From:	Nicole Piano Jones
To:	calshpo.ohp@parks.ca.gov
Cc:	Mandy Mills; Nick Stupin; Yi Su
Subject:	106 CPF Veteran"s Memorial Park - Part 1
Date:	Wednesday, May 15, 2024 12:13:00 PM
Attachments:	CEQA_Certification_Form-signed.pdf image001.png Veterans Memorial Park Draft IS.pdf SHPO letter (Veteran"s Memorial Park) .pdf

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Good afternoon,

Please accept this request for review and concurrence with Section 106 of the National Historical Preservation Act and implementing regulations, 36 CFR Part 800, for the Veteran's Memorial Park project. This is email one (1) of two (2) containing supporting documentation. The second email will be sent shortly.

Please feel free to contact me directly with questions or requests for additional information concerning this request, thank you.

Kind regards,

Nicole Piano-Jones
she | her | hers
Senior Program Manager
Housing & Homeless Services
City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008
www.carlsbadca.gov

nicole.pianojones@carlsbadca.gov
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Facebook | Twitter | You Tube | Pinterest | Enews

From:	OHP, CALSHPO@Parks
To:	Nicole Piano Jones
Subject:	Automatic reply: 106 CPF Veteran"s Memorial Park - Part 1
Date:	Wednesday, May 15, 2024 12:16:07 PM

Your submission to the California Office of Historic Preservation has been received and will be processed. OHP staff will follow up with you with any questions. You should expect to receive a response to your submission within 30 days. Thank you.

California Office of Historic Preservation
calshpo.ohp@parks.ca.gov
916-445-7000

May 15, 2024

VIA EMAIL

Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

SUBJECT: VETERAN'S MEMORIAL PARK ASSESSOR PARCEL NUMBER (APN) 212-271-03-00

In accordance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, 36 CFR Part 800, we are providing information for your review and concurrence regarding the above-referenced project. It is being considered for assistance by the United States Department of Housing and Urban Development (HUD) for Community Planning Funds and is subject to review under 24 CFR Part [50 or 58]. As a recipient of HUD funds, the City of Carlsbad is the Responsible Entity (24 CFR 58.2) for the proposed Project and is preparing an Environmental Assessment for National Environmental Protection Act (NEPA) and NHPA compliance.

Based upon research of the property performed by Psomas, a professionally qualified environmental consultant, we have defined the Area of Potential Effect (APE) as the boundary of the project site. Psomas requested a records search of the California Historical Resources Information System (CHRIS) located at the South Coastal Information Center (SCIC) for the proposed APE and the area within a one (1.0) mile radius of the APE. The results of the records search indicated that there were 69 cultural resources located within a 1-mile radius, of which two (2) are located on the project site. A search of the Sacred Lands File (SLF) held by the Native American Heritage Commission (NAHC) was also requested, and the results were positive.

We have made a "Finding of no Adverse Effect" pursuant to 36 CFR 800.5(b) based on the following:

The Project consists of the development of a new public park on 38.82 acres of a 93.70-acre parcel (the Project site), which would include a Veterans memorial plaza/gathering area, playgrounds, a bike park, formal picnic areas, passive recreation areas, outdoor exercise area, an outdoor education area, open turf, and multi-use trails. Currently the site is vacant and zoned as Open Space. The Project site is located approximately 350 feet east of the intersection of Cannon Road and Faraday Avenue, 1.4 miles east of the Interstate (I) 5/Cannon Road interchange, 0.5-mile southeast of the Agua Hedionda Lagoon, and located southeast of the intersection of Faraday Avenue and Whitman Way. The proposed project will provide improved access to outdoor recreation for residents and visitors.

California Native American Tribes were consulted as part of the California Environmental Quality Act (CEQA) Mitigated Negative Declaration process. Formal tribal consultation began on October 26, 2021, with letters being sent to the San Luis Rey Band of Mission Indians, the Rincon Band of Luiseño Indians, Mesa Grande Band of Diegueno Mission Indians, and the Torres Martinez Desert Cahuilla Indians. The results of that consultation are reflected in the Mitigated Negative Declaration specifically MM CUL-1 through MM CUL-16.

All data considered, the results from the SCIC record searches, NAHC Sacred Lands File, tribal consultation, and the archaeological field survey indicate past human activities dating to the Prehistoric periods of Southern California took place within the Project site, from the extraction, processing, and subsequent use of raw materials to long-term occupation and sense of established community. Therefore, the Project could significantly impact archaeological resources pursuant to Section 15064.5 of the State CEQA Guidelines. With implementation of Mitigation Measures CUL-1 through CUL-16, which require archaeological and tribal monitoring, and specify the communication protocols and the steps to follow in case an archaeological or tribal cultural resource are discovered during grading, and Mitigation Measure BIO-3 requiring the temporary fencing/delineation of the Project's temporary impact areas, as well as compliance with the Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines (Carlsbad 2017a) the project would result in less than significant impacts related to archaeological resources.

Attached for your review is the Mitigated Negative Declaration, prepared by Psomas for the City of Carlsbad including Appendix D "Phase I Archaeological and Paleontological Resource Inventory," Tribal consultation letters and correspondence, Carlsbad Tribal, Cultural, and Paleontological Guidelines, and signed CEQA compliance certification, supporting our findings. This documentation satisfies requirements set forth at §800.11(d).

In accordance with §800.4(d)(1)(i), your office has 30 days to object to this finding. Please respond within this timeframe, otherwise we will assume that you concur with our finding. If you concur, please sign on the line below and return a copy of this letter by email or mail to Nicole Piano-Jones, Senior Program Manager at 1200 Carlsbad Village Drive, Carlsbad, CA 92008.

If you have questions regarding this finding, please direct them to Nicole Piano-Jones, Senior Program Manager for the City of Carlsbad at Nicole.PianoJones@CarlsbadCa.Gov or (442) 391-2191. Thank you for your attention to this matter.

Kind Regards,

Nicole Piano-Jones

NICOLE PIANO-JONES, Senior Program Manager

Attachments:

- Mitigated Negative Declaration, prepared by Psomas, March 2022
  - Appendix D - Phase I Archaeological and Paleontological Resource Inventory
- Tribal Consultation Letters and Correspondence
- Signed CEQA Compliance Certification
- Carlsbad Tribal, Cultural and Paleontological Resource Guidelines

Concurrence:

_____

State Historic Preservation Officer Date

Phase I Archaeological and Paleontological Resources Inventory

Veterans Memorial Park Project, City of Carlsbad, San Diego County, California

Prepared for

City of Carlsbad
Parks & Recreation Department
799 Pine Avenue, Suite 200
Carlsbad, California 92008-2428
Contact: Barbara Kennedy

Prepared by

Psomas
225 South Lake Avenue, Suite 1000
Pasadena, California 91101
626.204.6520

August 2021

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NATIONAL ARCHAEOLOGICAL DATABASE (NADB)

INFORMATION SHEET

Phase I Archaeological and Paleontological Resources Inventory for the Veterans Memorial Park Project,

San Diego County, California

BY

Charles W. Cisneros, M.S., RPA

August 2021

Submitted by:

Charles Cisneros, M.S., RPA
Psomas
225 South Lake Avenue, Suite 1000
Pasadena, California 91101
626.204.6520

Submitted to:

City of Carlsbad
Parks & Recreation Department
799 Pine Avenue, Suite 200
Carlsbad, California 92008-2428
Contact: Barbara Kennedy

Prepared for: CEQA Documentation
USGS Geologic San Luis Rey 7.5-Minute Quadrangles

Psomas Project Number: 1RJM010100
Key Words: Archaeological Survey, Prehistoric Archaeology, Luiseno, San Diego County

EXECUTIVE/MANAGEMENT SUMMARY

PURPOSE AND SCOPE

The purpose of this Phase I Archaeological and Paleontological Resource Inventory report is to determine the potential for impacts to archaeological and paleontological resources within the proposed Veterans Memorial Park Project (hereinafter referred to as the "Project"), located in in the city of Carlsbad, San Diego County, California.

Psomas' study consisted of an South Coastal Information Center (SCIC) records and literature search, a Sacred Lands File (SLF) search from the Native American Heritage Commission (NAHC), a San Diego Natural History Museum (SDNHM) paleontological records search, and an archaeological and paleontological field survey of the proposed Project site. This report documents the results of this study.

DATES OF INVESTIGATION

Psomas requested the cultural resources literature and records search for the Project from the SCIC on April 16, 2019. The SCIC completed its search on April 22, 2019. On April 16, 2019, Psomas requested that the NAHC conduct a search of its Sacred Lands File to determine if cultural resources important to Native Americans have been recorded within the Project site or in the immediate vicinity of the Project site. The NAHC completed its search on May 2, 2019. Additionally, Psomas requested a paleontological resource record search from the SDNHM on April 16, 2019. The SDNHM completed its search on April 16, 2019.

A pedestrian survey of the Project site was conducted on April 26, 2019. This study was completed in August 2021 and is based on the findings from the records and literature searches, Assembly Bill 52 (AB 52) consultation, and the field survey of the proposed Project site.

FINDINGS OF THE INVESTIGATION

Psomas conducted archaeological and paleontological resources field investigations within the Project site on April 26, 2019. The main goal of the investigations was to gather and analyze information needed to determine if the Project would have a significant impact on properties eligible for the CRHR and to provide mitigation measures for those resources. The results of the 2019 SCIC archaeological records search identified 69 cultural resources within the 1-mile search radius of the Project site. Sixty-four of the 69 resources recorded within the 1-mile search radius are of prehistoric context, consisting of shell middens, habitation debris (e.g., pottery and dark midden soils), lithic scatters, and a milling feature. Three resources consist of historic-era resources, including an industrial building, single-family residence, and a commercial structure. The remaining two resources are unknown prehistoric resources with no associated site records (CA-SDI-8695 and P-37-014379).

Two of the sixty-nine cultural resources are located within the Project site. These include CA-SDI-8303, identified as the remnants of prehistoric habitation debris and P-37-016262, an isolated prehistoric lithic tool. Furthermore, the NAHC Sacred Lands File search was positive for sacred sites. Consultation between the City and tribal representatives from the Rincon Tribe and the San Luis Rey Band of Mission Indians also identified the area as extremely sensitive for cultural resources important to California tribes.

The SDNHM identified 41 fossil localities within a 1-mile radius surrounding the Project site. These localities are within the Members B and C of the Santiago Formation that underlies the Project site and much of the surrounding area. None of the 41 fossil localities identified from the SDNHM are located within the Project site.

The 2019 field survey (archaeological and paleontological) updated the archaeological resource CA-SDI-8303 located within the Project site. The updated portion of the archaeological site is in the lower southeast region of the Project site and is due north of Faraday Avenue. As of 2019, the surface of the site exhibits the characteristics of a large lithic scatter; however, the site was originally recorded in 1979 as a long-term habitation site. Since its initial recordation, there have been several updates to CA-SDI-8303, with the most recent update in 2007. Multiple updates to the site have confirmed that archaeological site CA-SDI-8303 is a habitation site dating back to the Late Prehistoric Period. Archaeological resources identified from the 2019 study include debitage (stone tool debris), two mano fragments (groundstone), a core, and a possible hammerstone. However, it should also be noted that during consultation between the City and the San Luis Rey Band of Mission Indians, tribal representatives shared information that identified an archaeological site near Faraday Avenue and extending into the Project site. Therefore, there is a possibility that this updated portion of CA-SDI-8303 is a new archaeological resource currently not on file with the SCIC.

Moreover, the previously recorded prehistoric isolate, P-37-016262, was collected in 1998 by Gallegos and Associates.

No additional archaeological resources were observed as part of the 2019 field study. As well, no paleontological resources were identified during the 2019 field survey.

All data considered, the results from the SCIC record searches, NAHC Sacred Lands File, AB 52 tribal consultation, and the archaeological field survey, indicate past human activities dating to both the Prehistoric periods of Southern California took place within the Project site, from the extraction, processing, and subsequent use of raw materials, to long-term occupation and sense of established community. Therefore, the Project could significantly impact archaeological resources pursuant to Section 15064.5 of the State CEQA Guidelines. With implementation of **MMs CUL-1** through **CUL-14** (see Section 7.0 below) requiring archaeological and tribal monitoring, and specifying communication protocols and the steps to follow in case an archaeological or tribal cultural resource is discovered during grading and adherence to **RR CUL-1**, as well as compliance with the *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines* (Carlsbad 2017), the Project would result in less than significant impacts related to archaeological resources.

Additionally, although no paleontological resources were identified during the 2019 field survey conducted for the Project, the Project site is considered sensitive for previously unrecorded paleontological resources and the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature represents a significant impact. Implementation of **MM GEO-2** (see Section 7.0 below) requiring paleontological monitoring of ground disturbance activities during Project construction as well as recovery and curation of fossils inadvertently encountered would be reduce impacts to a less than significant level.

DISPOSITION OF DATA

This report will be filed with the Psomas, SCIC, and the SDNHM. All field notes and other documentation related to the report are on file at Psomas.

1.0 INTRODUCTION

1.1 PROJECT LOCATION

The proposed Project site is located within the City of Carlsbad, San Diego County, California (Exhibit 1 and Exhibit 2). The site encompasses approximately 93.62 acres along the coastal foothills of the San Marcos Mountains and, specifically, includes portions of Section 15 and Section 16, T 12S/R 04W, as depicted on the San Luis Rey, CA 7.5-minute series United States Geological Survey (USGS) topographic maps (2014). Project site elevation ranges from approximately 16 to 326 meters (52 to 326 feet) above mean sea level (msl). The archaeological and paleontological study for the Project focused on approximately 50.25 acres of the Project site that are considered developable and outside of the City's Habitat Management Plan (HMP) hardline preserve.

1.2 PROJECT DESCRIPTION

The Project is based on the Veteran's Memorial Park Master Plan as approved 'in concept' by the City Council. The master plan is a planning document, and as such is conceptual in nature. The master plan was developed by the City to show the general park design as well as uses that would be included in the ultimate development of the Project.

The park would be physically separated into three distinct areas, the northern and southern portions of the Park, as well as a transitionary area of vista terraces that would connect the northern and southern portions of the park.

Overall, the Project's recreational use areas would include playgrounds, a bike park, formal picnic areas, outdoor recreation areas, an outdoor education area, open turf, and multi-use trails.

1.3 PROJECT PERSONNEL

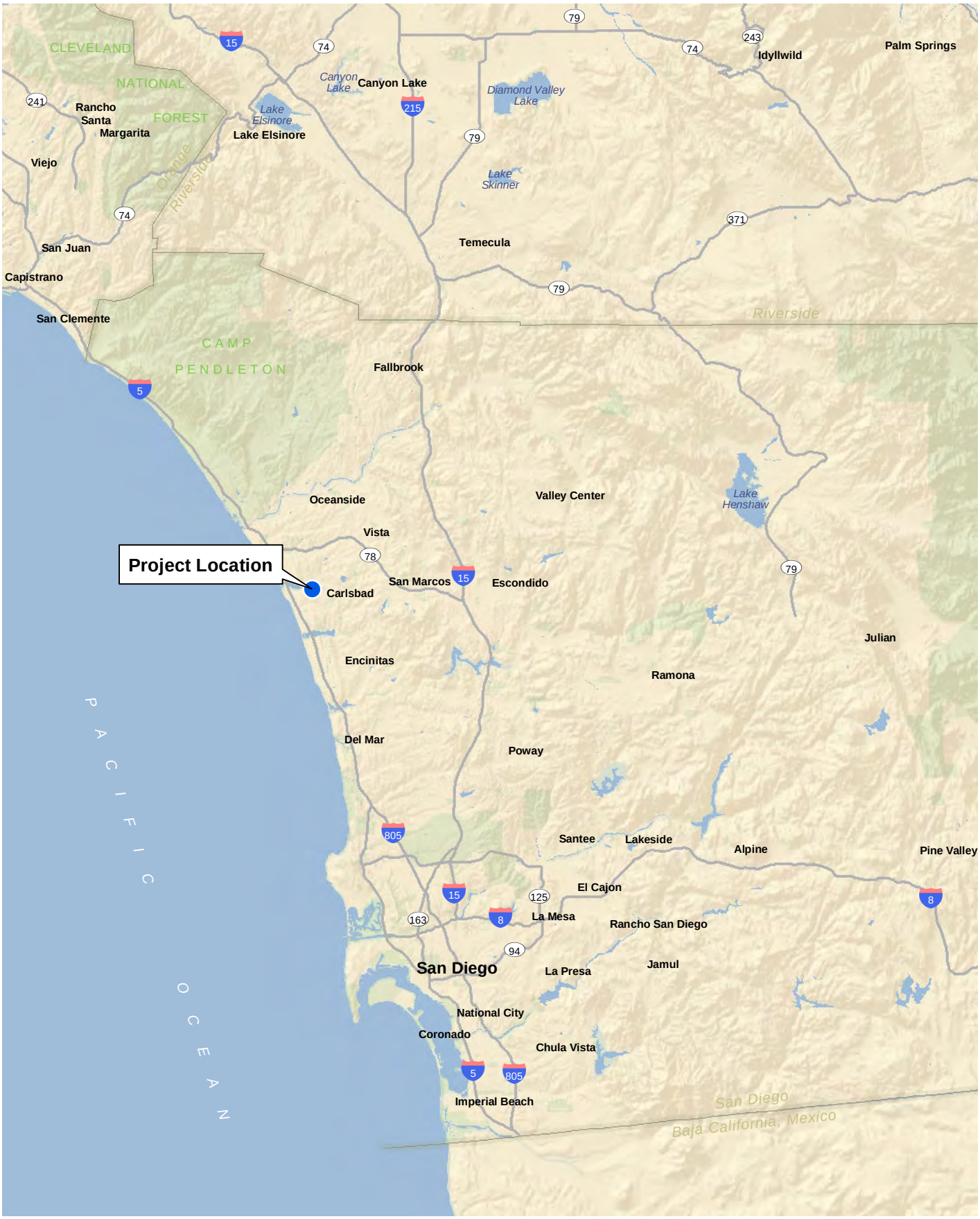
The staff members for the proposed Project were selected based on their familiarity with the site's geographic location and understanding of the archaeology and paleontology discipline. The team includes experts with extensive experience in California archaeology and prehistory, paleontology, cultural resources management, project administration, and other appropriate skills including spatial analysis. Key personnel are Registered Professional Archaeologists (RPA) who meet or exceed the Secretary of the Interior's Professional Qualification Standards (NPS 1994) for archaeology and the Society for Vertebrate Paleontology (SVP). Project roles and responsibilities are summarized below.

1.3.1 Charles Cisneros, M.S., RPA

Charles Cisneros is a Registered Professional Archaeologist and served as the Project's Principal Investigator. Mr. Cisneros supervised all aspects of the archaeological studies for this Project, including the field survey and the preparation of this report.

1.3.2 Kassie Sugimoto, M.A.

Kassie Sugimoto conducted literature and records searches with the California Historical Resources Information Center (CHRIS). Ms. Sugimoto also conducted the archaeological field survey.



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Regional Location

Exhibit 1

Veterans Memorial Park

N
W
E
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10 5 0 10

Miles

PSOMAS

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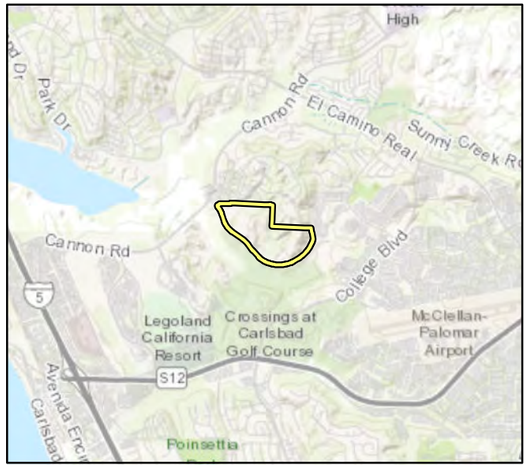

Project Boundary

N
W E
S

300 150 0 300
Feet

Aerial Source: Esri, Maxar 2020

Project Location

Exhibit 2

Veterans Memorial Park

PSOMAS

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1.3.3 Melissa Macias, M.S.

Melissa Macias's project role was that of Field Paleontologist and researcher. Ms. Macias also conducted the paleontological field survey.

2.0 REGULATORY SETTING

2.1 CULTURAL RESOURCES

Cultural resource laws, regulations, and guidelines set up the processes for defining what is or is not a significant cultural resource and include various agency procedures for managing these archaeological and historical resources and assessing the information from the cultural remains to determine their significance. Most importantly is whether these resources are eligible for inclusion in a national or state register (i.e., the National Register of Historic Places [NRHP] and CRHR). As defined by archaeologists Thomas Neumann and Robert Sanford (2001: 27), the laws and regulations serve to do the following:

- Set forth the criteria for assessing the relative importance of cultural remains;
- Outline the procedures for reviewing assessments;
- Delineate the responsible parties involved in making such assessments;
- Identify and then define the extent of jurisdiction and responsibility of each party in the evaluation process;
- Set forth the criteria for making a determination of significance, as well as indicating which party can or cannot make such determinations;
- Set forth the criteria for the archaeological and historic preservation work performed; and
- Set forth the criteria regarding who can perform the archaeological and historic preservation work.

A summary of State laws, regulations, and standards that govern cultural resource management within the Project's alignment is provided below.

2.1.1 State Regulatory Setting

California Register of Historical Resources

The California Environmental Quality Act (CEQA) requires a lead agency to determine whether a project would have a significant effect on one or more historical resources. According to Section 15064.5(a) of the State CEQA Guidelines, a "historical resource" is defined as a resource listed in or determined to be eligible for listing in the CRHR (*California Public Resources Code* [PRC] Section 21084.1); a resource included in a local register of historical resources (*California Code of Regulations* [CCR], Title 14, Section 15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR 15064.5[a][3]).

Section 5024.1 of the PRC, Section 15064.5 of the State CEQA Guidelines (CCR, Title 14, Chapter 3, Sections 15000–15387), and Sections 21083.2 and 21084.1 of the CEQA (PRC, Sections 21000–21189) were used as the basic guidelines for the cultural resources study. PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the CRHR is to maintain listings of the State's historical resources

and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR, which were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP (per the criteria listed at 36 *Code of Federal Regulations* [CFR] 60.4), are stated below.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:

(1) Are associated with events that have made a significant contribution to the broad patterns of our history; or

(2) Are associated with the lives of persons significant in our past; or

(3) Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(4) Have yielded, or may be likely to yield, information important in prehistory or history.

According to Section 15064.5(a)(3) (A–D) of the State CEQA Guidelines, a resource is considered historically significant if it meets the criteria for listing in the NRHP, as stated above, in addition to the CRHR. Impacts that affect those characteristics of the resource, that qualify it for the NRHP or that would adversely alter the significance of a resource listed in or eligible for listing in the CRHR, are considered to have a significant effect on the environment. Impacts to cultural resources from the proposed Project are thus considered significant if the Project: (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource that contributes to its significance; or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

The purpose of a cultural resources' investigation is to evaluate whether any cultural resources remain exposed on the surface of a project site or can reasonably be expected to exist in the subsurface. If resources are discovered, management recommendations would be required for evaluation of the resources for CRHR eligibility.

Assembly Bill 52

Assembly Bill (AB) 52 (Chapter 532, Statutes of 2014), which became effective on July 1, 2015, requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project, if they have requested such notice in writing. Once Native American tribes receive a project notification, they have 30 days to respond and identify if they wish to initiate consultation regarding the project, including subjects such as mitigation for any potential project impacts to tribal cultural resources. A tribal cultural resource is defined as either a site, feature, place, or cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is eligible for the CRHR or a local historic register. If a tribe requests consultation and the lead agency and the tribe ultimately agree on mitigation to address any potentially significant impacts to tribal cultural resources, the mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document.

2.1.2 Human Remains

Section 7050.5 of the *California Health and Safety Code* provides for the disposition of accidentally discovered human remains. Section 7050.5 states that, if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains would occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

Section 5097.98 of the PRC states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the NAHC within 24 hours. The NAHC, in turn, must identify the person or persons it believes to be the most likely descendant of the deceased Native American. The descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

2.2 PALEONTOLOGICAL RESOURCES

Paleontological resources are afforded protection by environmental legislation set forth under CEQA. Appendix G of the CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, indicating that a project will have a significant impact on paleontological resources if it will disturb or destroy a unique paleontological resource or site or unique geological feature.

Under Guidelines for the Implementation of CEQA, as amended March 29, 1999 (Title 14, Division 6, Chapter 3, California Code of Regulations: 15000 et seq.), procedures define types of activities, persons, and public agencies required to comply with CEQA and include as one of the questions to be answered in the Environmental Checklist: “Will the proposed project disturb paleontological resources?” (Appendix G, Section VII, Part f)

The California Public Resources Code Section 5097.5 states:

a) “No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

b) As used in this section, “public lands” means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.”

3.0 SETTING

3.1 CONTEMPORARY SETTING

As discussed above in Section 1, the Project site encompasses approximately 92 acres of disturbed and urban/developed land along the coastal foothills (Figure 1) of the San Marcos Mountains. Vegetation identified on the Project site include non-native grassland, Diego coastal sage scrub, coastal sage scrub-chaparral scrub, southern maritime chaparral, oak woodland, Eucalyptus woodland, and riparian scrub.

FIGURE 1: COASTAL FOOTHILLS

3.2 GEOLOGIC AND PALEONTOLOGICAL SETTING

The sediments of the City of Carlsbad contain a geological sequence of marine and non-marine sedimentary rocks that record portions of 140 million years of the earth's history (Figure 2). The primary geologic formations present are marine and non-marine Pleistocene and Holocene sediments, the Santiago Formation, Point Loma Formation, Lusardi Formation, and the Delmar Formation. Other geologic units present in the area consist of the Torrey Sandstone, alluvial flood-plain deposits, paralic deposits which consist of both marine and continental sediments, marine beach deposits, paralic estuarine deposits, Tonalite, Dacite stock, Leucogranodiorite of Lake Hodges, and some metasedimentary and metavolcanic rocks.

The area contains abundant alluvial and flood-plain deposits from the early Pleistocene and Holocene (about 2 million years ago [Mya] to present). The City of Carlsbad also contains many paralic deposits from the Pleistocene (approximately 2 Mya to 10,000 years ago). These paralic deposits are deposits that contain intertwined marine or continental sediments. Based on grain size and depositional history, most of these units have low to moderate fossil potential and should be surveyed to determine fossil potential in individual locations.

The Santiago Formation (49-45 Mya) and the Delmar Formation (49-47 Mya) are part of the La Jolla Group and are primarily middle Eocene (49-38 Mya) sandstones and siltstones. The Santiago Formation contains lenses of fossiliferous claystone and siltstone. The accompanying Delmar Formation is a sandy claystone interbedded with sandstone. This formation is not well known for producing fossils but has the potential to yield specimens. Before the Eocene, this area was a shallow sea (approximately 74 Mya). This sea deposited the sands and silts which comprise the major formations from this time.

The Point Loma Formation (76-72 Mya) is a sandstone and siltstone unit with significant fossil potential. This Upper Cretaceous unit is known to contain abundant calcareous nannoplankton. The Lusardi Formation (90-75 Mya), also Upper Cretaceous in age, is primarily a cobble and boulder conglomerate which is unlikely to produce any fossil material but does contain lenses of medium grained sandstone which have the potential to yield fossil material.

There are also zones of metasedimentary and metavolcanic deposits which have low to marginal potential to produce any significant fossil discoveries.

3.3 REGIONAL PREHISTORIC ARCHAEOLOGY AND NATIVE AMERICAN HISTORY

The following archaeological and Native American History setting was taken from the *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines* (Carlsbad 2017).

Most archaeologists contend that approximately 10,000 years ago at the beginning of the Holocene, warming temperatures and the extinction of the megafauna resulted in changing subsistence strategies with an emphasis on hunting smaller game and increasing reliance on plant gathering. The San Dieguito Complex was defined based on material found at the Harris site (CA-SDI-149) on the San Dieguito River near Lake Hodges in San Diego County (Warren 1968). San Dieguito artifacts include large leaf-shaped points; leaf-shaped knives; large ovoid, domed, and rectangular end scrapers and side scrapers; engraving tools; and crescentics (Koerper, Langenwalter, and Schroth 1991). The San Dieguito Complex at the Harris site dates to 9,000 to 7,500 before present (B.P.) (Gallegos 1991). However, sites from this time period in coastal San Diego County have yielded artifacts and subsistence remains characteristic of the succeeding Encinitas Tradition, including manos, metates, core-cobble tools, and marine shell (Gallegos 1991; Koerper, Langenwalter, and Schroth 1991).

The Encinitas Tradition (Warren 1968) and the Milling Stone Period (Wallace 1955) refer to a long period of time during which small mobile bands of people foraged for a wide variety of resources including hard seeds, berries, and roots/tubers (yucca and agave in inland areas), rabbits and other small animals, and shellfish and fish in coastal areas.

The La Jolla Pattern of the Encinitas Tradition was found along the San Diego County coast beginning about 8,500 B.P. Phases within the La Jolla Pattern consist of La Jolla I (8,500 B.P. to 5,000 B.P.), La Jolla II (5,000 to 4,000 B.P.), and La Jolla III (4,000 B.P. to 1,300 B.P.) (Sutton and Gardner 2010). Most La Jolla Complex sites are located around the coastal lagoons, which began filling with sea water at the beginning of this period because of sea level rise as the ice caps melted at the end of the last ice age. Shellfish from these lagoons were an important part of the diet and most La Jolla sites are classified as shell middens. During La Jolla I both rocky shores shellfish, such as Mytilus sp. (mussels), and bay/estuary shellfish, such as Argopecten sp. (scallops), Chione sp. (cockles), and Ostrea lurida (oyster) are found in La Jollan sites. Later in time (after 3,000 B.P.) the rocky shores species are much reduced in quantity and almost disappear from the middens. This has been attributed to increased sediment deposition around the mouths of the lagoons along the northern and central San Diego coast, which covered the rocky habitats. Fewer sites were occupied in these areas during La Jolla III. However, the larger

bays to the south (Mission Bay and San Diego Bay) never silted in and there are numerous La Jolla III sites in this area (Masters and Gallegos 1997).

The Encinitas Tradition in inland San Diego County is known as the Pauma Pattern and was originally defined as the Pauma Complex (True 1958, 1980). The Pauma Pattern is divided into the Pauma I Phase (7,500-3,000 B.P.) and the Pauma II Phase (3,000-1,000 B.P.) (Sutton and Gardner 2010). Pauma sites have numerous manos and metates and lack the marine subsistence remains seen in La Jolla sites. Other Pauma Complex artifacts include core and cobble tools, scraper planes, and unifacial scrapers.

In most Pauma Pattern sites, the mano-metate tool kit predominates, which suggests that collecting and processing hard seeds was emphasized. Pauma sites are located on older high elevation alluvial terraces in valleys and canyons. Some Pauma sites may be buried in shallow alluvium. The inland Pauma Complex and the coastal La Jolla Complex may be different seasonal manifestations of the same people with the La Jolla Pattern emphasizing marine resources (shellfish and fish) and the Pauma Pattern emphasizing hard seeds. There are more planing-scraping tools in the La Jolla Complex and more manos and metates in the Pauma Complex (Waugh 1986:55-56).

Following the Pauma Complex, Waugh (1986:310) has defined a Transition Phase from about 2,000 B.P. to 1,000 B.P. in inland northern San Diego County. During this phase people lived in small groups which occupied seasonal camps on knolls and low hills along the San Luis Rey River and the Santa Margarita River and its major tributaries. These groups used the river as corridors for travel between the coastal mesas and interior valleys (Temecula Valley on the upper Santa Margarita River and San Jose Valley on the upper San Luis Rey River) where grass seeds and sage seeds were abundant. Seasonal residential bases were probably established in these areas. While traveling along the river corridors, camps were established in areas where chaparral was producing large amounts of seeds. The knoll locations along the rivers may have been selected in order to see game and members of other groups approaching. The camps had cached metates indicating the camps were-reused seasonally by the same groups.

Artifacts found as a result of excavation at CA-RIV-3063, a Transition Phase site on a knoll overlooking the Santa Margarita River in Temecula Canyon, include 5 domed scrapers, 5 cobble tools, 3 cores, 2 biface fragments, 9 unifacially modified flakes, 18 manos, and 4 metates (slab and flat block). Obsidian from both the Coso and Obsidian Butte sources was present (Waugh 1986:233-241). Transition Phase artifacts include artifacts characteristic of the preceding Pauma Complex (core/cobble tools, hammerstones, cortex-based scrapers, domed scrapers), but they make up a smaller proportion of the total tool assemblage. Other artifacts found in Pauma Complex sites, such as scraper planes, hammer grinders, and discoidals, are absent in the Transition Phase. Small unifacial flake tools and new forms for metates (slab and flat block) first appear during the Transition Phase (Waugh 1986:312).

The period from 1,000 B.P. to 150 B.P. in northern San Diego County is divided into the San Luis Rey I Phase (1,000 to 500 B.P.) and the San Luis Rey II Phase (500 to 150 B.P.) (Sutton 2011). San Luis Rey I is characterized by Cottonwood Triangular projectile points, use of bedrock mortars, stone pendants, shell beads, quartz crystals, and bone tools. San Luis Rey II sees the addition of ceramics, including ceramic cremation urns, red pictographs on boulders in village sites, and steatite projectile straighteners. San Luis Rey II represents the archaeological manifestation of the antecedents of the historically known Luiseño.

A new settlement system developed in the upper San Luis Rey River drainage area (east of Pala) at the beginning of the San Luis Rey I phase (1,000 – 400 B.P.). The most important determinants of the new settlement system were access to water and access to acorns. Small permanent

residential sites were located in a linear arrangement along the lower reaches of each of the tributaries on the north side of the San Luis Rey River (Waugh 1986:305). Acorns from coast live oak were available nearby as well as plant foods from the riparian woodland and chaparral plant communities. Camps were also established on Agua Tibia Mountain / Palomar Mountain / Aguanga Mountain above 5,000 feet to collect and process acorns from black oaks and to hunt deer. These camps were occupied in the fall and were permanent in the sense that they were re-occupied every year (True and Waugh 1982). The watershed of each tributary along the north side of the river probably comprised the territory of a corporate kin group (Waugh 1986:314) or lineage. Settlements within the territory included the multiple residential sites along the drainage in the lowlands and the fall acorn camps in the uplands. An extended family within the lineage probably occupied each of the lowland residential sites (Waugh 1986:296), which together comprised the lineage settlement.

The artifacts and features at the lowland residential sites indicate that a full range of activities took place at each site. These activities included hunting, tool manufacturing and maintenance, food processing, and social interaction (Waugh 1986:313). One of these residential sites (CA-SDI-731) is on lower Frey Creek above its confluence with the San Luis Rey River. The site is within the chaparral plant community and near coast live oaks. There are 23 bedrock mortars, 8 bedrock metates, and 20 bedrock slicks or milling surfaces. Ground stone tools include manos, metates, bowl mortars, and pestles. Fire affected rock and ash features are present. There are both unifacial flaked stone tools, including domed scrapers, and bifacial flaked stone tools, including numerous Cottonwood Triangular projectile points which date to after 700 B.P. in this area (Waugh 1986:179, 262). All, except one, pieces of obsidian were from the Obsidian Butte source. Primary and secondary flakes among the debitage indicates that lithic reduction took place (Waugh 1986:303). A cache of burned Olivella shell beads was found adjoining an ash feature. There were 161 beads, 122 of which were Olivella cupped beads, which date to A.D. 1150 – 1792 in the Santa Barbara Channel area. Faunal specimens consisted mostly of rabbit and deer. There are more deer bones and small rodent bones in the upper levels of the site. A few pieces of marine shell were found (Waugh 1986:179, 222, 266).

The San Luis Rey I Complex indicates decreased residential mobility and increased intensification of land use, compared to the previous Transition Phase. Residential sites were located so as to control critical resources, especially water. All residential sites were in direct proximity to water. The transformation to settlement in stable permanent residential sites occurred within a relatively short span of time and coincided with the beginning of acorn use (Waugh 1986:313). Acorns required a much greater labor effort for processing (Basgall 1987), but were storable, allowing year-round settlement in permanent residential sites. This specialization and intensification of resource procurement is indicated by the bedrock mortars and pestles for acorn processing and the projectile points for deer hunting (Waugh 1986:314). At the beginning of San Luis Rey I, decreased mobility in order to control a water source resulted in multiple season residency, intensified use of restricted or smaller habitats or territories, and a specialized system of resource use (Waugh 1986:318-319).

There was a consolidation of settlement at the beginning of San Luis Rey II (400 – 130 B.P.) in the upper San Luis Rey River drainage area. The number of lowland residential sites decreased from 42 to 13. Each of the 13 residential sites consisted of a large village located at a reliable water source. Each of the 13 villages had a territory that consisted of the watershed of one of the 13 major drainages that descend from Agua Tibia Mountain – Palomar Mountain – Aguanga Mountain (True and Waugh 1982; True 1990). Multiple lineages now lived together in one village, probably resulting in the parties comprised of multiple lineages described ethnographically for the Luiseño. Each territory had one or more permanent camps in the uplands for gathering black oak acorns and deer hunting in the fall. San Luis Rey II villages are recognized by their large size as well as the presence of ceramics and red pictograph panels on boulder outcrops. The pictographs

were painted by girls during their puberty ceremonies and demonstrated clan (party) affiliation and ownership of their territory and its resources. The girls' puberty ceremonies symbolized established party and lineage rights to female labor and reproduction (Waugh 1986:316, 321).

One of the 13 San Luis Rey II villages in the upper San Luis Rey River drainage area, known as Molpa (CA-SDI-308), was investigated by archaeologists during the 1950s (True, Meighan, and Crew 1974). It is located on two low knolls overlooking open grassland. There is a reliable spring below the site. The midden area at Molpa occupies 40,000 square yards (about 33,400 square meters). There are two pictograph panels and one cupule rock. There are 289 bedrock mortars and 109 bedrock milling surfaces on 10 outcrops. Seven subsurface features were found consisting of rock clusters and ash. Flaked stone tools included 327 Cottonwood Triangular projectile points, 10 Desert Side-Notched projectile points, and 6 leaf-shaped projectile points. There were also 49 knives, 12 drills, 5 domed scrapers, 1 keeled scraper, 5 flake scrapers, 59 retouched flakes, 7 hammerstones, 2 hammer-grinders, and 1 chopper. Ground stone tools include 88 manos, 24 metates, 8 pestles, and 9 portable mortars. Other artifacts consisted of 59 bone tools fragments, most probably representing awls and needles, 1 steatite projectile shaft straightener, 1 quartz crystal, 1 tourmaline crystal, 1 conically drilled bone fragment which may have been a pendant, 16 Olivella shell beads, 3 abalone ornaments, and 2 glass beads. Ceramics consisted of 2,728 sherds, 8 fired clay pipes and 4 fired clay figurines. Most of the ceramics came from the upper 18 inches of the site, which represents the San Luis Rey II component.

There is less information about settlement along the lower San Luis Rey River west of Pala. However, a village site occupied during the San Luis Rey II phase, known as Tom-Kav (CA-SDI-682) was excavated during the 1950s and 1960s (True, Pankey, and Warren 1991). It is located near Bonsall on the San Luis Rey River where there is no adjacent upland area for collecting black oak acorns. There are 116 bedrock mortars, 51 bedrock metates, and 31 milling surfaces (slicks) on 7 groups of outcrops at Tom-Kav. There are small and large cupules on some of the outcrops and there is a pictograph panel on the ceiling of a rockshelter at the east end of the site. Flaked stone tools consist of 94 Cottonwood Triangular projectile points, large bifaces used as knives, drills, scrapers, and retouched flakes. Ground stone tools include 159 manos, 31 metates, 5 pestles, 5 portable mortars, and 29 smoothing stones. Bone artifacts consisted of 77 bone awls, 22 needles, and 57 worked bone fragments. Ceramics consisted of 1,720 Tizon Brown Ware sherds, 76 Colorado Buff Ware sherds, and 18 fired clay pipes. Animal bone was only classified as small and large mammal. A small amount of marine shell (Chione sp. and Argopecten sp.) was recovered.

There were no upland acorn collecting camps associated with Tom-Kav, but there are several small processing stations with bedrock milling features and camps nearby. Their function is unknown and they would seem to be superfluous since all the resources collected from Tom-Kav's territory could have been brought back to the village for processing. It is possible these sites date to San Luis Rey I because most have no pottery (True, Pankey, and Warren 1991:47). There is a different proportion of bedrock mortars to bedrock milling surfaces at Tom-Kav compared to Molpa. At Tom-Kav there are 116 mortars and 82 bedrock milling surfaces for a ratio of 1.4 to 1. At Molpa there are 289 mortars and 109 bedrock milling surfaces for a ratio of 2.65 to 1. This indicates that acorn use was less intensive at Tom-Kav and that hard seeds made up a greater proportion of the plant foods (True, Pankey, and Warren 1991:47).

Better documentation of a settlement system similar to that around Tom-Kav comes from an investigation of sites on Rancho Lilac on Keys Creek, a tributary which enters the San Luis Rey River from the south, west of Pala. The sites in the Rancho Lilac valley include a Late Prehistoric village, 5 temporary camps with bedrock milling features and subsurface deposits including tools, debitage and animal bone, 9 sites with bedrock milling features only, and 3 lithic scatters. CA-SDI-4909 has been identified as a Late Prehistoric village (Clevenger, Phillips, and Gallegos

1990). It has four loci with midden, each with associated bedrock milling features. The number and type of milling features at CA SDI-4909 is not provided. Test excavations recovered triangular projectile points, bifaces, utilized and retouched flakes, worked bone, ground stone tools, ceramics, animal bone, marine shell, a shell pendant, and glass beads. The ceramics and glass beads indicate a San Luis Rey II occupation at CA SDI-4909. The five temporary camps have bedrock milling features (59 mortars and 105 basins/slicks), flaked and ground stone tools, and animal bone. CA-SDI-4909 appears to be a San Luis Rey II village, based on the presence of ceramics. The investigators state that all the temporary camps are associated with the village and that all the sites in the valley comprise a settlement system, implying that were all occupied at the same time by one group. However, the temporary camps lack ceramics and, as with sites around Tom-Kav, there is no need for camps so close to the village. As with the Tom-Kav area, it is more likely that the camps date to the San Luis Rey I Phase.

The temporal and functional relationships of the sites cannot be determined because radiocarbon dates are not available. The ratio of mortars to milling surfaces (basins to slicks) is 0.56 mortars to 1 milling surface, indicating that in the Keys Creek area acorns were even less important than in the Tom Kav area. In the Keys Creek area, hard seeds from the chaparral community which surrounds the sites were the most important plant resource. Their use could have been intensified through managed burning of the chaparral to allow grasses to grow and produce new sprouts from the chaparral plants. This pattern of settlements associated with hard seed processing is probably more characteristic of the lower San Luis Rey River area and the area around Carlsbad. In these areas there was abundant coastal sage scrub and chaparral with numerous plants that produced hard seeds, while acorns were available only from coast live oak trees which had a limited distribution, mostly in canyons.

3.4 REGIONAL ETHNOGRAPHY

The City of Carlsbad is located in a culturally rich region, which has long since been home to, or within traditional use areas of, Native American cultures. The cultural history of Carlsbad is complex, and a representative summary of two main cultures, namely, the Luiseño and the Kumeyaay, is provided herein.

3.4.1 Luiseño

The Luiseño were one of the Takic-speaking groups in southern California prior to the arrival of Euro Americans. Luiseño occupied most of the area drained by the San Luis Rey and Santa Margarita Rivers.

The Luiseño lived in sedentary and autonomous village groups, each with specific subsistence territories encompassing hunting, collecting, and fishing areas. Villages were typically located in valley bottoms, along streams, or along coastal strands near mountain ranges where water was available and village defense was possible. Inland populations had access to fishing and gathering sites on the coast, which they used during the winter months (Bean and Shipek 1978).

Luiseño subsistence was based on the gathering of acorns, seeds, greens, bulbs, roots, berries, and other vegetal foods. This was supplemented by hunting mammals such as deer, antelope, rabbit, woodrat, ground squirrels, and mice, as well as birds including quail, doves, and ducks. Bands along the coast also exploited marine resources, such as sea mammals, fish, crustaceans, and mollusks. Inland, trout and other fish were taken from mountain streams (Bean and Shipek 1978).

Hunting was done both individually and by organized groups. Tool technology for food acquisition, storage, and preparation reflects the size and quantity of items procured. Small game was hunted

with the use of curved throwing sticks, nets, slings, or traps. Bows and projectiles were used for hunting larger game. Dugout canoes, basketry fish traps, and shell hooks were used for near-shore ocean fishing. Coiled and twined baskets were made for food gathering, preparation, storing, and serving. Other items used for food processing included large shallow trays for winnowing chaff from grain, ceramic and basketry storage containers, manos and metates for grinding seeds, and ceramic jars for cooking (Bean and Shipek 1978).

Luiseño social organization was based on patrilineal and patrilocal lineages. Exogamy rules required that a man could not marry a woman related to them within five generations. Women moved to their husband's village but kept their identity as a member of their natal lineage (Cultural Systems Research 2005:15).

The Luiseño corporate group was a "party" composed of one major lineage with a ceremonial leader (chief), a ceremonial bundle, and a ceremonial house or enclosure. Members of other lineages within the party could live in the same village as the major lineage or within other villages within the party territory. The ceremonial chief was also the hereditary chief of the party who organized religious, economic, and military activities (Goldberg I:47). An advisory council of ritual specialists and shamans was consulted for their specialized knowledge. Resources within the party territory were owned by the party. The party territory was marked by boundary markers and was defended against trespassers (Waugh 1986:74).

The most important ceremonies were boy and girl initiation ceremonies and mourning ceremonies for all who had died during the year. The corporate identity of the Luiseño party was reaffirmed through these ceremonies. Ceremonies were usually held during fall and winter when stored foods were available for exchange with other groups. During the girls' initiation ceremony, the girls made geometric red paintings on boulders with their hands. Luiseño girls painted the same geometric rectilinear red designs on rocks and their faces for four successive months. Thus, there are red pictographs associated with every Luiseño village site usually on a boulder or outcrop in or near the village (Cultural Systems Research 2005:55-56). Non-geometric designs were made by shamans in isolated rockshelters and on sheltered outcrops away from the village (Shepard 1996).

Ceremonies were held in and around an unroofed ceremonial enclosure surrounded by a brush fence. The enclosure could be round, elliptical, or rectangular. One example measured 38 by 58 feet. There was a ramada (a structure with a thatched roof supported by willow poles) in the center of the enclosure near fire pits. Spectators watched the dances from outside the fence. The ceremonial enclosure was located near the chief's house (Cultural Systems Research 2005:11-12).

Houses were circular with conical roofs and were made of a framework of logs covered by tules, sedge, or bark and a layer of earth. The floors of the houses were about two feet below the ground surface. Houses had a central fireplace, but most cooking was done outside (Cultural Systems Research 2005:9). Round earth-covered semi-subterranean sweathouses with an interior fire pit were primarily used by men and were located next to a stream or pond. Ramadas, flat-roofed open structures, provided shade for work areas (Cultural Systems Research 2005:12-13). Women's work areas often consisted of a circular windbreak made of projectile weed or tule. They had a hard-packed earth floor that was swept to remove debris. Earth ovens consisted of a pit with a ring of rocks. Granaries for storing acorns, seeds, and nuts were made of woven projectile weed or willow, sealed with mud. They were built on platforms, on top of houses, or on boulders to keep burrowing animals out. Caves and rockshelters in or near villages were used for activity areas, as caches, and for ceremonies. Rockshelters away from the village could be used as temporary camps. Other temporary camps had lean-tos made of willows with an adjacent fire pit (Cultural Systems Research 2005:12-14).

When the Spanish arrived in southern California in 1769, it is estimated that there were 50 Luiseño villages with a population of about 200 each, suggesting a total population of about 10,000 (White 1963:104). The first contact with Euro-Americans by Native Americans in southern California came as a result of the Spanish Portolá Expedition in 1769. Missions were established by Franciscan friars to convert, educate, and control the native population. Mission San Diego was established to convert the Native Americans that lived in the area, known as the Kumeyaay or Diegueño. Mission San Juan Capistrano was established in 1776 on San Juan Creek (in what is now southern Orange County) to convert the Acjachemen or Juaneño. Coastal Luiseño people were also taken to Mission San Juan Capistrano. Mission San Luis Rey was established in 1798 on the lower San Luis Rey River (in what is now Oceanside) to convert the Luiseño (Castillo 1978:100). Some missions later established outposts in inland areas. An asistencia (mission outpost) of Mission San Luis Rey, known as San Antonio de Pala, was built in Luiseño territory along the upper San Luis Rey River near Mount Palomar in 1810 (Pourade 1961).

Some coastal Luiseño people were converted and baptized by Franciscan friars and taken to the San Juan Capistrano Mission after it opened in 1776. However, the friars at San Luis Rey Mission (established 1798), allowed many native people to remain in their villages, especially along the upper San Luis Rey River, with a continuation of traditional economic organization and leadership (Bean and Shipek 1978:558). The friars travelled to the villages to say mass and teach farming skills and European crafts (Bean and Shipek 1978:558).

Hundreds of Luiseño who lived near San Luis Rey Mission were converted and brought to live at the mission. Other Luiseño converts worked on ranches established by the mission friars. The ranches were within 10 leagues of the mission and included ranches at Santa Margarita, Las Flores, San Mateo, Pala (around the asistencia), and Temecula. The friars appointed Luiseño alcaldes or overseers to manage the labor of the Luiseño on the ranches where the Luiseño grew wheat, barley, and corn and looked after large herds of cattle. Each ranch had houses, storehouses, and a chapel. The priests from the mission came to say Mass in the chapels on the ranches. The Luiseño on the ranches were able to maintain more of their culture and religious traditions than those at the mission. Other Luiseño remained in their villages on the upper San Luis Rey River and the headmen of these villages retained their authority. People who left the mission usually returned to these villages (Phillips 2014).

The Spanish saw the native people as lower class, conquered people who had obligations which included obedience, allegiance to the crown, and fidelity to God. The Luiseño saw these as foreign obligations that were forced on them. However, the friars saw not fulfilling these obligations as a crime punishable by forcible return to the mission, public whipping, or incarceration. The friars thought the Luiseño had a child-like culture and therefore the friars should serve in loco parentis and have rights of judgment and punishment (Carrico 2008).

After Mexico became independent of Spain in 1821, the Mexican government said that the Indians were citizens of Mexico and released some of them from the control of the missions. In 1834, Mexico secularized the missions. This meant that the friars no longer had political or legal jurisdiction over the converts. While some Luiseño returned to the inland villages, others remained at the mission and on the mission ranches. The Mexican governor of Alta California appointed Pío Pico as administrator of Mission San Luis Rey. Pico continued the system the friars had established for running a large agricultural enterprise using the labor of the Luiseño, but without the religious instruction that the friars had provided. Pico was assisted by three Mexicans who served as ranch managers. The Luiseño carried out agricultural labor, including plowing, seeding, and harvesting. Craftsmen included shoemakers, blacksmiths, carpenters, soap makers, and weavers. In 1840 the mission and its ranches had 25,000 sheep and 3,000 cattle. Pico served as mission administrator from 1835 to 1840 (Phillips 2014).

