

3.4 CULTURAL RESOURCES

This EIR section analyzes the potential for adverse impacts on cultural resources such as paleontological, archaeological, and historical resources that are known or anticipated to be encountered resulting from implementation of the proposed project. The Initial Study (Appendix A) identified the potential for impacts associated with paleontological resources, as well as prehistoric and historic archaeological resources, which exist on the project site. Issues identified as less than significant include effects on historical structures, as none exist on the project site. Data used to prepare this section were taken from the City's General Plan (City 1996), *Paleontologic Resource Impact Mitigation Program Final Report, Test Excavations and Archival Research* (PAS 2002), and three reports that include information regarding paleontological resources on the project site (Lander 1998a, 1998b; DeBarros and Roeder 2001). In addition, the *Evaluation of Prehistoric Archaeological Site CA-ORA-149 and Historical Archaeological Site CA-ORA-1582H* was used to provide site-specific data on on-site cultural resources. The summary of this report is provided in Appendix L. Due to the sensitivity of the information included in the report with respect to the location of cultural materials, this document is not provided in its entirety. The site-specific technical reports are hereby incorporated in their entirety by reference. Full bibliographic entries for all reference materials are provided in Chapter 7 (References) of this document.

3.4.1 Existing Conditions

Paleontology

A number of paleontological sites have been identified on the project site. Research on the potential for paleontological resources to be located on site was initially conducted by Lander (1998a). This research included a review of geologic and paleontological reports and maps that provide coverage of the project site and immediate vicinity. These maps and reports show and describe the rock units that underlie the project site and document the species represented by the fossil remains, if any, that were encountered on the site. A field survey of exposed strata was also conducted to determine the conditions of any previously recorded fossil site in the project site and to document the occurrence of any previously unrecorded paleontological site. The assessment complies with the 1995 Society of Vertebrate Paleontology standard guidelines for assessing the paleontological sensitivity of an area.

Rock Units and Paleontological Sensitivity

As shown in Figure 3.6-3 in Section 3.6 (Geology and Soils), two rock units underlie the project site: Quaternary Marine Terrace deposits (Qtm) and undifferentiated Holocene alluvium and colluvium (Qac).

The Qtm deposits underlie all but the southeastern corner of the project site, and are composed of silt, sand, and gravel deposits. The Qac deposits consist of unconsolidated sediments and occupy the southeastern corner of the project site.

At the time the literature survey was completed for the project by Lander (1998b), no paleontological site had been recorded on the project site. However, fossil remains were observed during the field survey, and previous reports included fossil sites that had been recorded near—and in the same rocks units that underlie—the project site.

The Qac deposits on the project site have yielded no fossil remains in the vicinity of the project site; however, investigations at depth in Los Angeles County and other areas of Orange County have yielded fossilized remains of Holocene land mollusks, continental vertebrates, and land plants. These occurrences indicate an undetermined potential for similar fossil remains being encountered at depth on the project site as a result of grading or excavation in the southeastern portion of the site.

The type of Qtm deposits on the project site have yielded fossil remains representing a variety of Pleistocene shallow-water marine invertebrates, including coral, worms, snails, clams, crabs, sand dollars, sea urchins, and other types. Fossilized bones and teeth have also been recovered and represent a wide variety of marine and land vertebrates. Most of these remains were collected at sites in Newport Beach, Huntington Beach, and Costa Mesa. Additionally, fossilized shells of unidentified mollusks were observed in exposed marine terrace deposits near the northeastern corner of the project site. These newly recorded fossil occurrences indicate a high potential for similar fossil remains in areas of the project site that are underlain by Qtm deposits.

Resources Recovered on the Project Site

In 2001, a paleontological resource mitigation program was conducted in association with excavation at the sand borrow area on the project site. This was required by the City of Huntington Beach, due to the determination by the Lander report of the paleontological sensitivity of the project site and the consequent recommendation for monitoring of excavation and grading activities.

During the course of grading and excavation activities, no fossil remains were recovered from the Qac rock units. Eight paleontological sites were identified in the Qtm deposits underlying the project site, and are described below.

- **Site 1** yielded a mammoth tusk fragment and a bison vertebra. Both of these remains represent extinct species.

- **Site 2** yielded thousands of mollusk specimens, representing seven species of snail, two species of slugs, and one species of clam. Additionally, a sediment sample from the site yielded rare pollen grains of the plant family Chenopodiaceae.
- **Site 3** contained fragments of large mammal bone. These fragments were saved for use in obtaining radiocarbon dates.
- **Site 4** provided the richest source of fossils on the project site. Numerous land snails were recovered, along with remains of several small vertebrates (fish, shark, snake, shrew, and rodents). A fragment of calcium carbonate yielded a radiocarbon date range of 22,930 to 24,555 years before present (BP). The site also yielded rare pollen grains representing alder, pine, and Chenopodiaceae.
- **Site 5** yielded the remains of a mammoth humerus.
- **Site 6** yielded a large mammal bone fragment.
- **Site 7** yielded a scapula (shoulder blade) from an extinct species of horse, as well as a bison vertebra.
- **Site 8** yielded several large mammal bone fragments.

