For a federally funded project or projects requiring a federal permit, the possible impacts of a project on archaeological and historic resources must be reviewed. The process of review is often referred to as the “Section 106” process and is described in 36 CFR Part 800, the implementing regulations of Section 106 of the National Historic Preservation Act (NHPA). Section 106 consultation is required for federal undertakings: those projects with federal funding or that require a federal permit.

If an alternative other than the No Federal Action Alternative (i.e., for this Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report [SEIS/SEIR], the No Federal Action/No Project Alternative) is chosen, compliance with Section 106 of the NHPA is required because a federal permit (a 404 permit under the Clean Water Act from the USACE) is necessary for the Project. For Section 106 review, cultural resources (that is, archaeological and historic resources) must be identified and then evaluated using NRHP eligibility criteria. If

1 NRHP-eligible cultural resources, termed historic properties, are present in the
2 Project's Area of Potential Effect (APE), it must be determined whether the Project
3 will have an effect on the historic property and whether the effect will be adverse.
4 Title 36 CFR Part 800 (Section 106) defines effects and adverse effects on historic
5 resources as follows:

- 6 • Section 800.9(a), Criterion of Effect, indicates that an undertaking has an effect
7 on a historic property when the undertaking may alter characteristics of the
8 property that may qualify it for inclusion in the NRHP. For the purpose of
9 determining effect, alteration of features of a property location, setting, or use
10 may be relevant depending on significant characteristics of a property.
- 11 • Section 800.9(b), Criteria of Adverse Effect, indicates an undertaking is
12 considered to have an adverse effect when the impact on an historic property
13 may diminish the integrity of the location, design, setting, materials,
14 workmanship, feeling, or association of the property. Adverse effects on historic
15 properties include, but are not limited to:
 - 16 ○ Physical destruction, damage, or alteration of all or part of the property
 - 17 ○ Isolation of the property from, or alteration of the character of the setting
18 of the property when that character contributes to the qualification of the
19 property for the NRHP
 - 20 ○ Introduction of visual, audible, or atmospheric elements that are out of
21 character with the property or alter its setting
 - 22 ○ Neglect of a property resulting in its deterioration or destruction
 - 23 ○ Transfer, lease, or sale of the property without adequate provisions to
24 protect historic integrity

25 The federal agency (for this proposed Project, the USACE) makes the determination
26 of eligibility and determination of effect and requests concurrence on these
27 determinations from the State Historic Preservation Officer (SHPO). If there will be
28 adverse effects to eligible historic properties, mitigation measures are stipulated in a
29 Memorandum of Agreement (MOA) signed by the federal agency and the SHPO.
30 When a federal permit is involved, the federal agency makes compliance with the
31 provisions of the MOA a permit condition.

32 In addition to the NHPA, cultural resources are protected by the Archaeological
33 Resources Protection Act of 1979 (ARPA) (16 U.S.C. Sections 469-469c). ARPA
34 describes the requirements that must be satisfied before federal authorities can issue a
35 permit to excavate or remove any archeological resource on federal or Indian lands.
36 Requirements for curation of artifacts, other materials excavated or removed, and the
37 records related to the artifacts and materials are described. The act provides detailed
38 descriptions of prohibited activities including damage, defacement, and unpermitted
39 excavation or removal of cultural resources on federal lands. Selling, purchasing,
40 and other trafficking activities of cultural resources in the United States or
41 internationally is prohibited. ARPA also identifies stiff penalties that can be levied
42 against convicted violators.

1 **3.4.3.1.1 Ethnographic Resources**

2 As prehistoric archaeological sites, artifacts, and human remains are considered
3 important components of contemporary Native American heritage, two federal
4 statutes apply. The American Indian Religious Freedom Act of 1978 (AIRFA) (42
5 U.S.C. Sections 1996-1996a) requires that locations identified as central to Native
6 American religious practice be protected. The Native American Graves Protection
7 and Repatriation Act of 1990 (NAGPRA) (25 U.S.C. Sections 3001-3013) requires
8 that prehistoric human remains and burial-related artifacts of individuals recovered
9 during ground disturbances on federal or tribal land be provided to those
10 contemporary Native Americans who are recognized as descendants.

11 **3.4.3.1.2 Paleontological Resources**

12 There is no federal legislation designed specifically for the management and
13 protection of paleontological resources on nonfederal lands.

14 **3.4.3.2 State Regulations**

15 **3.4.3.2.1 Archaeological and Historic Architectural Resources**

16 The California Environmental Quality Act (CEQA) Guidelines Section 15064.5(a.3)
17 and California Public Resources Code (PRC) Section 21084.1 define below the
18 criteria used to determine the significance of cultural resources, characterized as
19 “historical resources.”

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

30 CEQA Guidelines (Section 15064.5(b) (revised July 27, 2007) state that “a project
31 with an effect that may cause a substantial adverse change in the significance of an
32 historical resource is a project that may have a significant effect on the environment.”
33 To this end, CEQA Guidelines list the following definitions:

- 34 1. *Substantial adverse change in the significance of an historical*
35 *resource means physical demolition, destruction, relocation, or*
36 *alteration of the resource or its immediate surroundings such that*
37 *the significance of an historical resource would be materially*
38 *impaired.*
- 39 2. *The significance of an historical resource is materially impaired*
40 *when a project:*

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

20 When an archaeological resource is listed in, or is eligible to be listed in, the
 21 California Register of Historical Resources (CRHR), PRC Section 21084.1 requires
 22 that any substantial adverse effect to that resource be considered a significant
 23 environmental effect. PRC Sections 21083.2 and 21084.1 operate independently to
 24 ensure that potential effects on archaeological resources are considered as part of the
 25 environmental analysis for a project. Either of these benchmarks may indicate that a
 26 proposal may have a potential adverse effect on archaeological resources.

