

3.5 CULTURAL, TRIBAL CULTURAL, AND PALEONTOLOGICAL RESOURCES

3.5 CULTURAL, TRIBAL CULTURAL, AND PALEONTOLOGICAL RESOURCES

3.5.1 Definitions

Cultural Resources

Cultural resources are generally defined as prehistoric and historic sites, structures, landscapes, districts, and any other physical evidence associated with human activity considered important to a culture, a subculture, or a community for scientific, traditional, religious or any other reason. Cultural resources in the State of California are recognized as non-renewable resources that require management to assure their benefit to present and future Californians.

Historical Resources

CEQA's provisions governing analysis of historical resources are set forth in PRC §21084.1 and CEQA Guidelines Section 15064.5(a)-(b). CEQA includes objects of historical significance in its definition of "environment" (PRC §21060.5). Per CEQA Guidelines Section 15064.5, the term "historical resources" is defined as:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (CRHR).
2. A resource included in a local register of historical resources or identified as significant in a historical resources survey shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site area, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a cultural resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR, including the following:
 - a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - b. Is associated with the lives of persons important in our past;
 - c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - d. Has yielded, or may be likely to yield, information important in prehistory or history.

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Archaeological Resources

CEQA includes detailed standards governing the analysis of impacts on archaeological resources (PRC §21083.2; CEQA Guidelines Section 15064.5[c]-[f]). If the lead agency determines that a project may have a significant effect on unique archaeological resources, the analysis must address those archaeological resources (PRC §21083.2[a]). An environmental document need not address effects on archaeological resources that are not unique (PRC §21083.2[a], [h]). The term “unique archaeological resource” under PRC §21083.2(g) refers to an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information,
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type, or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC §21083.2[g]).

Tribal Cultural Resources

Assembly Bill (AB) 52, enacted in September 2014, recognizes that California Native American tribes have expertise with regards to their tribal history and practices. The bill established a new category of cultural resources known as tribal cultural resources to consider tribal cultural values when determining impacts on cultural resources. Tribal cultural resources have the following meaning under PRC §21074(a):

1. Sites, features, places, cultural landscapes, 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 CRHR, or
 - b. Included in a local register of historical resources as defined in PRC §5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC §5024.1(c). In applying the criteria set forth in PRC §5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe.
3. A cultural landscape that meets the criteria of PRC §21074(a) is also a tribal cultural resource if the landscape is geographically defined in terms of the size and scope.
4. A historical resource as described in PRC §21084.1, a unique archaeological resource as defined in PRC §21083.2, or a non-unique archaeological resource as defined in PRC §21083.2, may also be a tribal cultural resource if it meets the criteria of PRC §21074(a).

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Paleontological Resources

Paleontological resources—or fossils—are the remains of ancient plants and animals that can provide scientifically significant information about the history of life on earth. Paleontological “sensitivity” is defined as the potential for a geologic unit to produce scientifically significant fossils. This sensitivity is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities that are recorded from that unit. Paleontological sensitivity is assigned based on fossil data collected from the entire geologic unit, not just at a specific site. Paleontological sensitivity ratings are described as follows:

- **High Sensitivity.** Indicates fossils are currently observed on site, localities are recorded within the study area, and/or the unit has a history of producing numerous significant fossil remains.
- **Moderate Sensitivity.** Fossils within the unit are generally not unique, or are so poorly preserved as to have only moderate scientific significance.
- **Low Sensitivity.** Indicates significant fossils are not likely to be found because of a random fossil distribution pattern, extreme youth of the rock unit, and/or the method of rock formation, such as alteration by heat and pressure.
- **Marginal Sensitivity.** Indicates the limited probability of the geologic unit composed of either pyroclastic or metasedimentary rocks conducive to the existence, and/or preservation of fossils.
- **Zero Sensitivity.** Origin of the geologic unit renders it not conducive to the existence of organisms, and/or preservation of fossils, such as high-grade metamorphic rocks, intrusive igneous rocks, and most volcanic rocks.
- **Indeterminate Sensitivity.** Unknown or undetermined sensitivity indicates that the geologic unit has not been sufficiently studied, or lacks good exposures to warrant a definitive rating. An experienced, professional paleontologist can often determine whether the stratigraphic unit should be categorized as having high or low sensitivity after reconnaissance surveys, including observations of road cuts, stream banks, and possible subsurface testing, such as augering or trenching.

Paleontological resources are considered to be non-renewable because they are the remains of prehistoric animal and plant life.

3.5.2 Data Collection

Records Searches

SDG&E requested archaeological records searches from the South Coastal and South Central Coastal Information Centers to identify previously recorded cultural resources within 0.25 mile of the proposed project. SDG&E also requested archaeological records from MCB CPEN for resource sites and information maintained by MCB CPEN.

SDG&E also requested a paleontological records search from the San Diego Natural History Museum (SDNHM), Department of Paleontology, in August 2016. The purpose of the

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paleontological records search was to identify previously recorded paleontological resources within 1 mile of the proposed project.

Survey Methods

2013 Survey

SDG&E conducted a cultural resource survey between April 22, 2013 and April 25, 2013, for the proposed project (HDR, Inc. 2013). Surveyors examined the area for evidence of potential resources within a 180-foot-wide corridor along the proposed project alignment and work areas, including pole locations, access roads, stringing sites, guard structures, and staging yards. Field methods consisted of visual inspection along parallel transects spaced at approximately 10- to 15-meter intervals. Known sites from previous surveys identified in the records search were located in the field (referred to here as being relocated), and were photographed and mapped using a global positioning system (GPS) device. In some areas, dense vegetation and terrain impeded survey efforts.

2015 Survey

SDG&E conducted a second cultural resource survey in March 2015 (HDR, Inc. 2015a). Staff surveyed areas not previously surveyed in 2013, within a 300-foot-wide corridor, and three newly added staging yards. All areas were examined for evidence of potential cultural resources. Steep slopes and dense vegetation impeded survey efforts on occasion. Similar to the 2013 survey, visual inspections were performed along parallel transects, spaced at approximately 10- to 15-meter intervals. Relocated sites were photographed and mapped using a GPS device.

2016 Survey

Components that were added to the proposed project after the 2015 survey were surveyed by SDG&E in June 2016 (HDR, Inc. 2016a). Paved helicopter ILAs, a previously surveyed staging yard, several turnaround areas, and several access roads were analyzed remotely and determined not to require a pedestrian survey. HDR, Inc. performed intensive pedestrian surveys for several access roads, 11 possible work locations, a staging yard, and several other proposed project work areas. Pole locations and up to a 30-meter radius around the pole were surveyed.

Native American Outreach and Assembly Bill 52 Consultation

Native American Outreach

The CPUC requested a search of the Sacred Lands Inventory and a Tribal Consultation List from the Native American Heritage Commission (NAHC) on October 31, 2016. The NAHC responded to the request, and provided a list of local Native American individuals and organizations that may have further knowledge of cultural and tribal cultural resources within or near the proposed project area. The CPUC mailed letters on December 23, 2016 to the Native American individuals and organizations seeking information and expressing concerns about resources in the proposed project area. Copies of these outreach efforts can be found in Appendix C. Tribes contacted during the Native American consultation are listed in Table 3.5-1.

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Table 3.5-1 Tribes Contacted during Native American Outreach

Tribe	Tribe
Campo Band of Diegueño Indians	Pala Band of Mission Indians
Ewiiapaayp Band of Kumeyaay Indians	Pauma Band of Luiseño Indians
Gabrieleño Band of Mission Indians ^a	Pechanga Band of Luiseño Indians ^a
Juaneño Band of Mission Indians	Rincon Band of Luiseño Indians
Juaneño Band of Mission Indians Acjachemen Nation	San Luis Rey Band of Mission Indians ^a
La Jolla Band of Luiseño Indians	Soboba Band of Luiseño Indians
La Posta Band of Diegueño Mission Indians	Sycuan Band of the Kumeyaay Nation
Manzanita Band of Kumeyaay Nation	Viejas Band of Mission Indians of the Viejas Reservation

Note:

^a These tribes were notified of the proposed project through AB 52 consultation.

Assembly Bill 52 Consultation

AB 52 defines requirements for consultation between the CEQA lead agency and Native American tribes. Recognizing that “California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources” (PRC §21080.3.1[a]), AB 52 requires CEQA lead agencies to provide notice of a proposed project to tribes if the tribe has requested notice by the lead agency for projects proposed in that geographic area.

Three Native American tribes that are traditionally and culturally affiliated with the proposed project area (Pechanga Band of Luiseño Indians, Gabrieleño Band of Mission Indians, and San Luis Rey Band of Mission Indians) requested CPUC notification of proposed projects under AB 52. The CPUC mailed AB 52 notification letters for the proposed project to these three tribes on September 20, 2016, as required by PRC §21080.3.1(d).

3.5.3 Environmental Setting

Prehistoric and Historic Overview

Prehistoric Overview

Prehistory in southern California can be divided into three general time periods:

- **Paleo-Indian Period (circa 12,000 years before present [BP]).** Evidence in the archaeological record suggests that inhabitants of southern California appeared approximately 12,000 years ago on the Channel Islands. They lived primarily by fishing and collecting shellfish; fully developed maritime economies were present but very distinct from the Clovis tradition represented in the interior of North America. The San Dieguito complex is represented during this period by the presence of worked scrapers, leaf-shaped, and stemmed projectile points. Sites

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dating to the La Jolla complex are also present, based on the presence of flaked cobble tools, abundant groundstone, and flexed burials. The relationship between these two complexes is debatable; however, it is evident that human populations were established along the southern coast of California during the Paleo-Indian Period (SDG&E 2016).

