

## 4.4 CULTURAL RESOURCES

This analysis is based primarily on the Dudek and Associates (Dudek) *Extended Phase 1 Archaeological Investigation, Shelby Residential Project, 7400 Cathedral Oaks Road, City of Goleta, California* (Dudek 2011) (Appendix D) and a record search and field inspection of the project area by an ICF International (ICF) archaeologist in June 2013.

### 4.4.1 Existing Conditions

#### 4.4.1.1 Prehistoric Setting

The local prehistoric chronology is divided into four major periods—Paleoindian, Early Period, Middle Period, and Late Period. It is generally accepted that humans entered the New World about 11,000 B.C. during the latter part of the Wisconsin glaciation. The earliest unquestioned evidence of human occupation in south Santa Barbara County is dated between 8,000 B. C. and 6,000 B.C. (Erlandson and Colten 1991). Paleoindian groups during this time focused on hunting Pleistocene megafauna, including mammoth and bison. Plants and smaller animals were undoubtedly part of the Paleoindian diet as well, and when the availability of large game was reduced by climatic shifts near the end of the Pleistocene, the subsistence strategy changed to a greater reliance on these resources (Dudek 2011).

Post-Pleistocene changes in climate and environment are reflected in the local archaeological record by approximately 6,000 B.C., (King 1981, 1975; King and Gamble 1979), the beginning of the Early Period (6000 B.C. to 1500 B.C.). The Early Period of the Santa Barbara Channel mainland was originally defined by Rogers (1929), who called it the “Oak Grove Period.” The diagnostic features of this period are the mano and metate milling stones, which were used to grind hard seeds, such as sage, for consumption. Toward the end of the Early Period, sea mammal hunting appears to have supplemented subsistence strategies (Glassow 1990).

The Middle Period (1500 B. C. to 1150 A.D.) is characterized by larger and more permanent settlements, related to a generally wetter environment. Materials from Middle Period sites reflect a greater reliance on marine resources and include marine shells, fish remains, and fishhooks. A major shift in vegetable food exploitation occurred, as the mano and metate milling stones were replaced by stone mortars and pestles. This indicates a transition from seed gathering to oak tree acorn gathering and processing, the result of cooler temperatures and more expansive oak woodland habitats. Toward the end of this period, the plank canoe was developed, making ocean fishing and trade with the Channel Islands safer and more efficient (Arnold 1987). Terrestrial resources continued to be exploited, as evidenced by the presence of contracting-stemmed and corner-notched projectile points from Middle Period sites (Bamforth 1984).

The Late Period (1150 A.D. to 1800 A.D.) was a time of increased social and economic complexity. The increased number of permanent and semi-permanent villages clustered along the Santa Barbara Channel and on the Channel Islands, and the diversity of environmental site settings in which sites have been identified, indicates a substantial increase in prehistoric population. Intensification of terrestrial as well as marine resources occurred. Acorns continued to be processed, and land mammals were hunted with the bow and arrow, rather than exclusively by spear. Trade networks, probably controlled by village chiefs, expanded and played an important part in local Chumash culture, reinforcing status differences and encouraging craft specialization. Shell beads, related to status and social value and found throughout the Early and Middle Periods, increased in number and variety.

The protohistoric culture of the Chumash was terminated by the arrival of a Spanish expedition led by Gaspar de Portolà in 1769. Chumash culture changed dramatically with the establishment of the Missions of Santa Barbara, Santa Ynez, and La Purisima (Dudek 2011).

#### **4.4.1.2 Historic Setting**

The historic occupation of the project vicinity can be divided into four settlement periods: the Mission Period (1769–1830 A.D.), the Rancho Period (ca. 1830–1850 A.D.), the American Period (ca. 1850–1900 A.D.), and the Modern Period (1900 to the present). Construction of Mission Santa Barbara in 1786, Mission la Purisima Concepción in 1787, and Mission Santa Ynez in 1804 altered both the physical and cultural landscape of the region. The missions were the center of Spanish influence in the region and affected Native American patterns of settlement, culture, trade, industry, and agriculture. Native Americans provided labor for the Mission system, and many coastal tribes, such as the Chumash, were no longer able to live in their traditional ways.

