

4.4 Cultural and Tribal Cultural Resources

This section assesses the potential for the Project to result in significant adverse impacts on cultural and tribal cultural resources (including architectural resources, prehistoric and historic-era archaeological resources, human remains, and tribal cultural resources). The section first includes a description of the existing environmental setting as it relates to these types of resources, and provides a regulatory framework that discusses applicable federal, state, and local regulations. The section then includes an evaluation of potential significant impacts of the proposed Project on cultural and tribal cultural resources, and identifies feasible mitigation measures to ensure potentially significant impacts associated with these resources would be avoided or minimized to the greatest extent feasible.

This section also analyzes the Maritime Reservation Scenario, focused on environmental conditions, regulations, impacts and mitigation measures that are different from those identified for the proposed Project.

To support the analysis in this Draft EIR, ESA conducted surveys and performed archival research to determine if historical resources are present on the Project site and within a larger Study Area (see **Figure 4.4-1**). The Study Area was defined by considering the geographic area within which the Project may directly or indirectly impact the character or use of significant cultural resources. The Project site is the area where project construction activities would occur and activities such as ground disturbance, demolition, and project construction could directly, physically impact historical resources and is primarily contained within the Howard Terminal parcel. The Study Area includes areas that could be potentially impacted by visual, setting changes or vibration from construction on the Project site, and generally includes those parcels located within a half-block of the Project site.

ESA staff conducted site surveys on February 1 and 6, 2019. ESA staff conducted a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) on December 5, 2018 (File No. 18-1077). The records search included a review of previous surveys and studies, records, and historic maps and aerial imagery on file at the NWIC for the Project site and a surrounding 0.25-mile radius. It also included a review of the State of California Office of Historic Preservation Historic Properties Directory with summary information from the National Register of Historic Places (National Register), Registered California State Landmarks, and California Historic Points of Interest; the Archaeological Determinations of Eligibility; and the California Inventory of Historical Resources. The purpose of the records search was to (1) determine whether known cultural resources have been recorded within or adjacent to the Project site, and (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites. Additional sources of information included the City of Oakland's zoning map and database, Oakland Cultural Heritage Survey and additional city surveys, the Port of Oakland's Board of Commissioners Meeting Minutes Archive, the Oakland Tribune archive, and archival material held at the Oakland Public Library's History Room.

- 1 – Crane X422
- 5 – Lightship Relief (Water St)
- 6 – USS Potomac (530 Water St)
- 7 – 93 Linden St
- 8 – 110 Linden St
- 9 – 101 Myrtle St
- 10 – 737 2nd St
- 11 – 101 Jefferson St
- 12 – 601-645 Embarcadero
- 13 – 205 Washington St
- 14 – 215 Washington St
- 15 – 522 2nd St
- 16 – 221 Washington St
- 17 – 301 Washington St
- 18 – 520 3rd St
- 19 – 315 Washington St
- 20 – 480 3rd St
- 21 – 380 Washington / 475 4th St
- 22 – 499 5th St
- 25 – 718-726 Washington St
- 26 – 489 8th St
- 27 – 736 Washington St
- 28 – 483 9th St
- 29 – 826 Washington/499 9th St
- 30 – 924 Washington St / 538 9th St
- 31 – 493 10th St
- 32 – 902 Washington St
- 33 – 827 Washington St
- 34 – 512 8th St
- 35 – 809-815 Washington
- 36 – 801 Washington St
- 37 – 727-735 Washington St
- 38 – 509-513 8th St
- 39 – 725 Washington St
- 40 – 518-524 7th St
- 41 – 717-719 Washington St

- Project Site Boundary
- Study Area
- Old Oakland API
- Southern Pacific Railroad API
- PG&E Substation C API



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SOURCE: ESA, 2019; Google Earth, 2019

Oakland Waterfront Ballpark District Project

Figure 4.4-1
Historic Resources



The Port of Oakland also submitted a historic analysis of Crane X-422. A reconnaissance site survey was completed on June 13, 2019. As part of the survey, alterations and modifications to the structure were identified to assess changes to its physical and historic integrity, based on a review of historic plans, photographs, and images. Field notes and photographs documenting the structure and setting were completed. Primary and secondary source research on Crane X-422 and the overall history of the Port was also completed. Research and repository sources include Port archives; Port crane department records; historic newspaper databases; City of Oakland library; journals and professional publications and databases; Sanborn Fire Insurance Maps; historic maps and aerial photograph websites; and discussions with Port staff. Information that was reviewed included (but is not limited to) various reports and studies, trade literature and publications, government publications, historic plans and specifications, Port Commissioner meeting minutes, Port newsletters, and newspaper articles.

4.4.1 Environmental Setting

Terminology used in this section includes the terms defined below:

Architectural resources include buildings, structures, objects, and historic districts. Residences, cabins, barns, lighthouses, military-related features, industrial buildings, and bridges are examples of architectural resources. The CEQA Guidelines define an historical resource as: (1) a resource in the California Register of Historic Resources (California Register); (2) a resource included in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

Archaeological resources consist of prehistoric and historic-era archaeological resources. Prehistoric archaeological resources consist of village sites, temporary camps, lithic scatters, roasting pits/hearths, milling features, petroglyphs, rock features, and burials. Associated artifacts include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs). Historic-era archaeological resources include townsites, homesteads, agricultural or ranching features, mining-related features, refuse concentrations, and features or artifacts associated with early military and industrial land uses. Associated artifacts include stone, concrete, or adobe footings and walls; artifact filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If a lead agency determines that an archaeological site is an historical resource, the provisions of PRC Section 21084.1 and CEQA Guidelines Section 15064.5 would apply. If an archaeological site does not meet the CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083.2 regarding unique archaeological resources.

Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing, on the national, state, or local register of historical resources (PRC Section 21074[a][1]).

Archaeological Resources

Natural Setting and Geoarchaeological Review

The Project site is in the San Francisco Bay Area-Delta region, which hosts a diverse variety of natural communities ranging from the open waters of San Francisco Bay, to salt and brackish marshes, to chaparral and oak woodlands. The climate is Mediterranean in nature, with relatively mild, wet winters and warm, dry summers. The abundant natural resources of the area would have been taken advantage of by its prehistoric and early historic-era populations. Deer, elk, and waterfowl were plentiful, as were marine and bay resources such as seals, otters, abalone, mussels, oysters, clams, and numerous fish species. Franciscan chert was an easily obtainable local raw material for stone tools and obsidian could be acquired from the Anadel and Napa Glass Mountain quarries north of the Bay Area (Moratto, 1984).

The San Francisco Bay Area has undergone dramatic landscape changes since humans began to inhabit the region more than 13,000 years ago. Rising sea levels and increased sedimentation into streams and rivers are among some of the changes (Helley et al., 1979). In many places, the interface between older land surfaces and alluvial fans are marked by a well-developed buried soil profile known as a paleosol. Paleosols represent land forms in the past that were stable and thus suitable for human habitation prior to subsequent sediment deposition; therefore, paleosols have the potential to preserve archaeological resources if humans occupied or settled the area (Meyer and Rosenthal, 2007). Because human populations have grown since the arrival of the area's first inhabitants, younger (late Holocene) paleosols are more likely to yield archaeological resources than older (early Holocene or Pleistocene) paleosols.

The surficial geology of the entire Project site south of Embarcadero West and the railroad tracks is artificial fill, underlain by Young Bay Mud deposits and Merritt Sand (ENGEO, 2019). The fill material is composed of a mixture of sand, gravel, and clayey materials, much of which was dredged from the San Francisco Bay and placed on a pre-existing marshland. Fill placement south of the historic shoreline occurred during various construction events beginning in the early 1900s and range in depth from 5 to 40 feet below the existing surface, with deeper fill deposits closer to the channel (see Figure 4.6-1).

Beneath the artificial fill is a layer of Young Bay Mud. Deposited during sea level rise occurring between 11,000 and 8,000 years ago, Young Bay Mud is a series of unconsolidated muds deposited in the quiet, slowly rising water that was inundating glacial valleys and low lying areas. Deposition continued into the modern era, with vast amounts of sedimentation occurring in the 1850s and 1860s due to hydraulic gold mining practices in the foothills. In the Project site, much of the Young Bay Mud was dredged during the 1980s facility expansion and the thickness varies from 0 to 30 feet.

Late Pleistocene-age Merritt Sand underlies the Young Bay Mud. Merritt Sand is a beach or near-shore deposit of fine-grained clean to slightly clayey or silty sand that is the upper unit of the late Pleistocene-age glacial San Antonio Formation. Merritt Sand deposits have been documented in the Project site between 40 to 50 feet thick. The San Antonio Formation was deposited prior to human occupation of the San Francisco Bay Area; the surface of this formation would have been

accessible for use by early prehistoric peoples and represents the earliest formation in the area to have archaeological sensitivity. This former land surface, however, would have only been available during the very early Holocene-era when prehistoric populations would have been relatively mobile and their potential footprint on the landscape minimal. Only four well-documented Early Holocene-age sites have been identified in the greater Bay Area; none within the City of Oakland or Alameda County. Therefore, it is considered unlikely that deeply-buried prehistoric archaeological resources would be identified in relation to the upper stratum of the San Antonio Formation.

Prehistoric Background and Archaeological Sensitivity

The natural marshland communities along the edges of bays and channels were the principal source for subsistence and other activities during the prehistory of the San Francisco Bay Area region. Surveys of archaeological sites yielded the initial documentation of nearly 425 “earth mounds and shell heaps” along the littoral zone of the bay (Nelson, 1909). Notable sites in the region include the Emeryville shellmound (CA-ALA-309), the Ellis Landing Site (CA-CCO-295) in Richmond, the Fernandez site (CA-CCO-259) in Rodeo Valley, and the West Berkeley site (CA-ALA-307) (Moratto, 1984).