- **Archaic Period (8,500 to 1,300 years BP).** The Archaic Period encompassed both a coastal and inland focus. The coastal Archaic Period is represented by the shell middens associated with the La Jolla complex, while the inland Archaic Period is represented by the Pauma complex (DoN 2015). Archaeological remains associated with the La Jolla complex include shellfish and fish remains, flaked cobble tools, basin metates, manos, discoidals, stone balls, and flexed burials (SDG&E 2016).
- **Late Prehistoric Period (1,300 to 200 years BP).** The San Luis Rey complex is divided into two periods: San Luis Rey I and San Luis Rey II. The two periods are differentiated by the presence of ceramics, pictographs, steatite arrowshaft straighteners, glass, and metal in the San Luis Rey II Period (SDG&E 2016). A significant increase in the use of *Donax gouldii* shell has been documented during this period, and deposits have been found along the coast of northern San Diego County. Small projectile points appeared during the Late Prehistoric Period, indicating the use of bow and arrow, common use of ceramics, and the replacement of inhumations with cremations. All of these characteristics belong to the San Luis Rey complex, which was defined by Meighan in 1954 (DoN 2015). The San Luis Rey complex also marked the arrival of Takic speakers from regions located farther inland (DoN 2015), and a change in the focus of land use and settlement patterns. Settlement began to focus on inland settings at both interior and upland locations, which is evident by the reoccupation of the Luiseño village, Topomai, around A.D. 900, after being abandoned for several thousands of years. Numerous upland sites were also reoccupied in the Case Springs area by A.D. 1200 (SDG&E 2016).

When the Spanish arrived in the area that is known today as MCB CPEN, it was occupied by Takic-speaking Native Americans known to the Spanish as the Luiseño. The Luiseño territory covered approximately 1,500 square miles of both coastal and interior southern California. The Luiseño language is placed within the Cupan group of the Takic family of the Uto-Aztecán, also known as the Southern California Shoshonean. At the time of Spanish contact, there were approximately 50 Luiseño Rancherías, with an average population of 200 each (DoN 2015).

Historic Overview

Europeans first entered the area that is now MCB CPEN in 1769, when the Portola expedition passed through on its journey north to Monterey. The expedition described native villages at Santa Margarita, Las Pulgas, and Cristianitos Canyon. The earliest permanent structures on MCB CPEN were described in an 1827 mission report, and consisted of a small adobe where the Santa Margarita Ranch House and a mission estancia at Las Flores were located (DoN 2015).

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California's first baptism was performed in 1769 in Cristianitos Canyon near what is now the Cristianitos Road entrance to MCB CPEN (United States Marine Corps 2010).

After Mexico gained its independence from Spain in 1821, much of the MCB CPEN area became part of Rancho San Onofre and Rancho Santa Margarita. These ranchos were acquired in 1841 by Pío and Andres Pico. In 1844, the Pico brothers acquired Las Flores, one of the few Indian pueblos established by the Mexican government. The Pico brothers then created Rancho Santa Margarita y Las Flores, and established a thriving cattle ranch (DoN 2015).

The Pico brothers began to have financial difficulties around 1862. They sold part of the rancho to their brother-in-law, Juan Forster, as an attempt to avoid losing it to creditors. Forster died in 1882 after completing a number of improvements to the rancho. The rancho was eventually transferred to James C. Flood and Richard O'Neill. O'Neill owned the property until it was acquired by the US Marine Corps in 1942 (DoN 2015).

Since its establishment in 1942, major developments at MCB CPEN have supported its mission as an amphibious training facility. Major construction activities occurred during World War II (1942 to 1945), the Korean War (1950 to 1953), and the Vietnam era (1963 to 1975). Since the end of the Cold War (1976 to 1989) until just recently, development has largely focused on upgrades of World War II-era facilities (DoN 2015).

Records Searches and Survey Results

Records Search Results

The records searches at the South Coastal and South Central Coastal Information Centers identified 36 previously recorded cultural resources within a 0.25-mile buffer of the proposed project. These resources include prehistoric and historic archaeological resources.

Cultural Resource Survey Results

Table 3.5-2 summarizes the cultural resources that were identified or relocated during proposed project cultural resource surveys, and their eligibility for listing in the CRHR. Portions of the resources listed in Table 3.5-2 are located within proposed project work areas.

~~Five~~ Seven resource sites and one archaeological district (see below) located within the proposed project work areas are eligible for listing in the CRHR. Isolated finds (i.e., isolates) identified in Table 3.5-2 are not considered eligible for listing in the CRHR because they lack research or data potential, meaning they do not contain information that would further our understanding of past activities in the area. Other resources are not eligible for listing in the CRHR because:

- The resource is partially or entirely destroyed and thus does not meet any of the criteria to be considered a historically significant resource, or
- The resource does not have any substantial research potential and does not meet any of the criteria to be considered a historically significant resource.

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Table 3.5-2 Cultural Resource Sites within the Proposed Project Area

Site	Description	Eligible for listing in CRHR?
CA-SDI-4411	Prehistoric faunal remains and lithic scatter, historic building foundation	Yes
CA-SDI-6693	Prehistoric metavolcanic flake	No
CA-SDI-13324	Prehistoric marine shell fragments, vertebrate material, anddebitage	Yes
CA-SDI-13325	Prehistoric occupation site with metavolcanic flakes,metavolcanics chopper, shell fragments, human remains, and fire-affected rock	Yes
CA-SDI-14005	Historic California Southern Railroad	Yes
CA-SDI-17545	Prehistoric metavolcanic flakes	Unevaluated Yes ^a
CA-SDI-19385	Prehistoric metavolcanic flake, retouched flake	No
CA-SDI-19386	Prehistoric lithic scatter	No
CA-SDI-20768	Historic scatter	Unevaluated Yes ^a
CA-SDI-21060	Prehistoric buried marine shell, debitage, and pottery	Yes
P-30-100134	Prehistoric isolate: metavolcanics flake	No
P-30-100135	Prehistoric isolate: quartz flake	No
P-30-100136	Prehistoric isolate: metavolcanics flake	No
P-37-026835	Prehistoric isolate: metavolcanics flake	No
P-37-031944	Prehistoric isolate: metavolcanics core	No
P-37-032861	Prehistoric isolate: basalt flake	No
San Mateo Archaeological District (CA-SDI-13071 (CA-ORA-22), CA-SDI-4282, CA-SDI-4535, and CA-SDI-8435)	Prehistoric cores, hammerstones, manos, metate fragments, pottery sherds, marine shell, bone, shell midden, lithicdebitage	Yes

Note:

- Cultural resource sites CA-SDI-17545 and CA-SDI-20768 [are unevaluated, but were previously assumed to be eligible by MCB CPEN. Both CA-SDI-17545 and CA-SDI-20768](#) overlap with access roads. SDG&E's previous authorization from MCB CPEN for access road grading included requirements to avoid these resources during access road grading.

Sources: (HDR, Inc. 2013, HDR, Inc. 2015a, HDR, Inc. 2015b, HDR, Inc. 2016a, WESTEC Services, Inc. 1980)

San Mateo Archaeological District

The San Mateo Archaeological District (SMAD) is an area encompassing four previously recorded sites found to have spatially contiguous artifact distribution: CA-SDI-13071 ([CA-](#)

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[ORA-22](#), CA-SDI-4282, CA-SDI-4535, and CA-SDI-8435. In 1981, the US Department of Transportation and the Federal Highway Administration submitted documentation to the US Department of the Interior requesting a determination of eligibility for inclusion in the National Register of Historic Places. The Keeper of the National Register determined the Archaeological District eligible for inclusion on the National Register of Historic Places on December 31, 1981.

CA-SDI-13071 is described as a large habitation site determined to be the ethnohistoric village of Panhe. Large portions of the site have been disturbed by previous development within MCB CPEN, paved roadways, and a paved parking lot. Previous testing and excavation of the site resulted in the recovery of lithicdebitage, cores, hammerstones, manos, metate fragments, pottery sherds, marine shell, and bone. CA-SDI-4282 contains a large lithic scatter. CA-SDI-4535 is described as “San Dieguito and La Jollan” artifacts that were collected due to eminent destruction by highway construction. CA-SDI-8435 contains buried shell midden, a hearth feature, and burials.

Tribal Cultural Resources

Native American Outreach Results

The NAHC responded to the CPUC’s request for a search of the Sacred Lands File on November 10, 2016. The NAHC indicated that no cultural resources listed in the Sacred Lands File are present in the proposed project area, but that the area is sensitive for potential tribal cultural resources. The Pala Band of Mission Indians responded on January 5, 2017, requesting consultation under AB 52.

AB 52 Consultation

Pursuant to PRC §21080.3.1, Native American tribes that request consultation under AB 52 have 30 days from receipt of the formal notification to request consultation. The CPUC received a consultation request from the Pechanga Band of Luiseño Indians on October 11, 2016, effectively initiating the consultation process. The CPUC has consulted with representatives from the Pechanga Band of Luiseño Indians to discuss the proposed project, obtain information on tribal cultural resources in the area, discuss potential impacts on tribal cultural resources, and obtain tribal recommendations on mitigation for impacts on tribal cultural resources. In response to their request for AB 52 consultation, the CPUC also consulted with representatives from the Pala Band of Mission Indians. Consultation is on-going.

The CPUC did not receive responses to the AB 52 notification letter from the Gabrieleño Band of Mission Indians or San Luis Rey Band of Mission Indians.

Tribal Cultural Resources and Context

The proposed project is located in an area that was historically occupied by the Luiseño and Juaneño people. During AB 52 consultation, tribes provided information on tribal cultural resources located within the proposed project area.

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Village of Panhe

The village of Panhe was the historical home of the Juaneño/Acjachemen people. For thousands of years, Native Americans erected dwellings, cultivated crops, and constructed sacred burial grounds within the village of Panhe (San Onofre Parks Foundation 2017). The village of Panhe was the largest settlement of Juaneño Indians with several hundred Native Americans at the time of Mission San Juan Capistrano's founding in 1776. The Franciscans renamed the village of Panhe as San Mateo, and San Mateo functioned as a mission rancheria for San Juan Capistrano until at least the 1820s (Jordan 2014). Recognized as one of the major villages of the Juaneño/Acjachemen people, the village of Panhe continues to be used as a ceremonial and reburial site.

