
3.4 CULTURAL RESOURCES

3.4.1 INTRODUCTION

The purpose of this section of the EIR is to examine the potential historic, archeological, cultural, and paleontological effects that may occur as a result of the proposed project. Cultural resource is a term that refers to the imprint of human occupation left on the landscape. This imprint is manifested in the form of prehistoric and historic archaeological sites, and historic buildings, structures, and objects. Archaeological sites consist of artifacts, plant and faunal remains, trash deposits, and many types of features. Artifacts reflect anything that was manufactured or modified by human hands. Features can include structural remains, fire pits, and storage areas.

Prehistoric archaeological sites are those that reflect human occupation before the advent of human records. Prehistoric archaeological sites can include village sites, burial grounds, refuse piles, and worship sites; and artifacts found at prehistoric archaeological sites can include pot shards, tools, worked points (i.e. arrowheads), and other functional and decorative items. Historic archaeological sites reflect occupation after the advent of written records. Material remains of historic archaeological sites include: refuse dumps, structure foundations, roads, privies, or any other physical evidence of historic occupation. Refuse consists of food waste, bottles, ceramic dinnerware, and cans. There is usually a strong interplay between historic archaeological sites and written records. The archaeological data is frequently used to verify or supplement historic records. Historic buildings include: commercial and residential buildings, industrial space, and any other building that can accommodate people. Historic structures include facilities such as bridges, roadways, and objects.

In January 2006, McKenna et al. (McKenna), 6008 Friends Avenue Whittier, California 90601-3724, conducted a Phase I Cultural Resources Investigation, Paleontological Overview of the Chandler Ranch/Rolling Hills Country Club Residential Development, Rolling Hills Estates, Los Angeles County, California (referred to hereafter as Phase I). This Phase I generally involved the following tasks:

- An Archaeological Records Check;
- Native American Heritage Commission Consultation;
- A Paleontological Overview by the Los Angeles Museum of Natural History;
- Phase I Field Survey; and
- Analysis and Report Preparation.

Subsequently in December 2006 McKenna conducted a Phase II Cultural Resources Testing Program at CA-LAN-276, CA-LAN-277 and CA-LAN-3583, Three Prehistoric Sites Identified Within the Chandler Ranch/Rolling Hills Estates and Torrance Areas of Los Angeles County, California. The need for the Phase II was based on the findings of the aforementioned Phase I

which determined that the project site was sensitive for cultural and paleontological resources. The Phase II ascertained to what extent cultural and paleontological resources actually exists on the project site. The results of this testing program are documented in the report prepared by McKenna. The Phase II generally involved the following tasks:

- An Archaeological Records Check;
- Native American Consultation;
- Paleontological Overview;
- Phase I Field Survey;
- Phase II Excavations and Evaluations;
- Analysis and Report Preparation.

Both McKenna's Phase I and Phase II are included in Appendix D of this EIR.

3.4.2 REGULATORY FRAMEWORK

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires the lead agency of a project to consider the project's potential impacts on significant historical resources, archaeological sites that qualify as significant historical resources, and unique archaeological resources. CEQA defines significant historical resources as those resources "listed in, or determined eligible for listing in, the California Register of Historical Resources" (PRC § 21084.1). (See the "California Register of Historical Resources" section below for the criteria for listing.) CEQA (PRC § 21083.2) defines a unique archaeological resource as, "an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (California Register or CRHR) is a state version of the National Register of Historic Places program. The California Register program was enacted in 1992, and became official on January 1, 1998. As defined in PRC § 5024.1, "A resource may be

listed as an historical resource in the California Register if it meets any of the following National Register of Historic Places criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California or national history;
3. It embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values;
4. It has yielded or has the potential to yield information important to the prehistory or history of the local area, California or the nation.”

California properties formally determined eligible for, or listed in, the NRHP are also included in the California Register, per PRC § 5024.1. In addition, state historical landmarks, points of historical interest, and locally designated historical resources are given consideration for listing in the California Register.

OFFICE OF HISTORIC PRESERVATION/STATE HISTORIC PRESERVATION OFFICER

The Office of Historic Preservation (OHP) is the governmental agency primarily responsible for the statewide administration of the historic preservation program in California. The chief administrative officer of the OHP is the State Historic Preservation Officer (SHPO). The SHPO is also Executive Secretary of the State Historical Resources Commission.

In addition to their role in the identification of National Register properties, OHP and SHPO are responsible for administering the State Historical Landmark, State Point of Historical Interest, California Register of Historical Resources, California Historical Resources Information Systems, and the California Heritage Fund programs.

GENERAL PLAN GUIDELINES AND NATIVE AMERICAN CONSULTATION

The State of California General Plan Guidelines, Supplement, November 4, 2005, addresses the requirements of SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004. SB 18 requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places (“cultural places”) through local land use planning. This consultation requirement is imposed whenever a local public government seeks the adoption or amendment of a general plan or specific plan. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.

3.4.3 ENVIRONMENTAL SETTING

PHYSICAL AND NATURAL ENVIRONMENT

The subject property is an irregularly shaped collection of parcels totaling 228 acres that include a sand and gravel pit, a golf course with associated clubhouse and open space. Approximately 105 acres of the site have been excavated to a depth of 300 feet below natural grade. This portion the site represents the sand and gravel pit that is in the process of being filled with various inert materials. The golf course represents another 100 acres within the project area and was developed 40 years ago. The balance of the site is 23 acres of open space that has been disturbed to various levels.

Residential development of various densities surrounds the project site on all sides with the exception of the Alta Loma Park, the Cypress Street Reservoir, the Los Angeles County Sheriff's Department, the Palos Verdes Reservoir, the Jack Kramer Tennis Club and the Linden H. Chandler Nature Preserve.

Biologically, the project area is located in an area generally described as a Coastal Sage Scrub biotic community, although virtually no evidence of the natural vegetation is evident in the area. Only a small portion of the project site exhibits evidence of natural vegetation and contours.

GEOLOGIC BACKGROUND

Geologically, the project area is associated with the Middle Miocene Marine Altamira Shale Member of the Monterey Formation. The siliceous shale of this formation is known to have yielded fossil remains and has produced articulated specimens in the recent past which are on file in the Los Angeles County Museum of Natural Art. The Los Angeles County Museum of Natural Art has identified this area as being highly sensitive for "excellent" vertebrate fossils and recommended monitoring for the entire area during construction or ground disturbance activities.

PREHISTORIC ARCHAEOLOGY

McKenna conducted an intensive cultural resources investigation (Phase I) of the proposed Chandler Ranch/Rolling Hills Country Club project area. The resulting research revealed that the project area was sensitive for prehistoric resources and moderately sensitive for historic resources, mainly reflecting the area's use by indigenous populations of Native Americans, specifically the Gabrieliño. Excerpts from the full report are included in this section, and the full report is included in the EIR as Appendix D.

The proposed project is located in an ethnographic area associated with the Gabrieliño (Tongva) of the Los Angeles, San Gabriel, Rio Hondo, and Santa Ana River drainage—roughly, the Los Angeles County of today. Occasionally, the Ventureño of nearby Ventura County may also have occupied the area. Many of the relics that are being recovered from these sensitive archeological sites are evidence of their occupation of these areas either as transient use sites or permanent habitation sites.

The term "Gabrieliño" is a reference to the direct association between the Native American population of the San Gabriel Valley and the Mission San Gabriel de Archangel. The Mission was originally located in the Whittier Narrows area but relocated shortly after its founding because of unstable ground along the Rio Hondo/San Gabriel River channels. The Mission San Gabriel serviced the entire San Gabriel Valley, ranging from the coast to the San Gabriel/San Bernardino Mountains, and from northern Los Angeles County to just north of San Juan Capistrano. The northern and eastern extent of Mission territory included the San Gabriel/San Bernardino Mountains and areas generally associated with the Serrano of the mountain and desert regions.

The Gabrieliño are known as a society identified by Late Prehistoric/Proto-historic ethnographic records and archaeological data identifying Late Prehistoric occupation of Southern California. Changes identified between the earlier periods and the Late Prehistoric are evident in the archaeological record and in variations seen in technologies, social/community patterns and, in some cases, population estimates. Populations preceding the Gabrieliño, and likely directly related to the Gabrieliño, can be archaeologically identified as separate or variant forms of the evolving culture. As noted in this excerpt from the report:

The Mission San Gabriel serviced the entire San Gabriel Valley; ranging from the coast to the San Gabriel/San Bernardino Mountains and from the northern Los Angeles County to just north of San Juan Capistrano. The northern and eastern extent of their territory included the San Gabriel and San Bernardino Mountains and areas generally associated with the Serrano of the mountain and desert regions.

The Gabrieliño utilized numerous plants and animals for food, shelter, and medicines. Citing Kroeber (1976: 649-650), they used seeds most often, followed by foliage, shoots, fruits, and berries. Mountain shrubs, ash, elder, and willow were used for shelters and tool materials (e.g. bows). Over twenty plants were used regularly for medicinal purposes. Fauna used as food sources - included deer, rabbits, wood rats, squirrels, and ducks. Animals specifically not used were dog, coyote, bear, tree squirrel, pigeon, dove, mud hen, eagle, buzzard, raven, lizards, frogs, and turtles (Kroeber 1976: 652). Along the coast, the Gabrieliño regularly exploited the wetlands and ocean resources. The Gabrieliño also used numerous styles of bows, bedrock mortars, portable mortars, pipes, chisels, metates, manos, and various forms of chipped stone tools. Prior to the establishment of the Mission system, populations tended to live in larger villages with a series of "daughter" or "satellite" sites (limited activity areas) with lesser populations. Seasonal migration was practiced for the exploitation of resources and protection from seasonal weather conditions (Scientific Resource Surveys 1979:7). Habitation structures were constructed of branches, grasses, and mud and interior hearths were used for heat. Cooking was generally conducted outdoors with hearths generally used for food preparation.

Archaeological data and correlations with ethnographic data have resulted in the determination of a generalized chronology for prehistoric Southern California. The project area is located within the inland areas of Gabrieliño territory while chronological data has emphasized coastal occupations. Nonetheless, current archaeological data has indicated that the coastal chronological data derived by Wallace (1955), Warren (1968), and later by Koerper and Drover (1983) can be

applied to this region (Mason 1984; McKenna 1986). The coastal chronology generally accepted for Southern California has been as follows:

Early Man Horizon: Pre-dating 6,000 B.C.; is characterized by the presence of large projectile points and scrapers, suggesting a reliance on hunting rather than gathering;

Milling Stone Horizon: 6,000 to 1,000 B.C.; characterized by the presence of hand stones, milling stones, choppers, and scraper planes; tools associated with seed gathering and shell fish processing with limited hunting activities; evidence of a major shift in the exploitation of natural resources;

Intermediate Horizon: 1,000 B.C to A.D. 750; reflects the transitional period between the Milling Stone and the Late Prehistoric Horizons; little is known of this time period, but evidence suggests interactions with outside groups and a shift in material culture reflecting this contact;

Late Prehistoric Horizon: A.D. 750 to European Contact; characterized by the presence of small projectile points; use of the bow and arrow; steatite containers and trade items, asphaltum; cremations; grave goods; mortars and pestles; and bedrock mortars.

Many of the artifacts that are recovered from the four archeologically sensitive sites are relics from the Gabrieliño occupation and use of the site and they give clues as to how the site was utilized and information on how their society functioned.

ETHNOGRAPHY

The earliest known records of European contact with southern California Native Americans date to the mid-1500s, representing the early explorations of the Spanish. These explorations resulted in the identification of populations from Spanish ships, but did not include direct contact. Personal contact was not made until the 1770s, when Father Garces traversed the Mojave Desert and entered coastal southern California through the Cajon Pass.

In the 1770s, the Spanish Padres, under the direction of Junipero Serra, began the process of establishing a series of missions throughout Alta California, as California was then known. The missions held large tracts of land until 1824, when the Mexican government declared its independence from Spain and ordered the secularization of the missions. The majority of mission lands were then distributed in land grants to private ownership.

The general historic context in the study area is located within the historic Rancho Los Palos Verdes. Rancho Los Palos Verdes, which consisted of 31,630 acres, was granted to Jose Loreto and Juan Sepulveda by Governor Pio Pico in 1846 and was one of the last ranchos to be granted during California's Mexican Period. June 1880 marked the confirmation of this rancho by the U.S. Government thus indicating that there had been no significant subdivision or sale of rancho lands prior to 1880. The rancho was predominantly a cattle ranch and, shortly after the acquisition of California by the United States, some portions were sold to new settlers.

CONTEMPORARY HISTORICAL CONTEXT

Contemporary development in the project vicinity consisted of the Cypress/Lomita Reservoir, which was built in 1929. The construction of the reservoir occurred after this general area was sold out of the rancho lands. The Chandler Sand and Gravel enterprise was founded by Linden Chandler in 1937 and is located within an area referred to as the Chandler Ranch. According to Linden Chandler's grandson (also named Linden), the original ranch house dated back to approximately 1925 and was surrounded by pepper trees. The former location of the residence is located within the current location of the golf course. A brief biography of Chandler states: Chandler moved with his parents to the area in 1909, living in a small ranch house in Lomita. He later moved to a ranch on Peninsula Hill that overlooked the developing cities of the South Bay. He moved to the area in the days when cattle roamed the land, horses and wagons were the mode of transportation, farming was a way of life and there were only two major dirt roads on the Peninsula: the Palos Verdes Drive North and West thoroughfares.

The Chandler family had been in the quarry mining business prior to the establishment of the Chandler Ranch Sand and Gravel operation that has occupied this site since the late 1930's. Linden Chandler's father managed another Peninsula quarry operation, which was instrumental in influencing his decision to purchase the original five acres that started the quarry operation at this location. The topography of the Chandler Sand and Gravel operation started out as a hill that rose to 150 feet in elevation. Overtime, mining operations excavated millions of tons of material for utilization as aggregate for construction.

Linden H. Chandler was civic minded as well as entrepreneurial. Mr. Chandler was a staunch supporter of the effort for the City of Lomita to incorporate. He and his family were residents of Lomita for 35 years, and he was an advocate for cityhood because he did not want the community of Lomita to get annexed into the neighboring City of Torrance, thus losing its unique identity as a separate community. Mr. Chandler was a source of job generation as a result of the quarry activities in the City of Rolling Hills Estates and a community leader with his involvement in the incorporation effort for the City of Lomita. His life had implications historically to the surrounding communities.

CULTURAL RESOURCES ON THE PROJECT SITE AND VICINITY

The Phase I study prepared by McKenna identified seven previously recorded archeological sites in and around the immediate vicinity of the project area. Three of the seven sites are located outside of the project boundary, however, four of the sites are located within the boundaries of the proposed project.

McKenna also researched the significance of the artifacts left on the project site, like buildings, structures and ethnic relics, to determine the extent to which the project will have an impact on cultural resources. Some of the items analyzed are directly related to the quarry operations and other items are reminiscent of the historic and prehistoric occupants of the site by the Gabrieliño.

Many significant archaeological sites have been recorded in the general area over the past fifty years. Since laws establishing preservation of these types of resources have only existed for the last twenty years, many of these recorded sites may have been lost in the interim period. There have been seven sites identified as being located within the project area vicinity. These sites include CA-LAN-110,

CA-LAN-191, CA-LAN-276, CA-LAN-277, CA-LAN-278, CA-LAN-279, and CA-LAN-280. Three sites (CA-LAN-278, CA-LAN-279 and CA-LAN-280) are located outside of the project area and thus were not studied as thoroughly as the other sites. An additional site was identified in the process of exploring the known resource sites, and this site was given a temporary identifier of Chandler 1137-1. The sites located within the project area boundaries are discussed briefly below:

CA-LAN-110 was recorded relatively early, but no site record was available for the resource from the CSUF-South Central Coastal information Center in Fullerton so the specific date of recordation cannot be ascertained. The site was mapped as being along the northern boundary of the current study area and west of the Cypress/Lomita Reservoir. This area has been disturbed over time with development such as the installation of a jet fuel line. At the time the jet fuel line was installed, there was no evidence of the site at the unearthed location.

CA-LAN-191 was mapped as being located to the east of the Cypress/Lomita Reservoir. No specific detail on the site has been recorded, the basis for the mapping of its exact location is unknown, and the actual size of the site has been questioned. McKenna made attempts to verify the existence of a site at this location between 2003 and 2005 with presence/absence investigations. As a result, the location of the site has been adjusted but no evidence of a site has been discovered to date. The site may have been destroyed due to the disturbed nature of the area that resulted from the construction of the reservoir and the sand pit activities.

CA-LAN-276 was identified within the Golf Course in Bent Spring Canyon (southwest of CA-LAN- 191 and CA-LAN-110), southwest of the quarry pit and within the proposed project area. The site was described as an apparent village site. Artifacts discovered included cog stones, manos, sandstone bowls, and projectile points (arrowheads; including obsidian). Human remains were also reported. With the significance of cultural resources discovered at this site and the possibility of the resources being lost to project construction activities, this area was one of the subject sites tested as part of the Phase II. The findings of that testing are discussed later in this chapter.

CA-LAN-277 was also recorded and described as a scatter of chipping waste with little to no midden. This site was not considered significant, but suggested additional data may be present in a buried context. The recent investigations resulted in a determination that the UTM coordinates for this site are incorrect. The actual location is just west of the 16th green at the Rolling Hills Golf course. Therefore the mapped location was corrected. While no surface evidence of this site exists because it has been removed with the development of the golf course, the area is still considered significant for subsurface cultural resources. Therefore, this site was also one of the subject sites tested as part of the Phase II and the findings of that testing are discussed later in this chapter.

Chandler 1137-1 (CA-LAN-3583), during the course of the recent investigations, a previously unrecorded archaeological site was found in the northwestern corner of the project area. Designated "Chandler 1137-1", this site was found within the

“greenbelt” north of Alta Loma Park near the mouth of Dead Horse Canyon. The site area consisted of two loci, Locus “A” and Locus “B” bisected by the ravine identified as Dead Horse Canyon. Locus “A” was identified to the east and Locus “B”, to the west. The site likely extended to the south, into Alta Loma Park, but is no longer evident in this area. A few isolated artifacts were found along the fence line between the park and the sand pit with flakes, debitage, and tools widely scattered in two loci on either side of a small canyon. Since this is one of the remaining relatively undisturbed sites in this area, Chandler 1137-1 was tentatively identified as a significant prehistoric archaeological resource area and, as such, was analyzed as part of the Phase II archaeological testing program.

The area is also sensitive for paleontological resources and several of the sites noted above have yielded fossils specimens and excellent vertebrate fossils including holotypes for three specimens new to science from the Middle Miocene marine Altamira Shale Member of the Monterey Formation. Possible impacts to these resources are further discussed under the impacts portion of this chapter.

HISTORICAL RESOURCES ON THE PROJECT SITE AND VICINITY

The Phase I study prepared by McKenna identified three structures on the project site that may be eligible to be considered historic resources because they have been in existence for 45 years or more. The three structures are located within the project boundaries. They include the following:

1. Chandler Residence (ca. 1925)

The Chandler residence of ca. 1925 is reported to have been located near the western portion of the existing golf course and marked by the presence of pepper trees (Chandler 2005, personal communication). This location is immediately east of the 13th green and 14th tees. A survey of this area yielded no physical evidence of the early residence. Additionally, the pepper trees did not appear to be exceptionally old.

2. Chandler Sand and Gravel (ca. 1937)

The Chandler sand and gravel operation started very small in 1937 and grew to be one of the largest such operations in the country. Linden Chandler started the operation as a small family business and eventually expanded his holdings to include operations in Lomita and Colton, California. There is some evidence of the early development of the operations (e.g. abandoned vehicles and old piping), but the majority of the components within the property reflect the modernization of the facility.

3. Rolling Hills Country Club (ca. 1960)

The Rolling Hills Country Club was a relatively late development within this area and was facilitated through cooperation with Linden Chandler. Having been initiated in 1960, this resource is barely 45 years of age. Its amenities include the golf course fairways, tees, and

greens located south of the Chandler sand pit and also both east and west of Palos Verdes Drive East. The club house was added later (ca. 1966) and subsequent improvements have continued with the development of cart crossings, and pro a shop.

3.4.4 THRESHOLDS OF SIGNIFICANCE

Without mitigation, the project would result in a significant impact on cultural resources if it would:

1. Be located in a high cultural sensitivity area as defined by the Rolling Hills Estates General Plan and will result in grading in excess of 20 cubic yards of soil.
2. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines (as reiterated below);
3. Cause a substantial adverse change in the significance of an archeological resource as defined in Section 15064.5 of the State CEQA Guidelines (as reiterated below);
4. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
5. Disturb any human remains, including those interred outside of formal cemeteries.

Section 15064.5 of the State CEQA Guidelines states in relevant part:

- (b) A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.
 - (1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
 - (2) The significance of an historical resource is materially impaired when a project:
 - (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
 - (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of

the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

- (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

3.4.5 IMPACT DISCUSSION

TOPICS FOR WHICH THE PROJECT WOULD HAVE NO IMPACT

POTENTIAL TO CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A HISTORICAL RESOURCE (THRESHOLD 2)

Three resources were identified as potential historic resources, as items over 45 years of age, and located within the proposed project. These resources include the reported location of the Chandler residence circa 1925; the Chandler Sand and Gravel operations circa 1937; and the Rolling Hills Country Club circa 1960.

Chandler Residence Location

The Chandler residence is reported to have existed near the western portion of the existing golf course. Its presence was marked by the existence of pepper trees in the vicinity. The location is immediately east of the 13th and 14th tees. McKenna surveyed the location and found no evidence of the residence. The remaining pepper trees do not appear to be exceptionally old so they were probably planted after the residence was removed. The building no longer exists at its former location, so it does not constitute a historic resource.

Chandler Sand and Gravel Operations

The Chandler's facility includes four structures consisting of the Chandler's office building along Palos Verdes Drive East and three maintenance sheds within the quarry pit. The Chandler's office building is a one-story structure of non-descript architecture built in the early 1950. The three quarry maintenance sheds are of metal fabrication, two of which were constructed in 1973 and the third constructed in the early 1950's. McKenna assessed the sand and gravel operations and associated structures and found that it does not constitute a historic resource. Furthermore, the historic relevance of the former quarry operation and the facilities founder's role in the community is maintained in Rolling Hills Estates city archives that document the history of the operation and the founder's contribution to the city.

Rolling Hills Country Club

The Rolling Hills Country Club was developed in the 1960's. The original clubhouse was constructed in 1966, with subsequent additions that included the pro shop and golf cart crossings.

The structures onsite associated with the Rolling Hills Country Club consist of a 25,847-ft² clubhouse, a pro shop, and various ancillary golf course related buildings. The pro shop and other additional improvements were constructed between 1988-89. The buildings are designed with contemporary architecture. The additional golf course related structures are of no particular architectural style. While the golf course and associated amenities are just barely old enough to be considered historic, the club membership maintains records of the golf course's history as a matter of relevance to the organization. McKenna et al. concluded that the Rolling Hills Country Club, while relatively early for this area, is not an historic resource and, therefore, no site forms were prepared. The renovation of the golf course and the addition of new fairways will not result in any adverse impacts and, therefore, no further studies are warranted with respect to the Country Club.

Since none of the structures located within the project area boundaries meet the minimum criteria to be considered a historic resource, no mitigation is required specifically to address the removal of the buildings.

TOPICS FOR WHICH THE PROJECT WOULD HAVE POTENTIAL IMPACTS

POTENTIAL TO CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A CULTURAL RESOURCE (THRESHOLDS 1 AND 3)

Impact CULT-1: The project has the potential to cause a substantial adverse change in the significance of a cultural resource because the project is located in a high cultural sensitivity area as defined by the Rolling Hills Estates General Plan and will result in grading in excess of 20 cubic yards of soil.

As previously indicated, the project site is located within the City's Cultural Resources Overlay. This designation applies to those portions of the project site where archaeological resources are known or suspected to exist. General Plan Conservation Element Goals, Policies, and Implementation Measures which apply to properties in the Cultural Resources Overlay include the following.

Goal 3: Promote the preservation of cultural, historical and natural resources within the City.

Policy 3.1 Implement General Plan guidelines for the protection of sites of paleontological, archaeological, historical or culturally valuable significance.

Implementation Measure 3.1.1: New development in areas designated as having a high cultural sensitivity will be required to have archaeological surveys and on-site

The proposed project involves 3.2 million yds³ of earthwork¹, which would balance onsite. The majority of the proposed cut would be excavated from the western and southern rims of the existing quarry pit and on the existing golf course adjacent to the southern rim of the quarry pit. The majority of the fill would be placed within the quarry pit and within the existing valleys in the

¹ Ongoing Chandler's inert landfill operations would import additional fill material prior to project initiation. Such import would occur with or without the project as part of Chandler's existing permitted landfill operations.

southwestern portion of the site. Additional grading would occur at various locations throughout the project site to establish building pads and shape the proposed golf course.

The project site was surveyed for historical, archeological, and paleontological resources by McKenna et al. in conformance with General Plan Implementation Measure 3.1.1. The results of the survey included both Phase I and Phase II investigations. The results of those surveys are discussed below, including recommended mitigation measures. With the incorporation of Mitigation Measures CULT-1 and CULT-2, impacts are considered less than significant.

Impact CULT-2: The project has the potential to cause a substantial change in the significance of an archaeological resource. Phase II cultural resource investigations of the site revealed that two mapped cultural resources sites within the project area are sensitive for archeological resources, CA-LAN-277 and CA-LAN-3583; and that one of these sites, CA-LAN-3583, has the potential to be a significant resource.

The general area of the current project has yielded evidence of many significant archaeological sites. The majority of these sites have been recorded for over fifty years. A minimum of seven sites have been identified within or adjacent to the project area. The sites are: CA-LAN-110, CA-LAN-191, CA-LAN-276, CA-LAN-277, CA-LAN-278, CA-LAN-279, and CA-LAN-280. The specific sites that are of concern include CA-LAN-276, CA-LAN-277 and a newly mapped location CA-LAN-3583 (also referred to as Chandler 1137-1). These sites were determined to have the greatest potential for the presence of archeological resources.

McKenna conducted an intensive Phase I cultural resources investigation of the proposed Chandler Ranch Rolling Hills Country Club project area in 2006. Three sites were identified as requiring a Phase II subsurface (testing) program: CA-LAN-276, CA-LAN-277, and CA-LAN-3583.

As a result of the recent Phase II studies, McKenna et al. determined that there was no significant evidence of CA-LAN-276 in its mapped location. Following extensive subsurface testing, McKenna concluded that the site was either inaccurately mapped or destroyed. No evidence of archeological prehistoric remains was found.

The Phase II testing at CA-LAN-277 yielded evidence that the site was sparse at the mapped location with the recovery of a single chert flake, small fragments of local shell, and a single otolith. Based on these findings, McKenna has concluded that CA-LAN-277 is not a significant archaeological site. However, surrounding areas have been associated with other resources and, therefore, the general area was considered relatively sensitive for buried archaeological deposits.

CA-LAN-3583 was the largest of the sites identified within the project area. CA-LAN-3583 was defined as consisting of two loci (A and B). Testing of Locus A consisted of the excavation of fourteen (14) trenches; twenty (20) back dirt screening units (1 x 1 meters 11 cubic meter of soil each; thirty-five (35) 1 x 1 meter shovel scrapes to depths averaging 10 cm below surface); and eight (8) controlled excavation units. The artifacts recovered were dominated by chert, percussion/waste flakes, a few cores, drills, and groundstone (mano and pestle fragments). A single stone pipe bowl was also recovered.

Analysis showed that the deposits were essentially limited to the first 30 cm of the site, and there was no evidence of midden development. Locus A was defined as a limited use area associated with some food procurement, but mainly a site of flaked stone tool maintenance. Locus A is also identified as a peripheral use area. The main habitation site is not within the boundaries of Locus A, but likely nearby, if still present. The habitation area may be within a different locus, but may also have been destroyed through the development of Alta Loma Park and/or areas within the Chandler gravel yard.

McKenna et al. concluded that the few items from CA-LAN-276 and CA-LAN-277 were too insignificant to be of any scientific purpose. In the case of CA-LAN-3583, Locus A, the artifact assemblage was larger, but while there was no significant subsurface deposits, the collection was dominated by small waste flakes, and there were only a few diagnostic items (e.g. groundstone - manos and pestles) indicating an association with the Late Prehistoric Horizon (post-A.D. 750). The general area continues to be considered sensitive for significant resources.

McKenna et al. recommended that Locus B of CA-LAN-3583 be tested for subsurface deposits and/or significant resources. McKenna also recommended that any ground altering activities associated with the Golf Course, gravel pit, and associated project-related area be monitored for archaeological resources. McKenna also recommended that the monitoring program include a Native American representative. Therefore, inclusion of Mitigation Measure CULT-1 is recommended to assure that the project will have a less than significant impact on cultural/archeological resources that may be present on the project site.

Native American Resources

McKenna et al. conducted consultations (written correspondence) with Native American representatives, including correspondence with the Native American Heritage Commission and representatives of the Gabrieliño/Tongva Council/Tongva Nation as part of the Phase I cultural study prepared for the project. No responses were received from either party.

The City of Rolling Hills Estates, in compliance with SB18 and State General Plan Guidelines, solicited input from Native American tribes potentially affected by the proposed project. Input received by the City included a request from the Gabrieliño Tongva Indians of the California Tribal Council that a Gabrieliño tribe member be present during grading activities. In addition, a representative from the Chumash Fernandeno Tataviam Shoshone Paiute Yaqui indicated a need to ensure that uncovered Native American artifacts are properly handled. Rolling Hills Estates staff also requested a Sacred Land File search by the American Heritage Commission (NAHC). This search failed to indicate the presence of Native American cultural resources in the immediate project area.

POTENTIAL TO CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A PALEONTOLOGICAL RESOURCE (THRESHOLD 4)

Impact CULT-3: Grading and construction of the proposed project has the potential to destroy a paleontological resource, as the site was determined to be highly sensitive for paleontological resources.

The project area is located within an area that is sensitive for paleontological resources. The general area consists of the Middle Miocene marine Altamira Shale Member of the Monterey Formation, which is fossil-bearing. As such, there is a very good chance that subsurface excavation in the proposed project area will expose significant vertebrate fossils. Thus, any substantial excavation in the project area should be closely monitored to collect any vertebrate fossil remains without impeding development. This finding is borne out with data from the McKenna survey, where exposed paleontological shell beds were identified on the western slope below the Cypress/Lomita Reservoir which includes a relatively dense deposit of non-cultural paleontological shell located immediately west of reservoir (clam, oyster, whelk snail, etc.). In addition, two paleontological specimens, a fossil shark's tooth and a fossil insect, were recovered within the area identified as CA-LAN-276, attesting to the relative sensitivity for the area to yield paleontological specimens. It was determined that the area is still highly sensitive for paleontological remains and monitoring of any development activities was recommended. Mitigation Measure CULT-2 will assure that the project will have a less than significant impact on paleontological resources that may be present on the project site.