Analysis of Recovered Data

Fossil deposits generally fell into two categories. The first category consists of isolated bones of large, extinct, late-Pleistocene mammals (bison, horse, mammoth, and large mammal), as in Sites 1, 3, 5, 6, 7, and 8. These bones were recovered in sands that are interpreted as coastal dune deposits. The second type consisted of sandy silts that yield primarily land snail species, but also freshwater snails and a clam species. Site 4 also yielded (as described above) remains of reptiles and small land mammals. These silts are interpreted as the flat areas between coastal dunes, and based on the nonmarine mollusk data from Sites 2 and 4, as well as pollen analysis, climatic conditions near the coast at the time of deposition of the Huntington Beach urban center dune deposits (22,000 to 24,000 years BP) resembled central or northern California, with higher rainfall and cooler temperatures.

The data were collected only during the course of grading at the soil borrow area, which represents a limited portion of the project site. Consequently, additional paleontological resources are likely to be present on other portions of the project site.

Archaeology

Summary of the Culture History

The project site lies within the area considered to have been occupied by the Gabrielino culture group; however, the Santa Ana River drainage area appeared multi-ethnic and multi-linguistic, with extensive intermarriage between the Gabrielino and neighboring Juaneño/Luiseño group, which shared many

linguistic and cultural similarities. Consequently, a summary of the literature survey regarding both groups (provided in PAS 2002) is provided in this section.

Territory and Language

The name Gabrielino is derived from the association of the culture group with the Mission San Gabriel. The Fernandeano, so named by the Spanish for the association of the group with the Mission San Fernando, are also considered to be Gabrielino. Gabrielino territory encompassed the San Fernando Valley, the San Gabriel Valley, portions of the San Bernardino Valley, portions of the Los Angeles-Santa Ana Plain, and three of the California Channel Islands. The extent of the geographic range resulted in an important maritime trade network, using boats constructed of reeds or wooden planks, used primarily in the summer months.

The Juaneño are generally considered to be part of the Luiseño culture group. The difference in name results primarily from the affiliations of the groups with different Spanish missions, San Luis Rey and San Juan Capistrano. The Juaneño are associated with coastal areas extending to the vicinity of San Onofre, but the combined area of the Juaneño and Luiseño likely extended to the San Luis Rey drainage in northern San Diego County, running along a line between Escondido and Oceanside. Luiseño territory extended inland to the southern San Bernardino Valley, as well as western Riverside and central San Diego Counties.

Subsistence and Technology

The Gabrielino and Juaneño/Luiseño were hunter-gatherers with coastal populations that also exploited marine resources. The technical report (PAS 2002) cites two primary points of interest: (1) the importance of marine resources for coastal populations; and (2) the importance of seeds for coastal and inland populations.

Food preparation materials included manos and metates (grinding stones and associated hand stones) for seed grinding, mortars and pestles for crushing acorns and other nuts, and basketry winnowing and seed-parching trays. Cooking methods and materials included stone boiling in baskets often sealed with asphaltum (naturally occurring tar-like seepage), the use of stone pots and steatite/soapstone comals (griddles), and roasting in earthen ovens. Food was stored in large baskets or in granaries constructed of brush and twigs, sometimes inside caves or rock shelters.

Settlement Patterns and Social Organization

The Gabrielino and Juaneño/Luiseño lived in autonomous territories the Spanish called *rancherías*. Each *ranchería* contained a village and its associated resource procurement areas. Each *ranchería* was associated

with specific territory and had a principal village that was a permanent, year-round residential base with ceremonial structures and a cemetery. Different groups followed different seasonal migration patterns, which were probably based on seasonal resource shortages. Little is known about Gabrielino movement, but hostility between coastal Gabrielino groups and groups from the San Gabriel Mountains has been recorded, and some groups may have prevented inland areas from reaching the coast.

Burial

The Gabrielino and Luiseño each practiced both burial and cremation. Archaeological finds of adult burials often consists of a body accompanied by various grave goods. Some indication exists that island groups more frequently practiced burial, and inland groups more commonly cremated remains. Even cremated remains, however, were accompanied by grave goods, often consisting of useful belongings that were cremated along with their owner.

Definitions of Historical Resources

The National Historic Preservation Act established the National Register of Historic Places (NRHP) to recognize resources associated with the country's history and heritage. Structures and features must usually be at least 50 years old to be considered for listing on the NRHP, barring exceptional circumstances. Criteria for listing on the NRHP, which are set forth in Title 26, Part 63 of the Code of Federal Regulations (36 CFR Part 63), are significance in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that are (a) associated with events that have made a significant contribution to the broad patterns of our history; (b) associated with the lives of persons significant in our past; (c) embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values, represent a significant and distinguishable entity whose components may lack individual distinction; or (d) have yielded, or may be likely to yield, information important in prehistory or history. Criterion D is usually reserved for archaeological and paleontological resources.

