CULTURAL RESOURCES ASSESSMENT

The Lower Curtis Park Mass Grading Project

Mission Viejo, Orange County, California

Prepared for:

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Data Base Information:
Type of Study: Reconnaissance Survey
Resources Recorded: P-30-786
Keywords: Lower Curtis Park, Mission Viejo
USGS Quadrangles: 7.5-minute San Juan Capistrano, California (1981)

November 18, 2019
MANAGEMENT SUMMARY

BCR Consulting LLC (BCR Consulting) is under contract to Phil Martin & Associates to conduct a Cultural Resources Assessment of the Lower Curtis Park Mass Grading Project (project) in the City of Mission Viejo, Orange County, California. A reconnaissance-level pedestrian cultural resources survey of the project site was undertaken pursuant to the California Environmental Quality Act (CEQA). A cultural resources records search, field survey, subsurface test excavation, Sacred Lands File search with the Native American Heritage Commission, and paleontological overview were conducted for the project site. The records search revealed that six cultural resource studies have taken place resulting in the recording of 22 cultural resources within a one-mile radius of the project site. All of the previous studies have assessed the project site and one cultural resource has been previously identified, partially within its boundaries. During the field survey and subsurface test excavation, BCR Consulting archaeologists did not identify any cultural resources (including prehistoric or historic archaeological sites or historic-period buildings) within the Lower Curtis Park Mass Grading Project Site. As a result, BCR Consulting recommends a finding of no impacts to historical resources under CEQA. However, since a prehistoric resource has been previously identified within the project site boundaries, the project site is considered sensitive for buried archaeological resources. Therefore, BCR Consulting recommends archaeological monitoring for any project-related excavations. The monitor should work under the supervision of a Cultural Resource Professional that meets the U.S. Secretary of the Interior Professional Qualification Standards for Archaeology. In the event of an archaeological discovery, the monitor would have the authority to temporarily divert construction excavation in the vicinity of the find until it can be evaluated for significance. In case of accidental discoveries of historic or prehistoric resources during project-related excavation when an archaeological monitor is not present, work should cease and a U.S. Secretary of the Interior Qualified Archaeologist should be notified to record and evaluate the find.

If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.
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INTRODUCTION

BCR Consulting LLC (BCR Consulting) is under contract to Phil Martin & Associates to conduct a Cultural Resources Assessment of the Lower Curtis Park Mass Grading Project (project) in the City of Mission Viejo, Orange County, California. A reconnaissance-level pedestrian cultural resources survey of the project site was undertaken pursuant to the California Environmental Quality Act (CEQA). The project site is located in section 32 of Township 6 South, Range 7 West, San Bernardino Baseline and Meridian. It is depicted on the United States Geological Survey (USGS) San Juan Capistrano, California (1981) 7.5-minute topographic quadrangle (Figure 1).

NATURAL SETTING

The project site is located in the southwestern flank of the small peninsular range known as the Santa Ana Mountains. Local sediments are dominated by sedimentary deposits of the Upper Cretaceous, Tertiary, and Quaternary periods, obscured beneath an intermittent veneer of recent alluvium (Oates 1960, Stadum 1982). Local rainfall ranges from 5 to 15 inches annually (Jaeger and Smith 1971: 36-37), and runoff flows in a southeasterly direction to the Trabuco Creek which is adjacent to the east boundary of the project site (USGS 1997). Chaparral, coastal sage scrub, and riparian vegetation communities dominate regional flora. Key native plants include black sage, California brittlebush, California buckwheat, California sagebrush, deerweed, golden yarrow, laurel sumac, lemonadeberry, poison oak, purple sage, sticky monkeyflower, sugar bush, toyon, white sage, coastal century plant, coastal cholla, prickly-pear cactus, arroyo willow, and bulrush. These plants were utilized by local animal species, which included kangaroo rats, California horned lizard, orange-throated whiptail, San Diego horned lizard, brown-headed cowbird, California gnatcatcher, California quail, cactus wren, darkling beetle, harvester ant, and Palos Verdes blue butterfly (Williams et al. 2008:117,122). Peripheral species included deer, and various rodents, rabbits, and birds - many of which were utilized by prehistoric and historic inhabitants (Lightfoot and Parrish 2009).

