

May 14, 2020

City of Mission Viejo
Planning Department
Mission Viejo, California 92691
Attention Elaine Lister, Community Development Director

Eric Nelson, Vice President of Land Development
Trumark Companies
450 Newport Center Drive, Suite 300,
Newport Beach, CA 92660

Subject: Cultural Resources Assessment and Summary, El Toro Road TTM 19035 - CEQA
MND Project, Mission Viejo, California

Dear Mr. Nelson:

This memorandum summarizes the cultural resources investigation for the El Toro Road TTM 19035 project. It includes a cultural context, a discussion of cultural and paleontological records searches, and provides mitigation recommendations.

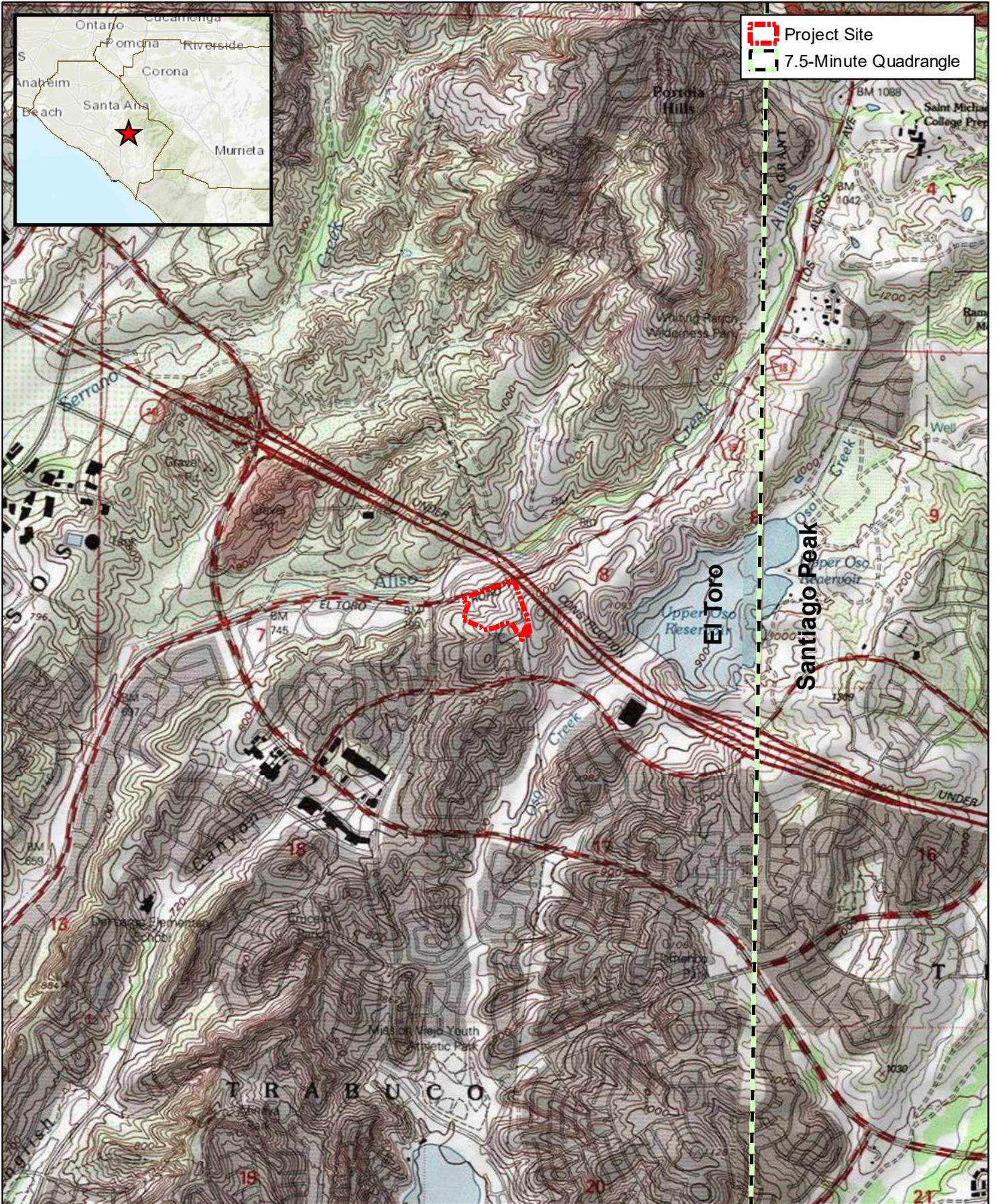
Project Location

The proposed El Toro Road TTM 19035 project in Mission Viejo involves a Zone Change and a General Plan Amendment from Open Space/Recreation to Residential to allow for the development of 91 multiple-family dwelling units on approximately 3.8 acres; including 1.41 acres of private access ways and parking areas, and 10.63 acres of open space slope and landscaping

The project site is located on El Toro Road between Marguerite Parkway and State Route 241. The site is currently undeveloped and consists of a hilly, heavily vegetated terrain ranging in elevation from 845 feet to 1,020 feet. The project site is surrounded by a parking lot and office building to the west, State Route 241 to the east, open space slope and multiple-family land uses to the south and a self-storage facility to the north. Figure 1.

Cultural Context

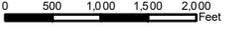
A long-standing tenet of New World archaeology has been that man did not arrive in the western hemisphere until about 10,000 to 11,000 Years Before Present (YBP). Some researchers have argued for earlier dates of entry, but the evidence has not been universally accepted by archaeologists. With



 Project Site
 7.5-Minute Quadrangle

Prepared By:

 VCS Environmental
 Map Created: March 2020



 1:24,000

7.5 min Quadrangle:
 El Toro
 CA DPR Township: T6S R7W
 Meridian: San Bernardino
 State: California
 County: Orange

Figure 1 **El Toro Road TTM 19035**
 Project Vicinity (USGS Topography)

more recent evidence, that is beginning to change (Dixon 1993; Adovasio and Page 2002; Johnson et al. 2002).

Most of the generally accepted early remains indicate a very small, mobile population apparently dependent on hunting large game animals as the primary subsistence strategy. However, recent evidence suggests that some very early people may have had a more sedentary lifestyle and probably relied upon a variety of resources (see Adovasio and Page 2002 for a discussion of the Monte Verde, Chile site). While early populations certainly used other resources, the bulk of the few traces remaining today are related to game hunting. This situation results from the fact that hunting equipment involved many lithic tools that do not decay, while the rest of the material culture used wood or leather, which are more subject to attrition through taphonomic (post depositional processes) factors. Lithic artifacts are the only surviving material from the Paleo-Indian Period (please see description below for definition). These consist primarily of large and extremely well made projectile points and large but cruder tools such as scrapers and choppers. Encampments were never permanent, but were probably sited near a major kill. Occupation would have lasted only until the resources of that kill were exhausted. Such an economy, using only a small fraction of the available resources would not have supported a large population. It is probable that the Paleo-Indians lived in groups no larger than extended families and that contact with other such groups was infrequent.

