

4. ENVIRONMENTAL IMPACT ANALYSIS

C. CULTURAL RESOURCES

1. ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

1. INTRODUCTION

This section evaluates potential impacts on archaeological and paleontological resources. The analysis provided in this section is based on a cultural resource records search conducted through the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC); a Sacred Lands File (SLF) search commissioned through the Native American Heritage Commission (NAHC) and a paleontological resources records search commissioned from the Natural History Museum of Los Angeles County (NHMLAC). In addition, the City submitted request to consult letters to various Native American individuals and organizations from the City's NAHC Tribal Consultation List pursuant to AB 52. The Native American consultation documentation and the results of the paleontological resources records search are included in Appendix D-1, Native American Consultation Documentation and Appendix D-2, Paleontological Records Search Results, of this Draft EIR.

Archaeology is the recovery and study of material evidence of human life and culture. Over time, this material evidence becomes buried, fragmented or scattered, or otherwise hidden from view. In urban areas such as the Project Site and environs, archaeological resources may include both prehistoric remains (before 1769 A.D.) and remains dating to the historical period (1769 to 1950 A.D.). Prehistoric resources can include village sites, temporary camps, lithic (stone tool) scatters, rock art, roasting pits/hearths, milling features, rock features, and burials. Historic archaeological resources can include refuse heaps, bottle dumps, ceramic scatters, privies, foundations, and burials and are generally associated in California with the Spanish Mission Period (after 1769) to the mid-20th century of the American Period.

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, non-renewable, and impact-sensitive scientific and educational resource. 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.

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Archaeological Setting

Archaeologists generally divide the human history of the southern California coast region into three major time intervals: Prehistoric, Protohistoric, and Historic (refer to **Table 4.C.1-1, Cultural Chronology of the Southern California Coast Region**, below). Prehistory is subdivided into the Paleocoastal, Milling Stone, Intermediate, and Late Prehistoric periods. History is subdivided into the Spanish, Mexican, and American periods.

Table 4.C.1-1

Cultural Chronology of the Southern California Coast Region

Date Range	Period
AD 1847-1960	American
AD 1822-1847	Mexican
A.D. 1769-1822	Spanish
A.D. 1542-1769	Protohistoric
1500 BP ^a to AD 1542	Late Prehistoric
4,000-1,500 BP	Intermediate
7,000-4,000 BP	Milling Stone
More Than 7,000 BP	Paleocoastal

^a BP = Before Present. By convention, "present" is set at AD 1950

Source: Adapted from Elsasser (1978) and Schuyler (1978), and modified.

The cultural chronology of the region is a subject of ongoing investigation. The dating of cultural change continues to undergo refinement using the results of new excavations, as does our understanding of the processes of cultural change. The need for further research accounts for the use of some broad date ranges and the presentation of some key but untested hypotheses within the following discussion.

(a) Prehistory, Early Holocene to AD 1542

The Project Site is located in the coastal zone of the northernmost Peninsular Ranges portion of the Southern California Coast prehistoric culture area, which encompasses the Transverse Ranges, the northern Peninsular Ranges, and the coastal zone and near-shore islands from Point Conception in the north to San Diego Bay in the south.¹ The subsistence of prehistoric hunter-gatherers in the coastal zone and near-shore islands depended on marine shellfish, fish, and mammals, supplemented with terrestrial game and a variety of terrestrial plants. Further inland, subsistence opportunities were limited to terrestrial plants and animals.

The prehistoric chronology of the region is traditionally divided into Milling Stone, Intermediate and Late Prehistoric periods, but more currently into Early, Middle, and Late Holocene periods.² In recent years, some conclusive evidence has emerged supporting human occupation during the late Pleistocene and earliest Holocene periods.

¹ Elsasser, Albert B., 1978, *Development of Regional Prehistoric Cultures. In Handbook of Native American Indians, Volume 8: California*, pp. 37-57, edited by Robert F. Heizer. Smithsonian Institution, Washington, D.C.

² Altschul, J. H, and. D. R. Grenda (editors), 2002, *Islanders and Mainlanders: Prehistoric Context for the Southern California Coast and Channel Islands*. The University of Arizona Press, Tucson.

Some of the oldest human skeletons found in the Americas were discovered at the Haverty Site, only about 4.5 miles southwest of the Project Site.³ A more recent study of the Haverty skeletons concludes that at least some of the skeletons may be of “terminal Pleistocene age.”⁴ Human bone collected from Santa Rosa Island in 1959 has recently been dated to 10,000-11,500 BP⁵ and is contemporaneous with pygmy mammoth bone also found on the island.⁶ Human and domestic dog bone, collected in 1994 from La Brea Tar Pits about 5.5 miles northwest of the Project Site, has been dated to the beginning of the Holocene, but radiocarbon dating complications make the date uncertain.⁷ The Milling Stone Horizon⁸ marks a shift from a subsistence strategy which emphasized big game hunting (of which large, fluted spear points, and the bones of butchered large mammals are hallmarks) to one which, for inland populations, emphasized plant seeds (as represented by the manos and metates used to mill them, and carbonized seeds). This presumably adaptive change occurred perhaps as early as 7,000 years BP and no later than about 4,000 or 3,000 BP.⁹

More elaborate material culture represents the subsequent Intermediate period, about 4,000 or 3,000 BP to about 1,500 BP: basket hopper mortars, bowl mortars, pestles, broad leaf-shaped blades, heavy side-notched and leaf-shaped spear points, stemmed atlatl dart points, implements and ornaments of bone, horn, shell, asphalt, and steatite, and inhumations with red ocher and stone cairns. This elaboration of material culture may reflect burgeoning and aggregating populations, and intensified social and political interaction.

The Late Prehistoric period, circa 1,500 BP, marks the advent of the bow and arrow as evidenced by finely chipped, stemless, concave- and convex-based arrow points, and steatite arrow straighteners. Also added to the material culture were steatite containers and shell, bone, and stone ornaments. Inhumations included abundant and diverse grave goods. The bow and arrow may have been adopted or developed primarily as a weapon rather than as a hunting tool, suggesting the full realization of population pressure and territoriality. Laboriously manufactured and visually attractive containers and ornaments, and mortuary customs requiring the sacrifice of considerably valuable material possessions, suggest a fully developed concept of wealth. Warfare, territoriality, and wealth all point to incipient tribalism.