Under the secularization law Indian pueblos were supposed to be created. The only Indian pueblo in Luiseño territory was Las Flores on the coast north of the Santa Margarita River which was established on one of the former mission ranches. In 1836 there were 196 Luiseño at Las Flores and some had individual plots of farmland. Farm animals were given to the people of Las Flores by the Mexican government in 1839 (Phillips 2014).

The mission administrators exploited native labor to enrich themselves. The Luiseño were not paid and were treated like serfs who were given only food. At the mission, some lived in the mission buildings. Under the Mexican system the Luiseño were free to leave the mission and many returned to the inland villages. Others went to Los Angeles where they worked as part time laborers or worked on ranches that had been given as land grants by the Mexican governor to Mexican citizens. One of the land grants in Luiseño territory included Rancho Santa Margarita y Las Flores which included the former mission ranch of Santa Margarita and the pueblo of Las Flores which was also on a former mission ranch. Rancho Santa Margarita was granted to Pío and Andres Pico in 1841 (Aviña 1976), one year after Pío Pico resigned as administrator of Mission San Luis Rey. In 1844 Las Flores was added to the land grant (Aviña 1976). Pio Pico put a large cattle herd on his land grant, possibly taken from the mission herds. He also had a resident labor force from the pueblo of Las Flores, which was now on his land grant (Phillips 2014).

Other Mexican land grants in Luiseño territory included Temecula, Little Temecula, Pauba, Monserate, Guajome, Pauma, and Cuca. Temecula and Little Temecula were located on one of the former mission ranches. The Little Temecula land grant was given to Pablo Apis, a Luiseño who had been an alcalde at Mission San Luis Rey. Apis became the headman or captain of a village community of Luiseño on the little Temecula land grant (Phillips 2014).

During the Mexican-American War in 1846, Manuelito Cota, a mestizo who lived near Pala, led a group of Indians who killed 11 Mexicans on the Rancho Pauma land grant. In retaliation, 38 Luiseños and Cupeños were killed at Aguanga. The Cupeños were another Takic-speaking group who lived in San Jose Valley east of the upper end of San Luis Rey River (Phillips 2014).

After Mexico lost the Mexican-American War, the U.S. government took control of California. California was governed by the U.S. Army from 1847 to 1849 and became a state in 1850. The U.S. government considered the Luiseño to be Mission Indians who were not U.S. citizens, but were residents of San Diego County. As residents of San Diego County, they were required to pay taxes, which caused much resentment. The captains of the village communities of Temecula, Pala, Potrero, La Jolla, and Pauma had to sell some of their cattle in San Diego in order to pay the taxes (Phillips 2014).

George Barbour was appointed by Congress as Indian Commissioner in 1851 and was told to negotiate treaties with the southern California Indians. Many Luiseño communities sent representatives to meet with Barbour at Rancho del Chino east of Los Angeles. Barbour did not attend the meeting and returned to Washington, D.C. without accomplishing anything (Phillips 2014).

During the Gold Rush, hundreds of gold seekers used the southern route into California, crossing the Colorado River at Yuma where they came into conflict with the Quechan, a Yuman-speaking group. Two white men, Lincoln and Glanton, established a ferry at Yuma and the Quechan established a competing ferry. During a meeting between the two ferry-operating groups, Glanton clubbed the Quechan chief. In retaliation, the Quechan later killed Glanton and Lincoln. The Morehead Expedition was sent by the California state militia to punish the Quechan but was forced to retreat by the Quechan. However, later in 1850, Camp Yuma, whose name was later changed to Camp Independence, was established. By 1851 there were only 11 men in the camp. The Quechan attacked a group of sheepherders who were crossing the river and stole some of their

sheep. They then surrounded the military camp. Captain Davidson of the militia from San Diego went to Camp Independence and rescued the men there; they abandoned Camp Independence and returned to San Diego. The Quechan destroyed Camp Independence and the ferry in late 1851 (Phillips 2014).

Perhaps emboldened by the success of the Quechan, Antonio Garra, a Cupeño leader, organized a revolt against the Americans. The Mexican land grant known as Valle de San Jose came into the possession of an American named John Warner and the ranch became known as Warner's Ranch. Most of the Cupeño villages were on Warner's Ranch, including the village of Kupa. Garra's son and others killed four Americans in Kupa. Another group attacked Warner's house. Although Warner escaped, when he returned, he found that all his possessions in his house had been stolen and all his cattle were gone (Phillips 2014).

The Luiseño leaders supported the Americans and refused to join the revolt of the Cupeños. However, a volunteer force of the California militia was organized in San Diego to put down the "Indian revolt" and martial law was declared in San Diego County on November 26, 1851. Antonio Garra, Garra's son, and four other Indians thought to have killed the Americans at Kupa were captured by forces from the California militia and the U.S. Army, were tried by military tribunals, and executed in December 1851 and January 1852. Kupa and other Cupeño villages were burned. Captain Heintzelman of the U.S. Army returned to Yuma where the Quechan were robbing travelers and "subdued" the Quechan by the end of 1852 (Phillips 2014).

The revolt by Antonio Garra and some of the Cupeño people was a result of the requirement by the County officials that the Indians must pay taxes and the unfulfilled promise of treaty negotiations on the part of the federal government. Meanwhile, the Americans in San Diego believed that all of the southern California Indians were united against them and that they would be attacked by thousands of warriors (Phillips 2014).

Indian Commissioner Wozencraft, a representative of the federal government, negotiated a treaty with the Luiseño captains at Temecula on January 5, 1852. The purpose of the treaty, from the government's point of view, was to stop all acts of hostility against U.S. citizens and other Indians. The Indians had to accept the jurisdiction, authority, and protection of the U.S. Government and to be governed by the U.S. Indian Bureau. In return, the Luiseño, Cahuilla, and Serrano would be given a large vaguely defined reservation that extended from the San Gorgonio and San Jacinto Mountains on the north to a line running west from the San Jose Valley to Pauma on the south. From Pauma the western boundary would run north through Temecula. The eastern boundary was the desert. The Indians who signed the treaty were to be given flour, clothing, cloth, plows and other farm tools, along with horses and oxen. A similar treaty was negotiated with the Kumeyaay on January 6, 1852. The Kumeyaay were to be given a reservation that extended south from the Luiseño reservation through the eastern mountains to the Mexican border (Phillips 2014).

The California Legislature opposed ratification of the treaties by the U.S. Senate and the Senate rejected them. Instead, Congress appointed Edward S. Beale as Indian Agent for California. Beale gave Benjamin D. Wilson of Los Angeles a contract to prepare a report on Indian policy for southern California. Wilson recommended setting aside smaller reserves (reservations) where the Indians were currently living, at places including San Gorgonio, San Jacinto, Temecula, Agua Caliente (Kupa), and Tejon. He noted that some of these places had existing vineyards and orchards from mission times. There should be one town in each reserve and the government should provide cattle, clothing, and tools to promote farming. There should be no hereditary chiefs. The Indian agent assigned to the reserve would appoint leaders based on good behavior who would enforce compulsory labor and rationing of food from commonly held stores of the produce of the small self-supporting agricultural community. Congress authorized five reserves,

each with a military garrison, in California. One of these was Tejon (north of Los Angeles), established by Beale in 1853. The others were in northern California. Once again, the federal government failed to provide any land for the southern California Indians (Phillips 2014).

Cave Couts was appointed Indian subagent for the Luiseño in 1853 and John Warner was appointed subagent for the Cupeño and Kumeyaay. Couts came from a slave-holding family in Tennessee and came to California as an officer in the U.S. Army during the Mexican-American War. He served on the military tribunal in San Diego that sentenced Antonio Garra to be executed. Couts married the daughter of a wealthy Mexican rancho owner in 1851 and received the Rancho Guajome land grant, near Mission San Luis Rey, as a wedding present (San Diego History Center 2016). Couts' appointment as Indian subagent was based on the 1850 Act for the Government and Protection of Indians. Using his position as Indian subagent to enforce provisions of the Act, he instituted a feudal labor system that bound Luiseño to ranch owners who exploited their labor. One of the provisions of the Act allowed employers to take custody of Indian children until they reached majority age, providing them with free child labor. Couts procured Luiseño labor for the development of his Rancho Guajome and for neighboring ranches. When Indian laborers didn't work hard enough, Couts flogged them, which sometimes resulted in their deaths. Couts was indicted for the flogging death of a Luiseño captain named Urbano in 1855 (Hanks 2012).

Couts appointed Manuelito Cota, the mestizo who had killed the Mexicans at Rancho Pauma during the Mexican-American War, to be a paramount chief over the captains of the Luiseño villages on the upper San Luis Rey River. Cota had a ranch east of Pala. Because Cota was not part of any Luiseño lineage, the Luiseño captains did not want to accept his authority. Cota actually served as an Indian labor recruiter and contractor for his own and neighboring ranches (Hanks 2012).

Couts wrote in 1856 that the Luiseño were industrious agriculturalists, but that the Kumeyaay did not farm. According to Couts, they subsisted on acorns and stolen cattle (Phillips 2014).

When Cota retired in 1860 the Luiseño captains chose Francisco Majal to succeed him. Couts was opposed to Majal because Majal was unwilling to recognize Couts' authority over him. Couts denounced Majal as a drunkard and thief and was successful in getting the Office of Indian Affairs to re-appoint Manuelito Cota in 1865 (Hanks 2012).

In 1867 Indian Agent Stanley met with 20 Luiseño captains at Temecula. He gave them supplies and tools and asked them to establish and maintain farms with fruit trees and grape vines. He noted that the Indians were losing their land to white men who also sold them liquor in exchange for their labor and for access to their women. In 1868 Stanley recommended establishing a reservation at Pala. In 1869 Cota recommended San Pasqual as a reservation. In 1870 President Grant, by executive order, set aside land at Pala and San Pasqual for exclusive Indian use (Phillips 2014).

The Luiseño captains, who were not happy with Cota because he was trying to get them to move onto reservations, elected Manuel Olegario (also known as Olegario Calac) as paramount chief over 12 villages in 1870. Olegario was a member of an important Luiseño lineage, unlike Cota. However, Olegario was not recognized by the federal government because he had not been appointed by an Indian agent. Olegario and the Luiseño captains said they would not go to the reservations. The Luiseño feared that on the reservations they would become dangerously dependent on the federal government and would lose control over their affairs. Because the Luiseño refused to move onto the ill-defined reservations, President Grant in February 1871 rescinded his executive order creating the reservations (Phillips 2014). Rescinding the order reinforced the Luiseño's belief that on the reservations they would be landless indigents with no claims to the land they currently occupied (Hanks 2012).

Violence erupted between the Cota faction and Olegario's followers at Pala and Pauma in the summer of 1871. Cota's sister, Margarita, was taken by Olegario's supporters and hung by her wrists (Hanks 2012).

Olegario and Manuel Largo of the Mountain Cahuilla went to San Bernardino in August 1871 and convinced Justice Wagner to issue an arrest warrant for Cota. News that the leaders of the Luiseño and the Cahuilla had joined forces and were trying to overthrow the government-appointed Indian leaders led to fears of another Indian uprising, such as the one led by Antonio Garra in 1851 (Hanks 2012).

During a meeting with Indian Superintendent Whiting at Temecula in 1871, the Luiseño captains complained about Cota who they said had abandoned them, did not defend and protect them, and neglected their welfare. Whiting recognized the forced resignation of Cota. At this meeting Olegario said that he was the leader elected and chosen by the Luiseño and that the reservations were promoted by the ranch owners who wanted the land the Indians currently occupied. Whiting said that neither Cota nor Olegario could be chief and appointed Jose Antonio Sal, Cota's relative, as general chief who should appoint captains and alcaldes. Like Cota, Sal supported reservations. However, most Luiseño continued to support Olegario (Hanks 2012, Phillips 2014). In 1873 Olegario complained that whites were taking Indian lands and sent a petition to the General Land Office in Los Angeles (Phillips 2014).

In 1875, Indian agent Charles Wetmore proposed establishing trust lands for Indians which they could not sell or buy. He also recommended that the proposed trust lands be surveyed to establish their boundaries. Wetmore said that there should be a town on the trust lands where there would be a Catholic church with a priest to "help" the Indians. Olegario opposed the land surveys, saying that surveying would limit Indian lands to small patches and that whites would take the rest. Surveying, which had begun at Pauma, was stopped (Phillips 2014).

Olegario began to change his mind about reservations after all of the Luiseño people were evicted from Rancho Temecula by the San Diego County Sheriff in 1875 (Phillips 2014). The Luiseño people from Temecula were forced into a waterless canyon which later became the Pechanga Reservation (Hanks 2012). Encroachment on traditional Luiseño lands was also occurring around other Luiseño villages.

Olegario went to Washington D.C. in November of 1875 and met with Secretary of the Interior Chandler and President Grant. As a result of this face-to-face appeal, on December 26, 1875 President Grant created nine small reservations in San Diego County by executive order. The Pala Reservation, Potrero Reservation (later became the La Jolla Reservation), and the Rincon Reservation were in Luiseño territory. The Agua Caliente Reservation was created at Kupa for the Cupeño. The other reservations were in Kumeyaay territory (Hanks 2012, Phillips 2014).

In June 1877 Antonio Varela, who was leasing land at Rancho Cuca near the Potrero reservation, began grazing his cattle on land outside the rancho, threatening traditional Luiseño food sources. Olegario and his warriors blocked the access of Varela to the ranch in an effort to keep his cattle off of traditional Luiseño lands. Several Luiseño were arrested and brought before Justice of the Peace Cave Couts, who uncharacteristically decided he had no jurisdiction and freed the prisoners (Hanks 2012).

Olegario sought the removal of the owner of Rancho Cuca, Margaret Trujillo, and return of the rancho land to the Luiseño. Deputy Sherriff Ed Bushyhead was sent to Cuca to arrest Olegario. Olegario and his followers refused to recognize the authority of the arrest warrant and a standoff ensued. Bushyhead returned to San Diego without his prisoner. Olegario went to court and argued

that Cuca was traditional Luiseño land, owned and worked by his people "since time began." However, the judge made no ruling in the case (Hanks 2012).

Olegario fought for the sovereign rights of the Luiseño people using the white's own legal system. "Olegario Calac redefined the nature of resistance in southern California by his use of the courts as well as confrontation" (Hanks 2012:47). He led the Luiseño in their fight for self-determination and resistance of white domination. "Olegario kept his people together, maintained the tribal integrity of their reservations, and represented the whole of the Luiseño nation with dignity and wisdom" (Hanks 2012:47). Olegario died July 31, 1877. Many Luiseño believed Olegario had been poisoned, but a Medical Examiner's inquest by Justice Cave Couts found no foul play (Hanks 2012).

The reservation created by President Grant at Agua Caliente for the Cupeño was rescinded by President Hayes in 1880 at the request of former Governor Downey who was then the owner of Warner's Ranch and wanted all Indians removed from his property. In 1903, all Cupeño were removed to Pala (Phillips 2014).

In 1882, Indian Commissioner Hiram Price authorized Helen Hunt Jackson to investigate the conditions of the southern California Indians. Accompanied by Abbot Kinney, she visited the Cahuilla, Luiseño, and Kumeyaay settlements. In her report she recommended resurveying the reservation boundaries and issuing federal patents for them, removing white settlers, establishing schools, distributing farm equipment, and hiring a law firm to represent the Indians. As a result of her visit to Soboba, the Soboba reservation was established in 1883 (Phillips 2014). She wrote the novel Ramona (published 1884) based on her investigations.

The Act for the Relief of Mission Indians established trust-patent reservations in 1891 (Bean and Shipek 1978:558-559). The Act created the Pechanga Reservation near Temecula, the Pauma and Yuima Reservation, and the San Pasqual Reservation (not established until 1910) (CIAP 2004).

The Act also established the Bureau of Indian Affairs (BIA) to "manage" the Native Americans and help them "assimilate" into American society (Bean and Shipek 1978:558-559). The BIA established native governments on the reservations (subject to the approval of the BIA) and started boarding schools for native children so that they would "adapt" to American culture. The Perris Indian School opened as a manual training boarding school for Indians in 1892, but lack of water resulted in a move to the Sherman Indian Institute in Riverside in 1901. The purpose of the boarding schools was to remove Indian children from their native environment in order to ensure "the transculturation of American Indians" which included "imposed assimilation" to American culture "and the subsequent loss of a distinct Indian culture," according to Albert Smiley, an Indian commissioner for southern California (Hanks 2012:87).

Many Luiseño children were taken to the Perris Indian School and, later to the Sherman Indian Institute. Conditions were poor at the Perris Indian School, resulting in poor health of the children. This caused great distress among the parents at Temecula who also thought their children were not being fed properly. This may have contributed to the murder of Mrs. Platt, the teacher at the day school at the Pechanga Reservation in 1894. The schoolhouse was burned with Mrs. Platt in it, resulting in her death. Some of the Luiseño parents had asked her for money so they could go to investigate conditions at the Perris Indian School and see their children, but Mrs. Platt refused. At Sherman Institute, children were beaten when caught speaking their native language and many had to steal food from the kitchen to get enough to eat. Many escaped and went home, only to be sent back to the school (Hanks 2012).

Constance G. Dubois visited the southern California reservations and villages in 1900. She found that the Indians lived a miserable existence in terrible poverty. They had some legal rights on the reservations, but on private land were vulnerable to the white civil justice system (Phillips 2014).

Native Americans were finally granted U.S. citizenship when Congress passed the Indian Citizenship Act in 1924. It was thought that granting citizenship would help assimilate Native Americans into mainstream society. However, this did little to change the authority of the BIA and its agents on the reservations. Indian agent police brutally enforced Prohibition on the reservations during the 1920s (Hanks 2012).

The Mission Indian Federation was organized in 1920 to counter the control of the BIA and its agents. The Federation was made up of representatives from all the reservations in southern California but was led by Jonathan Tibbet of Riverside who could serve as an intermediary with white society. The Federation put its own police on the reservations in order to solve problems before the BIA agents could intervene. The Federation was also a lobbying organization and assisted in convincing Congress to pass the Indian Citizenship Act and other federal legislation affecting Native Americans (Hanks 2012).

3.4.2 Kumeyaay

The Kumeyaay (also known as Tipai and Ipai) were Yuman speakers (part of the Hokan language family) who occupied San Diego County. The Kumeyaay have been ancestrally located in the southern part of the City of Carlsbad, southeast into Imperial County and south of the United States into Baja California. From west to east, the Kumeyaay occupied the coast, coastal hills, mountains, and desert.

The primary source of Kumeyaay subsistence was vegetal food. Seasonal travel followed the ripening of plants from the lowlands to higher elevations of the mountain slopes. Acorns, grass and sage seeds, cactus fruits, wild plums, pinyon nuts, and agave stalks were the principal plant foods. Deer, rabbits, small rodents, and birds provided meat. Residential bases were selected for seasonal use and were occupied by exogamous, patrilineal clans or bands. Three or four clans might winter together and then disperse during the spring and summer (Luomala 1978).

The Kumeyaay were loosely organized into exogamous patrilineal groups termed sibs, clans, gens, and tribelets by ethnographers. The Kumeyaay term was cimul. The cimul used certain areas for hunting and gathering, but apparently did not control a bounded and defended territory, as did the Luiseño.

In addition, members of several different cimul usually lived in the same residential base, unlike the Luiseño where a single lineage, party, or clan controlled a village and its territory. Kumeyaay lived in residential bases during the winter and subsisted on stored resources. No permanent houses were built. Brush shelters were temporary and were not re-used the next year. Ceremonies, including rites of passage and ceremonies to insure an abundance of food, were held in the winter residential bases. The cimul leader directed the ceremonies and settled disputes (Christenson 1990:58, 62). One of the most important ceremonies was the mourning ceremony. Upon death, the Kumeyaay cremated the body of the deceased. Ashes were placed in a ceramic urn and buried or hidden in a cluster of rocks. The family customarily held a mourning ceremony one year after the death of a family member. (Luomala 1978).

The Kumeyaay were geographically and linguistically divided into western and eastern Kumeyaay. The western and eastern Kumeyaay spoke two different dialects (Christenson 1990:64). The western Kumeyaay lived along the coast and in the valleys along the drainages west of the mountains. The eastern Kumeyaay lived in the canyons and desert east of the

mountains. The western Kumeyaay spent the winter in residential bases in the lowland valleys and then broke into smaller cimul groups that moved gradually eastward toward the mountains, following ripening plants and occupying temporary residential sites along the way. Thus, each group occupied several different residential bases during the course of a year (Christenson 1990:292-293). The eastern Kumeyaay spent the winter in villages on the desert margin where water was available from springs at canyon mouths. They moved up the canyons toward the mountains during spring and summer. The eastern and western Kumeyaay met in the mountains in the fall where they gathered black oak acorns, traded, and held ceremonies (Christenson 1990:63).

It is estimated that the precontact Kumeyaay population was about 9,000 (Luomala 1978). Beginning in 1775, the semi-nomadic life of the Kumeyaay began to change as a result of contact with European Americans, particularly from the influence of the Spanish missions. Through successive Spanish, Mexican, and Anglo-American control, the Kumeyaay were forced to adopt a sedentary lifestyle and accept Christianity (Luomala 1978).

3.5 EURO-AMERICAN HISTORY

Euro-American colonization of California began with the Spanish Portolá land expedition. The expedition, led by Captain Gaspar de Portolá of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterrey Bay area in 1769. As a result of this expedition, Spanish missions to convert the native population, presidios (forts), and towns were established. The Franciscan missionary friars established 21 missions in Alta California (the area north of Baja California) beginning with Mission San Diego in 1769 and ending with the mission in Sonoma established in 1823. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. As previously mentioned, missions were established at San Diego in 1769, at San Juan Capistrano in 1776 and San Luis Rey Mission was established in 1798 on the lower San Luis Rey River (in what is now Oceanside) (Castillo 1978:100). Some missions later established outposts in inland areas.

The missions sustained themselves through cattle ranching and traded hides and tallow for supplies brought by ship. Large cattle ranches were established by Mission San Luis Rey at Temecula and San Jacinto (Gunther 1984). The Spanish also constructed presidios, or forts, at San Diego and Santa Barbara, and a pueblo, or town, was established at Los Angeles. The Spanish period in California began in 1769 with the Portolá expedition and ended in 1821 with Mexican independence.

After Mexico became independent from Spain in 1821, what is now California became the Mexican province of Alta California. The Mexican government closed the missions in the 1830s and former mission lands were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants or “ranchos” (Robinson 1948). During the Mexican period there were small towns at San Diego (near the presidio), San Juan Capistrano (around the mission), and Los Angeles. The rancho owners lived in one of the towns or in an adobe house on the rancho. The Mexican Period includes the years 1821 to 1848.

Most of what is now Carlsbad was the Mexican land grant known as Rancho Agua Hedionda, granted to Juan María Marrón by the Mexican governor of Alta California in 1842 (Aviña 1976:92). When originally granted, the rancho covered three square leagues. When surveyed by the U.S. Surveyor General’s Office, the area of the grant was 13,311 acres. Marron had been a ship captain and arrived in San Diego in the 1820s. He married the daughter of the Alcalde of San Diego and was a regidor (city councilman) in San Diego. Marrón raised cattle and horses on his

rancho. He supported the Americans during the Mexican War which caused trouble with his neighbors when they used his support for the Americans as a pretext to remove all the livestock from his rancho in 1846 (Anderson 2007).

The American period began when the Treaty of Guadalupe Hidalgo, which ended the Mexican War, was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the territory of California. Rapid population increase occasioned by the Gold Rush of 1849 allowed California to become a state in 1850. Most Mexican land grants were confirmed to the grantees by U.S. courts, but usually with more restricted boundaries which were surveyed by the U.S. Surveyor General's office. Land that was not part of a land grant was owned by the U.S. Government until it was acquired by individuals through purchase or homesteading. Floods and drought in the 1860s greatly reduced the cattle herds on the ranchos, making it difficult to pay the new American land taxes on the thousands of acres that comprised many of the ranchos. Many Mexican-American cattle ranchers borrowed money at usurious rates from newly arrived Anglo Americans. The resulting foreclosures and land sales transferred most of the land grants into the hands of Anglo-Americans (Cleland 1941:137-138).

Don Juan María Marrón died in 1853 at the age of 45, leaving most of Rancho Agua Hedionda to his widow and four children. His brother, Silvestre Marrón, received 360 acres. In 1860 the heirs took a loan of $6,000 from Francis Hinton with the rancho as collateral. Drought, which greatly reduced the Marron's cattle herd, left the Marrón family unable to repay the debt and Hinton foreclosed in 1865.

Hinton was born in New York and came to California as part of the Boundary Commission Guard during the Mexican War. He previously was a merchant in Yuma (Allen and Harmon n.d.). Hinton never married and lived at the rancho until his death in 1870. Robert Kelly, who had come to San Diego from Yuma with Hinton as a member of the Boundary Commission Guard, became a partner in the Jamacha Rancho near San Diego where he raised cattle. In 1860 Kelly became ranch foreman on Hinton's Rancho Jamul and later became a partner with Hinton in Rancho Agua Hedionda. Hinton had no children and, upon Hinton's death in 1870, Hinton's half interest in Rancho Agua Hedionda was bequeathed to Robert Kelly who now fully owned the Rancho (Allen and Harmon n.d.). When Robert Kelly died without heirs in 1890 the rancho passed to the nine children of his brother, Matthew Kelly, who had died in 1885. Matthew Kelly had come to California as part of the Gold Rush and then moved to the San Diego area to join his brother, Robert. The Kelly children divided the rancho equally among them and the new parcels were surveyed in 1895 (Allen and Harmon n.d.).

Matthew Kelly lived outside the rancho (just east of the southeastern rancho boundary) on land (in Section 19 of T3 W, R 12 S) that he purchased from the federal government in 1881 and 1884 (BLM 2016). Kelly's land was known as Rancho de los Kiotes. His heirs sold Rancho de los Kiotes to a San Francisco syndicate in 1922. They sold the land (840 acres) to actor Leo Carrillo in 1938. Carrillo remodeled the adobe house Kelly had built and lived there until his death in 1961 when the ranch passed to his adopted daughter, Mrs. Marie Antoinette Carrillo Delpy (Anderson 2007a). Leo Carrillo Ranch, located in Carlsbad, is now California Historical Landmark No. 1020 and is listed on the NRHP.

The original town of Carlsbad was located outside of Rancho Agua Hedionda on federal land along the coast south of Buena Vista Lagoon. The town began as a station (Frazier's Station) on the new California Southern Railroad which completed its line from National City (south of San Diego) to Colton in 1882. The railroad was later completed through San Bernardino to Barstow, where it connected with the transcontinental AT&SF (Santa Fe) Railroad in 1885. The railroad became part of the AT&SF Railway in 1906 (Robertson 1998).

John A. Frazier, a former ship captain, arrived in the area in 1883 and dug a well near the railroad to provide water for the steam locomotives when they stopped at what became known as Frazier's Station beginning in 1884. Frazier dug another well that produced mineral water. Frazier had the mineral water analyzed and the mineral content was found to be similar to the water of one of Europe's most popular health spas, Karlsbad, in Bohemia (now known as Karlovy Vary, Czech Republic) (Anderson 2007b, Gudde 1969:54). Frazier bought land from the federal government around Frazier's Station and along the coast (in Section 1 of T5 W, R 12 S) in 1886 and purchased additional land in 1892 (BLM 2016). Frazier and several businessmen from the eastern U.S. formed the Carlsbad Land and Mineral Water Company Frazier provided the land and the other partners in the company provided the capital. Frazier's Station was renamed Carlsbad when the company divided some of the land into town lots and filed a town plat with the County. The company began bottling the mineral water and sold it nationwide as (The American) Carlsbad Mineral Water. The Company built a large hotel and spa (the Carlsbad Hotel) near the mineral water well for those who wanted to take the waters in person (by drinking and bathing) (Carlsbad Spa 2016). Frazier sold lots around the hotel and those who bought the lots built businesses and residences that formed the beginning of the town of Carlsbad. In 1890 there were a telegraph office, Wells Fargo Express, a school, a Methodist and a Congregational church, a hotel, and another hotel under construction. The Carlsbad Hotel was destroyed by fire in 1896 (Allen and Harmon n.d.).

Several of the partners in the Carlsbad Land and Mineral Water Company, including Samuel C. Smith and Gerhard Schutte, moved to Carlsbad. Gerhard Schutte's home, built in the Queen Anne style, became one of the two Twin Inns. The Twin Inns was greatly expanded and redecorated with exotic foreign themes and later became a fried chicken restaurant. The Shipley family purchased the Smith home, as well as large tracts of land around Carlsbad (Allen and Harmon n.d.).

There was little further development in Carlsbad until 1914 when the South Coast Land Company bought up all the remaining lands of the Carlsbad Land and Mineral Water Company, as well as other adjoining properties. The new company drilled wells to provide water for farming. New settlers arrived and bought farm land, growing winter vegetables, grains, and poultry. During the 1920s Carlsbad became a major avocado production area. The Carlsbad Avocado Growers Club was formed in early 1923 with John Newberry as president. The peak years for avocado production were 1947 and 1948. Commercial flower and bulb production also began in the 1920s. In 1949, it was estimated that 90 per cent of the nation's freesia bulbs came from Carlsbad's annual production of nearly three million bulbs (Allen and Harmon n.d.). After a vote about whether to join Oceanside or incorporate, Carlsbad incorporated as a city in 1951 (Allen and Harmon n.d.).

In 1930, the Eastman Hotel Company acquired the mineral water well and built the California-Carlsbad Mineral Springs Hotel. The hotel had 130 rooms with a spa and clinic for taking mineral water baths. The hotel was purchased by the Lutheran Services of San Diego in 1956 and became a retirement home (Allen and Harmon n.d.). By the early 1950s, the mineral water well had been buried and forgotten. B. M. Christiansen rediscovered and reopened the well and made a Bohemian-themed well house to protect and commemorate the well (Allen and Harmon n.d.). In 1995, the mineral well was reopened as the Carlsbad Mineral Water Artesian Well by Ludvik and Veronica Grigoras from Karlovy Vary, Czech Republic. A new spa opened as the Carlsbad Mineral Water Spa and the water was sold as Carlsbad Alkaline Water (Carlsbad Spa 2016).

4.0 METHODS

4.1 CULTURAL RESOURCES

4.1.1 Cultural Resource Records Search and Literature Review

Psomas requested a literature and records search from the SCIC on April 16, 2019. The SCIC is a designated branch of the California Historical Resources Information Center (CHRIS) and houses records regarding archaeological and historic resources recorded in San Diego and Imperial Counties. The records search included a 1.6-kilometer (1-mile) search radius around the proposed Project alignment and consisted of a detailed examination of the USGS' 7.5-minute San Luis Rey Quadrangle. The purpose of the literature search was to identify prehistoric or historic archaeological sites or historic buildings and structures previously recorded within and around the Project alignment. The SCIC also reviewed the NRHP, the CRHR, local registers, and Archaeological Determinations of Eligibility. The records were reviewed to accomplish the following:

- Identify cultural resources (e.g. archaeological sites) in the Project site and surrounding areas;
- Identify and determine the adequacy of previous cultural resources studies in the Project site;
- Develop management recommendations for cultural resources within or adjacent to the Project site; and
- Assess what additional cultural resources studies would need to be undertaken for the proposed Project.

The SCIC completed its search on April 22, 2019. The results of the records searches are presented below in Subsection 5.1.

4.1.2 Native American Sacred Lands File Review and Assembly Bill 52

An inquiry was made of the NAHC on April 16, 2019, to request a review of the Sacred Lands File database regarding the possibility of Native American cultural resources and/or sacred places in the Project vicinity that are not documented on other databases. The NAHC completed its search on May 2, 2019. The results of the Sacred Land File Review are presented below in Subsection 5.2.

4.1.3 Archaeological Field Survey

Psomas surveyed the Project site on April 26, 2019 (Figure 4). The field survey for the Project focused on approximately 50.25 acres of the Project site that are considered developable and outside of the City's Habitat Management Plan (HMP) hardline preserve.

The Project site was surveyed by walking evenly spaced transects spaced no more than 10 meters (32 feet) apart. Ground visibility was low to moderate due to vegetation (Figure 5). The archaeologist examined all areas considered highly sensitive for cultural resources and the ground surface for the presence of the following:

- Prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools);
- Historic artifacts (e.g., metal, glass, ceramics);

- Sediment discoloration that might indicate the presence of a cultural midden; and
- Depressions and other features indicative of the former presence of structures or buildings (e.g., post holes, foundations).

Psomas maintained transect accuracy in the Project area using a Garmin global positioning system (GPS) receiver and Project field maps. A field notebook and a digital camera were used to record the survey conditions and findings.

FIGURE 2: PROPOSED PROJECT SITE

FIGURE 3: VEGETATION ONSITE

5.0 REPORT OF FINDINGS

5.1 CALIFORNIA HISTORICAL RECORDS INFORMATION SYSTEM

5.1.1 South Coastal Information Center (EIC)

Past Studies

The literature search review conducted for the Project site revealed that 125 cultural resource studies have been conducted within 1 mile of the Project site. The studies were completed between 1973 and 2018. As indicated in Table 1, below, five of the 125 studies have been conducted within the Project site or along the border of the Project site. These five studies consist of archaeological record searches and field studies, data recovery, and an Environmental Impact Report (EIR), prepared for the City of Carlsbad. The remaining 120 studies include archaeological surveys, data recovery projects, mitigation monitoring, and general overview studies for the region. The prior studies are listed in Table 2, and the records search results summary letter from SCIC is presented as Attachment A.

TABLE 1
PRIOR CULTURAL RESOURCES STUDIES CONDUCTED
WITHIN THE PROJECT SITE

Report No.	Year	Author(s)	Affiliation	Type of Study	Title of Study
SD-04111	1982	Seeman, L.	Larry Seeman	Environmental Impact Report	Draft Environmental Impact Report Revised Parks and Recreation Element, Carlsbad California
SD-04353	1999	Harris, N. and D. Gallegos	Gallegos and Associates	Data Recovery	Historical/Archaeological Test of a Portion of CA-SDI-8303 for the Faraday Road Extension, Carlsbad, California
SD-06181	2000	Gallegos, D. and R. Cerreto	Gallegos and Associates	Archaeological Field Study	Historical/Archaeological Survey for the Kirgis Carlsbad Project, Carlsbad, California
SD-09361	2002	Byrd, B. and C. O'Neil	ASM, Inc.	Archaeological Field Study	Archaeological Survey Report for the Phase I Archaeological Survey along Interstate 5, San Diego County, California
SD-17232	2017	Brunzell, D.	BRC Consulting, Inc.	Archaeological Field Study	San Diego 55 Fiber Project, San Diego County, California (BCR Consulting Project No. SYN 1628)
Source: SCIC 2019					

Previously Recorded Archaeological Sites and Cultural Resources

The 2019 SCIC archaeological records search identified 69 cultural resources within the 1-mile search radius of the Project site. Sixty-four of the 69 resources recorded within the 1-mile search radius are of prehistoric context, consisting of shell middens, habitation debris (e.g., pottery and dark midden soils), lithic scatters, and a milling feature. Three resources consist of historic-era resources, including an industrial building, single-family residence, and a commercial structure. The remaining two resources are unknown prehistoric resources with no associated site records (CA-SDI-8695 and P-37-014379).

Two of the sixty-four cultural resources are located within the Project site, as shown in Table 2, below. These include CA-SDI-8303, identified as the remnants of prehistoric habitation debris and P-37-016262, an isolated prehistoric lithic tool.

CA-SDI-830 is an archaeological site located in the lower southeast portion of the Project site. Since its initial recordation in 1979 by M.J. Hatley, there have been several updates to CA-SDI-8303, with the most recent update in 2007 by Gallegos and Associated. Multiple updates to the site have confirmed that archaeological site CA-SDI-8303 is a habitation site dating back to the Late Prehistoric Period. The types of cultural resources present onsite include archaeological features (hearths and middens), several types of lithics consisting of flaked stone tools (projectile points, knives, bifaces, cores), groundstone (mano and metates), beads (shell, stone, bone, and glass), pottery, bone tools, and quartz crystals.

P-37-016262 was recorded in 1998 by Gallegos and Associated as a flaked stone tool. The isolated find consisted of a flaked stone tool manufactured from metavolcanic stone and measuring approximately 7 by 5 ½ by 2.2 centimeters (cm). The isolated stone tool was collected by Gallegos and Associates in 1998.

TABLE 2
PREVIOULSY RECORDED CULTURAL RESOURCES
WITHIN 1-MILE OF THE PROJECT SITE

Primary	Trinomial	Resource Description	Proximity to Project site
P-37-000209	CA-SDI-209	Prehistoric: shell/habitation midden	Outside
P-37-005353	CA-SDI-5353	Prehistoric: shell/habitation midden	Outside
P-37-006133	CA-SDI-6133	Prehistoric: shell/habitation midden	Outside
P-37-006135	CA-SDI-6135	Prehistoric: habitation debris	Outside
P-37-006140	CA-SDI-6140	Prehistoric: shell/habitation midden	Outside
P-37-006830	CA-SDI-6830	Prehistoric: shell and lithic scatter	Outside
P-37-006832	CA-SDI-6832	Prehistoric: shell/lithic midden	Outside
P-37-006833	CA-SDI-6833	Prehistoric: shell/lithic midden	Outside
P-37-006834	CA-SDI-6834	Prehistoric: shell scatter	Outside
P-37-006835	CA-SDI-6835	Prehistoric: shell midden and lithic scatter	Outside
P-37-007229	CA-SDI-7229	Prehistoric: shell scatter	Outside
P-37-007230	CA-SDI-7230	Prehistoric: lithic scatter	Outside
P-37-008303	CA-SDI-8303	Prehistoric: habitation debris	Within
P-37-008687	CA-SDI-8687	Prehistoric: shell scatter	Outside
P-37-008688	CA-SDI-8688	Prehistoric: shell scatter	Outside
P-37-008689	CA-SDI-8689	Prehistoric: shell/habitation midden	Outside
P-37-008690	CA-SDI-8690	Prehistoric: lithic scatter	Outside
P-37-008691	CA-SDI-8691	Prehistoric: lithic scatter	Outside
P-37-008692	CA-SDI-8692	Prehistoric: shell scatter	Outside
P-37-008693	CA-SDI-8693	Prehistoric: shell and lithic scatter	Outside
P-37-008694	CA-SDI-8694	Prehistoric: habitation debris	Outside
P-37-008695	CA-SDI-8695	Prehistoric: unknown	Unknown
P-37-008793	CA-SDI-8793	Prehistoric: shell scatter and habitation debris	Outside
P-37-008794	CA-SDI-8794	Prehistoric: shell midden and lithic scatter	Outside
P-37-008796	CA-SDI-8796	Prehistoric: shell midden and lithic scatter	Outside

TABLE 2
PREVIOULSY RECORDED CULTURAL RESOURCES
WITHIN 1-MILE OF THE PROJECT SITE

Primary	Trinomial	Resource Description	Proximity to Project site
P-37-008797	CA-SDI-8797	Prehistoric: habitation debris and burials	Outside
P-37-009095	CA-SDI-9095	Prehistoric: shell and lithic scatter	Outside
P-37-009097	CA-SDI-9097	Prehistoric: shell and lithic/pottery scatter	Outside
P-37-009114	CA-SDI-9114	Prehistoric: shell and lithic scatter	Outside
P-37-009115	CA-SDI-9115	Prehistoric: shell scatter	Outside
P-37-009116	CA-SDI-9116	Prehistoric: shell scatter	Outside
P-37-009649	CA-SDI-9649	Prehistoric: shell midden and lithic scatter	Outside
P-37-009650	CA-SDI-9650	Prehistoric: lithic scatter	Outside
P-37-009651	CA-SDI-9651	Prehistoric: shell and lithic scatter	Outside
P-37-009652	CA-SDI-9652	Prehistoric: lithic scatter	Outside
P-37-009653	CA-SDI-9653	Prehistoric: shell and lithic scatter	Outside
P-37-009654	CA-SDI-9654	Prehistoric: shell midden and lithic scatter	Outside
P-37-009655	CA-SDI-9655	Prehistoric: shell and lithic scatter	Outside
P-37-010024	CA-SDI-10024	Prehistoric: shell midden and habitation debris	Outside
P-37-010444	CA-SDI-10444	Prehistoric: shell and lithic scatter	Outside
P-37-010609	CA-SDI-10609	Prehistoric: shell and lithic scatter	Outside
P-37-010670	CA-SDI-10670	Prehistoric: shell and lithic scatter	Outside
P-37-010671	CA-SDI-10671	Prehistoric: shell and lithic scatter	Outside
P-37-010876	CA-SDI-10876	Prehistoric: shell midden and lithic scatter	Outside
P-37-011022	CA-SDI-11022	Prehistoric: shell scatter	Outside
P-37-012814	CA-SDI-12814	Prehistoric: shell and lithic scatter	Outside
P-37-013008	CA-SDI-13008	Prehistoric: habitation debris	Outside
P-37-014232	CA-SDI-14064	Prehistoric: shell and lithic scatter	Outside
P-37-014364	CA-SDI-14140	Prehistoric: shell and lithic scatter	Outside
P-37-014379	-	Site Record Missing	Unknown
P-37-015183	CA-SDI-I-485	Prehistoric: isolate (lithic)	Outside
P-37-015714	CA-SDI-15714	Prehistoric: lithic scatter	Outside
P-37-015990	CA-SDI-14563	Prehistoric: habitation debris	Outside
P-37-015991	CA-SDI-14564	Prehistoric: milling feature	Outside
P-37-015992	CA-SDI-14565	Prehistoric: habitation debris	Outside
P-37-015993	CA-SDI-14566	Prehistoric: lithic scatter	Outside
P-37-016262	-	Prehistoric: isolate (lithic)	Within
P-37-016317	CA-SDI-14809	Multicomponent: prehistoric shell scatter and historic refuse scatter	Outside
P-37-024320	CA-SDI-16130	Prehistoric: shell scatter	Outside
P-37-024321	CA-SDI-16131	Prehistoric: shell scatter	Outside
P-37-024322	CA-SDI-16132	Prehistoric: shell scatter	Outside
P-37-024323	CA-SDI-16133	Prehistoric: shell and lithic scatter	Outside
P-37-024327	CA-SDI-16137	Prehistoric: shell scatter	Outside
P-37-024428	CA-SDI-16205	Prehistoric: lithic scatter	Outside
P-37-029576	CA-SDI-18917	Prehistoric: shell midden and habitation debris	Outside

TABLE 2
PREVIOULSY RECORDED CULTURAL RESOURCES
WITHIN 1-MILE OF THE PROJECT SITE

Primary	Trinomial	Resource Description	Proximity to Project site
P-37-035933	CA-SDI-21888	Prehistoric: shell scatter	Outside
P-37-036606	-	Historic: industrial building	Outside
P-37-036859	-	Historic: single-family residence	Outside
P-37-036860	-	Historic: commercial structure	Outside
Source: SCIC 2019			

5.2 NATIVE AMERICAN HERITAGE COMMISSION AND ASSEMBLY BILL 52

Psomas submitted a request to the Native American Heritage Commission (NAHC) on April 16, 2019 to review the Sacred Lands File database regarding the possibility of Native American cultural resources and/or sacred places in the project vicinity that are not documented on other databases. The NAHC completed its Sacred Lands File search on May 2, 2019. The results (Attachment C of this Memorandum) were positive for Tribal Cultural Resources and/or sacred sites. The NAHC recommends consulting with the San Luis Rey Band of Mission Indians for additional details regarding any resources considered sacred by the Tribe. The NAHC also provided a contact list of Native American groups and individuals, as identified in Table 3, who may have knowledge of Native American resources not formally listed on any database. The NAHC Sacred Lands Files results are included as Attachment B.

TABLE 3
TRIBAL REPRESENTATIVES

Tribal Organization	Ethnographic Affiliation(s)	Tribal Representative
La Jolla Band of Mission Indians	Luiseno	Fred Nelson, Jr.
Pala Band of Mission Indians	Luiseno; Cupeno	Shasta Gaughen
Pauma Band of Luiseno Indians	Luiseno	Temet Aguilar
Pechanga Band of Mission Indians	Luiseno	Mark Macarro
Rincon Band of Luiseno Indians	Luiseno	Bo Mazzetti
San Luis Rey Band of Mission Indians	Luiseno	C.J. Mojado
Soboba Band of Luiseno Indians	Luiseno; Cahuilla	Joseph Ontiveros

Additionally, as required by Assembly Bill 52 (AB52), the City requested consultation with the tribes that notified the City of a desire to be consulted regarding projects in the City.

The City received responses from the Rincon Tribe and the San Luis Rey Band of Mission Indians. Consultation between the Rincon Tribe and the City occurred on July 15, 2019 with Ms. Destiny Colocho (Cultural Resource Manager and Tribal Historic Preservation Officer) and Cheryl Madreigal (Rincon Tribal Representative). The following comments and requests were presented to the City.

- Rincon Tribe has identified cultural resources within ½ -mile of Veterans Memorial Park;
- City to provide technical report including the results of the intensive pedestrian survey;
- Rincon Tribe requests mitigation measures to include a Native American monitor, protocol for discovery, and a copy of the final monitoring report;
- City to provide tribal mitigation measures to Rincon Tribe;
- Rincon Tribe would like the opportunity to monitor either in addition to San Luis Rey Band of Mission Indians or as an alternative to the San Luis Rey Band of Mission Indians; and
- Notify the Rincon Tribe when the Mitigated Negative Declaration CEQA document of available for public review

Consultation between the San Luis Rey Band of Mission Indians and the City occurred on August 6, 2019 with Ms. Cami Mojado (Cultural Resources Officer). The following comments and requests were presented to the City.

- City was informed that numerous archaeological discoveries have been made within the vicinity of the Project site, nearby lagoon, the Westin Hotel site, and at the neighboring golf course. Examples of archaeological discoveries include the village site studied by Gallegos and Associates, a ritualized burial of a horse discovered 5 feet below the surface, and a pre-contact archaeological site extending across Faraday into the Project site;
- Tribe requests avoiding development adjacent to known areas of archaeological discoveries;
- City to include mitigation measures for monitoring by both a Native American and Archaeological Monitor; and
- Tribe requests that if remains are found, that the remains be repatriated on site within open space preserve areas.

5.3 PALEONTOLGICAL RESOURCES RECORD SEARCHES

5.3.1 San Diego Natural History Museum Paleontological Resources Record Search

The San Diego Natural History Museum (SDNHM) identified 41 fossil localities within a 1-mile radius surrounding the Project site. These localities are within the Members B and C of the Santiago Formation that underlies the Project site and much of the surrounding area. Fossil localities within 0.25 mile are listed in Table 4, below. A complete list of fossil localities within the 1-mile radius is included with the records search results as Attachment C.