Several chronologies are generally used to describe the sequence of the later prehistoric periods of Southern California. William Wallace (1955) developed the first comprehensive California chronologies and defines four periods for the southern coastal region. Wallace's synthesis is largely "descriptive and classificatory, emphasizing the content of archaeological cultures and the relationships among them" (Moratto 1984:159). Wallace relies upon the concept of cultural horizons, which are generally defined by the temporal and spatial distribution of a set of normative cultural traits, such as the distribution of a group of commonly associated artifact types. As a result, his model does not allow for much cultural variation within the same time period, nor does it provide precise chronological dates for each temporal division. Nevertheless, although now over 50 years old, the general schema of the Wallace chronology has provided a general framework for Southern California prehistory that remains valid today.

By the late 1960s, radiocarbon dates and assemblage data were more widely available for many Southern California archaeological sites. Based on these new data, Warren (1968) synthesizes Southern California prehistory into five traditions which, unlike Wallace's horizons, account for more regional variation in the same time period. Defined as "a generic unit comprising historically related phases", traditions were not strictly sequential temporal units (Warren 1968). That is, different traditions could co-exist in the same region or in neighboring regions at the same time.

Horizon I: Early Man or Paleo Indian Period (11,000 BCE to 7,500 BCE¹). While initially termed Early Man Horizon (I) by Wallace (1955), this early stage of human occupation is commonly referred to as

¹ BCE stands for "Before Common Era" and CE stands for "Common Era". These alternative forms of "BC" and "AD", respectively, are used throughout this document.

the Paleo Indian Period today (Chartkoff and Chartkoff 1984:24). As discussed above, the precise start of this period is still a topic of considerable debate. At inland archaeological sites, the surviving material culture of this period is primarily lithic, consisting of large, extremely well made stone projectile points and tools such as scrapers and choppers. Encampments were probably temporary, located near major kills or important resource areas. The San Dieguito Tradition, defined by Warren at the stratified C.W. Harris site in San Diego County, is encompassed by this period of time (Moratto 1984:97).

Horizon II: Milling Stone Assemblages (7,500 BCE to 1,000 BCE). Encompassing a broad expanse of time, the Milling Stone Period was named for the abundant millingstone tools associated with sites of this period. These tools, the mano and metate, were used to process small, hard seeds from plants associated with shrub-scrub vegetation communities. An annual round of seasonal migrations was likely practiced with movements coinciding with ripening vegetal resources and the periods of maximal availability of various animal resources. Along the coast, shell midden sites are common site types. Some formal burials, occasionally with associated grave goods, are also evident. This period of time is roughly equivalent to Warren's (1968) Encinitas Tradition. Warren (1968) suggests that, as millingstones are common and projectile points are comparatively rare during this time period, hunting was less important than the gathering of vegetable resources.

However, more recent studies (Koerper 1981; Koerper and Drover 1983) suggest that a diversity of subsistence activities, including hunting of various game animals, were practiced during this time period. At present, little is known about cultural change during this period of time in Southern California. While this lack of noticeable change gives the appearance of cultural stasis, almost certainly many regional and temporal cultural shifts did occur over the course of this time period. Future research that is focused on temporal change in the Milling Stone Period would greatly benefit the current understanding of Southern California prehistory. One avenue of research that could help accomplish this goal would be a synthesis of the growing amount of archaeological "gray" literature involving cultural resource mitigation of Milling Stone Period sites in the Orange County area.

Horizon III: Intermediate Cultures (1,000 BCE to 750 CE). The Intermediate Period is identified by a mixed strategy of plant exploitation, terrestrial hunting, and maritime subsistence strategies. Chipped stone tools (e.g., projectile points) generally decrease in size, but increase in number. Abundant bone and shell remains have been recovered from sites dating to these time periods. In coastal areas, the introduction of the circular shell fishhook and the growing abundance of fish remains in sites over the course of the period suggest a substantial increase in fishing activity during the Intermediate Horizon. It is also during this time period that mortar and pestle use intensified dramatically. The mano and metate continued to be in use on a reduced scale, but the greatly intensified use of the mortar and pestle signaled a shift away from a subsistence strategy based on seed resources to that of the acorn. It is probably during this time period that the acorn became the food staple of the majority of the indigenous tribes in Southern California. This subsistence strategy continued until European contact. Material culture generally became more diverse and elaborate during this time period and included steatite containers, perforated stones, bone tools, ornamental items, and asphalt adhesive.

While Warren recognizes the start of the Campbell Tradition in the Santa Barbara region at roughly the beginning of the Intermediate Period, he did not see clear evidence of cultural change farther south. As a result, the Encinitas Tradition in Southern California encompasses both the Milling Stone and Intermediate Periods in Warren's chronology (1968:2, 4). However, the more recent chronological schema by Koerper and Drover (1983) clearly recognizes an Intermediate Period in Southern California. They suggest that Warren's inability to recognize an intermediate cultural stage was likely due to "the lack of conclusive data in 1968" (1983:26).

Horizon IV: Late Prehistoric Cultures (750 CE to 1769 CE). During the Late Prehistoric Period, exploitation of many food resources, particularly marine resources among coastal groups, continued to intensify. The material culture in the Late Prehistoric Horizon increased in complexity in terms of the abundance and diversity of artifacts being produced. The recovery and identification of a number of small projectile points during this time period likely suggests a greater utilization of the bow and arrow, which was likely introduced near the end of the Intermediate Period. Shell beads, ornaments, and other elements of material culture continue to be ornate, varied and widely distributed, the latter evidence suggestive of elaborate trade networks. Warren's (1968) scheme divides the late prehistoric period into several regional traditions. Western Riverside County, Orange County, and the Los Angeles Basin area are considered part of the "Shoshonean" tradition, which may be related to a possible incursion of Tatic speakers into these areas during this period. The Late Prehistoric Period includes the first few centuries of early European contact (1542 CE to 1769 CE); this period is also known as the Protohistoric Period, as there was a low level of interaction between native Californians and Europeans prior to Portolá's overland expedition in 1769.

In the few centuries prior to European contact, the archaeological record reveals substantial increases in the indigenous population (Wallace 1955:223). Some village sites may have contained as many as 1,500 individuals. Apparently, many of these village sites were occupied throughout the year rather than seasonally. This shift in settlement strategy was likely influenced by improved food procurement and storage technology, which enabled population growth and may have helped stimulate changes in sociopolitical organization.

Ethnography

The Project area was occupied during the Late Prehistoric Period by the Native American societies commonly known to anthropologists as the Juaneño and the Gabrielino (Kroeber 1925; Bean and Shippek 1978; Bean and Smith 1978). The name "Juaneño" denotes those people who, in historic times, were administered by the Spanish from Mission San Juan Capistrano. Many contemporary Juaneño identify themselves as descendants of the indigenous people living in the local San Juan and San Mateo Creek drainage areas, termed the Acjachemen Nation (Belardes 1992). While the term "Gabrielino" identifies those Native Americans who were under the control of the Spanish Mission San Gabriel, the overwhelming number of people in these areas were of the same ethnic nationality and language group. Some currently refer to themselves as *Tongva*, while others prefer the term *Kizh*. Their territory extended from northern Orange County north to the San Fernando Valley in Los Angeles County. The terms the Native Americans in Southern California used to identify

themselves have, for the most part, been lost; therefore, the names do not necessarily identify specific ethnic or tribal groups.