The village of Panhe is a tribal cultural resource, which includes a cultural landscape that is important to Native Americans (personal communication Macarro 2016). The cultural landscape encompasses the entire area of Cristianitos Canyon near the Pacific Ocean, and extends south to SONGS Mesa; it includes ceremonial and resource gathering areas, as well as several archaeological sites and 'U'u'umay (meaning "gathering area") (pers. comm. Macarro 2017). Significant resources within these sites include artifacts and human remains.

Other Resources

A large number of Native American burials and cremations are known to have occurred in proximity to the proposed project area. These burials are common in the area because of the long history of Native Americans in the area and the large mission that occupied the area when Europeans settled in the area.

An additional place that is considered a significant tribal cultural resource in the proposed project area and vicinity includes Na'akwalpe (meaning "plain at the mouth") near SONGS Mesa (pers. comm. Macarro 2017). This area was used by Native Americans for ceremonies.

Paleontological Resources

Records Search

The SDNHM prepared a report summarizing the findings of the paleontological records search, which covered the proposed project alignment and all areas within 1 mile of the alignment. The SDNHM reviewed relevant published geologic maps and reports to determine the specific rock units underlying the alignment. The SDNHM also used geographic information system (GIS) to determine the paleontological sensitivity of proposed project pole structure locations based on the San Diego Department of Public Works classification system (SDNHM 2016).

The record search identified nine fossil localities within 1 mile of the proposed project; however, none of the fossil localities overlap with proposed project alignment, staging areas, or helicopter ILAs. Three of the localities are from geologic units that are not anticipated to be impacted by construction; the remaining six localities are from the Monterey and Santiago Formations, which are found within the proposed project alignment.

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Proposed Project Area Geologic Units and Associated Paleontological Sensitivity

Identifying the geologic units and associated fossil productivity allows for prediction of where fossils could or could not be encountered within the proposed project area. Figure 3.5-1 shows paleontological sensitivity in the proposed project area. The paleontological sensitivity of geologic units that underlie the proposed project area is shown in Table 3.5-3. A description of each geologic unit is provided below.

Holocene Alluvial Deposits

Holocene alluvial deposits occur in modern floodplains along San Mateo Creek and San Onofre Creek (Kennedy and Tan 2007), which intersect the southern half of the proposed project alignment. These deposits are generally less than 10,000 years old. Holocene alluvial deposits are assigned a low paleontological sensitivity because of their young geologic age and the lack of known fossil localities; however, these deposits may overlay sensitive geologic units that could be impacted where the contact is relatively shallow.

Quaternary Landslide Deposits

Landslide deposits from the Holocene and Pleistocene epochs (less than 750,000 years old) underlie much of the northern half of the proposed project alignment. These deposits appear to be derived from the Capistrano and Monterey Formations, which both have high paleontological sensitivity. It is possible that fossils may be discovered; however, without associated stratigraphic data, fossil remains may be of little scientific value. These deposits are therefore assigned a low paleontological sensitivity.

Pleistocene Alluvial Flood Plain Deposits

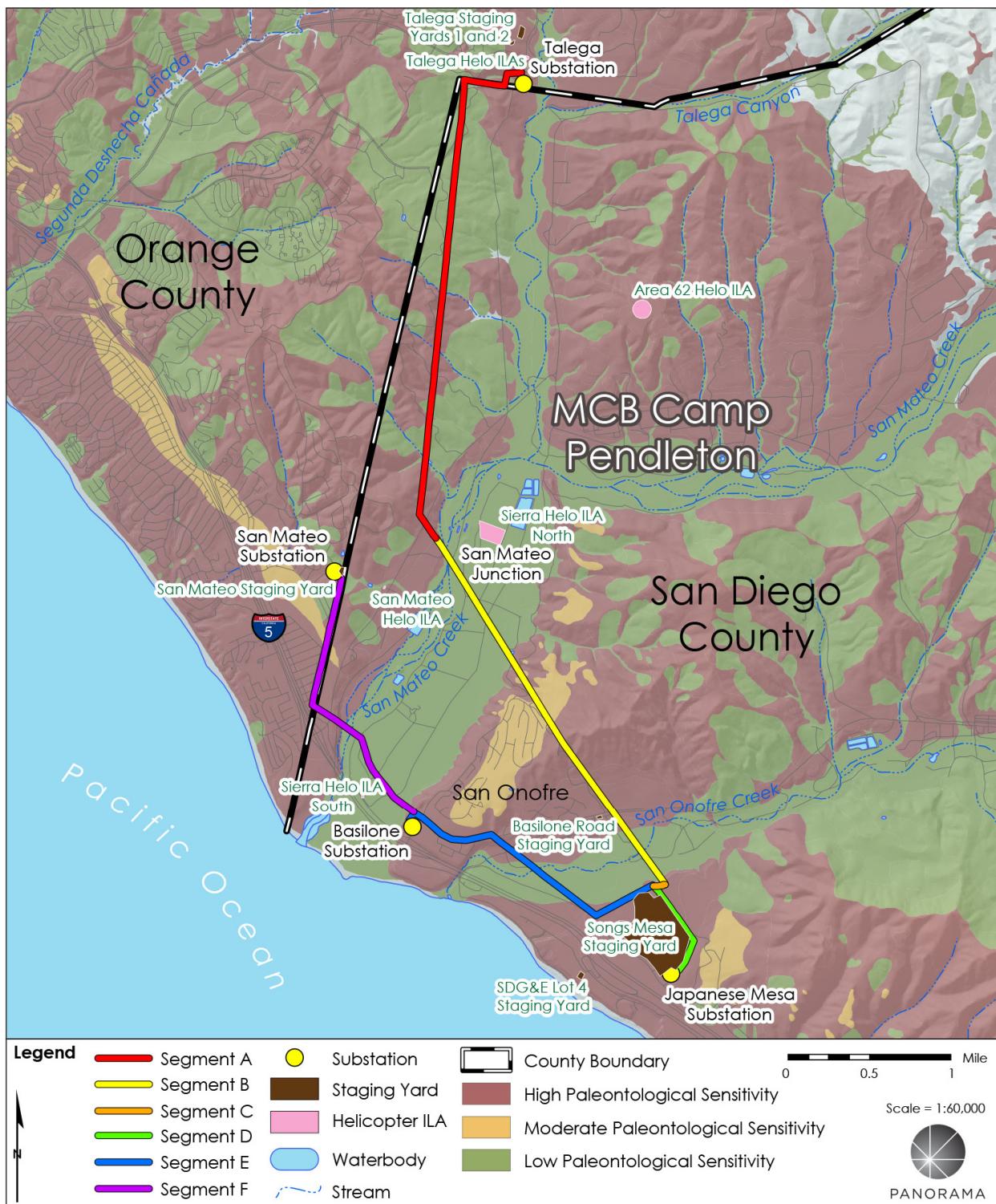
Fossil remains from Pleistocene alluvial flood plain deposits are somewhat rare. However, scientifically significant terrestrial vertebrate fossils (e.g., reptiles, birds, small mammals, and large-bodied “Ice-Age” mammals such as mammoth, bison, horse, and camel) have been recovered from several locations in San Diego County (Deméré and Walsh 1993); therefore, these deposits are assigned a high paleontological sensitivity.

Bay Point Formation

The Bay Point Formation consists of Pleistocene nearshore marine deposits (Kennedy and Tan 2007). This formation intermittently underlies the proposed project alignment near the coast, and on either side of the mouths of San Mateo Creek and San Onofre Creek. Diverse and well-preserved fossils of marine invertebrates (e.g., mollusks) and marine vertebrates (e.g., sharks, rays, and bony fishes) have been recovered from these deposits. The Bay Point Formation is therefore assigned a high paleontological sensitivity.

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Figure 3.5-1 Paleontological Sensitivity of the Proposed Project Area (Revised)



Source: (SDNHM 2016)

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Table 3.5-3 Paleontological Sensitivity of Geologic Units that Underlie the Proposed Project

Proposed Project Component	Geologic Unit	Paleontological Sensitivity
Power Line Segment		
Segment A	Capistrano Formation	High
	Monterey Formation	High
	Pleistocene Alluvial Flood Plain Deposits	High
	Santiago Formation	High
	Quaternary Landslide Deposits	Low
	Holocene Alluvial Deposits	Low
Segment B	Bay Point Formation	High
	Capistrano Formation	High
	Pleistocene Alluvial Flood Plain Deposits	High
	San Mateo Formation	High
	Lindavista Formation	Moderate
	Holocene Alluvial Deposits	Low
Segment C	Bay Point Formation	High
Segment D	Bay Point Formation	High
Segment E	Bay Point Formation	High
	Pleistocene Alluvial Flood Plain Deposits	High
	San Mateo Formation	High
	Holocene Alluvial Deposits	Low
Segment F	Bay Point Formation	High
	Pleistocene Alluvial Flood Plain Deposits	High
	San Mateo Formation	High
	Lindavista Formation	Moderate
	Holocene Alluvial Deposits	Low
	Quaternary Landslide Deposits	Low
Staging Yards		
Lemon Grove	Bay Point Formation	High
Basilone Road	Pleistocene Alluvial Flood Plain Deposits	High
Talega	Santiago Formation	High
SDG&E Lot 4	Bay Point Formation	High
San Mateo	San Mateo Formation	High

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Proposed Project Component	Geologic Unit	Paleontological Sensitivity
	Quaternary Landslide Deposits	Low
SONGS Mesa	San Mateo Formation	High
	Bay Point Formation	High
Helicopter Incidental Landing Areas		
Talega Heli 1	Quaternary Landslide Deposits	Low
Talega Heli 2	Santiago Formation	High
	Pleistocene Alluvial Flood Plain Deposits	High
Area 62 Heli	Pleistocene Alluvial Flood Plain Deposits	High
San Mateo Heli	Pleistocene Alluvial Flood Plain Deposits	High
Sierra North Heli	Holocene Alluvial Deposits	Low
Sierra South Heli	Holocene Alluvial Deposits	Low

Source: (SDNBM 2016)

Lindavista Formation

The marine and/or non-marine terrace deposits of the Early to Middle Pleistocene epoch Lindavista Formation rarely contain fossil localities. While fossil localities are rare, the fossilized remains of marine invertebrates (e.g., clams, scallops, snails, barnacles, and sand dollars) and marine vertebrates (e.g., sharks and baleen whales) have been collected from this formation in southwestern San Diego County. The Lindavista Formation is therefore assigned a moderate paleontological sensitivity.