Mexico rebelled against Spain in 1810, and by 1821 Mexico, including California, achieved independence. The Mexican Republic began to grant private land to citizens to encourage immigration to California. Huge land grant ranchos took up large sections of land in California. In 1833, Mexico declared an end to the Missions and secularized each Mission's land holdings.

Secularization of lands and a focus on cattle raising marked the Rancho Period, where large land grants of mission lands were ceded to wealthy, prominent Spanish families. Native Americans continued to work as laborers on ranchos during this period.

The American Period began with the acquisition of California by the United States in 1848, at the end of the Mexican-American War. The Mexican American war began in 1846, with the short-lived California Republic being declared on June 14, 1846. The Republic disbanded 26 days later upon the arrival of U.S. troops in California. The American Period is marked by the large influx of American citizens into California and the almost complete replacement of previous Native American, Spanish, and Mexican cultural systems with United States customs and laws.

The discovery of gold and the subsequent Gold Rush brought many Americans into California, which promoted extensive cultural changes. The state developed rapidly, being admitted to statehood in 1850. However, this great influx of population was primarily limited to central California, in San Francisco and the Gold Rush region of the Sierra Nevada. Southern California grew very slowly during this time. After the end of the Gold Rush, farming and more intensive land uses steadily replaced cattle raising. In the 1860s, cattle ranching was substantially reduced by a prolonged drought, and a more mixed agricultural economy developed in Santa Barbara County and other rural areas of Southern California.

Major forces of regional change between 1900 and 1920 begin the Modern Period, which extends to the present day, during which Southern California developed its distinctive regional characteristics. These include the growth of Los Angeles into a major city, increased urbanization in Santa Barbara County and along the coast, development of the automobile as the main form of transportation, and development in the region of agribusiness, wineries, the oil industry, and large college institutions.

#### **4.4.1.3 Project Site**

The project site is within the City of Goleta, in the Goleta Foothills at the edge of the Santa Ynez Mountains, adjacent to El Encanto Creek, a blue-line stream. The project site encompasses 14.38 acres situated north of Cathedral Oaks Avenue, bounded on the west by El Encanto Creek and on the north and east by the Glen Annie Golf Course. The property encompasses a small recorded archaeological site, CA-SBA-1735.

The elevation of the project parcel is 145 feet above mean sea level (AMSL) at Cathedral Oaks Road, rising on a gentle slope to 252 feet AMSL in the northeast property corner. Rincon Formation bedrock is present in the north end of the parcel at shallow depths, about 7 to 8 feet. The majority of the parcel is underlain by deep deposits of Quaternary Older Alluvium. Geotechnical testing (ENGEO 2011) indicates this alluvium is at least 22.5 feet deep near the site location. Grading to develop level parcels for the project will require grading to a depth of 3 to 8 feet.

Microfossils are common in the Rincon Formation, and have been helpful in dating the formation because some of these species only existed for a limited time span. Foraminiferal microfossils remains, in particular, are abundant. Within Santa Barbara County, two significant fossil finds (aside from microfossils) have been made in the Rincon Formation, while the Quaternary Older Alluvium has yielded significant vertebrate land mammal fossils.

#### ***Previous Archaeological Investigations***

A summary of the prior archaeological investigations performed within the larger CA-SBA-1735 site is provided below.

A records and literature search was conducted at the Central Coast Information Center (CCIC), University of California Santa Barbara (UCSB). The CCIC is the state-designated regional clearinghouse for archaeological site information for Santa Barbara County. For this project, a records search was requested by Dudek in 2011. An additional records search was conducted by ICF in 2013, which determined that no additions or changes to the records had taken place. The records search identified a total of 13 previous cultural resource studies and 10 archaeological sites within a 1/2-mile radius of the proposed project site. The entire project parcel has been surveyed twice in the past (Spanne 1972; SAIC 1999), and the northern 9 acres of the parcel were re-surveyed for the current project (Dudek 2011).