The two groups are broadly similar, but there are sufficient differences in Gabrielino and Juaneño language, ritual observances, and material culture to justify identification as separate social groups (Bean and Smith 1978). The languages of both groups are derived from the Takic family, part of the Uto-Aztecan linguistic stock. This feature was shared with the Serrano and Cahuilla Native American groups located in what is now San Bernardino and Riverside Counties. By contrast, the languages of the Native American groups located south of the Juaneño are derived from the Yuman language family, while the Chumash north of the Tongva appear to be of an isolated and deep origin, both representing origins quite different from that of the local languages (Mithun 1999:304).

Juaneño/Acjachemen

The Acjachemen population during the Precontact Period is thought to have numbered upwards of 3,500 (O’Neil 2002). It is known that 1,138 local Native Americans—consisting primarily of Acjachemen but including Gabrielino, coastal and interior Luiseño, Serrano, and Cahuilla—resided at Mission San Juan Capistrano in the year 1810 (Engelhardt 1922:175). The Mission’s death register shows as many as 1,665 native burials in its cemetery by this time, a number in addition to those who died unrecorded at the remaining villages from natural causes and introduced infectious diseases.

Gabrielino/Tongva

To the north of the Acjachemen resided the Gabrielino/Tongva. They arrived in the Los Angeles Basin probably before 500 BCE as part of the so-called Shoshonean (Takic speaking) Wedge from the Great Basin region. The Gabrielino/Tongva gradually displaced the indigenous peoples, who were probably Hokan speakers. Large, permanent villages were established in the fertile lowlands along rivers and streams and in sheltered areas along the coast. Eventually, Gabrielino territory encompassed the greater Los Angeles Basin, coastal regions from Topanga Canyon in the north to perhaps as far south as Aliso Creek, and the islands of San Clemente, San Nicholas, and Santa Catalina (Bean and Smith 1978:538–540). Recent studies suggest the population may have numbered as many as 10,000 individuals at their peak in the Precontact Period.

Cultural Resources Records Search

A California Historic Resources Information System (CHRIS) cultural resources records search was requested of the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSUF) on March 23, 2020 (Attachment A). It consisted of a request to examine the U.S. Geological Survey’s (USGS’) *El Toro* 7.5-minute quadrangle map to evaluate the project site for any cultural resources sites recorded or cultural resources studies conducted on and near the project site. In addition, it was requested that the California Points of Historical Interest (PHI), California Historical Landmarks (CHL), the California Register of Historical Resources (CRHR), the

National Register of Historic Places (NRHP), the California State Historic Resources Inventory (HRI), and historic topographic maps be reviewed.

The SCCIC concluded that there have been 33 cultural resources studies completed within one-half mile of the Project site. Twelve of those studies included at least a portion of the Project site. Native American tribes may have additional historical resource information which could be elucidated during tribal consultation efforts.

Table 1: Cultural Resources Studies Within the Project Site

Report Number	Author/Year	Type of Study, Results
OR-00019	Howard/1975	Survey, 500 acres, 10 resources
OR-00251	Desautels & Chase/1976	Survey, 500 acres, 5 resources
OR-00286	Bean/1979	Survey – Linear, 31 resources
OR-00580	Anon./1977	Literature search, 0 resources
OR-00581	McCoy & Kirkish/1982	Monitoring and Data recovery Excavation, 11 resources (including ORA-725)
OR-00648	Breece & Padon/1982	Survey - Linear, 33 resources (including ORA-458)
OR-01102	Macko & Hurd/1991	Monitoring and Test Excavation, 2 resources (including ORA-725)
OR-01137	Demcak/1991	Survey, 8 resources (including ORA-458)
OR-01316	Demcak/1993	Monitoring report for ORA-458
OR-01439	McCoy & Roxana/1980	National Register Assessment, 26 resources (including ORA-725)
OR-01445	Desautels, et al./1977	Test Excavation, 5 resources (including ORA-458)

Report Number	Author/Year	Type of Study, Results
OR-02522	Wallock/2001	Upper Aliso Archaeological District designation, 35 resources (including ORA-458 and ORA-725)

Seven of the 12 studies undertaken at least partially within the Project site included investigations of two of the resources within the Project site: CA-ORA-458 and/or CA-ORA-725. The final study (OR-02522) is the Upper Aliso Archaeological District report. The District includes, among 33 other sites, CA-ORA-458 and CA-ORA-725.

The records search also concluded that there are fifteen resources recorded within a 1/2-mile radius of the Project site. Three of these cultural resources (30-000458, 30-000725, and 30-001728) are within the Project site

Table 2: Cultural Resources Recorded Within the Project Site

Site Number	Recorder/Year (most recent)	Description
30-000458	Oxendine/1978	AP02 (Lithic Scatter), Excavated, resource is an element of District 30-001728
30-000725	Wallock/2001	AP02 (Lithic Scatter); AP15 (Habitation debris). Excavated, resource is an element of District 30-001728
30-001728	Wallock/2001	Upper Aliso Creek Archaeological District

Site 30-000458 is a lithic scatter of manos, cores, flakes, and fire-affected rock. It was included in the Upper Aliso Creek Archaeological District in 2001 (Wallock 2001). A monitoring report for the site by Carol Demcak in 1993 (OR-01316) suggests that the site has been destroyed by grading and construction of the existing storage facility. Careful monitoring of grading in the site area is recommended.

Site 30-000725 consists of three loci atop the first ridge to the southeast of El Toro Road at station 2342+00 of the Foothill Transportation Corridor. Each of the three loci exhibited a small lithic

scatter of flakes, cores, and tools including groundstone objects. The site record prepared by Macko (1991) states that the entire site was graded with monitor present following excavations and surface collection. It should be considered destroyed, but monitoring in the area of the site is recommended. The site was included in the Upper Aliso Creek Archaeological District in 2001 (Wallock 2001).

Site 30-001728 is the Upper Aliso Creek Archaeological District itself (described in OR-02522), composed of 35 separate archaeological sites, is numbered CA-ORA-1728. It includes CA-ORA-458 and CA-ORA-725.

In addition, a Phase I assessment by PCR Services (2011), and a Phase II research design (Duke 2012) and Phase II study report (Duke 2013) for the nearby Skyridge development was reviewed and the records search and findings from those studies was summarized and compared to this project. The Skyridge project site lies less than one mile to the east of the project site, along El Toro Road.

The records search results, received for the Skyridge Project (PCR 2011) indicate that more than 60 cultural resources studies have been completed and more than 50 cultural resources sites have been recorded within one mile of the Skyridge site. Many of the studies yielded positive results for the presence of resources. The site located on the Skyridge project site (CA-ORA-507), is a significant chert quarry that would have yielded considerable quality stone material for the manufacture of tools for native populations living in the vicinity. Several additional resources discovered along upper Aliso Creek during surveys for the widening of El Toro Road were deemed significant; one of which is CA-ORA-507. Immediately to the north of CA-ORA-507 is the Saddleback Meadows property. A large parcel east of El Toro Road. Up to a dozen archaeological sites have been recorded on the property. They were all tested for significance by the author (Maxon 1995). Two—CA-ORA-710 and CA-ORA-711—were found significant. For these reasons, it is clear, based on this site density and significance, that the surrounding area is sensitive for the presence of as yet undiscovered cultural resources.

