SECTION SUMMARY

This section addresses potential impacts on cultural resources that could result from implementation of the proposed Project or the alternatives. Cultural resources customarily include archaeological resources, ethnographic resources, and those of the historic, built environment (architectural resources). Though not specifically a cultural resource, paleontological resources (geological fossil resources) are also considered here, as they are discussed in Appendix G of the State CEQA Guidelines (Environmental Checklist Form).

Section 3.4, Cultural Resources, provides the following:

- a description of the prehistoric, ethnographic, historic, and paleontological setting of both the Port and the proposed project area;
- a description of existing local, state, and federal cultural resource regulations and policies;
- a discussion on the methodology used to determine whether the proposed Project or alternatives result in an impact on cultural resources;
- an impact analysis of both the proposed Project and alternatives; and
- a description of any mitigation measures proposed to reduce any potential impacts, as applicable.

Key Points of Section 3.4

The proposed project area encompasses approximately 185 acres at Berths 212–224 on Terminal Island. Physical improvements proposed at the existing YTI Terminal include dredging and installing sheet piles and king piles at two berths, adding and replacing/extending wharf gantry cranes, extending the 100-foot gauge crane rail along the wharf deck, improving/repairing backlands, and adding a new rail storage track within the existing TICTF on-dock rail yard. The boundaries of the project site constitute the “study area” for cultural resources, and all improvements would occur within the boundaries of the existing YTI Terminal and TICTF. The NEPA analysis considers impacts to cultural resources within a specified area of potential effect (APE). The APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. In complying with the regulations of Section 106, 36 CFR 800, the APE for the proposed Project is defined by USACE as consisting of a “permit area” that is considerably smaller than the proposed Project’s study area under CEQA and defined in the USACE implementing regulations (33 CFR 325 Appendix C). The permit area (as shown in Figure 2-11 in Chapter 2, Project Description) includes areas subject to a federal permit extends from Berth 212 to Berth 224, encompassing portions of the East Basin Channel and Cerritos Channel, and includes the cranes associated with the individual berths and approximately 100 feet of the landside wharves. For the purposes of this analysis, the term “permit area” is used to determine impacts under NEPA.
The proposed Project’s study area encompasses only one historic resource, the Vincent Thomas Bridge, which would not be significantly impacted by the proposed Project. It should be noted that the Vincent Thomas Bridge is not located within the federal permit area. There are no other properties or sites listed or eligible for listing on the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR), or as a contributor to a potential historic district, within the study area or permit area.

No archaeological, ethnographic, or paleontological resources are known to exist in the proposed project area. There is an extremely low potential for buried resources to be found during construction of the proposed Project or alternatives because most of the proposed project site is underlain with imported/modern fill (i.e., dredged material) and is paved or highly disturbed. Therefore:

- the proposed Project and all alternatives would have a low potential to disturb, damage, or degrade previously undiscovered historical archaeological resources, and no potential to disturb, damage, or degrade unknown prehistoric archaeological and ethnographic resources; and
- the proposed Project and all alternatives would have no potential to disturb paleontological resources.

Although the construction of the proposed Project or Alternatives 1, 2, or 3 is not expected to result in a significant impact under CEQA or NEPA, a standard condition (SC) of approval has been added to manage unanticipated discoveries. With the standard condition of approval in force, potential late discovery impacts would remain a less-than-significant impact. Specifically:

- **SC CR-1: Stop Work in the Area if Prehistoric and/or Archaeological Resources are Encountered.** In the unlikely event that any prehistoric artifact of historic period materials or bone, shell, or nonnative stone is encountered during construction, work shall be immediately stopped, the area secured, and work relocated to another area until the materials can be assessed by a qualified archaeologist. Examples of such cultural materials might include historical trash pits containing bottles and/or ceramics; or structural remains or concentrations of grinding stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; and flakes of stone not consistent with the immediate geology such as obsidian or fused shale. The contractor shall stop construction within 30 feet of the exposure of these finds until a qualified archaeologist can be retained by LAHD to evaluate the find (see 36 CFR 800.11.1 and 14 CCR 15064.5(f)). If the resources are found to be significant, they shall be avoided or shall be mitigated consistent with Section 106 or State Historic Preservation Officer Guidelines.
3.4.1 Introduction

This section addresses potential impacts on cultural resources that could result from implementation of the proposed Project or alternatives. Cultural resources customarily include archaeological resources, ethnographic resources, and those of the historic, built environment (architectural resources). Though not specifically a cultural resource, paleontological resources (geological fossil resources) are also considered here, as they are discussed in Appendix G of the State CEQA Guidelines (Environmental Checklist Form) within the context of Section V, Cultural Resources.

The proposed project area encompasses approximately 185 acres at Berths 212–224 on Terminal Island. Within the 185 acres are the YTI terminal and a portion of the TICTF. The berths and container yard occupy approximately 157 acres, YTI’s portion of the TICTF on-dock rail is approximately 24 acres, and an additional 4 acres are unused. The YTI Terminal consists of a cargo ship unloading area (the wharf and immediate backlands), a large container and chassis parking/storage yard (backlands), a container and equipment wash area, a maintenance and repair area, a power shop area, a marine tower area, a fuel dispensing area, a gear room area, various supply storage areas, a warehouse and consolidation area, a crane maintenance area, and an administration building area. Most of the yard is paved with asphalt, but some areas around buildings and on equipment runways are paved with concrete. All improvements would occur within the existing boundaries of the YTI Terminal.

For the purposes of the CEQA analysis, the study area for the proposed Project is defined as consisting of the entirety of the “Lease Premises” as shown in Figure 2-3. For the purposes of the NEPA analysis, the “permit area” is defined by a smaller portion of the project site that extends from Berth 212 to Berth 224, encompassing portions of the East Basin Channel and Cerritos Channel, and includes the cranes associated with the individual berths and approximately 100 feet of the landside wharves, as shown in Figure 2-10.

The only historic resource identified within the proposed Project’s study area is the Vincent Thomas Bridge, which is eligible for listing on the NRHP. All of the other buildings within the study area have been constructed within the last 50 years and are not of “exceptional importance” or a contributor to a potential historic district. No historic resources are located within the permit area.

3.4.2 Environmental Setting

The proposed Project is located on Terminal Island, a primarily human-made area (made from imported/modern soils) developed in increments based on various demands since the Port was initially developed around the early 1900s. The site is within the Port of Los Angeles Community Plan area in the City of Los Angeles, which is adjacent to the communities of San Pedro and Wilmington, and approximately 20 miles south of downtown Los Angeles (Figure 1-1). The site is generally bound on the northwest by the East Basin Channel and Cerritos Channel, on the southeast by Seaside Avenue, on the southwest by the Vincent Thomas Bridge, and on the northeast by a recycling facility (refer to Figure 2-1).
3.4.2.1 Paleontological Setting

Sediments within the proposed project area consist of imported or modern fill material placed in the early twentieth century. The original island landform that underlies the southern part of the YTI Terminal area was covered with dredged material in the late nineteenth and early twentieth centuries, to create a usable land surface. Additionally, the landform that makes up the northern portion of the YTI Terminal area was created in the early 1980s by filling existing slips with material dredged from the inner and outer Los Angeles harbors during the Los Angeles Harbor Deepening Project (USACE and LAHD 1980). Because the site was created using dredged material, it would not be expected to yield significant paleontological resources or unique geologic features.

3.4.2.2 Prehistoric Setting: Southern California

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

The Early Period material culture is characterized by large, fluted projectile points that imply heavy reliance on large game for subsistence that was most likely supplemented with plants and small game. Sites dating to the Early Period appear primarily along the eastern portions of Southern California (China Lake, Lake Tulare, and Borax Lake); however, the La Brea skeleton has been dated to approximately 9,000 years Before Present.¹²

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

The subsistence base diversified during the Intermediate Period to include a wider variety of plant foods, as evidenced by the appearance of mortars and pestles, and greater reliance on marine resources within the small-animal protein dietary component (Wallace 1978). The 1,250 BP (AD 700) modal radiocarbon date falls toward the end of this

¹ Before Present years is a time scale used in archaeology, geology, and other scientific disciplines to specify when events in the past occurred. Source: http://en.wikipedia.org/wiki/Before_Present.
period. The Ballona Creek sites, CA-LAN-64 (1860 BP), CA-LAN-59 (620 to 1100 BP),
CA-LAN-61 (1000 to 2900 BP), and CA-LAN-63 (1590 to 2120 BP) are among the few
recognized Intermediate Period deposits (Dillon 1994).