(b) Protohistory, AD 1542-1769

The Protohistoric period is the time between initial contact and subsequent, tenuous and peripheral contact with a literate culture to the full establishment of a local literate culture. In the Southern California Coast culture area, the advent of protohistory is marked by the maritime explorations of Juan Rodriguez Cabrillo in AD 1542. During the following 227 years, direct contact between local indigenous people and Europeans

³ Brooks, S., et al., 1990, *The Haverty Human Skeletons: Morphological, Depositional, and Geochronological Characteristics*. *Journal of California and Great Basin Anthropology* 12(1).

⁴ *Ibid.*

⁵ Johnson, J. R., 2002, *Arlington Springs Revisited*. In *Proceedings of the Fifth California Islands Symposium*, pp. 541-545. USDI Minerals Management Service and the Santa Barbara Museum of Natural History, Santa Barbara, California.

⁶ Agenbroad, L. D., et al., 2005, *Mammoths and Humans as Late Pleistocene Contemporaries on Santa Rosa Island*. In *Proceedings of the Sixth California Islands Symposium* edited by D. Garcelon and C. Schwemm, pp. 3-7. National Park Service Technical Publication CHIS-05-01, Institute for Wildlife Studies, Arcata, California.

⁷ Erlandson, J. M. 1994, *Early Hunter-Gatherers of the California Coast*. Plenum Press, New York.

⁸ Wallace, W. J., 1955, *A Suggested Chronology for Southern California Coastal Archaeology*. *Southwestern Journal of Anthropology* 11(3):214-230.

⁹ Elsasser, A. B., 1978, *Development of Regional Prehistoric Cultures*. In *Handbook of Native American Indians, Volume 8: California*, pp. 37-57, edited by Robert F. Heizer. Smithsonian Institution, Washington.

was limited to occasional European visits by sea. Spanish exploration and the establishment of Spanish colonies in Mexico, including along the Baja California Peninsula, afforded opportunities for brief episodes of direct contact and for peripheral contact such as “down-the-line” or “neighbor-to-neighbor” exchange of information and goods.¹⁰

European artifacts, although rare, are found in protohistoric archaeological deposits¹¹ Glass trade beads are the most common. One example, albeit from farther north along the California coast, is that of China ceramic fragments from an AD 1595 Spanish shipwreck which were collected and reworked by the Coast Miwok for generations.¹² European diseases likely took a toll on indigenous populations during protohistory.¹³ Historical documentation of local people and events began with the overland Portolá expedition in 1769 and the establishment of Spanish missions in the 1770s.

In 1542, when Cabrillo, leader of the first European exploration of the California coast, sailed his ships into the San Pedro and Santa Monica bays, a “great number of Indian villages” were observed:¹⁴

Villages were situated all along the Pacific shore wherever fresh water was available from flowing springs or cañon streams. In this semi-arid land established villages were almost inevitable wherever there was a stretch of level land along the banks of the Los Angeles River and the few other streams within the county area. In the mountains, the cañons usually were too narrow to afford sites for villages; but settlement sites are to be found where the cañons open out and the land levels off...

It is notable that the courses of the rivers of the Los Angeles Basin, prior to modern, artificial channelization, fluctuated horizontally as sediments built up, or were transported and shifted due to storm waters and, at their estuaries, tidal and wave forces. Prehistoric village site locations, hence, may correlate with former, pluvial river channels rather than with current channels. Prior to floods in 1824-1825, for example, the Los Angeles River emptied into Santa Monica Bay, not San Pedro Bay.¹⁵

(c) Ethnohistory, Early History, AD 1769-1847

The Project Site is located in the heart of Gabrielino¹⁶ tribal territory which, at the start of the Spanish Period, included the Los Angeles Basin and adjacent areas, and San Clemente, Santa Catalina, and San Nicolas islands. Their mainland territory extended from the San Fernando Valley and the San Gabriel Mountains in the north to Aliso Creek and the Santa Ana Mountains in the south, and from Mount Rubidoux in the east to Topanga

¹⁰ Lightfoot, K. G., and W. S. Simmons, 1998, *Culture contact in Protohistoric California: Social Contexts of Native and European Encounters*. *Journal of California and Great Basin Anthropology* 20(2): 138-170.

¹¹ King, C., 1978, *Protohistoric and Historic Archaeology*. In *Handbook of Native American Indians, Volume 8: California*, pp. 58-68, edited by Robert F. Heizer. Smithsonian Institution, Washington.

¹² Starr, K., 2005, *California: A History*. Modern Library, New York.

¹³ Erlandson, J. M., and K. Bartoy, 1995, *Cabrillo, the Chumash, and Old World Diseases*. *Journal of California and Great Basin Anthropology* 17(2):153-173.

¹⁴ Walker, E. F., 1951, *Five Prehistoric Archaeological Sites in Los Angeles County, California*. Southwest Museum, Los Angeles, California.

¹⁵ Johnston, B. E., 1962, *California's Gabrielino Indians*. Southwest Museum, Los Angeles.

¹⁶ *The Gabrielino (alternatively spelled Gabrieleño) are so called for their aggregation at the Mission San Gabriel Arcángel during the early Spanish Period. Currently, many Gabrielinos prefer the term Gabrielino-Tongva, or simply Tongva, or Kizh.*

Canyon in the west. This territory included mountain, foothill, prairie, coastal zones, and the islands, which offered a variety of resources to Gabrielino foragers.

The Gabrielino relied on gathered wild plants and trapped or hunted animals¹⁷ for food. Acorns and piñon nuts were food staples found only in the mountains and foothills. On the islands and coast, marine resources, especially shellfish, fish, and sea mammals, greatly supplemented terrestrial resources. Plants also provided building material and raw material for craft manufacturing such as basket making. Animal bone, skin, fur, and feathers were also used as raw material for craft manufacturing. Whale bones were sometimes used in building windbreaks and houses. Certain types of stone were quarried and asphaltum¹⁸ was gathered for tool and container manufacturing, and for water-proofing boats. Santa Catalina Island provided abundant steatite¹⁹ which was valued as a raw material for bowls and an array of other items, notably body ornaments.