San Mateo Formation

The San Mateo Formation, Late Pliocene to Late Miocene in age, has produced abundant and scientifically significant fossil remains of marine vertebrates (e.g., sharks, rays, bony fish, sea birds, and marine mammals) and terrestrial vertebrates (e.g., horses, camels, llamas, and peccaries). Specific to the proposed project area, the exposures on MCB CPEN have produced diverse assemblages of marine invertebrates (e.g., clams, scallops, snails, and sea urchins) (Deméré and Walsh 1993). The San Mateo Formation is therefore assigned a high paleontological sensitivity.

Capistrano Formation

The Capistrano Formation consists of Late Miocene marine deposits, approximately 5 to 7 million years old. While few fossils have been recovered from this formation in San Diego County, the Capistrano Formation is known to produce diverse assemblages of fossil marine vertebrates (e.g., sharks, rays, bony fishes, sea birds, toothed whales, baleen whales, sea cows, fur seals, and walruses) in Orange County. This formation is thus assigned a high paleontological sensitivity.

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Monterey Formation

The Monterey Formation consists of Middle to Late Miocene marine deposits. Four recorded fossil localities from the Monterey Formation are located within 1 mile of the proposed project area (SDNHM 2016). These localities yielded fossilized remains of marine invertebrates (e.g., crabs) and marine vertebrates (e.g., sharks, bony fish, sea lions, dolphins, baleen whales, and sea cows). The Monterey Formation is also known for its diverse and well-preserved assemblages of marine microfossils (e.g., diatoms, silicoflagellates, and radiolarians commonly found in the siliceous shales, and diatomites, coccoliths, and foraminiferans commonly found in the argillaceous shales) (Deméré and Walsh 1993). The Monterey Formation is assigned a high paleontological sensitivity because of its extremely diverse assemblages preserved in its deposits.

Santiago Formation

The Santiago Formation consists of marine and non-marine sandstone, siltstone, and claystone from the Middle Eocene (Cranham, Camilleri and Jaffe 1994). Although the majority of the Santiago Formation is non-marine, some deposits contain remains of various types of estuarine and marine mollusks (Wilson 1972). Well-preserved remains of turtles, snakes, lizards, crocodiles, birds, and mammals (e.g., opossums, insectivores, primates, rodents, brontotheres, tapirs, protoreodonts, and other early artiodactyls) have been found in the non-marine portions of the formation (Deméré and Walsh 2003). Fossils from the Santiago Formation and other Eocene formations in the San Diego area make the Eocene deposits of San Diego County among the most significant in North America (Deméré and Walsh 2003). Two recorded fossil localities from the Santiago Formation are located within 1 mile of the proposed project (SDNHM 2016). These localities yielded fossilized remains of marine invertebrates (e.g., oysters) and terrestrial vertebrates (e.g., birds and rodents). The Santiago Formation is assigned a high paleontological sensitivity due to its production of abundant and generally well-preserved large and diverse assemblages of fossil land mammal faunas.

3.5.4 Applicant Proposed Measures

SDG&E has proposed measures to reduce environmental impacts. Several APMs have been modified or superseded with mitigation measures to address environmental impacts. Table 3.5-4 summarizes the APMs proposed to reduce impacts on cultural, tribal cultural, and paleontological resources and, if applicable, mitigation measures to supersede APMs.

Table 3.5-4 Applicant Proposed Measures for Cultural, Tribal Cultural, and Paleontological Resources

APM Number	Requirement	Revised or Superseded?
APM CUL-01: Stub Pole Structure in San Mateo Archaeological District (SMAD)	SDG&E will conduct additional surveys and testing and evaluation to assess whether or not the proposed stub pole structure will affect buried cultural deposits in the SMAD. A qualified archaeologist and Native American monitor will monitor all overhead work within the SMAD to ensure no impact is made during the ingress and egress of large vehicles. All ground disturbance work within the SMAD will be monitored by a qualified archaeologist and Native American	Superseded by MM Cultural-1: Cultural Resource Monitoring, MM Cultural-2: Cultural

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APM Number	Requirement	Revised or Superseded?
	monitor. As necessary and as feasible, SDG&E will investigate and implement additional design adjustments to avoid and/or minimize impacts to this resource.	Resource Avoidance Procedures, and MM Cultural-3: Discoveries of Cultural Resources
APM CUL-02: Additional Avoidance and Minimization	SDG&E will implement additional avoidance and minimization recommendations described in the Recommendations for Cultural Resources Protection and Avoidance for the TL 695 and TL 6971 Reconstructor Project Report. This document describes avoidance and minimization recommendations at each Proposed Project component that may have an adverse effect on cultural resources. The recommendations include no access roadway improvements within specified cultural sites, use of a truck mounted guard structure at guard structure 3, periodic archaeological and Native American spot-checking of construction activities, and other recommendations.	No revisions
APM CUL-03: Cultural Resources Sensitivity Training	Prior to construction or ground-disturbing activities, all SDG&E, contractor, and subcontractor personnel will receive training regarding the appropriate work practices necessary to effectively implement standard operating procedures and APMs relating to cultural resources, including the potential for exposing subsurface cultural resources and paleontological resources. This training will include presentation of the procedures to be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains, as well as of paleontological resources. A qualified archaeologist will demarcate work areas prior to the start of construction so as to minimize impacts to Environmentally Sensitive Areas. Construction crews will be instructed to work within designated work areas.	Superseded by MM Cultural-4: Worker Training
APM CUL-04: Archaeological Monitoring	<p>A qualified archaeologist and Native American monitor will attend preconstruction meetings, as needed, and a qualified archaeological and Native American monitor will monitor all activities in the vicinity of all known cultural resources within the Proposed Project area. The requirements for archaeological and Native American monitoring will be noted on the construction plans. The archaeologist's duties will include monitoring, evaluation of any finds, analysis of materials, and preparation of a monitoring results report conforming to Archaeological Resource Management Reports guidelines.</p> <p>In the event that cultural resources are discovered, the archaeologist would have the authority to divert or temporarily halt ground disturbance to allow evaluation of potentially significant cultural resources. The archaeologist would contact SDG&E's Cultural Resource Specialist, the Environmental Project Manager, and MCB Camp Pendleton Archaeologist immediately at the time of discovery. The archaeologist, in consultation with SDG&E's Cultural Resource Specialist, and MCB Camp Pendleton Archaeologist shall determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist the Environmental</p>	Superseded by MM Cultural-1: Cultural Resource Monitoring, MM Cultural-2: Cultural Resource Avoidance Procedures, and MM Cultural-3: Discoveries of Cultural Resources

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APM Number	Requirement	Revised or Superseded?
	<p>Project Manager, and MCB Camp Pendleton Archaeologist would have to concur with the evaluation procedures to be performed before construction activities would be allowed to resume. For significant cultural resources, preservation in place would be the preferred manner of mitigating impacts. For resources that could not be preserved in place, a Research Design and Data Recovery Program would be prepared and upon approval from MCBCP would be carried out to lessen impacts. A cultural resources curation plan would be developed and implemented if resources cannot be preserved in place, and are considered to be unique and important. All collected cultural remains would be cataloged, and permanently curated with an appropriate institution. All artifacts would be analyzed to identify function and chronology as they relate to the history of the area. Faunal material would be identified as to species.</p>	
APM CUL-05: Unanticipated Discovery of Human Remains	<p>If human remains are encountered during construction, SDG&E will comply with California State law (Health and Safety Code Section 7050.5; PRC Sections 5097.94, 5097.98 and 5097.99). This law specifies that work will stop immediately in any areas where human remains or suspected human remains are encountered. The appropriate agency and SDG&E will be notified of any such discovery. SDG&E will contact the Office of the Medical Examiner. The Medical Examiner has two working days to examine the remains after being notified by SDG&E. Under some circumstances a determination may be made without direct input from the Medical Examiner (e.g., when the remains can be positively identified by the archaeologist as being non-human). When the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will immediately notify the identified most likely descendant (MLD) and the MLD has 24 hours to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within 24 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and MLD, the NAHC will mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall re-inter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.</p>	Superseded by MM Cultural-5: Procedure for Discovery of Human Remains
APM CUL-06: Paleontological Monitoring	<p>A paleontological monitor will work under the direction of a qualified Project paleontologist and will be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits for the eight pole structures located within paleontologically sensitive formations (i.e., Pomerado Conglomerate, Late Pleistocene to Holocene-age channel deposits). A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.</p>	Superseded by MM Paleo-1: Paleontological Monitoring
APM CUL-07: Unanticipated	<p>In the event that fossils are encountered, the paleontological monitor would have the authority to divert or temporarily halt</p>	Superseded by MM Paleo-2:

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APM Number	Requirement	Revised or Superseded?
Discovery of Fossils	construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist would determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager would have to concur with the evaluation procedures to be performed before construction activities would be allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. If fossils are discovered, the paleontologist (or paleontological monitor) would recover them along with pertinent stratigraphic data. In most cases, this fossil salvage can be completed in a short period of time. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage would be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections, and a paleontological monitoring report would be prepared.	Evaluation and Treatment of Previously Undiscovered Paleontological Resources

3.5.5 Impact Analysis

Summary of Impacts

Table 3.5-5 presents a summary of the CEQA significance criteria and impacts on cultural, tribal cultural, and paleontological resources that would occur during construction, operation, and maintenance of the proposed project.