The California Register of Historical Resources (CRHR) was created to identify resources deemed worthy of preservation on a State level and was modeled closely after the NRHP. The criteria are nearly identical to the four criteria of the NRHP listed above, but focus upon resources of statewide, rather than national, significance. The CRHR includes all resources in the State that are listed on the NRHP.

Identification of Historical Resources on the Project Site

Previous Archaeological Studies of the Project Site

Two archaeological sites have been identified on the project site: one prehistoric site (CA-ORA-149) and one historic site with a late prehistoric component (CA-ORA-1582H). Prior to the preparation of the technical report completed for this project (PAS 2002), four known cultural resources investigations had been conducted on the project site. These are discussed below.

CA-ORA-149

McKinney 1964

The shell midden site CA-ORA-149 was first recorded by McKinney during a 1964 survey of an area that included a portion of the project site. The east end of CA-ORA-149 had already been destroyed by construction of the mobile home park east of Huntington Street. McKinney estimated that the site was about 200 ft by 100 ft, and described the site as containing “many shell fragments on slope to low bluff,” as well as a decorated stone pendant, a few projectile points, and debris associated with stone working. However, no survey report or site map was included with the site form.

Douglas 1980

Douglas re-surveyed CA-ORA-149 as part of a survey of the entire project site. The report described the site as a “kitchen site” with abundant shell remains and few artifacts. Douglas mistakenly characterized the site as 1000 m by 100 m in size. Subsequent study (Dillon 1997) estimated the area of intact and smeared midden to 150 m by 210 m.

Dillon 1997

Dillon conducted a survey of the project site and mapped CA-ORA-149. He observed no other prehistoric sites or historic features and noted that features, such as the historic rail lines and alignments, had been destroyed during the course of development. Dillon estimated the size of the site to be 2 acres, of which 20 to 30 percent remained undisturbed at the time of the field survey. The intact area encompasses about 7,000 m² in the central portion of the archaeological site, surrounded by a disturbed outer area of about 14,000 m², and site depth was estimated to be approximately 50 cm. Dillon reported observing fewer artifacts than McKinney, but also reported abundant fire-cracked rock and burned fragments of medium to large terrestrial mammal bone. Extensive shellfish remains were also observed.

Dillon suggested that CA-ORA-149 is of “moderate significance,” based on the abundant midden, the presence of artifacts, the absence of known human remains, probable Late Prehistoric Age (which was later determined to be incorrect), poor integrity, and moderate uniqueness. The study also concluded that if relatively intact deposits are found, they would constitute highly significant deposits.

Project-Related Archaeological Investigations

DeBarros 1998

This study mapped the site, which indicated an intact site area of 5,500 m² and revealed three types of deposits:

- *Highly disturbed midden deposits*—Areas with some disturbed, surface midden
- *Shallow midden deposits*—Relatively intact deposits estimated to range from 10 to 50 cm in depth
- *Stratified midden deposits*—Described by DeBarros as the most interesting at the site, with two midden layers: one measured 15 to 20 cm thick and the second measured 45 to 55 cm thick, though it possibly extended deeper

DeBarros recommended fencing the site to prevent further damage, and formal test excavations to evaluate the significance of CA-ORA-149 under Section 15064.5 of the CEQA Guidelines.

The framework for the analysis of CA-ORA-149 describes potential research topics, including

- Chronology
- Subsistence, settlement, environmental change
- Environmental correlates of changing subsistence patterns
- Procurement of stone and the toolmaking processes
- Trade

With each of these topics, the discussion includes the data requirements (type and amount) that must be present at the site to allow the study to meaningfully address the topic.

Site investigation for ORA-149 included surface collection, as well as excavation with a backhoe of a series of trenches to refine the excavation strategy, followed by the hand excavation of ten 1 m² units. Excavated material from the individual units was dry- and wet-screened through ½-inch wire mesh to recover smaller artifacts, then catalogued by level and sent for appropriate laboratory analysis, based on artifact type. Detailed listings of artifacts and site properties are included in Section 5 of the technical report (PAS 2002).