CULTURAL SETTING

Prehistory

Various regional syntheses have been commonly utilized in the archaeological literature for southern California. The most widely cited include Wallace (1955) and Warren (1968 and 1986). Wallace defines four cultural horizons, each with characteristic local variations:

- Early Period (before 6000 B.C.)
- Milling Stone (6000 to 3000 B.C.)
- Intermediate (3000 B.C. to A.D. 500)
- Late Prehistoric (A.D. 500 to A.D. 1769).

Employing a more ecological model Warren (1968) defined three traditions, including:
- San Dieguito (pre 5500 B.C.)
- Encinitas (5500 B.C. to A.D. 600)
- Shoshonean (A.D. 600 to A.D. 1769).

Relying on data from more desert-based groups Warren defined five periods in his 1986 study:
Figure 1
Lower Curtis Park Mass Grading Project
Phil Martin & Associates
Reference: ESRRI, USGS Quad: San Juan Capistrano (1981), California
- Lake Mojave (8000 to 5000 B.C.)
- Pinto (5000 to 2000 B.C.)
- Gypsum (2000 B.C. to A.D. 500)
- Saratoga Springs (A.D. 500 to 1200)
- Protohistoric (A.D. 1200 to 1769).

Although these references have provided useful overviews for southern California, updated studies more specific to the prehistory of coastal southern California (see Arnold 1990, 1991, 1992, 1995; Arnold et al. 1997; Raab and Larson 1997) are relevant to the current project area. The current study is synthesized from Mason et al. (1997), and Koerper et al. (2002). This regional focus is considered vital to Orange County prehistory because of the wealth of reliably dated prehistoric sites recorded in area, ranging from 7550 B.C. to the late Late Prehistoric (Mason et al. 1997:35; Koerper et al. 2002:68). A temporal scheme has been formulated from data utilized by both studies, and is provided below in Table A.

**Table A. Radiocarbon Dates/Periods from Sites in Orange County (Koerper et al. 2002:68)**

Mason et al. (1997) combine data from six sites excavated during the Newport Coast Archaeological Project (NCAP) with climatic and biogeographical information collected within the greater Orange County area to address the importance of:
terrestrial/marine vertebrates versus shell-fish/plant utilization by Millingstone populations
significant population fluctuations during the Early to Middle Holocene
settlement transition and other adaptive strategies at the end of the Middle Holocene
issues of prehistoric lithic trade.

They conclude that Middle Holocene site expansion along the Orange County coast is the result of new habitats containing important prehistoric food sources that flourished due to stabilizing sea levels between five and six thousand years ago (Mason et al. 1997:58). These habitats particularly included kelp beds containing sheephead fish, and sandy and muddy substrates that encouraged proliferation of cockles, scallops, oysters, bat rays, and guitar fish -each of which has been found in significant numbers during this era at various sites within NCAP (Mason et al. 1997:40-41). During the late Holocene population increase resulting from access to these food sources as well as terrestrial resources allowed further expansion into Orange County's interior.

As prehistoric populations spread throughout the Orange County area, their tool types and site remains indicate two settlement strategies. The first, known as the forager model, enabled whole groups to mobilize between residential bases as part of a seasonal round. This was commonly practiced during the Millingstone and early Intermediate Period. During the late Intermediate Period and the early Late Prehistoric Period, a functional hierarchy of site types appear, containing multi-season residential bases, minor residential bases, and single gender specialized activity locations. This indicates the second model, known as the collector (or village) model, in which residential bases remain the same or seasonal, while specialized procurement parties are deployed to collect resources and bring them back to base (Mason et al. 1997:52, 56; see also Binford 1980, and Thomas 1983).

In addition to site data, Koerper et al. (2002) utilize information from wetland salinity, climatic and hydrologic conditions, and artificial and natural resource depletion studies which link "demographic dynamics to subsistence intensification, territoriality, violent behavior, trade, and the further elaboration of status hierarchies during the late Holocene in Orange County" (Koerper et al. 2002:63). This approach has underscored the importance of punctuated environmental events, such as the capricious coursing of local drainage systems often catalyzed by the commencement and/or termination of droughts (i.e. the Medieval Climatic Anomaly and the Little Ice Age). Having occurred within relatively short time frames, these events are posited to give rise to a model of dramatic cultural shift rather than one of gradualism, and have been confirmed by correlating radiocarbon dates utilized in the local prehistoric chronology (Table A).