The Gabrielino interaction sphere was considerably larger than their tribal territory *per se*.²⁰

With the possible exception of the Chumash [their westward neighbors], the Gabrielino were the wealthiest, most populous, and most powerful ethnic nationality in aboriginal southern California, their influence spreading as far north as the San Joaquin Valley Yokuts, as far east as the Colorado River, and south into Baja California.

The Gabrielino spoke several dialects of a Cupan language in the Takic family, and neighboring tribes to the north, east, and south also spoke languages in the Takic family.²¹

Spain established two Franciscan missions in Gabrielino tribal territory: Mission San Gabriel Arcángel, founded in 1771 in the north-central Los Angeles Basin, and Mission San Fernando Rey de España, founded 1797 in the north-central San Fernando Valley. Prior to aggregation at the missions, the Gabrielino settlement pattern included primary villages and secondary camps; both villages and camps were situated alongside fresh waterways or springs.

For the Gabrielino and other Native Americans, Euro-American exploration and settlement, and the Spanish mission system, meant disease, strife, capture, displacement, and population decline from first contact until the 20th century.²² Several Gabrielino villages (*Apachianga*, *Otsunga*, *Yaanga*, and *Sonagna*) are known to have existed near or in the heart of the City of Los Angeles; however, their exact location is unknown. A Gabrielino Indian site is also known to have been located at Dodger Stadium and approximately 2.15 miles

¹⁷ *Plants were not domesticated and domesticated animals were limited to dogs. Archaeological data collected to date does not suggest that dogs were used for food.*

¹⁸ *Asphaltum is a tar-like substance that washes ashore from natural, undersea oil seepages.*

¹⁹ *A soft rock consisting largely of talc and also known as steatite.*

²⁰ *Bean, L. J., and C. R. Smith, 1978, Gabrielino. In: Handbook of North American Indians, Vol. 8, California. Robert F. Heizer, ed., pp. 538-549. Smithsonian Institution, Washington.*

²¹ *Shipley, W. F., 1978, Native Languages of California. In Handbook of North American Indians, Vol. 8, California. Robert F. Heizer, ed., pp. 80-90. Smithsonian Institution, Washington.*

²² *Castillo, E. D., 1978, The Impact of Euro-American Exploration and Settlement. In Handbook of Native American Indians, Volume 8: California, pp. 99-127, edited by Robert F. Heizer. Smithsonian Institution, Washington. Costo, R., and J. H. Costo, (editors), 1987, The Missions of California: A Legacy of Genocide. Indian Historian Press, San Francisco. McCawley, W., 1996, The First Angelinos: The Gabrielino Indians of Los Angeles. Malki Museum Press, Banning, California.*

north of the Project Site. In addition, Gabrielino villages are also known to have existed throughout the Los Angeles Basin. This information is based on Cabrillo's arrival accounts of 1542 in the San Pedro Bay, calling the land the "Bay of Smokes" because he had seen so many village fires inland.²³

During the Spanish and Mexican periods, from the time of the overland Portolá expedition until the culmination of the Mexican-American War, the Project Site was not far from the centers of population and commerce. El Pueblo de La Reina de Los Angeles, established in 1781, was about 1.75 miles northeast, Mission San Fernando was about 19.5 miles to the northwest, and Mission San Gabriel was about 10 miles to the northeast.²⁴ Later history is discussed in Section 4.C.2, *Historical Resources*, of this Draft EIR.

(2) Resources Identified in the Project Vicinity

(a) Archaeological Resources

Results of the cultural resources records search indicate that a total of 45 cultural resource studies have been conducted within a one-half mile radius of the Project Site. Of the 45 studies, three have been conducted immediately adjacent to the Project Site. One study also appears to have previously included the Project Site. This study consists of a letter to initiate consultation with the State Historic Preservation Officer (dated April 12, 2013) regarding the proposed restoration of the Historic Streetcar Service in Downtown Los Angeles²⁵.

A total of 38 resources have been recorded within the one-half mile radius of the Project Site, although only one of the resources, 19-003287, is an archaeological resource. This resource is described as five discrete refuse scatters dating to the early 1900s that were recovered below the surface during construction monitoring of the Belmont New Primary Center Number 11 Project.²⁶ Of these 38 resources, one (19-173054) has been recorded immediately east of the Project Site's northern boundary. This resource is a built environment described as the 11-story Petroleum Building²⁷. This resource is discussed further in Section 4.C.2, *Historic Resources*, of this Draft EIR. No historic or prehistoric archaeological resources have been recorded within close proximity or within the boundaries of the Project Site.

The 1906 Sanborn Map shows that the lots that now compose the Project Site and its immediate area were developed with single-family homes or duplexes. Review of the 1951 Sanborn Map indicates that the northern portion of the Project Site was developed with: a gas station with parking, one auto storage, four stores, and a stand-alone office. The southern portion of the Project Site appears to have been developed with: one stand-alone office, a two-story building (first floor: office and auto parts, second floor: auto repairing), one auto trimming shop, a two-story building (Rms), one stand-alone small structure, a repair shop and an auto sales lot.