As a result of the study, CA-ORA-149 was evaluated by PAS (2002) for significance under Criterion D (Has yielded, or may likely to yield, information important in prehistory or history) of Section 15064.5(a)(3) of the CEQA Guidelines, as well as whether the site would be considered a Unique Archaeological Resource under Section 21083.2 of CEQA. While the majority of the site has either been disturbed or destroyed, deposits associated with two of the three loci identified for the site (Loci A and B1) were determined to contain sufficient integrity to merit an evaluation of significance. The two loci were considered to have the ability to address the following research topics:

Chronology

- Both loci contain abundant shellfish remains that permit dates to be assigned to the range of occupation.
- Both loci contain small amounts of obsidian (volcanic glass), which can also be dated and which can help confirm a growing database for calibration of dates from the Coso obsidian source.
- Locus B1 contains a Late Millingstone Period component, and the subsistence trends of this component can be studied.
- Locus A contains intact early to middle Late Prehistoric Period components, which are generally absent from this portion of coastal Orange County, especially at Bolsa Chica, and data from this component can help fill an important data gap. Locus B1 also contains an early Late Prehistoric Period component.

Subsistence, Settlement, and Environmental Change

- Both loci contain significant data on food procurement, including vertebrate fish and nonfish remains, shellfish remains, groundstone tools, and protein residues on these tools. These data can help the study of changing patterns of adaptation to climatic change in the region and the local area.
- Locus A contains evidence of intensification of fishing during the early to mid-Late Prehistoric Period.
- Sufficient data are present to assess site function, especially with a larger sample of excavated data.
- The site provides clues as to the relationship between dry and moist climatic periods during the Medieval Climatic Anomaly and changes in animal, fish, and shellfish procurement, particularly at Locus A.
- Additional excavation could confirm the apparent absence of an Intermediate Period Component at the site, although the nearby Bolsa Chica Mesa was continuously occupied during that period.

Procurement of Stone and the Toolmaking Process

- The site provides baseline data on flaked stone and groundstone materials procurement and toolmaking during the Late Millingstone and early to mid Late Prehistoric Period in this portion of north coastal Orange County.

Trade

- The site included Coso obsidian and possibly Franciscan chert (flint), both of which are known trade items. The site also included an oval ring limpet shell ornament, which allows the assignment of a range of dates of use/occupation to the site.

Summary

Loci A and B1 of CA-ORA-149 qualify the site as historically significant under Section 15064.5(a)(3)(D) of the CEQA Guidelines, because the data that the loci have yielded and/or are considered likely to yield allow scientists to address key research issues, as described above, that are important to prehistory.

Discovery of CA-ORA-1582H

CA-ORA-1582H, a large, buried historic dump, was discovered in 1999 during geotechnical study trenches on the project site. Based on examination of a sample of bottles recovered from the site, a historical archaeologist preliminarily determined that the dump probably dated to between ca. A.D. 1915 and 1930. Additional trenching was completed to determine the boundaries of the dump. Additional bottles and ceramic artifacts were retrieved, and the depth of the site was estimated to range from 2 to 5 feet in depth.

Eight 1 m² units were subsequently excavated by hand, and recovered material was dry- and wet-screened through ¼-inch wire mesh (historic sites tend to contain larger artifacts and fragments than prehistoric sites). Artifacts were then sorted and bagged by level and type. Soil profiles were also drawn of at least one sidewall of each excavation unit. Extensive supporting documentation was provided in the appendices to the technical studies, and is available for review at the City Planning Department.

As with CA-ORA-149, the framework for the analysis of CA-ORA-1582H describes potential research topics, along with the data requirements to address these topics. The topics include

- Chronology
- Status of Huntington Beach residents
- Trade network links
- The site as a reflection of the history of Huntington Beach
- Activity groups
- Horizontal variation (are sections reserved for different purposes?)

CA-ORA-1582H was determined, during the course of surface collection and excavations, to contain three components: a historic dump, a prehistoric site component within the dump, and shellfish remains

northwest of the dump. Both were evaluated by PAS (2002) for significance under Criterion D (Has yielded, or may likely to yield, information important in prehistory or history) of Section 15064.5(a)(3) of the CEQA Guidelines, as well as whether the site would be considered a Unique Archaeological Resource under Section 21083.2 of CEQA. Although CA-ORA-1582H is a historic site, Criteria A and B do not apply because the site was determined to be a historic dump, which is not associated with specific events, significant patterns of history, or significant persons. Additionally, the site does not qualify under Criterion C because it contains no standing structures.

Historic Dump

Test excavations of the historic dump produced 27 boxes of historic artifacts. This is a considerable amount of material and attests to the density of cultural refuse present in the dump. The recovered artifacts, including large numbers of complete bottles, have provided much valuable data, including additional details provided in the appendices to the technical report, and the reference data are significant because they provide a baseline for comparison with—as well as interpretation of—residential refuse deposits from the general area. However, the deposits of the site are highly disturbed and do not exhibit any clear differentiation across the site, and additional excavation would be unlikely to produce significant new information other than what the test excavations have yielded. PAS (2002: 304) concluded that the historic component of CA-ORA-1582H is not a historically significant resource under CEQA or the CEQA Guidelines. However, larger samples of whole bottles and other diagnostic artifacts could be valuable as teaching aides for historical societies or academic departments, as well as public displays.