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

3.4.2.3 Ethnographic Setting

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

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

Evidence suggests the Gabrieliño lived in villages encompassing economically and
politically autonomous patrilineal clans who collectively owned specific territories that
were actively protected against trespass. Settlement patterns have been depicted as
consisting primarily of permanently inhabited village sites organized on the basis of clan
groupings, augmented by outlying satellite camps that were occupied on a temporary,
perhaps seasonal, basis. These temporary camps were used by small groups and were
located in areas of increased localized resource availability (Bean and Shipek 1978).

The social organization of the Gabrieliño is believed to be based on a moiety system by
which clans were paired through reciprocal marriage and ceremonial obligations (Strong
1929; White 1963). Villages typically were located in valley bottoms, along streams or
near coastal strands, in protected defensible locations, often near their reciprocating
villages. The primary positions of power for each village—the chief, shaman, or other
specialist—was based on heredity. Specific tangible and intangible resources were
owned by families or individuals. Typically, inland groups established rights to fishing
and gathering sites on the coast, in contrast to coastal groups that moved inland for brief
periods of time, usually during the fall to collect acorns and other resources. Most
traveled within a one-day distance of the largely sedentary villages to gather food. The
diverse environment afforded access to varied maritime and inland resources, offering not
only food but raw materials necessary for tools, clothing, housing and ceremonial
structures, items of personal adornment, and other goods. Predominant food sources for
inhabitants of the island valleys and foothills included acorns, sage, yucca, and deer.
Shellfish and marine species common to the estuaries, sandy beaches, and offshore kelp
beds were food sources for those who inhabited the coast (Bean and Shipek 1978). The
Gabrieliños as a group were extremely wealthy and populous due to their access to a
variety of natural resources, such that their influence through trade extended as far as the
San Joaquin Valley, the Colorado River, and south into Baja California. In particular,
their use of shell inlay in asphaltum, rare minerals, stone carvings, and rock paintings are
considered of exceptional quality. Their steatite (soapstone) carvings of animals, pipes,
and other ritual ornaments are cultural trademarks. The Gabrieliños maintained a
sophisticated chiefdom level of social organization, with an elite (including the chief and
his family, and the very rich), middle class family lineages, and a lower class involved in
ordinary social activities (Bean and Smith 1978).

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

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

3.4.2.4 Historic Setting

Early History: Port of Los Angeles Region

The Port of Los Angeles, at the southernmost point of Los Angeles County, occupies
portions of three former historic ranchos that Governor Pedro Fages conferred on
veterans of the 1769 Portolá expedition. They were Rancho San Pedro, Rancho Los
Palos Verdes, and Rancho Los Cerritos, with a combined total of 84,000 acres (Beck and
Haase 1974; Cowan 1977). By 1830, San Pedro was the leading west coast center of hide
production, the primary export of the Missions and, later, the Ranchos (Queenan 1983).
Annexation by the United States in 1848 and the gold rush of 1849 brought landless
Americans to the San Pedro area, but ranching remained its primary enterprise. Flint,
Bixby & Company, one of the largest sheep ranchers, was headquartered in San Pedro,
but the Port area remained underused.

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

Modification of the harbor area began when USACE constructed two jetties in 1871 and
deepened the channel leading to the Wilmington landing in 1880. USACE began
construction on the breakwater in 1900.
Initial Commercial Shipping, 1857 to 1897

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

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

The first short rail line in southern California, the LA&SP, was acquired by the Southern Pacific Railroad (SPRR) in 1872. In an attempt to break the stranglehold the SPRR had on shipping in the area, Senator John P. Jones from Nevada started the Los Angeles and Independence Railroad (LA&I) (Los Angeles to Santa Monica Pier) one year prior to the acquisition of LA&SP by SPRR. However, in 1877 the LA&I was absorbed quickly into the SPRR system (Queenan 1983).

Improved transportation to and from the harbor facilitated the burgeoning growth of Los Angeles. Between 1880 and 1890, the population of the city grew from 11,000 to 50,000, and by 1900, it had reached 102,000 (Matson 1920). This boom fueled increased demand for construction supplies and consumer goods, much of which arrived on ships that docked at San Pedro.

Founding of the Port of Los Angeles, 1897 to 1913

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

In preparation for the opening of the Panama Canal (which occurred in 1914), the City of Los Angeles extended its boundaries to coastal tidewaters when it annexed a strip of San Pedro in 1906. The Port of Los Angeles and the LAHD were officially created in December 1907, and numerous harbor improvements followed. These improvements included completion of the 2.22-mile breakwater, broadening and dredging of the main channel, completion of the first major wharf by the SPRR, construction of the Angel’s Gate lighthouse, and construction of the first municipal pier and wholesale fish market. By 1909, both Wilmington and San Pedro had been absorbed into the City of Los Angeles. By 1913, the Port of Los Angeles was the largest lumber importer in the world (Matson 1920).

The opening of the Panama Canal in August 1914 significantly reduced the transshipment time between eastern and western U.S. ports. The canal also promised to open up new trade opportunities worldwide. In anticipation of increased trade, the City of Los Angeles completed one of many large municipal terminals in the harbor. With the outbreak of World War I, the promise of increased trade and expansion possibilities was put on hold (Queenan 1983).
Wartime Changes, 1914 to 1950

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

During the war, the Port was one of the chief sources of employment for area residents. Shipbuilding enterprises (including Southwestern Shipbuilding Company, Los Angeles Shipbuilding and Drydock Corporation, and Ralph J. Chandler Shipbuilding) began turning out vessels by the dozens for the war effort. The Port of Long Beach, established only two years before the onset of the war, offered the only Southern California shipping and shipbuilding competition to the Port of Los Angeles. That competition continues to the present day.

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

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

In 1923, the City of Los Angeles passed a harbor improvement bond measure for construction of additional wharves to meet the demands of increased trade (Queenan 1983; San Buenaventura Research Associates 1992). During the Depression years, traffic within the Port slowed along with the rest of the American economy (Queenan 1983).

During World War II, San Pedro Harbor, as one of the closest major ports to the Pacific Theatre of Operations, was fully involved in defense activities. Between 1941 and 1945, ship and aircraft production facilities in the harbor area worked day and night to produce more than 15 million tons of war equipment. Hundreds of thousands of military and civilian personnel shipped out through San Pedro in support of the war effort and returned through it when their tasks were done (Shettle 2003).

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

Containerization, 1950 to Present

Methods of shipping changed dramatically following World War II with the introduction of containerization. As discussed in Section 1.2.2 in Chapter 1, “Introduction,” containerization is an integrated system of transport in which goods are shipped in standardized (20- or 40-foot-long), sealable metal boxes, designed for easy placement on compatible truck beds, railcars, and ships. Advantages of containerization include reduction of the labor force necessary to load shipments, decreased loading and...
unloading time, and decreased loss via theft or damage. Additional efficiencies arise from the integration of transport by truck, train, and ship. The primary disadvantage is the large capital outlay necessary to produce the new ships, cranes, rail cars, truck trailers, and port facilities designed to fit the containerization system.

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

**History of Berths 212–224, 1920s to Present**

Berths 212–224 have a rich history dating back to the late 1920s, serving a variety of tenants including oil companies, lumber companies, shipbuilding and dismantling operations, and cargo terminals.

The facilities at Berths 212–214 were originally constructed in the 1920s. From about 1941 through 1945, during World War II, California Shipbuilding Company (Calship) manufactured Liberty and Victory-class transports at the site. Calship was the largest wartime shipbuilder in Los Angeles Harbor during World War II. Following the war, Calship was acquired by the National Metal and Steel Corporation, which was the final destination for many decommissioned United States Navy ships to be dismantled and exported as scrap metal.

Fellows and Stewart, a yacht builder, also occupied Berth 214 from 1949 through 1976, at which point Al Larson Boat Shop took over the site from 1977 through the mid-1980s. Al Larson Boat shop was used for boat cleaning, painting, repair, refitting, and boat building. Proctor and Gamble also occupied a portion of the Berth 214 backland for warehousing operations from about 1961 through the mid-1980s.