²³ *TongvaPeople.com, 2016, Villages, <http://tongvapeople.com/villages.html>, accessed January 12, 2016.*

²⁴ *Beck, W. A., and Y. D. Haase, 1974, Historical Atlas of California. University of Oklahoma Press, Norman.*

²⁵ *Rogers, Leslie, 2013, Initiation of Section 106 Consultation for the Restoration of Historic Streetcar Service in Downtown Los Angeles, Report on file at SCCIC.*

²⁶ *Underwood, Jackson, 2004, DPR Site Form for 19-003287. Record on file at the SCCIC.*

²⁷ *Hatheway, Roger G., 1979, DPR Site Form for 19-173054, Record on file at SCCIC.*

Results of a SLF search did not indicate any recorded Native American cultural resources from the NAHC database on the Project Site.²⁸ Pursuant to NAHC suggested procedure, follow-up letters were sent via certified mail on February 25, 2016 to the five Native American individuals and organizations identified by the NAHC as being affiliated with the vicinity of the Project Site. The letters request any additional information or concerns the affiliated parties may have about any potential Native American cultural resources on the Project Site for which records may not be available. To date, responses were received by the City of Los Angeles, Department of City Planning from two Native American contacts. The first response was received on February 9, 2016 from Mr. Andrew Salas, Chairman of the Gabrielino Band of Mission Indians-Kizh Nation. The letter mentioned that the entire Downtown area is “highly sensitive” and therefore the Tribe requests a Tribal monitor to be present at the Project Site during all ground disturbing activities including, but not “limited [to] pavement removal, pot-holing or auguring, boring, grading, excavation and trenching”. The second response letter was received on March 8, 2016 from Mr. Joseph Ontiveros, Cultural Resources Director from the Soboba Band of Luiseño Indians. Mr. Ontiveros mentioned that the Band defers to the Gabrielino, as they are closer to the Project Site.

(b) Paleontological Resources

Results of the paleontological resources records search indicate that the Project Site has surface deposits composed of younger Quaternary Alluvium (derived from the floodplain of Los Angeles River) which are not known for containing significant fossil vertebrates in the upper layers. However, in the older underlying layers of older Quaternary Alluvium are conducive to retaining paleontological resources. Moreover, it is possible that the Project Site could contain deposits of the Fernando and Puente Formations as these geologic units were encountered just north of the Project Site. The closest vertebrate fossil locality from older Quaternary deposits is LACM 1755 (located approximately .35 miles southeast of the project site and near the intersection of Hill Street and 12th Street) which produced a fossil specimen of a horse at a depth of 43 feet below surface. Fossil locality LACM 6204 (located approximately 2.65 miles northwest of the project site and near the intersection of Wilshire Boulevard and Serrano Avenue) yielded a fossil specimen of mammoth at an unknown depth while LACM 1893 [situated 2.75 miles southwest of the project site and near the Santa Monica Freeway (I-10)] produced fossil specimens of mammoth and bison. Four fossil localities from the Fernando Formation, LACM 3868, LACM 6971, LACM 4726 and LACM 7730 (located between .50 to about 1.15 miles north of the project site) have also yielded combined fauna including fossil specimens of stingray, eagle ray, skate, chimaerid, bull shark, dusky shark, hammerhead shark, white sharks, herring, hake, sheepshead, mackerel, bird, rorqual baleen whale, and toothed whale. Three other localities from the Puente Formation are also located approximately 1 to 1.5 miles northwest of the Project Site that have yielded fossil fish specimens of deep sea smelt, needlefishes, moras, lanternfishes, mackerels, and a fossil whale rib fragment at depths between 40 and 80 feet below surface. LACM 5961 also from the Puente Formation was found during excavation for the Metrorail station (approximately 1.15 miles northeast of the Project Site) and produced specimens of the fossil bristlemouth fish.

b. Regulatory Framework

Numerous laws and regulations require State and local agencies to consider the effects of a Project on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities

²⁸ *Request for Sacred Lands File Search and Native American Contact List for the 1020 S. Figueroa Street Project in the City of Los Angeles, California. Prepared by Gayle Totton, Associate Governmental Program Analyst, California Native American Heritage Commission, February 10, 2016.*

of the various agencies proposing the action, and proscribe the relationship among other involved agencies. A description of the applicable laws and regulations is below.

(1) State Level

(a) Archaeological Resources

(i) California Register of Historical Resources

Created by Assembly Bill 2881, which was signed into law on September 27, 1992, the California Register of Historical Resources (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.”²⁹ The criteria for eligibility for the California Register are based upon National Register criteria.³⁰ 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.³¹

To be eligible for the California Register, a pre-historic or historic property must be significant at the local, state, and/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; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register of Historic Places, but it may still be eligible for listing in the California Register.

Archaeological resources, in contrast to built environment historic period resources, are most often eligible under Criterion 4 for their “information potential.” For properties eligible under Criterion 4, less attention is given to their overall condition, than if they were being considered under Criteria 1, 2, or 3. Archeological sites, in particular, do not exist today exactly as they were formed as there are always cultural and natural processes that alter the deposited materials and their spatial relationships. For properties eligible under

²⁹ *California Public Resources Code Section 5024.1(a).*

³⁰ *California Public Resources Code Section 5024.1(b).*

³¹ *California Public Resources Code Section 5024.1(d).*

Criterion 4, integrity is based upon the property's potential to yield specific data that addresses important research questions.³²

Additionally, the California Register includes resources that are listed automatically and those that are nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register of Historic Places and those formally Determined Eligible for the National Register of Historic Places.
- California Registered Historical Landmarks from No. 770 onward.
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5.³³
- Individual historical resources.
- Historical resources contributing to historic districts.
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

(ii) California Environmental Quality Act

The California Environmental Quality Act (CEQA) is the principal statute governing environmental review of projects occurring in the State. CEQA requires lead agencies to determine if a proposed project would have a significant effect on archaeological resources (Public Resources Code Sections 21000 *et seq.*). As defined in Section 21083.2 of the Public Resources Code, 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, and there is a high probability that it meets 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.

³² *National Register Bulletin 15, page 46.*

³³ *Those properties identified as eligible for listing in the National Register of Historic Places, the California Register of Historical Resources, and/or a local jurisdiction register.*

In addition, State *CEQA Guidelines* §15064.5 broadens the approach of classifying archaeological resources by using the term “historical resource” instead of “unique archaeological resource.” The *Guidelines* recognize that certain archaeological resources may also have significance. The *Guidelines* recognize that a historical resource includes: (1) a resource in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in Public Resources Code §5020.1 (k) or identified as significant in a historical resource survey meeting the requirements of Public Resources Code §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.

If a lead agency determines that an archaeological site is a historical resource, the provisions of §21084.1 of the Public Resources Code and §15064.5 of the *Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the *Guidelines*, then the site is to be treated in accordance with the provisions of Public Resources Code §21083.2, which refer to a unique archaeological resource. The *Guidelines* note 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. (§15064.5(c)(4)).