The records of the State Historic Property Data Files, National Register of Historic Places, National Register of Determined Eligible Properties, California Historical Landmarks, California Points of Historic Interest, California Office of Historic Preservation Archaeological Determinations of Eligibility, and the California Department of Transportation State and Local Bridge Surveys were consulted. No historic property evaluations within a 1/2-mile radius of the project parcel have been recorded.

One prehistoric archaeological site, CA-SBA-1735, has been recorded within the project parcel. This site was recorded in 1972 (Spanne 1972) and described as a "trace scattering of chipping waste, clam shell and sandstone cobble fragments." Artifacts were described as "a few utilized Franciscan chert flakes of thumbnail size." The site was described as being 27 meters by 18 meters (88.5 by 59 feet), and was noted to be in an area "cultivated, eroded, and disturbed by tree roots," with a creek adjacent to the site's western boundary. Unfortunately, the site was not mapped in detail when it was recorded, and the location mapped by the CCIC on the U.S.

Geological Survey (USGS) topographic Dos Pueblos Canyon quadrangle map is an estimated location.

The 1999 survey made diligent efforts to locate CA-SBA-1735, but no evidence of the site was found in its mapped location. It was suggested that the site may have been destroyed, as the orchard on the site had been removed and a house, outbuildings, and driveway constructed on the parcel. The driveway and associated barn access have been constructed in the mapped site location. (Air photo imagery indicates the orchard, with no structures, was present on the project parcel in 1994, and had been removed by 2002, replaced by grassland and structures.)

For the current project, the mapped site location was tested with three shovel probes (Dudek 2011). The Chumash Native American community, represented by Gilbert Unzueta, Chumash elder, monitored this excavation. No prehistoric cultural materials were recovered. Finally, a survey of the mapped site location and vicinity was conducted by an ICF archaeologist on June 19, 2013; no prehistoric cultural materials were observed. Site CA-SBA-1735 appears to have been destroyed, possibly by grading for the existing driveway. There is a possibility that the site location has been slightly mis-mapped, but surveys of the parcel in 1999 and 2011 did not reveal any archaeological materials.

### ***Historic Resources***

Three buildings are present on the project parcel: a residence, barn, and stable. These are typical 1950s-era vernacular ranch buildings. These buildings were moved onto the project parcel in the 1990s from the southern portion of the original 25-acre parcel when Cathedral Oaks Road was extended and a subdivision built south of the road. These buildings were examined by an architectural historian (Nye 2011), who concluded the buildings had lost historical integrity when they were moved, and that they were commonplace vernacular structures in any case. It was concluded that the three buildings do not meet any of the City's or CEQA's significance criteria.

### ***Native American Community Consultation***

The City contacted the local Native American community in October 2011 for SB 18 consultation regarding the Shelby General Plan Amendment. No responses have been received.

In a letter dated August 9, 2013, ICF International, on behalf of the City, contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands File search and a Native American Contact list. On August 29, 2013, Native American groups and individuals listed by the NAHC were contacted by mail about the project, and asked if they had any cultural information about the project area or concerns about the project. Comments were requested by September 30, 2013; no responses were received. This contact and request for information is a separate process from Senate Bill (SB) 18 consultation.

Follow-up phone calls or e-mails were placed with the 19 Native American individuals and groups listed by the NAHC. One person requested a Native American presence during project construction, two individuals had no concerns about the project, and one had no comment. Messages were left for the remainder of the Native American contacts requesting a response if they had comments or concerns about the project. No responses have been received.