Categorizing the prehistoric period into cultural stages allows researchers to describe a range of archaeological resources with similar cultural patterns and components during a given time frame, creating a regional chronology. Milliken et al. (2007) provide a framework for the interpretation of the San Francisco Bay Area and have divided human history in California into three major periods: the *Early Period* (10000–6000 B.C.), the *Middle Period* (6000–1750 B.C.), and the *Late Period* (1750 B.C.–A.D. 1776). In many parts of California four periods are defined; the fourth being the *Paleoindian Period* (11500–8000 B.C.), characterized by big-game hunters occupying broad geographic areas. Evidence of human habitation during the Paleoindian Period has not yet been discovered in the San Francisco Bay Area. Economic patterns, stylistic aspects, and regional phases further subdivide cultural periods into shorter phases. Such periods and phases are differentiated by technological types, socio-politics, trade networks, population density, and variations of artifact types.

Before Euroamerican contact, the area of present-day Oakland and Alameda County was occupied by the *Ohlone* (also known by their linguistic group, *Costanoan*). During the Mission Period (1770–1835), native populations, especially along the California coast, were brought—usually by force—to the missions by the Spanish missionaries to provide labor. The missionization caused the Ohlone people to experience cataclysmic changes in almost all areas of their life, particularly a massive decline in population caused by introduced diseases and declining birth rate. Following the secularization of the missions by the Mexican government in the 1830s, most Native Americans gradually left the missions and established Rancherias in the surrounding areas (Levy, 1978; Moratto, 1984).

The NWIC records search results indicate that no previously recorded prehistoric archaeological resources are listed in the databases at the NWIC within the Project site or within the 0.25-mile records search radius. The nearest prehistoric archaeological resources to the Project site are over 1 mile to the northeast near Lake Merritt or several miles to the north near Emeryville and Berkeley.

Historic Background and Archaeological Sensitivity

The Architectural Resources discussion below provides a detailed overview of the history of the Project site. A review of historic aerial imagery and topographic maps shows the Project site as marshland until the late 1800s when two small piers, one with a railroad spur, were constructed south from the shore into the channel. These features continued to exist until 1915 when the shoreline was extended south and numerous structures were constructed on the fill. Sometime before 1949 the shoreline was again modified, four finger piers were constructed, and various warehouses were built. Three of the piers were timber decks supported on timber piles and the other was fill surrounded by a perimeter rock dike; the shoreline was formed by a quay wall that comprised a concrete gravity wall with a section of steel sheet pile wall (ENGEO, 2019:5).

In the 1980s, the Project site was enlarged and converted to a container terminal with a marginal wharf. The buildings were demolished and the timber piers were removed. The Bay Mud was dredged down to the Merritt Sand formation and a rock dike was installed. Materials dredged from the bay were placed hydraulically behind the dike and a concrete marginal wharf supported on concrete piles was constructed along the new southern boundary. As part of this expansion, the quay wall was buried within the fill. In the 1990s, the eastern end of the wharf was expanded by placing a new rock dike and fill on dredged ground (ENGEO, 2019:5).

Historic archaeological property types that could exist in the Project site include purposeful fill and architectural features. Purposeful fill is fill that is derived offsite and deliberately dumped to raise the land surface. In 2011, historic-era archaeological materials, including ceramics, bottle glass, a tableware knife, a shoe or boot fragment, faunal bone, shell, cut and wire nails, brick rubble, milled wood fragments, and courtyard bricks from the PG&E Station C building, were identified within and immediately adjacent to the Project site during excavation for soil borings for the installation of new temporary wells and potholes to expose utilities (designated as the Jefferson Street Artifact Deposit or P-01-011265; Pacific Legacy, 2011). While purposeful fill could contain large quantities of artifacts, such artifacts can only serve as a baseline for comparison with artifact deposits associated with individual households or businesses. To possess research potential, archaeological materials must have adequate physical integrity in the form of what James Deetz (1988) has called archaeological “focus.” By focus, Deetz refers to the level of clarity with which the archaeological remains can be seen to represent a particular event. Remains that represent a number of activities or other characteristics that cannot be separated out from one another are said to lack focus. According to Deetz’s model, the following criteria are used to assess integrity:

1. Does the property have focus? That is, is it possible to interpret the behaviors that are represented by it?
2. Does the property have integrity of location and setting with respect to the arrangement of remains? That is, does the property retain a significant portion of its original contents and condition, and is it in its original location?

Offsite derived purposeful fill lacks integrity of setting, location, feeling, and association, and therefore does not retain focus because there are not specific individuals, groups, or events associated with the fill that would convey association or significance. Therefore, per the standards set forth in Section 15064.5 of CEQA Guidelines, artificial fill on the Project site would not likely

yield important information in history, nor contain information needed to answer important scientific research questions, and would therefore not likely be considered a historical resource or a unique archaeological resource for the purpose of CEQA.

Architectural features that may be considered archaeological resources include subsurface structural remains such as foundations and footings related to earlier iterations of the shoreline facilities. This property type encompasses a wide variety of structures and in most cases, correlate with buildings and structures depicted on maps, photographs, and other documents, especially in an area as well-documented as the Project site. When sufficient historical documentation is available for a given location, such as the Project site, the ability of those remains to contribute to important research themes is generally limited, especially for later nineteenth and twentieth century features. Many research questions that could be addressed by architectural features are often better suited to other research media, such as analysis of primary documents, rather than archaeological study. Therefore, per the standards set forth in Section 15064.5 of CEQA Guidelines, architectural features on the Project site, such as the remains of former piers or quays, would not likely yield important information in history, nor contain information needed to answer important scientific research questions, and would therefore not likely be considered a historical resource or a unique archaeological resource for the purpose of CEQA.

Architectural Resources

The proposed Project site is notable for its role in development of maritime uses at the Port of Oakland and the surrounding area. This is a part of the City of Oakland that has historically been used for industrial and commercial purposes. A portion of the Project site has been occupied by PG&E power generation equipment for over a century, while the majority of the site was concurrently developed and redeveloped to support growth of the shipping trade through the Port of Oakland.

The following discussion provides the contextual information for the architectural resources on the Project site and in the surrounding Study Area, including physical descriptions of each of the resources and their significance status. It is followed by a table summarizing the status of each resource.

Port Development on San Francisco Bay

San Francisco Bay has long been an important shipping center on the West Coast. The advantages of the natural harbor and extensive river delta system were discovered by early European explorers in their first expeditions in the 17th century. With natural protection plentiful in the shallow bay and connections to major rivers such as the Sacramento and San Joaquin, and minor rivers such as the Napa, as well as numerous shallow, protected berths, the San Francisco Bay has served commercial interests since this early time.

When gold was discovered near Sutter's mill on the South Fork of the American River in Coloma, California in 1848, San Francisco was already a regular stop for ships coming from South and Central America. The subsequent explosion in population solidified the San Francisco Bay's importance as a transportation and shipping destination. Improvements in technology and expansion of transportation options such as completion of the Transcontinental Railroad in 1869

and the opening of the Panama Canal in 1914 brought dramatic increases in population and shipping traffic to the entire San Francisco Bay Area.

Initially, this growth was primarily seen along the San Francisco waterfront, although when the Transcontinental Railroad established its western terminus in Oakland, the Port of Oakland was developed to provide a final leg in the shipment of goods from the east coast to points west and south. It served to shuttle goods from the railyards in Oakland to the shipping wharves in San Francisco. This development occurred south and east of the area now occupied by the eastern span of the Bay Bridge, between the rail yards and the bay waters.

Rise of the Port of Oakland

In order to entice the Central Pacific Railroad to locate the terminus of its transcontinental line in Oakland, Horace Carpentier, a prominent figure in the early history and development of Oakland, struck a deal with the railroad that essentially guaranteed control of Oakland's prime waterfront lands to the railroad. As a result, development of the waterfront for commercial and shipping purposes remained slow and mired in legal battles while San Francisco's shipping industry boomed. Indeed, by 1909 only "two wharves and several small freight sheds adjoining the Webster Street Bridge comprised the municipality's total port development." (Minor, 1994)

This began to change as Oakland's population rapidly expanded following the earthquake in 1906, the end of World War I in 1919, and the boom years of the 1920s. During this time, legal victories by the City of Oakland freed them from the legacy of Carpentier's earlier dealings with the railroads, two more transcontinental rail lines brought goods in and out of the city, and a number of processed food companies located canneries along the East Bay waterfronts. Also during this time, the city invested heavily in the waterfront to develop it into a real competitor with its neighbor to the west.

One of the first and costliest improvements was construction of a quay wall from Myrtle Street to Broadway. Constructed in two phases in 1910-11 and 1912-14, it cost over \$1.4 million and included massive dredging of a deep water shipping channel with the resulting fill used behind the quay wall to extend the city-owned land 150 feet farther into the Oakland-Alameda Estuary (Estuary). Wharves and warehouses followed over the next 20 years, transforming marshland into a modern port.