Dramatic shift is particularly evident between ca. 2000 and 1000 B.C. when a decline in carbon-fourteen dates from the area indicated the disappearance of a population practicing a residential mobility pattern of foraging, the predominant adaptive strategy practiced during the mid-Holocene. The disappearance of this group is highly correlated with very dry conditions, as indicated by pollen studies (Koerper et al. 2002:79), and people do not reappear in this area in significant numbers until circa 1000 B.C., at which point fewer, more highly concentrated settlements appear. Some resource intensification is apparent during the ensuing generations, and by the beginning of the Late Prehistoric is confirmed by the
expanding use of shellfish recovered in context as far as six kilometers from its origin at Newport Bay. Resource intensification is often a sign of a shortage of preferred or customary resources brought about by a rise in population and/or other factors. Such a rise in population certainly occurred by A.D. 600, peaking circa A.D. 1300 (see Table A), and is correlated with the local advent of the bow and arrow, which may have been brought by Takic speakers from the Southwest (Koerper et al. 2002:80). Native Orange County populations began to decline during the late Late Prehistoric prior to any likely effects of European disease. Koerper et al. suggests that rather than exceeding the land's carrying capacity, this decline in the Orange County area was due to a failure of "food yields...to increase in proportion to the additional investments of energy expended in subsistence labor" (Koerper et al. 2002:80; see also Halstead and O'Shea 1989; Hayden 1990). This has been further supported by oral tradition, which suggests that people were driven to leave food procurement areas due to incongruities between population and resources (ibid), which gave rise to the patterns whose rudiments remained at the time of European contact.

Ethnography
The project site is situated within the traditional boundaries of the Juaneño (Ajachemem; see Boscana 1933, Bean and Shipek 1978, and Kroeber 1925). The term Juaneño derives from Mission San Juan Capistrano and refers to Takic speakers associated with that mission. Although early studies separated the Juaneño and Luiseño based on linguistic differences (White 1963:91), more recent work has purported that the two groups actually represent a single ethnic nationality (Bean and Shipek 1978:550). The Juaneño were originally studied using ethnography, particularly during the early 20th century, although their decimation through acculturation and disease has necessitated supplementing any social analysis with archaeological data (see Prehistory above). The Juaneño were semi-nomadic hunter-gatherers who subsisted by exploitation of seasonably available plant and animal resources. Plants utilized for food were heavily relied upon and included acorn-producing oaks, as well as seed-producing grasses and sage. Animal protein was commonly derived from rabbits and deer in inland regions, while coastal populations supplemented their diets with fish, shellfish, and marine mammals (Boscana 1933, Heizer 1968, Bean and Shipek 1978).

History
In Southern California, the historic era is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present).

Spanish Period. The first European to pass through the area is thought to be a Spaniard called Father Francisco Garces. Having become familiar with the area, Garces acted as a guide to Juan Bautista de Anza, who had been commissioned to lead a group across the desert from a Spanish outpost in Arizona to set up quarters at the Mission San Gabriel in 1771 near what today is Pasadena (Beck and Haase 1974). Garces was followed by Alta California Governor Pedro Fages, who briefly explored the region in 1772 (Beck and Haase 1974).

Mexican Period. In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions, reorganized as parish churches, lost their vast land holdings, and released their neophytes (Beattie and Beattie 1974).
American Period. The American Period, 1848–Present, began with the Treaty of Guadalupe Hidalgo. In 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure. A series of disastrous floods in 1861–1862, followed by a significant drought further diminished the economic impact of local ranching. This decline combined with ubiquitous agricultural and real estate developments of the late 19th century, set the stage for diversified economic pursuits that have continued to proliferate to this day (Beattie and Beattie 1974; Cleland 1941).

PERSONNEL

David Brunzell, M.A., RPA acted as the Project Manager and Principal Investigator for the current study. BCR Consulting Staff Archaeologist Nicholas Shepetuk, B.A., conducted the cultural resources records search at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. BCR Consulting Staff Archaeologist Nicholas Shepetuk completed the field assessment and excavation with BCR Consulting Staff Historian Dylan Williams, B.A. Mr. Brunzell authored the technical report with contributions from Mr. Shepetuk.

METHODS

Records Search

Prior to fieldwork, an archaeological records search was conducted at the SCCIC. This included a review of all recorded historic and prehistoric cultural resources, as well as a review of known cultural resources, and survey and excavation reports generated from projects completed within one mile of the project site. In addition, a review was conducted of the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and documents and inventories from the California Office of Historic Preservation including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

Fieldwork

An archaeological pedestrian field survey of the project site was conducted on August 30, 2019. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across 100 percent of the accessible project site. Steep slopes were surveyed intuitively based upon the degree of access allowed by obstacles in the field. Soil exposures, including natural and artificial clearings were carefully inspected for evidence of cultural resources. Low surface visibility combined with a cultural resource identified (partially) within the project site during a previous assessments (see Cooley et al. 1979) necessitated additional survey, six vegetation clearing transects, seven shovel scrapes, and three shovel test pits (STPs). These were completed on October 23 and 24, 2019.

City personnel assisted in vegetation clearing in which six transects were mechanically cleared of vegetation across the entire property following contour lines, oriented northeast by
southwest. BCR Consulting crews walked these transects carefully inspecting the surface for evidence of cultural resources. Where a small portion of the previously recorded prehistoric site designated P-30-786 coincided with the project site (see Appendix D), seven shovel scrapes and two shovel test pits were excavated. During shovel scrapes, BCR Consulting personnel cleared a two square meter area of vegetation. The top five centimeters of soil were then excavated and sifted through 1/8-inch steel mesh to check for evidence of buried cultural resources. STPs were approximately 35 centimeters in diameter and were excavated at 20-centimeter intervals. Sediments were similarly screened and examined. Since no buried cultural remains were identified (see Results), the units were subjectively placed in areas exhibiting a strong likelihood for buried deposits based on surface observations.

RESULTS

Records Search

The records search revealed that six cultural resource studies have taken place resulting in the recording of 22 cultural resources within a one-mile radius of the project site. A very low-density prehistoric artifact scatter designated P-30-786 was previously identified partially within the project boundaries in 1979 (see Cooley et al. 1979). All of the previous studies have assessed the project site and one cultural resource has been previously recorded within its boundaries. The records search is summarized as follows:

Table B. Cultural Resources and Reports Located Within One Mile of the Project Site

<table>
<thead>
<tr>
<th>USGS 7.5 Minute Quadrangle</th>
<th>Cultural Resources Within One Mile of Project Site</th>
<th>Studies Within One Mile of Project Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>P-30-36: Camp 36 OCAS (1 mile S)</td>
<td>OR582*, 584*, 928*, 2394*</td>
</tr>
<tr>
<td>Gobernadora, California</td>
<td>P-30-380: Prehistoric lithic scatter (3/4 mile W)</td>
<td></td>
</tr>
<tr>
<td>(1997)</td>
<td>P-30-461: Prehistoric lithic scatter (1 mile W)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-30-463: Prehistoric lithic scatter (1 mile SW)</td>
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<tr>
<td></td>
<td>P-30-470: Prehistoric lithic scatter (1 mile SW)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-30-472: Prehistoric lithic scatter and rock feature (3/4 mile N)</td>
<td></td>
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<tr>
<td></td>
<td>P-30-474: Prehistoric lithic scatter (1/2 mile N)</td>
<td></td>
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<tr>
<td></td>
<td>P-30-621: Prehistoric lithic scatter (1/2 mile NW)</td>
<td></td>
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<tr>
<td></td>
<td>P-30-784: Prehistoric lithic scatter (3/4 mile S)</td>
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<tr>
<td></td>
<td>P-30-785: Prehistoric lithic scatter (1/2 mile S)</td>
<td></td>
</tr>
<tr>
<td><strong>P-30-786: Prehistoric artifact scatter (partially within project)</strong></td>
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<tr>
<td></td>
<td>P-30-875: Prehistoric lithic scatter (1/4 mile E)</td>
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<tr>
<td></td>
<td>P-30-897: Prehistoric lithic scatter (1 mile S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-30-898: Prehistoric lithic/trash scatter (3/4 mile S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-30-899: Prehistoric lithic scatter (2/3 mile SE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P-30-900: Prehistoric lithic scatter (1/2 mile S)</td>
<td></td>
</tr>
<tr>
<td>San Juan</td>
<td>P-30-871: Prehistoric lithic scatter (1 mile NE)</td>
<td>OR286*, 584*, 928*, 1439*, 2394*</td>
</tr>
<tr>
<td>Capistrano, California</td>
<td>P-30-874: Prehistoric lithic scatter (3/4 mile NE)</td>
<td></td>
</tr>
<tr>
<td>(1981)</td>
<td>P-30-876: Multicomponent, scatter and structures (1/3 mile E)</td>
<td></td>
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<tr>
<td></td>
<td>P-30-1044: Prehistoric lithic scatter (2/3 mile NE)</td>
<td></td>
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<tr>
<td></td>
<td>P-30-1045: Prehistoric lithic scatter (2/3 mile NE)</td>
<td></td>
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<tr>
<td></td>
<td>P-30-1046: Prehistoric lithic scatter (3/4 mile NE)</td>
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</tbody>
</table>