Table 3.5-5 Summary of Proposed Project Impacts on Cultural, Tribal Cultural, and Paleontological Resources

Would the Proposed Project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Would the Proposed Project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: <ul style="list-style-type: none"> i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC §5020.1(k)?, or ii. 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 PRC §5024.1? In applying the criteria set forth in subdivision (c) of PRC §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Discussion

a) Would the proposed project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	Significance Determination
	Less than significant with mitigation

Impacts on CRHR-eligible historical and prehistorical resources identified in Table 3.5-2 (consistent with the definition of a historical resource under CEQA Guidelines Section 15064.5) are discussed under this significance criterion.

Construction

Known Resources (Excluding the San Mateo Archaeological District)

Field surveys identified five CRHR-eligible resources in the proposed project area: CA-SDI-4411, CA-SDI-13324, CA-SDI-13325, CA-SDI-14005, and CA-SDI-21060 (refer to Table 3.5-2). Two resources that have not been evaluated for listing in the CRHR, CA-SDI-17545 and CA-SDI-20768, were also identified in the proposed project area; these resources are assumed to be

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eligible for listing on the CRHR because they have not been evaluated. Impacts on eligible resources from construction of the proposed project are discussed below.

Construction equipment and vehicles would cross CA-SDI-14005, the California Southern Railroad, for ingress/egress to and from a staging yard. No ground-disturbing activities such as excavation or grading would occur within or near the resource, and the existing access road would be used without any road modifications. Crossing the railroad would not affect the integrity of the resource; no impact would occur.

Access road grading and maintenance activities are proposed within the boundaries of CA-SDI-4411, CA-SDI-21060, CA-SDI-17545, and CA-SDI-20768. Impacts on cultural resources from ground disturbance during grading and maintenance of access roads could result in a substantial adverse change in the significance of cultural resources occurring within the access roads, which would be a significant impact. MM Cultural-6 requires SDG&E to avoid direct impacts on these resources, conduct flagging and monitoring during access road maintenance activities, and develop a discovery plan with protocols to follow should a resource be uncovered. The SHPO concurred with the assessment of no adverse effect on cultural resources from access road maintenance activities with the conditions included in MM Cultural-6 (SHPO 2015). Impacts on CRHR-eligible resources from access road grading would be less than significant with mitigation.

Excavation and pole installation, vegetation removal, and other ground-disturbing activities would occur within portions of CA-SDI-4411, CA-SDI-13324, and CA-SDI-13325 that could damage the resources and result in a significant impact. SDG&E would follow the avoidance and minimization recommendations in the Recommendations for Cultural Resources Protection and Avoidance report (HDR, Inc. 2015b) per APM CUL-02. However, impacts would remain significant because APM CUL-02 does not specify procedures to follow if resources are encountered. MM Cultural-1 requires monitoring of ground-disturbing activities, and MM Cultural-2 specifies procedures for avoidance of known cultural resources, including project redesign to avoid resources wherever feasible, and minimize impacts where resources cannot be avoided. Implementation of MM Cultural-1 and MM Cultural-2 (in addition to APM CUL-02) would reduce impacts on CRHR-eligible resources to less than significant.

San Mateo Archaeological District

The SMAD is an area encompassing four previously recorded resource sites found to have spatially contiguous artifact distribution. Activities proposed within the SMAD include pole top work, conductor removal, vegetation removal, work area access, installation of an anchor structure within a 36-inch diameter hole, and installation of one guard structure. The hole for the anchor structure and the guard structure would be located outside any delineated resource site boundary, but within the boundary of the SMAD (HDR, Inc. 2016b). Any ground-disturbing activities within the SMAD, regardless of whether within bounded sites or not, could damage resources. ~~Ground disturbing activities could damage resources within the SMAD,~~ causing a significant impact. APM CUL-02 requires SDG&E to implement the recommendations

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for construction activities within the SMAD in the Recommendations for Cultural Resources Protection and Avoidance report (HDR, Inc. 2015b), including:

1. Using a truck-mounted guard rather than a temporary pole structure for the guard structure within the SMAD,
2. Monitoring excavation and all vegetation trimming along footpaths used to access work areas,
3. Avoiding road improvements within the SMAD, and
4. Spot-checking overhead work within the SMAD to ensure no impact occurs from the ingress and egress of construction vehicles.

APM CUL-02 would reduce the potential for impact by reducing earthwork and disturbance in the SMAD, but impacts would remain significant because earth disturbance would not be fully avoided and APM CUL-02 does not specify procedures to follow should a resource be encountered. MM Cultural-1 requires SDG&E to monitor ground-disturbing activities. MM Cultural-2 defines procedures for cultural resource avoidance including project redesign to avoid known resources wherever feasible, and implementation of minimization measures for any resources that cannot be fully avoided. Impacts on the SMAD would be less than significant with mitigation.

Previously Undiscovered Resources

Construction of the proposed project would include ground disturbance that could expose previously undiscovered cultural resources (e.g., CRHR-eligible resources). It is likely that previously undiscovered resources are present in the proposed project area given the abundance of cultural resources in the area, the presence of a village traditional cultural property, and because several areas within the cultural resources survey area had low visibility due to dense vegetation and steep terrain. Ground-disturbing activities would include:

- Removal of existing poles
- Installation of new poles
- Grading and/or blading of access roads and temporary work areas
- Vegetation removal for staging yards and temporary work areas
- Work area access

If a previously undiscovered CRHR-eligible resource is encountered during ground-disturbing activities, the resource could be damaged. Damage to CRHR-eligible resources would be a significant impact. MM Cultural-1 requires SDG&E to monitor ground-disturbing activities. MM Cultural-3 specifies procedures for discoveries of cultural resources including halting work, evaluating and avoiding any previously undiscovered resources, and implementing procedures for avoidance and minimization of impacts on significant resources. MM Cultural-4 requires SDG&E to train construction personnel to effectively implement the mitigation measures and to recognize basic signs of a potential cultural resource prior to the start of construction. Implementation of MM Cultural-1, MM Cultural-3, and MM Cultural-4 would reduce impacts on CRHR-eligible resources to less than significant.

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Operation and Maintenance

Operation and maintenance activities associated with the proposed project would be conducted in areas that would be disturbed during proposed project construction. Maintenance vehicles would use access roads, and all maintenance activities would be conducted within previously disturbed areas. SDG&E would continue to conduct access road maintenance and grading. Access road grading activities could impact significant cultural resources located within access roads and cause a significant impact. MM Cultural-6 specifies requirements for access road grading and maintenance activities to avoid cultural resources located within access roads. Impacts on cultural resources would be less than significant with mitigation. SDG&E compliance with a future access road agreement with MCB CPEN could satisfy the requirements of MM Cultural-6 if the agreement conditions are equal or more effective in mitigating impacts on cultural resources.

Mitigation Measures: MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-4, and MM Cultural-6

b) Would the proposed project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	Significance Determination
	Less than significant with mitigation

Construction

The SMAD is a No unique archaeological resources, as defined by CEQA Guidelines Section 15064.5, were found during cultural resource surveys for the proposed project; however, Construction could impact the SMAD and previously undiscovered unique archaeological resources. Impacts on the SMAD and previously undiscovered unique archaeological resources are for the reasons described in Impact a) above. Damage to a unique archaeological resource would be a significant impact. MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-4, and MM Cultural-6 require cultural resource monitoring during construction, avoidance of resources where feasible, treatment of cultural resources that cannot be avoided, and cultural resources training for all project personnel. Impacts on unique archaeological resources would be less than significant with mitigation.

Operation and Maintenance

Operation and maintenance activities associated with the proposed project would be conducted in areas that would be disturbed during construction of the proposed project. Maintenance vehicles would use access roads, and all maintenance activities would be conducted within previously disturbed areas. Access road grading activities could impact significant archaeological resources located within access roads and cause a significant impact. MM Cultural-6 specifies requirements for access road grading and maintenance activities to avoid archaeological resources located within access roads. Impacts on archaeological resources would be less than significant with mitigation. SDG&E compliance with a future access road agreement with MCB CPEN could satisfy the requirements of MM Cultural-6 if the agreement conditions are equal or more effective in mitigating impacts on archaeological resources.

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Mitigation Measures: MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-4, and MM Cultural-6

c) Would the proposed project disturb any human remains, including those interred outside of formal cemeteries?	Significance Determination
	Less than significant with mitigation

Construction

~~Human remains are known to occur within the SMAD and near proposed work areas. No recorded Native American or other human remains have been identified within or adjacent to the proposed project area; however, it is possible that unrecorded human remains could be disturbed during construction.~~ The unintended discovery of human remains during ground-disturbing activities could result in damage to the remains, which would be a significant impact. APM CUL-05 requires SDG&E to comply with California laws applicable to the discovery of human remains (Health and Safety Code §7050.5 and PRC §§5097.94, 5097.98 and 5097.99); however, impacts would remain significant because APM CUL-05 does not specify coordination with MCB CPEN for resources found within the military base or training of construction personnel. MM Cultural-4 requires that construction personnel be trained to effectively implement the mitigation measures, including recognizing basic signs of human remains. MM Cultural-5 supersedes APM CUL-05 and outlines the required procedures SDG&E would follow upon the discovery of human remains. These procedures include halting construction activities around the find, examination of the remains by the County Medical Examiner or MCB CPEN if the find is within MCB CPEN, and notification of the appropriate Native American tribe if the remains appear to be Native American. Implementation of MM Cultural-4 and MM Cultural-5 would reduce impacts on previously unrecorded human remains to less than significant.