After the opening of the Panama Canal (1914) and the end of World War I (1919), global shipping became more common. At the time, this consisted primarily of European and transpacific international trade, combined with intercoastal and regional river commercial trade. California was quickly becoming an agricultural powerhouse, shipping fresh and processed foods across the country and around the globe and Oakland was primed to expand with the increased demand:

"The Port of Oakland received a steadily increasing volume of business in its early years. In 1929, the U.S. Treasury Department designated Oakland as a full port of entry with customs service. By the mid-1930s, Oakland was a regular port of call for nearly 30 steamship lines. Between 1928 and 1937, despite the worldwide depression, tonnage handled by Port more than tripled, from 316,377 tons in 1928 to 1,166,664 tons in 1937. For the first 30 years of its history, the Port of Oakland operated most of its shipside facilities directly. Nearly all Port-

owned warehouses were occupied by tenants, and a number of waterfront industrial plants were built on land leased from the Port.” (Minor, 1994)

In the boom years following World War II, changes in shipping technology necessitated changes in ports around the globe. Technological advances in shipbuilding and goods transportation developed for wartime usage were quickly modified and expanded for use in the private sector. Ships got larger and faster. Ports had to also grow to accommodate the new ships – deeper channels, more warehouses, more manpower to load and unload the expanding tonnage of cargo.

At this time, Oakland was a typical break-bulk cargo port. All goods came in on ships and were unloaded, and stored in warehouses until they could be loaded onto trucks or trains. Goods arrived in crates, were opened and distributed to warehouses, then reloaded for delivery to their final destinations. The work was labor and time intensive. With increasing numbers of ships and amounts of goods being shipped around the globe, the port moved to the more efficient system of containerized shipping.

Containerized shipping was pioneered by the Sea-Land company in New Jersey in 1956. In this method, goods were placed in large, sealed containers that were carried, unopened from ship to rail to truck. Only upon arrival at their final destination would they be opened up for distribution. As a result, shippers needed only to move containers, rather than individual goods. The containers were heavy and necessitated development of a new type of dockside crane to enable easy transport onto and off from the ships. The first such container crane in the world was developed and first used at the Encinal Terminal in Alameda, California in 1959.

The combination of adequate dockside space for the new container cranes, need for open storage for the large containers, and the increased size, draft, and speed of the new container ships required fundamental design changes to ports around the world. It was in this period, beginning in the early 1960s, that the Port of Oakland surpassed the Port of San Francisco in shipping volume and capacity. Oakland had land space, waterfront space, and the ability to increase the depth of its shipping channels in ways that the tightly constrained Port of San Francisco could not. By 1969, the Port of Oakland was the second largest container port in the world. (Port of Oakland, 1969)

The Port of Oakland’s tremendous growth starting in the 1960s was aided in part by the rapid adoption and installation of container cranes, first in the Outer Harbor at Berths 8 and 9 for Sea-Land in 1966 and then in 1968 at the Seventh Street terminal at Berths G and H for four Japanese shipping lines (Commissioners Board, 1/2/1968 and throughout that year).¹ Volume increased so swiftly that the Board of Commissioners instituted special emergency provisions to more quickly acquire cranes (Commissioners Board, 7/17/1967). This resulted in additional cranes in both of these areas (Commissioners Board, 4/7/1969, 9/17/1969 and 10/15/1969), all ordered from the Pacific Coast Engineering Company (Paceco, Inc.) (Commissioners Board, 12/3/1969).

¹ Unless noted, information cited from Port of Oakland Board of Commissioners Board meeting minutes is referenced as “Commissioners Board, date of meeting”. All meeting minutes can be found at www.portofoakland.com/port/board-of-commissioners/board-meetings/archive/.

Howard Company & Howard Terminal

The Howard Company operated on a 17-acre site on the Estuary waterfront at the foot of Filbert Street. The company began in 1900 as a coaling station and depot for building materials and diversified as local demands changed with the growing population. It continued to expand through the 1920s and 30s as a privately-owned terminal on privately owned land. (Minor, 1994)

Immediately adjacent to the Howard Company Terminal was the municipally owned Grove Street Terminal. It consisted of the Grove Street Pier, Market Street Pier, Clay Street Pier, and the quay wall. During World War II, nearly all of the Port, *except* the Grove Street Terminal, came under Navy control. Following the war, in 1956, the Port leased the Grove Street Terminal to the Howard Company. At that time, operations at the Grove Street Terminal were combined with Howard Terminal and the entire complex was operated as Howard Terminal. The Howard Company operated the terminal until 1974 when it ended its lease on the Grove Street Terminal and sold its original site to the Port of Oakland.

With ownership by the Port of Oakland came redevelopment of the site. This included removal of many of the breakbulk sheds, expansion of the wharf farther into the Estuary with replacement of most of the 1912 quay wall, and installation of two new Panamax Hitachi shipping cranes along the waterfront (cranes X-415 and X-416). The new terminal was named the Charles P. Howard Terminal in honor of the owner of its longest occupant. The terminal was expanded further in 1995 with the removal of the Grove Street Pier, expansion of the wharf, and replacement of the final section of the original 1912 quay wall.

Site Description and Historical Resources in the Study Area

Today, the Howard Terminal property consists of a large, paved area between Embarcadero West and railroad tracks on the north side and the waterfront on the south side. Existing uses on Howard Terminal include, but are not limited to, truck parking, loaded and empty container storage and staging, longshoreperson training facilities, and berthing vessels for maintenance and storage. It is not currently used as a marine terminal facility. The only remaining architectural features on the site that relate to its prior use as a marine terminal facility are four container cranes (X-415, X-416, X-417, and X-422). Additionally, there are two small buildings on the former PG&E site at 50 Market Street (historically known as Substation B, Manufactured Gas Plant, and/or Gas Load Center). The Project site also includes the Peaker Power Plant (601 Embarcadero West), located south of Embarcadero West. This building is historically associated with power generation at both PG&E Substation B and Station C. These resources, along with off-site resources within the Study Area, have been described in greater detail and evaluated for eligibility as historical resources pursuant to CEQA in **Appendix CUL.1** and **Appendix CUL.2**. Results of this analysis are summarized below and in **Table 4.4-1** followed by summaries of each resource to facilitate the impacts discussion.

Container Cranes

Of the four container cranes on Howard Terminal, only one, Crane X-422 at the west end of the site, dates from the initial period of containerized shipping. Originally installed in 1970 in the Outer Harbor, this crane was modified and increased in height in 1993 and then moved to Howard Terminal in 1994. Crane X-422 is the last remaining crane associated with the initial

period of development of containerized shipping at the Port of Oakland (1962-1977).² During this period, the Port of Oakland transitioned from a regionally modest break-bulk facility into the second-largest container shipping port in the world.

**TABLE 4.4-1
 AGE-ELIGIBLE POTENTIAL ARCHITECTURAL RESOURCES IN THE STUDY AREA**

Resource Name	Address	Status	Source
Cranes X-415, X-416, and X-417	Berth 67, Howard Terminal	Not Historic	ESA, 2019 (Appendix CUL.1)
Crane X-422³	Berth 67, Howard Terminal	CR eligible	ESA, 2019 (Appendix CUL.1)
		Not Historic	Jacobs Engineering Group, 2019 (Appendix CUL.2)
Lightship <i>Relief</i>	Water Street	NHL	Listed 1989
PG&E Gas Load Center / Substation B	50 Market Street	Not Historic	ESA, 2019 (Appendix CUL.1)
PG&E Station C API	Water Street to 2nd Street, Martin Luther King (MLK), Jr. Way to Jefferson Street	NR eligible (A & C), City of Oakland API	OCHS, 1985
- Peaker Power Plant	601 Embarcadero West	PG&E Station C API Contributor, individually eligible for NR	OCHS, 1985
	101 Jefferson Street	PG&E Station C API Contributor, individually eligible for NR	OCHS, 1985
SPRR Industrial Landscape District API	MLK Jr. St. to Chestnut St. at the SPRR tracks	NR eligible (C), City of Oakland API	OCHS, 1990
- CalPak Label Plant	101 Myrtle Street	SPRR API contributor	OCHS, 1990
- Standard Underground Cable Co.	93 Linden Street	SPRR API contributor	OCHS, 1990
- CalPak / Del Monte Cannery	110 Linden Street	SPRR API contributor	OCHS, 1990
- Phoenix Lofts	737 2nd Street	SPRR API contributor	OCHS, 1990
USS <i>Potomac</i>	FDR Pier, end of Clay Street	NHL, City of Oakland Landmark	Listed 1987

NOTES:

NR – National Register, CR – California Register, API – Area of Primary Importance (City of Oakland zoning designation identifying historic resources for the purposes of CEQA), NHL – National Historic Landmark

Potential resources located within the Project site are in **BOLD**.

The City has received two studies with differing conclusions on the historic significance of Crane X-422 (ESA, 2019; Jacobs, 2019). One study concludes that Crane X-422 represents the earliest extant representation of container cranes at the Port, dating to the period when Ben Nutter

² Three older cranes at Berths 20 and 21 (Cranes X-402, X-403, and X-404) were evaluated for eligibility as historic resources for the Port of Oakland in 2016 (CH2MHill, 2016). This report concluded they did not qualify for listing on the California Register of Historical Resources. When they are demolished, Crane X-422 will be the oldest extant container crane at the Port of Oakland.

³ The City has received two reports regarding Crane X-422 and its eligibility for listing on the CRHR. Both reports and their findings are reflected here.

was the Executive Director of the Port (1962-1977) and containerized shipping initially developed at the Port of Oakland. This report determines for the purposes of CEQA, Crane X-422 is eligible as a historical resource for its association with the transformation of the Port of Oakland from a break bulk port to a major containerized shipping port, and the rise of the Port of Oakland to local, regional, and international importance. The other study finds that Crane X-422 was a small component of a much larger event, is not representative of the standard gantry cranes used along Oakland's waterfront, and lacks integrity. As a consequence, this study identified it as not eligible for listing in the CRHR, and concluded it does not meet the definition of a historical resource for purposes of CEQA. Detailed evaluations of Crane X-422 are provided in Appendices CUL.1 and CUL.2.