Berth 215 once housed a liquid bulk transfer/storage facility, and included oil storage tanks, office, storage, and pump buildings. Hancock Oil occupied Berth 215 from 1928 through 1958, when it was sold to Signal Oil. Signal Oil continued operations at the site until about 1965, at which time Gulf Oil took over the site. In 1983, Gulf Oil sold their Santa Fe Springs refinery to Golden West Refining, who operated the marine facility until 1987. Quaker oil also operated on the backlands portion of Berth 215 from about 1965 through 1980.

As early as 1927, Berths 216–217 were occupied by California Petroleum Corporation. Around 1929 The Texas Company (now Texaco) began operations at Berths 216–218 and remained on site until about 1968. Berths 216–218 were vacant for several years before Dow Chemical occupied a portion of the backlands until the mid-1980s. The Western Walker Company also occupied a portion of the backlands at Berths 216 through 218 from about 1929 through 1932.

Hammon Lumber Company operated at Berths 220–224 from about 1927 through about 1963, at which point this portion of the site began to operate as a cargo terminal. Berths 220–224 continued operations as a container terminal, and Indies Cargo Terminal (Indies) expanded the cargo operations to include Berths 216–218 around 1985. YTI
began operation at Berths 211–215 in 1990 and took over operation of Berths 216–224 in
1996.

**Records Search**

In May 2013, ICF International conducted a cultural resources records search at the South
Central Coastal Information Center (SCCIC), located on the California State University
Fullerton campus as requested by LAHD. The search was conducted on May 14, 2013,
and included the proposed project area located within San Pedro, California. The records
search included a review of all cultural resource site records, maps, and reports located
within the proposed project area and within a half-mile radius.

Results of the records search indicate that 19 cultural resource studies have been
conducted within a half-mile radius of the proposed project area. Of these, 4 included the
proposed project area and are listed on Table 3.4-1. In 2011, a built environment
evaluation was undertaken for Terminal Island (SWCA 2011). The YTI property was not
surveyed as the report concluded that the YTI Container Terminal was “of the recent past
(1967 or younger) and not enough time has passed to adequately evaluate it for historic
significance”.

**Table 3.4-1: Cultural Resource Studies Conducted within the Proposed
Project Area**

<table>
<thead>
<tr>
<th>SCCIC File #</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>10527</td>
<td>Weinman, Lois J. 1978 <em>Long Beach-Los Angeles Harbor Areas Regional Cultural History, Los Angeles County, California.</em></td>
</tr>
</tbody>
</table>

There have been 50 cultural resources recorded within a half-mile radius of the proposed
project study area. Of these, three (19-167314, 19-173042, and 19-189468) have been
recorded within the proposed project area.

**19-167314, Terminal Island:** Terminal Island, also known as Rattlesnake Island and
East San Pedro, began as a fishing village and a large resort community. According to
the site record, all of the fisherman’s houses and shops were razed and replaced with
canneries, oil companies, and warehouses. The island lacks historical integrity and is not
listed on the NRHP or CRHR.

**19-173042, Ferryboat Sierra Nevada:** The ferryboat *Sierra Nevada* sunk off the coast of
Terminal Island, but its exact location was not indicated on the site record. The *Sierra
Nevada* was located by remote sensing in 1980, during a project involving dredging the
Main Channel (Schwartz 1989). The superstructure of the ship was in poor condition and
badly broken up on underwater rocks. However, the ship’s original 1913 engine was relatively intact and was evaluated and found eligible for the NRHP. The engine was removed from the ship and relocated onto land. Historic American Engineering Record documentation was completed. No donor could be found for the engine, however, so after documentation the engine was sold for scrap (Schwartz 1989:208). Given the engine removal work in 1980 and the damage done to the Sierra Nevada, it is unlikely that any portion of this resource still exists.

19-189468, The Vincent Thomas Bridge: The Vincent Thomas Bridge, constructed between 1961 and 1963, crosses the southeast corner of the proposed project area. The bridge was found eligible for the NRHP and CRHR.

Field Survey

An ICF architectural historian and an ICF archaeologist inspected the YTI site on June 12, 2013. At the time of this inspection, the proposed project area was paved and developed precluding the ability to conduct an archaeological survey. Other than the Vincent Thomas Bridge, no built environment resources older than 45 years appeared to be present in the proposed project study area. No paleontological field survey of the proposed project site was conducted because the site is covered by extensive development and/or is underlain by non-fossiliferous imported/modern fill.

Vincent Thomas Bridge

The Vincent Thomas Bridge is a 1,500-foot-long suspension bridge crossing the Main Channel of the Los Angeles Harbor linking San Pedro with Terminal Island. The bridge is part of SR-47 and opened in 1963. It is named for California Assemblyman Vincent Thomas of San Pedro, who championed its construction. It was the first welded suspension bridge in the United States and is now the fourth longest suspension bridge in California and the 76th longest in the world. The clear height of the navigation channel is approximately 185 feet. It is the only suspension bridge in the world supported entirely on piles.

Assemblyman Thomas, who represented San Pedro, spent 19 years beginning in 1940 arguing for the 16 different pieces of legislation that were necessary for its construction. During that time and in the years right after it was built, it was ridiculed as “the bridge to nowhere.” Other bridges to the island included the 1948 Commodore Schuyler Heim lift bridge connecting SR-47 north and a World War II pontoon bridge from Ocean Boulevard to Long Beach (replaced in 1968 by the Gerald Desmond arch bridge). Until the new bridge’s 1963 construction, ferry service from San Pedro was important to cannery and shipyard workers on Terminal Island; private ferries had begun in 1870, and municipal ferry service had begun in 1941. In 1968 the bridge was connected through SR-47 directly into the Harbor Freeway. Having the bridge and freeway connection available was considered crucial to the Port’s success in the era of containerized cargo. Today, cargo can go from the San Pedro side of the Port of Los Angeles over the Vincent Thomas bridge, onto the Terminal Island Freeway, to the southern end of the Long Beach Freeway, and then up to the rail yards of East Los Angeles.

The proposed project study area encompasses only a small portion of the bridge near its eastern terminus. Specifically, the study area includes several concrete columns supporting the bridge.
3.4.3 Applicable Regulations

3.4.3.1 Federal Regulations

Section 106 of the National Historic Preservation Act

Federal undertakings (i.e., those projects with federal funding or that require a federal permit) that may affect a resource listed or eligible for listing on the NRHP must comply with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA). Thus, for a federally funded project or projects requiring a federal permit, the possible effects of a project on historic properties must be reviewed. The process of review is often referred to as the “Section 106” process and is described in 36 CFR 800, the implementing regulations of Section 106. The USACE Regulatory Program process for considering cultural resources is described in Appendix C of USACE’s NEPA implementing regulations at 33 CFR 325.

If an alternative other than the No Federal Action Alternative (or for this Draft EIS/EIR, the No Project Alternative) is chosen, compliance with Section 106 of the NHPA is required because a federal permit (i.e., USACE authorization pursuant to Section 10 of the Rivers and Harbors Appropriation Act, and/or Section 103 of the Marine Protection, Research, and Sanctuaries Act) is necessary for the project. For Section 106 review, cultural resources must be identified and then evaluated using NRHP eligibility criteria.

Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe that meet the NRHP criteria (36 CFR 800.16(l)).

To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP.

For projects involving a federal agency, cultural resource significance is evaluated in terms of eligibility for listing in the NRHP. For a property to be considered for inclusion in the NRHP, it must be at least 50 years old and meet the criteria for evaluation set forth in 36 CFR 60.4, as follows:

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 design, setting, materials, workmanship, feeling, and association and

(a) That are associated with events that have made a significant contribution to the broad patterns of our history; or

(b) That are associated with the lives of persons significant in our past; or

(c) That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master or that possess high artistic values or that represent a significant and distinguishable entity whose components may lack individual distinction; or
(d) That have yielded, or may be likely to yield, information important in prehistory or history.

If a particular resource meets one of these criteria, it is considered as an eligible historic property for listing in the NRHP. Among other criteria considerations, a property that has achieved significance within the last 50 years is not considered eligible for inclusion in the NRHP unless certain exceptional conditions are met.

CFR Title 36, Part 800 defines effects and adverse effects on historic properties as follows:

- **Section 800.9(a)** Criterion of Effect indicates that an undertaking has an effect on an historic property when the undertaking may alter characteristics of the property that may qualify it for inclusion in the National Register. For the purpose of determining effect, alteration of features of a property’s location, setting, or use may be relevant depending on a property’s significant characteristics.

- **Section 800.9(b)** Criteria of Adverse Effect indicates an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.  