An examination was made of the historic aerial photographs at HistoricAerials.com (NETRONLINE n.d.). The examination revealed that the Project site has never been developed. Aerial photographs, the earliest of which was taken in 1938, show only transient dirt roads skirting its edge.

Paleontological Resources Records Search

Sam McLeod of the Natural History Museum of Los Angeles County (NHMLAC) conducted a review of the museum's geologic and vertebrate paleontological records for the Project site and vicinity on April 3, 2020 (Attachment B).

The NHMLAC literature revealed that the Museum does not have any vertebrate fossil localities that lie directly within the APE; however, it does have record of vertebrate fossil localities nearby from sedimentary deposits the same as those that occur subsurface on the APE.

*In the less elevated terrain in the very northern portion of the proposed project area the surficial deposits consist of younger Quaternary alluvium. These deposits typically do not contain significant vertebrate fossils in the uppermost layers, but older sedimentary deposits occurring at relatively shallow depth may well contain significant fossil vertebrate remains. Most of the proposed project area has exposures of the marine late Miocene La Vida Member of the Puente Formation. Our closest Puente Formation La Vida Member locality is LACM 6287, northwest of the proposed project area in Limestone Canyon, that produced fossil specimens of tonguefish, *Symphurus*.*

*The western-most portion of the proposed project area has exposures of the marine late Miocene Oso Member of the Capistrano Formation. Our closest vertebrate fossil localities from the Oso Sand Member of the Capistrano Formation, LACM 3221, 3411, 4177, and 7370-7372, are situated just to the west and west-northwest of the proposed project area. Just to the southwest of the proposed project area we have the additional Oso Sand localities LACM 3865, 4436, and 5471. These vertebrate fossil localities have produced an extensive composite fossil fauna of predominately marine vertebrates including bonito shark, *Isurus hastalis*, extinct white shark, *Carcharocles megalodon*, eagle ray, *Myliobatis*, sturgeon, *Acipenser*, halibut, *Paralichthys*, sabretooth salmon, *Onchorhynchus rastrosus*, tortoise, *Geochelone*, leatherback turtle, *Psephophorus*, crocodile, *Crocodylidae*, auklet, *Mancallinae*, sea lion, *Imagotaria*, otter, *Satherium*, dugongid sea cows, *Dugongidae*, horse, *Pliohippus*, rhinoceros, *Rhinocerotidae*, camel, *Camelidae*, primitive baleen whale, *Herpetocetus*, right whale, *Balaenidae*, rorqual whale, *Balaenopteridae*, and sperm whale, *Scaldicetus*. Of particular note, E.J. Hilton and L. Grande (2006). Review of the fossil record of sturgeons, family *Acipenseridae* (Actinopterygii: *Acipenseriformes*), from North America. *Journal of Paleontology*, 80(4):672-683) published on fossil specimens of the sturgeon *Acipenser* from locality LACM 3221.*

According to McLeod (2020), excavations into the younger alluvium in the northern portion of the property will likely not contain fossils. However, deeper excavations into the older alluvial materials and any excavations into the Capistrano Formation or Puente Formation, that could contain significant vertebrate fossil remains should be monitored by a qualified Paleontologist to identify and recover significant fossil remains. Sediment samples should also be recovered to determine the small-fossil potential of the site.

Recommendations

Cultural Resources

Prior to the issuance of grading permits, the Applicant shall provide written evidence to the City of Mission Viejo that the Applicant has retained a qualified archaeologist and Native American

monitor to observe ground disturbing activities and recover archaeological resources as necessary. The Archaeologist and Tribal monitors will attend the pre-grade conference where the archaeologist will establish procedures for archaeological monitoring and shall establish procedures and protocols to temporarily halt ground disturbing activities to permit sampling, evaluation, and recovery of any discovery. If a discovery is determined to be a historical resource, unique archaeological resource, or Tribal Cultural Resource, additional excavations or treatment may be necessary to ensure that any impacts to them are mitigated to a less than significant level.

Human Remains

Project-related earth disturbance has the potential to unearth previously undiscovered human remains, resulting in a potentially significant impact. Pursuant to Section 7050.5 of the *California Health and Safety Code*, if human remains are encountered during excavation activities, all work shall halt, and the County Coroner shall be notified. The Coroner will determine within two working days whether a cause of death investigation is necessary. If the Coroner determines that the remains are Native American, s/he will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then, pursuant to *California Public Resources Code*, §5097.98, immediately identify the most likely descendant (MLD), who may inspect the remains and site of discovery and make recommendations for the treatment and/or disposition of the remains. The MLD shall make his/her recommendation within 48 hours of being granted access to the site. The MLD's recommendation shall be followed, if feasible, and may include scientific removal and non-destructive analysis of the human, preservation in place, and deeding the remains to the MLD for treatment. If no MLD is identified, the MLD fails to make a recommendation, or the landowner rejects the recommendation, the landowner shall rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance.

Paleontological Resources

Project excavations that extend into older Quaternary alluvium or the Capistrano and Puente Formations, should be monitored by a qualified Paleontologist. The precise depth of older alluvium across the site is not known; however, a depth of three to five feet below the present ground surface should be reached before paleontological monitoring commences. The Paleontologist should be present during the preconstruction meeting to determine the nature and duration of monitoring activities (locations and depth) and to establish procedures for temporarily halting or redirecting ground disturbing activities in the event of a fossil discovery to allow for its identification, evaluation, and recovery as appropriate. Sediment samples should be recovered and processed as appropriate to determine the small fossil and/or invertebrate fossil potential of the site.

May 14, 2020

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Please contact Patrick Maxon at pmaxon@vcsenvironmental.com or 949-234-6077 with any questions.

Sincerely,



Patrick Maxon, M.A., RPA
Director, Cultural Services

References

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PCR Services

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ATTACHMENT A
SOUTH CENTRAL COASTAL INFORMATION CENTER

South Central Coastal Information Center

California State University, Fullerton
Department of Anthropology MH-426
800 North State College Boulevard
Fullerton, CA 92834-6846
657.278.5395 / FAX 657.278.5542

sccic@fullerton.edu

California Historical Resources Information System
Orange, Los Angeles, and Ventura Counties

5/5/2020

Records Search File No.: 21203.7314

Patrick Maxon
VCS Environmental
30900 Rancho Viejo Road, Suite 100
San Juan Capistrano CA 92675

Re: Records Search Results for the Saddleback Church Development Project

The South Central Coastal Information Center received your records search request for the project area referenced above, located on the El Toro, CA USGS 7.5' quadrangle. Due to the COVID-19 emergency, we have temporarily implemented new records search protocols. With the exception of some reports that have not yet been scanned, we are operationally digital for Los Angeles, Orange, and Ventura Counties. See attached document for your reference on what data is available in this format. The following reflects the results of the records search for the project area and a ½-mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: custom GIS maps shape files hand-drawn maps

Resources within project area: 3	30-000458, 30-000725, 30-001728
Resources within ½-mile radius: 15	SEE ATTACHED LIST
Reports within project area: 12	OR-00019, OR-00251, OR-00286, OR-00580, OR-00581, OR-00648, OR-01102, OR-01137, OR-01316, OR-01439, OR-01445, OR-02522
Reports within ½-mile radius: 33	SEE ATTACHED LIST