*Previously assessed a portion of the project site.
Fieldwork

During the field survey, Mr. Shepetuk and Mr. Williams carefully inspected the project site, and identified no cultural resources within its boundaries. Surface visibility was low due to the presence of dense native and non-native vegetation. The overgrowth combined with the previously recorded archaeological site (see Cooley et al. 1979; Appendix D) to prompt the vegetation clearing and subsurface test excavation. Additional survey in the denuded transects, and the excavated shovel scraps and STPs were negative. Therefore, prehistoric site P-30-786 is not considered to remain within the project site boundaries. Sediments ranged from gray to dark brown, dry, semi-compact, sandy clay, with relatively low gravel content. Some plastic and asphalt were discovered during excavations.

RECOMMENDATIONS

BCR Consulting conducted a Cultural Resources Assessment of the Lower Curtis Park Mass Grading Project in the Community of Mission Viejo, Orange County, California. The records search revealed that six cultural resource studies have taken place resulting in the recording of 22 cultural resources within a one-mile radius of the project site. All of the previous studies have assessed the project site and one cultural resource has been previously identified, partially within its boundaries. During the field survey and subsurface test excavation, BCR Consulting archaeologists did not identify any cultural resources (including prehistoric or historic archaeological sites or historic-period buildings) within the Lower Curtis Park Mass Grading Project Site. As a result, BCR Consulting recommends a finding of no impacts to historical resources under CEQA. However, since a prehistoric resource has been previously identified within the project site boundaries, the project site is considered sensitive for buried archaeological resources. Therefore, BCR Consulting recommends archaeological monitoring for any project-related excavations. The monitor should work under the supervision of a Cultural Resource Professional that meets the U.S. Secretary of the Interior Professional Qualification Standards for Archaeology. In the event of an archaeological discovery, the monitor would have the authority to temporarily divert construction excavation in the vicinity of the find until it can be evaluated for significance. In case of accidental discoveries of historic or prehistoric resources during project-related excavation when an archaeological monitor is not present, work should cease and a U.S. Secretary of the Interior Qualified Archaeologist should be notified to record and evaluate the find.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.
REFERENCES

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1997 *Gobernadora Canada, California* 7.5-minute topographic quadrangle map.
APPENDIX A

NATIVE AMERICAN SACRED LANDS FILE SEARCH
Attachment

Associate Governmental Program Analyst

Steven Quinn

September 13, 2019

Dear Mr. Williams:

RE: Lower Curtis Park Mass Grading Project, Orange County

VIA Email to: Dylan.r.will@gmail.com

BCR Consulting

Dylan Williams

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov. If you receive notification of change of address and phone numbers from tribes, please notify us.

Sincerely,

Steven Quinn
Associate Governmental Program Analyst

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This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Lower Curtis Park Mass Grading Project, Orange County.