TABLE 4
PALEONTOLOGICAL RESOURCES
WITHIN 0.25 MILE OF THE PROJECT SITE

Locality Number	Resource Type	Taxa	Formation	Proximity to Project site	Depth
SDNHM 6971	Vertebrate and Invertebrate Fossils	*Turritella sp.* (gastropod) *Scaphander sp.* (gastropod) *Barbatia morsei* (bivalve) *Tellina sp.* (bivalve) Osteichthyes (bony fish) Chordata (chordate)	Santiago Formation	Outside (~ 0.01 mile from APE)	Unknown
SDNHM 4345	Vertebrate, Invertebrate, and Plant Fossils	*Turritella uvasana* (gastropod) *Architectonica sp.* (gastropod) *Trichoptropis lajollaensis* (gastropod) *Calyptraea diegoana* (gastropod) *Ectinochilus macilentus* (gastropod) *Sinum* sp. (gastropod) Naticidae (gastropod) *Ficopsis cooperiana* (gastropod) *Ancilla* sp. (gastropod) Muricidae (gastropod) *Conus* sp. (gastropod) Neogastropoda (gastropod) Opisthobranchia (gastropod) Gastropoda (gastropod) *Acila* sp. (bivalve) *Nuculana* sp. (bivalve) *Glycymeris* sp. (bivalve) *Brachidontes* sp. (bivalve) *Venericardia* sp. (bivalve) *Acanthocardia brewerii* (bivalve) *Pelecyora* sp. (bivalve) *Callista* sp. (bivalve) *Veneridae* (bivalve) *Tellina soledadensis* (bivalve) *Tellina* sp. (bivalve) *Solena novacularis* (bivalve) *Gari* sp. (bivalve) *Corbula* sp. (bivalve) Pelecypoda (bivalve) *Dentalium stentor* (scaphopod) Manoliopsida (flowering plant) *Terminalia* sp. (flowering plant) *Myliobatis* sp. (eagle ray) *Diopatrichnus roederensis* (polychaete burrow)	Santiago Formation, Member C	Outside (~0.02 mile from APE)	unknown
SDNHM 4346	Invertebrate Fossils	*Crassatella uvasana* (bivalve) *Acanthocardia brewerii* (bivalve) *Marcia bunkeri* (bivalve)	Santiago Formation, Member C	Outside (~0.07mile from APE)	Unknown
SDNHM 4347	Invertebrate and Plant Fossils	*Turritella uvasana* (gastropod) *Calyptraea diegoana* (gastropod) *Ectinochilus macilentus* (gastropod) *Tejonia moragia* (gastropod) Naticidae (gastropod) *Ficopsis cooperiana* (gastropod) *Conus* sp. (gastropod) *Ficus mamillata* (gastropod)	Santiago Formation, Member C	Outside (~0.02 mile from APE)	Unknown

TABLE 4
PALEONTOLOGICAL RESOURCES
WITHIN 0.25 MILE OF THE PROJECT SITE

Locality Number	Resource Type	Taxa	Formation	Proximity to Project site	Depth
		Fasciolariidae (gastropod) *Ancilla* sp. (gastropod) Gastropoda (gastropod) *Nuculana* sp. (bivalve) *Cardium sorrentoensis* (bivalve) *Venericardia* sp. (bivalve) *Crassatella uvasana* (bivalve) *Pelecyora* sp. (bivalve) *Veneridae* (bivalve) *Corbula* sp. (bivalve) *Teredo* sp. (bivalve) Pelecypoda (bivalve) *Dentalium stentor* (scaphopod) *Ophiomorpha* sp. (burrow) Magnoliopsida (flowering plant) *Diopatrichnus roederensis* (polychaete burrow)			
SDNHM 5772	Invertebrate Fossils	*Turritella uvasana* (gastropod)	Santiago Formation, Member C	Outside (~0.05 mile from APE)	Unknown
SDNHM 4659	Vertebrate, Invertebrate, and Plant Fossils	*Sabalites* sp. (palm tree) *Rhizophora* sp. (mangrove tree) *Calyptraea diegoana* (gastropod) Muricidae (gastropod) Unionidae (bivalve) *Venericardia brewerii* (bivalve) *Callista* sp. (bilvalve) *Tellina* sp. (bivalve) Tracheophyta (flowering plant) *Odontaspis* sp. (sand shark) Myliobatiformes (eagle ray) *Leptoreodon leptolophus* (artiodactyl)	Santiago Formation, Member C	Outside (~0.13 mile from APE)	Unknown
SDNHM 4925	Vertebrate, Invertebrate, and Plant Fossils	Pulmonata (gastropod) Trionychidae (softshell turtle) Testudinae (tortoise) *Pristichampsus* sp. (crocodile) *Glyptosaurus* sp. (lizard) Aves (bird) *Dyseolemur pacificus* (primate) *Pareumys* sp. (rodent) *Protoerodon annectens* (artiodactyl) *Protylopus* sp. (artiodactyl) *Protylopus stocki.* (artiodactyl) *Leptoreodon leptolophus* (artiodactyl) *Leptoreodon* sp. (artiodactyl) Artiodactyla (artiodactyl) Tapiridae (tapir) Perissodactyla (perissodactyl) Mammalia indet. (mammal) Coprolite (fossil feces) *Peradectes californicus* (opossum) *Peratherium* sp. (opossum)	Santiago Formation, Member C	Outside (~0.21 mile from APE)	Unknown

TABLE 4
PALEONTOLOGICAL RESOURCES
WITHIN 0.25 MILE OF THE PROJECT SITE

Locality Number	Resource Type	Taxa	Formation	Proximity to Project site	Depth
		Apatemys sp. (early mammal) *Sespedectes* sp. (hedgehog) *Proterixoides davisi* (hedgehog) *Centetodon* sp. (hedgehog) *Oligoryctes* sp. (shrew) *Nyctitherium* sp. (shrew) Microchiroptera (bat) *Uintasorex* sp. (primate) *Dyseolemur* sp. (primate – new species) *Phenacolemur* sp. (primate) *Ourayia* sp. (primate) *Microparamys woodi* (rodent) *Leptotomus caryophilus* (rodent) *Rapamys* sp. (rodent) Ischyromyidae (rodent) *Eohaplomys serus* (rodent) *Pareumys* sp. (rodent) *Metanoiamys* sp. (rodent) *Griphomys* sp. (rodent) *Simimys* sp. (rodent) Mesonychidae (carnivorous cetartiodactyl) *Hyaenodon* sp. (carnivorous mammal) *Procynodictis* sp. (carnivore) *Miacis* sp. (carnivore) Tapiroidea (tapir) Insectivora indet. (mammal) Rodentia indet, (rodent) Artiodactyla indet. (artiodactyl) Carnivora indet. (carnivore)			
SDNHM 4934	Invertebrate Fossils	Teredinidae (bivalve)	Santiago Formation, Member C	Outside (~0.1 mile from APE)	Unknown
SDNHM 5765	Invertebrate Fossils	*Miltha packi* (bivalve)	Santiago Formation, Member C	Outside (~0.17 mile from APE)	Unknown
SDNHM 5766	Invertebrate Fossils	*Isognomon clarki* (bivalve) *Diodora sillwaterensis* (bivalve) *Pycnodonte stewartia* (bivalve) *Spondylus carlosensis* (bilvalve) *Anomia mcgoniglensis* (bivalve) *Ophiomorpha* sp. (burrow)	Santiago Formation, Member C	Outside (~0.18 mile from APE)	Unknown

TABLE 4
PALEONTOLOGICAL RESOURCES
WITHIN 0.25 MILE OF THE PROJECT SITE

Locality Number	Resource Type	Taxa	Formation	Proximity to Project site	Depth
SDNHM 5767	Invertebrate Fossils	*Bittium* sp. (gastropod) *Ectinochilus macilentus* (gastropod) *Tejonia* sp. (gastropod) Naticidae (gastropod) *Voluta martini* (gastropod) *Nuculana* sp. (bivalve) *Pitar* sp. (bivalve) *Macrocallista andersoni* (bivalve) *Dentalium stentor* (scaphopod)	Santiago Formation, Member C	Outside (~0.22 mile from APE)	Unknown

5.3.2 PaleoBiology and University of California Museum of Paleontology Database Searches

A search of the PaleoBiology database and University of California Museum of Paleontology (UCMP) online databases, which include institutional records and published references, indicates that no additional previously recorded fossil localities have been identified within 1-mile radius of the Project site.

5.4 ARCHAEOLOGICAL/PALEONTOLOGICAL FIELD SURVEY RESULTS

The 2019 field survey (archaeological and paleontological) updated the archaeological resource CA-SDI-8303 located within the Project site. The updated portion of the archaeological site is in the lower southeast region of the Project site and is due north of Faraday Avenue. As of 2019, the surface of the site exhibits the characteristics of a large lithic scatter; however, the site was originally recorded in 1979 as a long-term habitation site (e.g. village). As discussed above in Section 5.1.1, since its initial recordation, there have been several updates to CA-SDI-8303, with the most recent update in 2007. Multiple updates to the site have confirmed that archaeological site CA-SDI-8303 is a habitation site dating back to the Late Prehistoric Period. Archaeological resources identified from the 2019 study include debitage (stone tool debris), two mano fragments (groundstone), a core, and a possible hammerstone. However, it should also be noted that during consultation between the City and the San Luis Rey Band of Mission Indians, tribal representatives shared information that identified an archaeological site near Faraday Avenue and extending into the Project site. Therefore, there is a possibility that this updated portion of CA-SDI-8303 is a new archaeological resource currently not on file with the SCIC.

Moreover, also noted above, the previously recorded prehistoric isolate, P-37-016262, was collected in 1998 by Gallegos and Associates.

No additional archaeological resources were observed as part of the 2019 field study. As well, no paleontological resources were identified during the 2019 field survey.

FIGURE 4: EXTENSION OF CA-SDI-8303

6.0 DISCUSSION AND IMPACT ANALYSIS

Psomas conducted archaeological and paleontological resources field investigations within the Project site on April 26, 2019. The main goal of the investigations was to gather and analyze information needed to determine if the Project would have a significant impact on properties eligible for the CRHR and to provide mitigation measures for those resources. The results of the 2019 SCIC archaeological records search identified 69 cultural resources within the 1-mile search radius of the Project site. Sixty-four of the 69 resources recorded within the 1-mile search radius are of prehistoric context, consisting of shell middens, habitation debris (e.g., pottery and dark midden soils), lithic scatters, and a milling feature. Three resources consist of historic-era resources, including an industrial building, single-family residence, and a commercial structure. The remaining two resources are unknown prehistoric resources with no associated site records (CA-SDI-8695 and P-37-014379).

Two of the sixty-nine cultural resources are located within the Project site. These include CA-SDI-8303, identified as the remnants of prehistoric habitation debris and P-37-016262, an isolated prehistoric lithic tool. Furthermore, the NAHC Sacred Lands File search was positive for sacred sites. Consultation between the City and tribal representatives from the Rincon Tribe and the San Luis Rey Band of Mission Indians also identified the area as extremely sensitive for cultural resources important to California tribes.

The SDNHM identified 41 fossil localities within a 1-mile radius surrounding the Project site. These localities are within the Members B and C of the Santiago Formation that underlies the Project site and much of the surrounding area. None of the 41 fossil localities identified from the SDNHM are located within the Project site.

The 2019 field survey (archaeological and paleontological) updated the archaeological resource CA-SDI-8303 located within the Project site. The updated portion of the archaeological site is in the lower southeast region of the Project site and is due north of Faraday Avenue. As of 2019, the surface of the site exhibits the characteristics of a large lithic scatter; however, the site was originally recorded in 1979 as a long-term habitation site. As discussed above in Section 5.1.1, since its initial recordation, there have been several updates to CA-SDI-8303, with the most recent update in 2007. Multiple updates to the site have confirmed that archaeological site CA-SDI-8303 is a habitation site dating back to the Late Prehistoric Period. Archaeological resources identified from the 2019 study include debitage (stone tool debris), two mano fragments (groundstone), a core, and a possible hammerstone. However, it should also be noted that during consultation between the City and the San Luis Rey Band of Mission Indians, tribal representatives shared information that identified an archaeological site near Faraday Avenue and extending into the Project site. Therefore, there is a possibility that this updated portion of CA-SDI-8303 is a new archaeological resource currently not on file with the SCIC.

Moreover, also noted above, the previously recorded prehistoric isolate, P-37-016262, was collected in 1998 by Gallegos and Associates.

No additional archaeological resources were observed as part of the 2019 field study. As well, no paleontological resources were identified during the 2019 field survey.

All data considered, the results from the SCIC record searches, NAHC Sacred Lands File, AB 52 tribal consultation, and the archaeological field survey, indicate past human activities dating to both the Prehistoric periods of Southern California took place within the Project site, from the extraction, processing, and subsequent use of raw materials, to long-term occupation and sense of established community. Therefore, the Project could significantly impact archaeological

resources pursuant to Section 15064.5 of the State CEQA Guidelines. With implementation of **MMs CUL-1** through **CUL-14** (see Section 7.0 below) requiring archaeological and tribal monitoring, and specifying communication protocols and the steps to follow in case an archaeological or tribal cultural resource is discovered during grading and adherence to **RR CUL-1**, as well as compliance with the *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines* (Carlsbad 2017), the Project would result in less than significant impacts related to archaeological resources.

Additionally, although no paleontological resources were identified during the 2019 field survey conducted for the Project, the Project site is considered sensitive for previously unrecorded paleontological resources and the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature represents a significant impact. Implementation of **MM GEO-2** requiring paleontological monitoring of ground disturbance activities during Project construction as well as recovery and curation of fossils inadvertently encountered would be reduce impacts to a less than significant level.

7.0 REGULATORY REQUIREMENT AND MITIGATION MEASURES

Based on the archaeological and paleontological research to date, Psomas recommends the following mitigation measures as well as compliance with the *Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines* (Carlsbad 2017), and State Regulatory Requirements for the treatment of human remains to satisfy the requirements of the City and CEQA.

7.1 REGULATORY REQUIREMENT

Regulatory Requirement – RR-CUL-1 Human Remains

If human remains are found on this site, the developer/permit holder or any successor in interest shall comply with State Health and Safety Code Section 7050.5. In accordance with Section 7050.5 of the *California Health and Safety Code*, if human remains are found during ground-disturbing activities, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. The County Coroner shall be notified within 24 hours of the discovery. If the County Coroner determines that the remains are or are believed to be Native American, s/he shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with Section 5097.98 of the *California Public Resources Code*, the NAHC must immediately notify those person(s) it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The property owner would then determine, in consultation with a designated Native American representative, the final disposition of the human remains (*California Code of Regulations,* Title 14, Section 15064.5[e]).

7.2 CULTURAL RESOURCES MITIGATION MEASURES

Mitigation Measure – MM-CUL-1 Cultural Resource Sensitivity Training

All construction personnel and monitors who are not trained archaeologists and paleontologists shall be trained regarding the recognition of possible buried cultural remains and protection of all cultural resources, including prehistoric and historic resources, and paleontological resources during construction, prior to the initiation of construction or ground-disturbing activities. Applicant/Developer shall retain a qualified cultural resources consultant to complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American burials, and paleontological resources.

All personnel shall be instructed that unauthorized collection or disturbance of artifacts or other cultural materials is not allowed. Violators will be subject to prosecution under the appropriate state and federal laws, and violations will be grounds for removal from the Project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. Supervisors shall also be briefed on the consequences of intentional damage to cultural resources.

Upon discovery of the potential for buried cultural materials by archaeologists, monitors, or construction personnel, work in the immediate area of the find shall be diverted and the Project Archaeologist notified. Once the find has been inspected and a preliminary assessment made, the Project Archaeologist will make the necessary plans for evaluation and treatment of the find(s) or mitigation of adverse impacts to the resource.

Applicant/Developer shall maintain a list of construction personnel who have completed the cultural resources identification training prior to start of construction, and this list shall be updated by Applicant/Developer as required when new personnel start work.

Mitigation Measure – MM-CUL-2 Archaeological Resources Monitoring

An archaeological monitor shall be present for initial ground-disturbing activities associated with the proposed project in the event unanticipated discoveries are made. If human remains are discovered, California Health and Safety Code Section 7050.5, states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County coroner shall be contacted. At this time, the person who discovered the remains will contact the City of Carlsbad so that they may work with the most likely descendent on the respectful treatment and disposition of the remains.

Mitigation Measure – MM-CUL-3 Tribal Cultural Resources Monitoring Agreement

Prior to the commencement of any ground disturbing activities, the project developer shall enter into a Pre-Excavation Agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement, with the San Luis Rey Band of Mission Indians or other Luiseño tribe. This agreement will contain provisions to address the proper treatment of any tribal cultural resources and/or Luiseño Native American human remains inadvertently discovered during the course of the project. The agreement will outline the roles and powers of the Luiseño Native American monitors and the archaeologist. A copy of said archaeological contract and Pre-Excavation Agreement shall be provided to the City of Carlsbad prior to the issuance of a grading permit.

Mitigation Measure – MM-CUL-4 Native American Monitor

A Luiseño Native American monitor shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.

Mitigation Measure – MM-CUL-5 Uncovered Artifacts of Luiseno Native Americans

A Luiseño Native American monitor shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.

Mitigation Measure – MM-CUL-6 Preconstruction Meeting

The Luiseño Native American monitor shall be present at the project's on-site preconstruction meeting to consult with grading and excavation contractors concerning excavation schedules and safety issues, as well as consult with the principal archaeologist concerning the proposed archaeologist techniques and/or strategies for the project.

Mitigation Measure – MM-CUL-7 Authority to Divert and/or Halt Construction Activities

Luiseño Native American monitors and archaeological monitors shall have joint authority to temporarily divert and/or halt construction activities. If tribal cultural resources are discovered during construction, all earth moving activity within and around the immediate discovery area must

be diverted until the Luiseño Native American monitor and the archaeologist can assess the nature and significance of the find.

Mitigation Measure – MM-CUL-8 Inadvertent Discovery of Significant Cultural Resources

If a significant tribal cultural resource(s) and/or unique archaeological resource(s) are discovered during ground disturbing activities for this project, the San Luis Rey Band of Mission Indians shall be notified and consulted regarding the respectful and dignified treatment of those resources. Pursuant to California Public Resources Code Section 21083.2(b) avoidance is the preferred method of preservation for archaeological and tribal cultural resources. If however, the Applicant is able to demonstrate that avoidance of a significant and/or unique cultural resource is infeasible and a data recovery plan, is authorized by the City of Carlsbad as the lead agency, the San Luis Rey Band of Mission Indians shall be consulted regarding the drafting and finalization of any such recovery plan.

Mitigation Measure – MM-CUL-9 Communication Protocols

When tribal cultural resources are discovered during the project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. If the archaeologist does not collect the tribal cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor shall follow the procedures in MM CUL-4.

Mitigation Measure – MM-CUL-10 Inadvertent Discovery of Native American Cemeteries

If suspected Native American human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the San Diego County Medical Examiner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Suspected Native American remains shall be examined in the field and kept in a secure location at the site. A Luiseño Native American monitor shall be present during the examination of the remains. If the San Diego County Medical Examiner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted by the Medical Examiner within 24 hours. The NAHC must then immediately notify the “Most Likely Descendant” about the discovery. The Most Likely Descendant shall then make recommendations within 48 hours and engage in consultation concerning treatment of remains as provided in Public Resources Code 5097.98.

Mitigation Measure – MM-CUL-11 Monitoring of Fill Material for Tribal Cultural Resources

In the event that fill material is imported into the project area, the fill shall be clean of tribal cultural resources and documented as such. If fill material is to be utilized and/or exported from areas within the project site, then that fill material shall be analyzed and confirmed by an archeologist and Luiseño Native American monitor that such fill material does not contain tribal cultural resources.

Mitigation Measure – MM-CUL-12 Invasive and/or Non-Invasive Testing

No testing, invasive or non-invasive, shall be permitted on any recovered tribal cultural resources without the written permission of the San Luis Rey Band of Mission Indians.

Mitigation Measure – MM-CUL-13 Cultural Resources Monitoring Report

Prior to the release of the grading bond, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the monitoring program shall be submitted by the archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Carlsbad for approval, and shall be submitted to the South Coastal Information Center. Said report shall be subject to confidentiality as an exception to the Public Records Act and will not be available for public distribution.

Mitigation Measure – MM-CUL-14 Curation of Non-Tribal Archaeological Resources

In the event that non-tribal, archaeological resources are discovered at the project site, they would be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts would be subjected to curation or returned to the property owner, as deemed appropriate in consultation with the City.

7.3 PALEONTOLOGICAL RESOURCES MITIGATION MEASURES

Mitigation Measure – MM-GEO-2 Paleontological Monitor

The Applicant/Developer shall retain a professional Paleontologist prior to the issuance of grading permits. The task of the Paleontologist shall be to monitor ground disturbance within the project site for the unearthing of previously unknown paleontological resources. Selection of the paleontologist shall be subject to the approval of the City, and no grading activities shall occur within the project site until the Paleontologist has been approved by the City. The Paleontological Monitor shall be responsible for maintaining daily field notes and a photographic record and for reporting all finds to the City in a timely manner. The Paleontologist shall be equipped to record and salvage paleontological resources that may be unearthed during grading activities. The Paleontologist shall be empowered to temporarily halt or divert grading equipment to allow recording and removal of the unearthed resources.

In the event that potential paleontological resources are discovered during ground-disturbing activities, work will stop in that area and within 30 feet of the find until a qualified Paleontologist can assess the significance of the find and, if necessary, develop appropriate treatment measures. Recovered specimens will be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Specimens will be curated into a professional, accredited museum repository with permanent retrievable storage. A report of findings, with an appended itemized inventory of specimens, will be prepared and will signify completion of the mitigation.

The Paleontologist will retain the option to reduce monitoring if it is determined that the sediments were previously disturbed. Monitoring may also be reduced if potentially fossiliferous units are not present or, if present, are determined to have a low potential to contain fossil resources.

8.0 CERTIFICATION

I hereby certify that the statements furnished above in this draft report and in the attached exhibits present the data and information required for this draft Phase I Archaeological and Paleontological Resources Inventory, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: August 26, 2021 SIGNED: _____

Charles Cisneros, M.S., RPA
Senior Archaeologist

9.0 REFERENCES CITED

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ATTACHMENT A

SOUTH COASTAL INFORMATION CENTER RECORDS SEARCH RESULTS

South Coastal Information Center
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-5320
Office: (619) 594-5682
www.scic.org
nick@scic.org

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

Company: Psomas

Company Representative: Kassie Sugimoto

Date Processed: 4/22/2019

Project Identification: Carlsbad Veteran Hospital - 3RJM010100

Search Radius: 1 mile

Historical Resources: YES

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: YES

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: YES

A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: YES

The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Summary of SHRC Approved CHRIS IC Records Search Elements	
RSID:	2604
RUSH:	yes
Hours:	1
Spatial Features:	194
Address-Mapped Shapes:	no
Digital Database Records:	0
Quads:	1
Aerial Photos:	0
PDFs:	Yes
PDF Pages:	3851

This is not an invoice. Please pay from the monthly billing statement

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-00102	NADB-R - 1120102; Voided - APC 02	1979	Archaeological Planning Collaborative	Archaeological Records Search and Reconnaissance Survey Carlsbad Pacific Property Carlsbad, California	Archaeological Planning Collaborative	37-006832, 37-006833, 37-007229, 37-007230
SD-00103	NADB-R - 1120103; Voided - APC 06	1980	Archaeological Planning Collaborative	Archaeological Records Search and Field Survey, Palomar Airport Excess Effluent Pipeline, San Diego County, California.	Archaeological Planning Collaborative	37-006832, 37-008303
SD-00339	NADB-R - 1120339; Voided - BISSELL 01	1985	Bissell, Ron and Rod Raschke	Cultural and Scientific Resources Assessment: Evans Point Project, Carlsbad, California.	RMW Paleo Associates	37-010444
SD-00424	NADB-R - 1120424; Voided - CARRICO131	1981	Carrico, Richard and Roxana Phillips	Archaeological Salvage at W-132A Carlsbad, California.	WESTEC Services, Inc.	37-000209
SD-00681	NADB-R - 1120681; Voided - HECTOR 19	1986	Hector, Susan and Sue Wade	Archaeological Excavations at SDM-W-132/SDi-10,024 Carlsbad California.	RECON	37-009700, 37-010024
SD-00716	NADB-R - 1120716; Voided - KALDENBE17	1976	Kaldenberg, Russell L.	A Predevelopment Archaeological Resource Survey for the Agua Hedionda Lagoon North Shores Project	RECON	
SD-00786	NADB-R - 1120786; Voided - CHEEVER18	1987	Cheever, Dayle and Dennis Gallegos	Archaeological Survey for a Road Detour and Storm Drain on a Portion of Palomar Airport Road	WESTEC Services, Inc.	37-008692
SD-00889	NADB-R - 1120889; Voided - KOERPER 01	1986	Koerper, Henry C., Paul F. Langenwalter II, and Adella Schroth	The Agua Hedionda Project Archaeological Investigations at CA-SDi-5353 and CA-SDi-9649	Henry C. Koerper	37-005353, 37-009649
SD-00951	NADB-R - 1120951; Voided - GALLEGO 64	1989	Gallegos, Dennis and Andrew Pigniolo	Cultural Resource Survey of the Kelly Property, Carlsbad, California	ERC Environmental and Energy Services Company	
SD-00980	NADB-R - 1120980; Voided - GROSS 13	1973	Gross, Tim and Charles Bull	An Archaeological Survey of Tract #72-28	San Diego State University	
SD-01016	NADB-R - 1121016; Voided - GALLEGOS32	1987	Gallegos, Dennis and Andrew Pigniolo	Cultural Resource Survey of the Mar Vista OV1 Trunk Sewer Line, Vista, California	WESTEC Services, Inc.	
SD-01048	NADB-R - 1121048; Voided - GALLEGOS43	1988	Gallegos, Dennis R. and Carolyn Kyle	Cultural Resource Survey of Portions of the Floral Trade Center	WESTEC Services, Inc.	37-011022
SD-01129	NADB-R - 1121129; Voided - HECTOR 27	1985	Hector, Susan	An Archaeological and Historical Survey of Robertson Ranch, Carlsbad.	RECON	37-005416, 37-005434, 37-005435
SD-01329	NADB-R - 1121329; Voided - PIGNIOLO11	1989	Pigniolo, Andrew	Cultural Resource Investigation: Site SDi-6835 (W-1895) Within the Palomar Airport Center Project Area.	WESTEC Services, Inc.	37-006835

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-01377	NADB-R - 1121377; Voided - FINK 31	1974	Fink, Gary R.	Archaeological Survey for the Proposed Palomar Airport Master Plan Project No. UJ0089	County of San Diego Public Works Agency	
SD-01468	NADB-R - 1121468; Voided - SRS 25	1982	Scientific Resource Surveys, Inc.	Cultural Resources Report on Site II, Located in an Unincorporated Area of Carlsbad, San Diego County, California	Scientific Resource Surveys, Inc.	37-006752, 37-006829
SD-01498	NADB-R - 1121498; Voided - RECON 04	1983	Hector, Susan M.	Archaeological Survey of Del Mar Financial Carlsbad, California	RECON	37-009092
SD-01554	NADB-R - 1121554; Voided - SOULE 1	1984	Soule, William E.	On Stream Earthfill Dam Project	State Water Resources Control Board	
SD-01579	NADB-R - 1121579; Voided - WADE 09	1986	Wade, Sue A. and Susan M. Hector Ph.D.	Archaeological Monitoring of the Encina Gas Pipline Project Profiles of Subsistence Patterns Along the South Shore of Agua Hedionda Lagoon	RECON	37-006132, 37-006133, 37-006134, 37-006830, 37-008303
SD-01595	NADB-R - 1121595; Voided - WHITEHOU06	1990	Whitehouse, John L.R. and Sue A. Wade	A Cultural Resource Survey of the McGregor Property Carlsbad, California	RECON	37-009655
SD-01605	NADB-R - 1121605; Voided - WADE 32	1989	Wade, Sue A.	Archaeological and Paleontological Constraints for the Fox Property	RECON	
SD-01618	NADB-R - 1121618; Voided - WESTEC 11	1987	WESTEC Services, Inc.	Archaeological Survey of a Portion of Palomar Airport Road	WESTEC Services, Inc.	37-008692
SD-01665	NADB-R - 1121665; Voided - WADE 13	1987	Wade, Sue A.	Archaeolgical Study for 260 Acres South of Agua Hedionda Lagoon	RECON	37-006132, 37-006133, 37-006134, 37-006830, 37-006831
SD-01849	NADB-R - 1121849; Voided - HECTOR 64	1988	Hector, Susan	An Archaeologiacl Survey of the Garrett Property, Carlsbad, California	RECON	37-009607
SD-01984	NADB-R - 1121984; Voided - WESTEC 07	1980	WESTEC Services, Inc.	Regional Historic Preservation Study	WESTEC Services,Inc.	37-000209, 37-000210, 37-000211, 37-000212, 37-000600, 37-000601, 37-000602, 37-000603, 37-000608, 37-000610, 37-000626, 37-000627, 37-000628, 37-000629, 37-000630, 37-000690, 37-000691, 37-000692, 37-000693, 37-000694, 37-000695, 37-000696, 37-000760, 37-001014, 37-004358, 37-005077, 37-005213, 37-005214, 37-005353
SD-02016	NADB-R - 1122016; Voided - ELFEND AS2	1984	Elfend Associates	Environmental Information Kelly Ranch Master Plan/Specific Plan	Elfend Associates	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-02045	NADB-R - 1122045; Voided - BRANDMAN 1	1983	Micheal Brandman Associates, INC.	Draft Environmental Impact Report 83-4 General Plan Amendment and Zone Change Kelly Ranch SCH #83042707	Micheal Brandman Associates, INC.	37-009646
SD-02088	NADB-R - 1122088; Voided - EIP 1	1974	Environmental Impact Profile	Draft Environmental Impact Report For Lagoon Shores Carlsbad California	Environmental Impact Profiles	
SD-02296	NADB-R - 1122296; Voided - EIP 02	1973	ENVIRONMENTAL IMPACT PROFILES	ENVIRONMENTAL IMPACT REPORT FOR THE PLANNED COMMUNITY - CARLSBAD PALISADES	ENVIRONMENTAL IMPACT PROFILES	
SD-02474	NADB-R - 1122474; Voided - GALLEGO117	1992	GALLEGOS, DENNIS and CAROLYN KYLE	HISTORICAL/ARCHAEOLOGICAL SURVEY AND TEST REPORT FOR CALSBAD RANCH	GALLEGOS AND ASSOCIATES	37-006132, 37-008797, 37-010670, 37-010672, 37-010673, 37-012814
SD-02623	NADB-R - 1122623; Other - 90-1013; Voided - BISSELL 12	1990	BISSELL, RONALD M.	TEST EXCAVATION OF TWO ARCHAEOLOGICAL SITES AND PHOTOGRAPHIC DOCUMENTATION OF A HISTORIC BARN, EVAN'S POINT CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA	RMW PALEO ASSOCIATES INC	37-010444
SD-03170	NADB-R - 1123170; Voided - DOLAN 06	1996	DOLAN, CHRISTY, SCOTT MOOMJIAN, DR MICHAEL RAEN-JENNING, and BRIAN SMITH	RESULT OF A DATA RECOVERY PROGRAM AT SITE SDI 6132, SDI 10,671, AND SDI 12,814, CARLSBAD RANCH PROJECT CARLSBAD, CALIFORNIA	CARLTAS DEVELOPEMENT CO	37-006132, 37-008797, 37-010670, 37-010673, 37-012814
SD-03497	NADB-R - 1123497; Voided - GALLEGO154	1998	GALLEGOS, DENNIS R., LARRY TIFT, and TRACY STROPES	ARCHAEOLOGICAL TEST REPORT FOR A PORTION OF CA-SDI-9115/SDM-W-122 CARLSBAD, CALIFORNIA	INDUSTRIAL DEVELOPMENTS INTERNATIONAL	
SD-03528	NADB-R - 1123528; Other - AFFINIS JOB NO. 1261; Voided - GROSS 41	1998	GROSS, G. TIMOTHY and RUTH C. ALTER	ARCHAEOLOGICAL TESTING OF A PORTION OF SDI-14,809, AN ARCHAEOLOGICAL SITE ON A SEGMENT OF THE SOUTH AGUA HEDIONDA TRUNK SEWER CARLSBAD, CALIFORNIA	CARLSBAD MUNICIPAL WATER DISTRICT	37-016317
SD-03560	NADB-R - 1123560; Other - RECON NUMBER 3169A; Voided - BERRYJ 42	1999	BERRYMAN, JUDY A. and DAYLE M. CHEEVER	DATA RECOVERY RESULTS FOR THE NORTHERN PORTION OF CA-SDI-8303, FARADAY AVENUE EXTENSION PROJECT, CITY OF CARLSBAD	CITY OF CARLSBAD,PUBLIC WORKS ENGINEERING DIVISION	37-008303
SD-03586	NADB-R - 1123586; Voided - SMITHB 330	1998	SMITH, BRIAN F.	THE RESULTS OF A CULTURAL RESOURCE SURVEY AND EVALUATION PROGRAM FOR "AREA A" AT THE KELLY RANCH AND THE IMPROVEMENT CORRIDOR FOR PARK DRIVE	A.D. HINSHAW ASSOCIATES	37-000209

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-03943	NADB-R - 1123943; Voided - GALLEGO165	1995	GALLEGOS, DENNIS, ADELLA B. SCHROTH, and JENNIFER PERRY	HISTORICAL/ARCHAEOLOGICAL SURVEY AND TEST FOR CARLSBAD RANCH SPECIFIC PLAN AMEDMENT CARLSBAD, CALIFORNIA	GALLEGOS AND ASSOCIATES	37-001014, 37-008797
SD-03955	NADB-R - 1123955; Voided - GALLEGO177	1997	GALLEGOS, DENNIS and TRACY STOPES	CULTURAL RESOURCE SURVEY REPORT FOR THE STERLING PROPERTY	GALLEGOS AND ASSOCIATES	37-009116
SD-03959	NADB-R - 1123959; Voided - GALLEGO181	1998	GALLEGOS, DENNIS and LARRY TIFT	HISTORICAL/ARCHAEOLOGICAL SURVEY FOR THE FARADAY ROAD PROJECT	GALLEGOS AND ASSOCIATES	
SD-04088	NADB-R - 1124088; Voided - GALLEGO186	1997	GALLEGOS, DENNIS R. and CAROLYN E. KYLE	HISTORICAL/ARCHAEOLOGICAL SURVEY FOR THE CARLSBAD MUNICIPAL GOLF COURSE PROJECT CITY OF CARLSBAD, CALIFORNIA	GALLEGOS AND ASSOCIATES	
SD-04093	NADB-R - 1124093; Voided - GALLEGO191	1998	GALLEGOS, DENNIS R., PATRICIA MITCHELL, ADELLA SCHROTH, PhD, and NINA M. HARRIS	DATA RECOVERY AT CA-SDI-6133, LOCUS C, CANNON ROAD, CARLSBAD, CA	GALLEGOS AND ASSOCIATES	37-006133
SD-04111	NADB-R - 1124111; Voided - SEEMAN01	1982	Larry Seeman	Draft Environmental Impact Report Revised Parks and Recreation Element, Carlsbad, California	Larry Seeman	
SD-04117	NADB-R - 1124117; Voided - GALLEGO82	1990	Dennis Gallegos	The Copley Project, San Marcos, California Cultural Resources Survey and Testing Program at SDI-5633	ERCE	37-005633
SD-04209	NADB-R - 1124209; Voided - KOERPER02	1986	KOERPER, HENRY C.	THE AQUA HEDIONDA PROJECT ARCHAEOLOGICAL INVESTIGATIONS AT CA-SDI-5353 & CA-SDI-9649.	HENRY C. KOERPER	
SD-04263	NADB-R - 1124263; Voided - MLA35	1991	BRIAN F. MOONEY ASSOCIATES	CULTURAL RESOURCE SURVEY AND ASSESSMENT OF THE CARLSBAD ZONE 20 SPECIFIC PLAN AREA cARLSBAD, CA	BRIAN F. MOONEY ASSOCIATES	
SD-04353	NADB-R - 1124353; Voided - HARRISN12	1999	HARRIS, NINA M. AND DENNIS R. GALLEGOS	HISTORICAL/ARCAHEOLOGICAL TEST OF A PORTION OF CA-SDI-8303 FOR THE FARADAY ROAD EXTENSION CARLSBAD	GALLEGOS & ASSOCIATES	37-008303
SD-04635	NADB-R - 1124635; Voided - ULTRA02	1983	ULTRA SYSTEMS, INC.	SUPPLEMENTAL ENVIRONMENTAL STUDIES - KELLY RANCH	ULTRA SYSTEMS, INC.	37-000209, 37-005353, 37-006136, 37-006140, 37-009649, 37-009650, 37-009651, 37-009652, 37-009653, 37-009654, 37-009655

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-04641	NADB-R - 1124641; Voided - WESTEC30	1982	WESTEC	DRAFT ENVIRONMENTAL IMPACT REPORT AIRPORT BUSINESS CENTER	WESTEC SERVICES, INC.	37-004357, 37-004358, 37-004359, 37-004852, 37-004853, 37-004854, 37-004855, 37-004856, 37-004857, 37-004858, 37-004860, 37-005117, 37-005118, 37-005353, 37-006132, 37-006133, 37-006135, 37-006149, 37-006753, 37-006754, 37-006819, 37-006820, 37-006821, 37-006829, 37-006832, 37-006835, 37-007229, 37-007230, 37-008195
SD-04796	NADB-R - 1124796; Voided - BRANDES21	1987	BRANDES, RAY	AN HISTORICAL/ARCHAEOLOGICAL STUDY OF BLOCK SD-31, NEW SAN DIEGO, SAN DIEGO, CALIFORNIA	DR. RAY BRANDES	
SD-04960	NADB-R - 1124960; Voided - RECON61	1984	RECON	DRAFT EIR CARLSBAD LAND INVESTORS CARLSBAD, CALIFORNIA	RECON	
SD-04972	NADB-R - 1124972; Voided - RECON57	1983	RECON	DRAFT ENVIRONMENTAL IMPACT REPORT FOR DELMAR FINANCIAL CARLSBAD, CALIFORNIA	RECON	
SD-05045	NADB-R - 1125045; Voided - AFFINIS07	1999	ROBBINS-WADE, MARY	RECORD SEARCHES FOR TELECOMMUNICATION SITES SD-341-01 & SD 382-02	AFFINIS	37-004515, 37-006132, 37-010673, 37-012814, 37-013008
SD-05251	NADB-R - 1125251; Voided - WESTEC23	1979	WESTEC SERVICES	ENVIRONMENTAL DATA STATEMENT SAN ONOFRE TO ENCINA 230 KV TRANSMISSION LINE ADDENDUM NO. 3	WESTEC SERVICES	37-004538, 37-005131, 37-005133, 37-005445
SD-05343	NADB-R - 1125343; Other - 01-1886; Voided - BROWNJ20	2001	BROWN, JOAN C.	Archaeological Monitoring During Excavation for the Hamptons Project, Located in Carlsbad, California	RMW Paleo Associates, Inc.	
SD-06173	NADB-R - 1126173; Other - PROJECT NO. 5-99; Voided - GALLEGO229	1999	GALLEGOS, DENNIS R., NINA M. HARRIS, and TRACY STROPES	HISTORICAL/ARCHAEOLOGICAL TEST OF A PORTION OF CA-SDI-8303 FOR THE FARADAY ROAD EXTENSION CARLSBAD, CALIFORNIA	GALLEGOS & ASSOC.	
SD-06179	NADB-R - 1126179; Voided - NIGHA 04	2000	NIGHABHLAIN, SINEAD	CULTURAL RESOURCE SURVEY REPORT FOR THE PACIFIC CARLSBAD PROPERTY CARLSBAD	GALLEGOS & ASSOC.	
SD-06181	NADB-R - 1126181; Voided - GALLEGO232	2000	GALLEGOS, DENNIS and RICHARD CERRETO	HISTORICAL/ARCHAEOLOGICAL SURVEY FOR THE KIRGIS CARLSBAD PROJECT CARLSBAD, CALIFORNIA	GALLEGOS & ASSOC.	37-008793, 37-009097

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-06589	NADB-R - 1126589; Voided - ROBBINS 85	1997	ROBBINS-WADE, MARY	ARCHAEOLOGICAL SURVEY & TESTING FOR THE TERRACES AT SUNNY CREEK, CARLSBAD, CALIFORNIA	AFFINIS	
SD-06606	NADB-R - 1126606; Voided - SOULE 08	1984	SOULE, WILLIAM E.	NEGATIVE ARCHAEOLOGICAL SURVEY REPORT FOR MICHAEL J. DUNIGAN OF CARLSBAD RESEARCH CENTER	MICHAEL J. DUNIGAN	
SD-07554	NADB-R - 1127554; Voided - DUKE 128	2002	DUKE, CURT	CULTURAL RESOURCE ASSESSMENT CINGULAR WIRELESS FACILITY NO. SD 398-05 SAN DIEGO COUNTY, CALIFORNIA	LSA ASSOC.	
SD-08049	NADB-R - 1128049; Voided - GALLEGO287	1999	DENNIS R. GALLEGOS, ADELLA SCHROTH, and NINA HARRIS	THE 4,000 YEAR OLD LEGOLAND CRESCENTIC-HEARTH SITE (CA-SDI-12814) CARLSBAD, CALIFORNIA	GALLEGOS AND ASSOCIATES	37-012814
SD-08050	NADB-R - 1128050; Voided - GALLEGO258	1999	DENNIS GALLEGOS and NINA M. HARRIS	5000 YEARS OF OCCUPATION: CULTURAL RESOURCE INVENTORY AND ASSESSMENT PROGRAM FOR THE CARLSBAD MUNICIPAL GOLF COURSE PROJECT, CITY OF CARLSBAD, CALIFORNIA	GALLEGOS AND ASSOCIATES	37-006833, 37-006834, 37-008303, 37-008687, 37-008688, 37-008690, 37-008691, 37-008692, 37-008694, 37-008797, 37-009095, 37-015990
SD-08065	NADB-R - 1128065; Voided - GALLEGO273	1998	GALLEGOS, DENNIS R. and LARRY TIFT	HISTORICAL/ARCHAEOLOGICAL SURVEY FOR THE CARLSBAD PARK PROJECT, CITY OF CARLSBAD, CALIFORNIA	GALLEGOS AND ASSOCIATES	37-009115
SD-08066	NADB-R - 1128066; Voided - GALLEGO274	1998	GALLEGOS, DENNIS R., LARRY TIFT, and TRACY STROPES	ARCHAEOLOGICAL TEST REPORT FOR A PORTION OF CA-SDI-9115/SDM-W-122 CARLSBAD, CA	GALLEGOS AND ASSOCIATES	37-009115
SD-08073	NADB-R - 1128073; Voided - GALLEGO281	2001	GALLEGOS, DENNIS R., TRACY A. STROPES, and MONICA GUERRO	CULTURAL RESOURCE TEST PROGRAM FOR THE WILSON PROPERTY, CARLSBAD, CALIFORNIA	GALLEGOS AND ASSOCIATES	37-008793, 37-009097
SD-08089	NADB-R - 1128089; Voided - KYLE155	1999	KYLE, CAROLYN	CULTURAL RESOURCE SURVEY FOR THE GREEN FAMILY TRUST PROJECT, CITY OF CARLSBAD, CA	KYLE CONSULTING	
SD-08094	NADB-R - 1128094; Other - JOB N. KC4-98; Voided - KYLE160	1998	KYLE, CAROLYN	CULTURAL RESOURCE SURVEY FOR THE EMERALD POINT ESTATES PROJECT, CARLSBAD, CA	KYLE CONSULTING	
SD-08314	NADB-R - 1128314; Voided - TUMA 16	2003	TUMA, MICHAEL	RESULTS OF A DATA RECOVERY PROGRAM FOR THE ALLAN O. KELLY SITE (CA-SDI-9649), KELLY RANCH PROJECT- A LA JOLLA COMPLEX SHELL MIDDEN SITE AT AGUA HEDIONDA LAGOON CARLSBAD, CALLIFORNIA	BRIAN F. SMITH AND ASSOCIATES	37-009649

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-08577	NADB-R - 1128577; Voided - CUPPLES60	1978	CUPPLES, SUE ANN	A CULTURAL RESOURCES SURVEY REPORT FOR A PROPOSED SAN MARCOS COUNTY WATER DISTRICT SEWAGE INTERCEPTOR PIPELINE	SUE ANN CUPPLES	
SD-08738	NADB-R - 1128738; Voided - HECTOR118	1985	HECTOR, SUSAN	AN ARCHAEOLOGICAL SURVEY OF THE PANONIA PROPERTY, CARLSBAD, CALIFORNIA	RECON	37-010024
SD-08742	NADB-R - 1128742; Other - PROJECT SS6401; Voided - FINK 125	1973	FINK, GARY R.	ARCHAEOLOGICAL SURVEY OF THE PROPOSED LETTERBOX CANYON LANDFILL SITE, PROJECT SS6401	SAN DIEGO COUNTY ENGINEER DEPARTMENT	
SD-08750	NADB-R - 1128750; Voided - ULTRA03	1983	ULTRA SYSTEMS, INC. and ARCHAEOLOGICAL ASSOCIATES	RESULTS OF SUPPLEMENTAL ARCHAEOLOGICAL STUDIES AT SDI-9649 (KR-1) ON THE KELLY RANCH	ULTRASYSTEMS, INC.	37-009649
SD-08754	NADB-R - 1128754; Voided - HANNA25	1981	HANNA, DAVID C.	ADDENDUM TO THE CULTURAL RESOURCE SURVEY REPORT FOR CARLSBAD HIGHLANDS CITY OF CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA	RECON	37-005434, 37-005438
SD-09146	NADB-R - 1129146; Voided - TANGB 02	2004	TANG, BAI, MICHAEL HOGAN, JOSH SMALLWOOD, TERRY JACQUEMAIN, and LAURA HENSLEY SHAKER	IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES SAN DIEGO COUNTY WATER AUTHORITY SEAWATER DESALINATION PROJECT. IN THE CITIES OF CARLSBAD, VISTA, AND SAN MARCOS, SAN DIEGO COUNTY, CALIFORNIA	CRM TECH	
SD-09249	NADB-R - 1129249; Voided - SMITH462	2004	SMITH, BRIAN F. and SHANNON GILBERT	AN ARCHAEOLOGICAL STUDY OF THE RANCHO CARLSBAD ADDITIONS	BRIAN F. SMITH & ASSOCIATES	37-017304, 37-024328
SD-09361	NADB-R - 1129361; Other - 11A0398; Voided - BYRD15	2002	Byrd, Brian F. and Collin O'Neill	Archaeological Survey Report for the Phase I Archaeological Survey along Interstate 5 San Diego County, CA.	ASM, Inc	37-000606, 37-004552, 37-004553, 37-006851, 37-007296, 37-012120, 37-013484
SD-09571	NADB-R - 1129571; Other - 12-03; Voided - GUERREM 20	2003	GUERRERO, MONICA C and DENNIS R. GALLEGOS	CITY OF CARLSBAD WATER AND SEWER MASTER PLANS CULTURAL RESOURCE BACKGROUND STUDY CITY OF CARLSBAD, CALIFORNIA	GALLEGOS & ASSOCIATES	37-000628, 37-000694, 37-005353, 37-006826
SD-09930	NADB-R - 1129930; Voided - AISLIM33	2004	Marnie Aislin-Kay and Christeen Taniguchi	Cultural Resource Survey for Sprint telecommunications Facility Candidate SD55XC009B (Cannon/Faraday SDG&E), Carlsbad, sna Diego County, California	Michael Brandman Associates	

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-10563	NADB-R - 1130563; Voided - SMITHD13		SMITH, DAVID	PALOMAR INDUSTRIAL PARK	DAVID D. SMITH AND ASSOCIATES	
SD-10655	NADB-R - 1130655; Voided - SMITHB535	2006	GREENE, RICHARD and BRIAN F. SMITH	RESULTS OF A DATA RECOVERY PROGRAM AT CA-SDI-8797, GRAND PACIFIC RESORTS PROJECT CARLSBAD, CALIFORNIA	BRIAN F. SMITH AND ASSOCIATES	37-008797
SD-10692	NADB-R - 1130692; Voided - SMITHB564	2007	SMITH, BRIAN F. and NORA E. COLLINS	RESULTS OF AN ARCHAEOLOGICAL SURVEY FOR THE TABATA DEVELOPMENT PROJECT, CITY OF CARLSBAD, CALIFORNIA	BRIAN F. SMITH AND ASSOCIATES	
SD-11144	NADB-R - 1131144; Voided - HECTOR180	2007	HECTOR, SUSAN	ENCINA-PENASQUITOS TRANSMISSION LINE RECORDS SEARCH	ASM AFFILIATES, INC.	
SD-11212	NADB-R - 1131212; Voided - WADES139	1989	WADE, SUE A.	ARCHAEOLOGICAL AND PALEONTOLOGICAL CONSTRAINTS FOR THE FOX PROPERTY (RECON NUMBER 2078A)	RECON	
SD-11224	NADB-R - 1131224; Voided - ROBBINS212	2007	ROBBINS-WADE, MARY	ENCINA EAST STORMWATER MANAGEMENT CULTURAL RESOURCES (AFFINIS JOB NO. 2244)	AFFINIS	
SD-11783	NADB-R - 1131783; Voided - LAYLAD57	2008	LAYLANDER, DON and LINDA AKYUZ	ARCHAEOLOGICAL SURVEY FOR THE CALTRANS I-5 NORTH COAST CORRIDOR PROJECT BIOLOGICAL MITIGATION PARCELS, SAN DIEGO COUNTY, CALIFORNIA	ASM AFFILIATES, INC	37-000209, 37-007296, 37-029576, 37-029577
SD-12019	NADB-R - 1132019; Voided - GALLEGO321	2004	GUERRERO, MONICA and DENNIS R. GALLEGOS	CULTURAL RESOURCE SURVEY FOR THE CARLSBAD SEAWATER DESALINATION PLANT PROJECT CARLSBAD, CALIFORNIA	GALLEGOS & ASSOCIATES	
SD-12022	NADB-R - 1132022; Voided - GALLEGO324	2005	GUERRERO, MONICA and DENNIS R. GALLEGOS	CULTURAL RESOURCE SURVEY FOR THE AURA CIRCLE PROJECT CARLSBAD, CALIFORNIA	GALLEGOS & ASSOCIATES	
SD-12024	NADB-R - 1132024; Voided - GALLEGO326	2005	STROPES, TRACY and DENNIS R. GALLEGOS	CARLSBAD MUNICIPAL GOLF COURSE DATA RECOVERY PROGRAM FOR CA-SDI-8694, AND INDEXING AND PRESERVATION STUDY FOR CA-SDI-8303 AND CA-SDI-8797 LOCUS C, CITY OF CARLSBAD, CALIFORNIA	GALLEGOS & ASSOCIATES	37-008303, 37-008694, 37-008797

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SD-12027	NADB-R - 1132027; Voided - GALLEGO329	2005	STROPES, TRACY and DENNIS R. GALLEGOS	CULTURAL RESOURCE DATA RECOVERY AND INDEXING AND PRESERVATION PROGRAM FOR THE GRAND PACIFIC RESORTS SITE CA-SDI-8797 AREA A, CITY OF CARLSBAD, CALIFORNIA	GALLEGOS & ASSOCIATES	
SD-12037	NADB-R - 1132037; Voided - GALLEGO339	2007	GALLEGOS, DENNIS R.	CULTURAL RESOURCES MONITORING REPORT FOR THE CARLSBAD MUNICIPAL GOLF COURSE, CITY OF CARLSBAD, CALIFORNIA	GALLEGOS & ASSOCIATES	37-008303, 37-008694, 37-008797
SD-12084	NADB-R - 1132084; Voided - COLLETT26	2001	COLLETT, RUSSELL and DAYLE CHEEVER	SIGNIFICANCE ASSESSMENT OF THREE CULTURAL RESOURCE SITES WITHIN THE COLLEGE BOULEVARD REACH B ALTERNATIVE 1 AND REACH C ALIGNMENTS CITY OF CARLSBAD, CALIFORNIA	RECON	37-005416, 37-005434, 37-005436
SD-12204	NADB-R - 1132204; Voided - GARDNJ02	2009	GARDNER, JILL	ARCHAEOLOGICAL MONITORING FOR THE SDG&E ENCINA-PENASQUITOS 230 KV TRANSMISSION LINE PROJECT FROM CARLSBAD TO CARMEL VALLEY, AND GUARD STRUCTURE POLE FIELD CHECKS FOR THE SDG&E ENCINA-PENASQUITOS RECONDUCTOR PROJECT	ASM AFFILIATES	
SD-12380	NADB-R - 1132380; Voided - SMITHB613	2008	SMITH, BRIAN F. and SETH A. ROSENBERG	RESULTS OF A CULTURAL RESOURCES MITIGATION AND MONITORING PROGRAM FOR ROBERTSON RANCH: ARCHAIC AND LATE PREHISTORIC CAMPS NEAR THE AGUA HEDIONDA LAGOON	BRIAN F. SMITH & ASSOCIATES	37-010609, 37-010610, 37-010611, 37-024325, 37-024328
SD-12422	NADB-R - 1132422; Voided - NIGHAS68	2001	NI GHABHLAIN, SINEAD and DREW PALLETTE	A CULTURAL RESOURCES INVENTORY FOR THE ROUTE REALIGNMENT OF THE PROPOSED PF. NET / AT&T FIBER OPTICS CONDUIT OCEANSIDE TO SAN DIEGO, CALIFORNIA	ASM AFFILIATES, INC.	
SD-12444	NADB-R - 1132444; Voided - MCGINNIS96	2009	MCGINNIS, PATRICK	CULTURAL RESOURCES EXTENDED PHASE I REPORT FOR THE INTERSTATE 5 NORTH COAST CORRIDOR PROJECT BIOMITIGATION PARCELS SITES CA-SDI-209 AND CA-SDI-18917 CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA	TIERRA ENVIRONMENTAL	37-000209, 37-029576
SD-12647	NADB-R - 1132647; Voided - ROBBINS294	2010	ROBBINS-WADE, MARY	BUENA OUTFALL FORCE MAIN PHASE III (CIP 8131) - ARCHAEOLOGICAL STUDY	AFFINIS	

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-12762	NADB-R - 1132762; Voided - DOMINICI70	2010	DOMINICI, DEBORAH	HISTORIC PROPERTY SURVEY REPORT FOR THE INTERSTATE 5 NORTH COAST CORRIDOR PROJECT	DOMINICI, DEBORAH	
SD-13181	NADB-R - 1133181; Voided - SMITHB642	2011	SMITH, BRIAN F. and CLARENCE HOFF	A CULTURAL RESOURCES SURVEY UPDATE AND EVALUATION FOR THE ROBERTSON RANCH WEST PROJECT AND AN EVALUATION OF NATIONAL REGISTER ELIGIBILITY OF ARCHAEOLOGICAL SITES FOR SECTION 106 REVIEW (NHPA)	BRIAN F. SMITH AND ASSOCIATES, INC.	37-010609, 37-010612, 37-024320, 37-024321, 37-024322, 37-032209
SD-13401	NADB-R - 1133401; Voided - WHITJ13	2011	WHITAKER, JAMES E.	ETS #21929, CULTURAL RESOURCES SURVEY FOR THE EROSION CONTROL, Z226553, CARLSBAD PROJECT, SAN DIEGO COUNTY, CALIFORNIA (HDR #172681)	HDR, INC.	37-006140
SD-13626	NADB-R - 1133626; Voided - MORGAN05	2011	MORGAN, NICHOLE B.	TCM ACCESS ROAD GRADING PROJECT, CULTURAL RESOURCES INVENTORY REPORT	HDR	37-000744, 37-001097, 37-004575, 37-004607, 37-004905, 37-004927, 37-005826, 37-006134, 37-006135, 37-006139, 37-006140, 37-006830, 37-006858, 37-008280, 37-008914, 37-009089, 37-009655, 37-009708, 37-009980, 37-010671, 37-010672, 37-010823, 37-010875, 37-011728, 37-011729, 37-012209, 37-012461, 37-012818, 37-012820, 37-012821, 37-012940, 37-013084, 37-013085, 37-014563, 37-015863, 37-015867, 37-018386, 37-024458, 37-026492, 37-028681, 37-028737, 37-030107
SD-13707	NADB-R - 1133707; Voided - TENNK22	2011	TENNESEN, KRISTIN	ETS #21729, CULTURAL RESOURCES MONITORING FOR THE TOWER BRUSHING, 4 TOWERS, ENCINA PROJECT, SAN DIEGO COUNTY, CALIFORNIA	HDR	37-006132, 37-010673, 37-013008
SD-13828	NADB-R - 1133828; Voided - DREIBL01	2006	DREIBELBIS, LAURA, TANYA WAHOFF, and REBECCA APPLE	CULTURAL RESOURCE SURVEY FOR THE AGUA HEDIONDA AND CALAVERA CREEKS DREDGING AND IMPROVEMENT PROJECT	EDAW, INC.	
SD-14615	NADB-R - 1134615; Voided - CALTRANS90	2013	CALTRANS	I-5 NORTH CORRIDOR PROJECT SUPPLEMENTALS	CALTRANS	

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SD-14675	NADB-R - 1134675; Voided - RISSON01	2012	RISSO, NANCY	TURBOJET SERVICE TO MCCLELLAN-PALOMAR AIRPORT, CARLSBAD, CALIFORNIA	FEDERAL AVIATION ADMINISTRATION	
SD-14967	NADB-R - 1134967	2014	TRACY A. STROPES and BRIAN F. SMITH	PHASE I CULTURAL RESOURCES SURVEY FOR THE DOS COLINAS/ COLLEGE BOULEVARD MITIGATION PROJECT	BRIAN F. SMITH AND ASSOCIATES, INC.	37-016317
SD-15158	NADB-R - 1135158	2012	KRISTIN TENNESEN	ETS #22252, CULTURAL RESOURCES MONITORING FOR THE FOOTPATH, P135358, AGUA HEDIONDA PROJECT, SAN DIEGO COUNTY, CALIFORNIA	HDR	
SD-15527	NADB-R - 1135527	2015	Brian F. Smith and Tracy A. Stropes	A Section 106 (NHPA) Historic Resources Study for the College Boulevard Mitigation Project, City of Carlsbad, San Diego County, California (APNs 209-060-71 and 209-060-72)	Brian F. Smith and Associates	
SD-15541	NADB-R - 1135541	2013	Ian Scharlotta and Brian Williams	ARCHAEOLOGICAL DATA RECOVERY PLAN FOR CA-SDI-13008 (STRAWBERRY FIELDS), CARLSBAD, CALIFORNIA	ASM Affiliates, Inc.	
SD-15739	NADB-R - 1135739	2014	David Brunzell	CULTURAL RESOURCES ASSESSMENT OF THE GRAND PACIFIC PROJECT, CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA (BCR CONSULTING PROJECT NO. TRF1411)	BCR Consulting	
SD-15905	NADB-R - 1135905	2014	Mary Robbins-Wade	BUENA OUTFALL FORCE MAIN PROJECT CULTURAL RESOURCES SURVEY (AFFINIS JOB NO. 2535)		
SD-16013	NADB-R - 1136013	2012	Brian F. Smith	A PHASE I ARCHAEOLOGICAL STUDY FOR THE EL CAMINO REAL WIDENING PROJECT AT ROBERTSON RANCH CARLSBAD, CALIFORNIA	Brian F. Smith and Associates	
SD-16042	NADB-R - 1136042	2013	Shannon L. Loftus	CULTURAL RESOURCE RECORDS SEARCH AND SITE SURVEY AT&T SITE NS0023 LEGOLAND 5780 FLEET STREET CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA 92008 CASPR# 3601278048	ACE Environmental	
SD-16131	NADB-R - 1136131	2013	Michelle Blake	SIXTH SUPPLEMENTAL HISTORIC PROPERTY SURVEY REPORT (HPSR): REVISED AREA OF POTENTIAL EFFECTS (APE) I-5 NORTH COAST CORRIDOR	Caltrans	

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Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SD-16634	NADB-R - 1136634	2016	SMITH, BRIAN F.	A SECTION 106 (NHPA) HISTORIC RESOURCES STUDY FOR THE COLLEGE BOULEVARD REACH A AND DETENTION BASIN BJ BIOLOGICAL MITIGATION PROJECT SPL-2014-00339-RJV CITY OF CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA APNS 209-060-71 AND 209-060-72	Brian F. Smith and Associates	37-017303
SD-16774	NADB-R - 1136774	2016	KRAFT, JENNIFER R. and SMITH, BRIAN F.	CULTURAL RESOURCES STUDY FOR THE MARJA ACRES PROJECT CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA APNS 207-101-35 AND -37	Brian F. Smith and Associates	37-035933, 37-036859, 37-036860
SD-16927	NADB-R - 1136927	2017	SMITH, BRIAN F.	CULTURAL RESOURCES MONITORING REPORT FOR THE LEGOLAND PARKING STRUCTURE PROJECT, CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA	Brian F. Smith and Associates, Inc	
SD-16928	NADB-R - 1136928	2017	KENNEDY, GEORGE L. and Wirths, Todd A.	PALEONTOLOGICAL MONITORING REPORT, LEGOLAND CALIFORNIA PARKING STRUCTURE PROJECT, CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA	Brian F. Smith and Associates, Inc.	
SD-17039	NADB-R - 1137039	2017	SMITH, BRIAN F.	CULTURAL RESOURCES MONITORING REPORT FOR THE LEGOLAND HOTEL PROJECT, CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA	Brian F. Smith and Associates, Inc.	
SD-17085	NADB-R - 1137085	2017	SMITH, BRIAN F.	CULTURAL RESOURCES MONITORING REPORT FOR THE ROBERTSON RANCH WEST PROJECT AND IMPROVEMENTS TO EL CAMINO REAL, CITY OF CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA	Brian F. Smith and Associates, Inc.	37-010609, 37-010612, 37-024320, 37-024321, 37-024322, 37-032209
SD-17135	NADB-R - 1137135	2015	CORDOVA, ISABEL	ARCHAEOLOGICAL SURVEY FOR POLE BRUSHING PROJECT, VARIOUS LOCATIONS, SAN DIEGO COUNTY, CALIFORNIA (SDG&E ETS# 29109, PANGIS PROJECT# 1401.07)	PanGIS	37-004496, 37-004847, 37-006823, 37-008195, 37-009701, 37-013502, 37-024551, 37-026442, 37-031057, 37-034564, 37-034565, 37-034566, 37-034567, 37-034568, 37-034569, 37-034570, 37-034571, 37-034572, 37-034573, 37-034574
SD-17230	NADB-R - 1137230; Submitter - BCR Project No. SYN1606	2017	BRUNZELL, DAVID	CULTURAL RESOURCES ASSESSMENT OF THE TAYLORMADE PUC PROJECT, CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA (BCR CONSULTING PROJECT NO. SYN1606)	BCR Consulting LLC	

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SD-17232	NADB-R - 1137232; Submitter - BCR Project No. SYN1628	2017	BRUNZELL, DAVID	SAN DIEGO 55 FIBER PROJECT, SAN DIEGO COUNTY, CALIFORNIA (BCR CONSULTING PROJECT NO. SYN1628)	BCR Consulting LLC	
SD-17319	NADB-R - 1137319	2018	WILLIAMS, BRIAN and KENT MANCHEN	ARCHAEOLOGICAL MONITORING FOR THE SDG&E 2017 REPLACE POLE P124793 PROJECT, CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA (SDG&E ETS #36503 ASM #23004.86)	ASM AFFILIATES, INC.	
SD-17343	NADB-R - 1137343	2017	WILSON, STACIE and KRISTINA DAVISON	LAUREL TREE AVIARA PROJECT (APN 212-040-56-00) - CULTURAL RESOURCES SURVEY REPORT	HELIX ENVIRONMENTAL PLANNING	37-036606
SD-17625	NADB-R - 1137625	2018	SMITH, BRIAN F., GEORGE L. KENNEDY, and TODD A. WIRTHS	ARCHAEOLOGICAL AND PALEONTOLOGICAL MONITORING REPORT FOR THE CANNON ROAD SENIOR HOUSING PROJECT, CARLSBAD, SAN DIEGO COUNTY, CALIFORNIA (PROJECT NOS. MP 02-03(H); SDP 15-13; SDP 15-19; CUP 15-05; MS 15-12)	BRIAN F. SMITH AND ASSOCIATES, INC.	

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Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-37-000209	CA-SDI-000209						SD-00424, SD-01054, SD-01984, SD-03586, SD-04635, SD-11783, SD-12444, SD-17095
P-37-005353	CA-SDI-005353						SD-00889, SD-01984, SD-04635, SD-04641, SD-09571
P-37-006133	CA-SDI-006133						SD-01579, SD-01665, SD-04093, SD-04641
P-37-006135	CA-SDI-006135						SD-04641, SD-13626
P-37-006140	CA-SDI-006140						SD-01316, SD-04635, SD-13401, SD-13626
P-37-006830	CA-SDI-006830						SD-01579, SD-01665, SD-13626
P-37-006832	CA-SDI-006832						SD-00102, SD-00103, SD-04641
P-37-006833	CA-SDI-006833						SD-00102, SD-06114, SD-08050
P-37-006834	CA-SDI-006834						SD-08050
P-37-006835	CA-SDI-006835						SD-01329, SD-04641, SD-06114
P-37-007229	CA-SDI-007229						SD-00102, SD-04641
P-37-007230	CA-SDI-007230						SD-00102, SD-04641, SD-06114
P-37-008303	CA-SDI-008303						SD-00103, SD-01579, SD-01887, SD-03560, SD-04353, SD-08050, SD-12024, SD-12037
P-37-008687	CA-SDI-008687						SD-08050

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-37-008688	CA-SDI-008688						SD-08050
P-37-008689	CA-SDI-008689						SD-06114
P-37-008690	CA-SDI-008690						SD-06114, SD-08050
P-37-008691	CA-SDI-008691						SD-06114, SD-08050
P-37-008692	CA-SDI-008692						SD-00786, SD-01618, SD-06114, SD-08050
P-37-008693	CA-SDI-008693						SD-06114
P-37-008694	CA-SDI-008694						SD-06114, SD-08050, SD-12024, SD-12037
P-37-008695	CA-SDI-008695						
P-37-008793	CA-SDI-008793						SD-06181, SD-08073
P-37-008794	CA-SDI-008794						
P-37-008796	CA-SDI-008796						
P-37-008797	CA-SDI-008797						SD-02474, SD-03170, SD-03943, SD-08050, SD-10655, SD-12024, SD-12037
P-37-009095	CA-SDI-009095						SD-08050
P-37-009097	CA-SDI-009097						SD-06181, SD-08073
P-37-009114	CA-SDI-009114						
P-37-009115	CA-SDI-009115						SD-08065, SD-08066
P-37-009116	CA-SDI-009116						SD-03955, SD-06708
P-37-009649	CA-SDI-009649						SD-00889, SD-04350, SD-04635, SD-08314, SD-08750

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-37-009650	CA-SDI-009650						SD-04635
P-37-009651	CA-SDI-009651						SD-04635
P-37-009652	CA-SDI-009652						SD-04635
P-37-009653	CA-SDI-009653						SD-04635
P-37-009654	CA-SDI-009654						SD-04635
P-37-009655	CA-SDI-009655						SD-01595, SD-04635, SD-13626
P-37-010024	CA-SDI-010024						SD-00681, SD-08738
P-37-010444	CA-SDI-010444						SD-00339, SD-02623
P-37-010609	CA-SDI-010609						SD-12380, SD-13181, SD-17085
P-37-010670	CA-SDI-010670						SD-02474, SD-03170
P-37-010671	CA-SDI-010671						SD-13626
P-37-010876	CA-SDI-010876						SD-01047, SD-06000
P-37-011022	CA-SDI-011022						SD-01048
P-37-012814	CA-SDI-012814						SD-02474, SD-03170, SD-05045, SD-08049
P-37-013008	CA-SDI-013008						SD-05045, SD-13707
P-37-014232	CA-SDI-014064	Other - CRL-1				(Gallegos & Associates)	
P-37-014364	CA-SDI-014140	Other - EP-1				(RMW Paleo Associates)	
P-37-014379	CA-SDI-014151						
P-37-015183							
P-37-015714						1997 (Affinis)	
P-37-015990	CA-SDI-014563					1997 (Gallegos)	SD-08050
P-37-015991	CA-SDI-014564					1997 (Gallegos)	
P-37-015992	CA-SDI-014565					1997 (Gallegos)	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-37-015993	CA-SDI-014566					1997 (Gallegos)	
P-37-016262		Other - FR-I-1				1998 (Gallegos & Associates)	
P-37-016317	CA-SDI-014809	Other - Rancho Carlsbad Site #1				1998 (Affinis)	SD-03528, SD-03567, SD-08855, SD-14967
P-37-024320	CA-SDI-016130	Other - Robertson Temp2				2001 (Brian F. Smith and Associates)	SD-13181, SD-17085
P-37-024321	CA-SDI-016131	Other - Robertson Temp3				2001 (Brian F. Smith and Associates)	SD-13181, SD-17085
P-37-024322	CA-SDI-016132	Other - Robertson Temp 4				2001 (Brian F. Smith and Associates)	SD-13181, SD-17085
P-37-024323	CA-SDI-016133	Other - Robertson Temp 5				2001 (Brian F. Smith and Associates)	
P-37-024327	CA-SDI-016137	Other - Robertson Temp 15				2001 (Brian F. Smith and Associates)	
P-37-024428	CA-SDI-016205	Other - T1				2002 (RECON)	
P-37-029576	CA-SDI-018917	Other - Agua Hedionda 1				2008 (ASM Affiliates, Inc.)	SD-11783, SD-12444
P-37-035933	CA-SDI-021888	Other - Marja Acres Site MA-Temp-1; IC Informal - RNID-3079	Site	Prehistoric	AP16 (Other) - Prehistoric Shell Scatter	2016 (Jillian L. Hahnlen, Brian F. Smith & Associates, Inc.)	SD-16774
P-37-036606		IC Informal - RNID-3392; Other - SHC-01_Warehouse	Building	Historic	HP08 (Industrial building)	2017 (Krisitna Davison, Stacie Wilson, HELIX Environmental Planning)	SD-17343
P-37-036859		IC Informal - RNID-3592; Other - Marja Acres Building #1; Other - Hoffman Residence	Building	Historic	HP02 (Single family property)	2018 (Courtney Accardy, Brian F. Smith and Associates, Inc.)	SD-16774
P-37-036860		IC Informal - RNID-3592; Other - Marja Acres Building 2; Other - Hoffman Egg Ranch	Building	Historic	HP06 (1-3 story commercial building)	2018 (Courtney Accardy, Brian F. Smith and Associates, Inc.)	SD-16774

ATTACHMENT B

NATIVE AMERICAN HERITAGE COMMISSION SEARCH RESULTS

STATE OF CALIFORNIA **Gavin Newsom, Governor**

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

May 2, 2019

Kassie Sugimoto
Psomas

VIA Email to: Kassie.Sugimoto@Psomas.com

RE: 1RJM010100 Carlsbad Veterans Hospital, San Diego County.

Dear Ms. Sugimoto:

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 positive. Please contact the San Luis Rey Band of Mission Indians on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: katy.sanchez@nahc.ca.gov .

Sincerely,

Katy Sanchez

KATY SANCHEZ
Associate Environmental Planner

Attachment

ATTACHMENT C

SAN DIEGO NATURAL HISTORY MUESUM OF NATURAL HISTORY PALEONTOLOGY RECORDS SEARCH RESULTS

16 April 2019

Ms. Melissa Macias
Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, CA 92707

RE: Paleontological Records Search – Carlsbad Veterans Memorial Project

Dear Ms. Macias:

This letter presents the results of a paleontological records search conducted for the Carlsbad Veterans Memorial Project (Project), located in the City of Carlsbad, San Diego County, CA. The Project site is bordered to the west and south by Faraday Avenue, to the east by Faraday Avenue and undeveloped land, and to the north by Whitman Way and residential and undeveloped land.

A review of published geological maps covering the Project site and surrounding area was conducted to determine the specific geologic units underlying the Project. Each geologic unit was subsequently assigned a paleontological resource sensitivity (Deméré and Walsh, 1993). Published geological reports covering the Project area (e.g., Kennedy and Tan, 2007) indicate that the proposed Project has the potential to impact late Holocene-age alluvial floodplain deposits and the middle Eocene-age Santiago Formation. These geologic units and their paleontological sensitivity are summarized in detail in the following section.

In addition, a search of the paleontological collection records housed at the San Diego Natural History Museum (SDNHM) was conducted in order to determine if any documented fossil collection localities occur along the Project site or within the immediately surrounding area (Figure 1). The SDNHM has 88 recorded fossil localities within 1 mile of the Project site. Forty-seven of these localities are from geologic units that are not expected to be impacted by construction of the Project: the Pleistocene-age Bay Point Formation, the early to middle Pleistocene-age Lindavista Formation, and the Late Cretaceous-age Point Loma Formation. The remaining 41 localities are from the Santiago Formation, and are discussed in greater detail below.

Geologic Rock Units Underlying the Project Site

alluvial floodplain deposits – Late Holocene-age alluvial floodplain deposits underlie the northwestern portion of the Project site. These deposits are considered to be less than 10,000 years old, and consist of unconsolidated sandy, silty, and clayey alluvium (Kennedy and Tan, 2007). The SDNHM does not have any fossil localities from these deposits within a 1-mile radius of the Project. Holocene-age alluvial floodplain deposits are assigned a low paleontological sensitivity based on their relatively young geologic age and lack of recorded fossil collection localities. However, these deposits appear to be underlain at shallow depths by the Santiago Formation (see below), which could be impacted by construction where the contact is relatively shallow.

Santiago Formation – The Santiago Formation underlies the majority of the Project site at the surface, and appears to underlie surficial deposits in the northwestern portion of the Project site.

The middle Eocene-age (approximately 49 to 40 million years old) Santiago Formation has been divided into three informal members in the Encinitas-Carlsbad-Vista area of San Diego County (Wilson, 1972). The SDNHM has 41 recorded fossil localities from the Santiago Formation within a 1-mile radius of the Project site. Ten of these localities are from marine deposits of the middle member "B" and yielded trace fossils (e.g., burrows in matrix and shells with sponge borings) and fossil remains of marine invertebrates (e.g., foraminiferans, corals, snails, clams, mussels, oysters, tusk shells, barnacles, and sea urchins) and marine vertebrates (e.g., rays, skates, sharks, and bony fish). Thirty-one localities are from marine and fluvial deposits of the upper member "C" and yielded trace fossils (e.g., coprolites and burrows of polychaete worms and crustaceans) and fossil remains of plants (e.g., palms, laurel, magnolia, tropical mangrove, and tropical almond), terrestrial invertebrates (e.g., pulmonate snails), marine invertebrates (e.g., foraminiferans, brachiopods, snails, clams, mussels, oysters, tusk shells, barnacles, crabs, ostracods, starfish, sea urchins, and heart urchins), marine vertebrates (e.g., sharks, skates, rays, bony fish, and sea birds), and terrestrial vertebrates (e.g., turtles, crocodiles, marsupials, apatotheres, pantolestids, insectivorans, bats, primates, creodonts, carnivorans, rodents, artiodactyls, mesonychids, and perissodactyls). The Santiago Formation has produced significant terrestrial fossil vertebrate localities in northern San Diego County, and is considered to have a high paleontological sensitivity.

Summary and Recommendations

The high paleontological sensitivity of the Santiago Formation in San Diego County (Deméré and Walsh, 1993) suggests the potential for construction of the Project to result in impacts to paleontological resources. Any proposed excavation activities that extend deep enough to encounter previously undisturbed deposits of this geologic unit have the potential to impact the paleontological resources preserved therein. For these reasons, implementation of a complete paleontological resource mitigation program during ground-disturbing activities is recommended.

The fossil collection locality information contained within this paleontological records search should be considered private and is the sole property of the San Diego Natural History Museum. Any use or reprocessing of the locality information contained within this document beyond the scope of the Carlsbad Veterans Memorial Project is prohibited.

If you have any questions concerning these findings please feel free to contact me at 619-255-0321 or kmccomas@sdnhm.org.

Sincerely,

Katie McComas, M.S.
Paleontological Report Writer & GIS Specialist
San Diego Natural History Museum

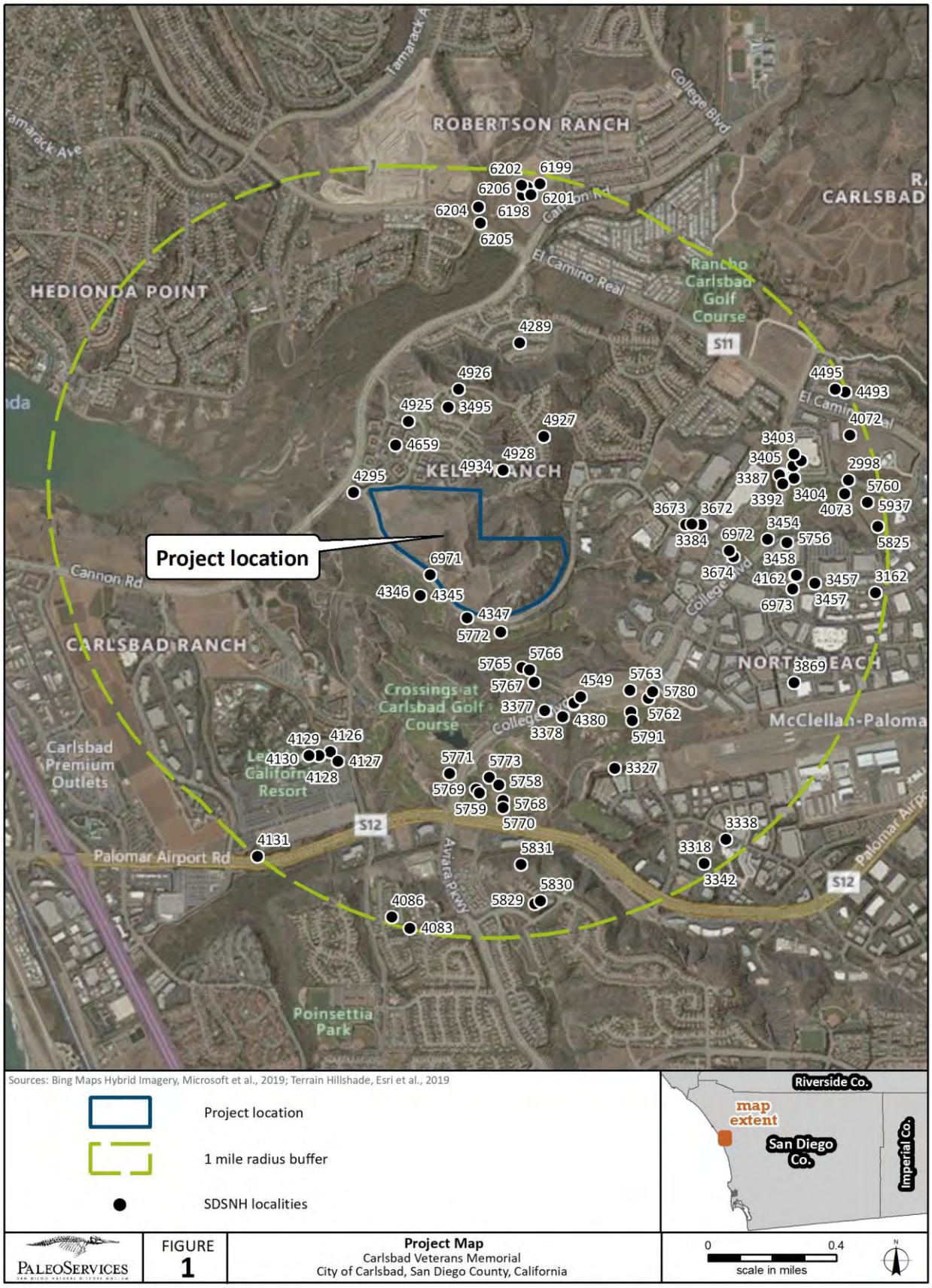
Enc: Figure 1: Project map
Appendix: List of SDNHM fossil localities in the vicinity of the Project

Literature Cited

Deméré, T.A., and Walsh, S.L. 1993. Paleontological Resources, County of San Diego. Prepared for the San Diego Planning Commission: 1–68.

Kennedy, M.P., and Tan, S.S. 2007. Geologic Map of the Oceanside 30' x 60' Quadrangle, California. California Geological Survey, Regional Geologic Map Series 1:100,000 scale, map no. 2.

Wilson, K.L. 1972. Eocene and related geology of a portion of the San Luis Rey and Encinitas quadrangles, San Diego County, California. Unpublished Master's. Thesis, University of California, Riverside.


ROBERTSON RANCH
HEDIONDA POINT
CARLSBAD RANCH
Project location
Cannon Rd
Palomar Airport Rd
El Camino Real
College Blvd
Tamarack Ave
Rancho Carlsbad Golf Course
Crossings at Carlsbad Golf Course
Carlsbad Premium Outlets
Poinsettia Park
McClellan-Paloma
S11
S12
6202
6199
6206
6201
6204
6198
6205
4289
4926
4925
3495
4927
4659
4928
4934
4295
6971
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4347
5772
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5765
5767
4549
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4380
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3378
5791
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4126
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3342
4495
4493
4072
3403
3405
2998
3387
5760
3392
3404
4073
5937
3673
3672
3454
3384
6972
5756
5825
3458
3674
4162
3457
3162
6973
3457
3869
Riverside Co.
map extent
San Diego Co.
Imperial Co.
Sources: Bing Maps Hybrid Imagery, Microsoft et al., 2019; Terrain Hillshade, Esri et al., 2019
Project location
1 mile radius buffer
SDSNH localities
PaleoServices
FIGURE 1
Project Map
Carlsbad Veterans Memorial
City of Carlsbad, San Diego County, California
0
0.4
scale in miles
N

Appendix: Locality List

San Diego Natural History Museum
Department of Paleontology

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
4127	Legoland #2	City of Carlsbad, San Diego County, CA	155	Bay Point Formation	Cenozoic	Quaternary	Pleistocene
4128	Legoland #3	City of Carlsbad, San Diego County, CA	157	Bay Point Formation	Cenozoic	Quaternary	Pleistocene
4129	Legoland #4	City of Carlsbad, San Diego County, CA	155	Bay Point Formation	Cenozoic	Quaternary	Pleistocene
4130	Legoland #5	City of Carlsbad, San Diego County, CA	145	Bay Point Formation	Cenozoic	Quaternary	Pleistocene
4295	Macario Bridge	City of Carlsbad, San Diego County, CA	48	Bay Point Formation	Cenozoic	Quaternary	late Pleistocene
4126	Legoland #1	City of Carlsbad, San Diego County, CA	158	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	late Pleistocene
6200	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	60	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	late Pleistocene
6201	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	58	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	late Pleistocene
6202	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	56	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	late Pleistocene
6204	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	58	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	late Pleistocene
6205	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	50	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	late Pleistocene
6206	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	52	Bay Point Formation, unnamed marine deposit	Cenozoic	Quaternary	late Pleistocene
4493	Sunny Creek #5	City of Carlsbad, San Diego County, CA	120	Bay Point Formation, unnamed nonmarine deposit	Cenozoic	Quaternary	Pleistocene
4495	Sunny Creek #5	City of Carlsbad, San Diego County, CA	112	Bay Point Formation, unnamed nonmarine deposit	Cenozoic	Quaternary	Pleistocene
6195	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	80	Bay Point Formation, unnamed nonmarine deposit	Cenozoic	Quaternary	late Pleistocene
6197	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	77	Bay Point Formation, unnamed nonmarine deposit	Cenozoic	Quaternary	late Pleistocene
6198	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	72	Bay Point Formation, unnamed nonmarine deposit	Cenozoic	Quaternary	late Pleistocene
6199	Robertson Ranch PA 12 & 13, Wildlife Corridor	City of San Diego, San Diego County, CA	62	Bay Point Formation, unnamed nonmarine deposit	Cenozoic	Quaternary	late Pleistocene
5780	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	316	Lindavista Formation	Cenozoic	Quaternary	Pleistocene
4928	Kelly Ranch Core - Pholad Site	City of Carlsbad, San Diego County, CA	300	Lindavista Formation, unnamed marine terrace	Cenozoic	Quaternary	Pleistocene
6971	Carlsbad Desalination Pipeline	City of Carlsbad, San Diego County, CA	95	Santiago Formation	Cenozoic	Paleogene	middle Eocene
3318	Airport Business Center I	City of Carlsbad, San Diego County, CA	190	Santiago Formation, member B	Cenozoic	Paleogene	middle Eocene
3327	Airport Business Center	San Diego County, CA	235	Santiago Formation, member B	Cenozoic	Paleogene	middle Eocene
3338	Airport Business Center	San Diego County, CA	238	Santiago Formation, member B	Cenozoic	Paleogene	middle Eocene
3342	Airport Business Center	San Diego County, CA	198	Santiago Formation, member B	Cenozoic	Paleogene	middle Eocene
4289	Kelly Ranch, Village E	City of Carlsbad, San Diego County, CA	102	Santiago Formation, member B	Cenozoic	Paleogene	middle Eocene
5762	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	280	Santiago Formation, member B	Cenozoic	Paleogene	middle Eocene
5763	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	285	Santiago Formation, member B	Cenozoic	Paleogene	middle Eocene
5764	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	287	Santiago Formation, member B	Cenozoic	Paleogene	middle Eocene
5791	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	279	Santiago Formation, member B	Cenozoic	Paleogene	middle Eocene
3377	College Boulevard, Site 4	City of Carlsbad, San Diego County, CA	185	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
3378	College Boulevard - Site 14	City of San Diego, San Diego County, CA	236	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
3495	Kelly's Ranch	City of Carlsbad, San Diego County, CA	260	Santiago Formation, member C	Cenozoic	Paleogene	late Eocene
4083	Emerald Ridge Site 3	City of Carlsbad, San Diego County, CA	170	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4086	Emerald Ridge East Sites	City of Carlsbad, San Diego County, CA	0	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene

Appendix: Locality List

San Diego Natural History Museum
Department of Paleontology

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
4131	Legoland #6	City of Carlsbad, San Diego County, CA	75	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4345	Faraday Avenue Extension	City of Carlsbad, San Diego County, CA	57	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4346	Faraday Avenue Extension	City of Carlsbad, San Diego County, CA	56	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4347	Faraday Avenue Extension	City of Carlsbad, San Diego County, CA	101	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4380	College Boulevard site 9	City of Carlsbad, San Diego County, CA	270	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4429	College Boulevard site 8	City of Carlsbad, San Diego County, CA	270	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4659	Kelly Ranch Core - plant site	City of Carlsbad, San Diego County, CA	100	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4925	Kelly Ranch Core - Mammal & Coprolite Site	City of Carlsbad, San Diego County, CA	54	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4926	Kelly Ranch Core - Bird Bone Site	City of Carlsbad, San Diego County, CA	255	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4927	Kelly Ranch Core - Gritstone Site	City of Carlsbad, San Diego County, CA	300	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4934	Kelly Ranch Core - Worm Burrow Site	City of Carlsbad, San Diego County, CA	297	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
5829	Emerald Pointe Estates	City of Carlsbad, San Diego County, CA	255	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
5830	Emerald Pointe Estates	City of Carlsbad, San Diego County, CA	257	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
5831	Emerald Pointe Estates	City of Carlsbad, San Diego County, CA	245	Santiago Formation, member C	Cenozoic	Paleogene	middle Eocene
4549	College Boulevard - Site 3	City of Carlsbad, San Diego County, CA	290	Santiago Formation, member C, subunit 1	Cenozoic	Paleogene	middle Eocene
5765	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	104	Santiago Formation, member C, unit 1	Cenozoic	Paleogene	middle Eocene
5766	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	120	Santiago Formation, member C, unit 2	Cenozoic	Paleogene	middle Eocene
5768	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	148	Santiago Formation, member C, unit 2	Cenozoic	Paleogene	middle Eocene
5769	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	112	Santiago Formation, member C, unit 2	Cenozoic	Paleogene	middle Eocene
5770	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	138	Santiago Formation, member C, unit 2	Cenozoic	Paleogene	middle Eocene
5758	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	163	Santiago Formation, member C, Unit 3	Cenozoic	Paleogene	middle Eocene
5759	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	122	Santiago Formation, member C, Unit 3	Cenozoic	Paleogene	middle Eocene
5767	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	155	Santiago Formation, member C, unit 3	Cenozoic	Paleogene	middle Eocene
5772	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	85	Santiago Formation, member C, unit 3	Cenozoic	Paleogene	middle Eocene
5773	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	134	Santiago Formation, member C, unit 3	Cenozoic	Paleogene	middle Eocene
5771	Carlsbad City Golf Course	City of Carlsbad, San Diego County, CA	135	Santiago Formation, member C, unit 4	Cenozoic	Paleogene	middle Eocene
2998	Letterbox Canyon	San Diego County, CA	120	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3162	Carlsbad Research Center	City of Carlsbad, San Diego County, CA	280	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3384	College Boulevard, Site 16	City of Carlsbad, San Diego County, CA	246	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3387	College Boulevard - Site 21A Roadcut	San Diego County, CA	175	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3392	College Boulevard - Dinosaur Quarry-Site 31	City of Carlsbad, San Diego County, CA	163	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3402	Carlsbad Research Center - Site 28	City of Carlsbad, San Diego County, CA	160	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3403	Carlsbad Research Center - Site 29	City of Carlsbad, San Diego County, CA	148	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3404	Carlsbad Research Center, Pad 76 - Site 30	City of Carlsbad, San Diego County, CA	168	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3405	College Boulevard	City of Carlsbad, San Diego County, CA	150	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous

Appendix: Locality List

San Diego Natural History Museum
Department of Paleontology

Locality Number	Locality Name	Location	Elevation (feet)	Geologic Unit	Era	Period	Epoch
3454	College Boulevard - Site 24	City of Carlsbad, San Diego County, CA	248	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3458	Carlsbad Research Center - Pad 49 - Site 26	City of Carlsbad, San Diego County, CA	255	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3672	Carlsbad Research Center - 5	City of Carlsbad, San Diego County, CA	245	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3673	Carlsbad Research Center - 5	City of Carlsbad, San Diego County, CA	220	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3674	Carlsbad Research Center - 5	City of Carlsbad, San Diego County, CA	245	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3869	Carlsbad Research Center II	City of Carlsbad, San Diego County, CA	290	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
4071	Taylor Made Golf Facility "main site"	City of Carlsbad, San Diego County, CA	150	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
4072	Taylor-Made Golf Facility - "Crab Hill"	City of Carlsbad, San Diego County, CA	140	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
4073	Taylor-Made Golf Facility - "Driving Range"	City of Carlsbad, San Diego County, CA	170	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
4162	Marriott Residence Inn-Faraday/College	City of Carlsbad, San Diego County, CA	255	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
5756	Clay Pit, Carlsbad - Holden Ostracod Types	City of Carlsbad, San Diego County, CA		Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
5760	Fox-Miller - Fat Ammonite Bed	City of Carlsbad, San Diego County, CA	194	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
5825	Fox-Miller	City of Carlsbad, San Diego County, CA	235	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
5937	Fox-Miller - Ammonite Canyon	City of Carlsbad, San Diego County, CA	198	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
6972	Carlsbad Desalination Pipeline	City of Carlsbad, San Diego County, CA	215	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
6973	Carlsbad Desalination Pipeline	City of Carlsbad, San Diego County, CA	245	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3457 A	Carlsbad Research Center	City of Carlsbad, San Diego County, CA	265	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous
3457 B	Carlsbad Research Center	City of Carlsbad, San Diego County, CA	265	Point Loma Formation	Mesozoic	Cretaceous	Late Cretaceous

ATTACHMENT D

CALIFORNIA DEPARTMENT PARKS AND RECREATION FORM 523 SERIES (CONFIDENTIAL)

Records Removed for Purposes of Confidentiality

Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines

Prepared for:

The City of Carlsbad, California

Prepared by:

ECORP Consulting, Inc.

with contributions from Cogstone Resource Management

September 2017

City of Carlsbad California

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AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
ARMR	Archaeological Resource Management Report
ARPA	Archaeological Resources Protection Act
BLM	Bureau of Land Management
BP	years Before the Present
BSO	Building, Structure, and Object record
CCR	Code of California Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CONUS	Continental United States
CRHR	California Register of Historical Resources
CRMP	Cultural Resources Management Plan
DPR	Department of Parks and Recreation
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EP	Evaluation Plan
FOE	Finding of Effect
GIS	Geographic Information System
GLO	General Land Office
GPS	Global Positioning System
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscape Survey
HPDF	Historic Property Data File
HPTP	Historic Property Treatment Plan

IC	Information Center
MLD	Most Likely Descendant
NAD	North American Datum
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PA	Programmatic Agreement
PI	Principal Investigator
PQS	Professional Qualification Standards
ROD	Record of Decision
SB	Senate Bill
SHPO	State Historic Preservation Officer
SLRBMI	San Luis Rey Band of Mission Indians
SOI	Secretary of the Interior
SOQ	Statement of Qualifications
STP	Shovel Test Pits or Shovel Test Probes
TCP	Traditional Cultural Property
TCR	Tribal Cultural Resource
THPO	Tribal Historic Preservation Officer
USA	Underground Service Alert
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
UTM	Universal Transverse Mercator

1.0 Purpose and Need for Guidelines

In 1990, the City of Carlsbad developed its first set of guidelines for the treatment of cultural resources that fall within the limits of the City. The original Cultural Resource Guidelines were prepared with funding from the National Park Service (NPS) via the California Office of Historic Preservation (OHP) and established a standard of performance for cultural resources investigations to meet the requirements of the California Environmental Quality Act (CEQA) that, by today's standards, were narrowly scoped to largely address archaeological sites.

Since 1990, a number of changes have occurred in the regulatory context within which the City operates. These changes occurred at various levels of jurisdiction, including at the city, state, and national levels and in the thresholds and expectations for best professional practices in cultural resources management. Changes have also occurred in terms of the level of involvement by stakeholders in cultural resources, particularly Native American tribes, as well as historical societies and the general public. The changes include the following.

- Carlsbad City Council Policy No. 83, adopted in 2016, calls for the City to "recognize [the City's] responsibility to protect with improved certainty the important historical and cultural values of current Tribal Cultural Resources within the City limits and to establish an improved framework for the City's consultations with Native American Tribes that are traditionally and culturally affiliated with the City of Carlsbad, including the San Luis Rey Band of Mission Indians." This policy calls for improved communication and consultation procedures with local Native American tribes. It will assist the City in implementing the requirements of Assembly Bill (AB) 52 and Senate Bill (SB) 18 through an update to the 1990 Guidelines, which is represented by the current document.

- AB 52, passed by the California legislature in 2014, amended CEQA to require early consultation with California Native American tribes when preparing a CEQA document for a specific project. The City, as CEQA lead agency, must offer consultation with tribes that request notification of projects at the initiation of CEQA. The consultation, if initiated, is to determine whether or not Tribal Cultural Resources, as defined by AB 52, would be affected by the project.

- SB 18, passed by the California legislature in 2005, mandates consultation with California Native American tribes when the City is considering the adoption or amendment of a General Plan or Specific Plan. SB 18 requires that CEQA lead agencies consult with local tribes regarding the provision of open space to protect resources important to Native American tribes.

- The regulations implementing Section 106 of the National Historic Preservation Act of 1966 were amended in 2000 and 2004. The amended regulations, found in the *Federal Register* at 36 CFR Part 800, specify how federal agencies are supposed to take into account the effects of their undertakings on historic properties. The Section 106 regulations apply to projects in the City when the project would receive federal funding, assistance, licenses, approvals, or permits

(such as a Section 404 Clean Water Act permit from the U.S. Army Corps of Engineers [USACE] or funding by the Federal Highway Administration through Caltrans).

- Decisions by the California Courts of Appeal and the California Supreme Court became case law that changed the interpretation of the CEQA Statute and Guidelines. The decision in the *Madera Oversight Coalition vs. County of Madera and Tesoro Viejo, LLC* (January 2012), said that evaluation of cultural resources to determine significance cannot be deferred until after the CEQA document is certified. This decision also said that preservation in place must be adopted to mitigate impacts to archeological sites, if feasible, unless the lead agency determines that another form of mitigation is available and provides "superior mitigation." In the *League for Protection of Oakland's Architectural and Historical Resources vs. City of Oakland and Montgomery Ward & Co, Inc*. (February 1997), it was found that documentation of a historically significant building prior to demolition may not reduce impacts to less than significant. If this is the case, a Statement of Overriding Considerations would be necessary in the Environmental Impact Report (EIR).

- An update to the CEQA Guidelines that took effect January 1, 1999 removed Appendix K and added Section 15064.5, Determining the Significance of Impacts to Archaeological and Historical Resources. This section more clearly defined a Historical Resource in the context of CEQA analysis, and established guidelines to determine whether a project may have a substantial adverse effect on the significance of a Historical Resource. The definition of a Historical Resource was added to the Guidelines in Section 15064.5(a) as a result of *League for Protection of Oakland's Architectural and Historical Resources vs. City of Oakland and Montgomery Ward & Co, Inc., (1997),* which, among other findings, determined that Historical Resources are not just those listed on a local register, but also resources that are eligible for listing in the CRHR or may otherwise be considered locally significant. Other subsections describe the types of actions that have substantial adverse effects, the relationship between historical resources and archaeological resources, and the protocol to follow if human remains are found.

- An update to the CEQA Guidelines took effect September 27, 2016 to revise Appendix G to the CEQA Guidelines to separate the consideration of tribal cultural resources from cultural and paleontological resources, and to add sample checklist questions.

- Best practices in cultural resources management now emphasize avoidance and preservation over destruction with documentation or data recovery. In addition, advances in digital technology have provided cultural resources managers with new tools for resource mapping, documentation, and data management.

- There has been an increased awareness of the importance of early consultation with resource stakeholders as part of project planning, particularly with tribes.

- There is an increasingly complex tribal consultation process that the City is either directly or indirectly affected by, and which varies from project to project.

- City budgetary constraints, coupled with a recent post-recession increase in private-sector development, have led to the need for streamlined processing and compliance verification, and greater City staff efficiency.
- Paleontological resources are now protected under state law and local regulations. These remnants of ancient life have scientific and educational value and are of great interest to many citizens of the City.

These changes have necessitated not only an update to the City's Cultural Resources Guidelines, but the addition of new procedures to address the additional requirements that emerged since the Cultural Resources Guidelines were adopted in 1990. However, guidelines are only effective when they translate a complicated regulatory setting into an understandable set of procedures and when they offer clarification and standardization of implementation that the regulations themselves fail to provide. The City's Cultural Resources Guidelines must:

- be user-friendly for City staff, by including process flow charts, compliance verification forms, and processing checklists that collectively standardize the implementation of the Guidelines and increase efficiency;
- include resources for cultural resources and paleontological consultants that ensure that the work products provided for review by City staff are consistent in terms of level of detail and format, which will contribute to greater efficiency in City staff review and result in fewer denials or requests for further information; and
- be clear, have established timeframes, and provide built-in accountability that removes the uncertainty from the compliance process so that the number of challenges to the need for following specific procedures is reduced.

With the preceding in mind, the following updated and newly named Tribal, Cultural, and Paleontological Resources Guidelines were developed in consultation with the San Luis Rey Band of Mission Indians, cultural and paleontological resources professionals, City staff, and the public. These Guidelines were authored by cultural resources professionals from ECORP Consulting, Inc. who meet the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. Input regarding the built environment was provided by ECORP and City staff who meet the same standards for historian, architectural historian, and historic preservation planner. Contributions regarding paleontological resources were provided by professionally qualified paleontologists from Cogstone Resource Management.

1.1 Organization

These Guidelines are organized into twelve main sections. Section 1 presented the purpose and need for the Guidelines. Section 2 provides definitions of resources that are utilized throughout the Guidelines, and Section 3 provides an overview of the regulatory context. Section 4 includes detailed

cultural and paleontological context statements that can be used by the City and professional consultants in evaluating significance or interpreting site function. Section 5 outlines the roles and responsibilities of those responsible for participating in, implementing, or verifying compliance with these Guidelines. Section 6 presents high-level sensitivity models for archaeological, architectural history, and paleontological resources that are intended to aid the City in making informed decisions about land use. Section 7 provides general standards of analysis, and Sections 8, 9, and 10 provide the processes by which resources are considered under these Guidelines for tribal cultural resources, cultural resources, and paleontological resources, respectively. Section 11 discusses the process by which compliance is verified. References cited in these Guidelines are provided in Section 12.

Attachment A provides a copy of Carlsbad City Council Policy No. 83, which led to the need to update these Guidelines. Appendix 1 is a separate Implementation Manual, which contains templates and forms needed to carry out the procedures specified in these Guidelines. Modifications to the Implementation Manual do not require an amendment to these Guidelines.

2.0 Definitions of Resources

These Guidelines pertain to a variety of types of resources within the City. In the broadest sense, these resources can be classified as either those relating to past human activities or those relating to past non-human life-forms.

2.1 Types

"Cultural resources" are broadly defined as anything made, modified, or moved by a human in the past. Cultural resources can also be described in terms of time period (prehistoric, ethnographic, and historic), culture (for example, Native American or Euroamerican), physical state (archaeological, built environment, landscape level, and sacred/religious), and significance, which is defined as meeting certain criteria and age thresholds specified in the regulations. In particular, a resource that is considered sacred, religious, spiritual or an object of cultural value to Native American tribes, regardless of time period, is a "Tribal Cultural Resource" that is given special and separate consideration under state and federal law, as well as these Guidelines.

"Paleontological resources" are unrelated to humankind. Paleontology is defined as the study of ancient life; paleontological resources include direct remnants of ancient life, such as fossilized bones of vertebrate animals like whales and bison, fossilized invertebrate animals like snail shells and crabs, or fossilized plant parts like pine cones and leaves. In addition, paleontological resources include indirect remnants of ancient life such as fossilized tracks and burrows. Vertebrate fossils are less commonly found compared with invertebrate and plant fossils.

Resources from the human environment (collectively, cultural resources) take many forms. The way in which they are described or classified can similarly vary, such as by time period, cultural affiliation, and physical characteristics. Most often, cultural resources are described using a combination of these characteristics. Commonly accepted definitions for each are provided below.

2.2 Cultural Association

Native American cultural resources are those that are reasonably considered or confirmed (with or without tribal consultation) to be associated with Native American cultures that predated or coexisted with the arrival of Europeans to California. As it pertains to the City, these are generally composed of the Luiseño and Kumeyaay, inclusive of their descendants, ancestors, and modern groups, such as the San Luis Rey Band of Mission Indians.

A specific type of Native American place is one that is considered sacred, spiritual, or religious in nature. This can include Traditional Cultural Properties (TCPs), Traditional Cultural Landscapes (TCLs), and Tribal Cultural Resources (TCRs) that are identified as such by Native American tribes or communities. A TCP, which is a term that applies to federal undertakings and Section 106, "is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community

that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1998). It is often referenced within the context of Native American culture, but is not exclusive to that culture. A TCR is a term that applies to CEQA and is defined in Section 21074(a) of the Public Resources Code as a site, feature, place, geographically defined cultural landscape, sacred place, or object with cultural value to a California Native American tribe, as defined in Section 3. TCPs and TCRs may or may not exhibit noticeable signs of their presence unless called out by those who identify with them as being cultural resources and may include natural landforms, such as mountain peaks, rivers, or ridge tops. Although at the time of the preparation of these Guidelines a formal definition of TCL has not been developed by the NPS, the ACHP states: "Traditional cultural landscapes are considered by the NRHP to be a type of significance rather than a property type. Property types are limited to those specified in the NHPA and the NRHP regulations and include districts, buildings, structures, sites, and objects. Traditional cultural landscapes can and often do embrace one or more of these property types" (ACHP 2012:2).

Euroamerican resources are those associated with people of European origin and descent, who first arrived in the San Diego area in the mid- to late 1700s. These include, but are not limited to, missionaries, fur trappers, gold miners, ranchers, and farmers who lived in the area when California was administered by Spain, Mexico, and the United States.

2.3 Time Period

Prehistoric resources are places that contain the material remains of activities carried out by the native population of the area (Native Americans) prior to the arrival of Europeans in California. The term "prehistory" originated in academia to mean the time before there were written records, but it is widely understood that the term does not mean "before history;" Native American occupation is known to extend back 10,000 years, representing a Native American "history" that long predates the arrival of Europeans. However, because it is a nearly universal term used in cultural resources management to refer to ancient Native American sites, its usage is retained herein. It is a strong belief held by California Native Americans, including but not limited to the Luiseño, that their people have inhabited this region since time immemorial.

Artifacts found in prehistoric sites include flaked stone tools such as projectile points, knives, scrapers, drills, and the resulting flakes from tool production (also known as debitage); ground stone tools such as manos, metates, mortars, and pestles for grinding seeds and nuts; bone tools, such as awls; ceramic vessels or fragments; and shell or stone beads. Subsistence byproducts (burned animal bone, charred seeds, nuts, or organic residue on ground stone tools) may also be present. Prehistoric features include hearths or rock rings, bedrock mortars and milling slicks, rock shelters, rock art, and burials.

Ethnographic or protohistoric resources are typically considered to be associated with Native American culture, but they can be associated with other groups, like Hispanic, Asian, or other ethnic populations that migrated to California in historic times. Ethnographic resources often reflect a blending or co-occurrence of European and Native American items, such as the presence of glass beads, woven cloth,

and trade goods in Native American sites. With respect to Native American ethnographic sites, archaeologists tend to distinguish this time period as being marked by the arrival of Spaniards to the San Diego area, sometime between 1769 and 1776.

Historic-period resources are places that contain the structures or material remains of activities carried out by people after the arrival of Europeans in the 1700s. Historic archaeological material usually consists of domestic refuse, disposed of either as roadside dumps or near structure foundations. Historic artifacts can include domestic refuse (food containers such as cans and bottles, ceramic and glass vessels for preparing and serving food and beverages, utensils, food waste, cosmetic and grooming items [perfume and cosmetics jars, combs brushes, mirrors], and clothing fasteners), building material (brick, concrete, concrete blocks, lumber, window glass, water and sewer pipe, nails, screws, bolts, and other metal fasteners), auto parts and oil cans, tools, and other miscellaneous items. Historic features include privies, pits, wells, and structure foundations. Archaeological investigations of historic-period sites are usually supplemented by historical research using written records.

Historic structures include houses, garages, barns, commercial structures, industrial facilities, community buildings, dams, levees, and other structures and facilities with extant architecture that are usually more than 45 years old. Historic structures may also have associated archaeological deposits, such as abandoned wells, cellars, and privies, refuse deposits, and foundations of former outbuildings. Note that the use of "historic" instead of "historical" is deliberate in this context, as explained in Section 3.

2.4 Physical Characteristics

Archaeological resources are composed of the remnants of past human activity, and include, but are not limited to, surface or subsurface artifact scatters, midden deposits, subsurface features, and human remains associated with any culture. According to National Register Bulletin 15, a "site" is the "location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure. They include village sites, cemeteries, rock art, habitation sites, camp sites, and other archaeological features." A discussion of the National Register of Historic Places and related federal laws, upon which the National Register Bulletin relies and implements, is provided in Section 3.

Archaeological sites are the locations of an event, a prehistoric or historic occupation or activity, or the former location of a building or structure, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure or feature (OHP 1995). Archaeological sites can be defined by the presence of one or more features or artifacts. When based solely on artifact presence, archaeological sites are defined as such when there are at least three artifacts in a ten-square meter area.

Archaeological isolates are individual artifacts that are reasonably believe to be out of primary context, such as artifacts that have been transported a distance from their original locations due to a variety of cultural or natural processes. In some cases, isolates indicate the presence of more extensive subsurface archaeological deposits. In other cases, particularly where the isolate is not in primary context, the presence of an isolate may indicate a more extensive prehistoric site in the vicinity, or simply reflects the general sensitivity of the area.

Archaeological districts are further defined as "a significant concentration, linkage, or continuity of sites important in history or prehistory" by plan or by physical development (Keller and Keller, n.d.; OHP 1995). Examples of historic archaeological districts may consist of ranches, farms, mining landscapes, and historic town sites that contain a subsurface element. The same criteria are applied to prehistoric districts, which may consist of interconnected village sites, temporary camping sites, and a combination of archaeological sites, ethnographic landscapes, and/or traditional cultural properties.

Features are considered "minor components of larger resources, like sites or districts. Features generally consist of small constructed works, discrete activity areas, landscaping, earthworks, non-portable natural objects modified by human use, and other similar cultural entities. They include, but are not limited to values such as: a garage or landscaping associated with a house; a gate valve associated with a ditch; an adit (entrance to an underground mine), tailings, or ruined mill that are part of a mining complex; or a trash pit, orchard, discrete activity area, bedrock milling station, rock art panel, or carved tree associated with a site" (OHP 1005:3). Historic archaeological features can include refuse dumps along roads or drainages with domestic refuse and/or building material; refuse dumps and deposits of domestic refuse and/or building material associated with a farmstead, ranch, residence, or commercial establishment; features and dumps/deposits associated with a historic-period farmstead, ranch, residence, or commercial establishment; or foundations or privies. Features associated with transportation include roads, highways, bridges, railroad grades and tracks, airfields, and runways that are at least 50 years old. Linear features may have since been paved over or graded, but may retain their original alignments, thereby possessing some aspects of integrity.

The *built environment* generally is considered to describe extant architecture and structures that are above ground and can still be utilized for the purpose it was originally intended, even if not effectively due to a loss of integrity. Sections IV and VIII of National Register Bulletin 15 (How to Apply the National Register Criteria for Evaluation) further define a building as "a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. 'Building' may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn. If a building has lost any of its basic structural elements, it is usually considered a "ruin" and is categorized as a site." Bulletin 15 also defines the term 'structure' "to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter and include dams and earthworks." The built environment may also include roads, agricultural irrigation systems, and similar features. These types of resources are studied by architectural historians, rather than archaeologists.

Common types of resources within the built environment include buildings, structures, objects, and signs. A *building*, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. Building may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn (OHP 1995).

The term *structure* is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter, such as roads, bridges, canals, fences, windmills, dams, etc.) (OHP 1995).

The term *object* is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed; although it may be, by nature or design, movable, an object is associated with a specific setting or environment (OHP 1995). This includes *signs*.

Furthermore, in accordance with Title 22 of the City's Municipal Code, *historic district* means any area that contains several historic resources or landmarks that have special character or special historical value, or which represent one or more architectural periods or styles typical to the history of the City, that has been designated a historic district pursuant to Title 22 (see Section 3).

Title 22 also defines *historic resources* as sites, places, areas, landscape, buildings, structures, signs, features, or other objects of scientific, aesthetic, educational, cultural, architectural, or historic significance to the citizens of the City and includes both historic landmarks and historic districts. This is notably different from the term "historical resource," which is defined in the California Public Resources Code as a cultural resource that warrants further consideration under CEQA.

Historic site, as defined in Title 22, means any parcel or portion of real property that has special character or special historic, cultural, archeological, paleontological, architectural, community or aesthetic value.

A *cultural landscape* is recognized for the relationship between cultural and natural features on a broad scale. These can be prehistoric or historic, and can be associated with specific cultures. Examples include large areas of historic mine tailings, prehistoric or ethnographic hunting and gathering locations, historic agricultural areas, and archaeological or historic districts. A rural historic landscape is defined as "a geographical area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features" (McClelland *et al.* 1999). Cultural landscapes may include historic homesteads, ranching and grazing lands, or agricultural facilities and fields that have persisted for generations.

An *ethnographic landscape* is defined as a cultural landscape, composed of natural and cultural features, which an associated population defines as a heritage resource. In either case, the individual elements that compose the cultural landscapes (or districts) are always recognized for being related in time and function. The National Park Service (NPS) initially identified ethnographic landscapes within

the grouping of four types of "historical landscapes" (historic site, historic vernacular, historic designed, and ethnographic). The NPS defined ethnographic landscapes as "a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, sacred religious sites, and massive geological structures. Small plant communities, animals, subsistence and ceremonial grounds are often components" (NPS 2000).

The NPS's Applied Ethnography program believed the initial definition of ethnographic landscapes to be too broad, and thus expanded the definition to include "a relatively contiguous area of interrelated places that contemporary cultural groups define as meaningful because it is inextricably and traditionally linked to their own local or regional histories, cultural identities, beliefs and behaviors. Present-day social factors such as people's class, ethnicity, and gender may result in the assignment of diverse meanings to a landscape and its component places" (Evans et al. 2001).

A *prehistoric landscape* falls under the NPS's definition of a "cultural landscape" which includes several types of historic landscapes. The NPS defines a historic landscape as "a geographic area, including both natural and cultural resources, including the wildlife or domestic animals therein, that has been influenced by or reflects human activity or was the background for an event or person significant in human history" (Melnick 1984). Prehistoric landscapes are similar to ethnographic and historic landscapes, in that they may include the natural and cultural resources within a designated area. But unlike ethnographic landscapes, they do not contain landscape features associated with cultural practices or beliefs of a living community which have been passed down through generations. Prehistoric landscapes may consist of prehistoric travel routes, quarry sites, or groups of sites associated by archaeological deposits and/or features within a geographic region.

A *rural historic landscape* is defined as "a geographical area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features" (McClelland *et al*. 1999).

3.0 Regulatory Context

These Guidelines were developed to satisfy a variety of local, state, and federal requirements, to the greatest extent that they apply to any given project and for requirements over which the City has either jurisdiction or the ability to execute. Full compliance with federal law cannot be achieved solely by the City, and therefore, these procedures will result in project planning and environmental impact decisions that can be utilized by federal agencies to complete the compliance process. A summary of the scope of the regulatory context, including excerpts, is provided below. Not all projects under City jurisdiction will require compliance with all of these regulations.

3.1 Local

3.1.1 City of Carlsbad General Plan

The City of Carlsbad General Plan (2015) affords consideration for the preservation of cultural resources. The City's Vision Statement Core Values for their General Plan note examples of the historical resources within the City including the Rancho Carrillo, the Marron Adobe, the Barrio neighborhood, the Magee House, and the Village. The General Plan includes guidelines to help revitalize the historic Barrio and Village neighborhoods. The General Plan also states the goal of enhancing education about the area's Native American history. Following are relevant goals and policies of the *Arts, History, Culture, and Education Element* of the City's General Plan*:*

Goal 7-G-1: Recognize, protect, preserve, and enhance the city's diverse heritage.

> Policy 7-P.1 Prepare an updated inventory of historic resources in Carlsbad, with recommendations for specific properties and districts to be designated in national, state, and local registries, if determined appropriate and with agreement of the property owners.
>
> Policy 7-P.2 Encourage the use of regional, state and federal programs that promote cultural preservation to upgrade and redevelop properties with historic or cultural value. Consider becoming a participant in the Mills Act tax incentive program.
>
> Policy 7-P.5 Encourage the rehabilitation of qualified historic structures through application of the California Historical Building Code.
>
> Policy 7-P.6 Ensure compliance with the City of Carlsbad Cultural Resource Guidelines to avoid or substantially reduce impacts to historic structures listed or eligible to be listed in the National Register of Historic Places or the California Register of Historical Resources.
>
> Policy 7-P.7 Implement the City of Carlsbad Cultural Resources Guidelines to avoid or substantially reduce impacts to archaeological and paleontological resources.
>
> Policy 7-P.8 During construction of specific development projects, require monitoring of grading, ground-disturbing, and other major earth-moving activities in previously undisturbed

areas or in areas with known archaeological or paleontological resources by a qualified professional, as well as a tribal monitor during activities in areas with cultural resources of interest to local Native American tribes. Both the qualified professional and tribal monitor shall observe grading, ground-disturbing, and other earth-moving activities.

Policy 7-P.9 Ensure that treatment of any cultural resources discovered during site grading complies with the City of Carlsbad Cultural Resource Guidelines. Determination of the significance of the cultural resource(s) and development and implementation of any data recovery program shall be conducted in consultation with interested Native American tribes. All Native American human remains and associated grave goods shall be returned to their most likely descendent and repatriated. The final disposition of artifacts not directly associated with Native American graves shall be negotiated during consultation with interested tribes; if the artifact is not accepted by Native American tribes, it shall be offered to an institution staffed by qualified professionals, as may be determined by the City Planner. Artifacts include material recovered from all phases of work, including the initial survey, testing, indexing, data recovery, and monitoring.

Policy 7-P.10 Require consultation with the appropriate organizations and individuals (e.g., Information Centers of the California Historical Resources Information Systems [CHRIS], the Native American Heritage Commission [NAHC], and Native American groups and individuals) to minimize potential impacts to cultural resources that may occur as a result of a proposed project.

Policy 7-P.11 Prior to occupancy of any buildings, a cultural resource monitoring report identifying all materials recovered shall be submitted to the City Planner.

Goal 7-G.2: Make Carlsbad's history more visible and accessible to residents and visitors.

Policy 7-P.3 Formalize a program of historical markers/plaques at resources in state and national registers or of local importance.

Policy 7-P.4 Promote community education of historic resources, integration and celebration of such resources as part of community events:

a. Enhance the community's recognition that objects of historic importance increase both fiscal and community value.

b. Promote the use of historic resources for the education, pleasure and welfare of the people of the city. Cooperate with historic societies, schools, libraries, parks and community members to stimulate public interest in historic preservation.

c. Maintain historical reference materials on file at the Carlsbad City Library.

The General Plan includes designating Special Resource Areas that help reserve natural and cultural features within the City. Following is a relevant policy of the *Open Space, Conservation, and Recreation Element* of the City's General Plan:

> Policy 4-P.32: Where appropriate, designate as open space those areas that preserve historic, cultural, archeological, paleontological and educational resources. Promote expansion of recreational and educational use opportunities in areas of significant ecological value, such as lagoons, where discretionary use of the resource allows. Consider partnering with private foundations for the conservation of such lands and the development of educational programming.
>
> - Combine historically significant sites with recreational learning opportunities, where possible.
> - Utilize community parks in support of historical and cultural programs and facilities when feasible and appropriate.
> - Coordinate the efforts of the Historic Preservation Commission on the siting and care of historic ruins within parks.

3.1.2 City of Carlsbad Municipal Code

The City of Carlsbad Municipal Code *Title 22 Historic Preservation* discusses historic and archaeological resources within the City. It includes definitions of local resource types, procedures for owners who want to voluntarily apply for historic site, landmark or district designations, and some regulatory provisions that may be available to owners of historic properties. The full text of Title 22 is available on the City's website. Compliance with Title 22 is voluntary as stated in the ordinance as of the date of these Guidelines. As such, Title 22 is not a regulatory code for the purposes of implementing CEQA. The other laws and regulations referenced and discussed in these Guidelines are instead utilized by the City for CEQA purposes, including Municipal Code *Title 19, Environment*.

The City of Carlsbad Historic Preservation Commission implements Title 22 and the duties of the Commission specified in Municipal Code Chapter 2.42. The five-member Historic Preservation Commission acts in an advisory capacity to the City Council and Planning and Housing Commissions in all matters relating to the identification, protection, retention, and preservation of historic sites and areas in the City. Their responsibilities are to recommend the designation of historic landmarks or historic districts, to maintain a historic resources inventory, to provide advice and guidance on the restoration or modification of any historical area or site when requested by the property owner, and to conduct programs to educate local residents regarding historic places, structures, or events. The Historic Preservation Commission is included on the list of interested parties that receive notices for Mitigated Negative Declarations and Environmental Impact Reports prepared for development projects in accordance with CEQA. The notice provides the opportunity for the Commission to comment on CEQA documents for any development project that would affect a historic structure,

archaeological or paleontological site that is identified on an adopted city historic resources inventory or within a project's cultural resources study.

3.1.3 Local Coastal Program

The City of Carlsbad's Local Coastal Program (LCP), which provides guidelines and land use policies for the City's Coastal Zone, outlines requirements for cultural resources within the Coastal Zone. The coastal zone is separated into several geographic areas or segments; the first two created in the early 1980s were called Mello I and Mello II, after state legislator Henry Mello, who sponsored the legislation that created the mechanism for the LCP. Select policies relevant to cultural resources are included below.

Mello I Segment, Policy 4 - Environmental Impact Report: In the event of commercial and/or residential development pursuant of a coastal development permit, biological and cultural resources on the site shall be identified, and any adverse impacts associated with development mitigated, through a site specific environmental impact report (EIR). Proposed mitigation shall be incorporated in the project design.

Mello II Segment: There are two applicable policies:

> Policy 8-2 Potentially Historic Structures: The City's historic structures which have the potential to meet criteria for inclusion in the National Register of Historic Places appear to be economically well-used at present. The sites with historic significance of "local importance" also appear to be in active use. However, maintenance, repair and use of these properties may require special attention. The building code flexibility and tax benefits which may be available to such properties need further study. The City of Carlsbad in conjunction with individual property owners of historically significant structures should determine which local and federal programs are applicable and take advantage of them as appropriate.
>
> Policy 8-4 Archaeological and Paleontological Resources: The environmental impact review process will determine where development will adversely affect archaeological and paleontological resources. A site-specific review should also determine the most appropriate methods for mitigating these effects. Most importantly, the City of Carlsbad should require the implementation of these measures.

West Batiquitos Lagoon/Sammis Properties Segment: A program of preservation and/or impact mitigation regarding archaeological sites located on the affected area shall be completed prior to any development.

North Coast Corridor PWP Overlay Local Coastal Program Land Use Plan Amendment (2014), Policy 3.7 Archaeological and Paleontological Resources, 3.7.1: Transportation, community and resource enhancement projects in the North Coast Corridor shall strive to protect and minimize impacts to archaeological and paleontological resources. Where North Coast Corridor projects may potentially adversely impact archaeological or paleontological resources, appropriate mitigation measures shall

be required and implemented consistent with the policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG, dated August 13, 2014). Any future amendment of the original PWP shall not decrease the level of protection of archaeological and paleontological resources guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

3.1.4 City of Carlsbad Council Policy No. 83

Effective March 1, 2016, the City Council passed Policy No. 83, *Tribal Consultation and Treatment and Protection of Tribal Cultural Resources*. The purpose of the policy was to recognize the City's "responsibility to protect with improved certainty the important historical and cultural values of current Tribal Cultural Resources within the City limits and to establish an improved framework for the City's consultation with Native American Tribes that are traditionally and culturally affiliated with the City of Carlsbad, including the San Luis Rey Band of Mission Indians."

This policy arose out of focused consultation with San Luis Rey Band of Mission Indians and, to the extent allowed under the authority of the City, urges City and private projects under the jurisdiction of the City to be designed to avoid or substantially reduce impacts to Tribal Cultural Resources, as defined in CEQA (see below). The policy also requires the updating of the 1990 Guidelines.

3.2 State

3.2.1 California Environmental Quality Act (CEQA)

The City is similarly bound to comply with applicable sections of CEQA (Pub. Res. Code §21000 et seq.) as it relates to tribal, cultural, and paleontological resources. The goal of CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where feasible. CEQA pertains to all proposed discretionary projects that require state or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of development project maps. Ministerial actions, or those that fall under one of a number of exemptions, are not subject to CEQA.

In accordance with CEQA, any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant effect on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on the California Register of Historical Resources (CRHR) (Pub. Res. Code §5024.1, Title 14 CCR, §4852). Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources under CEQA.

A Historical Resource is a resource that 1) is listed in or has been determined eligible for listing in the CRHR by the State Historical Resources Commission; 2) is included in a local register of historical

resources, as defined in Public Resources Code 5020.1(k); 3) has been identified as significant in an historical resources survey, as defined in Public Resources Code 5024.1(g); or 4) is determined to be historically significant by the CEQA lead agency [CCR Title 14, Section 15064.5(a)]. In making this determination, the CEQA lead agency usually applies the CRHR eligibility criteria.

The eligibility criteria for the CRHR are as follows [CCR Title 14, Section 4852(b)]:

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; or
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.

In addition, the resource must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, Section 4852(c)]. Impacts to a Historical Resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, Section 15064.5(a)].

Prior to the amendments to the CEQA guidelines that established the significance criteria under the CRHR and defined Historical Resources, the CEQA statute only required that the lead agency consider whether or not the project will have a significant impact on unique archaeological sites. A unique archaeological resource is 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. It contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. It has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. It is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2 [g]).

CEQA Guidelines require that it should first be determined whether an archaeological site is an Historical Resource (is eligible for the CRHR) (14 CCR Section 15064[c][1]). If the site is a Historical Resource, then the guidelines for assessing impacts to, and mitigation for, archaeological sites that are Historical Resources should be followed and the financial limits on mitigation for unique archaeological sites do not apply (14 CCR Section 15064[c][2]).

As a practical matter a site that meets any of the three criteria for unique archaeological sites will almost always meet the definition of a Historical Resource under the CRHR eligibility criteria. Likewise, a site that fails to meet the definition of a unique archaeological site will similarly not meet the definition of a Historical Resource. Therefore, in almost all cases the provisions for unique archaeological sites will not apply if archaeological sites are first evaluated using CRHR criteria to determine if they are Historical Resources. The State CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a Historical Resource, the effects of the project on that resource shall not be considered a significant effect on the environment (14 CCR Section 15064[c][4]).

CEQA also requires that the lead agency consider impacts to Tribal Cultural Resources. A Tribal Cultural Resource that meets the statutory definition does not have to be further evaluated for significance. Section 21074(a) of the Public Resource Code defines Tribal Cultural Resources for the purpose of CEQA as:

> Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
>
> a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
>
> b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
>
> c. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Recognizing that California Native American tribes are experts in their Tribal Cultural Resources and heritage, AB 52 amended CEQA to require lead agencies initiate consultation with tribes at the commencement of the CEQA process to identify Tribal Cultural Resources. Furthermore, because a substantial adverse change to a Tribal Cultural Resource is considered a significant impact on the environment under CEQA, consultation is required to develop appropriate avoidance, impact minimization, and mitigation measures.

The process by which consultation with tribes occurs in CEQA was established with the passage of AB 52. Effective July 1, 2015, a lead agency must provide notice to any California Native American tribe that has requested notice of projects proposed by the lead agency; and for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include the presence or absence of Tribal Cultural Resources, the potential for the project to cause a substantial adverse change to Tribal

Cultural Resources, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

The CEQA Guidelines, Appendix G, include paleontological resources among those resources that should be considered when evaluating the environmental impacts of a proposed project. Effects to unique paleontological resources typically occur through ground-disturbing activities. Significance of the discovery and importance of the resource may determine the level of consideration.

Changes to the CEQA Statute resulting from the passage of AB 52 and revisions to the CEQA Guidelines to incorporate the requirements of AB 52 have clarified that cultural resources, tribal cultural resources, and paleontological resources being considered as separate types of resources. This is because all Tribal Cultural Resources are cultural resources by definition, but not all cultural resources are Tribal Cultural Resources. In addition, a Tribal Cultural Resource might also meet the legal definition of a historical resource under CEQA, warranting consideration as both types of resources. Paleontological resources are natural (related to geology and biology), and not cultural (related to humans), in nature.

3.2.2 Senate Bill 18

SB 18 was signed into law in September 2004 and became effective in March 2005. SB 18 (Burton, Chapter 905, Statutes of 2004) requires city and county governments to consult with California Native American tribes early in the planning process with the intent of protecting traditional tribal cultural places. The purpose of involving tribes at the early stage of planning efforts is to allow consideration of tribal cultural places in the context of broad local land use policy before project-level land use decisions are made by a local government. As such, SB 18 applies to the adoption or substantial amendment of general or specific plans. The process by which consultation must occur in these cases was published by the Governor's Office of Planning and Research through its Tribal Consultation Guidelines: Supplement to General Plan Guidelines (November 14, 2005).

3.2.3 California Coastal Act

Section 30244 of the Act, "Archaeological or Paleontological Resources" states that: "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required."

If paleontological resources are present, efforts should be undertaken to monitor construction activities in potentially significant areas to reduce the adverse effects to paleontological resources and to salvage any significant fossils, or to avoid the site entirely. The City's certified Local Coastal Program, in conjunction with the California Coastal Commission, implements the California Coastal Act within the boundaries of Carlsbad.

3.2.4 Public Resources Code Section 5097.5

Section 5097.5 (a & b) of the California Public Resources Code Section states:

> "No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.
>
> As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof."

3.2.5 California Public Resources Code 5097.9

Public Resources Code 5097.9 establishes that no public agency or private party using or occupying public property or operating on public property, under a public license, permit, grant, lease, or contract made on or after July 1, 1977 shall interfere with the free expression or exercise of Native American religion. This code also prohibits damage to a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.

3.2.6 California Public Resources Code 5097.98

Public Resources Code 5097.98 specifies procedures to be followed in the event of the discovery of Native American human remains. This code specifies that the county Medical Examiner shall immediately notify the persons believed to be most likely descended from the deceased Native American. It provides that the most likely descendant has the right to inspect the site, with permission of the land owner, and provide recommendations for treatment of the remains and grave goods within 48 hours of being granted access to the site. The code also provides procedures in the event that the most likely descendant is unable to be identified or the identified descendants fail to make a recommendation.

3.2.7 California Public Resources Code 5097.99

Public Resources Code 5097.99 states that no person shall obtain or possess any Native American artifacts or human remains except as otherwise provided by law. The code further states that unlawful possession of these items is a felony, punishable by imprisonment.

3.2.8 California Health and Safety Code 7050.5

Health and Safety Code 7050.5 establishes the intentional disturbance, mutilation, or removal of interred human remains a misdemeanor. This code also requires that upon the discovery of human remains outside of a dedicated cemetery excavation or disturbance of land cease until a county Medical Examiner makes a report. The code also requires that the county Medical Examiner contact the NAHC within 24-hours if he or she determines the remains to be of Native American origin.

3.2.9 California Code of Regulations (Title 14, Division 3, Chapter 1)

Section 4307 of the California Code of Regulations regarding Geological Features applicable to lands administered by the California Department of Parks and Recreation states: "No person shall destroy, disturb, mutilate, or remove earth, sand, grave, oil, minerals, rocks, paleontological features, or features of caves."

Section 4309 of the California Code of Regulations regarding Special Permits applicable to lands administered by the California Department of Parks and Recreation states: "The Department may grant a permit to remove, treat, disturb, or destroy plants or animals or geological, historical, archaeological or paleontological materials; and any person who has been properly granted such a permit shall to that extend not be liable for prosecution for violating the forgoing."

3.3 Federal

3.3.1 National Historic Preservation Act

Regulations implementing Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800) provide procedures for federal agencies to identify, evaluate, assess effects, and provide treatment for adverse effects on historic properties for federal undertakings. A "historic property" is defined in 36 CFR Part 800.16(l)(1) as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria" in 36 CFR Part 60. Historic Properties, as defined therein, are subject to these Guidelines.

A federal undertaking is a project that receives federal funding or when a federal permit (such as a Section 404 permit from the USACE) is required. The Section 106 process is the responsibility of the federal agency that provides the funding or issues the permit. It is the federal agency official who determines if the project qualifies as an undertaking. However, the City must ensure that projects that qualify as federal undertakings that are initiated by the City or by applicants to the City go through the Section 106 process following the requirements of the responsible federal agency. The City or the applicant may hire a consultant to prepare the reports needed by the federal agency official for the Section 106 process.

The steps in the Section 106 process generally parallel those carried out for CEQA and include identification of historic properties, evaluation of historical significance, assessment of effects, and resolving adverse effects. At various points in the Section 106 process the federal official must consult with the State Historic Preservation Officer (SHPO) and any Consulting Parties (such as Native American tribes and local governments, such as the City) identified by the federal official.

A reasonable and good faith effort to identify potential historic properties in the Area of Potential Effect (APE) of the undertaking is required. Identification efforts may include background research, including a records search from the appropriate CHRIS Information Center and the NAHC, consultation with Native American groups, and field survey.

If potential historic properties are identified, they must be evaluated to assess whether they are historic properties (have historic or prehistoric significance). Historic properties are those that are eligible for or are already listed in the National Register of Historic Places (NRHP). The four NRHP eligibility criteria are as follows (36 CFR 60.4):

> "The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess aspects of integrity of location, design, setting, materials, workmanship, feeling, association, and
>
> a. is associated with events that have made a significant contribution to the broad patterns of our history;
>
> b. is associated with the lives of a person or persons significance in our past;
>
> c. embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic value, or represents a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. has yielded or may be likely to yield information important in prehistory or history.

In addition, the resource must be at least 50 years old, except in exceptional circumstances (36 CFR 60.4).

Effects to NRHP-eligible resources (historic properties) are adverse if the project may alter, directly or indirectly, any of the characteristics of an historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

In addition, the resource must possess sufficient integrity to adequately express the characteristics that make it eligible. Evaluation procedures include historical research to assess association with important historical events or persons, assessment of distinctive architectural or engineering characteristics, and archaeological investigation (may include test excavations) to assess information potential of archaeological sites. The federal agency official makes the determination of eligibility and the SHPO reviews the determination. The SHPO may concur or not concur with the determination.

If properties are determined to be eligible (historic properties are identified), it must be determined if the historic property will be adversely affected by the undertaking. The criteria of adverse effect are applied. Adverse effects occur when an undertaking may directly or indirectly alter characteristics of a historic property that qualify it for inclusion in the NRHP (make it eligible for the NRHP). Examples of adverse effects include physical destruction or damage, alterations to a building or structure that are not consistent with the Secretary of the Interior's Standards, relocation, and change of use or setting.

Alteration or destruction of an archaeological site is an adverse effect. After applying the criteria of adverse effect, the agency official will make a finding that historic properties are or are not adversely affected. The SHPO will review and concur or not concur with the finding.

When there are adverse effects to historic properties, a Memorandum of Agreement (MOA) is negotiated between the federal agency and the SHPO, with input from the Consulting Parties. The City may be a signatory, invited signatory, or concurring party to the MOA. The MOA stipulates the treatment that will be applied to resolve the adverse effects. Treatment (mitigation measures) may include documentation of buildings and structures using HABS/HAER standards (including large format photography), rehabilitation using the Secretary of the Interior's Standards, or data recovery for archaeological sites. Other types of mitigation could include ethnographic studies, nominations to the National Register of Historic Places, oral history documentation, coalescing of collections of imagery, or other types of documentation.

4.0 Context Statements

4.1 Regional Archaeology and Ancient Native American History

Most archaeologists contend that approximately 10,000 years ago at the beginning of the Holocene, warming temperatures and the extinction of the megafauna resulted in changing subsistence strategies with an emphasis on hunting smaller game and increasing reliance on plant gathering. The San Dieguito Complex was defined based on material found at the Harris site (CA-SDI-149) on the San Dieguito River near Lake Hodges in San Diego County (Warren 1968). San Dieguito artifacts include: large leaf-shaped points; leaf-shaped knives; large ovoid, domed, and rectangular end scrapers and side scrapers; engraving tools; and crescentics (Koerper, Langenwalter, and Schroth 1991). The San Dieguito Complex at the Harris site dates to 9,000 to 7,500 before present (B.P.) (Gallegos 1991: Figure 3.9). However, sites from this time period in coastal San Diego County have yielded artifacts and subsistence remains characteristic of the succeeding Encinitas Tradition, including manos, metates, core-cobble tools, and marine shell (Gallegos 1991; Koerper, Langenwalter, and Schroth 1991).

The Encinitas Tradition (Warren 1968) and the Milling Stone Period (Wallace 1955) refer to a long period of time during which small mobile bands of people foraged for a wide variety of resources including hard seeds, berries, and roots/tubers (yucca and agave in inland areas), rabbits and other small animals, and shellfish and fish in coastal areas.

The La Jolla Pattern of the Encinitas Tradition was found along the San Diego County coast beginning about 8,500 B.P. Phases within the La Jolla Pattern consist of La Jolla I (8,500 B.P. to 5,000 B.P.), La Jolla II (5,000 to 4,000 B.P.), and La Jolla III (4,000 B.P. to 1,300 B.P.) (Sutton and Gardner 2010). Most La Jolla Complex sites are located around the coastal lagoons, which began filling with sea water at the beginning of this period because of sea level rise as the ice caps melted at the end of the last ice age. Shellfish from these lagoons were an important part of the diet and most La Jolla sites are classified as shell middens. During La Jolla I both rocky shores shellfish, such as *Mytilus* sp. (mussels), and bay/estuary shellfish, such as *Argopecten* sp. (scallops), *Chione* sp. (cockles), and *Ostrea lurida* (oyster) are found in La Jollan sites. Later in time (after 3,000 B.P.) the rocky shores species are much reduced in quantity and almost disappear from the middens. This has been attributed to increased sediment deposition around the mouths of the lagoons along the northern and central San Diego coast, which covered the rocky habitats. Fewer sites were occupied in these areas during La Jolla III. However, the larger bays to the south (Mission Bay and San Diego Bay) never silted in and there are numerous La Jolla III sites in this area (Masters and Gallegos 1997).

The Encinitas Tradition in inland San Diego County is known as the Pauma Pattern and was originally defined as the Pauma Complex (True 1958, 1980). The Pauma Pattern is divided into the Pauma I Phase (7,500-3,000 B.P.) and the Pauma II Phase (3,000-1,000 B.P.) (Sutton and Gardner 2010). Pauma sites have numerous manos and metates and lack the marine subsistence remains seen in La Jolla sites. Other Pauma Complex artifacts include core and cobble tools, scraper planes, and unifacial scrapers.

In most Pauma Pattern sites, the mano-metate tool kit predominates, which suggests that collecting and processing hard seeds was emphasized. Pauma sites are located on older high elevation alluvial terraces in valleys and canyons. Some Pauma sites may be buried in shallow alluvium. The inland Pauma Complex and the coastal La Jolla Complex may be different seasonal manifestations of the same people with the La Jolla Pattern emphasizing marine resources (shellfish and fish) and the Pauma Pattern emphasizing hard seeds. There are more planing-scraping tools in the La Jolla Complex and more manos and metates in the Pauma Complex (Waugh 1986:55-56).

Following the Pauma Complex, Waugh (1986:310) has defined a Transition Phase from about 2,000 B.P. to 1,000 B.P. in inland northern San Diego County. During this phase people lived in small groups which occupied seasonal camps on knolls and low hills along the San Luis Rey River and the Santa Margarita River and its major tributaries. These groups used the river as corridors for travel between the coastal mesas and interior valleys (Temecula Valley on the upper Santa Margarita River and San Jose Valley on the upper San Luis Rey River) where grass seeds and sage seeds were abundant. Seasonal residential bases were probably established in these areas. While traveling along the river corridors, camps were established in areas where chaparral was producing large amounts of seeds. The knoll locations along the rivers may have been selected in order to see game and members of other groups approaching. The camps had cached metates indicating the camps were-reused seasonally by the same groups.

Artifacts found as a result of excavation at CA-RIV-3063, a Transition Phase site on a knoll overlooking the Santa Margarita River in Temecula Canyon, include 5 domed scrapers, 5 cobble tools, 3 cores, 2 biface fragments, 9 unifacially modified flakes, 18 manos, and 4 metates (slab and flat block). Obdisian from both the Coso and Obsidian Butte sources was present (Waugh 1986:233-241). Transition Phase artifacts include artifacts characteristic of the preceding Pauma Complex (core/cobble tools, hammerstones, cortex-based scrapers, domed scrapers), but they make up a smaller proportion of the total tool assemblage. Other artifacts found in Pauma Complex sites, such as scraper planes, hammer-grinders, and discoidals, are absent in the Transition Phase. Small unifacial flake tools and new forms for metates (slab and flat block) first appear during the Transition Phase (Waugh 1986:312).

The period from 1,000 B.P. to 150 B.P. in northern San Diego County is divided into the San Luis Rey I Phase (1,000 to 500 B.P.) and the San Luis Rey II Phase (500 to 150 B.P.) (Sutton 2011). San Luis Rey I is characterized by Cottonwood Triangular arrow points, use of bedrock mortars, stone pendants, shell beads, quartz crystals, and bone tools. San Luis Rey II sees the addition of ceramics, including ceramic cremation urns, red pictographs on boulders in village sites, and steatite arrow straighteners. San Luis Rey II represents the archaeological manifestation of the antecedents of the historically known Luiseño.

A new settlement system developed in the upper San Luis Rey River drainage area (east of Pala) at the beginning of the San Luis Rey I phase (1,000 – 400 B.P.). The most important determinants of the new settlement system were access to water and access to acorns. Small permanent residential sites were located in a linear arrangement along the lower reaches of each of the tributaries on the north side of the San Luis Rey River (Waugh 1986:305). Acorns from coast live oak were available nearby as well as

plant foods from the riparian woodland and chaparral plant communities. Camps were also established on Agua Tibia Mountain / Palomar Mountain / Aguanga Mountain above 5,000 feet to collect and process acorns from black oaks and to hunt deer. These camps were occupied in the fall and were permanent in the sense that they were re-occupied every year (True and Waugh 1982). The watershed of each tributary along the north side of the river probably comprised the territory of a corporate kin group (Waugh 1986:314) or lineage. Settlements within the territory included the multiple residential sites along the drainage in the lowlands and the fall acorn camps in the uplands. An extended family within the lineage probably occupied each of the lowland residential sites (Waugh 1986:296), which together comprised the lineage settlement.

The artifacts and features at the lowland residential sites indicate that a full range of activities took place at each site. These activities included hunting, tool manufacturing and maintenance, food processing, and social interaction (Waugh 1986:313). One of these residential sites (CA-SDI-731) is on lower Frey Creek above its confluence with the San Luis Rey River. The site is within the chaparral plant community and near coast live oaks. There are 23 bedrock mortars, 8 bedrock metates, and 20 bedrock slicks or milling surfaces. Ground stone tools include manos, metates, bowl mortars, and pestles. Fire-affected rock and ash features are present. There are both unifacial flaked stone tools, including domed scrapers, and bifacial flaked stone tools, including numerous Cottonwood Triangular arrow points which date to after 700 B.P. in this area (Waugh 1986:179, 262). All, except one, pieces of obsidian were from the Obsidian Butte source. Primary and secondary flakes among the debitage indicates that lithic reduction took place (Waugh 1986:303). A cache of burned *Olivella* shell beads was found adjoining an ash feature. There were 161 beads, 122 of which were *Olivella* cupped beads, which date to A.D. 1150 – 1792 in the Santa Barbara Channel area. Faunal specimens consisted mostly of rabbit and deer. There are more deer bones and small rodent bones in the upper levels of the site. A few pieces of marine shell were found (Waugh 1986:179, 222, 266).

The San Luis Rey I Complex indicates decreased residential mobility and increased intensification of land use, compared to the previous Transition Phase. Residential sites were located so as to control critical resources, especially water. All residential sites were in direct proximity to water. The transformation to settlement in stable permanent residential sites occurred within a relatively short span of time and coincided with the beginning of acorn use (Waugh 1986:313). Acorns required a much greater labor effort for processing (Basgall 1987), but were storable, allowing year-round settlement in permanent residential sites. This specialization and intensification of resource procurement is indicated by the bedrock mortars and pestles for acorn processing and the arrow points for deer hunting (Waugh 1986:314). At the beginning of San Luis Rey I, decreased mobility in order to control a water source resulted in multiple season residency, intensified use of restricted or smaller habitats or territories, and a specialized system of resource use (Waugh 1986:318-319).

There was a consolidation of settlement at the beginning of San Luis Rey II (400 – 130 B.P.) in the upper San Luis Rey River drainage area. The number of lowland residential sites decreased from 42 to 13. Each of the 13 residential sites consisted of a large village located at a reliable water source. Each of

the 13 villages had a territory that consisted of the watershed of one of the 13 major drainages that descend from Agua Tibia Mountain – Palomar Mountain – Aguanga Mountain (True and Waugh 1982; True 1990). Multiple lineages now lived together in one village, probably resulting in the parties comprised of multiple lineages described ethnographically for the Luiseño. Each territory had one or more permanent camps in the uplands for gathering black oak acorns and deer hunting in the fall. San Luis Rey II villages are recognized by their large size as well as the presence of ceramics and red pictograph panels on boulder outcrops. The pictographs were painted by girls during their puberty ceremonies and demonstrated clan (party) affiliation and ownership of their territory and its resources. The girls' puberty ceremonies symbolized established party and lineage rights to female labor and reproduction (Waugh 1986:316, 321).

One of the 13 San Luis Rey II villages in the upper San Luis Rey River drainage area, known as *Molpa* (CA-SDI-308), was investigated by archaeologists during the 1950s (True, Meighan, and Crew 1974). It is located on two low knolls overlooking open grassland. There is a reliable spring below the site. The midden area at *Molpa* occupies 40,000 square yards (about 33,400 square meters). There are two pictograph panels and one cupule rock. There are 289 bedrock mortars and 109 bedrock milling surfaces on 10 outcrops. Seven subsurface features were found consisting of rock clusters and ash. Flaked stone tools included 327 Cottonwood Triangular arrow points, 10 Desert Side-Notched arrow points, and 6 leaf-shaped arrow points. There were also 49 knives, 12 drills, 5 domed scrapers, 1 keeled scraper, 5 flake scrapers, 59 retouched flakes, 7 hammerstones, 2 hammer-grinders, and 1 chopper. Ground stone tools include 88 manos, 24 metates, 8 pestles, and 9 portable mortars. Other artifacts consisted of 59 bone tools fragments, most probably representing awls and needles, 1 steatite arrow shaft straightener, 1 quartz crystal, 1 tourmaline crystal, 1 conically drilled bone fragment which may have been a pendant, 16 *Olivella* shell beads, 3 abalone ornaments, and 2 glass beads. Ceramics consisted of 2,728 sherds, 8 fired clay pipes and 4 fired clay figurines. Most of the ceramics came from the upper 18 inches of the site, which represents the San Luis Rey II component.

There is less information about settlement along the lower San Luis Rey River west of Pala. However, a village site occupied during the San Luis Rey II phase, known as *Tom-Kav* (CA-SDI-682) was excavated during the 1950s and 1960s (True, Pankey, and Warren 1991). It is located near Bonsall on the San Luis Rey River where there is no adjacent upland area for collecting black oak acorns. There are 116 bedrock mortars, 51 bedrock metates, and 31 milling surfaces (slicks) on 7 groups of outcrops at *Tom-Kav*. There are small and large cupules on some of the outcrops and there is a pictograph panel on the ceiling of a rockshelter at the east end of the site. Flaked stone tools consist of 94 Cottonwood Triangular arrow points, large bifaces used as knives, drills, scrapers, and retouched flakes. Ground stone tools include 159 manos, 31 metates, 5 pestles, 5 portable mortars, and 29 smoothing stones. Bone artifacts consisted of 77 bone awls, 22 needles, and 57 worked bone fragments. Ceramics consisted of 1,720 Tizon Brown Ware sherds, 76 Colorado Buff Ware sherds, and 18 fired clay pipes. Animal bone was only classified as small and large mammal. A small amount of marine shell (*Chione* sp. and *Argopecten* sp.) was recovered.

There were no upland acorn collecting camps associated with *Tom-Kav*, but there are several small processing stations with bedrock milling features and camps nearby. Their function is unknown and they would seem to be superfluous since all the resources collected from *Tom-Kav's* territory could have been brought back to the village for processing. It is possible these sites date to San Luis Rey I because most have no pottery (True, Pankey, and Warren 1991:47). There is a different proportion of bedrock mortars to bedrock milling surfaces at *Tom-Kav* compared to *Molpa*. At *Tom-Kav* there are 116 mortars and 82 bedrock milling surfaces for a ratio of 1.4 to 1. At *Molpa* there are 289 mortars and 109 bedrock milling surfaces for a ratio of 2.65 to 1. This indicates that acorn use was less intensive at *Tom-Kav* and that hard seeds made up a greater proportion of the plant foods (True, Pankey, and Warren 1991:47).

Better documentation of a settlement system similar to that around *Tom-Kav* comes from an investigation of sites on Rancho Lilac on Keys Creek, a tributary which enters the San Luis Rey River from the south, west of Pala. The sites in the Rancho Lilac valley include a Late Prehistoric village, 5 temporary camps with bedrock milling features and subsurface deposits including tools, debitage and animal bone, 9 sites with bedrock milling features only, and 3 lithic scatters. CA-SDI-4909 has been identified as a Late Prehistoric village (Clevenger, Phillips, and Gallegos 1990). It has four loci with midden, each with associated bedrock milling features. The number and type of milling features at CA-SDI-4909 is not provided. Test excavations recovered triangular arrow points, bifaces, utilized and retouched flakes, worked bone, ground stone tools, ceramics, animal bone, marine shell, a shell pendant, and glass beads. The ceramics and glass beads indicate a San Luis Rey II occupation at CA-SDI-4909. The five temporary camps have bedrock milling features (59 mortars and 105 basins/slicks), flaked and ground stone tools, and animal bone. CA-SDI-4909 appears to be a San Luis Rey II village, based on the presence of ceramics. The investigators state that all the temporary camps are associated with the village and that all the sites in the valley comprise a settlement system, implying that were all occupied at the same time by one group. However, the temporary camps lack ceramics and, as with sites around *Tom-Kav,* there is no need for camps so close to the village. As with the *Tom-Kav* area, it is more likely that the camps date to the San Luis Rey I Phase.

The temporal and functional relationships of the sites cannot be determined because radiocarbon dates are not available. The ratio of mortars to milling surfaces (basins to slicks) is 0.56 mortars to 1 milling surface, indicating that in the Keys Creek area acorns were even less important than in the *Tom-Kav* area. In the Keys Creek area, hard seeds from the chaparral community which surrounds the sites were the most important plant resource. Their use could have been intensified through managed burning of the chaparral to allow grasses to grow and produce new sprouts from the chaparral plants. This pattern of settlements associated with hard seed processing is probably more characteristic of the lower San Luis Rey River area and the area around Carlsbad. In these areas there was abundant coastal sage scrub and chaparral with numerous plants that produced hard seeds, while acorns were available only from coast live oak trees which had a limited distribution, mostly in canyons.

4.2 Ethnography and Native American History

The City of Carlsbad is located in a culturally-rich region, which has long since been home to, or within traditional use areas of, Native American cultures. The cultural history of Carlsbad is complex, and a representative summary of two main cultures, namely, the Luiseño and the Kumeyaay, is provided herein. Figure 1 illustrates the organization of both cultures. The reader is encouraged to seek additional information through references that are cited throughout.

4.2.1 Luiseño

The Luiseño were one of the Takic-speaking groups in southern California prior to the arrival of Euro-Americans. Luiseño occupied most of the area drained by the San Luis Rey and Santa Margarita Rivers.

The Luiseño lived in sedentary and autonomous village groups, each with specific subsistence territories encompassing hunting, collecting, and fishing areas. Villages were typically located in valley bottoms, along streams, or along coastal strands near mountain ranges where water was available and village defense was possible. Inland populations had access to fishing and gathering sites on the coast, which they used during the winter months (Bean and Shipek 1978).

Luiseño subsistence was based on the gathering of acorns, seeds, greens, bulbs, roots, berries, and other vegetal foods. This was supplemented by hunting mammals such as deer, antelope, rabbit, woodrat, ground squirrels, and mice, as well as birds including quail, doves, and ducks. Bands along the coast also exploited marine resources, such as sea mammals, fish, crustaceans, and mollusks. Inland, trout and other fish were taken from mountain streams (Bean and Shipek 1978).

Hunting was done both individually and by organized groups. Tool technology for food acquisition, storage, and preparation reflects the size and quantity of items procured. Small game was hunted with the use of curved throwing sticks, nets, slings, or traps. Bows and arrows were used for hunting larger game. Dugout canoes, basketry fish traps, and shell hooks were used for near-shore ocean fishing. Coiled and twined baskets were made for food gathering, preparation, storing, and serving. Other items used for food processing included large shallow trays for winnowing chaff from grain, ceramic and basketry storage containers, manos and metates for grinding seeds, and ceramic jars for cooking (Bean and Shipek 1978).

Luiseño social organization was based on patrilineal and patrilocal lineages. Exogamy rules required that a man could not marry a woman related to them within five generations. Women moved to their husband's village, but kept their identity as a member of their natal lineage (Cultural Systems Research 2005:15).

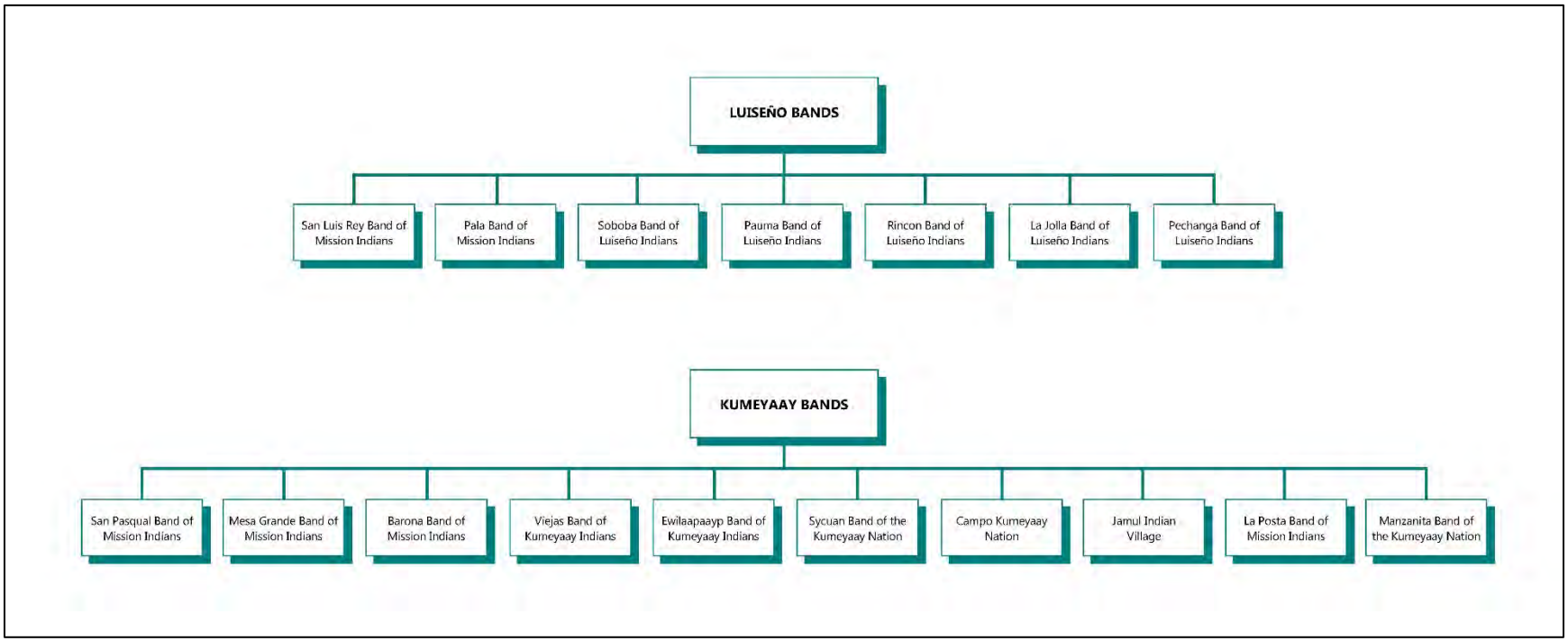

Figure 1. Luiseño and Kumeyaay Bands in the Region of Carlsbad (credit: San Luis Rey Band of Mission Indians).

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The Luiseño corporate group was a "party" composed of one major lineage with a ceremonial leader (chief), a ceremonial bundle, and a ceremonial house or enclosure. Members of other lineages within the party could live in the same village as the major lineage or within other villages within the party territory. The ceremonial chief was also the hereditary chief of the party who organized religious, economic, and military activities (Goldberg I:47). An advisory council of ritual specialists and shamans was consulted for their specialized knowledge. Resources within the party territory were owned by the party. The party territory was marked by boundary markers and was defended against trespassers (Waugh 1986:74).

The most important ceremonies were boy and girl initiation ceremonies and mourning ceremonies for all who had died during the year. The corporate identity of the Luiseño party was reaffirmed through these ceremonies. Ceremonies were usually held during fall and winter when stored foods were available for exchange with other groups. During the girls' initiation ceremony, the girls made geometric red paintings on boulders with their hands. Luiseño girls painted the same geometric rectilinear red designs on rocks and their faces for four successive months. Thus, there are red pictographs associated with every Luiseño village site usually on a boulder or outcrop in or near the village (Cultural Systems Research 2005:55-56). Non-geometric designs were made by shamans in isolated rockshelters and on sheltered outcrops away from the village (Shepard 1996).

Ceremonies were held in and around an unroofed ceremonial enclosure surrounded by a brush fence. The enclosure could be round, elliptical, or rectangular. One example measured 38 by 58 feet. There was a *ramada* (a structure with a thatched roof supported by willow poles) in the center of the enclosure near fire pits. Spectators watched the dances from outside the fence. The ceremonial enclosure was located near the chief's house (Cultural Systems Research 2005:11-12).

Houses were circular with conical roofs and were made of a framework of logs covered by tules, sedge, or bark and a layer of earth. The floors of the houses were about two feet below the ground surface. Houses had a central fireplace, but most cooking was done outside (Cultural Systems Research 2005:9). Round earth-covered semi-subterranean sweathouses with an interior fire pit were primarily used by men and were located next to a stream or pond. Ramadas, flat-roofed open structures, provided shade for work areas (Cultural Systems Research 2005:12-13). Women's work areas often consisted of a circular windbreak made of arrow weed or tule. They had a hard-packed earth floor that was swept to remove debris. Earth ovens consisted of a pit with a ring of rocks. Granaries for storing acorns, seeds, and nuts were made of woven arrow weed or willow, sealed with mud. They were built on platforms, on top of houses, or on boulders to keep burrowing animals out. Caves and rockshelters in or near villages were used for activity areas, as caches, and for ceremonies. Rockshelters away from the village could be used as temporary camps. Other temporary camps had lean-tos made of willows with an adjacent fire pit (Cultural Systems Research 2005:12-14).

When the Spanish arrived in southern California in 1769, it is estimated that there were 50 Luiseño villages with a population of about 200 each, suggesting a total population of about 10,000 (White 1963:104).

The first contact with Euro-Americans by Native Americans in southern California came as a result of the Spanish Portolá Expedition in 1769. Missions were established by Franciscan friars to convert, educate, and control the native population. Mission San Diego was established to convert the Native Americans that lived in the area, known as the *Kumeyaay* or Diegueño. Mission San Juan Capistrano was established in 1776 on San Juan Creek (in what is now southern Orange County) to convert the *Agjachemem* or Juaneño. Coastal Luiseño people were also taken to Mission San Juan Capistrano. Mission San Luis Rey was established in 1798 on the lower San Luis Rey River (in what is now Oceanside) to convert the Luiseño (Castillo 1978:100). Some missions later established outposts in inland areas. An *asistencia* (mission outpost) of Mission San Luis Rey, known as San Antonio de Pala, was built in Luiseño territory along the upper San Luis Rey River near Mount Palomar in 1810 (Pourade 1961).

Some coastal Luiseño people were converted and baptized by Franciscan friars and taken to the San Juan Capistrano Mission after it opened in 1776. However, the friars at San Luis Rey Mission (established 1798), allowed many native people to remain in their villages, especially along the upper San Luis Rey River, with a continuation of traditional economic organization and leadership (Bean and Shipek 1978:558). The friars travelled to the villages to say mass and teach farming skills and European crafts (Bean and Shipek 1978:558).

Hundreds of Luiseño who lived near San Luis Rey Mission were converted and brought to live at the mission. Other Luiseño converts worked on ranches established by the mission friars. The ranches were within 10 leagues of the mission and included ranches at Santa Margarita, Las Flores, San Mateo, Pala (around the *asistencia*), and Temecula. The friars appointed Luiseño *alcaldes* or overseers to manage the labor of the Luiseño on the ranches where the Luiseño grew wheat, barley, and corn and looked after large herds of cattle. Each ranch had houses, storehouses, and a chapel. The priests from the mission came to say Mass in the chapels on the ranches. The Luiseño on the ranches were able to maintain more of their culture and religious traditions than those at the mission. Other Luiseño remained in their villages on the upper San Luis Rey River and the headmen of these villages retained their authority. People who left the mission usually returned to these villages (Phillips 2014).

The Spanish saw the native people as lower class, conquered people who had obligations which included obedience, allegiance to the crown, and fidelity to God. The Luiseño saw these as foreign obligations that were forced on them. However, the friars saw not fulfilling these obligations as a crime punishable by forcible return to the mission, public whipping, or incarceration. The friars thought the Luiseño had a child-like culture and therefore the friars should serve *in loco parentis* and have rights of judgment and punishment (Carrico 2008).

After Mexico became independent of Spain in 1821, the Mexican government said that the Indians were citizens of Mexico and released some of them from the control of the missions. In 1834, Mexico secularized the missions. This meant that the friars no longer had political or legal jurisdiction over the converts. While some Luiseño returned to the inland villages, others remained at the mission and on the mission ranches. The Mexican governor of Alta California appointed Pío Pico as administrator of

Mission San Luis Rey. Pico continued the system the friars had established for running a large agricultural enterprise using the labor of the Luiseño, but without the religious instruction that the friars had provided. Pico was assisted by three Mexicans who served as ranch managers. The Luiseño carried out agricultural labor, including plowing, seeding, and harvesting. Craftsmen included shoemakers, blacksmiths, carpenters, soap makers, and weavers. In 1840 the mission and its ranches had 25,000 sheep and 3,000 cattle. Pico served as mission administrator from 1835 to 1840 (Phillips 2014).

Under the secularization law Indian pueblos were supposed to be created. The only Indian pueblo in Luiseño territory was Las Flores on the coast north of the Santa Margarita River which was established on one of the former mission ranches. In 1836 there were 196 Luiseño at Las Flores and some had individual plots of farm land. Farm animals were given to the people of Las Flores by the Mexican government in 1839 (Phillips 2014).

The mission administrators exploited native labor to enrich themselves. The Luiseño were not paid and were treated like serfs who were given only food. At the mission, some lived in the mission buildings. Under the Mexican system the Luiseño were free to leave the mission and many returned to the inland villages. Others went to Los Angeles where they worked as part time laborers or worked on ranches that had been given as land grants by the Mexican governor to Mexican citizens. One of the land grants in Luiseño territory included Rancho Santa Margarita y Las Flores which included the former mission ranch of Santa Margarita and the pueblo of Las Flores which was also on a former mission ranch. Rancho Santa Margarita was granted to Pío and Andres Pico in 1841 (Aviña 1976), one year after Pío Pico resigned as administrator of Mission San Luis Rey. In 1844 Las Flores was added to the land grant (Aviña 1976). Pio Pico put a large cattle herd on his land grant, possibly taken from the mission herds. He also had a resident labor force from the pueblo of Las Flores, which was now on his land grant (Phillips 2014).

Other Mexican land grants in Luiseño territory included Temecula, Little Temecula, Pauba, Monserate, Guajome, Pauma, and Cuca. Temecula and Little Temecula were located on one of the former mission ranches. The Little Temecula land grant was given to Pablo Apis, a Luiseño who had been an *alcalde* at Mission San Luis Rey. Apis became the headman or captain of a village community of Luiseño on the little Temecula land grant (Phillips 2014).

During the Mexican-American War in 1846, Manuelito Cota, a mestizo who lived near Pala, led a group of Indians who killed 11 Mexicans on the Rancho Pauma land grant. In retaliation, 38 Luiseños and Cupeños were killed at Aguanga. The Cupeños were another Takic-speaking group who lived in San Jose Valley east of the upper end of San Luis Rey River (Phillips 2014).

After Mexico lost the Mexican-American War, the U.S. government took control of California. California was governed by the U.S. Army from 1847 to 1849 and became a state in 1850. The U.S. government considered the Luiseño to be Mission Indians who were not U.S. citizens, but were residents of San Diego County. As residents of San Diego County, they were required to pay taxes, which caused much

resentment. The captains of the village communities of Temecula, Pala, Potrero, La Jolla, and Pauma had to sell some of their cattle in San Diego in order to pay the taxes (Phillips 2014).

George Barbour was appointed by Congress as Indian Commissioner in 1851 and was told to negotiate treaties with the southern California Indians. Many Luiseño communities sent representatives to meet with Barbour at Rancho del Chino east of Los Angeles. Barbour did not attend the meeting and returned to Washington, D.C. without accomplishing anything (Phillips 2014).

During the Gold Rush, hundreds of gold seekers used the southern route into California, crossing the Colorado River at Yuma where they came into conflict with the Quechan, a Yuman-speaking group. Two white men, Lincoln and Glanton, established a ferry at Yuma and the Quechan established a competing ferry. During a meeting between the two ferry-operating groups, Glanton clubbed the Quechan chief. In retaliation, the Quechan later killed Glanton and Lincoln. The Morehead Expedition was sent by the California state militia to punish the Quechan, but was forced to retreat by the Quechan. However, later in 1850, Camp Yuma, whose name was later changed to Camp Independence, was established. By 1851 there were only 11 men in the camp. The Quechan attacked a group of sheepherders who were crossing the river and stole some of their sheep. They then surrounded the military camp. Captain Davidson of the militia from San Diego went to Camp Independence and rescued the men there; they abandoned Camp Independence and returned to San Diego. The Quechan destroyed Camp Independence and the ferry in late 1851 (Phillips 2014).

Perhaps emboldened by the success of the Quechan, Antonio Garra, a Cupeño leader, organized a revolt against the Americans. The Mexican land grant known as Valle de San Jose came into the possession of an American named John Warner and the ranch became known as Warner's Ranch. Most of the Cupeño villages were on Warner's Ranch, including the village of Kupa. Garra's son and others killed four Americans in Kupa. Another group attacked Warner's house. Although Warner escaped, when he returned he found that all his possessions in his house had been stolen and all his cattle were gone (Phillips 2014).

The Luiseño leaders supported the Americans and refused to join the revolt of the Cupeños. However, a volunteer force of the California militia was organized in San Diego to put down the "Indian revolt" and martial law was declared in San Diego County on November 26, 1851. Antonio Garra, Garra's son, and four other Indians thought to have killed the Americans at Kupa were captured by forces from the California militia and the U.S. Army, were tried by military tribunals, and executed in December 1851 and January 1852. Kupa and other Cupeño villages were burned. Captain Heintzelman of the U.S. Army returned to Yuma where the Quechan were robbing travelers and "subdued" the Quechan by the end of 1852 (Phillips 2014).

The revolt by Antonio Garra and some of the Cupeño people was a result of the requirement by the County officials that the Indians must pay taxes and the unfulfilled promise of treaty negotiations on the part of the federal government. Meanwhile, the Americans in San Diego believed that all of the

southern California Indians were united against them and that they would be attacked by thousands of warriors (Phillips 2014).

Indian Commissioner Wozencraft, a representative of the federal government, negotiated a treaty with the Luiseño captains at Temecula on January 5, 1852. The purpose of the treaty, from the government's point of view, was to stop all acts of hostility against U.S. citizens and other Indians. The Indians had to accept the jurisdiction, authority, and protection of the U.S. Government and to be governed by the U.S. Indian Bureau. In return, the Luiseño, Cahuilla, and Serrano would be given a large vaguely defined reservation that extended from the San Gorgonio and San Jacinto Mountains on the north to a line running west from the San Jose Valley to Pauma on the south. From Pauma the western boundary would run north through Temecula. The eastern boundary was the desert. The Indians who signed the treaty were to be given flour, clothing, cloth, plows and other farm tools, along with horses and oxen. A similar treaty was negotiated with the Kumeyaay on January 6, 1852. The Kumeyaay were to be given a reservation that extended south from the Luiseño reservation through the eastern mountains to the Mexican border (Phillips 2014).

The California Legislature opposed ratification of the treaties by the U.S. Senate and the Senate rejected them. Instead, Congress appointed Edward S. Beale as Indian Agent for California. Beale gave Benjamin D. Wilson of Los Angeles a contract to prepare a report on Indian policy for southern California. Wilson recommended setting aside smaller reserves (reservations) where the Indians were currently living, at places including San Gorgonio, San Jacinto, Temecula, Agua Caliente (Kupa), and Tejon. He noted that some of these places had existing vineyards and orchards from mission times. There should be one town in each reserve and the government should provide cattle, clothing, and tools to promote farming. There should be no hereditary chiefs. The Indian agent assigned to the reserve would appoint leaders based on good behavior who would enforce compulsory labor and rationing of food from commonly held stores of the produce of the small self-supporting agricultural community. Congress authorized five reserves, each with a military garrison, in California. One of these was Tejon (north of Los Angeles), established by Beale in 1853. The others were in northern California. Once again, the federal government failed to provide any land for the southern California Indians (Phillips 2014).

Cave Couts was appointed Indian subagent for the Luiseño in 1853 and John Warner was appointed subagent for the Cupeño and Kumeyaay. Couts came from a slave-holding family in Tennessee and came to California as an officer in the U.S. Army during the Mexican-American War. He served on the military tribunal in San Diego that sentenced Antonio Garra to be executed. Couts married the daughter of a wealthy Mexican rancho owner in 1851 and received the Rancho Guajome land grant, near Mission San Luis Rey, as a wedding present (San Diego History Center 2016). Couts' appointment as Indian subagent was based on the 1850 Act for the Government and Protection of Indians. Using his position as Indian subagent to enforce provisions of the Act, he instituted a feudal labor system that bound Luiseño to ranch owners who exploited their labor. One of the provisions of the Act allowed employers to take custody of Indian children until they reached majority age, providing them with free

child labor. Couts procured Luiseño labor for the development of his Rancho Guajome and for neighboring ranches. When Indian laborers didn't work hard enough, Couts flogged them, which sometimes resulted in their deaths. Couts was indicted for the flogging death of a Luiseño captain named Urbano in 1855 (Hanks 2012).

Couts appointed Manuelito Cota, the mestizo who had killed the Mexicans at Rancho Pauma during the Mexican-American War, to be a paramount chief over the captains of the Luiseño villages on the upper San Luis Rey River. Cota had a ranch east of Pala. Because Cota was not part of any Luiseño lineage, the Luiseño captains did not want to accept his authority. Cota actually served as an Indian labor recruiter and contractor for his own and neighboring ranches (Hanks 2012).

Couts wrote in 1856 that the Luiseño were industrious agriculturalists, but that the Kumeyaay did not farm. According to Couts, they subsisted on acorns and stolen cattle (Phillips 2014).

When Cota retired in 1860 the Luiseño captains chose Francisco Majal to succeed him. Couts was opposed to Majal because Majal was unwilling to recognize Couts' authority over him. Couts denounced Majal as a drunkard and thief and was successful in getting the Office of Indian Affairs to re-appoint Manuelito Cota in 1865 (Hanks 2012).

In 1867 Indian Agent Stanley met with 20 Luiseño captains at Temecula. He gave them supplies and tools and asked them to establish and maintain farms with fruit trees and grape vines. He noted that the Indians were losing their land to white men who also sold them liquor in exchange for their labor and for access to their women. In 1868 Stanley recommended establishing a reservation at Pala. In 1869 Cota recommended San Pasqual as a reservation. In 1870 President Grant, by executive order, set aside land at Pala and San Pasqual for exclusive Indian use (Phillips 2014).

The Luiseño captains, who were not happy with Cota because he was trying to get them to move onto reservations, elected Manuel Olegario (also known as Olegario Calac) as paramount chief over 12 villages in 1870. Olegario was a member of an important Luiseño lineage, unlike Cota. However, Olegario was not recognized by the federal government because he had not been appointed by an Indian agent. Olegario and the Luiseño captains said they would not go to the reservations. The Luiseño feared that on the reservations they would become dangerously dependent on the federal government and would lose control over their affairs. Because the Luiseño refused to move onto the ill-defined reservations, President Grant in February 1871 rescinded his executive order creating the reservations (Phillips 2014). Rescinding the order reinforced the Luiseño's belief that on the reservations they would be landless indigents with no claims to the land they currently occupied (Hanks 2012).

Violence erupted between the Cota faction and Olegario's followers at Pala and Pauma in the summer of 1871. Cota's sister, Margarita, was taken by Olegario's supporters and hung by her wrists (Hanks 2012).

Olegario and Manuel Largo of the Mountain Cahuilla went to San Bernardino in August 1871 and convinced Justice Wagner to issue an arrest warrant for Cota. News that the leaders of the Luiseño and the Cahuilla had joined forces and were trying to overthrow the government-appointed Indian leaders led to fears of another Indian uprising, such as the one led by Antonio Garra in 1851 (Hanks 2012).

During a meeting with Indian Superintendent Whiting at Temecula in 1871, the Luiseño captains complained about Cota who they said had abandoned them, did not defend and protect them, and neglected their welfare. Whiting recognized the forced resignation of Cota. At this meeting Olegario said that he was the leader elected and chosen by the Luiseño and that the reservations were promoted by the ranch owners who wanted the land the Indians currently occupied. Whiting said that neither Cota nor Olegario could be chief and appointed Jose Antonio Sal, Cota's relative, as general chief who should appoint captains and alcaldes. Like Cota, Sal supported reservations. However, most Luiseño continued to support Olegario (Hanks 2012, Phillips 2014). In 1873 Olegario complained that whites were taking Indian lands and sent a petition to the General Land Office in Los Angeles (Phillips 2014).

In 1875, Indian agent Charles Wetmore proposed establishing trust lands for Indians which they could not sell or buy. He also recommended that the proposed trust lands be surveyed to establish their boundaries. Wetmore said that there should be a town on the trust lands where there would be a Catholic church with a priest to "help" the Indians. Olegario opposed the land surveys, saying that surveying would limit Indian lands to small patches and that whites would take the rest. Surveying, which had begun at Pauma, was stopped (Phillips 2014).

Olegario began to change his mind about reservations after all of the Luiseño people were evicted from Rancho Temecula by the San Diego County Sheriff in 1875 (Phillips 2014). The Luiseño people from Temecula were forced into a waterless canyon which later became the Pechanga Reservation (Hanks 2012). Encroachment on traditional Luiseño lands was also occurring around other Luiseño villages.

Olegario went to Washington D.C. in November of 1875 and met with Secretary of the Interior Chandler and President Grant. As a result of this face-to-face appeal, on December 26, 1875 President Grant created nine small reservations in San Diego County by executive order. The Pala Reservation, Potrero Reservation (later became the La Jolla Reservation), and the Rincon Reservation were in Luiseño territory. The Agua Caliente Reservation was created at Kupa for the Cupeño. The other reservations were in Kumeyaay territory (Hanks 2012, Phillips 2014).

In June 1877 Antonio Varela, who was leasing land at Rancho Cuca near the Potrero reservation, began grazing his cattle on land outside the rancho, threatening traditional Luiseño food sources. Olegario and his warriors blocked the access of Varela to the ranch in an effort to keep his cattle off of traditional Luiseño lands. Several Luiseño were arrested and brought before Justice of the Peace Cave Couts, who uncharacteristically decided he had no jurisdiction and freed the prisoners (Hanks 2012).

Olegario sought the removal of the owner of Rancho Cuca, Margaret Trujillo, and return of the rancho land to the Luiseño. Deputy Sherriff Ed Bushyhead was sent to Cuca to arrest Olegario. Olegario and

his followers refused to recognize the authority of the arrest warrant and a standoff ensued. Bushyhead returned to San Diego without his prisoner. Olegario went to court and argued that Cuca was traditional Luiseño land, owned and worked by his people "since time began." However, the judge made no ruling in the case (Hanks 2012).

Olegario fought for the sovereign rights of the Luiseño people using the white's own legal system. "Olegario Calac redefined the nature of resistance in southern California by his use of the courts as well as confrontation" (Hanks 2012:47). He led the Luiseño in their fight for self-determination and resistance of white domination. "Olegario kept his people together, maintained the tribal integrity of their reservations, and represented the whole of the Luiseño nation with dignity and wisdom" (Hanks 2012:47). Olegario died July 31, 1877. Many Luiseño believed Olegario had been poisoned, but a Medical Examiner's inquest by Justice Cave Couts found no foul play (Hanks 2012).

The reservation created by President Grant at Agua Caliente for the Cupeño was rescinded by President Hayes in 1880 at the request of former Governor Downey who was then the owner of Warner's Ranch and wanted all Indians removed from his property. In 1903, all Cupeño were removed to Pala (Phillips 2014).

In 1882, Indian Commissioner Hiram Price authorized Helen Hunt Jackson to investigate the conditions of the southern California Indians. Accompanied by Abbot Kinney, she visited the Cahuilla, Luiseño, and Kumeyaay settlements. In her report she recommended resurveying the reservation boundaries and issuing federal patents for them, removing white settlers, establishing schools, distributing farm equipment, and hiring a law firm to represent the Indians. As a result of her visit to Soboba, the Soboba reservation was established in 1883 (Phillips 2014). She wrote the novel *Ramona* (published 1884) based on her investigations.

The Act for the Relief of Mission Indians established trust-patent reservations in 1891 (Bean and Shipek 1978:558-559). The Act created the Pechanga Reservation near Temecula, the Pauma and Yuima Reservation, and the San Pasqual Reservation (not established until 1910) (CIAP 2004).

The Act also established the Bureau of Indian Affairs (BIA) to "manage" the Native Americans and help them "assimilate" into American society (Bean and Shipek 1978:558-559). The BIA established native governments on the reservations (subject to the approval of the BIA) and started boarding schools for native children so that they would "adapt" to American culture. The Perris Indian School opened as a manual training boarding school for Indians in 1892, but lack of water resulted in a move to the Sherman Indian Institute in Riverside in 1901. The purpose of the boarding schools was to remove Indian children from their native environment in order to ensure "the transculturation of American Indians" which included "imposed assimilation" to American culture "and the subsequent loss of a distinct Indian culture," according to Albert Smiley, an Indian commissioner for southern California (Hanks 2012:87).

Many Luiseño children were taken to the Perris Indian School and, later to the Sherman Indian Institute. Conditions were poor at the Perris Indian School, resulting in poor health of the children. This caused

great distress among the parents at Temecula who also thought their children were not being fed properly. This may have contributed to the murder of Mrs. Platt, the teacher at the day school at the Pechanga Reservation in 1894. The schoolhouse was burned with Mrs. Platt in it, resulting in her death. Some of the Luiseño parents had asked her for money so they could go to investigate conditions at the Perris Indian School and see their children, but Mrs. Platt refused. At Sherman Institute, children were beaten when caught speaking their native language and many had to steal food from the kitchen to get enough to eat. Many escaped and went home, only to be sent back to the school (Hanks 2012).

Constance G. Dubois visited the southern California reservations and villages in 1900. She found that the Indians lived a miserable existence in terrible poverty. They had some legal rights on the reservations, but on private land were vulnerable to the white civil justice system (Phillips 2014).

Native Americans were finally granted U.S. citizenship when Congress passed the Indian Citizenship Act in 1924. It was thought that granting citizenship would help assimilate Native Americans into mainstream society. However, this did little to change the authority of the BIA and its agents on the reservations. Indian agent police brutally enforced Prohibition on the reservations during the 1920s (Hanks 2012).

The Mission Indian Federation was organized in 1920 to counter the control of the BIA and its agents. The Federation was made up of representatives from all the reservations in southern California, but was led by Jonathan Tibbet of Riverside who could serve as an intermediary with white society. The Federation put its own police on the reservations in order to solve problems before the BIA agents could intervene. The Federation was also a lobbying organization and assisted in convincing Congress to pass the Indian Citizenship Act and other federal legislation affecting Native Americans (Hanks 2012).

4.2.2 Kumeyaay

The Kumeyaay (also known as Tipai and Ipai) were Yuman speakers (part of the Hokan language family) who occupied San Diego County. The Kumeyaay have been ancestrally located in the southern part of the City of Carlsbad, southeast into Imperial County and south of the United States into Baja California. From west to east, the Kumeyaay occupied the coast, coastal hills, mountains, and desert.

The primary source of Kumeyaay subsistence was vegetal food. Seasonal travel followed the ripening of plants from the lowlands to higher elevations of the mountain slopes. Acorns, grass and sage seeds, cactus fruits, wild plums, pinyon nuts, and agave stalks were the principal plant foods. Deer, rabbits, small rodents, and birds provided meat. Residential bases were selected for seasonal use and were occupied by exogamous, patrilineal clans or bands. Three or four clans might winter together and then disperse during the spring and summer (Luomala 1978).

The Kumeyaay were loosely organized into exogamous patrilineal groups termed sibs, clans, gens, and tribelets by ethnographers. The Kumeyaay term was *cimul*. The *cimul* used certain areas for hunting and gathering, but apparently did not control a bounded and defended territory, as did the Luiseño.

In addition, members of several different *cimul* usually lived in the same residential base, unlike the Luiseño where a single lineage, party, or clan controlled a village and its territory. Kumeyaay lived in residential bases during the winter and subsisted on stored resources. No permanent houses were built. Brush shelters were temporary and were not re-used the next year. Ceremonies, including rites of passage and ceremonies to insure an abundance of food, were held in the winter residential bases. The *cimul* leader directed the ceremonies and settled disputes (Christenson 1990:58, 62). One of the most important ceremonies was the mourning ceremony. Upon death, the Kumeyaay cremated the body of the deceased. Ashes were placed in a ceramic urn and buried or hidden in a cluster of rocks. The family customarily held a mourning ceremony one year after the death of a family member. (Luomala 1978).

The Kumeyaay were geographically and linguistically divided into western and eastern Kumeyaay. The western and eastern Kumeyaay spoke two different dialects (Christenson 1990:64). The western Kumeyaay lived along the coast and in the valleys along the drainages west of the mountains. The eastern Kumeyaay lived in the canyons and desert east of the mountains. The western Kumeyaay spent the winter in residential bases in the lowland valleys and then broke into smaller *cimul* groups that moved gradually eastward toward the mountains, following ripening plants and occupying temporary residential sites along the way. Thus, each group occupied several different residential bases during the course of a year (Christenson 1990:292-293). The eastern Kumeyaay spent the winter in villages on the desert margin where water was available from springs at canyon mouths. They moved up the canyons toward the mountains during spring and summer. The eastern and western Kumeyaay met in the mountains in the fall where they gathered black oak acorns, traded, and held ceremonies (Christenson 1990:63).

It is estimated that the precontact Kumeyaay population was about 9,000 (Luomala 1978). Beginning in 1775, the semi-nomadic life of the Kumeyaay began to change as a result of contact with European-Americans, particularly from the influence of the Spanish missions. Through successive Spanish, Mexican, and Anglo-American control, the Kumeyaay were forced to adopt a sedentary lifestyle and accept Christianity (Luomala 1978).

4.3 Euro-American History

Euro-American colonization of California began with the Spanish Portolá land expedition. The expedition, led by Captain Gaspar de Portolá of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterrey Bay area in 1769. As a result of this expedition, Spanish missions to convert the native population, *presidios* (forts), and towns were established. The Franciscan missionary friars established 21 missions in Alta California (the area north of Baja California) beginning with Mission San Diego in 1769 and ending with the mission in Sonoma established in 1823. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. As previously mentioned, missions were established at San Diego in 1769, at San Juan Capistrano in 1776 and San

Luis Rey Mission was established in 1798 on the lower San Luis Rey River (in what is now Oceanside) (Castillo 1978:100). Some missions later established outposts in inland areas.

The missions sustained themselves through cattle ranching and traded hides and tallow for supplies brought by ship. Large cattle ranches were established by Mission San Luis Rey at Temecula and San Jacinto (Gunther 1984). The Spanish also constructed *presidios*, or forts, at San Diego and Santa Barbara, and a *pueblo*, or town, was established at Los Angeles. The Spanish period in California began in 1769 with the Portolá expedition and ended in 1821 with Mexican independence.

After Mexico became independent from Spain in 1821, what is now California became the Mexican province of Alta California. The Mexican government closed the missions in the 1830s and former mission lands were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants or "ranchos" (Robinson 1948). During the Mexican period there were small towns at San Diego (near the presidio), San Juan Capistrano (around the mission), and Los Angeles. The rancho owners lived in one of the towns or in an adobe house on the rancho. The Mexican Period includes the years 1821 to 1848.

Most of what is now Carlsbad was the Mexican land grant known as Rancho Agua Hedionda, granted to Juan María Marrón by the Mexican governor of Alta California in 1842 (Aviña 1976:92). When originally granted, the rancho covered three square leagues. When surveyed by the U.S. Surveyor General's Office, the area of the grant was 13,311 acres. Marron had been a ship captain and arrived in San Diego in the 1820s. He married the daughter of the *Alcalde* of San Diego and was a *regidor* (city councilman) in San Diego. Marrón raised cattle and horses on his rancho. He supported the Americans during the Mexican War which caused trouble with his neighbors when they used his support for the Americans as a pretext to remove all the livestock from his rancho in 1846 (Anderson 2007).

The American period began when the Treaty of Guadalupe Hidalgo, which ended the Mexican War, was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the territory of California. Rapid population increase occasioned by the Gold Rush of 1849 allowed California to become a state in 1850. Most Mexican land grants were confirmed to the grantees by U.S. courts, but usually with more restricted boundaries which were surveyed by the U.S. Surveyor General's office. Land that was not part of a land grant was owned by the U.S. Government until it was acquired by individuals through purchase or homesteading. Floods and drought in the 1860s greatly reduced the cattle herds on the ranchos, making it difficult to pay the new American land taxes on the thousands of acres that comprised many of the ranchos. Many Mexican-American cattle ranchers borrowed money at usurious rates from newly arrived Anglo-Americans. The resulting foreclosures and land sales transferred most of the land grants into the hands of Anglo-Americans (Cleland 1941:137-138).

Don Juan María Marrón died in 1853 at the age of 45, leaving most of Rancho Agua Hedionda to his widow and four children. His brother, Silvestre Marrón, received 360 acres. In 1860 the heirs took a

loan of $6,000 from Francis Hinton with the rancho as collateral. Drought, which greatly reduced the Marron's cattle herd, left the Marrón family unable to repay the debt and Hinton foreclosed in 1865.

Hinton was born in New York and came to California as part of the Boundary Commission Guard during the Mexican War. He previously was a merchant in Yuma (Allen and Harmon n.d.). Hinton never married and lived at the rancho until his death in 1870. Robert Kelly, who had come to San Diego from Yuma with Hinton as a member of the Boundary Commission Guard, became a partner in the Jamacha Rancho near San Diego where he raised cattle. In 1860 Kelly became ranch foreman on Hinton's Rancho Jamul and later became a partner with Hinton in Rancho Agua Hedionda. Hinton had no children and, upon Hinton's death in 1870, Hinton's half interest in Rancho Agua Hedionda was bequeathed to Robert Kelly who now fully owned the Rancho (Allen and Harmon n.d.). When Robert Kelly died without heirs in 1890 the rancho passed to the nine children of his brother, Matthew Kelly, who had died in 1885. Matthew Kelly had come to California as part of the Gold Rush and then moved to the San Diego area to join his brother, Robert. The Kelly children divided the rancho equally among them and the new parcels were surveyed in 1895 (Allen and Harmon n.d.).

Matthew Kelly lived outside the rancho (just east of the southeastern rancho boundary) on land (in Section 19 of T3 W, R 12 S) that he purchased from the federal government in 1881 and 1884 (BLM 2016). Kelly's land was known as Rancho de los Kiotes. His heirs sold Rancho de los Kiotes to a San Francisco syndicate in 1922. They sold the land (840 acres) to actor Leo Carrillo in 1938. Carrillo remodeled the adobe house Kelly had built and lived there until his death in 1961 when the ranch passed to his adopted daughter, Mrs. Marie Antoinette Carrillo Delpy (Anderson 2007a). Leo Carrillo Ranch, located in Carlsbad, is now California Historical Landmark No. 1020 and is listed on the NRHP.

The original town of Carlsbad was located outside of Rancho Agua Hedionda on federal land along the coast south of Buena Vista Lagoon. The town began as a station (Frazier's Station) on the new California Southern Railroad which completed its line from National City (south of San Diego) to Colton in 1882. The railroad was later completed through San Bernardino to Barstow, where it connected with the transcontinental AT&SF (Santa Fe) Railroad in 1885. The railroad became part of the AT&SF Railway in 1906 (Robertson 1998).

John A. Frazier, a former ship captain, arrived in the area in 1883 and dug a well near the railroad to provide water for the steam locomotives when they stopped at what became known as Frazier's Station beginning in 1884. Frazier dug another well that produced mineral water. Frazier had the mineral water analyzed and the mineral content was found to be similar to the water of one of Europe's most popular health spas, Karlsbad, in Bohemia (now known as Karlovy Vary, Czech Republic) (Anderson 2007b, Gudde 1969:54). Frazier bought land from the federal government around Frazier's Station and along the coast (in Section 1 of T5 W, R 12 S) in 1886 and purchased additional land in 1892 (BLM 2016). Frazier and several businessmen from the eastern U.S. formed the Carlsbad Land and Mineral Water Company Frazier provided the land and the other partners in the company provided the capital. Frazier's Station was renamed Carlsbad when the company divided some of the land into town lots and filed a town plat with the County. The company began bottling the mineral water and sold it

nationwide as (The American) Carlsbad Mineral Water. The Company built a large hotel and spa (the Carlsbad Hotel) near the mineral water well for those who wanted to take the waters in person (by drinking and bathing) (Carlsbad Spa 2016). Frazier sold lots around the hotel and those who bought the lots built businesses and residences that formed the beginning of the town of Carlsbad. In 1890 there were a telegraph office, Wells Fargo Express, a school, a Methodist and a Congregational church, a hotel, and another hotel under construction. The Carlsbad Hotel was destroyed by fire in 1896 (Allen and Harmon n.d.).

Several of the partners in the Carlsbad Land and Mineral Water Company, including Samuel C. Smith and Gerhard Schutte, moved to Carlsbad. Gerhard Schutte's home, built in the Queen Anne style, became one of the two Twin Inns. The Twin Inns was greatly expanded and redecorated with exotic foreign themes and later became a fried chicken restaurant. The Shipley family purchased the Smith home, as well as large tracts of land around Carlsbad (Allen and Harmon n.d.).

There was little further development in Carlsbad until 1914 when the South Coast Land Company bought up all the remaining lands of the Carlsbad Land and Mineral Water Company, as well as other adjoining properties. The new company drilled wells to provide water for farming. New settlers arrived and bought farm land, growing winter vegetables, grains, and poultry. During the 1920s Carlsbad became a major avocado production area. The Carlsbad Avocado Growers Club was formed in early 1923 with John Newberry as president. The peak years for avocado production were 1947 and 1948. Commercial flower and bulb production also began in the 1920s. In 1949, it was estimated that 90 per cent of the nation's freesia bulbs came from Carlsbad's annual production of nearly three million bulbs (Allen and Harmon n.d.). After a vote about whether to join Oceanside or incorporate, Carlsbad incorporated as a city in 1951 (Allen and Harmon n.d.).

In 1930, the Eastman Hotel Company acquired the mineral water well and built the California-Carlsbad Mineral Springs Hotel. The hotel had 130 rooms with a spa and clinic for taking mineral water baths. The hotel was purchased by the Lutheran Services of San Diego in 1956 and became a retirement home (Allen and Harmon n.d.). By the early 1950s, the mineral water well had been buried and forgotten. B. M. Christiansen rediscovered and reopened the well and made a Bohemian-themed well house to protect and commemorate the well (Allen and Harmon n.d.). In 1995, the mineral well was reopened as the Carlsbad Mineral Water Artesian Well by Ludvik and Veronica Grigoras from Karlovy Vary, Czech Republic. A new spa opened as the Carlsbad Mineral Water Spa and the water was sold as Carlsbad Alkaline Water (Carlsbad Spa 2016).

4.4 Paleontological Resources

The sediments of the City of Carlsbad contain a geological sequence of marine and non-marine sedimentary rocks that record portions of 140 million years of the earth's history (Figure 2). The primary geologic formations present are marine and non-marine Pleistocene and Holocene sediments, the Santiago Formation, Point Loma Formation, Lusardi Formation, and the Delmar Formation. Other geologic units present in the area consist of the Torrey Sandstone, alluvial flood-plain deposits, paralic

deposits which consist of both marine and continental sediments, marine beach deposits, paralic estuarine deposits, Tonalite, Dacite stock, Leucogranodiorite of Lake Hodges, and some metasedimentary and metavolcanic rocks.

The area contains abundant alluvial and flood-plain deposits from the early Pleistocene and Holocene (about 2 million years ago [Mya] to present). The City of Carlsbad also contains many paralic deposits from the Pleistocene (approximately 2 Mya to 10,000 years ago). These paralic deposits are deposits that contain intertwined marine or continental sediments. Based on grain size and depositional history, most of these units have low to moderate fossil potential and should be surveyed to determine fossil potential in individual locations.

The Santiago Formation (49-45 Mya) and the Delmar Formation (49-47 Mya) are part of the La Jolla Group and are primarily middle Eocene (49-38 Mya) sandstones and siltstones. The Santiago Formation contains lenses of fossiliferous claystone and siltstone. The accompanying Delmar Formation is a sandy claystone interbedded with sandstone. This formation is not well known for producing fossils, but has the potential to yield specimens. Before the Eocene, this area was a shallow sea (approximately 74 Mya). This sea deposited the sands and silts which comprise the major formations from this time.

The Point Loma Formation (76-72 Mya) is a sandstone and siltstone unit with significant fossil potential. This Upper Cretaceous unit is known to contain abundant calcareous nannoplankton. The Lusardi Formation (90-75 Mya), also Upper Cretaceous in age, is primarily a cobble and boulder conglomerate which is unlikely to produce any fossil material, but does contain lenses of medium grained sandstone which have the potential to yield fossil material.

There are also zones of metasedimentary and metavolcanic deposits which have low to marginal potential to produce any significant fossil discoveries.

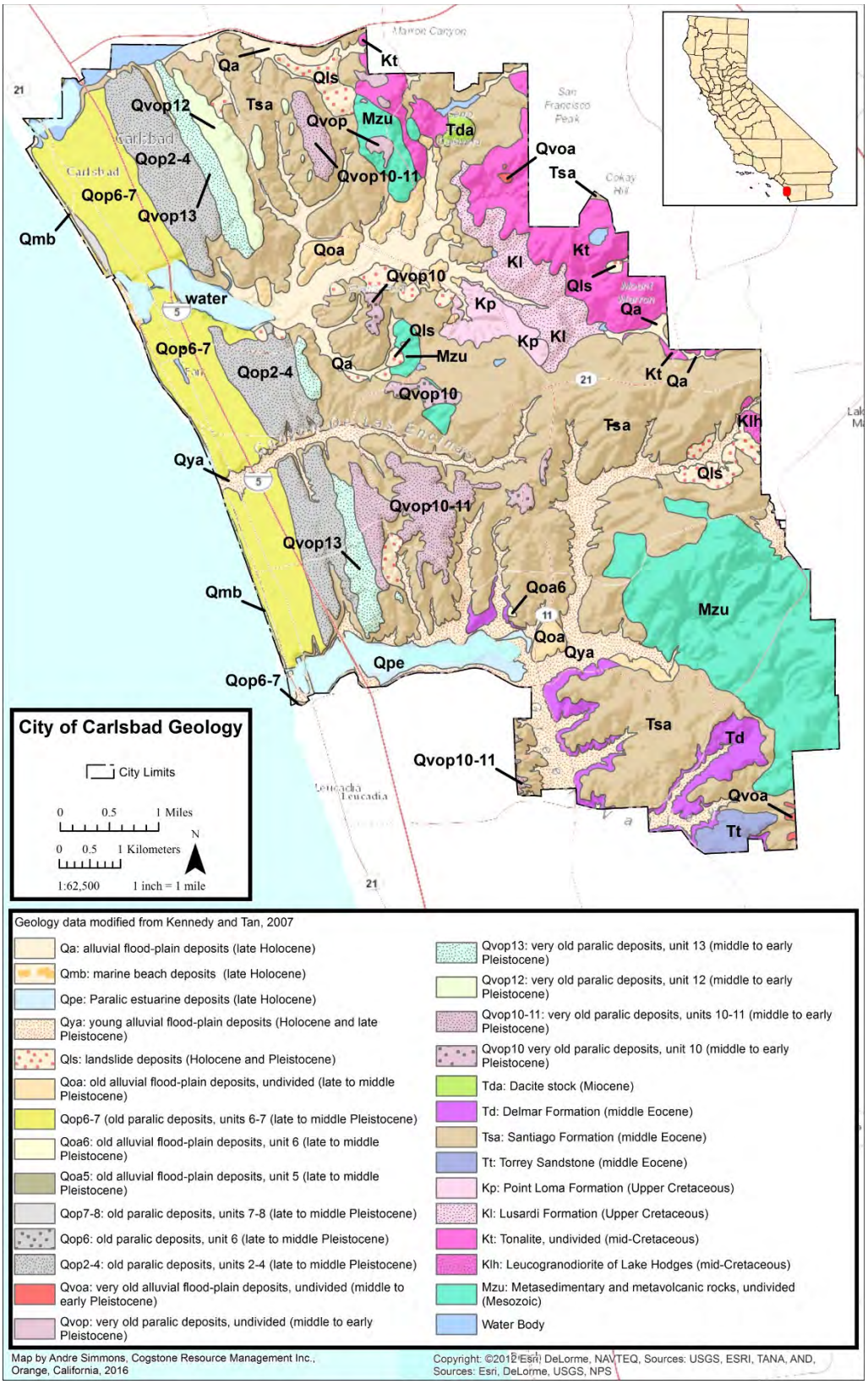

Figure 2. Geology of the City of Carlsbad.

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5.0 Roles and Responsibilities

Implementation of these Guidelines requires effort from, and collaboration with, a number of City staff; professionally qualified City and consultant staff; and tribes, agencies and interested parties. Those that are expected to either materially participate in their implementation, or those that will contribute important information to the process, are presented below.

5.1 City of Carlsbad

The City of Carlsbad will serve either as a CEQA lead or responsible agency for discretionary approval of private-sector projects, or as lead agency and a project proponent for City projects. The City also administers the issuance of ministerial approvals, plan checks, and non-discretionary actions related to projects under its jurisdiction, which are not subject to compliance with CEQA. The City Building Division monitors and enforces the building and safety standards contained in the state Building Codes and in various municipal codes and policies. This includes oversight of ministerial actions, which are not subject to these Guidelines. There are three primary divisions or departments that may be expected to implement these Guidelines, in whole or in part, as follows.

- The City Planning Division and Land Development Engineering are responsible for ensuring compliance of all development proposals with the City's zoning, subdivision, and environmental ordinances, as well as various codes, standards, and policies.
- The Public Works Department is responsible for administering and planning City projects that affect public streets, the water and sewer system, and other important infrastructure in the City.
- The Parks and Recreation Department operates 40 parks and nearly 68 miles of trails, as of May 2017, throughout the City, and plans and administers City projects in these areas. This includes areas of public open space that contain, or may contain, tribal, cultural, or paleontological resources.

The Planning Division, Public Works, and Parks and Recreation Departments are the departments most likely to be responsible for CEQA compliance.

In addition, the Historic Preservation Commission will receive Notices of Preparation for Environmental Impact Reports and notices of public review periods for other CEQA documents prepared for development projects under consideration by the Planning Department. Such notices allow the Historic Preservation Commission to comment during the public review period on environmental documents for projects that involve historic structures, and archaeological or paleontological sites, as shown on the historic resources inventory or as identified in an environmental study.

5.2 Private Applicants for Projects

Developers and citizens who propose development projects within the City, which are typically funded wholly with private money on privately-owned property, are considered private-sector applicants. These applicants are subject to compliance with all applicable laws, codes, regulations, and permits, both discretionary and ministerial. Although the City is ultimately responsible for approval or denial of a proposed project, the applicants and City may engage third-party consultants to implement portions of these Guidelines and carry out technical analyses used to support decision-making of discretionary projects.

5.3 Consultants

To ensure that consultants implementing these Guidelines are professionally qualified and produce technical documentation that can be used to support CEQA and discretionary approval of projects, minimum qualifications standards are required. These standards apply to both City-contracted consultants and those retained directly by private-sector project applicants.

5.3.1 Minimum Qualifications for Cultural Resources Professionals

The Principal Investigator (PI) is the professional that is primarily responsible for the design, preparation, execution, and results of a cultural resources study, and is the individual responsible for ensuring that the study is conducted in accordance with the terms of these Guidelines and all applicable laws and regulations. PIs implementing these guidelines shall meet the Secretary of the Interior's Professional Qualification Standards (PQS) that pertain to the particular area of study. The PQS standards are published in 36 CFR Part 61 and Volume 62, No 119 of the Federal Register (June 20, 1997) and state:

> The qualifications define minimum education and experience required to perform identification, evaluation, registration, and treatment activities. In some cases, additional areas or levels of expertise may be needed, depending on the complexity of the task and the nature of the historic properties involved. In the following definitions, a year of full-time professional experience need not consist of a continuous year of full-time work but may be made up of discontinuous periods of full-time or part-time work adding up to the equivalent of a year of full-time experience.

The NPS (NPS n.d.) published more detailed and comprehensive professional qualifications standards that apply to these Guidelines. Qualification standards are provided for PIs in the following disciplines and can be found in their entirety at https://www.nps.gov/history/local-law/gis/html/quals.html. All of the following disciplines also require a demonstrated ability to carry out applicable research or work, and education and experience must be in the relevant field:

- Prehistoric Archaeologist: graduate degree plus 2.5 years of experience

- Historical Archaeologist: graduate degree plus 2.5 years of experience
- Architectural Historian: graduate degree plus 2 years of experience or an undergraduate degree plus 4 years of experience
- Conservator: graduate degree plus 3 years of experience or an undergraduate degree plus 3 years of experience and another 3 years of full-time apprenticeship
- Cultural Anthropologist: graduate degree plus 2 years of experience or an undergraduate degree plus 4 years of experience
- Curator: graduate degree plus 2 years of experience or an undergraduate degree plus 4 years of experience
- Historic Engineer: licensed civil engineer plus 2 years of experience or a Masters of Civil Engineering plus 2 years of experience or a Bachelors of Civil Engineering plus 2 years of experience
- Folklorist: graduate degree plus 2 years of experience or an undergraduate degree plus 4 years of experience
- Historical Architect: licensed architect plus 2 years of experience, or a Masters of Architecture degree plus 2 years' experience or a Bachelors of Architecture with 2 years of experience
- Historical Landscape Architect: licensed landscape architect plus 2 years of experience, or a Masters of Architecture degree plus 2 years of experience or a Bachelors of Architecture with 3 years of experience
- Historic Preservation Planner: licensed land use planner plus 2 years of experience or a graduate degree in planning plus 2 years of experience, or an undergraduate degree plus 4 years of experience
- Historic Preservationist: graduate degree plus 2 years of experience or an undergraduate degree plus 4 years of experience
- Historian: graduate degree plus 2 years of experience or an undergraduate degree plus 4 years of experience

The Secretary of the Interior's Professional Qualification Standards allow for lead agencies to use some discretion in the combination of education and experience criteria required for each specialty. Consultants who may not definitively meet the criteria presented above must obtain approval from the City, in consultation with applicable agencies, prior to acceptance of work products intended to be utilized under these Guidelines, and may be subject to a mandatory peer review of the resulting documentation. Technical staff working under the direct supervision of the qualified PI need not meet the above criteria.

5.3.2 Minimum Qualifications for Paleontological Professionals

The qualifications listed below were derived from professional societies, federal, state, and local agencies. The roles are summarized from the same sources.

A Principal Paleontologist is an individual with a graduate degree in paleontology, geology, or related field, with at least one year of prior experience as a principal investigator. Generally, such persons will have a total of five or more years of paleontology experience; however, an advanced degree is less important than demonstrated competence. Competence in paleontology can be demonstrated by a thesis or dissertation on paleontological topics, at least three peer-reviewed publications on paleontological topics, or at least 10 paleontological resources consulting reports.

The Principal Paleontologist is responsible for ensuring that all subordinate personnel are appropriately qualified and trained. In addition, the Principal Paleontologist is responsible for the evaluation of fossils to determine if they meet legal significance standards, production of a final report with a complete catalog, and for ensuring the curation of significant specimens. Specimens not meeting significance standards may be donated for educational use in the City.

Other members of a paleontological field team may include Field Directors, Supervisors, and Technicians/Monitors. Laboratory work and use of specialists may be required to remove rock from fossils, obtain radiocarbon dates and perform other needed tasks. An undergraduate degree in paleontology, geology, or related field is preferable, but is less important than documented experience performing paleontological mitigation. These personnel must work under the supervision of a Principal Paleontologist.

5.4 California Office of Historic Preservation

The California OHP is a state agency led by the SHPO that, through delegation of authority by Congress, acts on behalf of the Advisory Council on Historic Preservation in the implementation of the regulations in 36 CFR Part 800 that implement Section 106 of the NHPA. The OHP is also responsible for maintaining the California Historical Resources Information System (CHRIS), and for administering the CRHR, NRHP, CHL, and various grants and programs related to historic preservation in California. Although OHP does not participate in the CEQA process for individual private-sector projects, it may enter into consultation as part of Section 106 compliance or when state-owned historical resources may be affected by a project.

5.5 California Native American Heritage Commission

The California NAHC is composed of a nine-member governor-appointed advisory body responsible for the identification and cataloging of places of special religious or social significance to Native Americans, including sacred sites and known Native American graves and cemeteries. The NAHC may serve as a trustee agency under CEQA, and is responsible for identifying a Most Likely Descendant for Native American human remains that are unearthed in California.

5.6 California Native American Tribes

California Native American tribes are defined in Section 21073 of the California Public Resources Code and Chapter 905 of the Statutes of 2004. Those that notified the City in writing of their request to receive notice of all projects subject to CEQA are subject to the procedures enacted by AB 52. These tribes need not be physically located in or near Carlsbad, but must be traditionally and culturally affiliated with the land currently under the jurisdiction of the City.

In addition, California Native American Tribes, including but not limited to those that do not request that the City notice them under AB 52, may be consulted under SB 18, as determined by the NAHC. The SB 18 lists typically provided by the NAHC in response to City requests include the San Luis Rey Band of Mission Indians, but also include other tribes. The City is required to offer consultation under SB 18 to all of the tribes named by the NAHC on its SB 18 list.

5.6.1 San Luis Rey Band of Mission Indians

The San Luis Rey Band of Mission Indians (SLRBMI) and the City enjoy a special planning partnership for all discretionary actions carried out or contemplated by the City. This relationship, which was further fortified by the passage of Council Policy No. 83 in 2016, allows for a higher level of involvement in project planning than is typically afforded to tribes, which is reflected in portions of these Guidelines. The SLRBMI is also a participant in the City's CEQA compliance under AB 52. Although the tribe is not federally-recognized, SLRBMI is a California Native American tribe and is considered by federal agencies as a consulting party in Section 106 consultation.

5.7 Federally-Recognized Tribes

Federally recognized tribes are those defined in 25 CFR Part 83 and identified as such by the Bureau of Indian Affairs. These tribes are recognized by the federal government as having special sovereignty, immunities, and privileges by virtue of their government-to-government relationship with the United States. Federally-recognized tribes are eligible for funding and services from the BIA and are afforded special consultation rights under Section 106 of the NHPA. Federally-recognized tribes may include, but are not limited to, California Native American tribes as described in Section 5.6.

5.8 Other Permitting or Approving Agencies

There are several federal agencies that may issue federal approvals, permits, licenses, or funding for projects in the City, which will trigger compliance with Section 106 NHPA and potential consultation with interested parties including but not limited to California Native American tribes, historical societies, and preservation organizations, etc.:

- U.S. Army Corps of Engineers (USACE): issuance of a permit for temporary and permanent discharge of fill into Waters of the United States, in accordance with Section 404 of the Clean Water Act

- U.S. Fish and Wildlife Service (USFWS): issuance of a biological opinion or incidental take permit for federally-listed biological species
- Federal Highways Administration (FHA), and its designee, California Department of Transportation (Caltrans): issuance of Federal pass-through funds, which will require separate compliance with the Caltrans Section 106 PA, or issuance of encroachment permits, which will require separate review by Caltrans
- Other federal agencies that may provide funding to City or private projects such as the U.S. Department of Housing and Urban Development's Community Development Block Grant program

5.9 Interested Parties

Other parties may express interest or provide input in planning and project approval decisions that are based, in part, on the implementation of these Guidelines. These include the City's Historic Preservation Commission, external historical societies and organizations, the City's Cultural Arts Office, professional societies, academia, and the general public. Although these entities do not have responsibility for implementing these Guidelines, any input will be taken into consideration as appropriate.

6.0 Sensitivity Models

6.1 Uses

Cultural resources come in a variety of forms, and range from historic, existing architecture to deeply buried archaeological and tribal cultural resources. The very nature of the latter makes identification and avoidance difficult, as some archaeological and tribal cultural resource sites sometimes do not manifest on the surface, such that they would be detectable by typical surface or near-surface methods alone. The ability to predict the presence of cultural resources is not always possible; however, the use of modeling to produce sensitivity and compliance status maps can be very helpful in long-range planning efforts. There are a number of benefits and uses for a sensitivity model for the City including:

- serving as a screening tool for planners and developers to determine if cultural resources surveys and evaluations have already been completed for a project area, thereby reducing the effort necessary to inventory for cultural resources;
- serving as a planning tool to identify to developers particularly sensitive areas that have a high potential for cultural resources, which may result in larger areas set aside for avoidance and preservation of cultural resources;
- identifying areas that may require additional or more specialized studies, such as geo-archaeological investigations;
- identifying areas that may require focused consultation with Native American tribes;
- identifying areas that may require consultation with specific special interest groups, like, historical societies, or other ethnic groups;
- serving as a model for predicting the types of cultural resources that may be expected in a project area;
- allowing for the development of research themes and questions, guidelines for treatment, and an overall compliance framework that can be applied in a consistent manner over time; and
- being housed in a Geographic Information System (GIS) database and continually updated and refined, as information generated through implementation of the City's Guidelines is fed back into the model.

However, as discussed further in Section 7.3, confidential information in the possession of the City cannot be disclosed to the public. Only City staff, professionally qualified consultants meeting the qualifications in Section 5, and California Native American tribes (when appropriate) may have access to information about specific site locations and descriptions.

More important than the purpose of this sensitivity model is acknowledgement of what this model is not—it does not provide a predictive map of where resources are located, does not represent an inventory of resources, and must not be used as a substitute for appropriate level of study under applicable state and federal law.

The initial sensitivity model for the City was developed through a broad and high-level records search and literature review, a review of geological maps and soils data, aerial photograph review, and from professional expertise in cultural resources management efforts throughout the City. General maps were created based on the model, which show general areas sensitive for archaeology, built environment resources (Figure 2), and paleontology (Figure 3). In the future, tribes may elect to submit information about areas of special concern, which may be included in the sensitivity model with their authorization.

In accordance with Section 7.3 of these Guidelines, archaeological information is restricted from public distribution or access under a variety of laws and regulations. Therefore, the sensitivity model for archaeological resources has been redacted from these Guidelines and will be kept in a secure location at the City. Only City planning staff and those qualified professionals meeting the applicable Secretary of the Interior's Professional Qualifications will be permitted to view the information. However, the CHRIS information centers are the primary source of archaeological information available to qualified professionals.

6.2 Architectural History Sensitivity Model

The three types of areas depicted on Figure 3 are High Sensitivity, Moderate Sensitivity, and Low Sensitivity for resources in the built environment.

High Sensitivity: areas shown in red in Figure 3 represent those areas that have known historic districts and features. These include Historic Village and Barrio Neighborhoods; McClellan Palomar Airport; and neighborhoods built before 1968 (as determined by reviewing historic aerial photographs and historic USGS quadrangle maps).

Moderate Sensitivity: areas shown in green in Figure 3 represent those areas that can be classified neither as high nor low, because they have not been surveyed for cultural resources or do not otherwise fall into either the high or low categories. These include developments that were built between 1968 and 1983 (as determined by reviewing historic aerial photographs and historic USGS quadrangle maps).

Low Sensitivity: areas shown without highlight in Figure 3 represent areas that are reflected in the files at CHRIS for having been previously surveyed, and/or have lower frequencies of previously recorded sites, or have recently been fully developed (as determined from historic through modern aerials), or have no visible indication of cultural resources on aerial photographs, or are set back from major water courses, such that the potential for cultural resources is relatively low. This includes heavily developed areas and areas built after 1983.

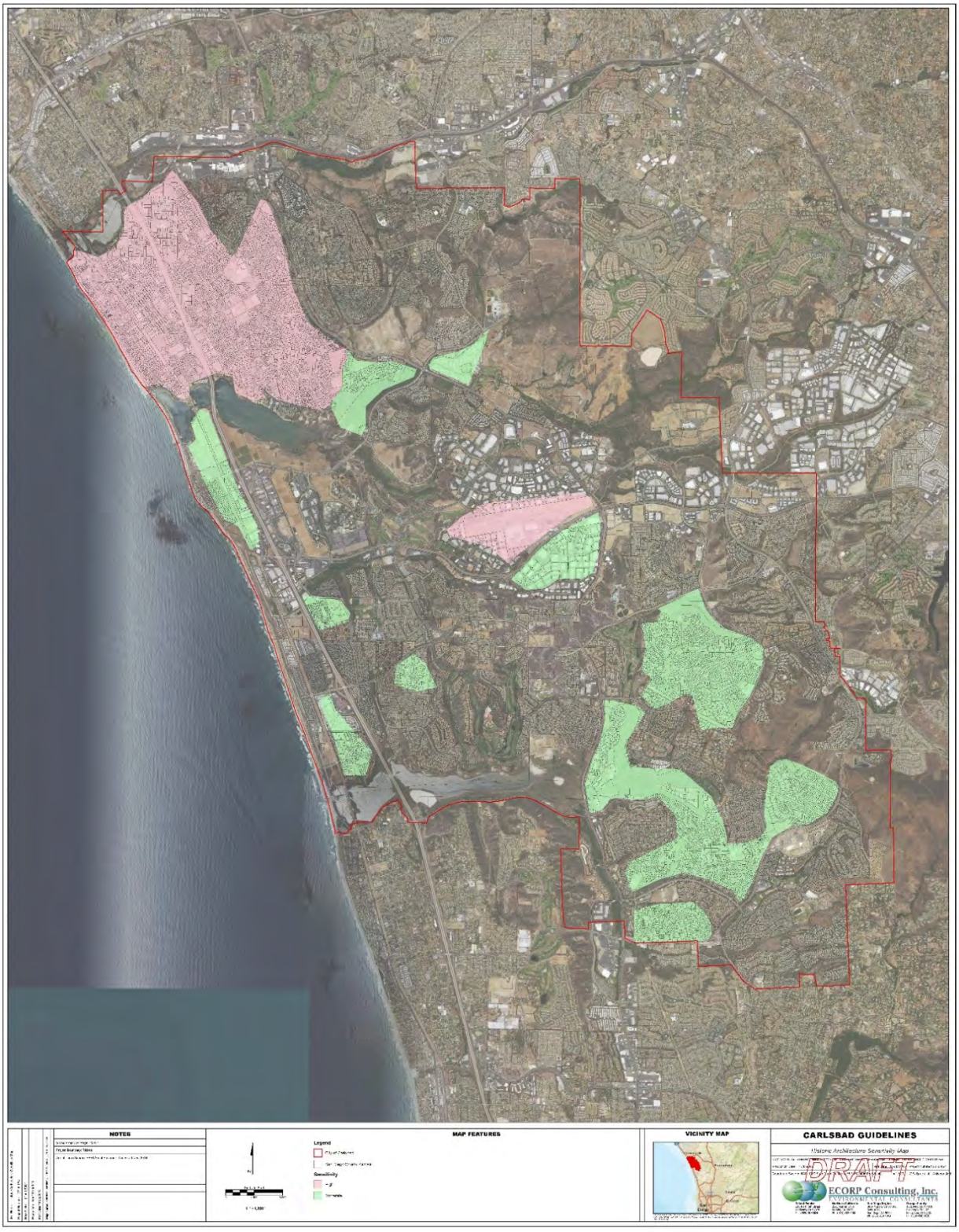

Figure 3. Architectural History Sensitivity Model, showing high sensitivity in pink and moderate sensitivity in green, with the balance being considered low sensitivity.

The categories presented above are considered preliminary only, and are expected to shift over time; thus, they should be considered only for screening and are not definitive. For example, where a property is currently situated in an area of high sensitivity, and such property is subject to the Guidelines for identification, evaluation, and treatment of cultural resources, it will eventually be surveyed. If the survey concludes, with agency concurrence, that there are no cultural resources located within its boundaries, then the model would be updated by the City to reflect a lower sensitivity, regardless if the development were to proceed; the color would change from red to green or no color. If development of that property is delayed, the classification of low sensitivity would alert the City to require, perhaps, a field visit to confirm ground conditions, but not necessarily a full re-survey. Also, with the passage of time, built environment resources age and new context statements emerge, so these resources may achieve higher sensitivity levels. Over time, over the course of the implementation of the Guidelines, the sensitivity model would more accurately reflect the actual inventory of cultural resources. As such, this model will not be available in its entirety to the public, but will be utilized by qualified City staff. However, at any time, a potential applicant for a project within the City can request information about whether the project is located in a high, moderate, or low sensitivity area. Knowledge of the relative sensitivity of the project location may help make a determination about whether development, adaptive re-use or strict preservation is the appropriate land use.

6.3 Archaeological Sensitivity Model

Similar to the architectural history model presented above, the three types of areas depicted in the sensitivity model are High Sensitivity, Moderate Sensitivity, and Low Sensitivity. These sensitivity levels were initially developed not by actual site locations, but by the presence or absence of development, or by existing landform.

High Sensitivity: these represent those areas that are situated in landforms that typically contain archaeological sites, or for which signatures of cultural resources are visible from aerial photography, or for which there is a higher concentration of previously recorded cultural resources.

Moderate Sensitivity: these represent those areas that can be classified neither as high nor low, because they have not been surveyed for cultural resources or do not otherwise fall into either the high or low categories.

Low Sensitivity: these areas represent areas that are either reflected in the files at CHRIS for having been previously surveyed, and/or have lower frequencies of previously recorded sites, or have recently been fully developed (as determined from historic through modern aerials), or have no visible indication of cultural resources on aerial photographs, or are set back from major water courses, such that the potential for cultural resources is relatively low. This includes heavily developed areas and areas built after 1983.

This model will not be available to the public, but will be utilized by City staff. However, at any time, a potential applicant for a project within the City can request information about whether the project is

located in a high, moderate, or low sensitivity area. While the City cannot release confidential information to the requesting party, knowledge of the relative sensitivity of the project location may help make a determination about whether development or conservation is the appropriate land use. The sensitivity model is also useful in suggesting the types of cultural resources that may be encountered, which, in turn, can be used to pre-define research themes and topics. It can also be used to develop standard treatment methods when avoidance or mitigation of significant cultural resources is necessary.

6.4 Paleontological Sensitivity Model

The sensitivity of each rock unit in the City was determined by considering the known yield of fossils in each geologic formation. A rank of high, moderate, or low sensitivity for paleontological resources was based on this information. Figure 4 shows the model in its current form. Table 1 provides a summary.

High: High sensitivity was assigned to geologic formations known to contain paleontological localities with fossils meeting significance criteria as defined above. These formations have the highest potential to produce unique invertebrate fossil assemblages or unique vertebrate fossil remains.

The High potential units in the City of Carlsbad are the Point Loma Formation, Santiago Formation and some of the old paralic deposits which are equivalent to the Bay Point Formation (130,000-80,000 years old).

Moderate: Moderate sensitivity was assigned to geologic formations known to contain paleontological localities or to represent depositional environments that should preserve fossils, but not in every location. This is described as patchiness. These geologic formations are judged to have a strong, but often unproven, potential for producing unique fossil remains (Deméré and Walsh 1993).

The Moderate sensitivity units in the City of Carlsbad include the Lusardi Formation, Delmar Formation, a few of the paralic deposits from the late to middle Pleistocene, the late Holocene marine beach deposits, and the late Holocene paralic estuarine deposits.

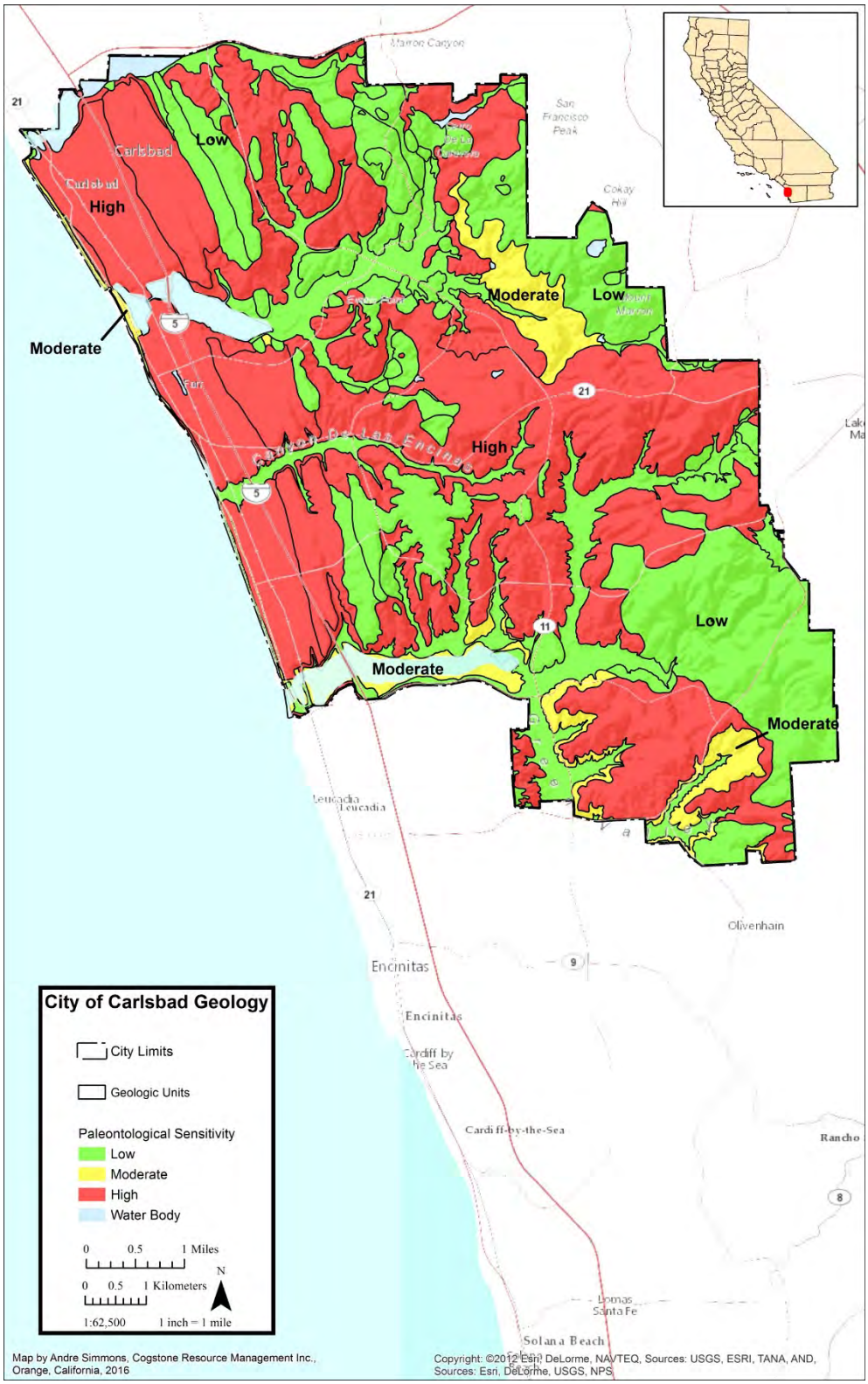

Figure 4. Paleontology Sensitivity Model.

Table 1. Summary of Paleontological Sensitivity by Map Unit

Map Unit	Description	Age	High	Moderate	Low
Qa	alluvial flood-plain deposits	late Holocene			X
Qmb	marine beach deposits	late Holocene		X	
Qpe	paralic estuarine deposits	late Holocene		X	
Qya	young alluvial flood-plain deposits	Holocene and late Pleistocene			X
Qls	landslide deposits	Holocene and Pleistocene			X
Qoa	old alluvial flood-plain deposits, undivided	late to middle Pleistocene			X
Qoa6	old alluvial flood-plain deposits, unit 6	late to middle Pleistocene			X
Qoa5	old alluvial flood-plain deposits, unit 5	late to middle Pleistocene			X
Qop7-8	old paralic deposits, units 7-8	late to middle Pleistocene	X		
Qop6-7	old paralic deposits, units 6-7	late to middle Pleistocene	X		
Qop6	old paralic deposits, unit 7	late to middle Pleistocene		X	
Qop2-4	old paralic deposits, units 2-4	late to middle Pleistocene	X		
Qvoa	very old alluvial flood-plain deposits, undivided	middle to early Pleistocene			X
Qvop	very old paralic deposits, undivided	middle to early Pleistocene			X
Qvop13	very old paralic deposits, unit 13	middle to early Pleistocene			X
Qvop12	very old paralic deposits, unit 12	middle to early Pleistocene			X
Qvop10-11	very old paralic deposits, units 10-11	middle to early Pleistocene			X
Qvop10	very old paralic deposits, unit 10	middle to early Pleistocene			X
Tda	Dacite Stock	Miocene			X
Td	Delmar Formation	middle Eocene		X	
Tsa	Santiago Formation	middle Eocene	X		
Tt	Torrey Sandstone	middle Eocene			X
Kp	Point Loma Formation	Upper Cretaceous	X		
Kl	Lusardi Formation	Upper Cretaceous		X	

Table 1. Summary of Paleontological Sensitivity by Map Unit

Map Unit	Description	Age	High	Moderate	Low
Kt	Tonalite, undivided	mid-Cretaceous			X
Klh	Leucogranodiorite of Lake Hodges	mid-Cretaceous			X
Mzu	Metasedimentary and metavolcanic rocks, undivided	Mesozoic			X

Low: Low sensitivity was assigned to geologic formations that, based on their relatively young age and/or high-energy depositional history, are judged unlikely to produce unique fossil remains. Low resource potential formations rarely produce fossil remains of scientific significance and are considered to have low sensitivity. However, when fossils are found in these formations, they are often very significant additions to the geologic understanding of the area. Low resource potential and low sensitivity is also assigned to geologic formations that are composed either of volcanoclastic (derived from volcanic sources) or metasedimentary rocks, but that nevertheless have a limited probability for producing fossils from certain formations at localized outcrops. Volcanoclastic rock can contain organisms that were fossilized by being covered by ash, dust, mud, or other debris from volcanoes. Sedimentary rocks that have been metamorphosed by head and/or pressure caused by volcanoes or plutons are called metasedimentary. If the sedimentary rocks had paleontological resources within them, those resources may have survived the metamorphism and still be identifiable with the metasedimentary rock, but since the probability of this occurring is so limited, these formations are considered to have a low sensitivity. Low resource potential and low sensitivity also applies to geologic formations that are composed entirely of volcanic or plutonic igneous rock, such as basalt or granite, and therefore do not have any potential for producing fossil remains. These formations have very low paleontological resource potential; i.e. they are not sensitive.

Those formations within the City of Carlsbad with Low potential include the Pleistocene and Holocene alluvial and flood-plain deposits, most of the paralic deposits, and the Torrey Sandstone (middle Eocene). It would be unlikely to find paleontological resources in the metasedimentary and metavolcanic rocks, as the heat and pressure these rocks experienced would likely have destroyed any fossil material. The volcanic units in the area, including the Dacite stock (Miocene; 23-5 Mya), and the Cretaceous (146-65 Mya) Tonalite and Leucogranodiorite of Lake Hodges, are also in the Low potential sensitivity and are highly unlikely to yield any paleontological resources.

6.5 Management of the Models

The City Planning Division will periodically obtain updates to the models presented in these Guidelines. Formal updates will be carried out by qualified professionals or with collaboration with the CHRIS, or both; however, in the interim, the City will keep confidential records of the results of cultural resources studies that affect the level of sensitivity on a parcel-by-parcel basis. Periodic official updates to the sensitivity models shall not require a revision to these Guidelines; however, any subsequent revisions may be accompanied by an update to the models. In addition, the Planning Division shall notify the secretary to the Historic Preservation Commission upon the updating of non-confidential sensitivity models.

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7.0 General Methods and Standards of Analysis

7.1 General Standards

There are numerous standards and guidelines that currently apply to cultural resources management. While modifications to these standards are expected to occur over the lifetime of the Guidelines and its individual projects, the fundamental standards for professional cultural resources management will always apply.

These fundamental standards and guidelines include:

- CEQA and applicable sections of the CEQA Guidelines and Public Resources Code;
- Archaeological Resource Management Reports: Recommended Contents and Format (February 1990), published by the California OHP;
- Instructions for Recording Historical Resources (March 1995), published by the OHP;
- Section 106 of the NHPA and its implementing regulations at 36 CFR Part 800;
- Standards for curation of archaeological collections in 36 CFR Part 79;
- Ethical and professional standards of the Society for California Archaeology, the Society for American Archaeology, and the Register of Professional Archaeologists (RPA); and
- Secretary of Interior's Standards and Guidelines for the identification, evaluation, and treatment of archaeological and historical resources as appropriate.

The following sections present the specifications for project work that meet the standards and guidelines above. These specifications are also based on standard practice by the NPS for similar projects. Deviation from any standards, guidelines, or work plan specifications must be approved by the City, in consultation with applicable federal agencies, in advance of implementation.

7.2 Thresholds of Review

There are two broad types of actions that the City is responsible for: discretionary projects and ministerial actions. *Discretionary projects* are those that require that the City exercise judgement or deliberation when determining whether or not to approve a project. Because discretionary projects can result in no approval (denial), they are subject to compliance with CEQA and, by extension, these Guidelines.

Ministerial actions are agency decisions involving little or no judgment by City staff as to the wisdom or manner of carrying out the project. These actions include plan checks, over-the-counter building permit issuance, dog or business licenses, and other similar actions for which an agency official has no ability to deny or reject the action, as long as the subject of the action meets the pre-approved

parameters and the required terms and conditions are met. Ministerial actions are not subject to CEQA or to these Guidelines. Therefore, the following procedures for the identification, evaluation, determination of effect, and mitigation of significant impacts to tribal, cultural, and paleontological resources apply only to discretionary projects (in which the City has the ability to deny a project through the exercise of judgment as to the wisdom or manner of carrying out the project), or to applicable City projects not exempt under CEQA.

7.3 Confidentiality

Maintaining confidentiality of the location and nature of archaeological sites and TCRs is of the utmost importance to the City. Similarly, federal and state law recognize this need. As it pertains specifically to CEQA and these Guidelines, the City shall make best efforts to meet the following objectives in the California Public Resources Code, which are provided herein:

"Any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with subdivision (r) of Section 6254 of, and Section 6254.10 of, the Government Code, and subdivision (d) of Section 15120 of Title 14 of the California Code of Regulations, without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. This subdivision does not prohibit the confidential exchange of the submitted information between public agencies that have lawful jurisdiction over the preparation of the environmental document" (Section 21082.3[c][1]).

"This subdivision does not prohibit the confidential exchange of information regarding tribal cultural resources submitted by a California Native American tribe during the consultation or environmental review process among the lead agency, the California Native American tribe, the project applicant, or the project applicant's agent. Except as provided in subparagraph (B) or unless the California Native American tribe providing the information consents, in writing, to public disclosure, the project applicant or the project applicant's legal advisers, using a reasonable degree of care, shall maintain the confidentiality of the information exchanged for the purposes of preventing looting, vandalism, or damage to a tribal cultural resources and shall not disclose to a third party confidential information regarding tribal cultural resources" (Section 21082.3[c][2][A]).

"This paragraph does not apply to data or information that are or become publicly available, are already in the lawful possession of the project applicant before the provision of the information by the California Native American tribe, are independently developed by the project applicant or the project applicant's agents, or are lawfully obtained by the project applicant from a third party that is not the lead agency, a California Native American tribe, or another public agency" (Section 21082.3[c][2][B]).

"This subdivision does not affect or alter the application of subdivision (r) of Section 6254 of the Government Code, Section 6254.10 of the Government Code, or subdivision (d) of Section 15120 of Title 14 of the California Code of Regulations" (Section 21082.3[c][3]).

"This subdivision does not prevent a lead agency or other public agency from describing the information in general terms in the environmental document so as to inform the public of the basis of the lead agency's or other public agency's decision without breaching the confidentiality required by this subdivision" (Section 21082.3[c][4]).

"Consistent with subdivision (c), the lead agency shall publish confidential information obtained from a California Native American tribe during the consultation process in a confidential appendix to the environmental document and shall include a general description of the information, as provided in paragraph (4) of subdivision (c) in the environmental document for public review during the public comment period provided pursuant to this division" (Section 21082.3[f]".

In addition, information obtained or derived from information provided by the California Historical Resources Information System maintained by the California Office of Historic Preservation cannot be disclosed to the public.

The California Public Records Act exempts from public disclosure the "records of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in Section 5097.9 and 5097.993 of the Public Resources Code maintained by, or in the possession of, the Native American Heritage Commission, another state agency, or a local agency" (GC § 6254(r)); and "records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency" (GC § 6254.10).

Although no federal lands currently exist within the City boundaries, dissemination of archaeological site information is also prohibited by Exemption 3 of the federal Freedom of Information Act (5 USC 5), because the disclosure of cultural resources location information is prohibited by the Archaeological Resources Protection Act of 1979 (16 USC 470hh) and Section 304 of the NHPA. Therefore, it is also exempted from disclosure under the Freedom of Information Act.

Therefore, in light of these requirements for confidentiality, the City shall not make publicly available the locations of cultural and paleontological resources, and dissemination of such information will be tightly guarded on a "need to know" basis only. Such circumstances are generally limited to City staff, landowners of property that contain resources, and consultants and engineers who are responsible for designing proposed projects in accordance with these Guidelines.

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8.0 Tribal Cultural Resources Procedures

Tribal cultural resources (TCR) are identified by California Native American Tribes through a consultation process in CEQA prescribed by AB 52. In recognition of the special relationship between the City and SLRBMI, this process, at minimum, requires consultation by the City with SLRBMI; however, in compliance with AB 52, this does not preclude additional California Native American Tribes from participation. No delegation of consultation authority from the City to Applicants or consultants is provided by these Guidelines, although these parties may be asked to provide technical and administrative support.

8.1 Tribal Outreach and Coordination

There are three regulatory mechanisms by which government-to-government consultation between tribes and agencies may occur: Section 106 NHPA, AB 52, and SB 18. Not all three will apply for any given project; however, the following procedures will be conducted when applicable, and documentation of compliance with these procedures shall be kept separate.

The City of Carlsbad made a commitment to SLRBMI when it adopted City Council Policy No. 83. To follow through on that commitment, these Guidelines contain specific additional tribal consultation procedures that will apply to SLRBMI, in addition to their participation under the three regulatory mechanisms, when applicable. The procedures under Notices of Exemption are not required by any of the regulatory mechanisms listed previously, and are above and beyond what is normally required. Because these procedures are outside of the strictly regulatory process, they are listed first.

8.1.1 Notices of Exemption

Section 15061 of the CEQA Guidelines requires that the City first consider whether or not the project is subject to CEQA, if not exempted by statute or by category. Statutory exemptions are provided in Article 18 of the CEQA statute, from Section 15260 to 15285 and include, but are not limited to:

- projects ongoing since 1970;
- feasibility and planning studies;
- discharge requirements;
- adoption of coastal plans and programs;
- general plan time extensions;
- financial assistance to low or moderate income housing;
- ministerial projects;
- emergency projects;

- family day care homes;
- specified mass transit projects;
- transportation improvement and congestion management programs;
- application of coatings;
- air quality permits; and
- specifically named projects either in the CEQA guidelines (Section 15282) and CEQA statute (Section 21080 et seq.).

Statutory exemptions under CEQA are not subject to these Guidelines.

In addition, Section 21084 of the Public Resources Code required the development of a list of classes of projects that have been determined not to have a significant effect on the environment and are therefore exempt from CEQA, as long as there is no exception to the exemption as specified in Section 15300.2 of the CEQA Guidelines. These categorically exempted projects currently include, but are not limited to the following projects in Sections 15301 through 15333:

- operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use;
- replacement or reconstruction of existing structures and facilities;
- new construction or conversion of small structures;
- minor alterations to land;
- minor alterations in land use limitations;
- information collection; inspections;
- loans;
- accessory structures;
- surplus government property sales;
- minor additions to schools;
- minor land divisions;
- acquisition or transfers of lands for conservation or preservation of parks, wilderness, historical resource, or wildlife conservation;
- transfer of ownership of land in order to create parks;
- open space contracts or easements;

- annexation of existing facilities;
- educational or training programs;
- normal operations of facilities for public gatherings;
- leasing facilities;
- small hydroelectric or cogeneration projects at existing facilities;
- some types of hazardous materials responses;
- in-fill development; and
- small areas of habitat restoration.

In accordance with Section 15300.2(f) of the CEQA Guidelines, categorical exemptions cannot be used for a project that may cause a substantial adverse change in the significance of a historical resource or under unusual circumstances. Because some TCRs may also meet the regulatory definition of historical resources under CEQA, consideration of the project's effects on TCRs must be taken into consideration before determining that a Notice of Exemption (NOE) is the appropriate CEQA document, and such consideration will include input from the California Native American tribes. This additional consideration (the process of which is provided below) is above and beyond what is required under AB 52 in order to meet the spirit and intent of City Council Policy No. 83.

8.1.1.1 Procedure for Pre-NOE Consultation with SLRBMI

The City will first screen every discretionary project to determine whether or not it is categorically exempt from CEQA and these Guidelines and does not invoke the exception to the exemption rule. The following types of projects are expected to be categorically exempt and have no reasonable potential to impact either historical resources or TCRs, and therefore, shall not be subject to the tribal notifications below:

- statutory exemptions, including ministerial projects;
- subdivisions without construction;
- wireless communication projects without ground-disturbing activity;
- changes of use of existing structures and facilities without ground-disturbing activity;
- sign permits;
- Consistency Determinations;
- time extensions;
- repair, minor alteration, repaving or replacement of existing infrastructure within previously excavated alignments, trenches or facilities; and

- other similar projects or permits, without ground disturbing activities or occurring within previously excavated graded areas, alignments, or trenches, as determined by the City Planner.

Some projects that are found to be eligible for Categorical Exemptions may still warrant consultation with the SLRBMI in order to determine whether or not a NOE is the appropriate CEQA document. In the event that the City screens a project activity, taking into consideration applicable sensitivity models, and determines that it otherwise qualifies for a Categorical Exemption under CEQA, then no later than 14 calendar days after deeming the application complete, City shall provide written notice by email to the SLRBMI of the intent to determine that a NOE will be prepared under CEQA. No response is necessary from SLRBMI if the tribe has no concerns.

If the tribe has concerns, the tribe shall provide confidential comments to the city within 10 business days of receiving the notice of intent. Upon receipt of comments from SLRBMI, within 5 calendar days the City shall acknowledge by email or letter its receipt of the comments. The City shall review and evaluate the comments as follows:

- to determine if the comments provide specific evidence about the presence of potential tribal cultural resources within the project area;
- to determine if the comments provide specific information that the project may result in potentially significant impacts to tribal cultural resources that may affect the City's ability to utilize a Categorical Exemption;
- if the comments are provided in verbal form only, to make a reasonable and good faith effort to interpret the comments in a way that is respectful of the tribe's concerns;
- to determine if additional consultation is warranted and would lead to important information prior to the project, as opposed to being conducted as part of implementation of standard unanticipated discovery measures; and
- to determine if the information presented meets the definitions and thresholds established by AB 52.

The above shall factor into the City's determination of the appropriate CEQA document for the project, as reflected in the CEQA determination letter prepared by the City for the project in accordance with the timelines prescribed by the Permit Streamlining Act. The City shall copy SLRBMI on CEQA determination letters.

If comments are received after the prescribed comment period, then the City shall evaluate those comments, but is not obligated to halt the project review and approval process in the meantime. Evaluation and notification of determinations following the receipt of late-arriving comments shall follow the same procedure above.

The City may coordinate with SLRBMI and the applicant regarding potential project conditions that may still be desirable for projects that do not meet AB 52 thresholds and warrant a NOE. However, in

the event that the above procedure indicates that a potentially significant TCR is present as defined by CEQA and may be adversely impacted, then the City shall not prepare a NOE, but shall undertake an Initial Study.

8.1.2 Section 106 of the NHPA

As a non-federal lead agency, the City is not directly responsible for compliance with Section 106 of the NHPA. However, some projects for which the City is the proponent will require federal permits, approval, or funding assistance. The legal responsibility to consult under Section 106 falls to the federal agency and therefore, the lead federal agency may direct the consultant otherwise; these Guidelines are not intended to supersede federal law or agency directives. To ensure that cultural resources investigations are compatible with the federal requirements under Section 106 and its implementing guidelines, the qualified professional consultant may implement the following procedures, subject to approval by the federal lead agency.

For projects subject to Section 106 of the NHPA, the City, or its designee which is likely to be the qualified professional consultant, shall first contact the NAHC to request a search of the Sacred Lands File and list of contacts. Upon receipt of the results, the City or its designee shall send by mail or email a project notification letter to each contact named by the NAHC. The notification letter shall, at minimum, include a boundary map of the project area and a brief description of the project, and the name and contact information to whom comments should be addressed. No sooner than one week following the delivery of the project notification letters, the City or its designee shall attempt, up to two times, to reach each contact by phone or email to verify receipt of the project notification letter and solicit comments. All non-written correspondence shall be documented in a log or appropriate record of conversation, which includes both successful and non-successful attempts to contact each individual.

Copies of the written correspondence and logs shall be forwarded by the City or designee to the applicable federal agencies with the applicable technical report in order for the federal agency to follow up and continue with government-to-government consultation.

8.1.3 AB 52

Each CEQA lead agency maintains its own file of general request letters from California Native American tribes under AB 52. The City shall first review project applications and within 14 days of determining that the application is deemed complete and it is ready to undertake CEQA review, it shall notify in writing those tribes that specifically requested notification under CEQA. The tribes notified may be different than the tribes being consulted under SB 18 or Section 106, although some overlap may occur. For tribes that respond within 30 days with a request to consult, the City shall initiate consultation within 30 days of receiving the written request to consult. Consultation concludes when either the parties come to agreement on impacts to, and mitigation measures for, TCRs, or, when the City determines, after acting in good faith and in a reasonable manner, that mutual agreement cannot

be reached. The procedures outlined in AB 52 shall be conducted as specified in the California Public Resources Code Sections 21074, 21080.3 et seq., 21082.3, 21083.09, and 21084.3.

8.1.4 SB 18

If a project will require a general plan or specific plan adoption or amendment, the City must comply with SB 18, which requires local agencies, including cities and counties, to contact and consult with California Native American tribes prior to amending or adopting a general plan or specific plan, or designating land as open space containing Native American cultural resources. The consultation that is conducted under SB 18 is different than that which is normally conducted in conjunction with cultural resources studies under AB 52 or Section 106 of the NHPA. In addition, consultation under SB 18 must be government-to-government, between the Native American community and the local agency and in accordance with the Governor's Office of Planning and Research's Tribal Consultation Guidelines (2005).

First, the City or its designee will obtain the list of applicable Native American tribes and organizations to contact for SB 18 consultation for the project from the NAHC. Each listed tribe will be contacted by letter to provide them with information about the project and ask if they wish to consult with the City. Follow-up phone calls will be made to each group and the results of all correspondence will be documented in a summary report. Native American consultation meetings will be conducted by City staff.

8.2 Identification of Tribal Cultural Resources

The determination of whether or not a TCR is present in or near a project site falls to the City, in consultation with the California Native American tribes through the AB 52 consultation process.

A TCR, defined in Section 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a Native American tribe that are:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources;
- Included in a local register of historical resources as defined in subdivision k of Section 5010.1; and/or
- Determined by the City to be significant, as supported by substantial evidence, including a cultural landscape with a geographically defined boundary.

Therefore, when determining that a resource meets the definition of a TCR, the City must, through tribal consultation, specify which of the seven aspects of integrity are present during pre-project (current) conditions. *National Register Bulletin 38* provides some guidance on establishing integrity of Traditional Cultural Properties, which is the equivalent of TCRs under the Section 106 process. City staff

may also rely upon professional cultural resources consultants to assist in determining or verifying integrity.

8.2.1 Impact Analyses and Mitigation Measures

AB 52 established that a substantial adverse change to a TCR has a significant effect on the environment. In making this determination, the City must determine if the Project will cause a substantial adverse change to the TCR. However, because the nature of TCRs can vary, and because they represent a new type of resource in the CEQA process since the adoption of the original Guidelines, and because some TCRs (particularly religious and sacred resources) may be difficult to quantify, determining whether or not a project will significantly impact a TCR may be difficult. Determining impacts to TCRs *may* initially follow the process typically used to assess impacts to Historical Resources, which relates to integrity. Determination of impacts to TCRs must take into account the significance ascribed to them by the California Native American tribe and may not always parallel impact assessments for Historical Resources.

Integrity of a resource is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, Section 4852(c)]. Impacts may be significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, Section 15064.5(a)]. Accordingly, impacts to a TCR would likely be significant if the project negatively affects the qualities of integrity that made it significant in the first place, as determined through consultation with the California Native American tribe.

Once the significance of that TCR has been established and further defined by one or more of those aspects of integrity, the City must next determine whether or not the project will adversely affect (significantly impact) those applicable aspects of integrity. In making this determination, the City should address the aspects of integrity that are important to the TCR's significance, which were identified by the tribal experts.

8.2.2 Preferred Treatment Options and Mitigation Measures

In the event that the City applies these thresholds and determines that there will be a significant impact on a TCR, the following are preferred treatment options and mitigation measures. Some or all of these options or measures may be required of projects, depending on the particular TCR and/or nature of the impact.

8.2.2.1 Avoidance and Preservation

Avoidance and preservation of TCRs can only be accomplished when a legal mechanism prevents future development and there are appropriate measures in place for long-term maintenance. For TCRs, this may require either the recording of a deed restriction or the dedication of a conservation easement over the resource, recorded with the County, to restrict development in perpetuity. Management of the protected resource in perpetuity will be the responsibility of either a qualified third-party easement

manager or the affiliated California Native American tribe. Long-term funding will be required to be demonstrated by the project proponent in either case.

The management shall include, but is not limited to, the following measures, as deemed appropriate:

- fence and gate repair;
- sign replacement;
- regular monitoring and associated reporting by a professional archaeologist for damage;
- erosion control;
- trash removal;
- vegetation and weed control with no or minimal ground intrusiveness;
- security patrols;
- vandalism abatement; and
- removal of trespassers.

No signs indicating the presence of TCRs shall be permitted. In addition, the deed restriction or conservation easement will be subject to negotiated conditions that restrict certain uses of the property, depending on the nature of the resource. This will be determined in consultation with the California Native American tribe.

The Applicant shall provide a copy of the recorded deed or conservation easement that includes the preserved resource as proof of the restriction of future activities that could affect the integrity of the site. Proof of compliance will typically be submitted to the City prior to ground-disturbing activities.

8.2.2.2 Dignified and Respectful Treatment

It is important that TCRs be treated with dignity and respect. The City may require as mitigation the implementation of a Contractor Sensitivity Training Session to allow a tribal representative to instill a sense of appropriate respect for TCRs in its construction contractors, and to educate workers about the proper level of respect.

8.2.2.3 Repatriation

The City recommends that the landowner or project proponent (if not the City) enter into an agreement with the applicable California Native American tribe on an appropriate reburial location on the property for any cultural materials or human remains that may be unearthed during ground disturbing activities during the project. The location shall be one that will not be subjected to ground disturbing activities in the future. This location will be documented as a reinternment location by the Native American tribe, and the tribe may file it as such with the NAHC, County, City, and the CHRIS. The site of any reburial of Native American human remains shall be kept confidential and not be disclosed pursuant to the

California Public Records Act, California Government Code §§ 6254.10, 6254(r). The Medical Examiner shall also withhold public disclosure of information related to such reburials pursuant to the specific exemption set forth in California Government Code § 6254.5(e).

8.2.2.4 Tribal Monitoring

The presence of a Native American monitor will be necessary during ground-disturbing activities that have the potential to affect TCRs. Monitoring may be required for an entire site or portions of a site, depending on discussions and consultation with the tribes and other information based on where native soils occur, a site's geomorphology, geotechnical reports, prior grading plans for disturbed soils, or other reasons. In cases where the TCR is also considered a historical resource under CEQA (i.e., it is also significant for archaeological characteristics), then archaeological monitoring may also be required. In other cases, where the TCR is not significant archaeologically, only a tribal monitor may be required.

When monitoring is required to address potential impacts to TCRs, then prior to the commencement of any ground-disturbing activities, including but not limited to exploratory geotechnical investigations/borings for contractor bidding purposes, the project developer shall enter into a Pre-Excavation Agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement, with the SLRBMI or other Luiseño tribe. This agreement will contain provisions to address the proper treatment of any tribal cultural resources and/or Luiseño Native American human remains inadvertently discovered during the course of the project. The agreement will outline the roles and powers of the Luiseño Native American monitors and the archaeologist, and may include the following provisions. In some cases, the language below may be modified in consultation with SLRBMI if special conditions warrant.

1. A Luiseño Native American monitor shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not be limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.

2. Any and all uncovered artifacts of Luiseño Native American cultural importance shall be returned to the San Luis Rey Band of Mission Indians, and/or the Most Likely Descendant, if applicable, and not be curated, unless ordered to do so by a federal agency or a court of competent jurisdiction.

3. The Luiseño Native American monitor shall be present at the project's preconstruction meeting to consult with grading and excavation contractors concerning excavation schedules and safety issues, as well as to consult with the archaeologist PI concerning the proposed archaeologist techniques and/or strategies for the project.

4. Luiseño Native American monitors and archaeological monitors shall have joint authority to temporarily divert and/or halt construction activities. If tribal cultural resources are discovered

during construction, all earth-moving activity within and around the immediate discovery area must be diverted until the Luiseño Native American monitor and the archaeologist can assess the nature and significance of the find.

5. If a significant tribal cultural resource(s) and/or unique archaeological resource(s) are discovered during ground-disturbing activities for this project, the San Luis Rey Band of Mission Indians shall be notified and consulted regarding the respectful and dignified treatment of those resources. Pursuant to California Public Resources Code Section 21083.2(b) avoidance is the preferred method of preservation for archaeological and tribal cultural resources. If, however, the Applicant is able to demonstrate that avoidance of a significant and/or unique cultural resource is infeasible and a data recovery plan is authorized by the City of Carlsbad as the lead agency, the San Luis Rey Band of Mission Indians shall be consulted regarding the drafting and finalization of any such recovery plan.

6. When tribal cultural resources are discovered during the project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. If the archaeologist does not collect the tribal cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor may, at their discretion, collect said resources and provide them to the San Luis Rey Band of Mission Indians for dignified and respectful treatment in accordance with their cultural and spiritual traditions.

7. If suspected Native American human remains are encountered, California Health and Safety Code Section 7050.5(b) states that no further disturbance shall occur until the San Diego County Medical Examiner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Suspected Native American remains shall be examined in the field and kept in a secure location at the site. A Luiseño Native American monitor shall be present during the examination of the remains. If the San Diego County Medical Examiner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted by the Medical Examiner within 24 hours. The NAHC must then immediately notify the "Most Likely Descendant" about the discovery. The Most Likely Descendant shall then make recommendations within 48 hours, and engage in consultation concerning treatment of remains as provided in Public Resources Code 5097.98.

8. In the event that fill material is imported into the project area, the fill shall be clean of tribal cultural resources and documented as such. Commercial sources of fill material are already permitted as appropriate and will be culturally sterile. If fill material is to be utilized and/or exported from areas within the project site, then that fill material shall be analyzed and confirmed by an archeologist and Luiseño Native American monitor that such fill material does not contain tribal cultural resources.

9. No testing, invasive or non-invasive, shall be permitted on any recovered tribal cultural resources without the written permission of the SLRBMI.

10. Prior to the release of the grading bond, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the monitoring program shall be submitted by the archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Carlsbad for approval. Said report shall be subject to confidentiality as an exception to the Public Records Act and will not be available for public distribution.

The above measures are intended as guidance for the development of an agreement, which may or may not be accompanied by a mitigation measure in a CEQA document. Each project will be evaluated for the presence or potential presence of TCRs individually, and when an agreement is deemed appropriate, measures will be tailored to that specific project.

8.2.2.5 Data Recovery and Curation

TCRs can also be archaeological sites that are eligible under NRHP Criterion D / CRHR Criterion 4 because they possess information that is important in history or prehistory. In such a case, data recovery excavations are one method of mitigating for adverse effect. Data recovery or curation, or both, may not be appropriate for TCPs or TCRs and thus would be a last resort.

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9.0 Cultural Resources Procedures

9.1 Sensitivity Model Review

In reviewing the cultural resources sensitivity maps, the City shall first determine the sensitivity of the project for archaeological and architectural historical resources. In the event that the project is wholly located within an area of low sensitivity for either or both, the City shall require the applicant to retain a professionally qualified consultant to first request a records search from the South Coastal Information Center (SCIC) at San Diego State University. The SCIC is a clearinghouse (part of the CHRIS) that contains previous cultural resources reports, site records, historic maps, text, and lists of historically important sites, buildings, districts, and other locations. The SCIC results may indicate that the project area has never been surveyed by a qualified professional. In those cases, the City shall cause the implementation of a survey using professionally qualified consultants.

If the review of the sensitivity models reflect either moderate or high sensitivity, the City shall require a professionally qualified consultant to be retained to carry out a records search and literature review with SCIC, and any additional survey or evaluation that may be required based on the qualified consultant's professional judgement.

9.2 Records Searches and Literature Reviews

All archival research conducted as part of identification efforts for a particular project area within the boundaries of the City shall begin with a record search and literature review at the SCIC. All records searches must be no more than one year old at the time of submission to the City.

The records search must include the project under consideration. The consultant, meeting the applicable Professional Qualifications Standards published by the Secretary of the Interior, shall utilize best judgment for the review of a radius around the project area.

In addition to the site records and reports on file at the SCIC, the *Office of Historic Preservation's Historic Property Data File for San Diego County* (HPDF), on file at the SCIC, should be consulted to obtain an inventory of evaluated resources from the historic period. The California Historical Resource Status Codes (OHP 2004, plus updates) for each inventoried resource in the HPDF in the records search radius should be consulted to determine if the resource has been determined eligible for, or listed in, the NRHP or the CRHR.

In addition to information from the records search at the SCIC, the following sources should be consulted, if available and appropriate:

- *California Inventory of Historic Resources*
- The National Register Information System

- *California Historical Landmarks*
- *Historic Spots in California* (Kyle 2002)
- Historic GLO land patent records and plat maps available from the BLM's General Land Office Records
- The City of Carlsbad historic resources inventory (see Policy 7-P.1 of Goal 7-G-1 of the General Plan) or other relevant documents including but not limited to other city document inventories and building permits, etc.
- Caltrans Bridge Local and State Inventories
- *Handbook of North American Indians* for lists and maps of nearby Native American villages
- Local historical societies
- Historical aerial photographs and historical maps to provide information on the past land uses of the property and locations of historical buildings
- County Assessor records

All archival research efforts, regardless of outcome and particularly if such research failed to yield information on cultural resources, should be documented in the technical report, including the name of repository and any personnel assisting in the research, the date that the research was conducted, the individual conducting the research, and what sources were consulted or reviewed.

The reporting of records search results within technical reports must include the title and author of each report, its SCIC report number, author, and date. In addition, technical reports must include an accounting of all previously-recorded resources within the records search radius, and whether or not each is located within the project area. Given privacy concerns surrounding the distribution of records search information for property that is not included in the project, the results of the records search for the radius around the project area shall not be transmitted to the City or any third party.

As part of the identification efforts, the NAHC should be contacted to carry out a search of the Sacred Lands File. The NAHC holds files containing information about sacred lands and other cultural resources of importance to Native Americans. The NAHC will also provide lists of Native American contacts that may be able to provide information about Native American cultural resources in and near the project area, should the AB 52 process not result in tribal comment on TCRs. The list should be forwarded to any federal agencies that will carry out Section 106 consultation.

9.3 Field Surveys

All surveys, either archaeological or for historic structures, must be conducted using the Secretary of the Interior's standards for the identification of Historic Properties, including any future updates, and in accordance with these Guidelines. For archaeological surveys, fieldwork must be systematic and

pedestrian, using parallel transects no more than 15 meters apart, unless wider transect widths are justified by the PI. Vehicular, All Terrain Vehicle, or horseback surveys are not permitted for survey or identification; however, consultants who are only using such means to transport themselves to a site location for a site-specific investigation may utilize any method of transportation that is acceptable to the landowner. For surveys of the built environment, typically a pedestrian survey will be conducted, but can include combination of a vehicular survey if appropriate at the discretion of the qualified professional consultant. Field surveys are generally considered valid for five years, and a new or an updated survey will be required for surveys older than five years. However, should a case be made to the City that demonstrates: 1) that the ground conditions have not changed since a previous, older survey; 2) that no additional sites and/or resources have been identified within ¼ mile of the survey area; and 3) that the methods used in older surveys are consistent with these guidelines, then an updated survey may not be required.

In accordance with Council Policy No. 83, it is the City's policy that California Native American Tribes be invited to participate in all archaeological pedestrian field surveys. Moreover, it is the City's policy that any archaeological fieldwork that disturbs the ground shall be carried out in coordination with a Luiseño Native American monitor, under the following parameters. Cultural resources surveys that are intended to inventory built environment resources only (not archaeology) are exempt from this requirement.

- If the City is the project proponent, then the City's archaeological consultant shall provide written proof, upon contract or task order award, that a Luiseño Native American monitor has been invited to participate in the archaeological pedestrian field survey, and retained in the event that ground-disturbing archaeological fieldwork is required.

- If the City is not the project proponent but is only serving as the lead agency under CEQA, and the proponent or property owner retains the services of an archaeologist to survey his or her property and no documentation of outreach or participation by a Luiseño Native American monitor can be provided, then the archaeological inventory shall be deemed incomplete until outreach to the tribe, and a tribal survey if requested by the tribe, is carried out. If the proponent or property owner's archaeologist conducts archaeological fieldwork that disturbs the ground and no documentation of participation by a Luiseño Native American monitor can be provided (subject to the exception below), then the archaeological inventory shall be deemed incomplete until a tribal survey is carried out.

- In the event that a Luiseño Native American monitor elects to not participate in the archaeological field survey or does not report at the agreed upon time and location, then the survey may proceed without the monitor present and the resulting technical study shall be deemed complete with the incorporation of documentation demonstrating reasonable and good faith effort to include a Luiseño Native American monitor. In such a case, the tribe shall be provided a copy of the archaeological inventory report for review and comment prior to submittal to the City.

Site recording shall include any physical evidence of human activities over 45 years old. Any cultural resource that contains at least three artifacts in a 10-square-meter area or consists of one or more features should be considered a site. Any indications of cultural presence in the project area that fail to meet the definition of a site should be recorded as isolates or noted on a location map. Any building that is at least 45 years of age or older warrants at least initial consideration under these Guidelines. The PI shall exercise professional judgment when drawing site boundaries and in recording resources, which must be justified in the technical report.

9.4 Site Records and Survey Reports

Site recording, or updates to previously recorded sites, shall be documented by the qualified professional using the most current revision of the California OHP's DPR 523 series Historical Resources Inventory forms following the *Instructions for Recording Historical Resources* (OHP 1995). Photography and submeter GPS precision for mapping of site boundaries is strongly encouraged. All completed DPR 523 forms should be sent by the qualified professional to the SCIC as soon as possible, so that primary numbers and trinomials (if appropriate) can be assigned, which will then be included in the technical reports in place of the temporary numbers assigned in the field.

Survey or inventory reports for all required archaeological surveys of a project area shall be prepared in a manner consistent with the California OHP's Archaeological Resource Management Reports: Recommended Contents and Format, the "Secretary of the Interior's Standards and Guidelines for Identification" (48 FR 44720-23; NPS 1998), and the NPS's publication, "The Archeological Survey: Methods and Uses" (1978: GPO stock #024-016-00091).

9.5 Evaluations of Significance

9.5.1 Properties Exempt from Evaluation of Eligibility

Buildings, structures, and facilities less than 45 years old at the time of study are exempt from evaluation as modern resources, unless determined to be of exceptional significance and meet Criterion Consideration (g) of the NRHP (*A property achieving significance within the past 50 years* and is thereby subject to the guidance in *National Register Bulletin 22* (Sherfy and Luce 1979, rev. 1998). Historic archaeological sites that consist of refuse dumps containing only surface items that are less than 45 years old are also exempt from evaluation.

9.5.2 General Methods

All evaluations of eligibility shall be conducted relative to all four of the CRHR and NRHP eligibility criteria, regardless of the type of resource.

9.5.3 Archival Research

For historic-era archaeological sites or resources in the built environment, this may require additional property-specific archival research, beyond that which is conducted generally during an inventory or

survey. The research may use sources including county records, historical aerials, historical USGS topographic maps, General Land Office (GLO) Plat maps and patent records, and assessor property records in an attempt to gather historical property and building information relevant to the construction and use of the building. Archival research may also be conducted to gather more detailed property history and information regarding use of the building, architectural designs and styles, and other history, as necessary.

9.5.4 Architectural History and Built Environment

Evaluation of eligibility of the built environment is often initiated during the inventory stage, but cannot be completed until evaluated within its historic context. Developing a historical context generally begins with compiling information from sources on relevant historical themes. National Register Bulletin 15 defines a theme as "a means of organizing properties into coherent patterns based on elements such as environment, social/ethnic groups, transportation networks, technology, or political developments that have influenced the development of an area during one or more periods of prehistory or history. A theme is considered significant if it can be demonstrated, through scholarly research, to be important in American history." Historical research, scaled appropriately for the size and nature of the undertaking, should be conducted to identify and develop the appropriate themes to determine whether those themes are significant and to establish the context within which to assess significance of the built environment or for archaeological resources. If a significant historic context is identified by the qualified professional, then evaluation requires an identification of the essential physical features - commonly referred to as "character-defining features" - that must be present to represent the property's significance. Following procedures outlined by OHP and NPS, the qualified professional must determine if the character-defining features are visible enough to convey their significance, often through a comparison of archival materials or similar properties elsewhere; determine which aspects of integrity are particularly important to the property and if they are present; and, if present, with what period of significance the resource is associated.

9.5.5 Historic Districts

As described in Section 2.0, a district is "a significant concentration, linkage, or continuity of sites important in history or prehistory" by plan or by physical development (Keller and Keller, n.d.; OHP 1995). When determining whether or not a district is present, consideration must be paid to whether or not individual buildings or sites contribute to the significance of the district as a whole. Contributing elements are those that possess some aspect that the significance or historic theme, such as a common architectural style. Non-contributing elements may be associated with the period of significance of the district, but may be minor or heavily remodeled such that they fail to convey the significance of the district as a whole. Elements may or may not also be individually significant.

9.5.6 Archaeological Excavation

In all cases where evaluation of eligibility of cultural resources cannot be ascertained from survey-level data alone, and archaeological testing is necessary, the PI, in consultation with the Luiseño Native

American monitor, shall prepare and implement a testing program to guide evaluation of cultural resources using research themes and questions, as presented below. The testing program should be consistent with the "Secretary of the Interior's Standards and Guidelines for Evaluation" (48 FR 44723-26; NPS 1998).

Prior to the initiation of subsurface excavation, the PI shall review utility maps, when appropriate, to determine what areas lack subsurface integrity due to utility trenches or past earth-moving activities. The PI shall utilize Underground Service Alert (USA) North services (http://www.usanorth.org/; 1-800-227-2600) to assist in the identification of subsurface utility lines, in accordance with state law.

Any archaeological testing shall be limited to disturbing no more than 5 percent of the surface area of the resource or four cubic meters, whichever is less. No complete (100 percent) surface collections are allowed under these Guidelines for evaluations of eligibility in order to avoid a significant effect during testing. Suggested subsurface testing methods include shovel test pits (STPs) or auguring placed systematically across the site and one by one meter excavation units. Testing must proceed downward until either culturally-sterile soil is encountered, or, if possible, the maximum depth of project disturbance is reached, so that the full extent of impacts is understood early. If the full extent cannot be tested for any reason, then monitoring may be required during ground-disturbance. Even after testing, if new deposits are found, previously unknown during testing, then unanticipated discovery measures would apply.

The following documentation should be prepared during all excavation work: (1) general site photographs taken before, during, and at the completion of excavation work; (2) photographs of at least one wall of every excavation unit and all features; (3) excavation records and field notes for each unit, level, and feature; (4) individual feature records; (5) scale profile drawings of unit walls with associated Munsell soil color readings; and (6) photograph record forms, field catalog forms, and sample artifact catalog forms (may be combined with field catalog forms).

9.5.7 Research Topics and Questions for Archaeological Sites

The significance of a historic property can be assessed only when it is evaluated within its historic context. Developing a historical context generally begins with compiling information from sources on relevant historical themes. National Register Bulletin 15 defines a theme as "a means of organizing properties into coherent patterns based on elements such as environment, social/ethnic groups, transportation networks, technology, or political developments that have influenced the development of an area during one or more periods of prehistory or history. A theme is considered significant if it can be demonstrated, through scholarly research, to be important in American history." Historical research, scaled appropriately for the size and nature of the undertaking, should be conducted to identify and develop the appropriate themes to determine whether those themes are significant and to establish the context within which to assess significance of the built environment or for archaeological resources.

The California OHP requires the use of a research design that "should present important research questions recognized for the region and relevant to the study, based on previous research" (OHP 1989:9). Research questions serve to guide research methods and to assess the potential for the recovery of scientifically valid data, ethnographic background, or oral history that are likely to satisfy any of the four CRHR and NRHP criteria. Sources of data sought in the evaluations of eligibility shall be selected by the PI, using professional judgment, as appropriate for the nature and type of the resource being evaluated and may vary according to criterion and resource. Sources may include, but are not limited to: archaeological data; architectural style; records, maps, and historical accounts in the archival record; oral history information; ethnographic and prehistoric contexts, and comments from California Native American Tribes. Comments from tribes can only be included in the consultation and administrative record if express permission has been granted by the commenting tribe. For documentation of compliance with AB 52 or SB 18, the City may contain a confidential (non-public) administrative record of tribal comments, when such comments have been identified by the tribe as being restricted from public distribution.

Following are examples of research themes and questions; however, the PI will utilize professional judgement in developing the research design that is appropriate for the resource being evaluated. Research themes and questions may be suggested by consulting tribes and shall be taken into consideration during the testing. In the event that testing is not supported, then evaluations of eligibility shall utilize all other available data and may result in an assumption of eligibility for the purpose of the project only.

Prehistoric Sites

Research topics for the prehistoric sites in the project area include activities and site function, internal site organization, subsistence patterns, and chronology and temporal patterning.

Activities and Site Function. Collecting site function and activities data is an important research theme in regard to explaining the past. Cultural material and feature data could explain the relationship between humans and their environment. Research questions could include:

- Is there a full range of activities represented, such as would be characteristic of a habitation site, or is there only a limited set of activities characteristic of a location? For example, are activities limited to resource procurement, or do they represent more permanent occupation?
- Is there evidence of flaked stone tool use?
- Is there evidence of flaked stone tool manufacturing?
- Is there evidence of food processing?
- Is there evidence of food preparation and cooking?
- Is there evidence of overnight stays?
- Is there evidence for flaked stone tool production and what techniques were used?

- Is there evidence for ceremonial activity?
- Do the site activities suggest a contribution to broad settlement patterns or mobility patterns?

Data requirements to address these questions include tools classified functionally and debitage classified technologically. If subsurface features (hearths, ovens) are present, the type and number of features will also help address these questions.

Internal Site Organization. Habitation sites are often composed of features that can be ascribed to living, food processing, refuse, religion or ceremonial functions, and many other aspects of prehistoric society. Identification of such features, and analysis of the internal site organization, can give insight into the social organization. Pertinent research questions could include:

- Are there distinct manufacturing, processing, food preparation, or ceremonial areas within the site?
- Were male and female activities conducted in different areas of a site?
- If bedrock milling features are present, are distinct activity areas associated with each outcrop containing bedrock milling features, or was a single activity area used by everyone using any of the bedrock milling features at the site?
- Does the arrangement of the features within the site suggest a broader prehistoric community design or sense of planning?

Data requirements include maps of the spatial distribution of tools, debitage, subsistence remains, and features. If the site is small and there are few categories that do not vary spatially, this domain cannot be addressed.

Subsistence Patterns. How prehistoric populations acquired food and water is a fundamental question studied by archaeology. While reflections of subsistence patterns are found in various features within habitation sites, such as hearths and midden deposits, reconstruction of subsistence systems often require information from multiple sites. These kinds of patterns may be indicative of eligibility under NRHP Criterion A or CRHR Criterion 1. Research questions could include:

- Where were the food procurement locations utilized by the occupants of the site?
- What resources were brought to the sites, and were they processed, prepared, or consumed at the site?
- Is there evidence for specialization or intensification of resource use?
- Are subsistence strategies narrowly focused on a few resources, or are they broad-based?
- Do subsistence strategies change through time?
- Can changes in the natural or cultural environment account for change?

- Do the site activities suggest a contribution to broad subsistence patterns or mobility patterns?

Specialization would be indicated by large numbers of the remains of a few species. Intensification would be indicated by reliance on resources that require greater amounts of labor to procure or process. Data categories necessary to address these questions include faunal remains, protein and blood residue analysis, artifact use-wear analysis, and landscape-site associations.

Chronology and Temporal Patterning. In order for archaeologists to study cultural similarities and differences in cultures of the past, they must first put sites in temporal order. Patterns may be indicative of eligibility under NRHP Criterion A or CRHR Criterion 1. Research questions could include:

- Can the site be assigned to a particular period, complex, or phase?
- Were the sites used at the same time as other nearby sites or sequentially?
- Were the sites used continuously for a short or long period of time?
- Were there periods of time when the sites were not used (continuous occupation or periodic abandonment)?
- What portions of local chronological sequences are represented by cultural resources in the project area?
- What are the chronological ranges for particular projectile point types?
- Can we identify chronological patterns in lithic raw material procurement practices or flaking technologies? If so, can these be used to date sites lacking other diagnostic artifacts?
- Do significant correlations exist between the timing of climatic shifts and technological innovations?
- Do the sites suggest a contribution to broad cultural change?

Chronological dating of sites often relies on the presence of subsurface material rather than surface material alone. Substantial subsurface material combined with a necessary degree of site integrity and preservation may aid in the dating of the archaeological site. Sites most likely to contribute to this theme include habitation sites that may contain thermal features, refuse deposits, and stratified middens. These sites may contain stone artifacts, such as projectile points, with temporally indicative stylistic characteristics. Also, charcoal, animal bone, and shell may be dated by radiocarbon assay. Some indication of the time range (relative dating) for obsidian artifacts may be obtained from measurement of obsidian hydration rinds.

Trade and Exchange. Archaeological information about trade and exchange comes mostly from exotic lithic and shell materials. These are materials with no known local source that must have been obtained from elsewhere through trade or exchange. Research questions could include:

- What inferences about mode of exchange can be made between the site area and the source area(s)?
- Do exotic artifacts present at the site reflect inter-tribal relationships or broad patterns of mobility or settlement?

Historic Archaeological Sites

Material from rural archaeological sites from the nineteenth and early twentieth centuries can provide information about the developing domestic economy of farmsteads and ranches, changes in socio-economic status, and changes in the spatial organization of activities within the farmstead. Early settlers may have been relatively self-sufficient, producing most food for their own consumption on the farm. Over time they may have increasingly participated in the developing market economy, exchanging their agricultural products for manufactured goods obtained from towns. Some farmers/ranchers may have specialized in a single crop or product and ceased to produce food for domestic consumption, obtaining all food from stores in the nearest town. The socio-economic status of rural residents may also have changed, based on increased access to markets for their agricultural products and changing commodity prices. By about 1920, most rural residents fully participated in the national economic system and agriculture had become mechanized. For the period after about 1920, there is little information that historical archaeology can provide about rural ranching and farming that is not already known from historical sources.

Research topics could include:

- Self-sufficiency versus participation in a market economy. Were food and household items produced on the farm or obtained from local, regional, or national sources? Did the degree of self-sufficiency decrease over time?
- Socio-economic status. What was the socio-economic status of rural residents, as reflected in material possessions? Did socio-economic status change over time?
- Organization of activities. What was the spatial organization of activities within the farmstead and did this change over time in conjunction with increased production for the market?

More specific research questions should be developed based on the historic context for the resource being evaluated.

Data categories necessary to address the research topics and questions include artifacts from before 1920 classified functionally. Technological attributes will provide a date range. Features, such as foundations, wells, privies, pits, walls, and fences will provide information on the organization of activities.

9.5.8 Evaluation Reports

Evaluation reports for archaeological sites will provide a prehistoric or historic context for the resource(s) evaluated, the methods employed, the results of archival research, the results of subsurface testing, and an evaluation of the resource using all four NRHP and CRHR eligibility criteria. Note that tribal consultation by the agency may be required in order to complete the evaluations, and so any partial evaluations advanced by consultants during pre-project planning studies must clearly identify any resources that require consultation to complete.

9.6 Impact Analyses and Mitigation Measures

9.6.1 Thresholds

In the event that any cultural resources are found to be eligible for either the CRHR or NRHP or both (hereafter, "eligible cultural resources"), then an impact assessment must be conducted, as described below. Assessment of impacts to non-eligible cultural resources, as required by CEQA (unique archaeological resources) and NEPA will be addressed separately by the project's CEQA and NEPA documentation.

As discussed in Section 3, the determination of whether or not a historical resource under CEQA will be significantly affected by a project parallels the comparable process under federal law. A significant impact under CEQA, or an adverse effect under Section 106, occurs when a project may alter, directly or indirectly, any of the characteristics of a resource that negatively affect its significance. These include reasonably foreseeable effects caused by the project, or those that may occur later in time or those that may be cumulative. Examples of adverse effects include, but are not limited to: physical destruction or damage to all or part of the property; alteration, restoration, rehabilitation, repair, maintenance, stabilization, or remediation; removal of the property from its historic location; change of the character or physical features; introduction of visual, atmospheric, or audible elements; neglect; or transfer, lease, or sale out of federal ownership (36 CFR 800.5[a][2] et seq.).

It is important to be specific as to the effect that will occur to the resource. This will assist in the determination of impact significance and, if warranted, the measures that are appropriate to mitigate the impact. Adverse effects on historic properties include, but are not limited to:

(i) Physical destruction of or damage to all or part of the property;

(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the SOI's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;

(iii) Removal of the property from its historic location;

(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;

(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

In addition, impacts to a Historical Resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, Section 15064.5(a)].

Therefore, the PI, in consultation with the City, project applicant, and, if applicable, SLRBMI or California Native American Tribes, shall determine whether or not the project will have a significant impact on a cultural resource. This determination may be combined with an evaluation of eligibility report if sufficient information exists for the PI to make a determination of effect.

For the purpose of these Guidelines, there are three categories of measures: Standard Conditions (for complete avoidance and preservation); Standard Treatment Measures (agreed-upon mitigation that will minimize or mitigate adverse effect without further review); and Non-Standard Treatment Measures (for other mitigation measures that are atypical, require phased implementation, or are otherwise not accounted for herein). The findings are summarized below and the following section provides details of each condition.

- If there are eligible cultural resources within the project area that will not be affected by the project because the criteria for adverse effect are not met, then the report shall specify a finding of "No Adverse Effect to Historic Properties" for Section 106 and/or "No Significant Impact to Historical Resources" under CEQA. The CEQA document findings would be "Less Than Significant Impact to Historical Resources."
- If there are eligible cultural resources within the project area that will not be affected by the project because of the incorporation of Standard Conditions presented in the following section, then the report shall specify a finding of "No Adverse Effect to Historic Properties, with Standard Conditions" and/or "No Significant Impact to Historical Resources, with Standard Conditions." This finding applies only to complete avoidance and preservation of eligible resources. The standard conditions must be included in the CEQA document as mitigation measures or conditions of approval. The CEQA document findings would be "Less Than Significant Impact with Mitigation Measures Incorporated."

- If there are eligible cultural resources within the project area that will be adversely affected by the project and the Applicant has determined that one or more of the Standard Treatment Measures provided in the following section will minimize or mitigate adverse effect, then the report shall specify a finding of "Adverse Effect to Historic Properties, with Standard Treatment Measures" and/or "Significant Impact to Historical Resources, with Standard Treatment Measures." The standard treatment measures must be included in the CEQA document as mitigation measures or conditions of approval. The CEQA document findings would also be "Less Than Significant Impact with Mitigation Measures Incorporated."
- If there are eligible cultural resources within the project area that will be adversely affected by the project, and the Applicant has determined that non-standard treatment measures are required to minimize or mitigate adverse effect, then the report shall specify a finding of "Adverse Effect to Historic Properties, with Non-Standard Treatment Measures" and/or "Significant Impact to Historical Resources, with Non-Standard Treatment Measures." A treatment plan must be prepared to specify the non-standard mitigation, phased mitigation, or other circumstances not accounted for in the standard treatment measures. The CEQA document findings would also be "Less Than Significant Impact with Mitigation Measures Incorporated."

9.6.2 Preferred Treatment Options and Mitigation Measures

9.6.2.1 Standard Treatment Measures

Avoidance is the preferred treatment method for all eligible cultural resources, including archaeological sites, TCPs, TCRs, historic structures, and ethnographic landscapes. The project proponent for a specific project area must consider redesigning the development project to avoid adverse effects to resources. This could include converting a lot that had been planned for residential development to open space designation or redesigning a road to curve around a Historic Property. However, not all eligible cultural resources can be avoided; if such redesign is not feasible, then the Applicant may be asked to justify why that is the case prior to project approval or permit issuance, and this may require additional consultation with interested parties and California Native American Tribes.

Standard Treatment 1: Conservation Easement

Avoidance and preservation of eligible cultural resources can only be accomplished when a legal mechanism prevents future development and there are appropriate measures in place for long-term maintenance. For archaeological resources on privately owned property, this will require the dedication of a conservation easement over the site, recorded with the County, to restrict development in perpetuity. The easement may be held either by the City, the County, a non-profit corporation, or a California Native American tribe, as long as the land owner and the easement holder are not the same. For archaeological resources on City-owned property, this will require the placement of a deed restriction and incorporation into the appropriate City department's operations and management plan (O&M Plan). For archaeological resources within public rights-of-way or under roadways, where a legal

encumbrance is not possible, then the City Planning Division shall note the confidential location both on the archaeological sensitivity model and in a confidential section of the project's file, and all future projects in that location shall be subject to additional tribal consultation prior to ground disturbance.

Management of the preserved site will be the responsibility of a qualified third-party preserve manager (which also may be the City, the County, a non-profit corporation, or a California Native American tribe) and in accordance with the applicable O&M Plan with sufficient long-term funding. Management shall include but is not limited to the following measures, as deemed appropriate: fence and gate repair; sign replacement; regular monitoring and associated reporting by a professional archaeologist for damage; erosion control; trash removal; vegetation and weed control; security patrols; vandalism abatement; and removal of trespassers. No signs indicating the presence of tribal cultural resources shall be permitted. In addition, the following activities are prohibited within the boundaries of preserved sites, unless otherwise agreed to by SLRBMI, even if such activities are permissible in other areas of larger biological or open space preserves, within which the site may be located):

- Unseasonable watering; use of fertilizers, pesticides, biocides, herbicides or other agricultural chemicals
- Use of off-road vehicles and use of other motorized vehicles except on existing roadways
- Agricultural cultivation activity of any kind
- Recreational activities, including, but not limited to, camping, with the exception of the use of a pedestrian trail adjacent to the site boundaries
- Construction, reconstruction, erecting or placement of any building, billboard or sign (except for that which is designed to keep the public out), or any other structure or improvement
- Depositing or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other materials
- Lighting fires, incendiary devices, or flammable substances
- Planting, introduction or dispersal of nonnative or exotic plant or animal species (animal grazing is permitted for fire control)
- Filling, dumping, excavating, draining, dredging, mining, drilling, removing or exploring for or extracting artifacts, minerals, loam, soil, sand, gravel, rock or other material on or below the surface of the sites, or granting or authorizing surface entry for any of these purposes
- Altering the surface or general topography of the sites, including but not limited to any alterations to habitat, building roads or trails, over paving or otherwise covering the sites with concrete, asphalt or any other impervious material, except for capping as described below or another form of capping with no objection from SLRBMI
- Removing, destroying, or cutting of trees, shrubs, or other vegetation, except as required by law for fire control and prevention or treatment of disease

- Mechanical or chemical weed abatement activities (hand and grazing methods are acceptable)
- Manipulating, impounding or altering any natural water course, body of water or water circulation on the sites, and any activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters
- Engaging in any use or activity that may violate, or may fail to comply with, relevant federal, state, or local laws, regulations, permit conditions, or applicable policies

Conservation Easements may also be used to preserve resources of the built environment, and the terms and limitations of such easements will need to reflect the type of resources being preserved.

The Applicant shall provide a copy of the recorded Conservation Easement as proof of the restriction of future activities that could affect the integrity of the site. Proof of compliance must be submitted to the City Planner, or city project manager for a city project, in accordance with the schedule that was agreed upon through consultation.

If avoidance and preservation of eligible cultural resources is not possible, then implementing one of the following Standard Treatment Measures may minimize or mitigate adverse effects. If a project will implement one or more of these measures without modification (except where allowed, below), and the agencies determine that no other mitigation is necessary, then the standard treatment measures will become mitigation measures or conditions of approval without the need for developing a separate treatment plan.

In this case, the determination of effect must be explicit about the site-specific requirements for each treatment measure, include a schedule for implementation relative to pre-construction, construction, and post-construction phases, and provide the means by which proof of compliance will be provided. If the City concludes that enough modifications to the measures have occurred that change the following pre-approved measures in a manner than could alter the purposes for which they are intended, then a separate treatment plan may be required to negotiate Non-Standard Treatment Measures.

Standard Treatment 2: Capping

In certain cases, the use of capping with natural materials will be desirable as a supplement to a conservation easement. This could include sites that are located in highly visible areas where public access could otherwise present a risk to the preservation of the site, where existing topography or future grade differentials could cause erosion and stabilization issues, or where there is not sufficient horizontal separation from project activities, but that vertical separation could be achievable. In these scenarios, the use of capping with soil, vegetation, and/or geotextile fabric may be preferred over complete exposure of the site. Figure 5 illustrates this in concept. Exceptions to these guidelines can be negotiated in consultation with all parties.

Where capping is considered an appropriate treatment measure, the following guidelines will be employed:

- The thickness of the soil cap must take into consideration the size and shape of the site, particularly the elevation of above-surface features like bedrock outcrops.
- The methods used to cap the resource must be designed to avoid damage to the resource during the process of installing the cap (such as prohibition of heavy equipment during installation).
- Caps may be covered with vegetation (without invasive root systems) to discourage erosion and unauthorized digging.
- No buildings or structures shall be placed on top of the cap.
- Non-motorized pedestrian paths may be placed over the cap, but only when constructed of natural materials such as bark or pea gravel (i.e., no pavement, brick, imported stone) and only when the entire site is capped by at least 18 inches of soil.
- No signage to indicate the location of a site beneath the cap shall be installed.
- Design and final implementation of the capping plan will be developed and monitored by a qualified professional archaeologist and Native American monitor, when appropriate.
- The area subject to capping must be legally restricted from future development, in perpetuity (with a conservation easement or documented in accordance with Standard Treatment #1 above if located within public rights-of-way); however, long-term management can be scaled accordingly.
- As appropriate, the capping should include a combination of layers of culturally-sterile and chemically-compatible soil of different colors and/or the layering of cyclone, chain link, or orange barrier fencing to discourage digging.

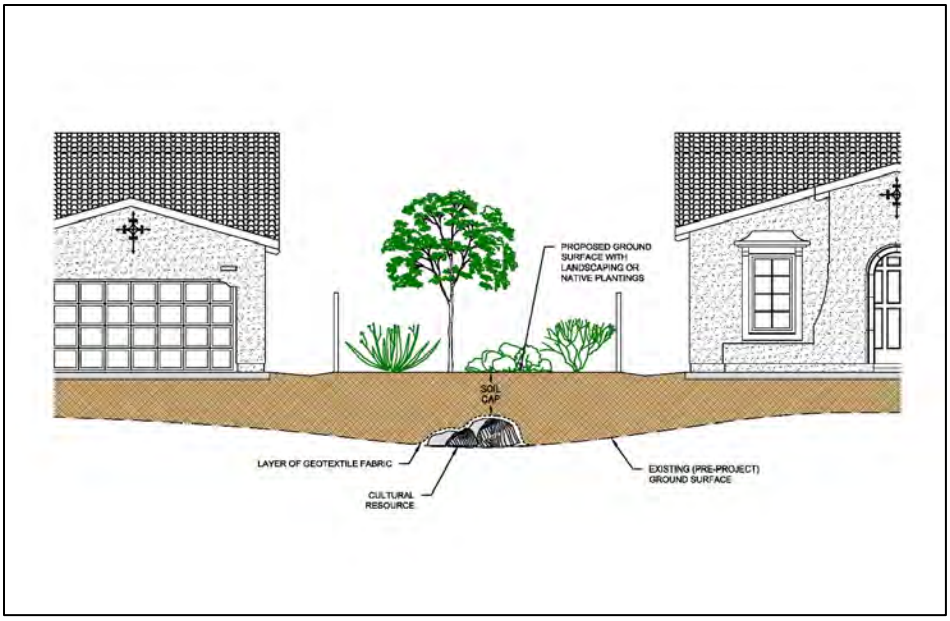

Figure 5. Conceptual capping of a site, in conjunction with a deed restriction (illustration courtesy of Bonadelle Neighborhoods).

Standard Treatment 3: Data Recovery Excavation

Archaeological sites that are eligible under NRHP Criterion D / CRHR Criterion 4, at minimum, are significant because they possess information that is important in history or prehistory. In such a case, data recovery excavations are one method of mitigating for adverse effect. Data recovery may not be appropriate for TCPs or TCRs and shall not be employed over the objection of the tribe or cultural group that associates with the resource. Should data recovery of a Native American site be pursued, then the SLRBMI shall be afforded an opportunity to comment on the data recovery plan in advance of implementation.

Should data recovery be an appropriate mitigation, the finding of effect shall specify the specific sites, number and size of units, and volume of excavation and is subject to City approval. Data recovery of prehistoric sites cannot be utilized as a Standard Treatment Measure over the objection of California Native American Tribes.

The data recovery will be documented in a confidential technical report that provides a discussion of the research topics that guided data recovery, discusses the field and laboratory methods employed, describes the recovered artifacts, updates the feature sketch map, and discusses how the recovered material contributed to addressing the research topics. A catalog of the recovered artifacts will be provided in a report appendix.

A sample of artifacts recovered from each site, not to exceed 10 percent (by artifact count, unless the Principal Investigator recommends another basis for this calculation) of the collection, may be permanently curated at an approved curation facility (see below). The sampling should not be restricted to diagnostics only, but shall represent the full spectrum of cultural materials observed at

the site. The remaining 90 percent of collected artifacts shall be offered to a local historical society for incorporation into publicly accessible or educational collections. Unclaimed collections will remain in the possession of the applicant and used as appropriate for public display within the facilities in the development.

Standard Treatment 4: Project-Specific Public Interpretation and Education

Any eligible cultural resource may be interpreted for the benefit of the general public through the development and installation of one or more interpretive panels in parks, along trails, or at scenic overlooks. The consultation conducted with SLRBMI would determine whether or not this measure is appropriate for Native American cultural resources. The number, location, and content of the panels shall not disclose the locations of confidential archaeological sites. Panels will measure approximately two feet by three feet and will be displayed along newly constructed trails within the permit area. Panels may be upright (as shown in Figure 6) or may be lower and angled.

Panels will be printed, manufactured, and installed by appropriate and experienced professionals. Immediately following installation, photographs and GPS coordinates of the installed signs will be provided to the City as proof of compliance with this requirement. Should the subject of the panels or signs be Native American culture, then the SLRBMI shall be afforded an opportunity to review and comment on the draft panels, prior to manufacturing.

Figure 6. Example of an interpretive panel.

Standard Treatment 5: Construction Monitoring

Monitoring by a qualified professional archaeologist, Native American monitor, and/or tribal representative shall only be used after reasonable and good-faith efforts, as determined by the City and through consultation, have been made to identify eligible cultural resources or significant tribal cultural resources prior to project approval. Monitoring can also be used to ensure avoidance of eligible cultural resources or significant tribal resources during ground-disturbing activities. Monitoring is appropriate in the following circumstances (and shall follow the requirements and provisions of Section 8.2.2.4 when tribal cultural resources are involved):

- when buried archaeological or known or potential tribal cultural resources are likely in the vicinity, but their specific location is unknown;
- when ground-disturbing activities will come within 100 feet of a recorded non-tribal eligible cultural resource;
- When within, or within close proximity to, a known or potential TCR;
- when installing or verifying the placement and integrity of temporary exclusionary (orange barrier or silk) fencing around resources that must be avoided; and/or
- when "pioneering" (breaking ground for) temporary/preliminary access roads for geotechnical trenching or boring.

Monitoring is considered a last resort to minimizing or mitigating adverse effects and is not the default treatment for all projects. Any monitoring required must be justified and balanced by a reporting schedule.

Should the City determine that monitoring is not an appropriate mitigation, then the City, with permission from the landowner, may extend an opportunity to members of the public or consulting parties to visit the project during construction on a volunteer basis, provided that the visitors receive safety training and sign liability release waivers. The City shall not have the authority to grant property access to private property over the objections of the landowner.

Standard Treatment 6: HABS/HAER/HALS-Like Documentation

The Historic American Building Survey (HABS), Historic American Engineering Record (HAER), and Historic American Landscape Survey (HALS) programs are administered by the NPS, in consultation with the federal agency and SHPO. These programs provide documentation for eligible buildings and structures. For the purpose of these Guidelines, federal agencies, NPS, and SHPO are not involved; however, documentation comparable with this program may be utilized. It should be noted that this documentation does not mitigate certain impacts to CEQA-defined Historical Resources to a less-than-significant level.

Standard Treatment 7: CC&Rs

The collecting, digging, disturbance, or removal of any artifact or other prehistoric or historic object located in an open space area, conservation easement, a lot subject to a deed restriction, or to any archaeological site or Historic Property that may become unearthed in the future, is prohibited. Notification of such restrictions shall be included in a restrictive type of covenant recorded on each parcel. Homeowners shall not be provided the locations of known cultural resources and archaeological sites, as these are confidential and restricted from public dissemination under state and federal law. A copy of the recorded covenant shall be provided to the City as proof of compliance.

Standard Treatment 8: Tribal Access Agreements

Upon transfer to the holder of any portion of a conservation easement that is intended to preserve confidential Native American or tribal resources, and upon request from a federally recognized and/or California Native American tribe to gain access to the tribal resource for visitation, the City shall develop a right-of-access authorization for requesting tribes, in cooperation with the landowner. The authorization shall specify the terms under which tribal access can be legally achieved and shall define the acceptable and prohibited uses thereof, and appropriate liability waivers. Use of this Standard Treatment Measure cannot occur over the objection of the private landowner, if applicable.

Standard Treatment 9: Contractor Awareness Training

There always remains a possibility that unanticipated discoveries may occur during project construction. For this reason, an archaeological sensitivity training program (Contractor Awareness Training) will be developed and delivered by a qualified professional archaeologist during a pre-construction meeting for construction supervisors prior to beginning any ground-disturbing work in the project. The sensitivity training program will provide information about notification procedures when potential archaeological material is discovered, procedures for coordination between construction personnel and monitoring personnel, and information about other treatment or issues that may arise if cultural resources (including human remains) are discovered during project construction. This protocol shall be communicated to all new construction personnel during orientation, prior to the employee beginning ground-disturbing work on the project, and on a poster that is placed in a visible location inside the construction job trailer.

Standard Treatment 10: Controlled Grading Procedures

A program of controlled grading may be implemented during the excavation of soil that is identified as part of a prehistoric cultural deposit at a particular location. Controlled grading is a method employed to peel away layers of soil to reveal cultural materials in a manner that significantly enhances the opportunity to identify and understand the relationship of artifacts and features within a prehistoric site. Controlled grading will not be required for soil that is identified as non-cultural formational soil or fill dirt imported to the site. The determination of the transition from cultural soil to formational soil will be made jointly by the project archaeological consultant, the Native American representative, and the project geologist, if applicable.

Controlled grading will involve use of a small piece of equipment or a road grader to peel away native soil using shallow cuts made in approximately five-inch-deep layers. The grading equipment will push the shallow cuts of soil to the outside of the cultural deposit area. This deposited soil may be sampled and screened to ensure adequate detection of any cultural materials that may be present. The project archaeologist and Native American representative will direct the controlled grading process, including the pace of the grading and the depth of layers to be removed. The potential exists that discoveries may temporarily suspend the controlled grading process if significant discoveries are made that require focused archaeological excavations.

As successive layers of the prehistoric site are exposed, any cultural features or artifact concentrations that are exposed and identified will be excavated as part of the data recovery program. In the event that a human burial or human remains are exposed, the protocol stated in the data recovery program will be implemented. The archaeological monitor and Native American monitor will follow closely behind the grading equipment and mark any cultural material with pin flags. Each artifact will be recorded to provide horizontal and vertical locational data. If no cultural deposits are encountered, the road grader will continue to make passes until one of two conditions are met (whichever occurs first):

- Grading will continue to a depth of 30 centimeters below the depth of any recorded artifacts, suggesting an end to the potential for cultural deposits, or
- Non-cultural formational soils are encountered that predate any human occupation of this location.

Once the cultural deposit has been completely removed, the controlled grading process will be terminated and mass grading may proceed.

Standard Treatment 11: Post-Review Discoveries

There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources, even for phases that do not have known resources present. If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 100-foot radius of the discovery and the following procedures apply.

A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment and in consultation with the Luiseño Native American monitor. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist, in consultation with the Luiseño Native American monitor, determines that the find does not represent a cultural resource, then work may resume immediately and no agency notifications are required.
- If the professional archaeologist, in consultation with the Luiseño Native American monitor, determines that the find does represent a cultural resource from any time period or cultural

affiliation, then he or she shall immediately notify the City and applicable landowner. The City shall consult with the other permitting agencies, if applicable, and the San Luis Rey Band of Mission Indians on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be eligible for inclusion in the NRHP or CRHR. Work cannot resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not eligible for the NRHP or CRHR; or 2) that the treatment measures have been completed to their satisfaction.

- If the find includes human remains, or remains that are potentially human, then he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Diego County Medical Examiner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Medical Examiner determines the remains are Native American and not the result of a crime scene, then the Medical Examiner will notify the Native American Heritage Commission, which then will designate a Native American Most Likely Descendant (MLD) for the project (Section 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the landowner does not agree with the recommendations of the MLD, then the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space zoning designation or conservation easement as appropriate; and/or recording a reinterment document with the County in which the property is located (AB 2641). Work cannot resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

Non-Standard Treatment Measures

Based on the number and type of resources within a project, or based on the construction timing of the project, there may be a need to develop and negotiate certain types of mitigation that are not provided for above. These may be alternate ways of resolving adverse effect (e.g., Section 6.3.1, below), or may require the phased implementation of mitigation measures for long-term buildout.

Compensatory mitigation (such as the analysis and proper curation of pre-existing artifact collections) is one such measure; however, in recognizing that no two cultural resources are the same, care must be taken to ensure that such a mitigation, if entertained, actually mitigates the impacts caused by a project.

In such circumstances where a non-standard treatment measure is considered, the Applicant shall propose mitigation measures in a treatment plan that is submitted to the City for review and consultation with the other applicable agencies and tribes.

9.7 Curation

Should permanent curation be necessary (such as for curation of historic-era archaeological artifacts), archaeological specimens, including their associated documentation (i.e., field notes, photographs, maps, and all environmental materials such as pollen, soils, sediments, bone, and shell) shall be curated using the standards set out in 36 CFR Part 79 to the greatest extent that facilities in southern California meet such standards. The San Diego Archaeological Center is the preferred location for curated collections of historic (non-Native American) artifacts and prehistoric artifacts that are not claimed by a culturally and traditionally affiliated California Native American tribe. Other curation facilities may become available in the future. Approval for the use of alternate facilities is at the discretion of the City, in consultation with the applicable federal agencies and SHPO.

Native American human remains, grave goods, items of cultural patrimony, and sacred objects encountered during the undertaking that are located on state or private land shall be treated in accordance with the requirements of Section 7050.5 of the California State Health and Safety Code and Section 5097.98 of the California Public Resources Code, which collectively penalize the intentional disturbance or removal of human remains and require that activity stop in the event of a discovery of human remains so that the Medical Examiner and, if applicable, NAHC, can determine the identity and/or historical significance of the find.

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10.0 Paleontological Resources Procedures

10.1 Sensitivity Model Review

In reviewing the paleontology sensitivity map, the City shall first determine whether or not the project is located in a medium or high sensitivity area, which will require a paleontological survey. Projects located entirely within low sensitivity areas require no further study for paleontology; however, the result of the sensitivity model check shall be reported in the CEQA document and, at minimum, a standard mitigation measure for unanticipated discovery shall apply to all non-exempt projects (described further below).

10.2 Records Searches and Literature Reviews

The San Diego Natural History Museum (SDNHM) is the sole institution holding fossils for San Diego County, and therefore, represents the best source for information about fossil-bearing sediments and rock. For projects that require a paleontological survey, the City or qualified consultant shall first request a paleontological assessment from the SDNHM for the project area plus a one-mile radius. Other sources that may be reviewed include online paleontology databases, the published literature, and project or nearby geotechnical boring reports to obtain information on subsurface rock unit depths.

10.3 Field Surveys

If the underlying geologic formation is exposed on the site, a field survey may be warranted. All paleontological field surveys for the project area must be completed by or under the direction of the Principal Paleontologist, who is responsible for ensuring that the surveyor is knowledgeable about local geology and paleontology.

All paleontological resources encountered during the survey shall be documented on standard locality forms, and documented with photography and GPS coordinates. The surveyor shall describe the sediments of the project in detail and evaluate the potential for specific sediments to be conducive to the preservation of fossils.

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;

2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;

3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;

4. The fossils demonstrate unusual or spectacular circumstances in the history of life;

5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations; and/or,

6. All identifiable vertebrate fossils are considered significant due to the rarity of their preservation.

As so defined, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology, are also critically important (Scott and Springer, 2003; Scott *et al*., 2004).

10.4 Impact Analyses and Mitigation Measures

Under current law, an analysis of the record search and survey results, if survey is required, must be used in a determination of whether or not "unique" (or "significant") paleontological resources will be impacted by the project, and whether or not that impact is significant. This conclusion must be based on actual information indicating a high probability of potential to damage or destroy significant fossils and documented in a Paleontological Assessment Report, used to support a CEQA document.

10.4.1 Negative Surveys

If the survey resulted in a negative finding for paleontological resources, then the paleontology sensitivity model should be updated to reflect low sensitivity for that project area. The Principal Paleontologist shall determine whether or not, based on professional judgement, the designation of low sensitivity can be extended outside of the project area.

In addition, the CEQA document shall require the adoption of a standard unanticipated discovery measure that instructs construction personnel to immediately halt ground-disturbing activity at the location of a suspected paleontological exposure plus a 50-foot radius around the find. Work shall be halted within the no-work radius until the City can consult with a qualified paleontologist on the identification and evaluation of the find.

At the discretion of the Principal Paleontologist, an additional mitigation measure requiring contractor awareness training may be warranted. However, unlike the unanticipated discovery measure, this is not a default mitigation measure for all projects that result in a negative survey for paleontological resources.

10.4.2 Positive Surveys

If the survey and/or Paleontological Assessment Report resulted in a positive finding for paleontological resources or a high probability for fossil-bearing sediments below the surface, then a Principal Paleontologist shall be retained to prepare a Paleontological Mitigation and Monitoring Plan to address the following information, as applicable and appropriate:

- the level of monitoring (spot checks, part time or full time), protocols and authorization for work stoppages, and safety procedures
- the need for Contractor Awareness Training for all earthmoving personnel for any projects where a monitor will not be present full time
- a research design listing the research questions and the data requirements for those questions
- the level and type of assistance from the contractor needed by the paleontologist to take bulk samples and place them into a safe area for processing
- the methods for fossil collection, fossil preparation, fossil identification, stratigraphic profiles, and curation
- the types of progress reports that will be provided to the project proponent and City (weekly or monthly)
- the schedule for reporting
- a recommendation for the updating of the paleontology sensitivity model, which takes into consideration the presence or absence of paleontological resources, the amount of ground disturbance, and the potential for future discoveries
- the identity of the financially-responsible party

10.4.3 Preferred Treatment Options and Mitigation Measures

Vertebrate fossils are rare in contrast with invertebrate and plant fossils. Due to this factor, all vertebrate fossils are generally recovered while samples of invertebrates and plants are taken. Documentation and curation is the preferred treatment method for paleontological resources.

10.5 Curation

In accordance with the Paleontological Mitigation and Monitoring Plan, specimens of significant fossils, all paleontological data, and a copy of the final report shall be curated at the SDNHM.

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11.0 Document Review and Consultation

As discussed earlier, the City is ultimately responsible for the compliance with these Guidelines. As such, the City planning staff will be responsible for receiving applications, reviewing documentation generated under these Guidelines, carrying out non-federal Native American consultation, preparing CEQA documentation, and, ultimately, making a project decision. Appendix 1 to these Guidelines provides the Implementation Manual with template forms and letters.

11.1 Application Requirements

Applicants or consultants implementing these Guidelines are required to submit two bound copies and one PDF on a CD of every cultural resources and paleontological resources technical document prepared for the project. One hard copy is intended for City use. One hard copy of technical documents that address archaeological resources will be transmitted to SLRBMI for review. Depending on the number of consulting tribes and parties, if electronic copies are not acceptable, additional hard copies of the reports may be requested by the City. All hard and electronic copies of technical documentation containing confidential information that is restricted from public distribution must be bound separately in a confidential appendix, and clearly marked on the cover of the document.

11.2 Completeness Review

A completeness review of the cultural and paleontological technical documentation will be conducted by the planning staff using a Cultural Resources Compliance Review Checklist (Appendix 1). Upon receipt of the documentation, the City shall first acknowledge in writing the date on which the materials were received. This begins a 30-day review period for the City staff to review the submitted materials and identify any additional technical information that is necessary. The checklist prompts the City to verify specific information. This includes:

- Does the project boundary provided by the applicant take into account all areas of ground disturbance, conservation, construction staging, infrastructure, and off-site mitigation?
- Is the records search and literature review less than one year old?
- Has a search of the Sacred Lands File with the NAHC been conducted within the past year?
- Has the project area and any off-site improvement areas been surveyed for cultural resources in accordance with the methods in these Guidelines?
- Is there documentation that Native American tribes were invited to participate and/or participated in the archaeological field survey and any archaeological testing?
- Are all identified cultural resources recorded and evaluated under all four NRHP and CRHR criteria?

- Have the criteria of adverse effect been applied to all significant cultural resources?
- Have Standard Conditions, Standard Treatment Measures, or Non-Standard Treatment Measures been proposed, if applicable?
- What federal agency approvals or permits, if any, will be required?
- What state agency approvals or permits, if any, will be required?
- What local agency approvals will be required?

If the documentation is not complete or is not in conformance with these Guidelines, it will be returned to the project proponent with an explanation and request for additional information. Until the requested information is submitted to the City, processing of the cultural resources compliance will pause. However, tribal consultation will proceed in accordance with the schedules noted in AB 52 and SB 18, as applicable.

11.3 Consultation

The city shall verify that all information identified on the Cultural Resources Compliance Review Checklist has been received and that no additional cultural resources information is required in conjunction with determining the overall project's completeness in accordance with Section 15060 of the CEQA Guidelines. When such determination is made, the City shall issue a written Notice of Completeness to the applicant and shall initiate the following actions within 14 days:

- Only if applicable, the City shall notify the point-of-contact for each agency that is expected to issue a federal approval or permit for the project by letter (or other agreed upon notification method). The notice shall serve to alert the agency that consultation under Section 106 may be required and request coordination of efforts.
- The City shall mail project notification letters to each tribe who requested notification letters under AB 52 and afford them an opportunity to consult on the project if they respond affirmatively within 30 days.
- If the project requires a federal permit, approval, or funding, the City shall mail separate project notification letters to each tribe identified on the NAHC contact list to solicit information about the project, and shall copy the federal agency on all letters.
- If the project requires a General Plan or Specific Plan adoption or amendment, or the dedication of open space that includes a tribal resource within it, the City shall mail separate project notification letters to the tribes identified on the SB 18 list obtained from the NAHC, and offer them an opportunity to consult if they respond within 90 days.
- The City shall notify any other consulting parties it feels appropriate.

The City shall conduct the consultation in accordance with the regulatory requirements, which may require meetings, field visits, providing copies of or making revisions to cultural resources technical reports and documents, or both.

11.4 Compliance Verification

The City shall be responsible for ensuring that any mitigation or permit conditions are implemented. Upon verification that all requirements are satisfied in full, and unless the mitigation requires further coordination and review by other agency staff, the City shall issue a written notice to the other lead agencies to notify them of the completion of mitigation requirements.

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LIST OF ATTACHMENTS

Attachment A – Carlsbad City Council Policy No. 83

CITY OF
CARLSBAD

Policy No.	83
Date Issued:	February 23, 2016
Effective Date:	March 1, 2016
Resolution No.	2016-042
Cancellation Date:	n/a
Supersedes No.	n/a

Council Policy Statement

Category: **TRIBAL CULTURAL RESOURCE PROTECTION**
Specific Subject: **Tribal Consultation and Treatment and Protection of Tribal Cultural Resources**

PURPOSE: It is the intent of the City Council that the City of Carlsbad recognize its responsibility to protect with improved certainty the important historical and cultural values of current Tribal Cultural Resources within the City limits and to establish an improved framework for the City's consultations with Native American Tribes that are traditionally and culturally affiliated with the City of Carlsbad including the San Luis Rey Band of Mission Indians.

BACKGROUND: The City of Carlsbad is proudly home to California Native American Tribes that have been here for more than ten thousand years. The City is acknowledged by California Native American Tribes, archaeologists, ethnographers, and anthropologists to be rich in Tribal Cultural Resources. These Tribal Cultural Resources are significant for their traditional, cultural, spiritual and religious ties to the California Native American people living today and the cultural significance these resources have to the lives of California Native American Tribal people in the present.

Currently, in the design and construction of development projects on private property and projects on City-owned properties, the City of Carlsbad Cultural Resources Guidelines and General Plan Policies 7-P.7 through 7-P.11 are implemented. In addition, during the project review process City staff, as the City's representative managing both projects on private and City-owned properties, must implement their best professional judgment to attempt to avoid or substantially reduce impacts to Tribal Cultural Resources, historical, archaeological and paleontological resources by developing mitigation measures for appropriate treatment and protection of such resources. However, the City's Cultural Resource Guidelines (1990) require updating to ensure consistency with State law and the City's General Plan Policies, define a predictable and reliable means of approving projects, and ensure appropriate long term protection of Tribal Cultural Resources. To meet these goals the City, within the areas of its authority, will establish improved guidelines for Native American tribal consultation and the protection of Tribal Cultural Resources in a way that is respectful to California Native American Tribes.

POLICY: To the extent allowed under the authority of the City, the City shall guide all development projects on private property and projects on City-owned properties to be designed and constructed in a manner to avoid or substantially reduce impacts to Tribal Cultural Resources, as they are defined by State Law, and to establish and adopt preservation measures to maintain their permanence in protection. To facilitate this Policy, the City shall consult with California Native American tribes that are traditionally and culturally affiliated with the City, including San Luis Rey Band of Mission Indians, early in the design process of development projects on City-owned properties and early in the permit process of development projects on private property to avoid or substantially lessen potential adverse impacts to Tribal Cultural Resources that may occur as a result of a proposed project. The City shall

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update its Cultural Resource Guidelines to incorporate State definitions of Tribal Cultural Resources, require consultation in the detection, treatment and protection of Tribal Cultural Resources for all Projects on City-owned lands and on private property to the full extent of the City's authority, ensure a complete understanding by project proponents, including the City and Tribal Representatives, of current and previous mitigation commitments for Tribal Cultural Resources, and provide improved protocols for ensuring the permanence of preservation mitigation measures.

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