Prehistoric Site Component

Excavations of this component of the dump yielded a small quantity of shellfish remains, one rabbit bone of unknown age, and one possible stone tool (a stone flake with some possible evidence of use). Two radiocarbon dates indicate that the shell dates to the terminal Late Prehistoric Period (post-A.D. 1400). However, the highly disturbed nature of the context from which the material was recovered eliminates research value other than the information gained from analysis of the shellfish and the radiocarbon dates. The prehistoric component of CA-ORA-1582H has not yielded, and is not considered likely to yield, information important to history or prehistory, and does not satisfy Section 15064.5(a)(3)(D) of the CEQA Guidelines.

Shellfish Remains Northwest of the Dump

Test excavations of this site component indicated that the contents consist of redeposited surface materials from elsewhere, as the shellfish remains are underlain by broken asphalt. No intact prehistoric component

exists and the material recovered has no research value. Consequently, this component is not historically significant under Section 15064.5(a)(3)(D) of the CEQA Guidelines.

3.4.2 Regulatory Framework

The treatment of cultural resources is governed by federal, State, and local laws and guidelines. There are specific criteria for determining whether prehistoric and historic sites or objects are significant and/or protected by law. Federal and State significance criteria generally focus on the resource's integrity and uniqueness, its relationship to similar resources, and its potential to contribute important information to scholarly research. Some resources that do not meet federal significance criteria may be considered significant by State criteria. The laws and regulation seek to mitigate impacts on significant prehistoric or historic resources. The federal, State, and local laws and guidelines for protecting historic resources are summarized below.

Federal

The National Historic Preservation Act of 1966

The National Historic Preservation Act of 1966 established the National Register of Historic Places (NRHP) as the official federal list of cultural resources that have been nominated by State Offices for their historical significance at the local, State, or national level. Properties listed in the NRHP, or "determined eligible" for listing, must meet certain criteria for historical significance and possess integrity of form, location, and setting. Significance is determined by four aspects of American history or prehistory recognized by the NRHP Criteria, which are listed in the section entitled "Definitions of Historical Resources" on page 3.4-5, above. Eligible properties must meet at least one of the criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character, the degree to which the original fabric has been retained, and the reversibility of changes to the property.

State

The California Register of Historic Resources

State law also protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the CEQA Guidelines. These criteria are nearly identical to those for the NRHP, which are listed in the section entitled "Definitions of Historical Resources" on page 3.4-5, above.

The State Historic Preservation Office (SHPO) maintains the California Register of Historical Resources (CRHR). Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the CRHR, as are State Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Health and Safety Code Sections 7050.5, 7051, and 7054

These sections collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the Public Resources Code), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

California Senate Bill 297 (1982)

This bill addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the Native American Heritage Commission to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the State CEQA Guidelines.

Local

Southern California Association of Governments

SCAG’s Regional Comprehensive Plan and Guide (RCPG) and RHNA are tools for coordinating regional planning and development strategies in southern California. Policies contained in the RCPG identified by SCAG as relevant to the proposed project are identified in Table 3.4-1, and this table also includes an assessment of the proposed project’s consistency with these policies.

Table 3.4-1 SCAG Regional Comprehensive Plan and Guide—Policies Applicable to Cultural Resources

<i>Policy</i>	<i>Project Consistency</i>
Policy 3.21. Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	As described above in Section 3.4.1 (Existing Conditions), two archaeological sites and eight paleontological resources sites are known on the project site, and one of the archaeological sites (CA-ORA-149) has been determined to be a unique archaeological site for the purposes of CEQA. Although these resources would be affected by the proposed project, mitigation measures proposed for the project would ensure that cultural materials that would be affected are identified and scientifically removed and preserved prior to site development, as well as when they are encountered during site development, as appropriate. The proposed project would not, therefore, conflict with this policy.

General Plan Historic and Cultural Resources Element

This element identifies the historical resources of the community, their current designations and community status, and the issues affecting their future. Table 3.4-2 identifies goals and objectives presented in the Cultural Resources Element of the General Plan related to cultural resources that are potentially relevant to the proposed project. This table also includes an assessment of the proposed project's consistency with the policies adopted in support of these goals and objectives.