In determining findings of significant impacts, a lead agency has discretion to choose between different expert opinions. (See *Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884, 900.) For public disclosure purposes and out of an abundance of caution, this EIR conservatively treats Crane X-422 as an historic resource for the purposes of CEQA. As such, this EIR includes the identification of feasible mitigation measures for any potential impacts. It will be up to the Lead Agency to make the final determination on whether or not Crane X-422 is an historical resource under CEQA.

The other three cranes (X-415 (1981), X-416 (1981), and X-417 (1987)) on the site are not age-eligible, do not relate to the Port's transition to container shipping, and do not qualify as historical resources. Detailed descriptions and evaluations for eligibility as historical resources pursuant to CEQA are provided in Appendix CUL.1.

50 Market Street – PG&E Substation B / Gas Load Center

The only other age-eligible structures on Howard Terminal warranting evaluation are a storage shed and a natural gas monitoring station at 50 Market Street, which were part of PG&E Substation B, a manufactured gas plant (MGP) which was operated on both a portion of the Project site between Market Street and MLK Jr. Way (formerly Grove Street) and at 101 Jefferson Street from the late 1890s through the 1960s. This complex previously contained a number of buildings as well as a series of large, cylindrical fuel tanks spread across the site. A large salt water pumping station, tanks, and most of the above-ground pipes and equipment are no longer extant. The remaining shed and monitoring station (Gas Load Center) no longer retain a strong enough physical context to the manufacture of gas in Oakland or to the larger history of the PG&E company for qualification as historical resources. Detailed descriptions and evaluations for eligibility as historical resources pursuant to CEQA are provided in Appendix CUL.1.

Areas of Primary Importance

On and adjacent to Howard Terminal, the City of Oakland has identified two historic districts as Areas of Primary Importance (API). The first of these is the PG&E Station C API, which consists of two extant buildings, one at the northeast corner of the Project site (601 Embarcadero West/ Peaker Power Plant), and one outside of the Project site but within the Study Area at 101 Jefferson Street.⁴ The other API is the Southern Pacific Railroad Industrial Landscape District

⁴ 101 Jefferson Street is associated with both PG&E Substation B and Station C. It is historically significant only for its association with Station C.

consisting of four surviving industrial buildings on six adjacent blocks across the railroad tracks from the Project site. The district extends from Castro Street on the east to Chestnut Street on the west, where the Western Pacific (3rd Street) tracks converge with the Southern Pacific tracks (Embarcadero West).

PG&E Station C API

The PG&E Station C API is important because of its architecture (Criterion 3) and association with the early development of both Oakland and the Pacific Gas & Electric Company (Criterion 1). The two-building grouping is a monumental Beaux-Arts-ornamented industrial power generation complex. It is associated with several important architects and engineers, including architects Walter J. Mathews and Ivan C. Frickstad and engineer Henry C. Vensano. It was the second electrical generation plant constructed in the City of Oakland and has been in near continual operation since 1889. The character-defining features⁵ of the PG&E Station C API as identified in the 1985 survey, include:

1. Monumental scale of the buildings;
2. Visibility of buildings from outside the immediate site
3. Quoined piers;
4. Round-headed windows;
5. Classical cornices; and
6. Open and industrial setting.

Southern Pacific Railroad Industrial Landscape District API

The Southern Pacific Industrial Landscape District API consists of four extant contributing structures and is significant as an example of the industrial manufacturing and processing history that defined the Oakland waterfront in the first half of the 20th century. These buildings are 93 Linden Street (Standard Underground Cable Company), 110 Linden Street (CalPak/Del Monte Cannery), 101 Myrtle Street (CalPak Label Plant), and 737 2nd Street (Phoenix Lofts). All contributing buildings in the district were constructed between 1899 and 1923 and each shares similar architectural characteristics of what was once a common building type in this area. They represent what once was a much larger grouping of structures oriented more toward the railroad tracks than to the city street grid. The character-defining features of the Southern Pacific Landscape District API, as identified in the City's 1990 survey, include:

1. Simplicity of design that includes stepped parapets and regular fenestration;
2. Industrial character that includes flat roofs, multi-lite steel-sash windows, and brick and/or concrete construction;
3. Large scale with buildings measuring full or half blocks in area;
4. Orientation to the railroad tracks;

⁵ Character-defining features are those distinctive elements and physical features that contribute to the significance of a historic building. Character-defining aspects of a historic building include its massing, materials, features, craftsmanship, decorative details, interior spaces and features, as well its site and environment.

5. Concrete railroad track platforms; and
6. Concentration of buildings with enough open space to allow for a long line of sight/highly visible as a grouping.

This open space is an important part of the significance as “the open space around the tracks (including the north part of the Moore Dry Dock (now Schnitzer Steel)) and Howard Terminal is true to the period and enhances the visibility of the district” (OHCS, 1990).

USS *Potomac* and the Lightship *Relief*

Two maritime historical resources, the USS *Potomac* and the Lightship *Relief*, are berthed immediately adjacent to and east of the Project site. The USS *Potomac* was used by President Franklin Delano Roosevelt during his terms in office and was placed on the National Register on February 20, 1987 because of its association with “critical events in the history of the United States during the crisis years of the Depression and the Second World War” (Criterion A) and for its association with Franklin Delano Roosevelt during his presidency (1936-1945) (Criterion B) (Delgado, 1987). It was designated a National Historic Landmark in 1990 (Delgado, 1990). The Lightship *Relief* was put into service in 1950 as the Coast Guard lightship WAL-605. It was one of the last generation of such ships used to aid navigation around important ports and waterways where installation of stationary, land-based lighthouses was impractical. It was placed on the National Register on December 20, 1989 and designated a National Historic Landmark in 1989 for its association with maritime safety and security (Delgado, 1989). Neither listing is based on the setting in which the ships are currently berthed.

4.4.2 Regulatory Setting

Federal

National Register of Historic Places

Under the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 306108), and its implementing regulations, a property is considered significant if it meets the criteria for listing in the National Register at 36 CFR 60.4, as stated below:

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

- A. Are associated with events that have made a significant contribution to the broad patterns of our history, or
- B. Are associated with the lives of persons significant in our past, or
- C. 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. Have yielded, or may be likely to yield, information important in prehistory or history.

If a federal action is required for implementation of a project, Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties (i.e., properties

listed in or eligible for listing in the National Register) and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register. The Section 106 review normally involves a four-step procedure, which is described in detail in the implementing regulations (36 CFR Part 800) and includes identifying historic properties in consultation with the State Historic Preservation Office (SHPO) and interested parties, assessing effects, consulting with SHPO and others to develop and execute an agreement regarding the treatment of historic properties, and proceeding with the project according to the agreement.

State

California Environmental Quality Act

The California Environmental Quality Act (CEQA), as codified in PRC Sections 21000 et seq., is the principal statute governing the environmental review of projects in the state. CEQA requires lead agencies to determine if a proposed project would have a significant effect on historical resources, including archaeological resources. The CEQA Guidelines (Section 15064.5(a)) define a historical resource as: (1) a resource listed in, or determined to be eligible by the State Historic Resources Commission, for listing in the California Register of Historical Resources, (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be historically significant, provided the lead agency's determination is supported by substantial evidence in light of the whole record. In addition, Section 15064.5 (a)(4) states that "the fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to PRC Section 5020.1(k)), or identified in an historical resources survey (meeting the criteria in PRC Section 5024.1(g)) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1."

If a lead agency determines that an archaeological site is an historical resource, the provisions of PRC Section 21084.1 and CEQA Guidelines Section 15064.5 would apply. If an archaeological site does not meet the CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083 regarding unique archaeological resources. A unique archaeological resource is "an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person” (PRC Section 21083.2 [g]).

The CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064[c][4]).

California Register of Historical Resources

The California Register is “an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for or listed in the National Register.

To be eligible for the California Register, an historical resource must be significant at the local, state, or federal level under one or more of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history (PRC Section 5024.1[c]).

Integrity is the authenticity of an historical resource's physical identity as shown by the survival of characteristics that existed during the period of significance. For a resource to be eligible for the California Register, it must also retain enough integrity to be recognizable as a historical resource and to convey the reasons for its significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

Assembly Bill 52

In September of 2014, the California Legislature passed Assembly Bill (AB) 52, which added provisions to the PRC regarding the evaluation of impacts on tribal cultural resources under CEQA, and consultation requirements with California Native American tribes. In particular, AB 52 now requires lead agencies to analyze project impacts on “tribal cultural resources” separately from archaeological resources (PRC Section 21074; 21083.09). AB 52 defines “tribal cultural resources” in PRC Section 21074 and requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC Section 21080.3.1, 21080.3.2, 21082.3).

Specifically, PRC Section 21084.3 states:

- a) Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.
- b) If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process provided in Section 21080.3.2, the following are examples of mitigation measures that, if feasible, may be considered to avoid or minimize the significant adverse impacts:
 - 1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - 2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - (A) Protecting the cultural character and integrity of the resource.
 - (B) Protecting the traditional use of the resource.
 - (C) Protecting the confidentiality of the resource.
 - 3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - 4) Protecting the resource.

California Public Resources Code Section 5097.98 and 5097.99

PRC Section 5097.98 (and reiterated in CEQA Guidelines Section 15064.5 [e]) identifies steps to follow in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery. PRC Section 5097.99, as amended, states that no person shall obtain or possess any Native American artifacts or human remains which are taken from a Native American grave or cairn. Any person who knowingly or willfully obtains or possesses any such artifacts or human remains is guilty of a felony which is punishable by imprisonment. Any person who removes, without authority of law, any such items with an intent to sell or dissect or with malice or wantonness is also guilty of a felony which is punishable by imprisonment.

