3.3 Cultural Resources

Section 3.3, Cultural Resources, evaluates the impacts of the proposed project on cultural resources in the project vicinity and includes the following information:

- A description of existing cultural resources in the project site and surrounding area.
- A discussion of the methodology and thresholds used to determine whether the proposed project would result in a significant impact related to cultural resources.
- Analysis of the proposed project’s impacts on cultural resources.
- A description of mitigation measures proposed to reduce the proposed project’s impacts to cultural resources.
- An analysis of the project’s contribution to cumulative impacts on cultural resources when considered with related projects in the vicinity.

3.3.1 Introduction

This section addresses the impacts of the proposed project on cultural resources and describes the environmental setting for cultural and paleontological resources, the applicable regulatory framework, impacts of the proposed project, and mitigation measures to reduce significant impacts to less than significant. The analysis in this section is based, in part, on information from the South Bay Galleria Project Historic Resources Evaluation Report prepared by Environmental Science Associates (ESA) included as Appendix E.

3.3.2 Cultural Setting

The categorical term “Cultural Resources” refers to remains and sites associated with human activities and includes prehistoric and historic archaeological resources; architectural/built-environment resources; human remains; and places important to Native Americans and other ethnic groups, including elements or areas of the natural landscape that have traditional cultural significance. Under the California Environmental Quality Act (CEQA), paleontological resources, although not associated with past human activity, are analyzed with cultural resources. For the purposes of this analysis, cultural resources are categorized into the following groups: historic-period built resources (including architectural/engineering resources); archaeological resources; human remains; and places important to Native Americans. Paleontological resources are also addressed in this section.

Historic-Period Built Resources

Historic-period built resources include standing structures, infrastructure, and landscapes of historic or aesthetic significance that are generally 50 years of age or older. In California, historic-period built resources considered for protection tend to focus on architectural sites dating from the Spanish Period (1529–1822) through World War II (WWII) and Post War era facilities. Some resources, however, may have achieved significance within the past 50 years if they meet
the criteria for exceptional significance. Historic-period built resources are often associated with archaeological deposits of the same age.

**Archaeological Resources**

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric-era (before European contact) or historic-era (after European contact). The majority of such places in California are associated with either Native American or Euro-American occupation of the area. The most frequently encountered prehistoric or historic Native American archaeological sites are: village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and rock art sites. Historic-era archaeological sites may include foundations or features, such as privies (i.e., an outhouse), corrals, and trash dumps.

**Human Remains**

Human remains (inhumations and cremations) include burials both within and outside formal cemeteries, including town cemeteries and burial grounds, family burial plots, church graveyards, military cemeteries, Native American burial mounds, and prehistoric and historic-period isolated grave sites. Native American groups in California practiced both inhumation and cremation, with inhumations either flexed (where the body is interred in a fetal position) or extended (where the body is laid flat on its back). Cremations were often placed in ceramic vessels (commonly referred to as *ollas*) and buried. Large burial mounds containing hundreds of individuals have been documented in California, although single or small-group burials are also common. After Spanish settlement, many missionized Native Americans were interred in mission cemeteries. Burial practices varied among immigrant groups to California. For example, many Chinese immigrants in the late 19th century observed Confucian doctrine, where remains were disinterred after a set period of time and returned to China. Historic-period burial sites range from large formal cemeteries to small family plots to isolated burials in remote areas.

**Native American Resources**

Places and elements of the natural landscape of cultural importance to Native Americans, also referred to as ethnographic resources, can include sacred sites; archaeological resources; rock art; and the prominent topographical areas, features, habitats, plants, animals, and minerals that contemporary Native Americans value and consider essential for the preservation of their traditional values. Such resources may also constitute a Traditional Cultural Property (TCP) or cultural landscape. Generally, locations of cultural importance to Native Americans are difficult to define because traditional culture often prohibits Native Americans from sharing information about these locations with the public.

**Paleontological Resources**

Paleontology is a branch of geology that studies the life forms of the past, especially prehistoric life forms, through the study of plant and animal fossils. Paleontological resources represent a
limited, nonrenewable, and impact-sensitive scientific and educational resource. As defined in this section, paleontological resources are the fossilized remains or traces of multicellular invertebrate and vertebrate animals and multicellular plants, including their imprints from a previous geologic period. Fossil remains such as bones, teeth, shells, and leaves are found in the geologic deposits (rock formations) where they were originally buried. Paleontological resources include not only the actual fossil remains, but also the collecting localities and the geologic formations containing those localities.

Geological Setting

The project site is located within the northern Peninsular Ranges geomorphic province (California Geological Survey 2002; Harden 2004). This geomorphic province is characterized by northwest trending mountain ranges and valleys that extend from the tip of the Baja Peninsula to the Transverse Ranges (east to west trending mountain ranges just north of the Los Angeles Basin and the Inland Empire, such as the San Bernardino and San Gabriel Mountain ranges). The province varies in width from approximately 30 to 100 miles. It is bounded to the east by the Colorado Desert, to the north by the Transverse Ranges (California Geological Survey 2002; Harden 2004), and to the west by Santa Catalina, Santa Barbara, San Clemente, and San Nicolas islands in the Pacific Ocean. Regional mountain ranges in the Peninsular Ranges’ geomorphic province include the Santa Ana, San Jacinto, and Santa Rosa Mountains. Geologically, these mountains are dominated by Mesozoic, plutonic igneous and metamorphic rocks that are part of the Peninsular Ranges batholith (Southern California batholith) (Jahns 1954; Harden 2004). In general, the intervening valleys are underlain by thick sequences of Cenozoic sedimentary rocks shed from the adjacent mountain ranges.

The project site is situated within the Los Angeles Basin, which is defined by Yerkes et al. (1965) as the area south of the Santa Monica Mountains and Elysian, Repetto, and Puente Hills; west of the Santa Ana Mountains; southwest of the San Joaquin Hills; and north and east of the Pacific Ocean (excluding the Palos Verdes Peninsula). The Los Angeles Basin formed approximately 17 million years ago with widespread volcanism and has been subsiding and filling with predominately marine sediments from the middle Miocene (Ca. 13 million years ago) to the late Pleistocene (Ca. 10 thousand years ago) (Yerkes et al. 1965; McCulloh and Beyer 2004).