There are seven examples of adverse effects identified in the Section 106 regulations that include, but are not limited to:

1. Physical destruction of or damage to all or part of the property.
2. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines.
3. Removal of the property from its historic location.
4. Change of the character of the property’s use or of physical features within the property’s setting that contribute to its historic significance.
5. Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property’s significant historic features.
6. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization.
7. Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.

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3 36 CFR 800.5
4 36 CFR 800.5(a)(2)
Area of Potential Effects

The APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR 800.16[d]).

To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP. In complying with the regulations of Section 106, 36 CFR 800, the APE for the proposed Project is defined by USACE as consisting of a permit area (Figure 2-11) that is considerably smaller than the proposed Project’s study area under CEQA. The permit area extends from Berth 212 to Berth 224, encompassing portions of the East Basin Channel and Cerritos Channel. It also includes the cranes associated with the individual berths and approximately 100 feet of the landside wharves.

There are no historic resources over 45 years of age located within the permit area. However, the Vincent Thomas Bridge, which was previously identified as eligible for listing in the NRHP, is located just outside of the permit area, and potential indirect impacts must be evaluated as part of this EIS/EIR.

Ethnographic Resources

The proposed Project or alternatives would not be on federal land; therefore, no federal legislation applies.

Paleontological Resources

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

3.4.3.2 State Regulations

Historical Resources

According to CEQA (PRC Section 21084.1), historical resources include any resource listed, or determined to be eligible for listing, in the CRHR. Properties listed in or determined eligible for listing in the NRHP, such as those identified in the Section 106 process, are automatically listed in the CRHR. Therefore, all “historic properties” under federal preservation law are automatically “historical resources” under state preservation law. Historical resources are also presumed to be significant if they are included in a local register of historical resources or identified as significant in a qualified historical resources survey. Section 15064.5 of the State CEQA Guidelines sets forth the criteria and procedures for determining significant historical resources and the potential effects of a project on such resources.

Section 15064.5 of the State CEQA Guidelines (14 CCR 3) sets forth the criteria and procedures for determining significant historical resources and the potential effects of a project on such resources.
The CEQA statute and guidelines provide five basic definitions as to what may qualify as a historical resource. Specifically, Section 21048.1 of the CEQA statute provides a description for the first three of these definitions, simplified as follows:

1) listed in the CRHR;

2) determined eligible for the CRHR by the State Historical Resources Commission; or

3) included in a local register of historical resources.

Section 15064.5 of the State CEQA Guidelines supplements the statute by providing two additional definitions of historical resources, which may be simplified in the following manner. An historical resource is a resource that is:

1) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g) [see footnote 4]; or

2) determined by a lead agency to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, this category includes resources that meet the criteria for listing on the CRHR (PRC Section 5024.1; 14 CCR 4852).

Generally, a resource is considered by the lead state agency to be “historically significant” if the resource meets the criteria for listing on the CRHR (CCR Title 14, Chapter 11.5, Section 4852), as follows:

Criteria for evaluating the significance of historical resources. An historical resource must be significant at the local state, or national level under one or more of the following four criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States,

2) It is associated with the lives of persons important to local, California, or national history;

3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Integrity. Integrity is the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Historical resources eligible for listing in the CRHR must meet one of the criteria of significance described in section 4852 (b) of this chapter and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.
Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance.

It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the NRHP, but they may still be eligible for listing in the CRHR. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

Special considerations:

(1) Moved buildings, structures, or objects. The Commission encourages the retention of historical resources on site and discourages the non-historic grouping of historic buildings into parks or districts. However, it is recognized that moving an historic building, structure, or object is sometimes necessary to prevent its destruction. Therefore, a moved building, structure, or object that is otherwise eligible may be listed in the CRHR if it was moved to prevent its demolition at its former location and if the new location is compatible with the original character and use of the historical resource. An historical resource should retain its historic features and compatibility in orientation, setting, and general environment.

(2) Historical resources achieving significance within the last fifty (50) years. In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than fifty (50) years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance.

(3) Reconstructed buildings. Reconstructed buildings are those buildings not listed in the CRHR under the criteria in Section 4853(b)(1), (2), or (3) of this chapter. A reconstructed building less than fifty (50) years old may be eligible if it embodies traditional building methods and techniques that play an important role in a community’s historically rooted beliefs, customs, and practices; e.g., a Native American roundhouse.

PRC Section 21084.1 provides that “[a] project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” Substantial adverse change is defined as the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

State CEQA Guidelines Sections 15064.5(b)(1) and (2) identify the threshold for a significant impact on a historical resource as the potential to cause a substantial adverse change in the significance of a historical resource. That means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. The significance of a historical resource is materially impaired when a project results in the following:
A. demolition or material alteration in an adverse manner of those physical characteristics of a historical resource that convey its historical significance and justify its inclusion in, or eligibility for inclusion in, the CRHR;

B. demolition or material alteration in an adverse manner of those physical characteristics that account for its inclusion in a local register of historical resources pursuant to PRC Section 5020.1(k) or its identification in a historical resources survey meeting the requirements of PRC Section 5024.1(g), unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

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

Archaeological Resources

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

PRC Section 21083.2 states that as part of conditions imposed for mitigation, a lead agency may make provisions for archaeological sites accidentally discovered during construction. These provisions may include an immediate evaluation of the find. If the find is determined to be a unique archaeological resource, contingency funding and a time allotment sufficient to allow recovering an archaeological sample or to employ one of the avoidance measures may be required under the provisions set forth in this section. Construction work may continue on other parts of the building site while archaeological mitigation takes place. Other state-level requirements for cultural resources management are written into PRC Chapter 1.7, Section 5097.5 (Archaeological, Paleontological, and Historical Sites).

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

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

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

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

Paleontological Resources

Paleontology is the study of life in past geologic time based on fossil plants and animals. A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized or funded projects (e.g., Antiquities Act of 1906 [16 USC 431–433], Federal-Aid Highway Act of 1935 [20 USC 78]). Under California law, paleontological resources are protected by CEQA; CCR Title 14, Division 3, Chapter 1, Sections 4307 and 4309; and PRC Section 5097.5.

PRC Section 5097.5 prohibits excavation or removal of any “vertebrate paleontological site or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.” Section 30244 requires reasonable mitigation of adverse impacts on paleontological resources from development on public land.

3.4.3.3 Local Regulations

Archaeological Resources

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

Specifically, Los Angeles Municipal Code Section 91.106.4.5 states that the Building Department:

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

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

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.

Port of Los Angeles Cultural Resource Policy

In May 2013, the Board of Harbor Commissioners adopted a policy to protect the historical, cultural, and architectural sites and structures at the Port. The Port of Los Angeles Cultural Resource Policy emphasizes that the Port take a leadership role to encourage and establish priorities for the identification, evaluation, and protection of these resources. The policy provides a comprehensive and proactive framework for the ongoing identification of historical resources and consideration for their preservation and reuse, and ensures that such resources are identified early in the planning process for proposed projects or potential leasing of vacant properties. The new policy incorporates practices to help identify resources to be protected, which includes:

- Preparing and maintaining an inventory of historical, cultural, and architectural resources of the Port.
- Completing a comprehensive survey to evaluate Port historical resources within two years of adoption of the policy and every five years thereafter. Buildings, objects, districts, and sites within the Port that are at least 50 years old will be evaluated; resources less than 50 years old that have exceptional importance may also be reviewed.
- Establishing priorities for preservation and adaptive reuse, where possible, of historical buildings, structures, districts, and other sites owned by or located on property owned by the LAHD. Staff will consider historical resources at the earliest stages of planning, and adaptive reuse in leasing transactions will be encouraged.

### 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 dredging, or ground disturbance activities, would adversely affect areas that contain significant built environment resources or could contain any archaeological sites listed in or eligible for listing in the NRHP or CRHR, or that are otherwise considered a unique or important archaeological resource, or contain any significant paleontological sites and/or resources under CEQA (City of Los Angeles
The NEPA analysis only considers impacts to cultural resources within the USACE permit area considered in the federal scope of analysis (See Figure 2-10 in Chapter 2, Project Description).