Operation and Maintenance

Operation and maintenance activities associated with the proposed project would be conducted in areas that would be disturbed during proposed project construction. Operation and maintenance activities would not differ from those currently conducted for the existing power line. Maintenance vehicles would use existing access roads, and all maintenance activities would be conducted within previously disturbed areas. No excavation or earth disturbance in new areas would be required during operation and maintenance of the proposed project; therefore, there would be no potential to encounter and impact human remains. No impact would occur.

Mitigation Measures: MM Cultural-4 and MM Cultural-5

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d) Would the proposed project cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significance Determination Less than significant with mitigation
<ul style="list-style-type: none">i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC §5020.1(k)?, orii. 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 PRC §5024.1? In applying the criteria set forth in subdivision (c) of PRC §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	

Construction

Ground Disturbance

The proposed project includes activities that would disturb the soil surface within the geographic extent of tribal cultural resources. These activities include:

- Pole foundation construction
- Pole installation
- Pole removal
- Underground power line construction
- Anchoring during conductor stringing
- Vegetation clearing and grading for work area access
- Regulator station removal
- Access road grading

Grading of access roads could result in a significant impact on tribal cultural resources that occur within the access roads. MM Cultural-6 requires SDG&E to avoid direct impacts on cultural resources, conduct monitoring during access road maintenance activities, and develop a discovery plan with protocols to follow should a resource be uncovered. Through implementation of MM Cultural-6, the impacts on tribal cultural resources from access road grading would be less than significant.

Ground-disturbing activities such as excavation, grading, vegetation removal, drilling, and blasting during pole foundation construction, pole installation, and conductor stringing could unearth and damage or destroy tribal cultural resources, which would be a significant impact.

MM Cultural-1 requires cultural resource monitoring during all ground-disturbing activities to verify that the avoidance procedures defined in the mitigation measures are properly implemented. MM Cultural-2 defines procedures for avoidance of cultural resources, including demarcation of avoidance areas and buffer areas. MM Cultural-3 defines the procedures SDG&E must implement if a tribal cultural resource is discovered to avoid adverse effects on

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resources. MM Cultural-4 requires SDG&E to train workers on how to implement the cultural resource mitigation measures. MM Cultural-5 describes procedures to follow in the event human remains are discovered. The impacts on tribal cultural resources would be less than significant with mitigation.

Helicopter Take-off and Landing

No grading or vegetation removal would occur within the helicopter ILAs. The Talega West and Talega East ILAs are paved and no ground disturbance would occur from use of these ILAs. Use of the Talega ILAs would not disturb any tribal cultural resource. The Sierra North and Sierra South ILAs are located in an area that is highly sensitive for tribal cultural resources; however, the ILAs are in previously disturbed areas and no site preparation or earth disturbance would occur from use of the ILAs. The impact on tribal cultural resources from use of helicopter ILAs including helicopter take-off and landing would be less than significant.

Material Staging

The SONGS Mesa staging yard and SDG&E Lot 4 staging yard are within an area that is currently covered in asphalt, and the existing asphalt layer would not be disturbed by project storage and staging activities. Staging within SONGS Mesa and SDG&E Lot 4 would not impact a tribal cultural resource.

Vegetation removal and fence installation would occur at staging yards that are not covered with asphalt. Several of the staging areas occur within the boundaries of tribal cultural resources. Vegetation removal and fence installation could potentially damage or destroy a tribal cultural resource, which would be a significant impact. MM Cultural-1 requires cultural resource and tribal cultural resource monitoring at all areas of disturbance. MM Cultural-2 defines measures to demarcate resources and buffer areas to avoid impacts on cultural resources. MM Cultural-3 defines the procedures SDG&E must implement if a tribal cultural resource is discovered during staging yard preparation to avoid adverse effects on resources. MM Cultural-4 requires worker training to implement the procedures in the mitigation measures. MM Cultural-5 describes procedures to follow in the event human remains are discovered. The impact on tribal cultural resources from staging yard development in native soil would be less than significant with mitigation.

Noise

Construction vehicles and equipment used to construct the proposed project would produce noise during pole foundation construction, pole installation, conductor stringing, and pole removal. Noise produced during construction of the proposed project would be temporary (eight months of construction) and limited to one to seven days in each pole work area because workers and activities would move along the power line throughout the construction duration. Helicopter noise would be limited to helicopter use periods: light-duty helicopters would be used for approximately four days, and medium- or heavy-duty helicopters would be used for up to 10 days during construction. The noise produced from helicopters and equipment during construction would be similar to existing noise from helicopters and military vehicles within

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MCB CPEN (refer to Section 3.12: Noise). The noise impact on tribal cultural resources would be less than significant due to the temporary nature of the construction noise.

Operation and Maintenance

Ground Disturbance

Operation and maintenance of the proposed project would occur within existing access roads or areas that would be disturbed during construction of the proposed project. Operation and maintenance would not require ground disturbance in any new areas. No tribal cultural resources could be encountered during operation and maintenance because ground disturbance would not occur in undisturbed areas. No impact would occur.

Noise

The proposed 69-kV conductor would replace existing 69-kV conductor within the existing transmission corridors. The potential corona noise generated by the reconducted power lines would be the same as the existing power lines (refer to Section 3.12: Noise). The proposed project would not cause a permanent increase in noise in the area. Operation of the line would not cause noise impacts on a tribal cultural resource. No impact would occur.

Aesthetics

Replaced Conductor and Power Poles

The existing power poles and conductor would be replaced within Segments A, D, and E. The visual impacts from the replacement poles and conductor along Segments A, D, and E are analyzed in detail in Section 3.1: Aesthetics. Figures 3.1-3 through 3.1-14 illustrate the existing visual conditions and visual change that would occur from the proposed project. In Segments D and E, the new poles and conductor would result in a low level of perceptible visual change, because the proposed power line and pole structures would be comparable to the existing poles and conductor. In Segment A, the new poles and conductor would result in a low level of visual change, because the new pole structures would be shorter and smaller than the existing, visually dominant steel lattice towers in the same transmission corridor. The impact on the cultural landscape would be less than significant due to the low level of visual change that would result from the project.

New Conductor

69-kV conductor would be added to existing steel lattice towers in Segment B. The additional conductor on existing structures within Segment B would result in a nearly imperceptible change in visual quality because the additional conductor would not change the appearance of the visually dominant steel lattice towers, and the conductor would be visually similar to the existing wires on the structures. The impact on the cultural landscape would be less than significant due to the low level of visual change.

Underground Power Line

Conductor would be installed underground in Segment C. The installation of an underground power line in Segment C would not impact visual quality in the proposed project area because

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the power line would be buried. The underground power line would have no aesthetic impact on the cultural landscape.

Removal of Conductor

Conductor would be removed and poles would be topped in Segment F. The removal of conductor and topping of the poles in Segment F would not have an adverse visual impact because reducing the height of the poles would make them less visually prominent. The conductor removal would have no adverse impact on the cultural landscape.

Mitigation Measures: MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-4, MM Cultural-5, and MM Cultural-6.

e) Would the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Significance Determination
	Less than significant with mitigation

Construction

No recorded paleontological resources or unique geologic features have been identified within proposed project impact areas; therefore, no impact on known unique paleontological resources or unique geologic features would occur.

Power Lines

Previously undiscovered paleontological resources could be damaged while replacing poles along Segments A, B, D, and E, and trenching along Segment C of the reconducted power lines. Excavation, pole installation, grading, and other ground-disturbing activities would occur within geologic units that have a moderate to high sensitivity for paleontological resources. Excavation and ground-disturbing activities could result in the physical destruction of buried fossils.

Construction activities would involve excavation to a maximum depth of approximately 30 feet for direct-bury and micropile foundations, 40 feet for concrete pier foundations, and 14 feet for trenching and vault installation. Access road grading would be limited to surface layers and would not impact paleontological resources because the access road maintenance would occur within existing areas of disturbance. Geologic units that underlie the power line alignment with a moderate to high paleontological sensitivity include the Bay Point Formation, Capistrano Formation, Monterey Formation, Pleistocene Alluvial Flood Plain Deposits, Santiago Formation, San Mateo Formation, and Lindavista Formation (see Table 3.5-2). The physical destruction of a unique fossil locality would be a significant impact. APM CUL-06 requires paleontological monitoring, and APM CUL-07 describes procedures to follow for unanticipated discovery of paleontological resources. Impacts would remain significant with implementation of APM CUL-06 and APM CUL-07 because APM CUL-06 limits monitoring to eight pole structures and there would be more than eight pole structures within paleontologically sensitive formations, and APM CUL-07 does not specify coordination requirements with MCB CPEN. MM Paleo-1

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supersedes APM CUL-06 and requires SDG&E to monitor all ground-disturbing activities that would occur in areas with moderate to high paleontological sensitivity. MM Paleo-2 supersedes APM CUL-07 and includes specific provisions to address discovery of paleontological resources and minimize effects to these resources. MM Paleo-2 requires SDG&E to inspect and evaluate discovered resources, mitigate impacts through preservation in place or recovery of the fossil remains, and, if the remains are recovered, curate the remains at an accredited institution. MM Cultural-³⁴ requires that construction personnel be trained to effectively implement the mitigation measures, including recognizing basic signs of paleontological resources. Impacts on paleontological resources would be less than significant with mitigation.

Staging Yards

All of the proposed staging yards are almost entirely underlain by geologic units with high paleontological sensitivity (Bay Point Formation, Pleistocene Alluvial Flood Plain Deposits, Santiago Formation, and San Mateo Formation); however, the proposed staging yards have all been heavily disturbed through either current or previous use for staging, or grading and vegetation removal. Ground-disturbing activities at staging yards would be limited to equipment access, vegetation removal, and the installation of fencing; no excavation is proposed within the staging yards. The likelihood of encountering a paleontological resource within staging yards would be low, because soils that may be disturbed during project activities have been heavily disturbed by past activities, and have a low potential for containing paleontological resources. Impacts on paleontological resources would be less than significant.