According to geological mapping by Dibblee et al. (1999), at a scale of 1:24,000, surficial sediments within the project site boundaries consist of older stabilized dune and drift sand (map unit Qos) with slightly elevated and dissected Quaternary alluvium (map unit Qae) mapped less than 1,000 feet to the east of the proposed project location. Whereas the older stabilized dune and drift sand is Pleistocene in age (approximately 2.6 million to 12,000 years old) and consists of fine sand, the slightly elevated and dissected Quaternary alluvium is generally Holocene in age (<12,000 years old) on the surface and consists of loamy clay in valleys and floodplains (Dibblee et al. 1999). Similarly, geological mapping of the Long Beach Quadrangle by Saucedo et al. (2003), at a scale of 1:100,000, determined the project site to be underlain by old eolian deposits (map unit Qoe) with undivided old alluvial floodplain deposits (map unit Qoa) mapped to the north and east of the project site. Saucedo et al. (2003) considered the old eolian deposits...
(equivalent to the older dune deposits of Dibblee (1999) to be Pleistocene in age along with the undivided old alluvial floodplain deposits.

The geotechnical report for the project determined subsurface sediments to be composed of Quaternary alluvial sediments (Qal) consisting of silty sand, sandy silt, and clayey sands to an approximate depth of 81.5 feet below ground surface (bgs) (Converse Consultants 2016). The report did not distinguish between younger (Holocene) and older (Pleistocene) alluvium. Artificial fill thickness varied from approximately 3 to 8 feet bgs within the four boreholes that were drilled for the project.

**Prehistoric Setting**

The chronology of Southern California is typically divided into three general periods: the Early Holocene (11,000 to 7600 Before Present [B.P.]), the Middle Holocene (7,600 to 3,600 B.P.), and the Late Holocene (3600 B.P. to Anno Domini [A.D.] 1769). Within this time frame, the archaeology of Southern California is generally described in terms of cultural “complexes.” A complex is a specific archaeological manifestation of a general mode of life, characterized archaeologically by technology, particular artifacts, economic systems, trade, burial practices, and other aspects of culture.

While it is not certain when humans first came to California, their presence in Southern California by about 11,000 B.P. has been well documented. At Daisy Cave, on San Miguel Island, cultural remains have been radiocarbon dated to between 11,100 and 10,950 B.P. (Byrd and Raab 2007). On the mainland, radiocarbon evidence confirms occupation of the Orange County and San Diego County coast by about 9,000 B.P. During the Early Holocene (11,000 to 7600 B.P.), the climate of Southern California became warmer and more arid and the human population, residing mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources (Byrd and Raab 2007).

The primary Early Holocene cultural complex in Southern California was the San Dieguito Complex, which occurred between approximately 10,000 and 8,000 B.P. The people of the San Dieguito Complex inhabited the chaparral zones of southwestern California, exploiting the plant and animal resources of these ecological zones (Warren 1984). Leaf-shaped and large-stemmed projectile points, scraping tools, and crescentics are typical of San Dieguito Complex material culture.

During the Middle Holocene (7600 to 3600 B.P.), there is evidence for the processing of acorns for food and a shift toward a more generalized economy. Around 7,000 B.P., Millingstone cultures appeared, characterized by the collection and processing of plant foods, particularly acorns, and the hunting of a wider variety of game animals (Byrd and Raab 2007; Wallace 1955).

During the Late Holocene (3600 B.P. to A.D. 1769), native populations of Southern California were becoming less mobile and populations began to gather in small sedentary villages with satellite resource-gathering camps. Evidence indicates that the over-exploitation of larger, high-ranked food resources may have led to a shift in subsistence toward a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants (Byrd and Raab 2007).
3. Environmental Analysis
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Around 1000 B.P., there was an episode of sustained drought, known as the Medieval Climactic Anomaly. While this climatic event did not appear to reduce the human population, it did lead to a change in subsistence strategies in order to deal with the substantial stress on resources. Although the intensity of trade had already been increasing, it now reached its zenith, with asphaltum (tar), seashells, and steatite being traded from Southern California to the Great Basin. Major technological changes appeared as well, particularly with the advent of the bow and arrow, which largely replaced the use of the dart and atlatl. Small projectile points, ceramics (including Tizon brownware pottery), and obsidian from Obsidian Butte (Imperial County) are all representative artifacts of the Late Holocene.

**Ethnographic Setting**

The project site is located within the territory of the native population known as the Gabrielino-Tongva. Prior to European colonization, the Gabrielino-Tongva occupied a diverse area that included the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers; the Los Angeles basin; and the islands of San Clemente, San Nicolas, and Santa Catalina (Bean and Smith 1978). The Gabrielino-Tongva were hunter-gatherers and lived in permanent communities located near the presence of a stable food supply and some measure of protection from flooding. Community populations generally ranged from 50 to 100 inhabitants, although larger settlements may have existed. The Gabrielino-Tongva are estimated to have had a population numbering around 5,000 in the pre-contact period (Kroeber,1925). Houses were made of tule mats on a framework of poles (Bean and Smith 1978). Basketry and steatite vessels were used rather than ceramics; ceramics became common only toward the end of the Mission Period in the 19th century. The Gabrielino-Tongva held some practices in common with other groups in Southern California, such as the use of jimsonweed in ceremonies as did the Luiseño and Juaneño, but details of the practices and the nature of cultural interaction between the Gabrielino-Tongva and other groups in Southern California are unknown. Maps produced by early explorers indicate the existence of at least 40 Gabrielino-Tongva villages, but as many as 100 may have existed prior to contact with Europeans (Bean and Smith 1978; McCawley 1996).

**Historic-Period Setting**

**Spanish Period (A.D. 1542–1821)**

Although Spanish explorers made brief visits the region in 1542 and 1602, sustained contact with Europeans did not commence until the onset of the Spanish Period. In 1769 Gaspar de Portolá led an expedition from San Diego, passing through the Los Angeles Basin and the San Fernando Valley, on its way to the San Francisco Bay (McCawley 1996). Father Juan Crespi, who accompanied the 1769 expedition, noted the suitability of the Los Angeles area for supporting a large settlement. This was followed in 1776 by the expedition of Father Francisco Garcés (Johnson and Earle 1990).

In the late 18th century, the Spanish began establishing missions in California and forcibly relocating and converting native peoples. Mission San Gabriel Arcángel was founded on September 8, 1771 and Mission San Fernando Rey de España on September 8, 1797. By the early 1800s, the majority of the surviving Gabrielino-Tongva population had entered the mission
system, either at San Gabriel or San Fernando. Mission life offered some degree of security in a
time when traditional trade and political alliances were failing and epidemics and subsistence
instabilities were increasing (Jackson 1999). This lifestyle change also brought with it significant
negative consequences for Gabrielino-Tongva health and cultural integrity.