**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 NOP. These environmental conditions normally would constitute the baseline physical conditions by which the CEQA lead agency determines if an impact is significant. The NOP for the proposed Project was published in April 2013. For purposes of this Draft EIS/EIR, the CEQA baseline takes into account the throughput for the 12-month calendar year preceding NOP publication (January through December 2012) in order to provide a representative characterization of activity levels throughout the complete calendar year preceding release of the NOP. In 2012, the YTI Terminal encompassed approximately 185 acres under its long-term lease, supported 14 cranes (10 operating), and handled approximately 996,109 TEUs and 162 vessel calls. The CEQA baseline conditions are also described in Section 2.7.1 and summarized in Table 2-1.

The CEQA baseline represents the setting at a fixed point in time. The CEQA baseline differs from the No Project Alternative (Alternative 1) in that the No Project Alternative addresses what is likely to happen at the proposed project site over time, starting from the existing conditions. Therefore, the No Project Alternative allows for growth at the proposed project site that could be expected to occur without additional approvals, whereas the CEQA baseline does not.

**NEPA Baseline**

For purposes of this Draft EIS/EIR, the evaluation of significance under NEPA is defined by comparing the proposed Project or other alternative to the NEPA baseline. The NEPA baseline conditions are described in Section 2.7.2 and summarized in Table 2-1. The NEPA baseline condition for determining significance of impacts includes the full range of construction and operational activities the applicant could implement and is likely to implement absent a federal action, in this case the issuance of a USACE permit.

Unlike the CEQA baseline, which is defined by conditions at a point in time, the NEPA baseline is not bound by statute to a “flat” or “no-growth” scenario. Instead, the NEPA baseline is dynamic and includes increases in operations for each study year (2015, 2016, 2017, 2020, and 2026), which are projected to occur absent a federal permit. Federal permit decisions focus on direct impacts of the proposed Project to the aquatic environment, as well as indirect and cumulative impacts in the uplands determined to be within the scope of federal control and responsibility. Significance of the proposed Project or the alternatives under NEPA is defined by comparing the proposed Project or the alternatives to the NEPA baseline.

The NEPA baseline, for purposes of this Draft EIS/EIR, is the same as the No Federal Action Alternative. Under the No Federal Action Alternative (Alternative 2), no dredging, dredged material disposal, in-water pile installation, or crane installation/extension would occur. Expansion of the TICTF and extension of the crane rail would also not occur. The No Federal Action Alternative includes only backlands improvements consisting of slurry sealing, deep cold planning, asphalt concrete overlay, restriping, and removal, relocation, or modification of any underground conduits and...
pipes necessary to complete repairs. These activities do not change the physical or
operational capacity of the existing terminal.

The NEPA baseline assumes that by 2026 the terminal would handle up to approximately
1,692,000 TEUs annually, accommodate 206 annual ships calls at two berths, and be
occupied by 14 cranes (10 operating).

### 3.4.4.2 Thresholds of Significance

The criteria for determining the significance for cultural resources impacts are different
for CEQA and NEPA. As described below, the thresholds of significance are developed
from both state (CEQA) and federal (Section 106 of the NHPA) regulations resulting in
criteria for each.

The proposed Project or an alternative would have a significant impact on cultural
resources if it resulted in any of the conditions described below.

**CR-1:** Have a significant impact on built environment historical resources.

The *L.A. CEQA Thresholds Guide* provides specific thresholds of significance to address
potential impacts on cultural resources resulting from implementation of a project (City
of Los Angeles 2006). A project would normally have a significant impact on historical
resources if it would result in a substantial adverse change in the significance of an
historical resource. A substantial adverse change in significance occurs if a project
involves:

- demolition of a significant resource;
- relocation that does not maintain the integrity and significance of a significant
  resource;
- conversion, rehabilitation, or alteration of a significant resource which does not
  conform to the Secretary of the Interior’s Standards for Rehabilitation and
  Guidelines for Rehabilitating Historic Buildings; or
- construction that reduces the integrity or significance of important resources on
  the site or in the vicinity.

Under NEPA, a significant impact on a historic resource would occur if it would result in
an adverse effect on a built environment resource, and it would alter, directly or
indirectly, any of the characteristics of an historic property that qualify the property for
inclusion in the NRHP.

**CR-2:** Cause a substantial adverse change in the significance of an archaeological or
ethnographic resource.

The *L.A. CEQA Thresholds Guide* provides that an impact on an archaeological or
ethnographic resource would be considered significant if it would disturb, damage, or
degrade an archaeological or ethnographic resource or its setting that is found to be
important under the criteria of CEQA because it:

- is associated with an event or person of recognized importance in California or
  American history or of recognized scientific importance in prehistory;
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- can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions;
- has a special or particular quality, such as the oldest, best, largest, or last surviving example of its kind;
- is at least 100 years old and possesses substantial stratigraphic integrity; and
- involves important research questions that historical research has shown can be answered only with archaeological methods.

Under NEPA, an adverse effect on known or unknown prehistoric and/or historic archaeological or ethnographic resources would be considered significant if it would alter, directly or indirectly, any of the characteristics of an historic property that qualify the property for inclusion in the NRHP.

CR-3: Result in the permanent loss of, or loss of access to, a significant paleontological resource.6

3.4.4.3 Impact Determination

Proposed Project

Impact CR-1: The proposed Project would not have a significant impact on built environment historical resources.

One property in the proposed project study area is over 45 years of age, the Vincent Thomas Bridge, which was previously identified as eligible for listing in the NRHP. Several of the concrete support columns at the eastern end of the bridge are within the proposed project study area. The proposed Project would not directly or indirectly alter the distinctive physical or historical characteristics of the Vincent Thomas Bridge, nor would it alter its integrity of location, design, materials, workmanship, feeling, or association.

CEQA Impact Determination

There would be no direct or indirect impact on the Vincent Thomas Bridge because the proposed Project does not include any elements that physically interact with the structure. The proposed Project would not involve any of the following:

- demolition of a significant resource;
- relocation that does not maintain the integrity and significance of a significant resource;

5 Although the CEQA criteria state that “important archaeological resources” are those which are at least 100 years old, the CRHR provides that any site found eligible for nomination to the National Register will automatically be included within the CRHR and be subject to all protections thereof. The National Register requires that a site or structure be at least 50 years old.
6 Although not a consideration under Section 106, the potential to impact paleontological resources is still analyzed under the NEPA analysis.
conversion, rehabilitation, or alteration of a significant resource which does not conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; or

construction that reduces the integrity or significance of important resources on the site or in the vicinity.

The proposed project would be consistent with the LAHD Cultural Resource Policy and would not involve the destruction of built historic, architectural, or cultural resources within the Port. Therefore, no impacts would occur.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

No impacts would occur.

**NEPA Impact Determination**

The permit area does not contain any significant historic resources; however, the Vincent Thomas Bridge is located adjacent to the permit area, and indirect effects are considered. The proposed Project would not directly or indirectly alter the distinctive physical or historical characteristics of the Vincent Thomas Bridge, nor would it alter its integrity of location, design, materials, workmanship, feeling, or association. The proposed Project would not affect any historic resources in accordance with any of the seven examples of adverse effects identified in the Section 106 regulations listed in Section 3.4.3.1, “Federal Regulations,” above. In summary, the proposed Project does not involve any activities that would:

(i) result in physical destruction or damage to the Vincent Thomas Bridge;

(ii) alter the Vincent Thomas Bridge in any manner inconsistent with the Secretary’s Standards;

(iii) remove the Vincent Thomas Bridge from its historic location.

(iv) change the character or use of the Vincent Thomas Bridge within the setting that contributes to its historic significance;

(v) introduce such elements that diminish the integrity of the significant historic features of the Vincent Thomas Bridge;

(vi) cause the deterioration of the Vincent Thomas Bridge; or

(vii) transfer, lease, or sell the property out of federal ownership or control.

Therefore, no impacts would occur.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

No impacts would occur.
**Impact CR-2: The proposed Project would not cause a substantial adverse change in the significance of an archaeological or ethnographic resource.**

No archaeological or ethnographic resources are known to exist in the proposed project area. There is an extremely low potential for buried historic-period cultural resources to be found during construction of the proposed Project because most of the proposed project area is underlain with imported and modern fill material dredged from the harbor. The proposed project area on land has been highly disturbed by recent modern filling and construction in the 1980s and 1990s. In addition, the potential to encounter cultural resources during dredging is also extremely low, since the channels in the Project that would be dredged have been dredged in the past to form Terminal Island. As noted above, recent 1980s and 1990s-period dredging near the Project area removed the wreck of the ferryboat *Sierra Nevada*, and this type of underwater work has been conducted in the channels adjacent to the Project. Because the operation of the proposed Project is not likely to involve subsurface disturbance, no impact on archaeological, ethnographic, or paleontological resources is anticipated during operations.

**CEQA Impact Determination**

Based on the analysis above, the proposed Project would not disturb, damage, or degrade an archaeological or ethnographic resource or its setting that is found to be important under the criteria of CEQA. Based on this analysis, proposed construction activities would result in less-than-significant impacts on archaeological and ethnographic resources, and a less-than-significant impact on in-water cultural resources.

**Mitigation Measures**

No mitigation is required. Although the potential for impacts on unknown archaeological and ethnographic resources is remote, SC CR-1 would be applied as a standard condition of approval.

**SC CR-1: Stop Work in the Area if Prehistoric and/or Archaeological Resources are Encountered.** In the unlikely event that any prehistoric artifact of historic period materials or bone, shell, or nonnative stone is encountered during construction, work shall be immediately stopped, the area secured, and work relocated to another area until the found materials can be assessed by a qualified archaeologist. Examples of such cultural materials might include historical trash pits containing bottles and/or ceramics; or structural remains or concentrations of grinding stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; and flakes of stone not consistent with the immediate geology such as obsidian or fused shale. The contractor shall stop construction within 30 feet of the exposure of these finds until a qualified archaeologist can be retained by LAHD to evaluate the find (see 36 CFR 800.11.1 and 14 CCR 15064.5(f)). If the resources are found to be significant, they shall be avoided or shall be mitigated consistent with Section 106 or State Historic Preservation Officer Guidelines.

**Residual Impacts**

Impacts would be less than significant.
NEPA Impact Determination

No known prehistoric and/or historic archaeological or ethnographic resources are located within the permit area, and the proposed Project would not alter, directly or indirectly, any of the characteristics of archaeological or ethnographic resources that qualify the property for inclusion in the NRHP. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation is required. Although the potential for impacts on unknown archaeological and ethnographic resources is remote, SC CR-1 would be applied as a standard condition of approval.

Residual Impacts

Impacts would be less than significant.

Impact CR-3: The proposed Project would not result in the permanent loss of, or loss of access to, a significant paleontological resource.

The geologic formation within the proposed project area consists of imported/modern fill material (i.e., dredged material) constructed in the early twentieth century. Any soil excavation would consist of imported soils in a previously disturbed area, and therefore would not be expected to adversely impact unique paleontological resources or geologic features. Given that no paleontological resources have been identified within the proposed project area during previous investigations, and considering the origin of the soils underlying the proposed project site, the potential for impact on paleontological resources is considered to be extremely low in areas requiring trenching or other activities that may disturb intact surface soils. In addition, the potential to encounter sensitive paleontological resources during dredging in the ancestral San Pedro Bay is also extremely low, since sediments in the Bay are Holocene age silts and sands deposited by the Los Angeles River. Additionally, the channels that will be dredged have been dredged in the past to form Terminal Island.

CEQA Impact Determination

The proposed Project is not expected to disturb or result in the permanent loss of or access to significant paleontological resources. No paleontological resources have been previously identified within the project area, and the potential to encounter fossils or other resources is remote due to the majority of the site being constructed on artificial fill materials that have been previously disturbed. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.
NEPA Impact Determination

Although the proposed Project would involve more excavation than the NEPA baseline, the geologic formation within the proposed project area consists of imported/modern fill material (i.e., dredged material) constructed in the early twentieth century. Therefore, the proposed Project would not be expected to disturb or result in the permanent loss of or access to significant paleontological resources or unique geologic features.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

Alternative 1 – No Project

Under Alternative 1, no LAHD action or federal action would occur. The No Project Alternative would not preclude future improvements to the proposed project site. However, any future changes in use or new improvements with the potential to significantly impact the environment would need to be analyzed in a separate environmental document.

Impact CR-1: Alternative 1 would not have a significant impact on built environment historical resources.

One property over 45 years of age, the Vincent Thomas Bridge, is located within the study area and was previously identified as eligible for listing in the NRHP. There would be no direct or indirect impact on the Vincent Thomas Bridge associated with Alternative 1 because no construction would occur, and only an incremental increase in container throughput would occur up to the existing capacity of the terminal.

CEQA Impact Determination

Alternative 1 would not involve construction activities and would not directly or indirectly affect any existing built historical resources. Alternative 1 would be consistent with the LAHD Cultural Resource Policy and would not involve the destruction of built historic, architectural, or cultural resources within the Port. As a result, Alternative 1 would result in no impacts related to substantial adverse changes in the significance of the historical resource.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 2 in this document).
Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Impact CR-2: Alternative 1 would not cause a substantial adverse change in the significance of an archaeological or ethnographic resource.

Alternative 1 would not involve any construction activities, and only an incremental increase in container throughput would occur up to the existing capacity of the terminal. No existing significant archaeological or ethnographic resources are located within the project area.

CEQA Impact Determination

Alternative 1 would not involve any construction activities, and would not cause a substantial adverse change in the significance of an archaeological or ethnographic resource. As a result, Alternative 1 would result in no impacts related to substantial adverse changes in the significance of an archaeological or ethnographic resource.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 2 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Impact CR-3: Alternative 1 would not result in the permanent loss of, or loss of access to, a significant paleontological resource.

Alternative 1 would not involve any construction activities, and only an incremental increase in container throughput would occur up to the existing capacity of the terminal. No existing paleontological resources are located within the project area.
CEQA Impact Determination

Alternative 1 would not involve any construction activities and would not cause the permanent loss, or loss of access to, a significant paleontological resource. As a result, Alternative 1 would result in no impacts related to the permanent loss, or loss of access to, a significant paleontological resource.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (Alternative 2 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

An impact determination is not applicable.

Alternative 2 – No Federal Action

The No Federal Action Alternative would be the same as the NEPA baseline and would include only the activities and impacts likely to occur absent USACE approval. This alternative includes the activities that would occur absent a USACE permit and could include improvements that require a local permit. Absent a USACE permit, no dredging, dredged material disposal, in-water pile installation, or crane installation/extension would occur. Expansion of the TICTF and extension of the crane rail also would not occur. The No Federal Action alternative includes only backlands improvements consisting of slurry sealing; deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or modification of any underground conduits and pipes necessary to complete repairs. These activities would not change the capacity of the existing terminal.

Impact CR-1: Alternative 2 would not have a significant impact on built environment historical resources.

One property over 45 years of age, the Vincent Thomas Bridge, is located within the study area, which was previously identified as eligible for listing in the NRHP. There would be no direct or indirect impact on the Vincent Thomas Bridge associated with Alternative 2 because only minor improvements in the backland portion of the terminal would occur under this alternative.

CEQA Impact Determination

There would be no direct or indirect impact on the Vincent Thomas Bridge associated with Alternative 2 because only minor improvements in the backland portion of the
terminal that would not physically interact with the structure would occur under this alternative. As a result, Alternative 2 would not cause a substantial adverse change in the significance of the historical resource and would not involve any of the following:

- demolition of a significant resource;
- relocation that does not maintain the integrity and significance of a significant resource;
- conversion, rehabilitation, or alteration of a significant resource that does not conform to the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings; or
- construction that reduces the integrity or significance of important resources on the site or in the vicinity.

Alternative 2 would be consistent with the LAHD Cultural Resource Policy and would not involve the destruction of built historic, architectural, or cultural resources within the Port. Therefore, no impacts would occur.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

No impacts would occur.

**NEPA Impact Determination**

Alternative 2 would include only backlands improvements consisting of slurry sealing; deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or modification of any underground conduits and pipes necessary to complete repairs. No construction of in-water or over-water features would occur under Alternative 2. The No Federal Action Alternative would involve the same construction activities as would occur under the NEPA baseline. Therefore, there would be no incremental difference between Alternative 2 and the NEPA baseline. As a consequence, Alternative 2 would result in no impact under NEPA.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

No impacts would occur.

**Impact CR-2: Alternative 2 would not cause a substantial adverse change in the significance of an archaeological or ethnographic resource.**

No archaeological or ethnographic resources are known to exist in the proposed project area. There is an extremely low potential for buried historic-period cultural resources to be found during construction of Alternative 2 because most of the proposed project area is underlain with imported and modern fill material dredged from the harbor and because Alternative 2 involves only minor ground disturbance. Additionally, the proposed project
area has been highly disturbed by recent modern filling and construction in the 1980s and 1990s.