27 PRC Section 21084.1 states that an historical resource is a resource listed in, or is
 28 determined to be eligible for listing in, the CRHR, or listed in a local register of
 29 historical resources, or deemed significant pursuant to criteria identified in PRC
 30 Section 5024.1(g) defined above, unless the preponderance of the evidence
 31 demonstrates that the resource is not historically or culturally significant. The fact
 32 that a resource is not listed in, or is determined not to be eligible for listing in, the
 33 CRHR, not included in a local register of historical resources, or not deemed
 34 significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 does not
 35 preclude a lead agency from determining whether the resource may be an historical
 36 resource.

37 CEQA Guidelines Sections 15064.5 and 15126.4 guide the evaluation of impacts to
 38 prehistoric and historic archaeological resources. Section 15064.5(c) provides that,
 39 to the extent an archaeological resource is also a historical resource, the provisions
 40 regarding historical resources apply. These provisions endorse the first set of
 41 standardized mitigation measures for historic resources by providing that projects
 42 following the Secretary of the Interior's Standards for Treatment of Historic
 43 Properties be considered as mitigated to a less than significant level.

44 PRC Section 21083.2 states that as part of conditions imposed for mitigation, a lead
 45 agency may make provisions for archaeological sites accidentally discovered during
 46 construction. These provisions may include an immediate evaluation of the find. If

1 the find is determined to be a unique archaeological resource, contingency funding
2 and a time allotment sufficient to allow recovering an archaeological sample or to
3 employ one of the avoidance measures may be required under the provisions set forth
4 in this section. Construction work may continue on other parts of the building site
5 while archaeological mitigation takes place. Other state-level requirements for
6 cultural resources management are written into the California PRC, Chapter 1.7,
7 Section 5097.5 (Archaeological, Paleontological, and Historical Sites).

8 CEQA Guidelines Section 15064.5 (revised July 27, 2007) indicate a project may
9 have a significant environmental effect if it causes “substantial adverse change” in
10 the significance of an “historical resource” or a “unique archaeological resource,” as
11 defined or referenced in CEQA Guidelines Section 15064.5 (b, c). Such changes
12 include “physical demolition, destruction, relocation, or alteration of the resource or
13 its immediate surroundings such that the significance of an historical resource would
14 be materially impaired” (CEQA Guidelines 1998 Section 15064.5 [b]).

15 **3.4.3.2.2 Ethnographic Resources**

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

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

27 **3.4.3.2.3 Paleontological Resources**

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

37 **3.4.3.3 Local Regulations**

38 **3.4.3.3.1 Archaeological and Historic Architectural Resources**

39 City guidelines for the protection of archeological resources are set forth in Section 3
40 of the City of Los Angeles General Plan Conservation Element, which, in addition to

1 compliance with CEQA, requires the identification and protection of archaeological
2 sites and artifacts as a part of local development permit processing.

3 Specifically, Los Angeles Municipal Code Section 91.106.4.5 states that the Building
4 Department “shall not issue a permit to demolish, alter or remove a building or
5 structure of historical, archaeological or architectural consequence if such building or
6 structure has been officially designated, or has been determined by state or federal
7 action to be eligible for designation, on the National Register of Historic Places, or
8 has been included on the City of Los Angeles list of historic cultural monuments,
9 without the department having first determined whether the demolition, alteration or
10 removal may result in the loss of or serious damage to a significant historical or
11 cultural asset. If the department determines that such loss or damage may occur, the
12 applicant shall file an application and pay all fees for the California Environmental
13 Quality Act Initial Study and Check List, as specified in Section 19.05 of the Los
14 Angeles Municipal Code. If the Initial Study and Check List identifies the historical
15 or cultural asset as significant, the permit shall not be issued without the department
16 first finding that specific economic, social or other considerations make infeasible the
17 preservation of the building or structure.”

18 **3.4.3.3.2 Historic Architectural Resources**

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

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

43 The significance of historical resources is also based on (1) whether the site has been
44 coded by the Department of Building and Safety with a Zoning Instruction number in
45 the 145 series (which indicates prior identification of the property as historic); (2)

1 whether the resource has been classified as historic in an historical resources survey
2 conducted as part of the updating of the Community Plan, the adoption of a
3 redevelopment area or other planning project; (3) whether the resource is subject to
4 other federal, state, or local preservation guidelines; (4) whether the resource has a
5 known association with an architect, master builder or person or event important in
6 history such that the resource may be of exceptional importance; and (5) whether the
7 resource is over 50 years old and is a substantially intact example of an architectural
8 style significant in Los Angeles (City of Los Angeles 2006).

9 The *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006) criteria for historic
10 architectural resources are provided below.

11 *City of Los Angeles Historic-Cultural Monument Designation*

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

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

24 *City of Los Angeles Historic Preservation Overlay Zones*

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

- 29 • Have substantial value as part of the development, heritage, or cultural
30 characteristics of, or is associated with the life of a person important in the
31 history of the city, state, or nation
- 32 • Are associated with an event that has made a substantial contribution to the
33 broad patterns of our history
- 34 • Are constructed in a distinctive architectural style characteristic of an era of
35 history
- 36 • Embody those distinguishing characteristics of an architectural type or
37 engineering specimen
- 38 • Are the work of an architect or designer who has substantially influenced the
39 development of the City
- 40 • Contain elements of design, details, materials, or craftsmanship which represent
41 an important innovation

- Are part of or related to a square, park or other distinctive area and should be developed or preserved according to a plan based on a historic, cultural, architectural or aesthetic motif
- Owing to its unique location or singular physical characteristics, represent an established feature of the neighborhood, community, or City
- Retaining the structure would help preserve and protect an historic place or area of historic interest in the City

3.4.3.3.3 Ethnographic Resources

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

3.4.3.3.4 Paleontological Resources

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

3.4.4 Impacts and Mitigation Measures

3.4.4.1 Methodology

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

3.4.4.1.1 CEQA Baseline

Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of a project that exist at the time of the Notice of Preparation (NOP). These environmental conditions would normally constitute the baseline physical conditions by which the CEQA lead agency determines whether an impact is significant. For purposes of this Draft SEIS/SEIR, the CEQA Baseline for determining the significance of potential impacts under CEQA is June 2004. CEQA Baseline conditions are described in Section 2.6.2.