California Health and Safety Code Section 7050.5

Section 7050.5 of the California Health and Safety Code protects human remains by prohibiting the disinterring, disturbing, or removing of human remains from any location other than a dedicated cemetery.

Local Plans, Ordinances and Policies

City of Oakland – Local Plans, Policies and Regulations

Under Section 17.158.090 of the City of Oakland Planning Code (2005), for purposes of evaluating environmental impacts CEQA, a historical resource is a resource that meets any of the following criteria:

1. A resource listed in, or determined to be eligible for listing in, the California Register;
2. A resource included in Oakland's Local Register of historical resources (defined in General Plan Historic Preservation Element Policy 3.8 below), unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
3. A resource identified as significant (e.g., rated 1–5) in a historical resource survey recorded on Department of Parks and Recreation Form (DPR) 523, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
4. Any object, building, structure, site, area, place, record, or manuscript which the Oakland City Council determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record. Generally, a resource is considered “historically significant” if it meets the criteria for listing on the California Register CEQA Guidelines Section 15064.5; or
5. A resource that is determined by the City Council to be historically or culturally significant even though it does not meet the other four criteria listed here.

General Plan Historic Preservation Element

In March 1994, the Oakland City Council adopted the Historic Preservation Element of the Oakland General Plan (amended July 21, 1998). The Historic Preservation Element sets out a graduated system of ratings and designations resulting from the Oakland Cultural Heritage Survey (OCHS) and Oakland Zoning Regulations. The following goal and policies address historical resources under CEQA:

- **Goal 2:** To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural or aesthetic interest or value.

Such properties or physical features include buildings, building components, structures, objects, districts, sites, natural features related to human presence, and activities taking place on or within such properties or physical features.

Policy 3.1: Avoid or minimize adverse historic preservation impacts related to discretionary city actions. The City will make all reasonable efforts to avoid or minimize adverse effects on the Character-Defining Elements of existing or Potential Designated Historic Properties which could result from private or public projects requiring discretionary City actions.

Policy 3.5: Historic preservation and discretionary permit approvals. For additions or alteration to Heritage Properties⁶ or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design matches or is compatible with, but not necessarily identical to, the property's existing or historical design; or (2) the proposed design comprehensively modifies and is at least equal in

⁶ Heritage Properties are defined in Appendix A of the City of Oakland Historic Preservation Element as “properties which under Policy 2.5 appear potentially eligible for Landmark or Preservation District designation because they either (1) have received an existing or contingency rating of ‘A’ (Highest Importance), ‘B’ (Major Importance), or ‘C’ (Secondary Importance) from the Intensive Survey; (2) have received an existing or contingency rating of ‘A’ or ‘B’ from the Reconnaissance Survey; or (3) contribute or potentially contribute to any area potentially eligible for Preservation District Designation”

quality to the existing design and is compatible with the character of the neighborhood; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

For any project involving complete demolition of Heritage Properties or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood; or (2) the public benefits of the proposed project outweigh the benefit of retaining the original structure; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

Policy 3.7: Property relocation rather than demolition as part of discretionary projects.

As a condition of approval for all discretionary projects involving demolition of existing or Potential Designated Historic Properties, the City will normally require that reasonable efforts be made to relocate the properties to an acceptable site.

Policy 3.8: Definition of “Local Register of Historical Resources” and historic preservation “Significant Effects” for environmental review purposes. For purposes of environmental review under the California Environmental Quality Act, the following properties will constitute the City of Oakland’s Local Register of Historic Resources:

1. All Designated Historic Properties [Landmarks, Heritage Properties, Study List Properties, Preservation Districts, and S-7 and S-20 Preservation Combining Zone Properties]; and
2. Those Potential Designated Historic Properties that have an existing rating of “A” or “B” or are located within an Area of Primary Importance (API).

Until complete implementation of Action 2.1.2 (Redesignation), the Local Register of Historical Resources will also include the following designated properties: Oakland Landmarks, S-7 Preservation Combining Zone properties, and Preservation Study List properties.

Complete demolition of a Historical Resource will normally be considered a significant effect that cannot be mitigated to a level less than significant and will, in most cases, require preparation of an Environmental Impact Report.

A proposed addition or alteration to a Historical Resource that has the potential to disqualify a property from Landmark or Preservation District eligibility or may have substantial adverse effects on the property’s Character-Defining Elements will normally, unless adequately mitigated, be considered to have a significant effect. Possible mitigation measures are suggested in Action 3.8.1.

Policy 3.13: Security of vacant properties. Vacant or abandoned existing or Potential Designated Historic Properties shall be adequately secured in order to prevent unauthorized entry, theft, or property damage.

Policy 4.1: Archaeological resources. To protect significant archaeological resources, the City will take special measures for discretionary projects involving ground disturbances located in archaeologically sensitive areas.

Conformity of the Project with General Plan goal and policies most relevant to historic resources is discussed throughout the discussion of potential impacts presented later in this section.

The Oakland Cultural Heritage Survey (OCHS) is an ongoing survey process conducted by the City of Oakland. It began in 1979 and uses a five-tier rating system for individual properties, ranging from “A” (highest importance) and “B” (major importance) to “E” (of no particular interest). This letter rating is termed the “Individual Property Rating” of a building and is based on the following criteria:

1. **Visual Quality/Design:** Evaluation of exterior design, interior design, materials and construction, style or type, supporting elements, feelings of association, and importance of designer.
2. **History/Association:** Association of person or organization, the importance of any event, association with patterns of history, and the age of the building.
3. **Context:** Continuity and familiarity of the building within the city, neighborhood, or district.
4. **Integrity and Reversibility:** Evaluation of the building’s condition, its exterior and interior alterations, and any structural removals.

4.4.3 Significance Criteria

The City of Oakland has established thresholds of significance for CEQA impacts, which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2016). The Project would have a significant adverse impact related to cultural resources if it would:

1. Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5. Specifically, a substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be “materially impaired.” The significance of an historical resource is “materially impaired” when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that convey its historical significance and that justify its inclusion on, or eligibility for inclusion on an historical resource list (including the California Register of Historical Resources, the National Register, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1-5);
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;
3. Disturb any human remains, including those interred outside of formal cemeteries.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City’s adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City’s thresholds, these topics and questions have been taken into consideration in the impact analysis below. Specifically, in accordance with

the requirements of AB 52 and the related 2018 update to Appendix G of the CEQA Guidelines, the Project would have a significant impact on tribal cultural resources if it would:

4. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.

Approach to Impacts Analysis

Architectural Resources

Potential impacts on architectural resources are assessed by identifying any activities (either during construction or operations) that could affect resources that have been identified as historical resources for the purposes of CEQA. Once a resource has been identified as a CEQA historical resource, it then must be determined whether the impacts of the Project would “cause a substantial adverse change in the significance” of the resource (CEQA Guidelines Section 15064.5[b]). A substantial adverse change in the significance of an historical resource means “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired” (CEQA Guidelines Section 15064[b][1]). An historical resource is considered materially impaired through the demolition or alteration of the resource’s physical characteristics that convey its historical significance and that justify its inclusion in the California Register (CEQA Guidelines Section 15064.5[b][2][A]).

Where potential impacts on historical resources are identified, CEQA Guidelines Section 15126.4(b) states that compliance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings will generally reduce potential impacts to a less than significant level. In addition, “in some circumstances, documentation of an historical resource...as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur” (CEQA Section 15126.4(b)(2)).

Archaeological Resources

Archaeological resources can include historical resources according to CEQA Guidelines Section 15064.5 as well as unique archaeological resources as defined in CEQA Guidelines Section 21083.2(g). The significance of most prehistoric and historical archaeological sites is usually assessed under National Register and California Register Criteria D/4. These criteria stress the importance of the information potential contained within the site, rather than its significance as a surviving example of a type or its association with an important person or event. Although it is less common, archaeological resources may also be assessed under California Register Criteria 1, 2, and/or 3.

Impacts to unique archaeological resources or archaeological resources that qualify as historical resources are assessed pursuant to Section 21083.2 of the CEQA statute, which states that the lead agency shall determine whether the Project may have a significant effect on archaeological resources. As with architectural resources above, whether the impacts of the Project would “cause a

substantial adverse change in the significance” of the resource must be determined (CEQA Guidelines Section 15064.5[b]).

Human Remains

Human remains, including those buried outside of formal cemeteries, are protected under several state laws, including PRC Section 5097.98 and Health and Safety Code Section 7050.5. These laws are identified above in Section 4.4.2, *Regulatory Setting*. Specifically, CEQA Guidelines Section 15064.5(d) requires a lead agency to work with Native Americans to develop an agreement for treating, with appropriate dignity, human remains and any items associated with the burials. Upon discovery of human remains that the County Coroner determines to be Native American in origin, the Native American Heritage Commission identifies the person or persons it believes to be the most likely descended from the deceased Native American. This analysis considers impacts on human remains including intentional disturbance, mutilation, or removal of interred human remains.

Tribal Cultural Resources

A tribal cultural resource is defined as a site feature, place, cultural landscape, sacred place or object, which is of cultural value to a tribe that is either on or eligible for the California Register or a local historic register, or the lead agency, at its discretion, chooses to treat the resource as a tribal cultural resource. Impacts to tribal cultural resources are assessed in consultation with affiliated Native American tribe in accordance with PRC Section 21080.3. This analysis considers whether the Project would cause damaging effects to any tribal cultural resource.