Helicopter Incidental Landing Areas

Construction activities at helicopter ILAs would be limited to helicopter landing and take-off; no ground-disturbing activities would occur in these areas. No impact on paleontological resources would occur.

Operation and Maintenance

Operation and maintenance activities associated with the proposed project would be conducted in areas that would be disturbed during proposed project construction. Inspection and routine maintenance activities would not differ from those currently conducted for the existing power lines. Maintenance vehicles would use access roads and would not disturb undeveloped lands. There is no potential to encounter paleontological resources during operation and maintenance because no earth disturbance would be conducted in areas that could contain paleontological resources. No impact would occur.

There would be no impact on unique geologic features during operation because none exist in the proposed project area.

Mitigation Measures: MM Paleo-1, MM Paleo-2, and MM Cultural-³⁴

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3.5.6 Mitigation Measures

MM Cultural-1: Cultural Resource Monitoring

Qualified Cultural Resource Specialist. SDG&E shall retain a qualified cultural resource professional that meets the standards as specified in the Secretary of the Interior's Professional Qualification Standards (36 Code of Federal Regulations [CFR] Part 61) and has experience with local Native American history, traditions and customs. SDG&E shall provide the name and credentials of the Qualified Cultural Resource Specialist(s) to the CPUC and MCB CPEN for approval at least 14 days prior to construction.

Qualified Cultural Resource Monitors. SDG&E shall retain qualified cultural resource monitors who have experience conducting cultural resource monitoring in the region on projects of similar size. SDG&E shall provide the name and credentials of proposed cultural resource monitors to the CPUC and MCB CPEN for approval at least 14 days prior to construction.

Tribal Cultural Monitor. SDG&E shall retain a tribal cultural monitor(s) in consultation with tribes identified by the Native American Heritage Commission (NAHC) to be traditionally and culturally affiliated with the proposed project area. The tribal cultural monitor(s) shall monitor all ground-disturbing activities, represent tribal concerns, and communicate necessary information with their respective tribal councils and/or cultural communities. SDG&E shall provide the documentation of coordination and outreach efforts and the name and credentials of the proposed Native American monitor(s) to the CPUC and MCB CPEN for approval at least 14 days prior to construction.

Cultural Resource Monitoring

- Cultural resource monitoring shall be conducted during all ground-disturbing activities (i.e., vegetation clearing, excavation, grading, and staging yard preparation within unpaved staging yards). The requirements for archaeological monitoring and tribal cultural shall be noted on construction plans and the worker environmental awareness training handouts. Monitors may cease monitoring if sterile soil and/or bedrock is encountered.
- Monitoring teams shall work under the direct supervision of the Qualified Cultural Resource Specialist in conjunction with a tribal cultural monitor. The Qualified Cultural Resources Specialist and tribal cultural monitor shall attend preconstruction meetings for the project. Monitoring teams shall include one qualified cultural resource monitor and one tribal cultural monitor. In the event that ground-disturbing activities occur simultaneously in multiple locations, a monitoring team shall be required at each location.
- The purpose of cultural resource monitoring is to ensure proper implementation of all avoidance procedures so that cultural resources, if present, are not irretrievably lost, damaged or destroyed, or otherwise adversely affected. If any cultural resources are identified, the provisions in MM Cultural-3 shall be followed.

Applicable Locations: All areas of ground disturbance

Performance Standards and Timing:

Before Construction:

Qualified cultural resource specialist, cultural resource monitors, and tribal cultural monitors are retained and approved by the CPUC and MCB CPEN

During Construction:

Cultural resource monitoring is conducted in all areas of ground disturbance

After Construction:

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MM Cultural-2: Cultural Resource Avoidance Procedures

SDG&E shall implement measures to avoid impacts on cultural resources, wherever feasible. Avoidance means that no activities associated with the project that may affect cultural resources shall occur within the boundaries of the resource, including any defined buffer zones. SDG&E shall implement the following procedures to avoid direct and indirect effects on cultural resources:

1. All known cultural resources shall be physically demarcated under the direction of the Qualified Cultural Resource Specialist, in consultation with the tribal cultural monitor, and excluded from proposed project work areas. All California Register of Historic Resources (CRHR)-eligible resources within the project area shall be clearly delineated with coded flagging or other effective marking, prior to implementing any activities that have the potential to affect cultural resources. Construction crews shall be instructed to work within designated approved work areas.
2. Linear sites may be crossed or bounded in areas where their features or characteristics clearly lack historic integrity, i.e., where those portions (taking into account any buffer zones related to setting) do not contribute to site eligibility or values.
3. When any changes in proposed activities are necessary to avoid cultural resources (e.g., project modifications, redesign, or elimination; removing old or confusing project markings or engineering stakes within site boundaries; or revising maps or changing specifications), these changes shall be completed before initiating any activities in the area. Any design modifications to avoid impacts shall be submitted to the CPUC at least 14 days prior to construction.

Where avoidance of all activities within the resource boundaries is infeasible (e.g., where the existing pole is located within the boundaries of a cultural resource or existing access roads are located within resource boundaries), SDG&E shall define methods to minimize potential disturbance or destruction of cultural resources including limiting work areas and equipment, use of same hole set for pole replacements, or other minimization methods as defined by the Qualified Cultural Resource Specialist in consultation with MCB CPEN and affected tribes. SDG&E shall define the minimization procedures for all activities proposed within the boundaries of any CRHR-eligible resource in a Cultural Resource Avoidance and Minimization Plan. SDG&E shall prepare the Cultural Resource Avoidance and Minimization Plan a minimum of 60 days prior to construction. No activities shall be conducted within the boundaries of a known CRHR-eligible cultural resource until SDG&E has obtained concurrence on the proposed minimization methods from MCB CPEN and any affected tribes.

Applicable Locations: Entire proposed project area

Performance Standards and Timing:

Before Construction:

- (1) Physically demarcate cultural resources and buffer zones
- (2) modify project design to avoid resources, where necessary
- (3) Cultural Resources Avoidance and Minimization Plan

During Construction: Avoid work within buffer zones

After Construction: N/A

MM Cultural-3: Discoveries of Cultural Resources

If a cultural resource is identified during construction, SDG&E shall:

1. Immediately suspend all activities within 50 feet of the resource and flag-off the area for avoidance. The Qualified Cultural Resource Specialist and tribal cultural monitor shall be immediately informed of the discovery.
2. The Qualified Cultural Resource Specialist will immediately notify the CPUC, MCB CPEN archaeologist, and any participating Native American tribes, if appropriate, of the discovery.
3. The Qualified Cultural Resource Specialist, tribal cultural monitor, and MCB CPEN's archaeologist shall evaluate the resource and determine whether it is (1) eligible for listing in the CRHR (and thus a

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<p>historic resource for purposes of CEQA), (2) a unique archaeological resource as defined by CEQA, or (3) a tribal cultural resource as defined by CEQA.</p> <p>4. If the resource is determined to be neither a CRHR-eligible resource, a unique archaeological, nor a tribal cultural resource, work may commence in the area.</p> <p>5. If the resource is determined to be a CRHR-eligible resource, unique archaeological resource, or tribal cultural resource, the area shall remain flagged-off, and the following procedures shall be followed:</p> <ol style="list-style-type: none">Where the procedures for cultural resource avoidance in MM Cultural-2 can be effectively implemented to avoid impacts on the resource, construction may resume in the area with implementation of MM Cultural-2.Where the resource cannot be avoided by the remaining construction activities, the Qualified Cultural Resource Specialist shall recommend appropriate treatment measures to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b). The Qualified Cultural Resource Specialist shall report the discovery and the proposed treatment to the CPUC, MCB CPEN archaeologist, and participating Native American tribes within two days of the find. Preservation in place (i.e., avoidance) is the preferred method of treatment for cultural resources and tribal cultural resources. Any treatment other than preservation in place must be approved by the CPUC, appropriate tribe, and MCB CPEN's archaeologist. The resource and treatment method shall be documented in a final report to be filed with the California Historical Resources Information System (CHRIS). Work in the area may commence upon completion of approved treatment and under the direction of the Qualified Cultural Resource Specialist.
Applicable Locations: Finds of cultural resources during construction
Performance Standards and Timing:
Before Construction: N/A
During Construction:
(1) Implement avoidance zones around any discovered cultural resources (2) Document the resource and notify parties of the find and proposed treatment method (3) Implement treatments (4) File a report with CHRIS
After Construction: N/A

MM Cultural-4: Worker Training

All proposed project personnel shall receive training regarding the appropriate work practices necessary to effectively implement cultural resource mitigation measures. Training shall be required for all personnel before construction commences and repeated for all new personnel before they begin work on the proposed project. This training program shall address the potential for exposing subsurface resources, basic signs of a potential resource, and required procedures to be followed upon the discovery or suspected discovery of archaeological materials, human remains, and fossil remains consistent with the procedures set forth in MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-5, and MM Paleo-2. The training shall also identify requirements for working within the San Mateo Archaeological District (SMAD) and all other resources as defined in the 2015 HDR, Inc. "Recommendations for Cultural Resources Protection and Avoidance" Report. The training program shall be submitted to the CPUC for approval at least 30 days before the start of construction and may be submitted in conjunction with the general Worker Environmental Awareness Program for the project.