**CEQA Impact Determination**

Based on the analysis above, proposed construction activities under Alternative 2 would result in less-than-significant impacts on archaeological and ethnographic resources.

**Mitigation Measures**

No mitigation is required. Although the potential for impacts on unknown archaeological and ethnographic resources is remote, SC CR-1 would be applied as a standard condition of approval.

**Residual Impacts**

Impacts would be less than significant.

**NEPA Impact Determination**

Alternative 2 would include only backlands improvements consisting of slurry sealing; deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or modification of any underground conduits and pipes necessary to complete repairs. No construction of in-water or over-water features would occur under Alternative 2. The No Federal Action Alternative would involve the same construction activities as would occur under the NEPA baseline. Therefore, there would be no incremental difference between Alternative 2 and the NEPA baseline. As a consequence, Alternative 2 would result in no impact under NEPA.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

No impacts would occur.

**Impact CR-3: Alternative 2 would not result in the permanent loss of, or loss of access to, a significant paleontological resource.**

The geologic formation within the proposed project area consists of imported/modern fill material (i.e., dredged material) constructed in the early twentieth century. Any soil excavation would consist of imported soils in a previously disturbed area, and therefore would not be expected to adversely impact unique paleontological resources or geologic features. Given that no paleontological resources have been identified within the proposed project area during previous investigations, and considering the origin of the soils underlying the proposed project site, the potential for impact on paleontological resources is considered to be extremely low in areas requiring trenching or other activities that may disturb intact surface soils. In addition, the potential to encounter sensitive paleontological resources during dredging in the ancestral San Pedro Bay is also extremely low, since sediments in the Bay are Holocene age silts and sands deposited by the Los Angeles River. Additionally, the channels that will be dredged have been dredged in the past to form Terminal Island.
CEQA Impact Determination

Alternative 2 is not expected to disturb or result in the permanent loss of or access to significant paleontological resources. No paleontological resources have been previously identified within the project area, and the potential to encounter fossils or other resources is remote due to the majority of the site being constructed on artificial fill materials that have been previously disturbed. Therefore, Alternative 2 would not be expected to adversely impact unique paleontological resources.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 2 would include only backlands improvements consisting of slurry sealing; deep cold planing; asphalt concrete overlay; restriping; and removal, relocation, or modification of any underground conduits and pipes necessary to complete repairs. No construction of in-water or over-water features would occur under Alternative 2. The No Federal Action Alternative would involve the same construction activities as would occur under the NEPA baseline. Therefore, there would be no incremental difference between Alternative 2 and the NEPA baseline. As a consequence, Alternative 2 would result in no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Alternative 3 – Reduced Project: Improve Berths 217–220 Only

This alternative includes all components of the proposed Project except dredging and pile driving at Berths 214–216. The following components of the proposed Project are unchanged under the Reduced Project Alternative:

- modifying up to six existing cranes;
- replacing up to four existing non-operating cranes;
- dredging 6,000 cy from a depth of -45 to -47 feet MLLW (with an additional 2 feet of overdredge depth, for a total depth of -49 feet MLLW), and installing 1,200 linear feet of sheet piles and king piles to support and stabilize the existing wharf structure at Berths 217–220;
- disposing of dredged material at LA-2, the Berths 243–245 CDF, or another approved upland location;
- extending the existing 100-foot gauge landside crane rail through Berths 217–220;
performing ground repairs and maintenance activities in the backlands area; and
expanding the TICTF on-dock rail by adding a single rail loading track.

Under this alternative, there would be three operating berths after construction, similar to
the proposed Project, but Berths 214–216 would remain at their existing depth. This
alternative would require less dredging (by approximately 21,000 cy) and pile driving
and a shorter construction period than the proposed Project. Based on the throughput
projections, this alternative is expected to operate at its capacity of approximately
1,913,000 TEUs by 2026, similar to the proposed Project. However, while the terminal
could handle similar levels of cargo, the reduced project alternative would not achieve the
same level of efficient operations as achieved by the proposed Project. This alternative
would not accommodate the largest vessels (13,000 TEUs). The depth achieved at Berths
217–220 would only be capable of handling vessels up to 11,000 TEUs, requiring
additional vessels to call on the terminal to meet future growth projections up to the
capacity of the terminal. Therefore, under this alternative, 232 vessels would call on the
terminal in 2020 and 2026, compared to 206 vessels for the proposed Project.
Additionally, because of the higher number of annual vessel calls, this alternative would
result in a maximum of five peak day ship calls (over a 24-hour period) compared to four
for the proposed Project.

**Impact CR-1: Alternative 3 would not have a significant impact on**
**built environment historical resources.**

One property over 45 years of age, the Vincent Thomas Bridge, is located within the
study area and was previously identified as eligible for listing in the NRHP.
Alternative 3 would not directly or indirectly alter the distinctive physical or historical
characteristics of the Vincent Thomas Bridge, nor would it alter its integrity of location,
design, materials, workmanship, feeling, or association.

**CEQA Impact Determination**

There would be no direct or indirect impact on the Vincent Thomas Bridge because
Alternative 3 does not include any elements that physically interact with the structure.
Alternative 3 would not involve any of the following:

- demolition of a significant resource;
- relocation that does not maintain the integrity and significance of a significant
  resource;
- conversion, rehabilitation, or alteration of a significant resource that does not
  conform to the Secretary of the Interior’s Standards for Rehabilitation and
  Guidelines for Rehabilitating Historic Buildings; or
- construction that reduces the integrity or significance of important resources on
  the site or in the vicinity.

Alternative 3 would be consistent with the LAHD Cultural Resource Policy and would
not involve the destruction of built historic, architectural, or cultural resources within the
Port. Therefore, no impacts would occur.

**Mitigation Measures**

No mitigation is required.
Residual Impacts

No impacts would occur.

NEPA Impact Determination

The permit area does not contain any significant historic resources; however, the Vincent Thomas Bridge is adjacent to the permit area, and indirect effects are considered. Like the proposed Project, Alternative 3 would not directly or indirectly alter the distinctive physical or historical characteristics of the Vincent Thomas Bridge, nor would it alter its integrity of location, design, materials, workmanship, feeling, or association. Alternative 3 would not affect any historic resources in accordance with any of the seven examples of adverse effects identified in the Section 106 regulations listed in Section 3.4.3.1, “Federal Regulations,” above. Therefore, no impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact CR-2: Alternative 3 would not cause a substantial adverse change in the significance of an archaeological or ethnographic resource.

No archaeological or ethnographic resources are known to exist in the proposed project area. There is an extremely low potential for buried historic-period cultural resources to be found during construction of Alternative 3 because most of the proposed project area is underlain with imported and modern fill material dredged from the harbor. Additionally, the project area has been highly disturbed by recent filling and construction in the 1980s and 1990s. In addition, because the operation of Alternative 3 is not likely to involve subsurface disturbance, no impact on archaeological, ethnographic, or paleontological resources is anticipated during operations.

CEQA Impact Determination

Based on the analysis above, construction activities under Alternative 3 would result in less-than-significant impacts on archaeological and ethnographic resources, and a less-than-significant impact on in-water cultural resources under CEQA.

Mitigation Measures

No mitigation is required. Although the potential for impacts on unknown archaeological and ethnographic resources is remote, SC CR-1 would be applied as a standard condition of approval.

Residual Impacts

Impacts would be less than significant.
NEPA Impact Determination

No known prehistoric and/or historic archaeological or ethnographic resources are located within the permit area, and Alternative 3 would not alter, directly or indirectly, any of the characteristics of archaeological or ethnographic resources that qualify the property for inclusion in the NRHP. Therefore, impacts would be less than significant.

Mitigation Measures

No mitigation is required. Although the potential for impacts on unknown archaeological and ethnographic resources is remote, SC CR-1 would be applied as a standard condition of approval.

Residual Impacts

Impacts would be less than significant.

Impact CR-3: Alternative 3 would not result in the permanent loss of, or loss of access to, a significant paleontological resource.

The geologic formation within the proposed project area consists of imported/modern fill material (i.e., dredged material) constructed in the early twentieth century. Any soil excavation would occur within recently placed soils in a previously disturbed area and therefore would not be expected to adversely impact unique paleontological resources or geologic features. Given that no paleontological resources have been identified within the proposed project area during previous investigations, and considering the origin of the soils underlying the proposed project site, the potential for impacting paleontological resources is considered to be extremely low in areas requiring trenching or other activities that may disturb intact surface soils. In addition, the potential to encounter sensitive paleontological resources during dredging in the ancestral San Pedro Bay is also extremely low, since sediments in the Bay are Holocene age silts and sands deposited by the Los Angeles River. Additionally, the channels that will be dredged have been dredged in the past to form Terminal Island.

CEQA Impact Determination

Alternative 3 is not expected to disturb or result in the permanent loss of or access to significant paleontological resources. No paleontological resources have been previously identified within the project area, and the potential to encounter fossils or other resources is remote due to the majority of the site being constructed on artificial fill materials that have been previously disturbed. Based on this analysis, there would be a less-than-significant impact on paleontological resources under CEQA for Alternative 3.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Although Alternative 3 would involve more excavation than the NEPA baseline, the geologic formation within the proposed project area consists of imported/modern fill material constructed in the early twentieth century. Any soil excavation would occur within recently placed soils in a previously disturbed area and therefore would not be expected to adversely impact unique paleontological resources or geologic features. Given that no paleontological resources have been identified within the proposed project area during previous investigations, and considering the origin of the soils underlying the proposed project site, the potential for impacting paleontological resources is considered to be extremely low in areas requiring trenching or other activities that may disturb intact surface soils. In addition, the potential to encounter sensitive paleontological resources during dredging in the ancestral San Pedro Bay is also extremely low, since sediments in the Bay are Holocene age silts and sands deposited by the Los Angeles River. Additionally, the channels that will be dredged have been dredged in the past to form Terminal Island.
material (i.e., dredged material) constructed in the early twentieth century. Therefore, Alternative 3 would not be expected to disturb or result in the permanent loss of or access to significant paleontological resources or unique geologic features.

**Mitigation Measures**

No mitigation is required.

**Residual Impacts**

Impacts would be less than significant.

### 3.4.4.4 Summary of Impact Determinations

Table 3.4-1 summarizes the CEQA and NEPA impact determinations of the proposed Project and alternatives related to cultural resources, as described in the detailed discussion above. This table is meant to allow easy comparison between the potential impacts of the proposed Project and alternatives with respect to this resource. Identified potential impacts may be based on federal, state, or City significance criteria; LAHD criteria; and the scientific judgment of the report preparers.

For each impact threshold, the table describes the impact, notes the NEPA and CEQA impact determinations, describes any applicable mitigation measures, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table.
Table 3.4-2: Summary Matrix of Potential Impacts and Mitigation Measures for Cultural Resources Associated with the Proposed Project and Alternatives

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Environmental Impacts</th>
<th>Impact Determination</th>
<th>Mitigation Measures</th>
<th>Impacts after Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Project</td>
<td>CR-1: The proposed Project would not have a significant impact on built environment historical resources.</td>
<td>CEQA: No impact</td>
<td>No mitigation is required.</td>
<td>CEQA: No impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEPA: No impact</td>
<td></td>
<td>NEPA: No impact</td>
</tr>
<tr>
<td></td>
<td>CR-2: The proposed Project would not cause a substantial adverse change in the significance of an archaeological or ethnographic resource.</td>
<td>CEQA: Less than significant</td>
<td>No mitigation is required; however, SC CR-1 would be applied as a standard condition of approval</td>
<td>CEQA: Less than significant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEPA: Less than significant</td>
<td></td>
<td>NEPA: Less than significant</td>
</tr>
<tr>
<td></td>
<td>CR-3: The proposed Project would not result in the permanent loss of, or loss of access to, a significant paleontological resource.</td>
<td>CEQA: Less than significant</td>
<td>No mitigation is required.</td>
<td>CEQA: Less than significant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEPA: Less than significant</td>
<td></td>
<td>NEPA: Less than significant</td>
</tr>
<tr>
<td>Alternative 1 – No Project</td>
<td>CR-1: Alternative 1 would not have a significant impact on built environment historical resources.</td>
<td>CEQA: No impact</td>
<td>No mitigation is required.</td>
<td>CEQA: No impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEPA: Not applicable</td>
<td>Mitigation not applicable</td>
<td>NEPA: Not applicable</td>
</tr>
<tr>
<td></td>
<td>CR-2: Alternative 1 would not cause a substantial adverse change in the significance of an archaeological or ethnographic resource.</td>
<td>CEQA: No impact</td>
<td>No mitigation is required.</td>
<td>CEQA: No impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEPA: Not applicable</td>
<td>Mitigation not applicable</td>
<td>NEPA: Not applicable</td>
</tr>
<tr>
<td></td>
<td>CR-3: Alternative 1 would not result in the permanent loss of, or loss of access to, a significant paleontological resource.</td>
<td>CEQA: No impact</td>
<td>No mitigation is required.</td>
<td>CEQA: No impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEPA: Not applicable</td>
<td>Mitigation not applicable</td>
<td>NEPA: Not applicable</td>
</tr>
</tbody>
</table>
Table 3.4-2: Summary Matrix of Potential Impacts and Mitigation Measures for Cultural Resources Associated with the Proposed Project and Alternatives

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Environmental Impacts</th>
<th>Impact Determination</th>
<th>Mitigation Measures</th>
<th>Impacts after Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative 2 – No Federal Action</td>
<td>CR-1: Alternative 2 would not have a significant impact on built environment historical resources.</td>
<td>CEQA: No impact</td>
<td>No mitigation is required.</td>
<td>CEQA: No impact</td>
</tr>
<tr>
<td></td>
<td>CR-2: Alternative 2 would not cause a substantial adverse change in the significance of an archaeological or ethnographic resource.</td>
<td>CEQA: Less than significant</td>
<td>No mitigation is required; however, SC CR-1 would be applied as a standard condition of approval.</td>
<td>CEQA: Less than significant</td>
</tr>
<tr>
<td></td>
<td>CR-3: Alternative 2 would not result in the permanent loss of, or loss of access to, a significant paleontological resource.</td>
<td>CEQA: Less than significant</td>
<td>No mitigation is required.</td>
<td>CEQA: Less than significant</td>
</tr>
<tr>
<td>Alternative 3 – Reduced Project: Improve Berths 217–220 Only</td>
<td>CR-1: Alternative 3 would not have a significant impact on built environment historical resources.</td>
<td>CEQA: No impact</td>
<td>No mitigation is required.</td>
<td>CEQA: No impact</td>
</tr>
<tr>
<td></td>
<td>CR-2: Alternative 3 would not cause a substantial adverse change in the significance of an archaeological or ethnographic resource.</td>
<td>CEQA: Less than significant</td>
<td>No mitigation is required; however, SC CR-1 would be applied as a standard condition of approval.</td>
<td>CEQA: Less than significant</td>
</tr>
<tr>
<td></td>
<td>CR-3: Alternative 3 would not result in the permanent loss of, or loss of access to, a significant paleontological resource.</td>
<td>CEQA: Less than significant</td>
<td>No mitigation is required.</td>
<td>CEQA: Less than significant</td>
</tr>
</tbody>
</table>
3.4.4.5 Mitigation Monitoring

In the absence of significant impacts, mitigation measures are not required. However, the following standard condition of approval (discussed under Impact CR-1 in Section 3.4.4.3) has been added to the proposed Project and Alternatives 2 and 3.

- **SC CR-1:** Stop Work in the Area if Prehistoric and/or Archaeological Resources are Encountered. In the unlikely event that any prehistoric artifact of historic period materials or bone, shell, or nonnative stone is encountered during construction, work shall be immediately stopped, the area secured, and work relocated to another area until the found materials can be assessed by a qualified archaeologist. Examples of such cultural materials might include historical trash pits containing bottles and/or ceramics; or structural remains or concentrations of grinding stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; and flakes of stone not consistent with the immediate geology such as obsidian or fused shale. The contractor shall stop construction within (30 feet) of the exposure of these finds until a qualified archaeologist can be retained by LAHD to evaluate the find (see 36 CFR 800.11.1 and 14 CCR 15064.5(f)). If the resources are found to be significant, they shall be avoided or shall be mitigated consistent with Section 106 or State Historic Preservation Officer Guidelines.

3.4.5 Significant Unavoidable Impacts

No significant unavoidable impacts on archaeological, ethnographic, and paleontological resources would occur during construction or operation at the proposed project site under either the proposed Project or any alternative.