The CEQA Baseline represents the setting at a fixed point in time, with no project growth over time, and differs from the “No Federal Action/No Project” Alternative (discussed in Section 2.5.2.1) in that the No Federal Action/No Project Alternative

1 addresses what is likely to happen at the site over time, starting from the baseline
2 conditions. The No Federal Action/No Project Alternative allows for growth at the
3 proposed Project site that would occur without any required additional approvals.

4 **3.4.4.1.2 NEPA Baseline**

5 For purposes of this Draft SEIS/SEIR, the evaluation of significance under the
6 National Environmental Policy Act (NEPA) is defined by comparing the proposed
7 Project or other alternative to the No Federal Action scenario (i.e., the NEPA
8 Baseline and No Federal Action Alternative are equivalent for this project). Unlike
9 the CEQA Baseline, which is defined by conditions at a point in time, the NEPA
10 Baseline/No Federal Action is not bound by statute to a “flat” or “no growth”
11 scenario; therefore, the USACE may project increases in operations over the life of a
12 project to properly analyze the NEPA Baseline/No Federal Action condition.

13 The NEPA Baseline condition for determining significance of impacts is defined by
14 examining the full range of construction and operational activities that are likely to
15 occur without a permit from the USACE. As documented in Section 2.6.1, the
16 USACE, the LAHD, and the applicant have concluded that no part of the proposed
17 Project would be built absent a USACE permit. Thus, for the case of this project, the
18 NEPA Baseline is identical to the No Federal Action/No Project Alternative (see
19 Section 2.6.1). Elements of the NEPA Baseline include:

- 20 • Paving, lighting, fencing, and construction of an access road at Tank Farm Site 1
21 to allow temporary storage of chassis-mounted containers on the site by APM;
- 22 • Paving, fencing, and lighting at Tank Farm Site 2 to accommodate temporary
23 wheeled container storage by APL or Evergreen; and
- 24 • Additional crude oil deliveries at existing crude oil terminals in the San Pedro
25 Bay Ports.

26 Significance of the proposed Project or alternative is defined by comparing the
27 proposed Project or alternative to the NEPA Baseline (i.e., the increment). The
28 NEPA Baseline conditions are described in Section 2.6.1 and 2.5.2.1.

29 **3.4.4.2 Thresholds of Significance**

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

34 **CR-1:** Adversely affect a resource listed in or eligible for listing in the National
35 Register of Historic Places (National Register), the California Register of
36 Historical Resources (California Register), or is designated a City of Los
37 Angeles Historic-Cultural Monument, included within a City of Los Angeles
38 Historic Preservation Overlay Zone, or is otherwise considered a unique or
39 important archaeological resource under CEQA.

1 The proposed Project would have a significant impact on paleontological resources if
2 it would:

3 **CR-2:** Result in the permanent loss of, or loss of access to, a paleontological
4 resource. The determination of significance must be made on a case-by-case
5 basis depending on the degree to which a paleontological resource is
6 potentially lost and the regional or statewide significance of that resource.

7 **3.4.4.3 Project Impacts and Mitigation**

8 **3.4.4.3.1 Proposed Project**

9 **Impact CR-1a: Construction activities would have a low potential to**
10 **disturb archaeological cultural resources.**

11 No known archaeological sites are recorded within the proposed Project area, and no
12 prehistoric or historic resources were identified during previous cultural resource site
13 record and literature searches or archaeological surveys (SCCIC 2004). As Piers 300
14 and 400 are the result of modern fill placement within the ancestral San Pedro Bay,
15 no intact prehistoric or historical archaeological resources would be expected within
16 the proposed Pier 400 Marine Terminal, Tank Farm Site 1, or temporary construction
17 yards located on these piers. Therefore, it is highly unlikely any unknown, intact
18 archaeological deposits exist within soils in these proposed Project areas.
19 Construction of the proposed Pipeline Segment 1 on Pier 400 would occur within
20 existing utility corridors and in an area created by fill placement; no new disturbance
21 of intact soils would be required.

22 Proposed Pipeline Segments 2a, 2b, 2c and Tank Farm Site 2 on Terminal Island and
23 proposed pipeline facilities located north of the Cerritos Channel (i.e., proposed
24 Pipeline Segments 3 through 5, proposed and alternative pigging station sites,
25 pipeline laydown areas, HDD work areas, TCY 425) would potentially encroach
26 within native soils. The use of jack and bore or directional drilling techniques during
27 the construction of proposed pipeline segments would reduce disturbance to near-
28 surface soils and the potential for impacting archaeological resources is considered to
29 be very low. Trenching activities associated with proposed pipeline construction, as
30 well as the construction of Tank Farm Site 2, would have a greater likelihood of
31 disturbing archaeological resources. Given the fact that no archaeological resources
32 have been identified within the proposed Project area during previous archaeological
33 investigations, the potential for impacting archaeological resources is considered to
34 be low in these areas as well.

35 Bore pits on either end of the pipeline drilling corridor would disturb a relatively
36 small spatial area (estimated to be less than 400 square ft [20 square meters]). As
37 numerous archaeological investigations along the proposed pipeline corridors have
38 not identified any cultural resources, and the area of potential impact would be
39 relatively small, the potential for impacting archaeological resources is low.

40 Neither the Outer Harbor nor the waters along Pier 400 would likely contain
41 significant marine cultural resources due to previous dredging and other in-water
42 construction activities. Therefore, proposed in-water construction activities related to

1 the Pier 400 Marine Terminal berth dock facility or ancillary structures would have
2 extremely low potential for encountering intact prehistoric materials or significant
3 marine cultural resources.