Applicable Locations: Entire proposed project area

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Performance Standards and Timing:**Before Construction:**

- (1) Training program is submitted to the CPUC
- (2) Construction personnel receive training

During Construction: N/A**After Construction:** N/A

MM Cultural-5: Procedure for Discovery of Human Remains

In the event that human remains, suspected human remains, or suspected funerary objects are identified, the area shall be flagged off and all construction activities within 50 feet of the find shall immediately cease. The CPUC-approved cultural resources specialist/archaeologist, SDG&E, and MCB CPEN (if the find is within MCB CPEN) shall be immediately notified, and the cultural resources specialist/archaeologist shall examine the find. If the cultural resources specialist/archaeologist determines that there may be human remains, SDG&E shall immediately contact the Medical Examiner at the Orange or San Diego County Coroner's office, depending on the location of the find. If the find occurs within MCB CPEN, MCB CPEN's [Comprehensive Agreement protocol](#) for the treatment of human remains under the Native American Graves Protection and Repatriation Act (NAGPRA) shall be followed. For remains discovered outside of MCB CPEN property, SDG&E shall comply with California law (Health and Safety Code §7050.5 and PRC §§5097.94, 5097.98, and 5097.99) for examining the remains, notifying appropriate personnel, and treatment and disposition of the remains. These procedures include notifying the NAHC if the remains are believed to be Native American or the local law enforcement if the remains are not believed to be Native American. The NAHC is responsible for notifying the most likely descendant (MLD) within 24 hours of notification. The MLD shall have 48 hours from the notification by the NAHC to determine the appropriate treatment and disposition of the remains. SDG&E shall coordinate the treatment and disposition of the remains between SDG&E, the MLD, and the landowner.

Applicable Locations: Entire proposed project area

Performance Standards and Timing:**Before Construction:** N/A**During Construction:**

- (1) If human remains are found, construction activities halt within 100 feet of the find, the area is flagged off, and the appropriate personnel are notified
- (2) The remains are examined
- (3) Either the county Medical Examiner or an appropriate authority is contacted
- (4) Health and Safety Code §7050.5 and PRC §§5097.94, 5097.98, and 5097.99 are followed, (or MCB CPEN's NAGRA protocol, if base property)
- (5) A report of the results is submitted to MCB CPEN if the remains are found within MCB CPEN

After Construction: N/A

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MM Cultural-6: Access Road Grading Measures

The following conditions are required for access road grading activities:

1. Flagging and avoidance of all archaeological sites in the area of potential effect for access road grading (i.e., the width of access roads and 15 meters on either side of the roads);
2. Development and implementation of a monitoring program to ensure avoidance of direct impacts on the sites from the grading activities;
3. Monitoring of all grading activities by qualified archaeological and Native American monitors;
4. Development and implementation of a discovery plan; and
5. A monitoring report will be submitted to the State Office of Historic Preservation upon completion of the proposed undertaking.

In the event that archaeological materials (e.g., shell, wood, bone, or stone artifacts) are found or suspected during project operations, or the project footprint is altered, work must be halted in the area of discovery, and the ES Cultural Resources Management Section notified at (760) 725-9738, as soon as practicable, but no longer than 24 hours after the discovery. Project work at the discovery site shall not proceed until the Base Archaeologist has the opportunity to evaluate the find and gives permission to resume construction activities.

Applicable Location: All road grading areas

Performance Standards and Timing:

Before Construction: N/A

During Construction:

- (1) Ensure avoidance of all cultural resource areas
- (2) Monitor all grading
- (3) Develop and implement a discovery plan

After Construction:

Following grading activities, submit a report to SHPO detailing the monitoring activities results of the discovery plan

MM Paleo-1: Paleontological Monitoring

Paleontological monitoring shall be required for all construction activities that require excavation, grading, or augering of 3 feet in diameter or greater at depth greater than 2 feet within geologic units determined to have a moderate to high paleontological sensitivity. The requirements for paleontological monitoring shall be noted on construction plans. Paleontological monitoring shall be conducted by qualified paleontological monitors under the direction of a CPUC-approved, qualified paleontologist. The qualified paleontologist shall have a Master's or PhD in geology or paleontology, have knowledge of the local paleontology, be familiar with paleontological procedures and techniques, and have worked as a paleontological mitigation project supervisor in the region for at least one year. Paleontological monitors shall have experience in the collection and salvage of fossil materials.

Applicable Locations: Areas of ground-disturbing construction activities within geologic units of moderate to high paleontological sensitivity

Performance Standards and Timing:

Before Construction:

Qualifications for qualified paleontologists and paleontological monitors are submitted to the CPUC for review and approval

During Construction:

Paleontological monitoring is conducted by a qualified paleontologist where ground-disturbing activities occur within geologic units of moderate to high paleontological sensitivity

After Construction: N/A

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MM Paleo-2: Evaluation and Treatment of Previously Undiscovered Paleontological Resources

In the event that a previously undiscovered paleontological resource is uncovered during project implementation, all ground-disturbing work within 50 feet of the discovery shall be halted. A CPUC-approved, qualified paleontologist shall contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery; MCB CPEN's cultural resource specialist shall also be contacted if the resource is found on MCB CPEN. The CPUC-approved, qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required.

Because of the potential for recovery of small fossil remains (i.e., isolated mammal teeth, bone fragments), it may be necessary to set up a screen-washing operation on site to inspect the resource. The qualified paleontologist shall determine whether screen-washing is necessary. Based on the results in the field, the qualified paleontologist shall determine if the recovery of bulk sedimentary-matrix samples for off-site wet screening from specific strata is necessary. Screen washing shall be conducted in accordance with the recommendations of, and under the direction of, the qualified paleontologist.

If the resource cannot be avoided and may be subject to further impact, the qualified paleontologist shall, in consultation with SDG&E's Cultural Resource Specialist, SDG&E's Environmental Project Manager, and MCB CPEN (if the resource is found on MCB CPEN), evaluate the resource and determine whether it is "unique" under CEQA, Appendix G, part V. If the resource is determined to be unique, a determination and associated plan for protection of the resource shall be provided to CPUC for review and approval. If the resource is determined not to be unique, work may commence in the area.

If the resource is determined to be a unique paleontological resource, work shall remain halted, and the qualified paleontologist shall consult with SDG&E and CPUC staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA.

Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts on paleontological resources and shall be required unless there are other equally effective methods. Other methods may be used but must ensure that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist.

All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines (Society of Vertebrate Paleontology 2010). Work may commence upon completion of treatment, as approved by CPUC. A final summary report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils. The report shall also include an itemized inventory of all collected and catalogued fossil specimens.

Applicable Locations: Entire proposed project area

Performance Standards and Timing:

Before Construction: N/A

During Construction:

- (1) Construction activities halt within 50 feet of the find, and the appropriate personnel are notified
- (2) The qualified paleontologist determines if further investigation is required, performs screen-washing, if necessary, and evaluates the find if the resource cannot be avoided
- (3) Work remains halted if the resource is determined to be unique
- (4) A plan for the protection of the resource is prepared and submitted and implemented
- (5) Recovered fossils are curated
- (6) A final summary report is prepared
- (7) Work commences after the resource is determined not to be unique or after treatment of the resource

After Construction: N/A

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3.5.7 References

- Cranham, G.T., P.A. Camilleri, and G.R. Jaffe. 1994. "Geologic Overview of the San Onofre Mountains, Camp Pendleton Marine Corps Base, San Diego County, California." Annual Field Trip Guidebook. San Diego Association of Geologists.
- Deméré, T.A., and S.L. Walsh. 1993. Paleontological Resources, County of San Diego. Prepared for the San Diego Planning Commission.
- . 2003. Paleontological Resources, County of San Diego. Department of Paleontology, San Diego Natural History Museum.
- DoN. 2015. "Final Environmental Assessment Joint Logistics Over the Shore, Maritime Prepositioning Force, and Field Exercise Training at Marine Corps Base Camp Pendleton, San Diego County, California."
- HDR, Inc. 2013. "eTS #25240, TL 695 and 13832, Wood to Steel Replacement, Cultural Resources Inventory Report, Marine Corps Base Camp Pendleton, San Diego County, California (HDR #156751)."
- . 2015a. "Cultural Resources Survey for the TL 695/6971 Reconductor Project, Marine Corps Base Camp Pendleton, San Diego, California."
- . 2015b. "Recommendations for Cultural Resources Protection and Avoidance for the TL 695/6971 Reconductor Project."
- . 2016a. "eTS #25240.01, Cultural Resources Survey of Additional Project Components for the TL 695/6971 Reconductor Project, San Diego County, California (HDR #250991)."
- . 2016b. "eTS #25240.01, Work Plan for Subsurface Testing at Proposed New Stub Pole for the TL 695/6971 Reconductor Project, San Diego County, California (HDR #250991)."
- Jordan, Ryan. 2014. "Remembering the Forgotten Village of San Onofre: An Untold Story of Race Relations." *The Journal of San Diego History* 27-44.
- Kennedy, M.P., and S.S. Tan. 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.
- Macarro, Paul (Pechanga Band of Luiseño Indians). 2016. Phone communication with CPUC. November, 1.
- . 2017. Phone communication with CPUC. January, 13.
- San Onofre Parks Foundation. 2017. San Onofre Foundation. Accessed January 17, 2017. <http://www.sanonofreparksfoundation.org/site/>.

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- SDG&E. 2016. "Proponent's Environmental Assessment for Tie-Line 695 and Tie-Line 6971 Reconstructor Project."
- SDNHM. 2016. "Paleontological Record Search - SDG&E TL 695/6971 Reconstructor Project (eTS Number 25240)."
- SHPO. 2015. "Annual SDG&E transmission Road Grading, CPEN (20130061A), (your 5090, ENV/CRS, January 6, 2015)." January 27.
- Society of Vertebrate Paleontology. 2010. "Standard Procedures for the Assessment of Mitigation of Adverse Impacts to Paleontological Resources."
- United States Marine Corps. 2010. California's First Baptism Held at Pendleton. February 5. Accessed January 4, 2017. <http://www.pendleton.marines.mil/News/News-Article-Display/Article/537086/californias-first-baptism-held-at-pendleton/>.
- WESTEC Services, Inc. 1980. "National Register Assessment Program of the Cultural Resources of the 230 kV Transmission Line Rights-of-Way from San Onofre Nuclear Generating Station to Black Star Canyon and Santiago Substation and to Encina and Mission Valley Substation."
- Wilson, K.L. 1972. Eocene and related geology of a portion of the San Luis Rey and Encinitas quadrangles, San Diego County, California. Unpublished M.A. thesis, University of California, Riverside.