**Table 3.4-2 General Plan Historic and Cultural Resources Element—
Policies Applicable to Cultural Resources**

<i>Goal, Objective, or Policy</i>	<i>Project Consistency</i>
Goal HCR 1. To promote the preservation and restoration of the sites, structures and districts which have architectural, historical, and/or archaeological significance to the City of Huntington Beach.	As described above in Section 3.4.1 (Existing Conditions), two archaeological sites and eight paleontological resources sites are known on the project site, and one of the archaeological sites (CA-ORA-149) has been determined to be a unique archaeological site for the purposes of CEQA. Although these resources would be affected by the proposed project, mitigation measures proposed for the project would ensure that cultural materials that would be affected are identified and scientifically removed and preserved prior to site development, as well as when they are encountered during site development, as appropriate. The proposed project would not, therefore, conflict with this policy.
Objective HCR 1.1. Ensure that all the City's historically and archaeologically significant resources are identified and protected.	As described above in Section 3.4.1 (Existing Conditions), two archaeological sites and eight paleontological resources sites are known on the project site, and one of the archaeological sites (CA-ORA-149) has been determined to be a unique archaeological site for the purposes of CEQA. Although these resources would be affected by the proposed project, mitigation measures proposed for the project would ensure that cultural materials that would be affected are identified and scientifically removed and preserved prior to site development, as well as when they are encountered during site development, as appropriate. The proposed project would not, therefore, conflict with this policy.
Policy HCR 1.1.2 Utilize the Secretary of Interior Standards for Historic Rehabilitation and standards and guidelines as prescribed by the state Office of Historic Preservation as the architectural and landscape design standards for rehabilitation, alteration, or additions to sites containing historic resources in order to preserve these structures in a manner consistent with the site's architectural and landscape design standards for rehabilitation, alteration, or additions to sites containing historic resources in order to preserve these structures in a manner consistent with the sites architectural and historic integrity.	The project site does not contain historic structures, and implementation of the proposed project would not conflict with this policy.

General Plan Coastal Element

The Coastal Element identifies significant historical and archeological resources within the Coastal Zone, and sets forth policies to ensure reasonable protection and/or enhancement of such resources. Table 3.4-3 identifies goals and objectives presented in the Coastal Element of the General Plan related to cultural

resources that are potentially relevant to the proposed project. This table also includes an assessment of the proposed project’s consistency with the policies adopted in support of these goals and objectives.

Table 3.4-3 General Plan Coastal Element—Policies Applicable to Cultural Resources

<i>Goal, Objective, or Policy</i>	<i>Project Consistency</i>
Goal C 5. Promote the preservation of significant archaeological and paleontological resources in the Coastal Zone.	Conformance with implementing policies, as discussed below, results in conformance with this goal.
Objective C 5.1. Identify and protect, to the maximum extent feasible, significant archaeological, paleontological, and historic resources in the Coastal Zone.	Conformance with implementing policies, as discussed below, results in conformance with this objective.
Policy C 5.1.2. Where new development would adversely impact archeological or paleontological resources within the Coastal Zone, reasonable mitigation measures to minimize impacts shall be required.	As described above in Section 3.4.1 (Existing Conditions), two archaeological sites and eight paleontological resources sites are known on the project site, and one of the archaeological sites (CA-ORA-149) has been determined to be a unique archaeological site for the purposes of CEQA. Although these resources would be affected by the proposed project, mitigation measures proposed for the project would ensure that cultural materials that would be affected are identified and scientifically removed and preserved prior to site development, as well as when they are encountered during site development, as appropriate.
Policy C 5.1.3. In the event that any Native American human remains are uncovered, the County Coroner, the Native American Heritage Commission, and the Most Likely Descendants, as designated by the California Native American Heritage Commission, shall be notified. The recommendations of the Most Likely Descendants shall be obtained prior to the disposition of any prehistoric Native American human remains.	The treatment of human remains is governed by applicable State regulations, including the Health and Safety Code and State Senate Bill 297, and the proposed project would be required to treat any human remains, if discovered, according to these regulations. The proposed project would therefore, be consistent with this policy.

Table 3.4-3 General Plan Coastal Element—Policies Applicable to Cultural Resources

<i>Goal, Objective, or Policy</i>	<i>Project Consistency</i>
<p>Policy C 5.1.4. A completed archeological research design shall be submitted along with any application for a coastal development permit for development within any area containing archeological or paleontological resources. The research design shall determine the significance of any artifacts uncovered and make recommendations for preservation. Significance will be based on the requirements of the California Register of Historical Resources criteria, and prepared based on the following criteria:</p> <ol style="list-style-type: none"> Contain a discussion of important research topics that can be addressed; and Be reviewed by at least three (3) County-certified archeologists (peer review committee). The State Office of Historic Preservation and the Native American Heritage Commission shall review the research design. The research design shall be developed in conjunction with affected Native American groups. The permittee shall comply with the requirements of the peer review committee to assure compliance with the mitigation measures required by the archeological research design. 	<p>As described above Section 3.4.1 (Existing Conditions), an archaeological resources technical report was prepared for the proposed project site by PAS and submitted to the City and would be subject to peer review, at the City's discretion. The report included a discussion of research topics and the theoretical framework that could be addressed by data from the archaeological sites and evaluated the significance of the sites and recovered cultural material using the applicable criteria from the California Register of Historical Resources, which are also included in Section 15064.5(a) of the CEQA Guidelines. The principal investigators for the report also consulted with the Native American Heritage Commission and with representatives of appropriate Native American groups.</p> <p>The conclusions and recommendations of the report will be made available to the Office of Historic Preservation as a part of the Draft EIR, and the recommendations of the report, in addition to other mitigation provided in this EIR, will be included in the Mitigation Monitoring and Reporting Program for the project, pursuant to Section 15097 of the CEQA Guidelines, and will be fully enforceable. The proposed project would, therefore, be consistent with this policy.</p>
<p>Policy C 5.1.5. A County-certified paleontologist/archeologist, shall monitor all grading operations where there is a potential to affect cultural or paleontological resources based on the required research design. A Native American monitor shall also monitor grading operations. If grading operations uncover paleontological/archeological resources, the paleontologist/archeologist or Native American monitor shall suspend all development activity to avoid destruction of resources until a determination can be made as to the significance of the paleontological/archeological resources. If found to be significant, the site(s) shall be tested and preserved until a recovery plan is completed to assure the protection of the paleontological/ archeological resources.</p>	<p>Mitigation measures proposed for the project include provisions for monitoring of earth-disturbing activities by archaeologists, paleontologists, and a Native American representative, as well as provisions for cessation of earth-disturbing activities as the significance of any recovered materials is assessed and subsequent appropriate actions are taken. The project would, therefore, be consistent with this policy.</p>