4 **CEQA Impact Determination**

5 No historic resources eligible for listing in the NRHP or the CRHR are recorded
6 within the proposed Project area. The proposed Pier 400 Marine Terminal and Tank
7 Farm Site 1 are located on imported fill soils, such that the probability of
8 encountering intact, unknown historic resources is remote. Construction activities
9 associated with Pipeline Segments 2a, 2b, 2c and Tank Farm Site 2 on Terminal Island
10 and portions of proposed Pipeline Segments 3 and 4 from Mormon Island to Plains
11 pipelines systems near Henry Ford Avenue and near or on the Ultramar/Valero Refinery
12 would potentially encroach within native soils. The potential for impacts to
13 archaeological resources in these areas are predicted to be very low if jack and bore or
14 directional drilling techniques are used. Given the fact that no archaeological resources
15 have been identified within the proposed Project area during previous archaeological
16 investigations, the potential for impacting archaeological resources is considered to be
17 low in areas requiring trenching or other activities that may disturb intact surface soils.
18 Based on this analysis, proposed construction activities would result in less than
19 significant impacts on archaeological cultural resources, and less than significant
20 impact on in-water cultural resources.

21 *Mitigation Measures*

22 Although the potential for impacts on unknown archaeological cultural resources is
23 low, the following mitigation measure is provided in the unlikely event unknown,
24 intact, potentially significant on-land archaeological resources eligible for listing in
25 the NRHP, the CRHR, or otherwise considered a unique or important archaeological
26 resource under CEQA are encountered during construction.

27 **MM CR-1a. Stop work in area if prehistoric and/or historical archaeological**
28 **resources are encountered.** In the unlikely event that any artifact, or an
29 unusual amount of bone, shell, or non-native stone is encountered during
30 construction, work shall be immediately stopped and relocated to another
31 area. The contractor shall stop construction within 10 meters (30 feet) of
32 the exposure of these finds until a qualified archaeologist can be retained
33 by the Port to evaluate the find (see 36 CFR 800.11.1 and California
34 Code of Regulations, Title 14, Section 15064.5(f)). Examples of such
35 cultural materials might include concentrations of ground stone tools
36 such as mortars, bowls, pestles, and manos; chipped stone tools such as
37 projectile points or choppers; flakes of stone not consistent with the
38 immediate geology such as obsidian or fused shale; historic trash pits
39 containing bottles and/or ceramics; or structural remains. If the
40 resources are found to be significant, they shall be avoided or shall be
41 mitigated consistent with SHPO Guidelines. All construction equipment
42 operators shall attend a preconstruction meeting presented by a
43 professional archaeologist retained by the Port that shall review types of
44 cultural resources and artifacts that would be considered potentially
45 significant, to ensure operator recognition of these materials during
46 construction.

1 Prior to beginning construction, the Port shall meet with applicable
2 Native American Groups, including the Gabrieliño/Tongva Tribal
3 Council, to identify areas of concern. A trained archaeologist shall
4 monitor construction at identified areas. In addition to monitoring, a
5 treatment plan shall be developed in conjunction with the Native
6 American Groups to establish the proper way of extracting and handling
7 all artifacts in the event of an archaeological discovery.

8 *Residual Impacts*

9 In the highly unlikely event that intact archaeological and/or human remains are
10 identified during construction, **MM CR-1a** would ensure that the materials and
11 remains were evaluated and mitigated according to professional standards, as well as
12 state law. Residual impacts would be less than significant.

13 **NEPA Impact Determination**

14 No historic resources eligible for listing in the NRHP or CRHP are recorded within
15 the proposed Project area. The proposed Pier 400 Marine Terminal and Tank Farm
16 Site 1 are located on imported fill soils, such that the probability of encountering
17 intact, unknown historic resources is remote. Although Pipeline Segments 2a, 2b, 2c
18 and Tank Farm Site 2 on Terminal Island and portions of proposed Pipeline Segments 3
19 and 4 from Mormon Island to Plains pipelines systems near Henry Ford Avenue and near
20 or on the Ultramar/Valero Refinery would potentially encroach within native soils, the
21 actual disturbance of soils near the surface where archaeological resources would be most
22 likely identified is particularly low. Given the fact that no archaeological resources have
23 been identified within the proposed Project area during previous archaeological
24 investigations, the potential for impacting archaeological resources is considered to be
25 low in areas requiring trenching or other activities that may disturb intact surface soils.
26 Based on this analysis, proposed construction activities would result in less than
27 significant impacts on archaeological cultural resources, and less than significant
28 impact on in-water cultural resources.

29 *Mitigation Measures*

30 Although the potential for impacts on unknown archaeological cultural resources is
31 low, **MM CR-1a** is provided in the unlikely event unknown, intact, potentially
32 significant on-land archaeological resources eligible for listing in the NRHP, the
33 CRHR, or otherwise considered a unique or important archaeological resource under
34 CEQA are encountered during construction.

35 *Residual Impacts*

36 In the highly unlikely event that intact archaeological and/or human remains are
37 identified during construction, **MM CR-1a** would ensure that the materials and
38 remains were evaluated and mitigated according to professional standards, as well as
39 state law. Residual impacts would be less than significant.

1 **Impact CR-1b: Construction activities would have no potential to result**
2 **in the disturbance of historic architectural resources.**

3 Construction of tank farms at Tank Farm Site 2 would potentially require relocation
4 of existing railroad tracks. The existing railroad track was constructed in 1997 and
5 does not meet federal or state eligibility criteria. The proposed Project tank farm
6 construction activities would have no potential impact on historic architectural
7 resources.

8 As construction of the Berth 408 Marine Terminal would occur on vacant land
9 composed of recent fill placement material, no impact on historic architectural
10 resources would occur. Construction of the proposed pipelines would be in right of
11 way areas and be accomplished primarily by directional drilling at depth. Pipeline
12 construction would therefore have no impact on historic architectural resources.