- Resource Database Printout (list):** enclosed not requested nothing listed
- Resource Database Printout (details):** enclosed not requested nothing listed
- Resource Digital Database (spreadsheet):** enclosed not requested nothing listed
- Report Database Printout (list):** enclosed not requested nothing listed
- Report Database Printout (details):** enclosed not requested nothing listed
- Report Digital Database (spreadsheet):** enclosed not requested nothing listed
- Resource Record Copies:** enclosed not requested nothing listed
- Report Copies:** enclosed not requested nothing listed
- OHP Built Environment Resources Directory (BERD) 2019:** available online; please go to https://ohp.parks.ca.gov/?page_id=30338

- (X) Resource Database Printout (list) – 3 pages
- (X) Resource Database Printout (details) – 30 pages
- (X) Report Database Printout (list) – 6 pages
- (X) Report Database Printout (details) – 53 pages
- (X) Resource Record Copies – (all) – 119 pages
- (X) Historical Maps – 4 pages

Emergency Protocols for LA, Orange, and Ventura County BULK or SINGLE PROJECT Records Searches IF YOU HAVE A GIS PERSON ON STAFF ONLY!!

These instructions are for qualified consultants with a valid Access and Use Agreement.

WE ARE ONLY PROVIDING DATA THAT IS ALREADY DIGITAL AT THIS TIME.

Some of you have a fully digital operation and have GIS staff on board who can process a fully digital deliverable from the Information Center. IF you can accept shape file data and do not require a custom map made for you by the SCCIC, and you are willing to sort the data we provide to you then these instructions are for you. Read further to be sure. You may have only one project at this time or some of you have a lot of different search locations that can be processed all at once. This may save you a lot of time getting results back and if we process your jobs in bulk, and you may enjoy significant cost savings as well.

Bulk processing will work for you if you have a GIS person on staff who can sort bulk data for you and make you any necessary project maps. This type of job can have as many job locations as you want but the point is that we will do them in bulk – at the same time - not one at a time. We send all the bulk data back to you and you sort it. This will work if you need searches in LA, Orange, or Ventura AND if they all have the same search radius and if all the other search criteria is the same– no exceptions. This will not work for San Bernardino County because we are not fully digital for San Bernardino County. You must submit all your shape files for each location at the same time and this will count as one search. If you have some that need a different radius, or different search criteria, then you should submit that job separately with its own set of instructions.

INSTRUCTIONS FOR BULK PROCESSING:

Please send in your requests via email using the data request form along with the associated shape files and pdf maps of the project area(s) at 1-24k scale. PDFs must be able to be printed out on 8.5X 11 paper. We check your shape file data against the pdf maps. This is where we find discrepancies between your shape files and your maps. This is required.

Please use this data request form and make sure you fill it out properly.

<http://web.sonoma.edu/nwic/docs/CHRISDataRequestForm.pdf>

DELIVERABLES:

1. A copy of the Built Environment Resources Directory or BERD for Los Angeles, Orange, Ventura, or San Bernardino County can now be found at the OHP Website for you to do your own research. This replaces the old Historic Properties Directory or HPD. We will not be searching this for you at this time but you can search it while you are waiting for our results to save time.
2. You will only get shapefiles back, which means that you will have to make your own maps for each project location.

3. You will get a bulk processed bibliographies for resources and reports as selected; you will not get individual bibliographies for each project location.
4. You will get pdfs of resources and reports if you request them, provided that they are in digital formats. We will not be scanning records or reports at this time.
5. You will get one invoice for the bulk data processing. We can't bill this as individual jobs on separate invoices for you. If there are multiple project names, we are willing to reference all the job names on the invoice if needed. If there a lot of job id's we may ask you to send them in an email so that we can copy and paste it into the invoice details. If you need to bill your clients for the data, you can refer to our fee schedule on the OHP website under the CHRIS tab and apply the fees accordingly.
6. We will be billing you at the staff rate of \$150 per hour and you will be charged for all resources and report locations according to the "custom map charges". This is in lieu of the \$12 per GIS shape file data fee that we normally charge for GIS files and this will only apply during the Covid 19 emergency. You will also be billed 0.15 per pdf page, or 0.25 per excel line as is usual.
7. Your packet will be mailed to you on a CD or via Dropbox if you have an account. We use 7-zip to password protect the files so you will need both. We email you the password.

I may not have been able to cover every possible contingency in this set of instructions and will update it if necessary. You can email me with questions at sccic@fullerton.edu

Thank you,

Stacy St. James

South Central Coastal Information Center

Los Angeles, Orange, Ventura, and San Bernardino Counties

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-00019		1975	Howard, Jerry B.	Archaeological Site Survey, El Toro Road Realignment	Archaeological Research, Inc.	30-000442, 30-000443, 30-000450, 30-000451, 30-000458, 30-000485, 30-000486, 30-000487, 30-000488, 30-000507
OR-00208		1978	La Fontaine, Keith	Archaeological Survey Report on Seventy-seven (77) Acres of Land Located in the El Toro Area of the County of Orange	Scientific Resource Surveys, Inc.	
OR-00238		1977	Howard, Jerry B.	A Reevaluation of the Cultural Resources of the Glen Ranch		30-000438, 30-000439, 30-000440, 30-000444, 30-000448, 30-000449, 30-000450, 30-000451, 30-000452, 30-000453, 30-000454, 30-000455, 30-000456
OR-00251		1976	Desautels, Roger J. and Paul G. Chace	Archaeological Report on an Archaeological Survey, Inventory, and Analysis of Alternate Realignment of El Toro Road Between 2.6 Miles Northerly of Trabuco Road and Live Oak Canyon Road in Orange County, California	Scientific Resource Surveys, Inc.	30-000458, 30-000485, 30-000486, 30-000488, 30-000507
OR-00286		1979	Bean, Lowell	Cultural Resources and the High Voltage Transmission Line From San Onofre to Santiago Substation and Black Star Canyon	Cultural Systems Research, Inc.	30-000001, 30-000002, 30-000003, 30-000004, 30-000005, 30-000007, 30-000011, 30-000012, 30-000013, 30-000014, 30-000015, 30-000016, 30-000017, 30-000018, 30-000019, 30-000020, 30-000021, 30-000022, 30-000023, 30-000024, 30-000025, 30-000026, 30-000027, 30-000028, 30-000029, 30-000030, 30-000031, 30-000032, 30-000033, 30-000034, 30-000037
OR-00375		1976	Clellow, William C. Jr.	Preliminary Report on Archaeological Investigations at ORA-469	UCLA Institute of Archaeology	30-000469
OR-00388		1977	Clellow, William C. Jr.	The Archaeology of Site ORA-469	Institute of Archaeology, University of California Los Angeles	30-000469
OR-00515		1980	Anonymous	Archaeological Investigations and Management Recommendations for the Glenn Ranch	Westec Services, Inc.	30-000438, 30-000439, 30-000440, 30-000441, 30-000442, 30-000443, 30-000444, 30-000445, 30-000446, 30-000447, 30-000448, 30-000449, 30-000450, 30-000451, 30-000452, 30-000453, 30-000454, 30-000455, 30-000456