(iii) Assembly Bill 52

Assembly Bill 52 (AB 52) is recent legislation that amends CEQA and requires lead agencies to consult with California Native American tribes to identify, evaluate, and mitigate impacts to a new type of cultural resource called “tribal cultural resources”, if the tribes formally request consultation. A tribal cultural resource is any of the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - Included or determined to be eligible for inclusion in the California Register.
 - Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of California Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.

(iii) California Health and Safety Code

California Health and Safety Code sections 7050.5, 7051, and 7054 address the illegality of interference with human burial remains (except as allowed under applicable sections of the Public Resource Code), and the disposition of Native American burials in archaeological sites. These regulations protect such remains from disturbance, vandalism, or inadvertent destruction, and establish procedures to be implemented if Native

American skeletal remains are discovered during construction of a project, including treatment of the remains prior to, during, and after evaluation, and reburial procedures.

(b) Paleontological Resources

(i) California Environmental Quality Act

Paleontological resources are afforded protection by environmental legislation set forth under CEQA. Appendix G (part V) of the State *CEQA Guidelines* provides guidance relative to significant impacts on paleontological resources, stating that “a project will normally result in a significant impact on the environment if it will ...disrupt or adversely affect a paleontological resource or site or unique geologic feature.” The *Guidelines* do not define “directly or indirectly destroy,” but it can be reasonably interpreted as the physical damage, alteration, disturbance, or destruction of a paleontological resource. The *Guidelines* also do not define the criteria or process to determine whether a paleontological resource is significant or “unique.”

(ii) Other State Regulations

California Code of Regulations, Title 14, Division 3, Chapter 1, Section 4307 states, part that “no person shall destroy, disturb, mutilate or remove . . . paleontological features.” California Public Resources Code Section 5097.5 protects cultural resources on public lands and specifies that any unauthorized removal of paleontological remains is a misdemeanor. California Penal Code Section 622½ states that damage or removal of archaeological or historical resources (which may be interpreted to include paleontological resources) on public or private lands constitutes a misdemeanor.

(2) Local Level – City of Los Angeles

(a) Archaeological Resources

(i) General Plan Conservation Element

The City of Los Angeles’s *General Plan Conservation Element* (Conservation Element), Chapter II, Section 3, defers to the State *CEQA Guidelines* in regard to the identification, evaluation, and mitigation of impacts to archaeological resources. The Conservation Element states that the City has primary responsibility for protecting significant archaeological resources. Furthermore, if it is determined that a development project may disrupt or damage an archaeological site, the project is required to provide mitigation measures to protect the site or enable study and documentation of the site, including funding of the study by the Applicant. The City’s environmental guidelines require the Applicant to secure services of a qualified archaeologist to monitor excavations or other subsurface activities associated with a development project in which all or a portion is deemed to be of archaeological significance. Discovery of archaeological materials may temporarily halt the project until the site has been assessed, potential impacts evaluated and, if deemed appropriate, the resources protected, documented, and/or removed.³⁴

The Conservations Element lists the following objective and policy for archaeological and paleontological resources:

³⁴ *City of Los Angeles General Plan Conservation Element, Chapter II, Section 3, adopted September 2001, pages II-3 through II-6.*

- **Objective:** Protect the City's archaeological and paleontological resources for historical, cultural, research, and/or educational purposes.
 - **Policy:** Continue to identify and protect significant archaeological and paleontological sites and/or resources known to exist or that are identified during land development, demolition or property modification activities.

(b) Paleontological Resources

(i) General Plan Conservation Element

The City's General Plan Conservation Element, Chapter II, Section 3,³⁵ protects endangered paleontologic sites by iterating CEQA mandates. The Conservation Element states that the City has primary responsibility to protect significant paleontological resources. The Conservation Element indicates that a paleontologist must assess a project's potential impact to a paleontologic site and should determine the appropriate mitigation if a paleontologic site will be destroyed. If significant paleontologic resources are uncovered during a project's execution, a designated paleontologist must be allowed to order assessment, removal, or protection of the resource.

To protect paleontological resources and pursuant to CEQA, if a land development project is within a potentially significant paleontological area, the developer is required to contact a qualified paleontologist to arrange for assessment of the potential impact and mitigation of potential disruption of or damage to the site. If significant paleontological resources are uncovered during project execution, authorities are to be notified and designated qualified paleontologist may order excavations stopped, within reasonable time limits, to enable assessment, removal, or protection of the resources. For the City and County, the Los Angeles County Museum of Natural History, in particular the George C. Page Museum, is the accepted authority concerning paleontological resources.

(ii) Society for Vertebrate Paleontology

The Society of Vertebrate Paleontology (SVP) has established guidelines for the identification, assessment, and mitigation of adverse impacts on nonrenewable paleontological resources (SVP,1995) Most practicing paleontologists in the nation adhere closely to the SVP's assessment, mitigation, and monitoring requirements outlined in these guidelines, which were approved through a consensus of professional paleontologists and are the standard. The SVP outlined criteria for screening the paleontological potential of rock units (High, Undetermined, Low) and established assessment and mitigation procedures tailored to such potential.

3. ENVIRONMENTAL IMPACTS

a. Methodology

(1) Archaeological Resources

The analysis of archaeological resources is based on cultural records searches and an SLF search conducted by the NAHC. An assessment of the Project Site's existing conditions indicated no exposed native ground

³⁵ *City of Los Angeles General Plan, Conservation Element, Chapter II, Section 3, adopted September 2001, pages II-5 and II-6.*

surface, which prevents any detection of typical surface clues regarding the potential presence of archeological resources. Therefore, no archaeological field survey was undertaken. To identify potential present cultural resources, a cultural resource records search was conducted at the CHRIS-SCCIC at California State University, Fullerton,³⁶ and included a review of all recorded archaeological resources within a one-half mile radius of the Project Site, as well as a review of cultural resource reports and historic topographic maps on file. Reviews of the following resources were also performed: California Points of Historical Interest (CPHI), California Historical Landmarks (CHL), the California Register, and the National Register. The records search indicates whether previously recorded archaeological resources exist within or near the Project Site. The potential for the Project Site to contain archaeological resources was assessed based on the findings of the records search (i.e., presence and proximity of known resources), historic land use, and the proposed excavation parameters for the Project.