PROJ-2019-004740 09/13/2019 10:38 AM 1 of 2
Native American Heritage Commission
Native American Contact List
Orange County
9/13/2019

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**Soboba Band of Luiseno Indians**
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This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Lower Curtis Park Mass Grading Project, Orange County.
APPENDIX B

PROJECT PHOTOGRAPHS
Photo 1: Project Site Overview

Photo 2: Project Site Overview
Photo 3: Sample Shovel Test Pit

Photo 4: Sample Shovel Scrape at Surface
APPENDIX C

PALEONTOLOGICAL OVERVIEW
Dear Mr. Williams,

This letter presents the results of a record search conducted for the Lower Curtis Park Mass Grading Project in Mission Viejo, Orange County, California. The project site is located east of Olympiad Road in the eastern portions of Robert A. Curtis Park in an unsectioned unit of Township 6 South, and Range 7 West, on the San Juan Capistrano USGS 7.5 minute quadrangle.

The geologic units underlying this project are mapped entirely as young alluvial landslide deposits dating from the late Pleistocene to Holocene epochs (Morton & Miller, 2006). Pleistocene alluvial units are considered to be of high paleontological sensitivity and value. The Western Science Center does not have localities within the project area or within a 1 mile radius, but does have numerous localities associated with similarly mapped sediments throughout Southern California. Due to the limited number of fossil localities in the Western Science Center’s database for Orange County, additional record searches may be required to fully understand the proximity of fossil localities to the project area.

Any fossil specimen recovered from the Lower Curtis Park Mass Grading Project would be scientifically significant. Excavation activity associated with the development of the project area would impact the paleontologically sensitive Pleistocene alluvial units and it is the recommendation of the Western Science Center that a paleontological resource mitigation program be put in place to monitor, salvage, and curate any recovered fossils associated with the study area.

If you have any questions, or would like further information, please feel free to contact me at dradford@westerncentermuseum.org

Sincerely,

Darla Radford
Collections Manager
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APPENDIX D

DPR 523 FORM
This resource was originally recorded by T. Cooly, L. Sullivan, and D. Diga in 1979 as six metate fragments, three manos, four cores, and three flakes scattered over an area of 400 x 150 meters.

BCR Consulting revisited the site location on August 30, October 23, and October 24 and found no remnants of the resource. Attempts at discovery included vegetation clearing, systematic survey, shovel scrapes, and shovel test pits.
### ARCHAEOLOGICAL SITE SURVEY RECORD

1. **Site**: CA-Ora-786  
2. **Map**: San Juan Capistrano, Quad 3  
3. **County**: Orange U.S.G.S.  
4. **Twp.**: 6S  
   **Range**: 7W  
   **NW 1/4 of SE 1/4 of Sec.**: 32  
5. **Location**: Southern California Edison Tower on Site.  
   **U.T.M.**: 41651848.  
6. **On contour elevation**: 640-700'  
7. **Previous designations for site**: none  
8. **Owner**:  
   **Address**:  
9. **Slope**  
   a) **degrees**: 30°  
   b) **direction**: South and West  
10. **Description of site**: Scatter of millingstone artifacts on low knoll just above Trabuco Stream.  
11. **Area**: 400x150m  
    **Depth**: 30-40 cm  
    **Height**: 60' above stream  
12. **Vegetation**: Grasses, cactus, sage.  
13. **Nearest water**: Trabuco Arroyo  
14. **Soil of site**: light colored loam  
15. **Surrounding soil type**: same  
16. **Previous excavation**: none  
17. **Cultivation**: Yes, disced  
18. **Erosion**: minimal  
19. **Buildings, roads, etc.**: Graded roads and S.C.E. Tower Pad on Site  
20. **Artifacts/Ecofacts**: 6 metate fragments, 3 manos, 4 cores, 3 flakes  
   21. **Housepits**: none observed  
   22. **Petroglyphs**: none  
   23. **Others**: Oaks adjacent to site on East.  
24. **Features**: none observed  
25. **Burials**: none observed  
26. **Remarks**: Most of the artifactual materials were in disturbed areas.  
27. **Published References**: none  
28. **Accession No.**:  
29. **Sketch Map**: Xerox U.S.G.S.  
   **T. CooTey**  
30. **Date**: 1-19-79  
31. **Recorded by**: L. Sullivan  
32. **Photos by**: D. Digua
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APPENDIX E

EXHIBIT DEPICTING P-30-786 OVER PROJECT BOUNDARY
Project Location Site
Lower Curtis Park Mass Grading Project
Reference: ESRI; USGS Quad: San Juan Capistrano (1981), California

Legend
- Archaeological Site
- Project Location

Figure 1
Phil Martin & Associates