4.4.4 Impacts of the Project

All of the potential impacts to cultural or tribal cultural resources analyzed below are related to the design and construction of the proposed Project through Buildout. No impacts to cultural or tribal cultural resources would result from the operation of the proposed Project.

Impact CUL-1: The Project could result in significant impacts to maritime resources (USS *Potomac* and the Lightship *Relief*) within the Study Area. (Criterion 1) (*Less than Significant with Mitigation*)

Two historic vessels are located adjacent to the Project site and within the Study Area. The USS *Potomac* is a National Historic Landmark currently docked at FDR Pier near the foot of Clay Street at the eastern border of the Project site. The Lightship *Relief*, also a National Historic Landmark, is docked near the foot of Jefferson Street, between FDR Pier and the eastern wharf edge of the Project site. Both vessels are run by non-profit foundations, are open to the public, and are currently seaworthy.⁷

Anticipated construction actions are designed to avoid both direct and indirect impacts to these two maritime resources. This includes avoidance of physical impacts resulting from construction activities near the resources and potential temporary loss of landside access routes to the USS *Potomac* and the Lightship *Relief*, including the reinforcement of waterfront areas, and in

⁷ The USS *Potomac* is operated by The Potomac Association and has regular public access opportunities. The Lightship *Relief* is operated by The Anchor Program, a maritime training program. It is open to the public at select times.

particular, the limited addition of in-water piles to support the wharf, improvements, and the cranes (if retained on site), if needed. Should circumstances arise, however, that require waterside access to the Project site, there could be potential for construction-related vessels to be in proximity to one or more identified maritime resources. Also, landside access to the resources could be interrupted as a result of construction at the eastern end of the Project site, indirectly affecting their maintenance and use. Thus, while unlikely, there exists the potential for direct and indirect impacts to occur on the maritime resources as a result of construction activities.

Mitigation Measure CUL-1, Maritime Resources Treatment Plan, would reduce potential impacts to less than significant.

Mitigation Measure CUL-1: Maritime Resources Treatment Plan.

Prior to any construction-related work within 100 feet of the Lightship *Relief* or the USS *Potomac*, the Project sponsor shall submit a Treatment Plan for the protection of and continued access to the USS *Potomac* and the Lightship *Relief* to the City. The Treatment Plan shall be prepared by a cultural resources professional with experience with historic ships, shall be provided for review by the Port and representatives for the USS *Potomac* and the Lightship *Relief*, and shall be approved by the City prior to the start of construction. At a minimum, the Treatment Plan shall include measures to address access to the resources during construction, measures to ensure a reasonable buffer zone regarding in-water construction-related traffic in close proximity to the resources, monitoring and notification protocols (if needed), and measures to allow for safe launch and return of the resources during construction. Implementation of protective measures included in the Treatment Plan shall be the responsibility of the Project sponsor.

Significance after Mitigation: Less than Significant.

Impact CUL-2: The Project would not result in significant impacts to the historical setting of the Southern Pacific Railroad Industrial Landscape District (SPRR) API. (Criterion 1) (Less than Significant)

The proposed Project would substantially increase the mass, bulk, and density of the built environment on the Project site and across the railroad tracks from the Southern Pacific Railroad Industrial Landscape District API. The area has historically been developed with low-rise industrial buildings ranging from one to four stories in height. Currently the tallest structures within a four-block radius of the Project site are the container cranes at Howard Terminal. These cranes are approximately 200 feet in height. Combined with the low scale of the buildings in the area, there is visual openness through the API provided by the railroad right-of-way, the existing configuration of Howard Terminal, and several undeveloped lots within the API. It is currently possible to view the whole API from vantage points along Embarcadero West.

At the completion of Phase 1 of the proposed Project, the eastern end of the Southern Pacific Railroad Industrial Landscape District API would no longer have visual access to the cranes or the Estuary. At the completion of Phase 2, no portion of the API would retain a visual connection to the Estuary. Additionally, the proposed heights and density of development on the Project site have the potential to alter light and shadow within the Southern Pacific Railroad Industrial

Landscape District API. Visual openness and line of sight through the district are character-defining features of the API helping to define the setting.

While the loss of open areas around the API and the increase in scale on the Project site have the potential to adversely impact the Southern Pacific Railroad Industrial Landscape District API, the Southern Pacific Railroad Industrial Landscape District API has its primary significance under Criterion C – Architecture for its “unity of architectural style” and as a representation of “trackside industrial development in Oakland through the late 19th and early 20th centuries.” The proposed Project would not impact the architectural design of the grouping, nor would it alter the relationship of the contributing structures to each other or the railroad tracks. The scale and design of landscaping at intersections within the district (Market Street and the terminus of Brush Street) would allow views along the railroad tracks, maintaining the visual unity and character-defining perspectives within the district (see Figure 3-23, Landscape Plan and Amenities). Therefore, the impact to setting resulting from an increase in mass, bulk, and density of the surrounding built environment would not “demolish or materially alter in an adverse manner those physical characteristics... that convey its historical significance and that justify inclusions in the or eligibility for, inclusion in” the California register,” (CEQA Section 15064.5(b)(2)(A)) Therefore, the impact resulting from alteration of the setting is less than significant and no mitigation is required.

Mitigation: None required.

Impact CUL-3: The Project could result in significant impacts to the Southern Pacific Railroad Industrial Landscape District API and the PG&E Station C API resulting from construction-related vibrations. (Criterion 1) (*Less than Significant with Mitigation*)

Construction in the vicinity of the Southern Pacific Railroad Industrial Landscape District API and the PG&E Station C API would introduce new temporary sources of vibration associated with construction activities. Historic masonry structures can be particularly sensitive to ground vibrations resulting in material damage to the historic fabric. Maintaining vibration levels below a site-specific threshold would limit the potential for damage associated with construction activities. **Mitigation Measure CUL-2, Vibration Analysis for Historic Structures**, would reduce potential impacts to less than significant.

Mitigation Measure CUL-2: Vibration Analysis for Historic Structures.

As presented in Chapter 4.11 Noise and Vibration, building damage is generally experienced when vibration levels exceed 94 VdB. Table 4.11-17 lists a number of construction activities with their estimated VdB at various distances. At distances up to 150 feet, there is potential for vibration levels to exceed 94 VdB, therefore, prior to any vibratory construction within 150 feet of a historic resource the Project sponsor shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structures and/or substantially interfere with activities located at 93 Linden Street, 110 Linden Street, 101 Myrtle Street, 737 Second Street, 601 Embarcadero West, and 101 Jefferson Street. The Vibration Analysis shall identify design means and methods of

construction that shall be utilized in order to not exceed the thresholds. The Project sponsor shall implement the recommendations during construction.

Significance after Mitigation: Less than Significant.

Impact CUL-4: The proposed Project would result in a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. (Criterion 1) (*Significant and Unavoidable*)

As noted earlier, the City has received two studies with differing conclusions on the historic significance of Crane X-422 (ESA, 2019; Jacobs, 2019). For public disclosure purposes and out of an abundance of caution, this EIR treats Crane X-422 as an eligible historic resource.⁸ With relation to this significance, the ESA report states that the character-defining features for Crane X-422 include aspects of its setting both at the edge of a shipping channel and within industrial maritime setting where it is taller than most of the buildings or structures in its immediate vicinity, except for other cranes.

If feasible the proposed Project would fix all four existing cranes, including Crane X-422, on portions of their existing tracks along the waterfront (see Section 3.5.2).⁹ The fixed locations are at the ends of Myrtle Street (Crane X-422), MLK, Jr. Way (Crane X-416), and at the southeastern corner of the project site approximately at the end of Jefferson Street (Cranes X-415 and X-417). See Figure 3-8, *Illustrated Buildout Site Plan*. From these positions, the cranes would be framed by elements of the proposed Project, and remain visible along the street corridors. As such, limited visibility of the cranes from outside the Project site would remain. Views from the water would also remain.

The historic setting of Crane X-422 as described in the ESA report was comprised of direct access to the shipping channel and a maritime location where it was taller than most of the buildings or structures in its immediate vicinity (except for other cranes). If the crane is maintained on site, the proposed Project would alter its historic setting, and the degree of alteration differs between the waterside and landside areas. From the landside, the proposed Project would result in increased scale and density of development resulting from the introduction of multi-story (up to 600 feet tall), residential, retail, and commercial structures on what was a seaport site within an area of the city that has historically been nearly devoid of such development. From the water, the proposed Project would maintain Crane X-422's relationship to the Estuary, retaining its historical setting immediately adjacent to an active shipping channel and near a maritime area.

⁸ As noted above, the City has received two studies with differing conclusions on the historic significance of Crane X-422. This EIR conservatively treats Crane X-422 as an historic resource. It will be up to the Lead Agency to make the final determination on whether or not Crane X-422 is an historical resource under CEQA.

⁹ Retention of the cranes is a baseline design concept for the Project. However, retention of the container cranes will ultimately be determined by a later assessment of whether such retention meets required feasibility and safety standards to incorporate the cranes within a publicly accessible space. Safety, while paramount, is not the only factor in play when considering retention. Other factors affecting feasibility will be considered as well, such as cost/schedule. Therefore, the Project is described as maintaining the cranes in their current locations, but includes discussion of impacts resulting from their loss if retention is not feasible.

If the Project succeeds in maintaining the cranes in or near their current locations along the southern project boundary and immediately adjacent to the Estuary (Figure 3-7), they would be within a new waterfront public park that would maintain the open areas between cranes and provide a landside open space buffer between the cranes and proposed new buildings. These design aspects would maintain the spatial and visual connections between the Crane X-422 and the water such that the impact to setting resulting from an increase in mass, bulk, and density of the surrounding built environment on the landside would not “demolish or materially alter in an adverse manner those physical characteristics...convey its historical significance and that justify inclusions in the or eligibility for, inclusion in” the California register,” (CEQA Section 15064.5(2)(A)).

As stated in section 3.5.2 Major Project Components – Ship to Shore Container Cranes, retention of the existing container cranes on site and Crane X-422 in particular will ultimately be determined upon future assessment based on feasibility and safety standards for public places. If Crane X-422 is removed from the site (i.e. demolished), this EIR conservatively concludes that this would result in the loss of a historical resource and therefore a significant and unavoidable impact.

In certain cases, relocation of a historical resource can be utilized to mitigate impacts resulting from the loss of the resource, provided aspects of the historical setting are maintained between the former location and the receptor site. The California State Office of Historic Preservation states (OHP, 2001):

Relocation of an historical resource may constitute an adverse impact to the resource. However, in situations where relocation is the only feasible alternative to demolition, relocation may mitigate below a level of significance provided that the new location is compatible with the original character and use of the historical resource and the resource retains its eligibility for listing on the California Register (14 CCR § 4852(d)(1)).

These conditions are applicable to Crane X-422; which was moved within the Port of Oakland to its current Howard Terminal location in 1994. The Project includes removal of the container crane rails during Phase 1. The rails are used to move the cranes laterally along the waterfront on the site. Once removed, movement of the cranes would only be possible by lifting them up from their current positions and moving them to a new location, either on the site or elsewhere. The new site would require a small segment of rails to secure the cranes to the ground. Therefore, lateral relocation on site is possible only prior to Phase 1. To address impacts associated with potential removal of Crane X-422 from the project site, the following mitigations are identified. (Note that Port staff has indicated they would not relocate Crane X-422 on Port property.)

Mitigation Measure CUL-3a: Crane Removal Documentation.

Prior to issuance of a demolition permit, the City shall require HABS documentation of Crane X-422. This documentation shall be prepared by professionals meeting, or exceeding, the Secretary of the Interior’s Historic Preservation Professional Qualifications Standards and shall include recommendations regarding selection criteria for an appropriate receiver site that approximates the crane’s current relationship to the Estuary. HABS documentation of the crane shall include recordation in both written and photographic media of the current and historical physical context and conditions of Crane X-422.

Mitigation Measure CUL-3b: Crane Relocation.

Pursuant to Policy 3.7 of the Historic Preservation Element of the Oakland General Plan, following completion of Mitigation Measure CUL-3a and prior to issuance of a demolition permit, the project sponsor shall make a good faith effort to support prompt relocation of Crane X-422 to a site acceptable to the City and the Port, and meeting the parameters established under Mitigation Measure CUL-3a. The sponsor shall make available funds equal to the cost of demolition to interested parties that submit, in writing, a relocation plan meeting the requirements established in Mitigation Measure CUL-3a. If no such party is identified within 90 days after the sponsor's offer, or the City determines that a submitted plan is not acceptable to the City, Crane X-422 may be removed by the sponsor.

Mitigation Measure CUL-3c: Interpretive Displays.

The Project sponsor shall, in consultation with a qualified architectural historian and landscape architect, develop one or more interpretive displays that present information regarding the early history of the Port of Oakland and its rise to prominence. Information should focus on the transformation of the port from 1962-1977, the role that early container cranes played in this transformation, the physical context, and the unique characteristics of the low-profile design of X-422 compared to its neighbors.

Significance after Mitigation: Mitigation Measures CUL-3a and CUL-3c, alone or in combination with each other, cannot lessen the impacts resulting from demolition of Crane X-422. Mitigation Measure CUL-3b would mitigate impacts relating to demolition of the historic resource if the crane were successfully relocated to another, compatible receiver site. Given the complexities involved with relocating a shipping container crane to another appropriate site outside the Port of Oakland, there is a low probability of successful implementation of this mitigation measure. Therefore, loss of the crane is the most likely outcome and the impact remains significant and unavoidable. As noted above, one report concludes that Crane X-422 is not an historic resource. If, based on this report or other evidence in the record, the Lead Agency finds that Crane X-422 is not an historic resource, then the impact of its removal will not be significant for CEQA purposes and, regardless of whether Mitigation Measures CUL-3a, CUL-3b and CUL-3c are adopted, this impact will be less than significant.

Impact CUL-5: Activities undertaken during construction of the Project could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. (Criterion 2) (*Less than Significant with Mitigation*)

Based on a preliminary review of site distribution and environmental context, there are no previously recorded prehistoric archaeological resources in the Project site and the Project site has a low potential to uncover previously undiscovered prehistoric archaeological resources. Background research indicates that no previously recorded prehistoric archaeological resources are within the Project site and that the nearest prehistoric archaeological resources to the Project site are over 1 mile to the northeast near Lake Merritt or several miles to the north near Emeryville and Berkeley.

As discussed in the Environmental Setting, there has been the identification of historic-era archaeological materials within and immediately adjacent to the Project site. However, purposeful

fill such as that identified on the Project site is generally not likely yield important information in history, nor contain information needed to answer important scientific research questions, and would therefore not likely be considered a historical resource or a unique archaeological resource for the purpose of CEQA. Architectural features related to the earlier iterations of the shoreline facilities in the Project site may be present; however, such architectural features would not likely yield important information in history, nor contain information needed to answer important scientific research questions, and would therefore also not likely be considered a historical resource or a unique archaeological resource for the purpose of CEQA.

While unlikely, the discovery of historic-era archaeological materials and features in the Project site, if not appropriately evaluated following discovery, would be a potentially significant impact. However, implementation of **Mitigation Measure CUL-4a, Archaeological Resources and Tribal Cultural Resources – Discovery During Construction**, and **Mitigation Measure CUL-4b, Archaeologically Sensitive Areas – Pre-Construction Measures**, would reduce impacts to archaeological resources by requiring archaeological monitoring in areas of historic-era archaeological sensitivity and that work halt in the vicinity of a find until it is evaluated by a Secretary of the Interior-qualified archaeologist. With implementation of these mitigation measures, the impact would be less than significant.

Mitigation Measure CUL-4a: Archaeological Resources and Tribal Cultural Resources – Discovery During Construction.

During construction, pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the Project sponsor shall notify the City and consult with a qualified archaeologist, as applicable, to assess the significance of the find. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the Project site while measures for the cultural resources are implemented.

In the event of data recovery of archaeological resources, the Project sponsor shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed Project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would

reduce the potential adverse impact to less than significant. The Project sponsor shall implement the ARDTP at his/her expense.

Archaeological monitoring and/or data recovery programs required by this measure could suspend Project operations in the vicinity of the discovery for up to 4 weeks. At the direction of the City, the suspension of construction can extend beyond 4 weeks only if such suspension is the only feasible means to reduce potential effects on a significant archaeological resource, as defined in CEQA Guidelines Section 15064(a) and 15064.5(c) to less than significant with mitigation.

Mitigation Measure CUL-4b: Archaeologically Sensitive Areas – Pre-Construction Measures.

Provision A: Intensive Pre-Construction Study. The Project sponsor shall retain a qualified archaeologist to conduct a site-specific, intensive archaeological resources study for review and approval by the City prior to soil-disturbing activities occurring on the Project site. The purpose of the site-specific, intensive archaeological resources study is to identify early the potential presence of history-period archaeological resources on the Project site. At a minimum, the study shall include:

- a. Subsurface presence/absence studies of the Project site. Field studies may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources.
- b. A report disseminating the results of this research.
- c. Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources.

If the results of the study indicate a high potential presence of historic-period archaeological resources on the Project site, or a potential resource is discovered, the Project sponsor shall hire a qualified archaeologist to monitor any ground disturbing activities on the Project site during construction and prepare an ALERT sheet pursuant to Provision B below that details what could potentially be found at the Project site. Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the ALERT sheet, required per Provision B below) and the procedures to follow if any artifacts are encountered, field recording and sampling in accordance with the Secretary of Interior’s Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, and preparing a report to document negative findings after construction is completed if no archaeological resources are discovered during construction.

Provision B: Construction ALERT Sheet. The Project sponsor shall prepare a construction “ALERT” sheet developed by a qualified archaeologist for review and approval by the City prior to soil-disturbing activities occurring on the Project site. The ALERT sheet shall contain, at a minimum, visuals that depict each type of artifact that could be encountered on the Project site. Training by the qualified archaeologist shall be provided to the Project’s prime contractor, any Project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving), and utility firms involved in soil-disturbing activities within the Project site.

The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, all work must stop within

50 feet of the discovery and the City's Environmental Review Officer contacted in the event of discovery of the following cultural materials: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, fire-cracked rocks); concentrations of bones; recognizable Native American artifacts (arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel. The ALERT sheet shall also be posted in a visible location at the Project site.

Significance after Mitigation: Less than Significant.

Impact CUL-6: Activities undertaken during construction of the Project could disturb human remains, including those interred outside of formal cemeteries. (Criterion 3) (*Less than Significant with Mitigation*)

Based on a review of site distribution and environmental context, there are no previously recorded human remains in the Project site and the Project site has a low potential to uncover previously undiscovered human remains because purposeful fill, such as that in the Project site, is not conducive to contain prehistoric human remains. While unlikely, the inadvertent discovery of human remains would be a potentially significant impact. However, implementation of **Mitigation Measure CUL-5, Human Remains – Discovery During Construction**, would reduce impacts to human remains by requiring that work halt in the vicinity of a find the County Coroner makes recommendations. With implementation of this mitigation measure, the impact would be less than significant.

Mitigation Measure CUL-5: Human Remains – Discovery During Construction.

During construction, pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the Project site during construction activities, all work shall immediately halt and the Project sponsor shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the Project sponsor.

Significance after Mitigation: Less than Significant.

Impact CUL-7: The Project could cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074. (Criterion 4) (*Less than Significant with Mitigation*)

There are no previously recorded archaeological resources that could be considered tribal cultural resources in the Project site. Purposeful fill, such as that in the Project site, is not conducive to contain previously unrecorded archaeological resource that could be considered tribal cultural resources.

On January 7, 2019, the City sent letters to eight Native American tribes provided by the Native American Heritage Commission as potentially interested in projects in the City of Oakland. The letters provided a description of the Project, a map showing the Project location, and an invitation to respond to a request for consultation within 30 days (as required by PRC Section 21080.3.1.d) and 90 days (as required by California Government Code Section 65352.3). No responses were received.

Based on a review of site distribution and the environmental context, the Project site has a low potential to uncover previously undiscovered tribal cultural resources. While unlikely, the inadvertent discovery of tribal cultural resources would be a potentially significant impact. However, implementation of Mitigation Measures CUL-4a and Mitigation Measure CUL-4b would reduce impacts to tribal cultural resources by requiring that work halt in the vicinity of a find until it is evaluated by a Secretary of the Interior-qualified archaeologist, and a Native American representative. With implementation of these mitigation measures, the impact would be less than significant.

Mitigation Measure CUL-4a: Archaeological Resources and Tribal Cultural Resources – Discovery During Construction. (see Impact CUL-3)

Mitigation Measure CUL-4b: Archaeologically Sensitive Areas – Pre-Construction Measures. (see Impact CUL-5)

Significance after Mitigation: Less than Significant.

Maritime Reservation Scenario

Under the Maritime Reservation Scenario, the Port has the right to take back approximately 10 acres at the southwest corner of the proposed Project site if the Port deems that area necessary to accommodate the expansion of the turning basin that is used to turn large vessels within Oakland's Inner Harbor Channel. Under this scenario, the reconfigured Project site boundary would change and the Project site area would become smaller.

The reduction in acreage would not result in a change in impacts to cultural resources. Impact CUL-2, SPRR API Setting and Impact CUL 4, Crane X-422, discuss impacts to historic resources as a result of the construction of new, tall buildings on the Project site. The same impacts as those already identified would occur. In addition, Impact CUL-4, Crane X-422 discusses impacts associated with possible removal (demolition) of the crane.

The proposed Project with the Maritime Reservation Scenario would result in the same significant and unavoidable impact to historic resources - Impact CUL-4, Crane X-422. Implementation of Mitigation Measures CUL-3a (Crane Removal Documentation), CUL-3b (Crane Relocation), and CUL-3c (Interpretive Displays), would not reduce this impact to less than significant. The proposed Project plus the Maritime Reservation Scenario would still result in a significant and unavoidable impact to a historic resource.

4.4.5 Cumulative Impacts

Impact CUL-1.CU: The Project, combined with cumulative development in the Project vicinity as a result of the Downtown Oakland Specific Plan and citywide, would contribute to cumulative adverse impacts on historical resources. (*Significant and Unavoidable*)

Geographic Context

The geographic scope for cumulative effects on architectural resources is the City of Oakland with a focus on the historically industrial area south of downtown, from Jack London Square to the Bay Bridge. This area is defined by low-scale, wood and masonry warehouses, with footprints that often span full city blocks. It is predominantly used currently and historically for commercial purposes and is reliant on access to mass-transportation corridors such as rail lines, deep water wharfs, and connections to the Interstate Highway system. This focus area overlaps with a portion of the draft Downtown Oakland Specific Plan (DOSP). Therefore, this cumulative analysis also considers potential impacts related to development anticipated under the Downtown Oakland Specific Plan, whose boundaries about the Project Site to the north. In addition, the cumulative analysis considers planned redevelopment of the Coliseum site under the City's Coliseum Area Specific Plan (CASP).

Cumulative Impact and Project Contribution

The DOSP identifies those parcels immediately adjacent to the railroad tracks, including blocks currently within the Southern Pacific Railroad Industrial Landscape District API and the PG&E Station C API, as “opportunity sites” for new development at intensities that are greater than currently allowed. The Draft Downtown Oakland Specific Plan EIR (DOSP DEIR) identifies a significant and unavoidable citywide cumulative impact with regard to cultural resources (City of Oakland, 2019).

Cumulative Impact CULT-1: Implementation of the Specific Plan and its associated development, combined with cumulative development in the Plan Area and citywide, including past, present, existing, approved, pending, and reasonably foreseeable future development would contribute to a significant and unavoidable adverse cumulative impact to cultural and historical resources. (DOSP DEIR, 363)

The findings in the DOSP DEIR are primarily connected to demolition or alteration of historic resources. This includes individual resources as well as the potential for incompatible infill development within ASIs and APIs (DOSP DEIR, 353-359 & 362-363).

By referencing cumulative development citywide, the DOSP DEIR's cumulative impact finding encompasses other past, present, and future projects in the City of Oakland that have or will result in demolition or alteration of historic resources. An example is redevelopment of the Oakland Coliseum site as envisioned under the adopted specific plan for the area. All of the redevelopment scenarios under the CASP that were analyzed in the CASP EIR anticipated demolition of the Coliseum itself, which was considered an historical resource. Some scenarios also anticipated demolition of the Arena, which was also considered an historic resource (City of Oakland, 2014).

As noted above, the Project includes retention of all four cranes as a baseline condition of the design, however, removal of the cranes, including Crane X-422 from the project site may be necessary pending future assessment based on feasibility and safety standards for public places. If they cannot be maintained on the Project site, the cranes would be offered for relocation as discussed in Mitigation Measure CUL-3b (Crane Relocation). However, because the likelihood of successful relocation of Crane X-422 is low due to the relatively few suitable relocation sites and anticipated high cost associated with preparation of a receiver site, relocation, and required maintenance, loss of the crane is assumed. As a result of the loss of Crane X-422, the Project would contribute to the significant and unavoidable citywide cumulative impact identified in the DOSP DEIR. Mitigation Measures CUL-3a and CUL-3c would reduce but not eliminate this significant impact.

Mitigation Measure CUL-3a: Crane Removal Documentation. (see Impact CUL-4)

Mitigation Measure CUL-3b: Crane Relocation. (see Impact CUL-4)

Mitigation Measure CUL-3c: Interpretive Displays. (see Impact CUL-4)

Significance after Mitigation: Significant and Unavoidable.

Impact CUL-2.CU: The Project, combined with cumulative development in the Project vicinity and citywide, could contribute to cumulative adverse impacts on archaeological resources, human remains, and tribal cultural resources. (*Less than Significant with Mitigation*)

Geographic Context

The geographic scope for cumulative effects on archaeological resources, human remains, and tribal cultural resources includes the Oakland waterfront from Jack London Square to the Bay Bridge, where the Project could cause disturbance and/or impact the setting of archaeological resources, human remains, and tribal cultural resources. This geographic scope includes a similar environmental setting for prehistoric and ethnohistoric resources as well as historic occupation and development in Alameda County.

Cumulative Impact and Project Contribution

As the preliminary analysis indicates that the Project would not have an impact on archaeological resources, human remains, and tribal cultural resources, there would be no cumulative impact. Similar to the proposed Project, cumulative projects in the vicinity could have a significant impact on previously undiscovered archaeological resources, including human remains, as well as

archaeological resource that are considered tribal cultural resources during ground-disturbing activities. The potential impacts of the Project when considered together with similar impacts from other probable future projects in the vicinity could result in a significant cumulative impact on buried archaeological resources, human remains, or tribal cultural resources. However, implementation of Mitigation Measures CUL-4a, CUL-4b, and CUL-5 would require that work halt in the vicinity of a find until it is evaluated by a Secretary of the Interior-qualified archaeologist, and in the case of human remains the County Coroner. In addition, cumulative projects undergoing CEQA review would be subject to similar types of inadvertent discovery measures.

Conclusion

Therefore, with implementation of Mitigation Measure CUL-4a, Mitigation Measure CUL-4b and Mitigation Measure CUL-5, the proposed Project's contribution to cumulative impacts would not be considerable, and the potential impact on archaeological resources, human remains, and tribal cultural resources would be less than significant.

Mitigation Measure CUL-4a: Archaeological Resources and Tribal Cultural Resources – Discovery During Construction. (see Impact CUL-5)

Mitigation Measure CUL-4b: Archaeologically Sensitive Areas – Pre-Construction Measures. (see Impact CUL-5)

Mitigation Measure CUL-5: Human Remains – Discovery During Construction. (see Impact CUL-6)

Significance after Mitigation: Less than Significant.

Maritime Reservation Scenario - Cumulative

As discussed above, the reduction in acreage would not result in a change in impacts to cultural resources, as a result of development of the Project under the Maritime Reservation Scenario. The proposed Project with the Maritime Reservation Scenario would result in the same less than significant cumulative impacts when considered together with similar impacts from other probable future projects in the vicinity with regard to archaeological resources and tribal cultural resources as the proposed Project, as it would be subject to the same mitigation measures. The proposed Project with the Maritime Reservation Scenario would also result in the same significant and unavoidable cumulative impact, Impact CUL-1.CU, as the proposed Project due to the potential removal of Crane X-422.

4.4.6 References – Cultural and Tribal Cultural Resources

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