## 4.4.2 Regulatory Framework

### 4.4.2.1 State

At the state level, the most relevant laws and regulations regarding the protection of cultural resources are Public Resources Code (PRC) §§ 5020.1(k) and 5024.1(g) (CEQA) and 14 California Code of Regulations § 4852 (CEQA Guidelines). Consideration of the significance of an “important archaeological resource” is regulated by CEQA Guidelines §§ 15064.5 and 15126.4 and the draft criteria regarding resource eligibility to the California Register of Historical Resources (CRHR). Generally, under CEQA, a historic resource includes built-environment historic and prehistoric archaeological resources, which are considered significant if the resource meets the following criteria:

- a. The resource is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- b. The resource is associated with lives of persons important in our past.
- c. The resource 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.
- d. The resource has yielded, or may be likely to yield, information important in prehistory or history.

CEQA Guidelines § 15064.5 also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC § 5097.98.

Impacts on “unique archaeological resources” and “unique paleontological resources” are also considered under CEQA, as described under PRC § 21083.2. A *unique archaeological resource* implies an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one of the following criteria:

- a. The archaeological artifact, object, or site contains information needed to answer important scientific questions, and there is a demonstrable public interest in that information.
- b. The archaeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type.
- c. The archaeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric event or person.

Potential impacts to identified cultural resources need only be considered if the resource is an “important” or “unique archaeological resource” under the provisions of CEQA Guidelines §§ 15064.5 and 15126.4 and the eligibility criteria. If a resource cannot be avoided, then the resource must be examined pursuant to CEQA Guidelines §§ 15064.5 and 15126.4 and to the eligibility criteria as an “important” or “unique archaeological resource.”

A non-unique archaeological resource is an archaeological artifact, object, or site that does not meet the above criteria. Impacts to non-unique archaeological resources and resources that do not qualify for listing on the CRHR receive no further consideration under CEQA. Similarly, a non-unique paleontological resource is given no further consideration other than the simple recording of its existence by the CEQA lead agency.

#### **4.4.2.2 Local**

The City's *Environmental Thresholds and Guidelines Manual* (Thresholds Manual) defines an important archaeological resource by one of the following criteria:

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

The Thresholds Manual defines a significant historical resource as one which: 1) possesses integrity of location, design, workmanship, material, and/or setting; 2) is at least 50 years old (can be less than 50 years old if it unique or possesses extraordinary elements of integrity, design, construction, or association); and 3) demonstrates one or more of the following:

- i. Is associated with an event, movement, organization, or person that/who has made an important contribution to the community, state, or nation.
- ii. Was designed or built by an architect, engineer, builder, artists, or other designer who has made an important contribution to the community, state, or nation.
- iii. Is associated with a particular architectural style or building type important to the community, state, or nation.
- iv. Embodies elements demonstrating outstanding attention to design, detail, craftsmanship; or outstanding use of a particular structural material, surface material, or method of construction or technology.
- v. Is associated with a traditional way of life important to an ethnic, national, racial, or social group, or to the community at large.
- vi. Illustrates broad patterns of cultural, social, political, economic, or industrial history.
- vii. Is a feature or cluster of features (structure, building, structural element, object, tree, garden, etc.) which convey a sense of time and place that is important to the community, state, or nation.
- viii. Is able to yield information important to the community or is relevant to the scholarly study of history, historical archaeology, ethnography, folklore, or cultural geography.

### **4.4.3 Project Impacts and Mitigation**

#### **4.4.3.1 Thresholds of Significance**

Based on both the City's Initial Study Checklist (CEQA Guidelines, Appendix G; Environmental Checklist Form) and the City's *Environmental Guidelines and Thresholds Manual* (Thresholds Manual), a significant impact on cultural resources could occur if the project would:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines
- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines.
- c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- d. Disturb any human remains, including those interred outside of formal cemeteries.
- e. Result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings.

Items a–d are from the Initial Study Checklist and Item e is from the Thresholds Manual.

#### **4.4.3.2 Project Impacts**

##### ***Impact CUL-1. Historic Resources***

There are three structures on the parcel: a residence, barn, and stable. These are typical 1950s-era vernacular ranch buildings, moved onto the project parcel in the 1990s. These buildings were examined by an architectural historian (Nye 2011), who concluded the buildings had lost historical integrity when they were moved, and that they were commonplace vernacular structures in any case. Nye concluded that the three buildings do not meet any of the City's or CEQA's significance criteria and are not historical resources. Therefore, there would be no potential for the project to result in any impacts on historic resources.