In addition, an SLF search was conducted by the NAHC, with follow-up consultation with Native American groups and/or individuals identified by the NAHC as having affiliation with the Project Site vicinity.³⁷ Each Native American group and/or individual listed was sent a Project notification letter and map and was asked to communicate any knowledge regarding prehistoric or Native American resources (archaeological sites, sacred lands, or artifacts) located within the Project Site or its vicinity. The letter included the Project location and a brief description. Results of the SLF search and are used to identify the location of additional prehistoric or Native American archaeological resources for which records may not be available at the CHRIS-SCCIC.

(2) Paleontological Resources

The analysis of paleontological resources is based on a review of fossil, soil and rock inventories compiled, synthesized, and evaluated by the staff of the Vertebrate Paleontology Section of the NHMLAC. Because the Project Site is entirely developed or paved and lacks any visible native ground surface or potential for surface exposure of resources, no paleontological field survey was undertaken.

The objective of the record search was to determine the geological formations underlying the Project Site, whether any paleontological localities have previously been identified within the Project Site or in the same or similar formations near the Project Site, and the potential for excavations associated with the Project Site to encounter paleontological resources. These methods are consistent with the SVP guidelines for assessing the importance of paleontological resources in areas of potential environmental effect.

As with archaeological resources, since no known resources were identified within the Project Site from the NHMLAC search, this did not preclude the existence of previously unknown buried resources within the Project Site that may be impacted during construction of the Project. The City has determined that there is potential for ground disturbance associated with the Project to encounter buried resources, based on the results of the record searches, depth of native versus fill soils, land use history, past disturbances, and the proposed excavation parameters for the Project.

³⁶ PCR Services, December 3, 2015.

³⁷ PCR Services, February 8, 2016 and February 25, 2016, respectively.

(3) Tribal Cultural Resources

The analysis of tribal cultural resources is based on Project notification and request to consult letters that the City submitted to eight (8) Native American individuals and organizations on the City's AB 52 Notification List on March 24, 2016. These request to consult letters and the responses to them are provided in Appendix D-1 of this Draft EIR.

b. Thresholds of Significance

As discussed in the Initial Study, provided in Appendix A of this Draft EIR, no further analysis on the topic of human remains in the EIR section is required and no mitigation measures are required. As discussed in the Initial Study, human remains that are inadvertently uncovered during excavation activities shall be treated in accordance with State Health and Safety Code Section 7050.5, Public Resources Code 5097.98, and CEQA Guidelines Section 15064.5(e).

(1) Archaeological Resources

Appendix G of the State *CEQA Guidelines* provides the following screening question to address impacts with regard to archaeological resources:

Would the project:

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

The *L.A. CEQA Thresholds Guide* incorporates the screening questions contained in Appendix G. In accordance with the City's thresholds, the Project would normally have a significant impact upon archaeological resources if it could disturb, damage, or degrade an archaeological resource or its setting that is found to be important under CEQA because it:

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

Based on these factors, the Project would have a significant impact on archaeological resources if it:

- ARCH-1** Substantially disturbs, damages, or degrades an archaeological resource or its setting in a manner that would change the significance of the resource pursuant to Section 15064.5 of the State *CEQA Guidelines*.

(2) Paleontological Resources

Appendix G of the State *CEQA Guidelines* provides the following screening question to address impacts with regard to paleontological resources:

Would the project:

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The *L.A. CEQA Thresholds Guide* incorporates the screening question contained in Appendix G. In accordance with the City's thresholds, the determination of significance for impacts on paleontological resources shall be made on a case-by-case basis, considering the following factors:

- Whether, or the degree to which, the project may result in the permanent loss of, or loss of access to, a paleontological resource; and
- Whether the paleontological resource is of regional or statewide significance.

Based on these factors, the Project would have a significant impact on paleontological resources if it:

- **PALEO-1** Results in the permanent loss of, or loss of access to, a unique paleontological resource or site of regional or Statewide significance, or a unique geologic feature.

(3) Tribal Cultural Resources

The OPR has recommended the following screening question to address impacts with regard to tribal cultural resources:

Would the project:

- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?

Based on these factors, the Project would have a significant impact on tribal cultural resources if it:

- **TCR-1** Substantially disturbs, damages, or degrades a tribal cultural resource or its setting in a manner that would change the significance of the resource as defined in Public Resources Code Section 21074.

c. Project Characteristics

The Project proposes to demolish the Luxe City Center Hotel (Luxe Hotel), and construct a new mixed-use project including hotel, residential, and commercial development. Excavations for the Project would consist of the construction of up to four subterranean parking levels and other foundation elements that would extend down to 45 to 50 feet below the existing grade.

d. Project Impacts

(1) Archaeological Resources

Threshold ARCH-1: The Project would result in a significant archaeological resources impact if it substantially disturbs, damages, or degrades an archaeological resource or its setting in a manner that would change the significance of the resource pursuant to Section 15064.5 of the State *CEQA Guidelines*.