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-00545		1977	Munoz, Jeanne and Theodore G. Cooley	Glenn Ranch: Archaeological Resources and Their Recommended Management		30-000438, 30-000439, 30-000440, 30-000441, 30-000442, 30-000443, 30-000444, 30-000445, 30-000446, 30-000447, 30-000448, 30-000449, 30-000450, 30-000451, 30-000452, 30-000453, 30-000454, 30-000455, 30-000456
OR-00546		1978	Cottrell, Marie G.	Records Search for 19+ Acres of the Glen Ranch	Unknown	
OR-00571		1973	Ahlering, Michael L.	Report of Findings of a Scientific Resources Survey and Study: Conducted on a Portion of the Whiting Ranch, Orange County, California	Archaeological Planning Collaborative	30-000489, 30-000490, 30-000491
OR-00580		1977	Anonymous	The Aliso Creek Watershed, Orange County, California a Proposal for Creating an Archaeological District for the National Register of Historic Places and a Suggested Research and Study Design	Scientific Resource Surveys, Inc.	
OR-00581		1982	McCoy, Lesley C. and Kirkish, Alex N.	Cultural Resources Data Recovery Program for the 230kv Transmission Line Rights-of-way From San Onofre Nuclear Generating Station to Black Star Canyon and Santiago Substation and to Encina and Mission Valley Substations	Cultural Systems Research, Inc.	30-000438, 30-000447, 30-000495, 30-000496, 30-000498, 30-000499, 30-000725, 30-000824, 30-000825, 30-000830, 30-000831
OR-00590		1981	Cottrell, Marie G.	Archaeological Resources Assessment Conducted for Planning Area 37, Mission Viejo, California	Archaeological Resource Management Corp.	30-000947
OR-00591		1980	Cooley, Theodore G. and Marie G. Cottrell	Archaeological Assessment of the Whiting Ranch		30-000042, 30-000447, 30-000489, 30-000490, 30-000491, 30-000825, 30-000826, 30-000827, 30-000828, 30-000832, 30-000905, 30-000949, 30-000950, 30-000951, 30-000952, 30-000953, 30-000954, 30-000955, 30-000956, 30-000957, 30-000958, 30-000959, 30-000960, 30-000961, 30-100276, 30-100277, 30-100278, 30-100279, 30-100280, 30-100281, 30-100282, 30-100283, 30-100284, 30-100286, 30-100287, 30-100288, 30-100289, 30-100290, 30-100291, 30-100292, 30-100293, 30-100294, 30-100295, 30-100296

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-00646		1982	Cooley, Theodore G.	Archaeological Investigations at CA-ORA-947, a Small Prehistoric Campsite, Located in the Inland Foothills of Orange County, California.	Archaeological Resource Management Corp.	30-000947
OR-00648		1982	Breece, Bill and Beth Padon	Cultural Resource Survey: Archaeological Resources: Foothill Transportation Corridor, Phase Ii	LSA Associates, Inc.	30-000244, 30-000304, 30-000361, 30-000442, 30-000450, 30-000451, 30-000458, 30-000479, 30-000485, 30-000486, 30-000487, 30-000488, 30-000507, 30-000545, 30-000564, 30-000601, 30-000629, 30-000630, 30-000641, 30-000649, 30-000650, 30-000651, 30-000710, 30-000711, 30-000712, 30-000713, 30-000719, 30-000725, 30-000726, 30-000853, 30-000864, 30-000865, 30-000866
OR-00890			Clewlow, William C. Jr.	CA-ORA-469		30-000469
OR-00899		1987	Anonymous	Draft Environmental Impact Report No. 481 Foothill Ranch (formerly Whiting Ranch) Planned Community Area Plan, General Plan Amendment and Zone Change	MICHAEL BRANDMAN Associates, Inc.	30-000042, 30-000489, 30-000490, 30-000491, 30-000825, 30-000826, 30-000827, 30-000828, 30-000832, 30-000905, 30-000949, 30-000961
OR-01060		1985	Cottrell, Marie G. and Demcak	Report of Salvage Investigations Conducted at CA-ORA-469, Area C, Mission Viejo, California	Archaeological Resource Management Corp.	30-000469
OR-01102		1991	Macko, Michael E. and Gary S. Hurd	Final Report: Results of Archaeological Monitoring and Test Excavations for the Foothill Transportation Corridor Northern Segment, El Toro Ridge Section	Macko Archaeological Consulting	30-000469, 30-000725
OR-01137		1991	Demcak, Carol R.	Cultural Resource Assessment for Planning Areas 11, 17, 27, 67, 80, and 81, Mission Viejo.	ARM	30-000458, 30-000469, 30-000473, 30-000485, 30-000486, 30-000487, 30-000488, 30-000726
OR-01188		1990	Mason, Roger D.	Cultural Resources Records Search Santiago Canyon Road Alignment Study Addendum Orange County, California	The Keith Companies Archaeological Division	30-000826, 30-000954
OR-01275		1992	Jones, Carleton S.	The Development of Cultural Complexity Among the Luiseno	California State University, Long Beach	30-000019, 30-000126, 30-000403, 30-000465, 30-000466, 30-000472, 30-000635, 30-000636, 30-000855, 30-000861, 30-000867, 30-000871, 30-000882, 30-000947, 30-001048, 30-001053, 30-001072, 30-001121

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-01309		1993	Macko, Michael E.	Final Report Summary of Archaeological Monitoring, Test Excavations, and Data Recovery for the Foothill Transportation Corridor Northern Segment	Macko Archaeological Consulting	30-000469, 30-000725, 30-000853, 30-000905, 30-000961, 30-001070, 30-001145, 30-001148, 30-001149, 30-001297, 30-001298, 30-001299, 30-001300
OR-01310		1992	Macko, Michael E. and Gary Hurd	Results of Archaeological Test Excavations for the Foothill Transportation Corridor Northern Segment, Construction Section F8 and F9	Macko Archaeological Consulting	30-001070, 30-001298, 30-001299, 30-001300
OR-01313		1993	Conrad, Susan M and Carol R. Demcak	Archaeological Test Investigations at CA-ORA-726 and CA-ORA- 487, Upper Aliso Creek, Inland Orange County, California	Archaeological Resource Management Corp.	30-000487, 30-000726
OR-01316		1993	Demcak, Carol R.	Archaeological Monitoring Report for CA-ORA-458, Planning Areas 40 and 82, Mission Viejo Planned Community, Orange County, California	Archaeological Resource Management Corp.	30-000458
OR-01354		1980	Munoz, Jeanne	History and Historical Resources of the Whiting Ranch	Archaeological Resource Management Corp.	30-001496, 30-001497, 30-001498, 30-001499, 30-100312
OR-01385		1994	Demcak, Carol R.	Archaeological Investigations at CA-ORA-486 (el Toro Quad), Inland Orange County,	Archaeological Resource Management Corp.	30-000486
OR-01439		1980	McCoy, Lesley C. and Phillips Roxana	National Register Assessment Program of Cultural Resources of the 230 Kv Transmission Line Rights-of-way From San Onofre Nuclear Generating Station to Black Star Canyon and Santiago Substation and to Encina and Mission Valley Substation	Westec Services, Inc.	30-000419, 30-000438, 30-000447, 30-000495, 30-000496, 30-000498, 30-000499, 30-000640, 30-000700, 30-000725, 30-000782, 30-000784, 30-000785, 30-000786, 30-000787, 30-000823, 30-000824, 30-000825, 30-000826, 30-000827, 30-000828, 30-000829, 30-000830, 30-000831, 30-000832, 30-000905
OR-01445		1977	Desautels, Roger J., David Van Horn, Paul Chase, and Nancy Whitney	Archaeological Field Test Report on Archaeological Sites Ora458, Ora485, Ora486, Ora488 & Ora507 Located in the Upper Aliso Creek Area of Orange County P.o. No. C 60012 Control No.39717	Scientific Resource Surveys, Inc.	30-000458, 30-000485, 30-000486, 30-000488, 30-000507
OR-01563		1997	Brock, James P.	Report on Archaeological Monitoring of Planning Area 12, Foothill Ranch, El Toro, Orange County, California	Archaeological Advisory Group	30-000825, 30-000826, 30-000827, 30-001373
OR-01753		1998	Brechbiel, Brant A.	Cultural Resources Records Search and Literature Review Report for a Pacific Bell Mobile Services Telecommunications Facility: Cm 302-04 in the City of Lake Forest, California	Chambers Group, Inc.	30-000468