##### ***Impact CUL-2. Archaeological Resources***

The project site encompasses the location of a recorded archaeological resource. The significance of this resource, CA-SBA-1735, has not been determined. Based on the available information, it appears that the site would not be considered significant under City or CEQA criteria. However, since the site could not be relocated and tested, there remains the possibility that CA-SBA-1735 could be a significant archaeological resource.

Site CA-SBA-1735 was not mapped in detail when it was recorded (Spanne 1972) and the location mapped by the CCIC on the USGS topographic Dos Pueblos Canyon quadrangle map is an estimated location. The 1999 survey made diligent efforts to locate CA-SBA-1735, but no evidence of the site was found in its mapped location, and testing of the mapped site location in 2011 yielded no evidence of the site. It is quite probable that the site has been destroyed, as the orchard on the site was removed and a house, outbuildings, and driveway constructed on the parcel. There is a possibility, however, that a buried portion of the site continues to exist in the project parcel with no surface indicators, perhaps not in the mapped location, since this is an estimated location.

Because the site cannot be located and evaluated, it is unlikely that anything remains of CA-SBA-1735. It is remotely possible that CA-SBA-1735 may still be present as a subsurface resource, and could be a significant cultural resource that is potentially eligible for listing on both the CRHR and local registers of historic resources. Because the site may still be present, although this is unlikely, there is a very small potential for significant impact on an archaeological resource.

**Impact CUL-3. Paleontological Resources/Geologic Features**

The Quaternary Older Alluvium underlying the subject property is known to contain significant vertebrate fossils in rare locations, while the Rincon Formation contains marine fossils that are occasionally exceptional specimens. There is a low potential to encounter fossils of unique value in the project parcel due to the limited size of the parcel and the shallow grading required to develop the project area. There are no unique geologic features at this location.

Although significant fossils are rare in the Quaternary Older Alluvium and Rincon Formation, should one be encountered during project development, the project could result in a significant impact to paleontological resources. The project would have no impact on geologic features because of the limited size of the parcel, the shallow grading required to develop the project area, and the absence of unique geologic features at this location.

**4.4.4 Cumulative Impacts****Impact CUL-4. Cumulative Archaeological Resources**

Prehistoric archaeological sites are non-renewable resources that have been destroyed at a high rate statewide and locally. Significant sites in Santa Barbara County have been destroyed by development. The archaeological resources available for study today represent only a fraction of the cultural resources in this area described by Rogers in 1929. At that time, Rogers found that development and relic hunting had already adversely impacted many archaeological sites in the County. However, only a minor site is known to have once been present in the project area, and this site appears to have been destroyed at some point in the past. Therefore, although the cumulative impacts to cultural resources in the project area from past activity can be considered significant and adverse, the present project does not add to this cumulative effect on cultural resources. The project will not have a significant cumulative impact on cultural resources.

**Impact CUL-5. Cumulative Paleontological Resources**

Paleontological sites are non-renewable resources that have been destroyed by development statewide and locally. However, fossil resources are rare, and it is unlikely any will be discovered in the project area. Further, mitigation measures are in place to salvage any fossils in the event they are discovered. Therefore, the project would not have a significant cumulative impact on paleontological resources.

**4.4.5 Mitigation Measures****MM CUL-2a. Construction Monitoring**

All site preparation, ground disturbance, and grading along the western side of the project parcel adjacent to and within 200 feet of El Encanto Creek must be monitored by a qualified archaeologist and qualified Chumash Native American observer (with selection to be reviewed and approved by the City). This monitoring must encompass the suspected location of site CA-SBA-1735, as well as areas of the parcel that could encompass the site if the site location has been mis-mapped.