13 **CEQA Impact Determination**

14 No historic resources have been recorded on or in the vicinity of Tank Farm Sites 1
15 and 2. Construction of the Berth 408 Marine Terminal would be located on imported
16 fill soils, and construction of proposed pipelines would be in right of way areas.
17 Based on this analysis, there would be no impact on historic architectural resources
18 under CEQA because construction activities would have no potential to result in the
19 disturbance of historic architectural resources.

20 *Mitigation Measures*

21 No mitigation is required.

22 *Residual Impacts*

23 No impact.

24 **NEPA Impact Determination**

25 No historic resources have been recorded on or in the vicinity of Tank Farm Sites 1
26 and 2. Construction of the Berth 408 Marine Terminal would be located on imported
27 fill soils, and construction of proposed pipelines would be in right of way areas.
28 Based on this analysis, there would be no impact on historic architectural resources
29 under NEPA because construction activities would have no potential to result in the
30 disturbance of historic architectural resources.

31 *Mitigation Measures*

32 No mitigation is required.

33 *Residual Impacts*

34 No impact.

1 **Impact CR-2: The proposed Project would not result in the permanent**
2 **loss of, or loss of access to, a paleontological resource.**

3 Important and unique vertebrate fossil remains have been discovered in Pleistocene
4 sedimentary deposits of the nearby upland Palos Verdes Peninsula. However, these
5 fossil sites are located a minimum of 0.75 mile (1.2 km) west of the proposed Project
6 area and are upland from the ancestral estuary habitat. The artificial fill materials
7 within the proposed Project area have no potential to include intact vertebrate fossils.
8 Any imported fossils would not be significant paleontological resources as their
9 context would be unknown, and it is highly unlikely they would be intact after
10 excavation and importation. Soils underneath the fill are Holocene alluvium, in
11 which there is no potential for encountering vertebrate fossils. Therefore, proposed
12 Project excavation would not have the potential to impact a significant
13 paleontological resource, and no impacts would occur.

14 **CEQA Impact Determination**

15 The proposed Project area is located on imported fill soils that have no potential to
16 contain intact vertebrate fossils or in areas with no recorded important or unique
17 vertebrate fossil remains. Based on this analysis, there would be no impact on
18 paleontological resources under CEQA because the proposed Project would not result
19 in the permanent loss of, or loss of access to, a paleontological resource.

20 *Mitigation Measures*

21 No mitigation is required.

22 *Residual Impacts*

23 No impact.

24 **NEPA Impact Determination**

25 The proposed Project area is located on imported fill soils that have no potential to
26 contain intact vertebrate fossils or in areas with no recorded important or unique
27 vertebrate fossil remains. Based on this analysis, there would be no impact on
28 paleontological resources under NEPA because the proposed Project would not result
29 in the permanent loss of, or loss of access to, a paleontological resource.

30 *Mitigation Measures*

31 No mitigation is required.

32 *Residual Impacts*

33 No impact.

34 **3.4.4.3.2 No Federal Action/No Project Alternative**

35 Under the No Federal Action/No Project Alternative, proposed Project facilities
36 would not be constructed or operated. As described in Section 2.5.2.1, the No

1 Federal Action/No Project Alternative considers the only remaining allowable and
2 reasonably foreseeable use of the proposed Project site: Use of the site for temporary
3 storage of wheeled containers on the site of Tank Farm 1 and on Tank Farm Site 2.
4 This use would require paving, construction of access roads, and installation of
5 lighting and perimeter fencing.

6 In addition, for analysis purposes, under the No Federal Action/No Project
7 Alternative a portion of the increasing demand for crude oil imports is assumed to be
8 accommodated at existing liquid bulk terminals in the San Pedro Bay Ports, to the
9 extent of their remaining capacities. Although additional demand, in excess of the
10 capacity of existing marine terminals to receive it, may come in by rail, barge, or
11 other means, rather than speculate about the specific method by which more crude oil
12 or refined products would enter southern California, for analysis purposes, the impact
13 assessment for the No Federal Action/No Project Alternative in this SEIS/SEIR is
14 based on marine deliveries only up to the available capacity of existing crude oil
15 berths. As described in Section 2.5.2.1, the impact assessment for the No Federal
16 Action/No Project Alternative also assumes existing terminals would eventually
17 comply with the California State Lands Commission (CSLC) Marine Oil Terminal
18 Engineering and Maintenance Standards (MOTEMS), that LAHD and the Port of
19 Long Beach would renew the operating leases for existing marine terminals, and that
20 existing terminals would comply with Clean Air Action Plan (CAAP) measures as of
21 the time of lease renewal (i.e., 2008 for Port of Long Beach Berths 84-87, 2015 for
22 LAHD Berths 238-240, and 2023 for Port of Long Beach Berths 76-78).

23 The NEPA Baseline condition coincides with the No Federal Action/No Project
24 Alternative for this project because the USACE, the LAHD, and the applicant have
25 concluded that, absent a USACE permit, no part of the proposed Project would be
26 built (Section 2.6.1). All elements of the No Federal Action/No Project Alternative
27 are identical to the elements of the NEPA Baseline. Therefore, under a NEPA
28 determination there would be no impact associated with the No Federal Action/No
29 Project Alternative.

30 **Impact CR-1a: No Federal Action/No Project Alternative construction**
31 **activities would have a low potential to disturb archaeological cultural**
32 **resources.**

33 **CEQA Impact Determination**

34 Construction activities associated with the No Federal Action/No Project Alternative
35 are limited to the Pier 400 area, Tank Farm Site 1, and Tank Farm Site 2. Pier 400
36 and Tank Farm Site 1 are located on imported fill soils, such that there is no
37 possibility of encountering intact, unknown archaeological resources. However,
38 construction activities associated with Tank Farm Site 2 on Terminal Island would
39 potentially encroach within native soils. Given the fact that no archaeological resources
40 have been identified within the proposed Project area during previous archaeological
41 investigations, the potential for impacting archaeological resources is considered to be
42 low. Based on this analysis, proposed construction activities would result in less than
43 significant impacts on archaeological cultural resources under CEQA.

1 *Mitigation Measures*

2 Although the potential for impacts on unknown archaeological cultural resources is
3 low, **MM CR-1a** would apply to the CEQA No Federal Action/No Project
4 Alternative impact determination.

5 *Residual Impacts*

6 In the highly unlikely event that intact archaeological and/or human remains are
7 identified during construction, **MM CR-1a** would ensure that the materials and
8 remains were evaluated and mitigated according to professional standards, as well as
9 state law. Residual impacts would be less than significant.

10 **NEPA Impact Determination**

11 Because the No Federal Action/No Project Alternative is identical to the NEPA
12 Baseline in this project, under NEPA the No Federal Action/No Project Alternative
13 would have no impact.

14 *Mitigation Measures*

15 No mitigation is required.

16 *Residual Impacts*

17 No impact.

18 **Impact CR-1b: No Federal Action/No Project Alternative construction**
19 **activities would not result in the disturbance of historic architectural**
20 **resources.**

21 **CEQA Impact Determination**

22 Construction activities associated with the No Action Alternative are limited to the
23 Pier 400 area and Tank Farm Site 1. Pier 400 is a recently constructed landform that
24 contains no historic architectural resources. Based on this analysis, proposed
25 construction activities associated with the No Federal Action/No Project Alternative
26 would have no impact on archaeological resources under CEQA.

27 *Mitigation Measures*

28 No mitigation is required.

29 *Residual Impacts*

30 No impact.

31 **NEPA Impact Determination**

32 Because the No Federal Action/No Project Alternative is identical to the NEPA
33 Baseline in this project, under NEPA the No Federal Action/No Project Alternative
34 would have no impact.

1 *Mitigation Measures*

2 No mitigation is required.

3 *Residual Impacts*

4 No impact.

5 **Impact CR-2: The No Federal Action/No Project Alternative would not**
6 **result in the permanent loss of, or loss of access to, a paleontological**
7 **resource.**

8 **CEQA Impact Determination**

9 Construction activities associated with the No Federal Action/No Project Alternative
10 are limited to the Pier 400 area and Tank Farm Site 1. Pier 400 and Tank Farm Site1
11 are located on imported fill soils, such that the possibility of encountering
12 intact/significant paleontological resources is negligible. Based on this analysis,
13 proposed construction activities associated with the No Federal Action/No Project
14 Alternative would have no impact on paleontological resources under CEQA.

15 *Mitigation Measures*

16 No mitigation is required.

17 *Residual Impacts*

18 No impact.

19 **NEPA Impact Determination**

20 Because the No Federal Action/No Project Alternative is identical to the NEPA
21 Baseline in this project, under NEPA the No Federal Action/No Project Alternative
22 would have no impact.

23 *Mitigation Measures*

24 No mitigation is required.

25 *Residual Impacts*

26 No impact.

27 **3.4.4.3.3 Reduced Project Alternative**

28 Under the Reduced Project Alternative, as described in Section 2.5.2.2, construction
29 and operation at Berth 408 would be identical to the proposed Project with the
30 exception of the lease cap limiting throughput in certain years. However, as
31 explained in Section 2.5.2.2, the lease cap would not change the amount of crude oil
32 demanded in southern California, and therefore the analysis of the Reduced Project
33 Alternative also includes the impacts of marine delivery of incremental crude oil

1 deliveries to existing liquid bulk terminals in the San Pedro Bay Ports in years where
2 demand exceeds the capacity of the lease-limited Berth 408.

3 As described in Section 2.5.2.2, the impact assessment for the Reduced Project
4 Alternative also assumes existing terminals would eventually comply with the
5 MOTEMS, that the LAHD and the Port of Long Beach would renew the operating
6 leases for existing marine terminals, and that existing terminals would comply with
7 CAAP measures as of the time of lease renewal (i.e., 2008 for Port of Long Beach
8 Berths 84-87, 2015 for LAHD Berths 238-240, and 2023 for Port of Long Beach
9 Berths 76-78).

10 **Impact CR-1a: Reduced Project Alternative construction activities**
11 **would have a low potential to disturb archaeological cultural resources.**

12 **CEQA Impact Determination**

13 No historic resources eligible for listing in the NRHP or the CRHR are recorded
14 within the Reduced Project Alternative area. The proposed Pier 400 Marine
15 Terminal and Tank Farm Site 1 are located on imported fill soils, such that the
16 probability of encountering intact, unknown historic resources is remote.
17 Construction activities associated with Pipeline Segments 2a, 2b, 2c and Tank Farm
18 Site 2 on Terminal Island and portions of proposed Pipeline Segments 3 and 4 from
19 Mormon Island to Plains pipelines systems near Henry Ford Avenue and near or on the
20 Ultramar/Valero Refinery would potentially encroach within native soils. The potential
21 for impacts to archaeological resources in these areas are predicted to be very low if jack
22 and bore or directional drilling techniques are used. Given the fact that no archaeological
23 resources have been identified within the Reduced Project Alternative area during
24 previous archaeological investigations, the potential for impacting archaeological
25 resources is considered to be low in areas requiring trenching or other activities that may
26 disturb intact surface soils. Based on this analysis, proposed construction activities
27 related to the Reduced Project Alternative would result in less than significant
28 impacts on archaeological cultural resources, and less than significant impact on in-
29 water cultural resources.

30 *Mitigation Measures*

31 Although the potential for impacts on unknown archaeological cultural resources is
32 low, **MM CR-1a** would apply to the CEQA Reduced Project Alternative impact
33 determination.

34 *Residual Impacts*

35 In the highly unlikely event that intact archaeological and/or human remains are
36 identified during construction, **MM CR-1a** would ensure that the materials and
37 remains were evaluated and mitigated according to professional standards, as well as
38 state law. Residual impacts would be less than significant.

39 **NEPA Impact Determination**

40 No historic resources eligible for listing in the NRHP or CRHP are recorded within
41 the Reduced Project Alternative area. The proposed Pier 400 Marine Terminal and

1 Tank Farm Site 1 are located on imported fill soils, such that the probability of
2 encountering intact, unknown historic resources is remote. Although Pipeline
3 Segments 2a, 2b, 2c and Tank Farm Site 2 on Terminal Island and portions of proposed
4 Pipeline Segments 3 and 4 from Mormon Island to Plains pipelines systems near Henry
5 Ford Avenue and near or on the Ultramar/Valero Refinery would potentially encroach
6 within native soils, the actual disturbance of soils near the surface where archaeological
7 resources would be most likely identified is particularly low. Given the fact that no
8 archaeological resources have been identified within the Reduced Project Alternative
9 area during previous archaeological investigations, the potential for impacting
10 archaeological resources is considered to be low in areas requiring trenching or other
11 activities that may disturb intact surface soils. Based on this analysis, proposed
12 construction activities related to the Reduced Project Alternative would result in less
13 than significant impacts on archaeological cultural resources and less than significant
14 impacts on in-water cultural resources.

15 *Mitigation Measures*

16 Although the potential for impacts on unknown archaeological cultural resources is
17 low, **MM CR-1a** would apply to the NEPA Reduced Project Alternative impact
18 determination.

19 *Residual Impacts*

20 In the highly unlikely event that intact archaeological and/or human remains are
21 identified during construction, **MM CR-1a** would ensure that the materials and
22 remains were evaluated and mitigated according to professional standards, as well as
23 state law. Residual impacts would be less than significant.

24 **Impact CR-1b: Reduced Project Alternative construction activities**
25 **would not result in the disturbance of historic architectural resources.**

26 Construction of tank farms at Tank Farm Site 2 would potentially require relocation
27 of existing railroad tracks. The existing railroad track was constructed in 1997 and
28 does not meet federal or state eligibility criteria. The tank farm construction
29 activities would have no potential impact on historic architectural resources.

30 As construction of the Berth 408 Marine Terminal would occur on vacant land
31 composed of recent fill placement material, no impact on historic architectural
32 resources would occur. Construction of the proposed pipelines would be in right of
33 way areas and be accomplished primarily by directional drilling at depth. Pipeline
34 construction would therefore have no impact on historic architectural resources.

35 **CEQA Impact Determination**

36 No historic resources have been recorded on or in the vicinity of Tank Farm Sites 1
37 and 2. Construction of the Berth 408 Marine Terminal would be located on imported
38 fill soils, and construction of proposed pipelines would be in right of way areas.
39 Based on this analysis, there would be no impact on historic architectural resources
40 under CEQA because the Reduced Project Alternative construction activities would
41 not result in the disturbance of historic architectural resources.

1 *Mitigation Measures*

2 No mitigation is required.

3 *Residual Impacts*

4 No impact.

5 **NEPA Impact Determination**

6 No historic resources have been recorded on or in the vicinity of Tank Farm Sites 1
7 and 2. Construction of the Berth 408 Marine Terminal would be located on imported
8 fill soils, and construction of proposed pipelines would be in right of way areas.
9 Based on this analysis, there would be no impact on historic architectural resources
10 under NEPA because the Reduced Project Alternative construction activities would
11 not result in the disturbance of historic architectural resources.

12 *Mitigation Measures*

13 No mitigation is required.

14 *Residual Impacts*

15 No impact.

16 **Impact CR-2: The Reduced Project Alternative would not result in the**
17 **permanent loss of, or loss of access to, a paleontological resource.**

18 Important and unique vertebrate fossil remains have been discovered in Pleistocene
19 sedimentary deposits of the nearby upland Palos Verdes Peninsula. However, these
20 fossil sites are located a minimum of 0.75 mile (1.2 km) west of the Reduced Project
21 Alternative area and are upland from the ancestral estuary habitat. The artificial fill
22 materials within the Reduced Project Alternative area have no potential to include
23 intact vertebrate fossils. Any imported fossils would not be significant
24 paleontological resources as their context would be unknown, and it is highly
25 unlikely they would be intact after excavation and importation. Soils underneath the
26 fill are Holocene alluvium, in which there is no potential for encountering vertebrate
27 fossils. Therefore, proposed excavation under the Reduced Project Alternative would
28 not have the potential to impact a significant paleontological resource, and no
29 impacts would occur.

30 **CEQA Impact Determination**

31 The Reduced Project Alternative area is located on imported fill soils that have no
32 potential to contain intact vertebrate fossils or in areas with no recorded important or
33 unique vertebrate fossil remains. Based on this analysis, there would be no impact on
34 paleontological resources under CEQA.

35 *Mitigation Measures*

36 No mitigation is required.

1 *Residual Impacts*

2 No impact.

3 **NEPA Impact Determination**

4 The Reduced Project Alternative area is located on imported fill soils that have no
5 potential to contain intact vertebrate fossils or in areas with no recorded important or
6 unique vertebrate fossil remains. Based on this analysis, there would be no impact on
7 paleontological resources under NEPA.

8 *Mitigation Measures*

9 No mitigation is required.

10 *Residual Impacts*

11 No impact.

12 **3.4.4.3.4 Summary of Impact Determinations**

13 Table 3.4-1 summarizes the CEQA and NEPA impact determinations of the proposed
14 Project and its alternatives related to Cultural Resources, as described in the detailed
15 discussion in Sections 3.4.4.3.1 through 3.4.4.3.3. This table is meant to allow easy
16 comparison between the potential impacts of the proposed Project and alternatives
17 with respect to this resource. Identified potential impacts may be based on Federal,
18 State, or City of Los Angeles significance criteria, Port criteria, and the scientific
19 judgment of the report preparers.