Impact Statement ARCH-1: *Impacts on buried historic archaeological resources are considered potentially significant, as the Project would involve excavations into soils with the potential to retain resources associated with the former turn of the 20th century residential uses on the Project Site.*

As discussed earlier, results of the Sanborn Map review revealed that the majority of the Project Site was developed with single-family homes, duplexes, and other residential uses in 1906, which were later razed. Prior to the 1964 construction of the existing hotel building, the Project Site was developed with multiple car-related uses including large public car garages (1919 and 1920), automobile showrooms and repair facilities, and gasoline service stations (1939 and 1965). Excavations associated with the construction of the existing Luxe Hotel building has likely displaced buried historic archaeological resources (such as privy features or refuse pits/dumps) associated with the prior residential uses at the Project Site that are depicted on the 1906 Sanborn Map. However, it is possible that the buried historical archaeological resources still exist underneath the areas of the Project Site, currently developed as surface parking lots, as these areas would not have been subjected to deep excavations that would have displaced or destroyed resources that may be present. This potential was reflected in a recent downtown project that exhibited a similar land use history as the Project Site. Specifically, during archaeological construction monitoring services of a mixed-use project in the Arts District (located approximately one mile east of the Project Site) in 2013-2014, PCR encountered multiple historic period refuse deposits associated with former turn of the 20th century residential uses in areas that were later developed with surface parking lots. Also, as discussed above, resource 19-003287 (historic refuse scatter) was recovered between 3 to 5 feet below the surface during archaeological construction monitoring of a project located a half-mile to the west of the Project Site. Therefore, the sequence of development at the Project Site has likely allowed preservation of buried archaeological resources associated with previous occupations. Because the Project would include construction excavations that could encounter these historical archaeological resources, impacts on buried historic archaeological resources are considered potentially significant.

No known prehistoric archaeological resources are known to be located near or under the existing paving based on the records search results acquired from SCCIC. However, Gabrieleno villages (*Apachianga, Otsunga, Yaanga, and Sonagna*) are known to have existed in the heart of or near the City of Los Angeles (although their exact location is unknown), and archaeological resources may be present. The SLF records search through the NAHC yielded negative results for Native American resources from the NAHC database at the Project Site. The City received two Native American letters from the Soboba Band of Luiseño Indians (Mr. Joseph Ontiveros on March 3, 2016) and the Gabrieleno Band of Mission Indians - Kizh Nation (Mr. Andrew Salas on February 9, 2016) regarding the project. Mr. Ontiveros indicated that the Soboba Band defers to the Gabrieleno. Mr. Salas indicated that the tribe has concerns regarding the Project's potential to impact cultural resources because the entire Downtown area is highly sensitive. Therefore, the Gabrieleno Band requests that a Native American monitor be on-site during any type of ground disturbance at the

Project Site. Accordingly, the potential for damaging or destroying unique archaeological resources during excavation into undisturbed native soils is considered a potentially significant impact.

(2) Paleontological Resources

Threshold PALEO-1: The Project would result in a significant paleontological resources impact if it results in the permanent loss of, or loss of access to, a unique paleontological resource or site of regional or Statewide significance, or a unique geologic feature.

Impact Statement PALEO-1: *Although the Project Site has been previously disturbed through grading and/or development for the construction of the Luxe City Center Hotel, it is possible that Project grading and excavation may encounter native soil/sediment associated with older Quaternary Alluvium, the Fernando Formation, and the Puente Formation deposits that have high potential for containing buried paleontological resources. As a result, the potential exists for construction to directly or indirectly destroy buried unique paleontological resources or sites or unique geologic features. Impacts to buried paleontological resources are considered potentially significant.*

Several fossiliferous geological units or formations are either known (older Quaternary alluvium) or likely to exist (Fernando and Puente Formations) beneath the Project Site. Although no known paleontological resources have been recorded within the Project Site, numerous fossil localities have been recovered nearby in the same deposits that underlie the Project Site. The Project would include excavation to potential depths of 45 and 50 feet below the surface for the subterranean parking levels and foundation elements. As a result, the deep excavations for the subterranean parking levels have a high potential for encountering native soils that have the potential to yield paleontological resources. This potential for the Project to destroy or create a loss of access to paleontological resources of regional or stateside significance, if present, is considered a potentially significant impact.

(3) Tribal Cultural Resources

Threshold TCR-1: The Project would result in a significant tribal cultural resources impact if it substantially disturbs, damages, or degrades a tribal cultural resource or its setting in a manner that would change the significance of the resource as defined in Public Resources Code Section 21074.

Impact Statement TCR-1: *The Project would not result in a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.*

As of June 29, 2016, the City has received one response to their AB 52 request to consult letters from the Native American contacts. This response was received by the City from Mr. Joseph Ontiveros of the Soboba Band of Luiseño Indians in a letter dated April 19, 2016 (received by the City on April 26, 2016). In his letter, Mr. Ontiveros stated that: 1) the Soboba Band had no specific concerns regarding known cultural resources within the Project Site, 2) the Soboba Band requests that a Native American monitor be present during future ground-disturbing activities, and 3) the Soboba Band defers consultation to Gabrielino tribal consultants who are located in closer proximity to the Project Site than the Soboba. Mr. Ontiveros; however, did not request formal consultation with the City in regards to the identification of tribal cultural resources pursuant to AB 52. Mr. Ontiveros' letter is provided in Appendix D-1 of this Draft EIR. As a result of the AB

52 consultations, no evidence has been presented that tribal cultural resources exist at the project site. As such, the Project would not cause an impact to known tribal cultural resources.

e. Cumulative Impacts

(1) Archaeological Resources

Many of the cumulative projects identified in Chapter 3, *General Description of Environmental Setting*, would require excavation that could potentially expose or damage potential archaeological resources. However, these cumulative projects are located in developed urban areas with sites that have been previously disturbed, and the potential to encounter and cause a significant impact on surface resources is unlikely. Further, in association with CEQA review, and depending on the depth of excavation and sensitivity of respective sites, mitigation measures would be required for projects that have the potential to cause significant impacts to undiscovered resources. Implementation of such mitigation measures would avoid significant impacts. State requirements regarding impacts on archaeological resources and CEQA compliance require monitoring of excavation activities and treatment and/or curation of discovered resources where appropriate (CEQA Section 21083.2 and State *CEQA Guidelines* Section 15064.5). Such standard construction practices, particularly over a range of project sites, provide for protection, recovery and curation of discovered resources and preserve their contributions to the knowledge base of past population activity in the area. For those projects not subject to CEQA review, there would be some potential for impacts on archaeological resources in the event there are excavations that extend into native soils. Therefore, the cumulative effects from cumulative projects are considered significant.

The Project is required to comply with the mitigation measures MM-ARCH-1 through MM-ARCH-3 and regulations cited above in the event resources are found, thus ensuring proper identification, treatment and preservation of any resources, and reducing significant impacts on archaeological resources to less than significant levels. These regulations require excavation monitoring, and treatment and curation of discoveries. Therefore, to the extent impacts on archaeological resources from cumulative projects may occur, further contribution from the Project would not be cumulatively considerable, and the cumulative impacts of the Project would be less than significant.