These monitor(s) have the following responsibilities:

- a. The monitors must be on site on a full-time basis during any site preparation, ground disturbance, and/or grading activities. The monitors must remain on site until it is determined through consultation with the applicant, City staff, archaeological consultant, and Native American representative that full-time monitoring is no longer warranted. At such time, an alternate monitoring schedule must be identified and agreed upon.
- b. The monitors have the authority to halt any activities impacting known or previously unidentified cultural resources and to conduct an initial assessment of the resources.
- c. In the event potential human remains (including a single bone fragment of unknown origin) are uncovered at any time, mitigation requirements established under MM CUL-2c, as described below, must be carried out.
- d. If an artifact is identified as an isolated find, it must be recovered with the appropriate location data.
- e. If a feature or concentration of artifacts is identified, the monitors must halt activities in the vicinity of the find, notify the applicant and the City, and prepare a proposal for the treatment of the find(s). This treatment may range from excavation and additional study to avoidance, depending on the nature of the find(s).
- f. The monitors must prepare a brief archaeological report documenting the results of the monitoring program and, if needed, will include an inventory of recovered artifacts, features, etc.
- g. The monitors must prepare any artifact assemblage recovered for curation with the UCSB Repository for Archaeological Collections.
- h. The monitors will file an updated archaeological site survey record for CA-SBA-1735 with the UCSB Central Coast Information Center.

**Plan Requirements and Timing:** Specifications for the monitoring must be printed on all plans submitted for any site preparation, ground disturbance, grading, and/or construction activities. The permittee must enter into a contract with a qualified archaeologist and qualified Chumash Native American observer (with selection to be reviewed and approved by the City) and must fund the required monitoring. The permittee must provide evidence of this contract before issuance of any permit for any site preparation, ground disturbance, grading, and/or construction activities.

**Monitoring:** The Planning and Environmental Review Director, or designee, must conduct periodic site inspections to verify compliance during any site preparation, ground disturbance, grading, and/or construction activities.

#### ***MM CUL-2b. Pre-construction Workshop: Cultural Resources***

A pre-construction workshop, funded by the permittee, must be conducted by a qualified archaeologist and qualified Chumash Native American observer (with selection to be reviewed and approved by the City).

**Plan Requirements and Timing:** Attendees must include the permittee, project archaeologist, project's Chumash Native American observer, construction supervisors, and heavy equipment operators to ensure that all parties understand the specifications for construction monitoring and their respective roles and responsibilities. All construction and landscaping personnel who work on the project during any phase of ground disturbance must be required to attend. The names

of all personnel who attend the workshop must be recorded, indicating that they have received workshop training.

The workshop must include the following:

- a. Review of the types of archaeological resources that may be uncovered.
- b. The provision of examples of common archaeological artifacts and other cultural materials to examine.
- c. An explanation of why monitoring is required and identification of monitoring procedures.
- d. A description of what would temporarily stop construction and for how long.
- e. A description of a reasonable “worst-case” new discovery scenario, such as the discovery of intact human remains or a substantial subsurface deposit.
- f. An explanation of reporting requirements and responsibilities of the construction supervisor.
- g. A discussion of prohibited activities, including unauthorized collecting of artifacts.

The permittee must provide workshop specifications, date/time, and list of attendees to the Planning and Environmental Review Director, or designee, before the City issues any grading permit. The workshop must be held before the start of any site disturbance.

**Monitoring:** The Planning and Environmental Review Director, or designee, must attend the workshop and must periodically site inspect for compliance during any site preparation, ground disturbance, grading, and/or construction activities.

#### ***MM CUL-2c. Discovery of Human Remains***

Procedures must be prepared and followed in the event human remains are discovered.

**Plan Requirements and Timing:** Before any site preparation, ground disturbance, grading, and/or construction activities, the permittee and construction crew must meet on site with the local Chumash representative(s) identified as the Most Likely Descendant (MLD) by the State Native American Heritage Commission. The MLD, permittee, Lead Agency, and project archaeologist (selection to be reviewed and approved by the City) must discuss procedures. These procedures must include those identified by PRC § 5097.98, CEQA Guidelines § 15064.5, and the Cultural Resource Guidelines of the City of Goleta *Environmental Guidelines and Thresholds Manual*. The Santa Barbara Sheriff-Coroner must be contacted if human remains are discovered. Satisfactory disposition of the remains must be agreed upon by all parties so as to limit future disturbance. Procedures must be reviewed and approved by the Planning and Environmental Review Director, or designee, before the City issues any grading permit.