20 For each type of potential impact, the table describes the impact, notes the CEQA and
21 NEPA impact determinations, describes any applicable mitigation measures, and
22 notes the residual impacts (i.e., the impact remaining after mitigation). All impacts,
23 whether significant or not, are included in this table. Note that impact descriptions
24 for each of the alternatives are the same as for the proposed Project, unless otherwise
25 noted.

26 **3.4.4.4 Mitigation Monitoring**

27 No significant impacts on cultural resources are anticipated. However, in the highly
28 unlikely event that intact archaeological and/or human remains are identified during
29 construction, **MM CR-1a** would ensure that the materials and remains were
30 evaluated and mitigated according to professional standards, as well as state law.
31 Residual impacts would be less than significant.

| | |
|---|--|
| Impact CR-1a: Construction activities have a highly unlikely potential to disturb archaeological cultural resources. | |
| MM CR-1a: Stop work in area if prehistoric and/or historical archaeological resources are encountered. | |
| Mitigation Measure | <p>In the unlikely event that any artifact, or an unusual amount of bone, shell, or non-native stone is encountered during construction, work shall be immediately stopped and relocated to another area. The contractor shall stop construction within 10 meters (30 feet) of the exposure of these finds until a qualified archaeologist can be retained by the Port to evaluate the find (see 36 CFR 800.11.1 and California Code of Regulations, 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 ceramics; or structural remains. If the resources are found to be significant, they shall be avoided or shall be mitigated consistent with SHPO Guidelines. All construction equipment operators shall attend a preconstruction meeting presented by a professional archaeologist retained by the Port that shall 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 shall meet with applicable Native American Groups, including the Gabrieliño/Tongva Tribal Council, to identify areas of concern. A trained archaeologist shall monitor construction at identified areas. In addition to monitoring, a treatment plan shall 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> |
| Timing | During proposed Project construction. |
| Methodology | The construction contractor shall notify the Port of the cultural find and retain the Port-qualified archaeologist and Native American representative. The Port-qualified archaeologist shall provide a report to the LAHD verifying compliance with the measure. |
| Responsible Parties | Construction contractor; LAHD. |
| Residual Impacts | Implementation of this measure would minimize impacts on previously unknown on-land cultural resources and human remains in the highly unlikely event they are encountered within alluvial river outwash sediments. Residual impacts would be less than significant. |

Table 3.4-1. Summary Matrix of Potential Impacts and Mitigation Measures for Cultural Resources Associated with the Proposed Project and Alternatives

| <i>Alternative</i> | <i>Environmental Impacts</i> | <i>Impact Determination</i> | <i>Mitigation Measures</i> | <i>Impacts after Mitigation</i> |
|--|---|--|---|--|
| 3.4 Cultural Resources | | | | |
| Proposed Project | CR-1a: Construction activities would have a low potential to disturb archaeological cultural resources. | CEQA: <u>In-water Cultural Resources:</u> Less than significant impact <u>Archeological Cultural Resources:</u> Less than significant impact NEPA: <u>In-water Cultural Resources:</u> Less than significant impact <u>Archeological Cultural Resources:</u> Less than significant impact | MM CR-1a: Stop Work in Area if Prehistoric and/or Historical Archaeological Resources are Encountered MM CR-1a | CEQA: Less than significant impact NEPA: Less than significant impact |
| | CR-1b: Construction activities would have no potential to result in the disturbance of historic architectural resources. | CEQA: No impact NEPA: No impact | Mitigation not required Mitigation not required | CEQA: No impact NEPA: No impact |
| | CR-2: The proposed Project would not result in the permanent loss of, or loss of access to, a paleontological resource. | CEQA: No impact NEPA: No impact | Mitigation not required Mitigation not required | CEQA: No impact NEPA: No impact |
| No Federal Action/No Project Alternative | CR-1a: No Federal Action/No Project Alternative construction activities would have a low potential to disturb archaeological cultural resources. | CEQA: Less than significant impact NEPA: No impact | MM CR-1a Mitigation not required | CEQA: Less than significant impact NEPA: No impact |
| | CR-1b: No Federal Action/No Project Alternative construction activities would not result in the disturbance of historic architectural resources. | CEQA: No impact NEPA: No impact | Mitigation not required Mitigation not required | CEQA: No impact NEPA: No impact |
| | CR-2: No Federal Action/No Project Alternative would not result in the permanent loss of, or loss of access to, a paleontological resource. | CEQA: No impact NEPA: No impact | Mitigation not required Mitigation not required | CEQA: No impact NEPA: No impact |

Table 3.4-1. Summary Matrix of Potential Impacts and Mitigation Measures for Cultural Resources (continued)

| <i>Alternative</i> | <i>Environmental Impacts</i> | <i>Impact Determination</i> | <i>Mitigation Measures</i> | <i>Impacts after Mitigation</i> |
|---|--|--|--|--|
| 3.4 Cultural Resources (continued) | | | | |
| Reduced Project Alternative | CR-1a: Reduced Project Alternative construction activities would have a low potential to disturb archaeological cultural resources. | CEQA: <u>In-water Cultural Resources:</u> Less than significant impact <u>Archeological Cultural Resources:</u> Less than significant impact NEPA: <u>In-water Cultural Resources:</u> Less than significant impact <u>Archeological Cultural Resources:</u> Less than significant impact | MM CR-1a MM CR-1a | CEQA: Less than significant impact NEPA: Less than significant impact |
| | CR-1b: Reduced Project Alternative construction activities would not result in the disturbance of historic architectural resources. | CEQA: No impact NEPA: No impact | Mitigation not required Mitigation not required | CEQA: No impact NEPA: No impact |
| | CR-2: The Reduced Project Alternative would not result in the permanent loss of, or loss of access to, a paleontological resource. | CEQA: No impact NEPA: No impact | Mitigation not required Mitigation not required | CEQA: No impact NEPA: No impact |

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