(2) Paleontological Resources

The cumulative projects would include those with the potential to disturb geological units that are conducive to retaining paleontological resources such as older Quaternary alluvium, Fernando Formation and Puente Formation deposits. Generally, projects with the potential for substantial excavation would be subject to environmental review. If the potential for significant impacts on paleontological resources were identified given the site characteristics and development program of the cumulative project, mitigation measures similar to those for the Project would be implemented. These measures would include a monitoring program and treatment/curation of discovered fossils. Implementation of these measures would reduce the potential for adverse effects on fossil resources individually and cumulatively; and will preserve and maximize the potential of these resources to contribute to the body of scientific knowledge. For those projects not subject to CEQA review, there would be some potential for impacts on paleontological resources in the event there are excavations that extend into geological units that are conducive to retaining paleontological resources.

The Project is required to comply with the mitigation measures MM-PALEO-1 through MM-PALEO-4, thus avoiding significant impacts on paleontological resources. These mitigation measures require excavation monitoring, and treatment and curation of discoveries. Therefore, to the extent impacts on paleontological resources from cumulative projects may occur, contribution from the Project would not be cumulatively considerable and cumulative impacts would be less than significant.

(3) Tribal Cultural Resources

Many of the cumulative projects identified would require redevelopment of properties in urban areas that are currently developed and have been previously disturbed, and the potential to encounter and cause a significant impact on tribal cultural resources is unlikely. Further, in association with CEQA review, future AB 52 consultations with Native American tribes in order to identify tribal cultural resources would be required for projects that have the potential to cause significant impacts to tribal cultural resources. Therefore, to the extent impacts on tribal cultural resources from cumulative projects may occur, contribution from the Project would not be cumulatively considerable and there would be no cumulative impact.

4. MITIGATION MEASURES

a. Archaeological Resources

The following mitigation measures are required to reduce potentially significant impacts on archaeological resources to a less than significant level:

The following mitigation measures are required to reduce Impact ARCH-1 to a less than significant level.

MM-ARCH-1: The Applicant shall retain a qualified Archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for an archaeologist, who shall supervise an archaeological monitor that will be present during construction excavations such as grading, trenching, grubbing, or any other excavation activity associated with the Project. The frequency of monitoring shall be determined by the Archaeologist based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time field observation can be reduced to part-time inspections or ceased entirely if determined appropriate by the Archaeologist.

MM-ARCH-2: In the event that historic or prehistoric archaeological resources (e.g., bottles, foundations, refuse dumps, Native American artifacts or features, etc.) are unearthed during ground-disturbing activities, the Applicant shall halt or redirect ground-disturbing activities away from the vicinity of the find, so that the find can be evaluated by a qualified Archaeologist. A buffer area of at least 25 feet shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by Project construction activities shall be evaluated by the Archaeologist. The Applicant shall coordinate with the archaeologist and the City to develop an appropriate treatment plan for the resources if they are determined to be potentially eligible for the California Register or potentially qualify as unique archaeological resources pursuant to CEQA.

Preservation in place (i.e., avoidance) shall be considered as a treatment measure first. If preservation in place is not feasible, treatment may include the implementation of archaeological data recovery excavations to remove the resource from the Project Site along with subsequent laboratory processing and analysis. Any archaeological material collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be donated to a local school or historical society for educational purposes. The Archaeologist shall determine the need for archaeological construction monitoring in the vicinity of the find thereafter.

MM-ARCH-3: The Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring. The report shall include a description of resources unearthed, if any, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources. The report and the Site Forms shall be submitted by the Applicant to the City, the South Central Coastal Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project construction. The Applicant, in consultation with the archaeologist and the City, shall designate repositories meeting State standards in the event that archaeological material is recovered. Project material shall be curated in accordance with the State Historical Resources Commission's Guidelines for Curation of Archaeological Collections.

b. Paleontological Resources

The following mitigation measures are required to reduce Impact PALEO-1 to a less than significant level.

MM-PALEO-1: A qualified Paleontologist shall attend a pre-grade meeting and develop a paleontological monitoring program for excavations into older Quaternary Alluvium deposits. A qualified Paleontologist is defined as a Paleontologist meeting the criteria established by the Society for Vertebrate Paleontology. The qualified Paleontologist shall supervise a paleontological monitor who shall be present during construction excavations into older Quaternary Alluvium deposits. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring inspections shall be determined by the Paleontologist and shall be based on the rate of excavation and grading activities, proximity to known paleontological resources or fossiliferous geologic formations (i.e., Quaternary Alluvium deposits), the materials being excavated (i.e., native sediments versus artificial fill), and the depth of excavation, and if found, the abundance and type of fossils encountered. Full-time field observation can be reduced to part-time inspections or ceased entirely if determined adequate by the qualified Paleontologist.

MM-PALEO-2: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation and, if necessary, salvage. A buffer area of at least 25 feet shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the

Paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.

MM-PALEO-3: Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the Los Angeles County Natural History Museum, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.

MM-PALEO-4: Following the completion of the above measures, the Paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Project Applicant to the lead agency, the Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.

5. LEVEL OF SIGNIFICANCE AFTER MITIGATION

a. Archaeological Resources

With implementation of the mitigation measures above, the Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the State *CEQA Guidelines*. The implementation of the above mitigation measures provide for appropriate treatment and/or preservation of resources if encountered. Potentially significant impacts to archaeological resources would be reduced to a less than significant level.

b. Paleontological Resources

The implementation of the mitigation measures above provide for avoidance and recovery of resources if encountered. Therefore, the Project would not directly or indirectly destroy a unique paleontological resource or site, or a unique geologic feature. Potentially significant impacts to paleontological resources would be reduced to a less than significant level.

c. Tribal Cultural Resources

The Project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 of the State *CEQA Guidelines*, therefore, the Project would cause no impact to tribal cultural resources and no mitigation measures are warranted.