**Monitoring:** The Planning and Environmental Review Director, or designee, must periodically site inspect monitoring activities and will respond according to procedure in the event human remains are discovered.

#### ***MM CUL-3a. Discovery of Paleontological Resources***

All site preparation, ground disturbance, and grading of the project site must be spot-monitored on a part-time basis by a qualified paleontologist (with selection to be reviewed and approved by the City). The Planning and Environmental Review Director, or designee, and the project

paleontologist must develop a schedule of regular part-time monitoring. This schedule can be increased, reduced, or eliminated as warranted by observed field conditions during construction. If fossils are exposed during grading and excavation, and found by the project paleontologist or construction personnel, the following actions must be taken:

- a. Follow appropriate notification procedures;
- b. Assessment of the find, usually in the field by the project paleontologist, and determination of recovery procedures;
- c. Provisions for construction avoidance until a find is assessed and, if recovery is called for, scientifically recovered; construction-related excavations would continue in other areas away from the discovery;
- d. Provisions for continued monitoring of construction in all appropriate areas while the find is being recovered;
- e. Post-field initial study and curation preparation and subsequent curation.

**Plan Requirements and Timing:** Fossils that may be discovered during construction must first be assessed to determine whether they are scientifically significant and whether recovery measures are warranted. If recovery is recommended, it must be completed in a manner reflecting scientific standards currently applied to paleontological excavations. Within those limits, all appropriate measures must be taken to expedite recovery and to minimize interference with construction scheduling. The Planning and Environmental Review Director, or designee, must be notified within 12 hours of a paleontological resources discovery assessed by the project paleontologist to be significant and warranting recovery. The project paleontologist must periodically update the Planning and Environmental Review Director, or designee, during the recovery, and notify them upon completion of recovery. This measure must be in effect throughout all construction phases.

**Monitoring:** The Planning and Environmental Review Director, or designee, must ensure that this measure is implemented through regular contact with the project paleontologist and site visits as appropriate.

#### ***MM CUL-3b. Pre-construction Workshop-Paleontological Resources***

A pre-construction workshop, funded by the permittee, must be conducted by a qualified paleontologist (with selection to be reviewed and approved by the City).

**Plan Requirements and Timing:** Attendees must include the permittee, the project paleontologist, construction supervisors, and heavy equipment operators to ensure that all parties understand the stop work and report provision and their respective roles and responsibilities. All construction and landscaping personnel who work on the project during any phase of ground disturbance must be required to attend. The names of all personnel who attend the workshop must be recorded, indicating that they have received workshop training.

The workshop will include the following:

- a. Review of the types of fossil resources that may be uncovered.
- b. The provision of examples of common fossils to examine.
- c. A description of what would temporarily stop construction and for how long.

- e. A description of a reasonable “worst-case” new discovery scenario, such as the discovery of a large mammalian invertebrate fossil.
- f. An explanation of reporting requirements and responsibilities of the construction supervisor.
- g. A discussion of prohibited activities, including unauthorized collecting of fossils.

The permittee must provide workshop specifications, date/time, and list of attendees to the Planning and Environmental Review Director, or designee, before the City issues any grading permit. The workshop must be held before the start of any site disturbance whatsoever, including clearing, grubbing, and grading preparations.

**Monitoring:** The Planning and Environmental Review Director, or designee, must attend the workshop and must periodically site inspect for compliance during any site preparation, ground disturbance, grading, and/or construction activities.

#### **4.4.6 Residual Impacts**

With implementation of the mitigation measures included above (CUL-2a through CUL-2c, CUL-3a through CUL-3b), residual project-specific impacts on cultural and paleontological resources would be reduced to less-than-significant levels (Class II).