POTENTIAL TO DISTURB HUMAN REMAINS (THRESHOLD 5)

Impact CULT-4: The project has the potential to disturb human remains interred outside of formal cemeteries because there is one cultural resource site located within the project area that may have contained human remains.

CA-LAN-276 was identified within the Golf Course in Bent Spring Canyon (southwest of CA-LAN-191 and CA-LAN-1), southwest of the quarry pit and within the proposed redevelopment area. This site was reported by D.L. True (1960) and described as an apparent village site with a deep black midden littered with chipping waste. Artifacts included cog stones, manos, sandstone bowls, and projectile points (arrowheads; including obsidian). Human remains were also reported. According to the Phase II testing program conducted by McKenna et al., the site appears to have been inaccurately mapped. However, although the site does not exist at its reported location, it may exist within the confines of the immediate area. Mitigation Measure CULT-1 should be implemented to ensure that no impacts to human remains interred in informal burial grounds occur.

3.4.5 CUMULATIVE IMPACTS

A cumulative impact occurs when a proposed project, in combination with other past, current and probable future projects will have an impact on the environment. The project's potential impacts on cultural resources are, by their nature, limited to the project site. In addition, no significant cumulative impacts on cultural resources have been identified and none are expected. As such the project would not contribute to a significant cumulative impact.

3.4.6 MITIGATION MEASURES

MM CULT-1: A full-time archaeological monitor and Native American/Gabrieliño-Tongva representative shall be present onsite during the demolition and grading phases of project construction, and during other construction activities that disturb soils,

such as trenching for pipes and foundations. The archaeological monitor must be a Registered Professional Archaeologist (RPA) or a trained monitor working under the direct supervision of an RPA. The monitor must oversee all excavations and have the ability to recognize, record, and/or recover isolated finds during the monitoring program and have the authority to halt any activities adversely impacting potentially significant cultural resources. The monitor must maintain daily notes on the operations and isolated finds and maintain a detailed photographic record of the ground altering activities. If the resource(s) is determined to be of Native American origin, the Native American/Gabrieliño-Tongva representative onsite will be able to assist in the completion of the monitoring program. If any evidence of human remains is uncovered, the archaeological monitor shall have the authority to shut the project down, contact the Principal Investigator, who will contact the County Coroner and Native American Heritage Commission. If the remains are declared of Native American descent, the Most Likely Descendant (MLD) will be named by the Native American Heritage Commission and consultation pertaining to the disposition of the remains will be undertaken. Activities will not commence at the site of the remains until clearance is afforded by the Coroner, Commission, Archaeological Consultant, and MLD.

- MM CULT-2:** A paleontological monitoring program shall be implemented during the demolition and grading phases of project construction, and during other construction activities that impact previously undisturbed soils, such as trenching for pipes and foundations. The paleontological monitoring program must be conducted by an individual with experience in paleontological monitoring in Los Angeles County and familiar with the monitoring and collection protocols of the Los Angeles County Museum of Natural History. The paleontological monitoring program must include the maintenance of daily field logs, the recovery of soil samples for micro-screening for small fossil remains, the ability to remove vertebrate remains, as they are identified (e.g., with proper locational data and associations). In addition, a photographic record must be maintained over the course of the program and, if resources are found in a context too extensive for the monitoring program, the monitor must have the authority to halt any activities adversely impacting the resource, and arrange for the additional personnel needed to adequately manage the resources.

3.4.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of mitigation measures, the proposed project would not significantly impact cultural resources. The following table presents a summary of the thresholds of significance, mitigation measures, and the project's corresponding level of impact.

Table 3.4.1		
Summary of Thresholds of Significance, Mitigation Measures, and Level of Significance for Cultural Resource Impact		
Threshold of Significance	Applicable Mitigation Measures	Level of Significance
Cause a substantial adverse change in the significance of a historic resource as defined in Section 15064.5 of the CEQA Guidelines	None Required	No Impact
Be located in a high cultural sensitivity area as defined by the Rolling Hills Estates General Plan and will result in grading in excess of 20 cubic yards of soil	MM CULT-1 and MM CULT-2, as shown above in Section 3.4.6	Less than Significant with the Incorporation of Mitigation Measures
Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines	MM CULT-1, as shown above in Section 3.4.6	Less than Significant with the Incorporation of Mitigation Measures
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	MM CULT-2, as shown above in Section 3.4.6	Less than Significant with the Incorporation of Mitigation Measures
Disturb any human remains, including those interred outside of formal cemeteries	MM CULT-1, as shown above in Section 3.4.6	Less than Significant with the Incorporation of Mitigation Measures

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