3.4.3 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2002 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on cultural resources if it would

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
- Disturb any human remains, including those interred outside of formal cemeteries

3.4.4 Project Impacts

Impact CR-1 Paleontological resources that could be located on-site would be adversely affected by earth-moving activities that could damage these materials.

As described above in Section 3.4.1 (Existing Conditions), the project site had previously been determined paleontologically sensitive by Lander (1998a; 1998b), and during previous grading activities, eight paleontological sites were identified in the Qtm rock units that underlie the project site in the sand borrow area. These sites yielded remains of a range of plant and animal species, which in turn provided significant data regarding paleoclimatic conditions on the project site and in the project vicinity. Consequently, DeBarros and Roeder (2001) concluded that because the sand borrow area represented a limited area of the site, additional paleontological resources are likely to be present on other areas of the site. Further earth-disturbing activities—such as grading and excavation—that could occur on the project site as a result of project implementation could damage or destroy these paleontological resources, which have the potential to yield additional information important in prehistory. Therefore, the impact resulting from damage to or destruction of these resources would be potentially significant.

Impact CR-2 Construction of the proposed project would cause a substantial adverse change in the significance of CA-ORA-149, a prehistoric archaeological site.

For the purposes of this analysis, changes in the significance of an archaeological resource are considered significant if the physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources are demolished or materially altered in an adverse manner.

As described in Section 3.4.1 (Existing Conditions), CA-ORA-149, a prehistoric archaeological site, is present on the project site. Archaeologists have determined, based on previous studies and test excavations

that yielded abundant information important in prehistory, that CA-ORA-149 qualifies as a historic resource, as defined under Section 15064.5(a)(3)(D) of the CEQA Guidelines. Because only a portion of the site was studied and development under the proposed project would occur on the entire site, the likelihood of encountering additional archaeological resources associated with CA-ORA-149 is considered very high. Also, additional archaeological resources could be present on the project site and earth-disturbing activities associated with project implementation—such as grading and excavation—could damage or destroy these resources. The impact resulting from such damage or destruction would be potentially significant.

Impact CR-3 Construction of the proposed project could cause a substantial adverse change in the significance of previously unknown archaeological resources, including human burials, that could be present on the project site.

Although investigations at the project site have detected two archaeological sites, archaeological sites can be present without providing surface indications. Because the project site and vicinity are known to be archaeologically sensitive, the potential exists for additional, unanticipated finds of archaeological resources during ground-disturbing activities associated with project implementation. Such resources must be considered significant under the criterion specified in Section 15064.5(a)(3)(D) of the CEQA Guidelines (may be likely to yield information important in prehistory or history). Additionally, although no burials are known to be associated with the known archaeological sites on the project site, the potential for encountering burials in archaeological contexts also exists. Therefore, the potential for damage to or destruction of these cultural resources would be a potentially significant impact.

Impact CR-4 Construction of the proposed project would not cause a substantial adverse change in the significance of CA-ORA-1582H—a historical archaeological dump site.

As described above, in Section 3.4.2 (Existing Conditions), CA-ORA-1582H—the historical archaeological dumpsite that is present on the project site—was determined not to have sufficient integrity to provide data for the study of research topics regarding the past. Therefore, the site does not meet the criterion specified in Section 15064.5(a)(3)(D) of the CEQA Guidelines (yielded, or may be likely to yield, information important in history or prehistory). As described above, criteria A through C are not considered to apply to the site, as no specific historical associations with significant events or people are known, and dump sites do not generally embody the distinctive characteristics a type, period, region, or method of construction. Because CA-ORA-1582H does not satisfy any of the criteria of a historic resource, as defined in Section 15064.5(a)(3) of the CEQA Guidelines, the site is not considered a historic resource, and a less-than-significant impact would result from the destruction of the site.