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-02110		2000	Duke, Curt and Nicole Wallock	Results of the Cultural Resource Records Search and Extended Survey for Pacific Bell Wireless Facility Cm 324-03, Orange County	LSA Associates, Inc.	30-000725
OR-02522		2001	Wallock, Nicole	Upper Aliso Creek Archaeological District	LSA Associates, Inc.	30-000438, 30-000439, 30-000440, 30-000441, 30-000442, 30-000443, 30-000444, 30-000445, 30-000446, 30-000447, 30-000448, 30-000449, 30-000450, 30-000451, 30-000452, 30-000453, 30-000454, 30-000455, 30-000456, 30-000458, 30-000468, 30-000469, 30-000485, 30-000486, 30-000487, 30-000488, 30-000507, 30-000545, 30-000630, 30-000631, 30-000641, 30-000725, 30-000726, 30-000727, 30-001728
OR-02645		2003	Schmidt, James J.	Removal of a Nextel Installation From an Sce Right-of-way	Compass Rose Archaeological, Inc.	
OR-02659		2000	Duke, Curt	Cultural Resource Assessment for Pacific Bell Wireless (pbw) Facility Cm 324-03, County of Orange, California	LSA Associates, Inc.	
OR-03050		2005	Bonner, Wayne H.	Cultural Resources Records Search Results and Site Visit for Cingular Wireless Candidate Oc-0056-01 (sce Tower/trabuco Canyon) Santiago Canyon Road, Portola Hills, Orange County, California	Michael Brandman Associates	
OR-03370		2007	Greene, Richard and Brian F. Smith	A Cultural Resources Study of the Portola Center Project	Brian F. Smith and Associates	30-000441, 30-000442, 30-000443, 30-000445, 30-000446, 30-000447
OR-03989		2011	Deering, Mark and Mason, Roger D.	Cultural Resources Documentation and Monitoring of Southern California Edison Access Roads During Maintenance by the Orange County Fire Authority, 2010 Orange County, California	ECORP Consulting, Inc	30-000161, 30-000328, 30-000330, 30-000331, 30-000370, 30-000438, 30-000446, 30-000447, 30-000495, 30-000588, 30-000590, 30-000591, 30-000708, 30-000779, 30-000785, 30-000787, 30-000825, 30-000826, 30-000827, 30-000829, 30-000830, 30-000831, 30-000847, 30-000897, 30-000898, 30-000941, 30-000969, 30-001032, 30-001282, 30-001404, 30-001410, 30-001412, 30-001428, 30-001430, 30-001532, 30-001533

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-04029		2010	Deering, Mark and Roger Mason	Cultural Resources Monitoring of Southern California Edison Access Roads Maintained by Orange County Fire Authority, Orange County, California (JPA E6088-0031; I.O. 305869)	ECORP Consulting	30-000007, 30-000072, 30-000077, 30-000161, 30-000291, 30-000292, 30-000325, 30-000326, 30-000327, 30-000328, 30-000329, 30-000330, 30-000331, 30-000370, 30-000438, 30-000446, 30-000447, 30-000456, 30-000495, 30-000588, 30-000590, 30-000591, 30-000592, 30-000640, 30-000700, 30-000708, 30-000724, 30-000767, 30-000779, 30-000781, 30-000784, 30-000785, 30-000787, 30-000805, 30-000825, 30-000826, 30-000827, 30-000828, 30-000829, 30-000830, 30-000831, 30-000832, 30-000847, 30-000892, 30-000897, 30-000898, 30-000909, 30-000941, 30-000957, 30-000967, 30-000968, 30-000969, 30-001032, 30-001055, 30-001087, 30-001162, 30-001201, 30-001228, 30-001281, 30-001282, 30-001293, 30-001398, 30-001404, 30-001410, 30-001411, 30-001412, 30-001428, 30-001430, 30-001532, 30-001533, 30-001618, 30-001619, 30-100137
OR-04243		2012	Billat, Lorna	TowerCo Colo CA2304	EarthTouch	
OR-04308		2014	Smith, Brian	A Section 106 (NHPA) Cultural Resources Study for the Portola Center Project Orange County, California	Brian F Smith and Associates	30-000441, 30-000442, 30-000443, 30-000445, 30-000446, 30-000447, 30-100445, 30-100446, 30-100447, 30-100448, 30-100449, 30-100450, 30-100463, 30-100464
OR-04521		2014	Smith, Brian F.	A Section 106 (NHPA) Cultural Resources Study for the Portola Center Project, City of Lake Forest, Orange County, California	Brian F. Smith and Associates, Inc.	30-000441, 30-000442, 30-000443, 30-000445, 30-000446, 30-000825, 30-001728, 30-100219, 30-100220

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-000441	CA-ORA-000441		Site	Prehistoric	AP02; AP08; AP15	1973 (CRABTREE, COOLEY, FEMENGA, NISSLEY, Archaeological Research, Inc); 2001 (Nicole Wallock, LSA Associates); 2007; 2014 (Tracy A. Stropes, BF Smith)	OR-00515, OR-00545, OR-01995, OR-02522, OR-03370, OR-03385, OR-04111, OR-04308, OR-04521
P-30-000442	CA-ORA-000442		Site	Prehistoric	AP02	1973 (CRABTREE; COOLEY, Archaeological Research, Inc); 2007	OR-00019, OR-00515, OR-00545, OR-00566, OR-00648, OR-01995, OR-02522, OR-03370, OR-04111, OR-04308, OR-04521
P-30-000458	CA-ORA-000458		Site	Prehistoric	AP02	1975 (Howard, J.; C. Carter, Archaeological Research, Inc); 1978 (Oxendine, Pink)	OR-00019, OR-00251, OR-00269, OR-00566, OR-00648, OR-01137, OR-01316, OR-01445, OR-01995, OR-02522
P-30-000468	CA-ORA-000468		Site	Prehistoric	AP02	1974 (FENENGA, Archaeological Research, Inc); 2001 (Nicole Wallock, LSA Associates, Inc)	OR-00390, OR-01753, OR-01995, OR-02522
P-30-000469	CA-ORA-000469		Site	Prehistoric	AP02; AP09	1974 (NISSLEY, Archaeological Research, Inc); 1991 (Mary Macko, Macko Archaeological Consulting); 2001 (Nicole Wallock, LSA Associates, Inc)	OR-00375, OR-00388, OR-00890, OR-01060, OR-01102, OR-01137, OR-01309, OR-01995, OR-02293, OR-02522
P-30-000485	CA-ORA-000485		Site	Prehistoric	AP02; AP15	1975 (HOWARD, Archaeological Research, Inc.); 2001 (Nicole Wallock, LSA Associates)	OR-00019, OR-00251, OR-00269, OR-00566, OR-00648, OR-01137, OR-01445, OR-01995, OR-02522