On September 4, 1781, El Pueblo de la Reina de los Angeles was established not far from the site
where Portolá and his men camped during their 1769 excursion, with a land grant of 28 acres
issued to California Governor Felipe de Neve in 1781 (Gumprecht 2001). The pueblo was first
established in response to the increasing agricultural needs of Spanish missions and presidios in
Alta California. The original pueblo consisted of a central square surrounded by 12 houses and a
series of agricultural fields. Thirty-six fields occupied 250 acres between the town and the river to
the east (Gumprecht 2001).

By 1786, the flourishing pueblo attained self-sufficiency and funding by the Spanish government
ceased. Fed by a steady supply of water and an expanding irrigation system, agriculture and
ranching grew, and by the early 1800s the pueblo produced surplus wheat, corn, barley, and beans
for export. A large number of livestock, including cattle and sheep, grazed in the surrounding
lands (Gumprecht 2001).

**Mexican Period (A.D. 1821–1848)**

After Mexico gained its independence from Spain in 1821, Los Angeles became the capital of the
California territory in 1835 (Gumprecht 2001). Mexico continued to promote settlement of
California with the issuance of land grants. In 1833, Mexico began the process of secularizing the
missions, reclaiming the majority of mission lands and redistributing them as land grants.
According to the terms of the Secularization Law of 1833 and Regulations of 1834, at least a
portion of the lands would be returned to the Native populations, but this did not always occur
(Milliken et al. 2009).

Many ranchos continued to be used for cattle grazing by settlers during the Mexican Period.
Hides and tallow from cattle became a major export for Californios (native Hispanic
Californians), many of whom became wealthy and prominent members of society. The
Californios led generally easy lives, leaving the hard work to vaqueros (Hispanic cowhands) and
Indian laborers (Pitt 1994; Starr 2007).

**American Period (A.D. 1848–Present)**

Mexico ceded California to the United States as part of the Treaty of Guadalupe Hildalgo in
1848. California officially became one of the United States in 1850. While the treaty recognized
right of Mexican citizens to retain ownership of land granted to them by Spanish or Mexican
authorities, the claimant was required to prove their right to the land before a patent was given.
The process was lengthy and generally resulted in the claimant losing at least a portion of their
land to attorney’s fees and other costs associated with proving ownership (Starr 2007).

When the discovery of gold in Northern California was announced in 1848, a huge influx of
people from other parts of North America flooded into California and the population of Los
Angeles tripled between 1850 and 1860. The increased population provided an additional outlet
for the Californios’ cattle. As demand increased, the price of beef skyrocketed and Californios reaped the benefits. However, a devastating flood in 1861, followed by droughts in 1862 and 1864, led to a rapid decline of the cattle industry; over 70 percent of cattle perished during these droughts (McWilliams 1946; Dinkelspiel 2008). These natural disasters, coupled with the burden of proving ownership, caused many Californios to lose their lands during this period. Former ranchos were subsequently subdivided and sold for agriculture and residential settlement (Gumprecht 2001; McWilliams 1946).

Los Angeles was connected to the transcontinental railroad via San Francisco on September 5, 1876, and the population again exploded. The City would experience its greatest growth in the 1880s when two more direct rail connections to the East Coast were constructed. The Southern Pacific completed its second transcontinental railway, the Sunset Route from Los Angeles to New Orleans, in 1883 (Orsi 2005). In 1885, the Santa Fe Railroad completed a competing transcontinental railway to San Diego, with connecting service to Los Angeles (Mullaly and Petty 2002). The resulting fare wars led to an unprecedented real estate boom. Despite a subsequent collapse of the real estate market, the population of Los Angeles increased 350 percent from 1880 to 1890 (Dinkelspiel 2008). Los Angeles continued on its upward trajectory in the first few decades of the 20th century with the rise of tourism, automobile travel, and the movie industry (McWilliams 1946).

Redondo Beach History

Redondo Beach includes portions of three different ranchos: San Pedro, Los Palos Verdes, and Sausal Redondo. The project site lies within the San Pedro and Sausal Redondo land grants. San Pedro, the largest and oldest of the three, covered approximately 43,000 acres (Robinson 1939) and was bounded on the east by the San Gabriel River, on the south and west by the Pacific Ocean, and on the north by Redondo Bay. Its boundaries include most of the original City of Redondo Beach as well as modern-day Torrance, Gardena, and Compton (Cleland 1951).

Rancho Sausal Redondo covered approximately 22,500 acres north of the original Redondo Beach Townsite. An American owner combined it with another rancho, Aguaje de la Centinela.

Early economic development in the future City of Redondo Beach started with the Pacific Salt Works along Redondo Bay organized by two Los Angeles merchants, Henry Allanson and William Johnson (Gillingham 1961). The Pacific Salt Works did not thrive after the Southern Pacific Railroad arrival in Los Angeles in the mid-1870s. The railroad introduced competition to local industry, including the Salt Works. Liverpool Salt Works, an inland company, purchased Pacific Salt Works in 1881 and abandoned it.

Redondo Beach was incorporated in 1892. The community realized the need for municipal authority to make infrastructure improvements to attract business and industry. During the early 1900s, Redondo Beach thrived as an off loading bay for lumber and oil, and as a tourist attraction. Henry E. Huntington invested in Redondo Beach and fortified the City’s future as a seaside resort and industrial port. Huntington supported several resort improvements including a casino. He also built an electric power generating station to service his Pacific Electric system, region-wide.
The 1920s marked the expansion of commercial and residential development in Redondo Beach. The introduction of the private car supported new commercial developments such as gasoline stations and eateries. Single-family farms were slowly being replaced with housing tracts.

As with several other cities in California, World War II and post–World War II led to booms in residential and commercial development. New families moved to the City of Redondo Beach during World War II as employment increased in defense plants located in the area. Following World War II, veterans returned from the war and faced a shortage of rental properties. As a result of this shortage, veterans purchased vacant lots to build future homes. This accelerated growth led to a demand for a more urban setting, and conveniences increased (Snyder 1948). In the late 1940s and 1950s, Artesia Boulevard was developed with commercial uses. The City of Redondo Beach continued to grow and support industry, residential, tourist, and commercial uses.

**History of the Development of the South Bay Galleria**

The South Bay Galleria was originally constructed in mid to late 1950s; building permits for the Macy’s building indicate that a foundation permit was issued in 1957 and on historic aerials the area was developed by 1963. All that remains of this original construction is the Macy’s building. Building permits indicated various renovations to the Macy’s building, with interior alterations in 1961, every year from 1971 to 1977, every year from 1981 to 1985, every year from 1992 to 1996, 1998, and 1999 as well as sign alterations and replacement in 1969 and 1993, respectively. City records indicated that the “new” mall was approved by the City in 1983. Historic aerials confirm that between 1980 and 1994 the majority of this original mall was demolished; only the Macy’s building remains after this time.

The only building at the South Bay Galleria that is at least 50 years old is the Macy’s building, located on the eastern end of the mall. The Macy’s building is a Modern-style three-story commercial retail building with a rectangular plan and flat roof. The ground floor is recessed and has expressed structural columns clad in black granite. Some of the landscape planters are also clad in black granite. Entries to the building are located on the north, south, and east facades, and are composed of steel-frame double doors with fixed glazing. Steel-frame commercial windows with fixed glazing are also located are on the ground floor level, although some windows have been infilled with solid black wall material. Other wall material on the ground floor consists of rectangular tiles with sheared off aggregate and painted plaster. The upper two floors of the building are entirely windowless, and are clad primarily in brick in a stacked bond, with vertical separations expressed above the ground floor columns. Other wall cladding on the upper floors consist of painted plaster.

The project site has been substantially altered by widespread urban development within the last several decades. Urbanization in the project site has involved commercial development as well as construction of roads, parking lots, utilities, and other infrastructure. Ground disturbances associated with such urbanization have included various clearing, grading, leveling, trenching excavation, and landscaping. Specific depths of prior ground disturbance range from depths of 3 to 8 feet bgs based on the geotechnical report prepared for the project (Converse Consultants 2016).
Paleontological Resources

Paleontological resources are any fossilized remains, traces, or imprints of organisms, preserved in the earth’s crust that provide the only direct evidence of ancient life. Some examples include body fossils of insects, mollusks, fishes, amphibians, reptiles, and mammals and trace fossils of these organisms, such as tracks, trackways, impressions, and coprolites (fossilized dung). Body and trace fossils provide scientists a wealth of information regarding what the organisms ate, how they moved, how and where they lived, the environment in which they lived, how they reproduced, and how they evolved, as well as providing global information on ever-changing environments and climates through time. Paleontological resources are considered to be nonrenewable resources because they cannot be replaced once they are destroyed, they take thousands to millions of years to form, and they are oftentimes very rare due to the great odds against an organism becoming fossilized (with the exception of some invertebrates).

The Society of Vertebrate Paleontology (SVP) provides procedures for the assessment of paleontological sensitivity of geological units and for mitigation of impacts to significant, nonrenewable paleontological resources (SVP 2010). Geological units are considered by SVP (2010) to fall within one of four categories: high paleontological sensitivity, undetermined paleontological sensitivity, low paleontological sensitivity, and no potential for paleontological resources. High-sensitivity units have produced significant paleontological resources in the past and, therefore, have a high probability of yielding significant paleontological resources. Geological units with undetermined paleontological sensitivity have not produced significant paleontological resources because of a lack of information regarding their paleontological content, depositional environment, and/or geological age. Low-potential geological units have little history of yielding significant paleontological resources, and geological units such as plutonic igneous rocks and high-grade metamorphic rocks are considered to have no potential to produce significant paleontological resources (SVP 2010).

To determine paleontological sensitivity of the proposed project site, published and unpublished geological and paleontological literature was reviewed, as well as available geological maps. In addition to the desktop research, a paleontological records search was requested from the Natural History Museum of Los Angeles County (LACM) on March 4, 2016, and the results were received on March 18, 2016.

Paleontological Setting

Pleistocene sediments have yielded numerous scientifically significant paleontological resources throughout Southern California, including several localities near the project site. According to Jefferson (1991), the nearest fossil locality to the project site is approximately 1.5 miles to the southeast and yielded a specimen of fossil horse (Equus) from an unknown depth in an area mapped by Dibblee et al. (1999) as having older dune and drift sand (map unit Qos) and elevated Quaternary alluvium (map unit Qae) on the surface. A fossil mammal from an unspecified depth was recovered approximately 5 miles to the northwest of the project site in surficial sediments mapped by Dibblee et al. (1999) as Quaternary older alluvium (map unit Qoa) (Jefferson 1991). Approximately 5.5 miles to the north-northeast of the project site, Jefferson (1991) reported a fauna from surficial sediments mapped as elevated Quaternary alluvium (map unit Qae of
Dibblee and Minch (2007) that consisted of a species of *Paramylodon* (ground sloth), *Thomomys bottae* (pocket gopher), *Mammuthus* sp. (mammoth), *Equus* sp. (horse), and *Bison latifrons*. A species of fossil tapir was recovered from sediments mapped as older alluvium (map unit Qoa) approximately 7 miles southeast of the project site (Jefferson 1991). Approximately 8 miles to the southeast of the project site, Miller (1971) and Jefferson (1991) reported two localities, one yielding an undetermined species of fossil *Bison* from an unspecified depth and the other producing a proboscidean and camel in sediments mapped by Jennings (1962) as Quaternary non-marine terrace deposits (map unit Qt), which are late Pleistocene to Holocene in age. For additional discussion of paleontological resources conditions on the project site, please see the discussion in the subsequent section under *LACM Paleontological Records Search*.

**Existing Cultural Resources**

**SCCIC Records Search**

A records search for the project site was conducted on January 15, 2016, at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) located at the California State University, Fullerton. The records search included a review of all recorded resources, including archaeological sites and built environment resources, within a 0.5-mile radius of the project site, as well as a review of cultural resource reports on file.

The records search indicated that 11 cultural resources studies have been conducted within a 0.5-mile radius of the project site. Of these 11 studies, one study includes a general literature review of the project site and surrounding areas, and two studies include areas adjacent to the project site. Based on the available information at the SCCIC, the project site has not been included in past cultural resources surveys/studies.

The records search indicated that three historic-period-built resources (P-19-189746, -190021, and -190326) have been previously recorded within a 0.5-mile radius of the project site. None of these resources are located within the project site boundaries. These resources consist of three historic-period-built resources and include one 160-foot-tall Southern California Edison (SCE) four-legged lattice tower originally constructed in 1963 (P-19-189746), one historic-period two-story retail building originally constructed in 1947 (P-19-190021), and one 156-foot-tall SCE four-legged lattice tower originally constructed in 1967 (P-19-190326). These three resources were previously evaluated for listing in the National Register of Historic Places (NRHP) and were determined ineligible by consensus through the Section 106 process (Johnson 2010, 2012; Crawford 2012). They were not previously assessed for eligibility under the California Register of Historical Resources (CRHR) criteria or for local listing. No archaeological resources have been previously documented within the project site or a 0.5-mile radius.

**Historic Research for the Project Site**

The 1924, 1934, 1964, 1972, and 1981 U.S. Geological Survey (USGS) topographic quadrangles were examined. In addition, historic aerial photographs from 1928, 1947, 1956, 1963, 1965 1976, 1989, 1994, and 2002 (ATC Associates, Inc., 2004; 2010) were also examined. The maps and aerials show that the project site remained undeveloped until after 1956. Building permits for the Macy’s building indicate that a foundation permit was issued in 1957 and the current Macy’s
3. Environmental Analysis

3.3 Cultural Resources

building was originally opened as May Company in 1959. The project site appears developed in the 1965 aerial photograph. The surrounding area was vacant until the 1930s when road grids appear on the USGS topographic maps and commercial and residential structures appear on the 1947 aerial photograph.

**Historic Resources Evaluation**

A site visit was conducted on February 16, 2016 to determine whether the South Bay Galleria (or any of its individual building or structures) would qualify as historical resources for purposes of CEQA. The remaining Macy’s building from the original 1950s shopping center is historic-age. It has not been previously listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR (State CEQA Guidelines Section 15064.5(a)(1)), nor has it been previously listed in a local register of historical resources (State CEQA Guidelines Section 15064.5(a)(2)), and it has not been previously listed, or evaluated for eligibility for listing in, the CRHR (State CEQA Guidelines Section 15064.5(a)(3)); therefore, the building was documented and evaluated for its eligibility as a historical resource, including listing in the CRHR and/or local City of Redondo Beach Landmark listing. The site visit included an exterior and interior survey of the Macy’s building as well as the larger South Bay Galleria. No other architectural resources were identified on the project site during the course of the survey that required further evaluation to determine whether they would qualify as a historical resource under CEQA.

**Evaluation Criteria**

**Criterion 1:** Criterion 1 asks whether the South Bay Galleria is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage. Originally constructed in 1957, the South Bay Galleria would need to exemplify the style of shopping center that was emerging in the mid to late 1950s to be eligible under Criterion 1. While the Macy’s building itself still appears to retain its original style, it is the only remaining portion of the original shopping center. Without the rest of the original shopping center, it cannot represent this era of evolution. In addition, archival research failed to identify any significant events at the South Bay Galleria that have made a significant contribution to the broad patterns of California’s history and cultural heritage. Therefore, the South Bay Galleria is not eligible under Criterion 1 for its association with the planning and design evolution of the modern shopping center.

**Criterion 2:** Criterion 2 applies to properties associated with individuals whose specific contributions to history can be identified and documented. Individuals involved in the design or construction of the building are discussed under Criterion 3, if known. Archival research failed to identify any significant individuals whose association with South Bay Galleria would meet the criteria for eligibility under Criterion 2. Therefore, the South Bay Galleria is not eligible under Criterion 2 (association with individuals).

**Criterion 3:** Criterion 3 asks whether the subject resource embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values. The Macy’s building at the South Bay Galleria does fit into a pattern of shopping centers built at this time, especially in California; however, without the rest of
the original shopping center the style cannot be fully expressed. Although the Macy’s building also retains some of the distinctive characteristics of the Modern architectural style, it is considered a more typical example of Modern commercial architecture rather than an embodiment of the style, and it does not represent the work of a master. The South Bay Galleria does not qualify for the California Register under Criterion 3.

**Criterion 4:** Criterion 4 asks if the project would yield, or may be likely to yield, information important in prehistory or history. The South Bay Galleria does not appear to yield significant information that would expand our current knowledge or theories of design, methods of construction, operation, or other information that is not already known. As such, the South Bay Galleria is not eligible for listing under Criterion 4.

Due to the previous demolition of the majority of the original shopping center, the remaining Macy’s building does not retain sufficient integrity, nor would it be individually considered an important example of the Modern architectural style. For these reasons, all portions of the South Bay Galleria are ineligible for the CRHR, and it would not meet the criteria for local listing, and as such does not meet the definition of historical resources as defined in *State CEQA Guidelines* Section 15064.5(a)).

**Native American Outreach**

The California Native American Heritage Commission (NAHC) maintains a confidential Sacred Lands File (SLF) that contains sites of traditional, cultural, or religious value to the Native American community. ESA contacted the NAHC on March 4, 2016, to request a search of the SLF. The NAHC responded in a letter dated March 8, 2016. The letter stated that the SLF search returned negative results. The letter also included a list of Native American contacts.

**Native American Consultation**

The City initiated Native American consultation pursuant to California Public Resources Code (PRC) Section 21080.3.1, as amended by Assembly Bill 52 (AB 52). Consultation is required with Native American groups who are traditionally and culturally affiliated with the geographic area of the proposed project, and who have requested such consultation in writing. The City mailed letters to the groups on April 26, 2016 inviting them to consult regarding potential impacts to tribal cultural resources. The Gabrieleno Band of Mission Indians – Kizh Nation responded by letter on May 26, 2016. The tribe noted that the general area has been inhabited by their peoples for hundreds of years, but did not identify any tribal cultural resources within the project site. However, the tribe indicated that the entire region is sensitive and requested that “one of our certified Native American Monitor to be on site during any and all ground disturbances (including but not limited to pavement removal, post holing, auguring, boring, grading, excavation and trenching) to protect any cultural resources which may be effected during construction or development.”

During a phone call with Chairperson Andrew Salas on September 29, 2016, Mr. Salas indicated that archaeological monitoring, in lieu of a Native American monitor, would be adequate if the City would notify him in the event that prehistoric archaeological materials were encountered.
Consultation was concluded. The Soboba Band of Luiseño Indians responded by letter on May 23, 2016 and indicated that they have no specific concerns and have not identified any cultural resources in the project site. They deferred to tribes who are in closer proximity to the project. They requested that appropriate consultation continue to take place between concerned tribes, project proponents, and local agencies and that “approved Native American Monitor(s) be present during any future ground disturbing proceedings.”

Geoarchaeological Review

Chris Lockwood, Ph.D, R.P.A., conducted a desktop geoarchaeological review of the project site and vicinity in order to evaluate the potential for buried archaeological resources within the project site. The following section presents the results of Dr. Lockwood’s analysis.

The project site is on a flat landform that is currently approximately 2.8 miles (4.5 km) from the Pacific Ocean. During the late Pleistocene, sea level was approximately 120 meters below present level, leaving the vicinity of the project site approximately 11.6 miles (18.7 km) inland. Sea level rose throughout the Holocene, attaining near present conditions by approximately 2,000 to 4,000 years ago. Geological mapping suggests the project site is underlain by Pleistocene-aged deposits classified alternately as dune and drift sand (Dibblee et al. 1999) or eolian deposits (Saucedo et al. 2003). These surficial deposits are, in turn, underlain by marine and volcanic sediments that date as far back as the Miocene (Yerkes et al. 1965; McCulloh and Beyer 2004). Geotechnical testing within the project site suggests the presence of Quaternary alluvial sediments (Qal) to an approximate depth of 81.5 feet bgs (Converse Consultants 2016), while artificial fill thickness varies between 3 and 8 feet bgs. The Natural Resources Conservation Service does not maintain soils data for the area that includes the project site; the absence of such data is common in urbanized settings where substantial development occurred prior to the implementation of systematic soils surveys.

Based upon the age of native deposits within the project site, as well as the prior development of the project site for commercial purposes, the project site is considered to have a low sensitivity for in situ archaeological resources. Throughout the period of human occupation of the Los Angeles Basin, the project site has been substantially distant from the coast, and therefore limited to providing terrestrial resources. If the project site was used in the past, there appear to be no landform characteristics warranting use of project area for anything but periodic subsistence procurement, if even that. Furthermore, the lack of substantial natural deposition during the Holocene would tend to have left any cultural resources exposed at the ground surface and, therefore, subject to disturbance or destruction. If archaeological resources are present within the project site, they would be deeply buried by fill and beyond the reach of traditional archaeological shovel probing and, further, have been subjected to disturbance as a mechanical site preparation during original construction of the South Bay Galleria.

LACM Paleontological Records Search

A paleontological records search request was sent to the LACM on March 4, 2016, and the results were received on March 18, 2016. The LACM reported no vertebrate paleontological localities within the project site boundaries (McLeod 2016). The LACM records search results reported that
a total of four vertebrate localities have been documented in the vicinity of the project site from Pleistocene sediments similar to those underlying the project site, including: (1) a fossil horse (*Equus*) and whale (*Cetacea*) that were reported from approximately 15 feet bgs approximately 1.3 miles southeast of the project site; (2) fossil mammoth bones from an unspecified depth that were recovered approximately 2.5 miles just northeast of the project site; (3) a fossil horse (*Equus*) that was reported from a depth of 35 feet bgs approximately 4.25 miles south-southeast of the project site; (4) and a fossil camel (*Camelops*) that was recovered from approximately 12 to 14 feet bgs approximately 6 miles to the southeast of the project site (McLeod 2016).

Based on the LACM localities near the project site, McLeod (2016) recommended monitoring of all excavations below the uppermost few feet bgs, collection of sediment samples to determine the potential for microvertebrate recovery, and curation of any collected fossils in an accredited, permanent repository.

3.3.3 Regulatory Framework

**Federal**

Cultural resources are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (54 United States Code [USC] 300101 et seq.), and the implementing regulations, Protection of Historic Properties (36 Code of Federal Regulations [CFR] Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979. Prior to implementing an “undertaking” (e.g., issuing a federal permit), the NHPA (54 USC 306108) requires federal agencies to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation and the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the NRHP. Under the NHPA, properties of traditional religious and cultural importance to a Tribe are eligible for inclusion in the NRHP (54 USC 302706). Also under the NHPA, a resource is considered significant if it meets the NRHP listing criteria at 36 CFR 60.4.

**State**

California implements the NHPA through comprehensive cultural resources surveys and preservation programs. The California Office of Historic Preservation (OHP) implements the policies of the NHPA and maintains the California Historical Resources Inventory.

**California Environmental Quality Act**

Under CEQA (PRC Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. *State CEQA Guidelines* Section 15064.5 defines a historical resource as: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR; (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); and (3) any object, building, structure, site, area, place, record, or manuscript which a Lead Agency determines to be historically significant or significant
in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the Lead Agency, provided the Lead Agency’s determination is supported by substantial evidence in light of the whole record. The fact that a resource does not meet the three criteria outlined above does not preclude the Lead Agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

As described by PRC Section 21084.1 and Section 15064.5 of the *State CEQA Guidelines*, should a project cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired) in the significance of an historical resource, the Lead Agency must identify potentially feasible measures to mitigate these effects (*State CEQA Guidelines* Sections 15064.5(b)(1) and 15064.5(b)(4)).

Archaeological resources are defined in CEQA Section 21083.2, which states that a “unique” archaeological resource is an archaeological artifact, object, or site that has a high probability of meeting any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Unique archaeological resources as defined in Section 21083.2 may require reasonable efforts to preserve resources in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. Additionally, the *State CEQA Guidelines* state that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (*State CEQA Guidelines* Section 15064.5(c)(4)).

**California Health and Safety Code Section 7050.5**

California Health and Safety Code Section 7050.5 requires in the event human remains are discovered that all ground disturbances must cease and the County Coroner must be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin by the Coroner, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

**California Public Resources Code Section 5097.98**

Section 5097.98, as amended by Assembly Bill 2641, provides procedures in the event human remains of Native American origin are discovered during project implementation. Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and
archaeological standards, and that further activities take into account the possibility of multiple burials. Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. Once the MLD has been granted access to the site by the landowner and inspected the discovery, the MLD then has 48 hours to provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

In the event that no descendant is identified, the descendant fails to make a recommendation for disposition, or the landowner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

**Paleontological Resources**

Section 5097.5 of the PRC specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, the California Penal Code Section 622.5 sets the penalties for the damage or removal of paleontological resources.

**Local**

In 1989, City Ordinance 2554 (Section 10, Chapter 4) of the Redondo Beach Municipal Code (RBMC) established the City Preservation Commission (currently known as the Historical Commission) and created criteria for Landmark designations. The criteria formulated for City of Redondo Beach Landmark listing correspond closely with criteria established for NRHP and CRHR eligibility, and are as follows:

(A) It exemplifies or reflects special elements of the city's cultural, social, economic, political, aesthetic, engineering, or architectural history; or

(B) It is identified with persons or events significant in local, state, or national history; or

(C) It embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship; or

(D) It is representative of the notable work of a builder, designer, or architect; or

(E) Its unique location or singular physical characteristic(s) represents an established and familiar visual feature or landmark of a neighborhood, community, or the city (Chapter 14, Article 2, Section 10-4.201).

According to City Ordinance 2554, Section 10-4.302, the standard of “very exceptional” must be met for structures less than 50 and over 30 years old in determining whether a property/building/structure is a potential historic resource. This standard of “very exceptional” was used as a standard of eligibility.
3.3.4 Impacts and Mitigation Measures

**Methodology**

According to the *State CEQA Guidelines* (Section 15064.5(b)), a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. The Guidelines further state that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historic resource would be materially impaired. Actions that would materially impair the significance of a historical resource are any actions that would demolish or adversely alter those physical characteristics of a historical resource that convey its historical significance and qualify it for inclusion in the California Register or in a local register or survey that meet the requirements of PRC Sections 5020.1(k) and 5024.1(g). A Lead Agency must also take into account impacts to unique archaeological resources (*State CEQA Guidelines* Section 15064.5(c)(1)-(4)). A project that may disrupt or adversely affects paleontological resources is a project that may have a significant effect on the environment.

**Thresholds of Significance**

The project would result in significant impacts to cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in *State CEQA Guidelines* Section 15064.5. (See Impact CUL-1.)
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to *State CEQA Guidelines* Section 15064.5. (See Impact CUL-2.)
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (See Impact CUL-3.)
- Cause a substantial adverse change in a significant tribal cultural resources as defined in *State CEQA Guidelines* Section 21074. (See Impact CUL-4.)

The Initial Study/Notice of Preparation (Appendix A) found that the project would result in no impact related to the disturbance of human remains. There are no known human remains in the project site. The project site is not part of a formal cemetery and is not known to have been used for disposal of human remains. In addition, the ground has been previously disturbed by construction of existing land uses. Thus, human remains are not expected to be encountered during construction of the proposed project. Implementation of the proposed project would comply with provisions of state law regarding discovery of human remains, including California Health and Safety Code Section 7050.5 and with such compliance, impacts relating to the disturbance of human remains would be less than significant. This issue will not be evaluated further in this section.
Impacts and Mitigation

Impact CUL-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.

An evaluation of the Macy’s building was conducted in 2016 and summarized earlier in Section 3.3.2. The evaluation concluded that the Macy’s building is not considered to be an historical resource. No additional historic-age resources are located within or immediately adjacent to the project site. Therefore, demolition and/or alteration of the South Bay Galleria would not result in a significant impact to an historical resource, and no impact would occur.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

No impact.

Impact CUL-2: The proposed project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.

No known archaeological resources have been recorded within the project site boundaries. As such, the project would not impact a known archaeological resource. Based upon the age of native deposits within the project site, as well as the prior development of the project site for commercial purposes, the project site is considered to have a low sensitivity for in situ unknown archaeological resources; therefore, impacts are considered less than significant. While impacts are less than significant without mitigation, the City is proposing as standard Conditions of Approval COA CUL-1, COA CUL-2, and COA CUL-3.

Condition of Approval

COA CUL-1: A City-approved qualified archeologist, defined as an archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards for archaeology (36 CFR Part 61), or an archaeologist working under the direction of a qualified archaeologist, shall conduct pre-construction cultural resources sensitivity training to inform construction personnel on the types of cultural resources that may be encountered, and to bring awareness to personnel of actions to be taken in the event of a cultural resources discovery. The applicant shall complete training for all construction personnel and retain documentation showing when training of personnel was completed.

COA CUL-2: The qualified archaeologist, or an archaeological monitor working under the direction of a qualified archaeologist (or a cross-trained archaeological/paleontological monitor), shall conduct full-time archaeological monitoring for all ground-disturbance (including but not limited to brush clearance, vegetation removal, grubbing, grading, and excavation) from existing ground surface to depths up to 8 feet (deepest depth of known artificial fill overlying the project site). Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the project site. The monitor
shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed below in Mitigation Measure CUL-3). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to the City and any Native American groups who request a copy. A copy of the final report shall be filed at the South Central Coastal Information Center.

COA CUL-3: In the event of the discovery of archaeological materials, the applicant shall immediately cease all work activities in the area (within approximately 50 feet) of the discovery until it can be evaluated by the qualified archaeologist. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool-making 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); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone or concrete footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Construction in the area shall not resume until the qualified archaeologist has made a determination regarding the significance of the resource.

The archaeologist shall evaluate the resource and determine whether it is (1) eligible for the CRHR (and thus a historical resource for purposes of CEQA), or (2) a unique archaeological resource as defined by CEQA. If the resource is determined to be neither a unique archaeological nor a historical resource, work may re-commence in the area.

If the resource meets the criteria for either a historical or unique archaeological resource, or both, work shall remain halted within the area of the find. Avoidance and preservation in place is the preferred manner of mitigation. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. Other methods of mitigation, described below, shall only be used if the archaeologist, in consultation with the City and the applicant, determines the method would provide superior mitigation of the impacts to the resource or preservation in places is determined to be infeasible. The alternative methods of mitigation may include data recovery. In the event data recovery is the selected method of mitigation, a treatment plan shall be prepared and implemented by a qualified archaeologist in consultation with the City and the applicant that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The methods and results of evaluation or data recovery work at an archaeological find shall be documented in a professional-level technical report to be filed with the California Historical Resources Information System (CHRIS). The City
shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered. Work in the area may re-commence upon completion of treatment, as approved by the City.

Residual Impacts

No mitigation measures are required. However, as noted above, while impacts are less than significant without mitigation, the City is proposing standard Conditions of Approval.

Impact CUL-3: The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Based on the paleontological records search conducted by the LACM, and based on the additional geological and paleontological research conducted for the proposed project, there are no known fossil localities within the project boundaries. However, the results of the LACM records search and literature review indicate that the project site is underlain by Pleistocene sediments known to yield significant paleontological resources and it is highly sensitive for paleontological resources at depths below 3 feet bgs (shallowest depth of known artificial fill overlying the project site). There is a potential that ground-disturbing activities associated with the project construction may impact unknown subsurface paleontological resources. This potential impact to unknown paleontological resources is considered significant.

Mitigation Measures

Mitigation Measure CUL-4: Prior to start of earth moving activities, a City-approved, qualified professional paleontologist, meeting the Society of Vertebrate Paleontology (2010) standards, shall be retained to conduct pre-construction worker paleontological resources sensitivity training. This training can be conducted in conjunction with the training outlined in CUL-1 via a module provided to the qualified archaeologist. This training shall include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All construction personnel shall be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present.

Mitigation Measure CUL-5: The qualified professional paleontologist, or a paleontological monitor working under the direct supervision of the qualified professional paleontologist (or a cross-trained archaeological/paleontological monitor), shall monitor all ground-disturbing activity 3 feet below the depth of artificial fill (which generally corresponds to a depth between 6 and 11 feet below the modern ground surface, depending on the depth of artificial fill). The location, duration, and timing of monitoring shall be determined by the qualified professional paleontologist designated for the project in consultation with the City, and shall be based on a review of geologic maps and grading plans. During the course of monitoring, if the paleontologist can demonstrate, based on observations of subsurface conditions, that the level of monitoring should be
reduced, the paleontologist, in consultation with the City, may adjust the level of monitoring, as warranted.

Paleontological monitoring shall include inspection of exposed rock units and sediment stockpiles during active excavations within sensitive geologic sediments. If sediments appropriate for the recovery of microfossils are noted by the paleontological monitor or qualified professional paleontologist, a test sample following the Society of Vertebrate Paleontology guidelines (SVP 2010) (or an amount deemed appropriate by the qualified professional paleontologist not to exceed the SVP 2010 recommendations) shall be collected and screened for microfossils on or off site. If the test sample yields significant, identifiable microvertebrate fossils, a standard sample (or an amount determined sufficient by the qualified professional paleontologist not to exceed the SVP 2010 recommendations), consistent with Society of Vertebrate Paleontology (2010) guidelines, shall be collected and screened on or off site. The paleontological monitor shall be equipped with the necessary equipment to quickly and safely remove any exposed fossils and collect necessary geographical, stratigraphical, taphonomic, and sedimentological data. The paleontological monitor shall have authority to temporarily divert excavation operations away from exposed fossils to collect associated data and recover the specimens if deemed necessary. If it is determined necessary to remove the fossils, the paleontological monitor shall have the authority to set up a 50-foot exclusion zone with flagging tape around the fossils while they are quickly and safely removed. Monitors shall prepare daily logs detailing the types of activities and soils observed, and any discoveries. Any fossils recovered shall be prepared to the point of identification, identified to the lowest taxonomic level, and curated at an accredited facility. Following the completion of monitoring, the qualified paleontologist shall prepare a report documenting the absence or discovery of fossil resources on site. If fossils are found, the report shall summarize the results of the inspection program, identify those fossils encountered, detail the recovery and curation efforts, and describe the methods used in these efforts, as well as describe the fossils collected and their significance. A copy of the report shall be provided to the City and to an appropriate repository.

**Mitigation Measure CUL-6:** In the event of unanticipated discovery of paleontological resources when a paleontological monitor is not present, the contractor shall cease ground-disturbing activities within 50 feet of the find until it can be assessed by the qualified paleontologist. The qualified paleontologist shall assess the find, implement recovery and reporting measures if necessary per Mitigation Measure CUL-5, and determine if paleontological monitoring is warranted once work resumes.

**Residual Impacts**

With the implementation of Mitigation Measures CUL-4 through CUL-6, project implementation would result in a less than significant impact involving destruction of a unique paleontological resource.
Impact CUL-4: The proposed project would not cause a substantial adverse change in a significant tribal cultural resource as defined in §21074.

The SLF search prepared by the NAHC indicated that no Native American cultural resources are located in the project site or vicinity. The City conducted consultation in accordance with California PRC Section 21080.3.1, as amended by AB 52, with tribal representatives from the Gabrieleno Band of Mission Indians – Kizh Nation and Soboba Band of Luiseño Indians. No tribal cultural resources were identified in the project site as a result of the consultation. Therefore, the project would result in no impact to tribal cultural resources.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

The project would result in no impact to tribal cultural resources.

3.3.5 Cumulative Impacts

The geographic scope of the assessment area is the city of Redondo Beach. Historic and archaeological resources include resources listed in, or determined to be eligible by the State Historical Commission for listing in the CRHR or resources eligible pursuant to the Redondo Beach criteria. A significant cumulative impact would occur if construction projects collectively destroyed unique archaeological resources and historical resources that provide historic cultural information to the extent that such information would be permanently lost pursuant to Section 15064.5 of the State CEQA Guidelines.

As discussed above, there are no historical resources on the project site or in the surrounding area. Therefore, the project would not contribute to a cumulatively significant impact to historical resources. Impacts would be less than significant (i.e., not cumulatively considerable under Impact CUL-1).

No archaeological resources are known to be located within the project site and the potential for encountering unknown archaeological on the project site is considered to be low; therefore, impacts are considered less than significant and not cumulatively considerable (Impact CUL-2). While impacts are not cumulatively considerable, the City is proposing as a Standard Conditions COA CUL-1 through COA CUL-3.

No known fossil localities have been found on the project site. However, Pleistocene sediments underlying the project site have demonstrated the presence of significant paleontological resources. Pleistocene sediments are also located in the project vicinity and could be impacted by cumulative development. Because the project could potentially encounter unknown paleontological resources, this impact is considered significant without mitigation (cumulatively considerable) for Impact CUL-3. With implementation of Mitigation Measures CUL-4 through CUL-6, the project’s contribution to cumulative impacts on paleontological resources would be less than cumulatively considerable, and thus less than cumulatively significant.
The SLF search prepared by the NAHC indicated that no Native American cultural resources are located in the project site or vicinity. The City conducted consultation in accordance with California PRC Section 21080.3.1, as amended by AB 52, with tribal representatives from the Gabrieleno Band of Mission Indians – Kizh Nation and Soboba Band of Luiseno Indians. No tribal cultural resources were identified in the project site as a result of the consultation. Therefore, the project would result in no impact to tribal cultural resources. The project’s contribution to cumulative impacts on tribal cultural resources would not be cumulatively considerable (Impact CUL-4).

**Cumulative Mitigation Measures**

Mitigation Measures MM CUL-4 through MM CUL-6 would reduce cumulative impacts to cultural resources from project implementation to less than significant.

**Cumulative Residual Impacts**

With application of mitigation measures associated with potential to encounter and destroy unknown paleontological resources during excavation activities, the proposed project would not have a significant cumulative impact on unique paleontological resources after implementation of Mitigation Measures CUL-4 through CUL-6.

**3.3.6 Significant Unavoidable Impacts**

No significant and unavoidable cultural resources impacts were identified for the proposed project with implementation of the proposed mitigation measures.

**3.3.7 References**


Crawford, K.A., 2012. Site Record for P-19-190326 on file at the South Central Coastal Information Center, California State University, Fullerton.


Johnson, Brent D., 2010. Site Record for P-19-189746 on file at the South Central Coastal Information Center, California State University, Fullerton.

2012. Site Record for P-19-190021 on file at the South Central Coastal Information Center, California State University, Fullerton.


McLeod, S.A., 2016. Paleontological resources for the proposed South Bay Galleria Project, ESA Project # 140636.00, in the City of Redondo Beach, Los Angeles County, project area. Natural History Museum of Los Angeles County Paleontological Records search, dated 18 March 2016.