3.4.5 Cumulative Impacts

This cumulative impact analysis considers development of the proposed project, in conjunction with other development within the vicinity of the project in the City of Huntington Beach. Cumulative development would require grading and excavation that could potentially affect archaeological or paleontological resources, similar to the proposed project. The cumulative effect of these projects is the continued loss of these resources. The potential loss of paleontological and archaeological resources under the project would contribute to the degradation of the historic fabric of the City of Huntington Beach. However, project specific mitigation would be implemented as appropriate to reduce the effect of this development by ensuring the evaluation and—where appropriate—scientific recovery and study of any resources encountered, which would ensure that important scientific information that is provided by these resources regarding history and prehistory would not be lost. Similar conditions would be required where cumulative development has the potential to affect these resources. The contribution of the proposed project to the degradation of the historic fabric of the City of Huntington Beach would, therefore, not be cumulatively considerable. Cumulative impacts would be less than significant.

3.4.6 Mitigation Measures and Residual Impacts

The following mitigation measure (MM) would be required to address impacts to archaeological and paleontological resources, as described above under Impacts CR-1 and CR-3.

- MM CR-1 Monitor grading and excavation for archaeological and paleontological resources:*
- (a) The Applicant shall arrange for a qualified professional archaeological and paleontological monitor to be present during demolition, grading, trenching, and other excavation on the project site. The Applicant shall also contact the appropriate Gabrielino and Juaneño tribal representatives to determine whether either group desires Native American monitoring of grading activities. If Native American monitors are requested, the Applicant shall arrange for the monitoring with tribal representatives. Additionally, prior to project construction, construction personnel will be informed of the potential for encountering significant archaeological and paleontological resources, and instructed in the identification of fossils and other potential resources. All construction personnel will be informed of the need to stop work on the project site until a qualified archaeologist or paleontologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel will also be informed of the requirement that unauthorized collection of cultural resources is prohibited.*

- (b) *If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find shall cease until the archaeologist/paleontologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources shall be considered significant. If the resource is determined to be significant, the archaeologist or paleontologist, as appropriate, shall prepare a research design for recovery of the resources in consultation with the State Office of Historic Preservation that satisfies the requirements of Section 21083.2 of CEQA. The archaeologist or paleontologist shall complete a report of the excavations and findings, and shall submit the report for peer review by three County-certified archaeologists or paleontologists, as appropriate. Upon approval of the report, the Applicant shall submit the report to the South Central Coastal Information Center at California State University, Fullerton, the California Coastal Commission, and the City of Huntington Beach.*
- (c) *Monitored grading at the location of CA-ORA-1582H shall involve the removal of refuse deposit in 15 to 20 cm layers using a skip loader. All materials shall be deposited in small to medium piles for scanning by archaeologists for diagnostic materials. If the resource encountered consists of complete or nearly complete artifacts from CA-ORA-1582H, then artifacts shall be cleaned and cataloged for curation at a facility acceptable to the City of Huntington Beach for loans to educational institutions, and no further study would be required.*
- (d) *In the event of the discovery on the project site of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find will halt immediately and the area of the find will be protected. If a qualified archaeologist is present, he/she will determine whether the bone is human. If the archaeologist determines that the bone is human, or in the absence of an archaeologist, the Applicant immediately will notify the City Planning Department and the Orange County Coroner of the find and comply with the provisions of P.R.C. Section 5097 with respect to Native American involvement, burial treatment, and reburial.*

Implementation of MM CR-1 would reduce Impacts CR-1 and CR-3 to less-than-significant levels by ensuring that paleontological resources and unanticipated archaeological resources, including human burials, would be subject to scientific recovery and evaluation, pursuant to CEQA, which would ensure that important scientific information that could be provided by these resources regarding history or prehistory is not lost.

The following mitigation measure would be required to address impacts to archaeological resources, as described above under Impact CR-2.

MM CR-2 Scientific recovery of archaeological resources associated with CA-ORA-149: The Applicant shall retain a qualified archaeologist (i.e., listed on the Registry of Professional Archaeologists) to develop and implement, in consultation with the State Office of Historic Preservation, a research design and recovery plan for remaining elements of CA-ORA-149. The recovery plan shall emphasize data collection in Locus A, between Test Units 1 and 2, as well as on a core area of Locus B, centered around Test Unit 4, and shall be designed to satisfy the requirements of Section 21083.2 of CEQA.

Implementation of MM CR-2 would reduce Impact CR-2 to a less-than-significant level by ensuring that significant elements of CA-ORA-149, a prehistoric archaeological site, would be subject to scientific recovery and evaluation, pursuant to CEQA, which would ensure that important scientific information that could be provided by these resources regarding history or prehistory is not lost.

Impacts to CA-ORA-1582H, as described above under Impact CR-4 would be less than significant.