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-000486	CA-ORA-000486		Site	Prehistoric	AP02	1975 (HOWARD, CARTER, AND MARTZ, Archaeological Research, Inc); 2001 (Nicole Wallock, LSA Associates, Inc)	OR-00019, OR-00251, OR-00617, OR-00648, OR-01137, OR-01385, OR-01445, OR-01995, OR-02522, OR-04111
P-30-000487	CA-ORA-000487		Site	Prehistoric	AP02	1975 (HOWARD, Archaeological Research, Inc)	OR-00019, OR-00566, OR-00648, OR-01137, OR-01313, OR-01995, OR-02522
P-30-000488	CA-ORA-000488		Site	Prehistoric	AP02	1975 (Howard, J. and C. Carter, Archaeological Research, Inc.); 2001 (Nicole Wallock, LSA)	OR-00019, OR-00251, OR-00269, OR-00566, OR-00648, OR-01137, OR-01445, OR-01995, OR-02522
P-30-000725	CA-ORA-000725		Site	Prehistoric	AP02; AP15	1978 (COOLEY, Archaeological Resource Management Corp); 1978 (Oxendine, Pink); 1982 (Breece, William H.); 1991 (Macko, M., Macko Archaeological Consulting); 2001 (Wallock, Nicole, LSA)	OR-00581, OR-00648, OR-01102, OR-01239, OR-01309, OR-01439, OR-01995, OR-02110, OR-02522
P-30-000726	CA-ORA-000726		Site	Prehistoric	AP02	1978 (CLEVINGER, Archaeological Resource Management Corp); 1982 (Breece, William)	OR-00648, OR-01137, OR-01313, OR-01995, OR-02522
P-30-000826	CA-ORA-000826	Resource Name - CSRI 419	Site	Prehistoric	AP02	1979 (Oxendine; Pink); 1982 (Breece, William); 1997 (James Brock, Archaeological Advisory Group)	OR-00591, OR-00899, OR-01188, OR-01439, OR-01563, OR-03989, OR-04029
P-30-000905	CA-ORA-000905		Site	Prehistoric	AP02	1980 (McCoy, L., Westec); 1982 (Breece, William)	OR-00591, OR-00899, OR-01309, OR-01439
P-30-000947	CA-ORA-000947	Resource Name - ARMC #1	Site	Prehistoric	AP02; AP08	1981 (Cooley, T., Archaeological Resource Management Corp.)	OR-00590, OR-00646, OR-00824, OR-01275

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-001728		Resource Name - Upper Aliso Creek Archaeological District	Site, District	Prehistoric	AP02; AP12; AP15		OR-02522, OR-04521
P-30-100219		Resource Name - PC-TEMP-ISO-1	Other	Prehistoric	AP02	2014 (Tracy A. Stropes, B.F. Smith & Associates)	OR-04521
P-30-100220		Resource Name - PC-TEMP-ISO-2	Other	Prehistoric	AP02	2014 (Tracy A. Stropes, B.F. Smith & Associates)	OR-04521
P-30-100237		Resource Name - Portola Center TR15353-Isolate 3	Other	Prehistoric	AP02	2018 (Jillian Hahnen, BFSA)	

ATTACHMENT B
NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY
RECORDS SEARCH

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org



Vertebrate Paleontology Section
Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

3 April 2020

VCS Environmental
30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, CA 92675

Attn: Patrick O. Maxon, Director, Cultural Services

re: Vertebrate Paleontology Records Check for paleontological resources for the proposed Saddleback Church Project, in the City of Mission Viejo, Orange County, project area

Dear Patrick:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed Saddleback Church Project, in the City of Mission Viejo, Orange County, project area as outlined on the portion of the El Toro USGS topographic quadrangle map that you sent to me via e-mail on 20 March 2020. We do not have any vertebrate fossil localities that lie directly within the proposed project area boundaries, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area.

In the less elevated terrain in the very northern portion of the proposed project area the surficial deposits consist of younger Quaternary alluvium. These deposits typically do not contain significant vertebrate fossils in the uppermost layers, but older sedimentary deposits occurring at relatively shallow depth may well contain significant fossil vertebrate remains. Most of the proposed project area has exposures of the marine late Miocene La Vida Member of the Puente Formation. Our closest Puente Formation La Vida Member locality is LACM 6287, northwest of the proposed project area in Limestone Canyon, that produced fossil specimens of tonguefish, *Symphurus*.

The western-most portion of the proposed project area has exposures of the marine late Miocene Oso Member of the Capistrano Formation. Our closest vertebrate fossil localities from the Oso Sand Member of the Capistrano Formation, LACM 3221, 3411, 4177, and 7370-7372, are situated just to the west and west-northwest of the proposed project area. Just to the southwest of the proposed project area we have the additional Oso Sand localities LACM 3865, 4436, and 5471. These vertebrate fossil localities have produced an extensive composite fossil fauna of predominately marine vertebrates including bonito shark, *Isurus hastalis*, extinct white shark, *Carcharocles megalodon*, eagle ray, *Myliobatis*, sturgeon, *Acipenser*, halibut, *Paralichthys*, sabretooth salmon, *Onchorhynchus rastrosus*, tortoise, *Geochelone*, leatherback turtle, *Psephophorus*, crocodile, Crocodylidae, auklet, Mancallinae, sea lion, *Imagotaria*, otter, *Satherium*, dugongid sea cows, Dugongidae, horse, *Pliohippus*, rhinoceros, Rhinocerotidae, camel, Camelidae, primitive baleen whale, *Herpetocetus*, right whale, Balaenidae, rorqual whale, Balaenopteridae, and sperm whale, *Scaldicetus*. Of particular note, E.J. Hilton and L. Grande (2006. Review of the fossil record of sturgeons, family Acipenseridae (Actinopterygii: Acipenseriformes), from North America. Journal of Paleontology, 80(4):672-683) published on fossil specimens of the sturgeon *Acipenser* from locality LACM 3221.

Shallow excavations in the younger Quaternary Alluvium exposed in the very north portion of the proposed project area are unlikely to uncover significant vertebrate fossils. Deeper excavations that extend down into older sedimentary deposits, or any excavations in the exposures of the Capistrano Formation or Puente Formation in the proposed project area, however, may well uncover significant fossil vertebrate remains. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,



Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice