



**Archaeological Resources Survey for the
Beyer Park Development Project,
San Diego, California
WBS# S-00752.02.02**

Prepared for
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NATIONAL ARCHAEOLOGICAL DATA BASE INFORMATION

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USGS Quadrangle Map: Imperial Beach, California

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Acronyms

AMSL	above mean sea level
APE	Area of Potential Effect
APN	Assessor's Parcel Number
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City of San Diego
CRHR	California Register of Historical Resources
GIS	Geographic Information System
GPS	Global Positioning System
MPOMPR	Management Plan for Otay Mesa Prehistoric Resources
NEPA	National Environmental Policy Act
NETR	Nationwide Environmental Title Research
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PRC	Public Resources Code
RPA	Register of Professional Archaeologists
SCIC	South Coastal Information Center

1.0 Management Summary

This report summarizes the results of the archaeological resources survey of the Beyer Park Development Project (project). The project is located on undeveloped City of San Diego park land, southeast of the eastern terminus of Beyer Boulevard within the communities of San Ysidro and Otay Mesa of the city of San Diego. The project includes 44 acres with approximately 12.6 acres considered as usable acres for the proposed recreational park. The proposed park may include lighted multi-purpose sports fields, a skate park, a lighted basketball court, children's play areas, a comfort station/concession building, picnic facilities including picnic shelter, viewpoints/overlooks and interpretive signage, bicycle paths and racks, nature trails, parking areas, walkways, security lighting, and landscaping. The project is currently in the conceptual design and preliminary environmental review phase.

The purpose of this study is to determine the potential effects of the project on significant cultural resources. As a result, a record search and archaeological resources survey were completed. The record search was request from the California Historical Resources Information System, South Coastal Information Center at San Diego State University (SCIC) to determine if previously recorded prehistoric or historic cultural resources occur on the property. The files at the SCIC indicated that two prehistoric archaeological sites, CA-SDI-10206 and CA-SDI-10614, were recorded within the survey area. CA-SDI-10206 was recorded as a lithic scatter, and CA-SDI-10614 was recorded as a quarry site. Further research indicated that four additional cultural resources had been documented within the survey area but not recorded at SCIC: two additional lithic scatters, one lithic and shell scatter, and one isolated hammerstone.

The on-foot survey was completed on January 18, 2017. The majority of the site has been previously disturbed by off-road vehicular activity, past grading and leveling, past mowing, and water erosion. Dirt roads crisscross the project area, and there is construction and residential debris scattered throughout.

Two previously recorded cultural resources (CA-SDI-10206 and CA-SDI-10614), two new prehistoric sites (8359-GK-1, 8359-HJP-2), and four new prehistoric isolated artifacts were located during the field survey. Three additional sites and an isolate previously recorded by Tierra Environmental in 2007 were not located. Conditions at CA-SDI-10206, a lithic scatter, were similar to past surveys where artifacts were mostly noted in the dirt roads within the site with dense vegetation outside the roads. CA-SDI-10614 was recorded as a quarry with over 200 flakes and some cores. Only six flakes and one hammerstone were identified; the majority of the materials were spalls, which occur naturally. 8359-GK-1 is a sparse lithic scatter with six flakes and two possible rock features, and 8359-HJP-2 is a lithic scatter consisting of at least 15 flakes. The isolates consisted of a core, a retouched flake, a core and flake, and a core and flake.

Based on the survey level of investigation, CA-SDI-10206, 8359-GK-1, and 8359-HJP-2 have the potential to yield information important to prehistory and therefore could qualify

under criteria D/4. A testing program with surface collection and excavation units is required to determine significance. After design plans are completed, if avoidance is not feasible, a testing program should be designed and implemented to determine whether the sites are significant under National Register of Historic Places, California Environmental Quality Act, and City of San Diego criteria.

2.0 Introduction

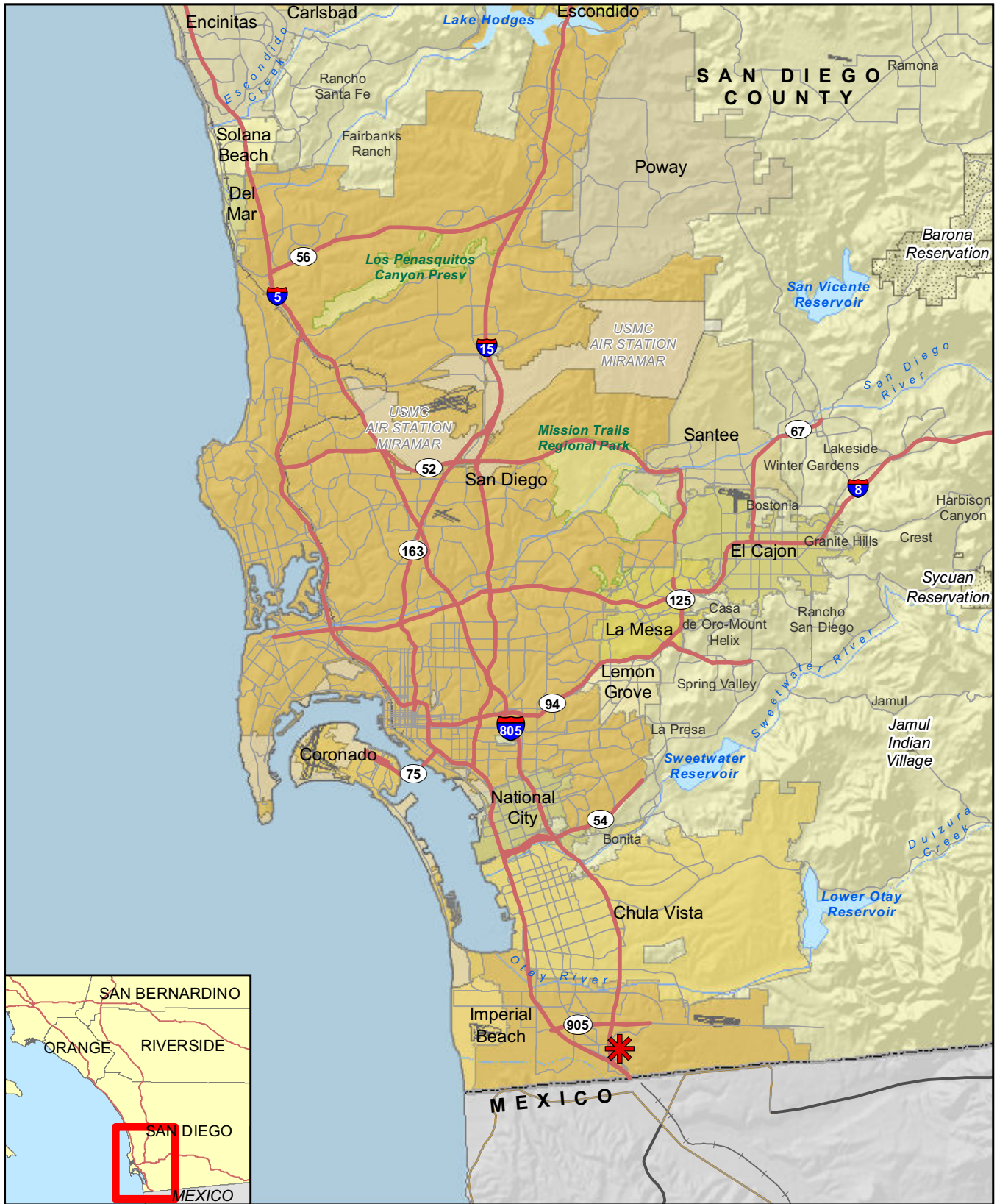
This report details background information, methods, and results of the cultural resources survey for the Beyer Park Development Project located in the communities of San Ysidro and Otay Mesa in the city of San Diego, California (Figure 1). The project is located on undeveloped City of San Diego (City) park land, southeast of the eastern terminus of Beyer Boulevard. It is found in the southeast quarter of Section 36, Township 18 South, Range 2 West of the U.S. Geological Survey 7.5-minute topographic map, Imperial Beach quadrangle (Figure 2). The project area is encompassed within Assessor's Parcel Numbers (APN) 638-170-18, 638-170-19, and 638-070-71 (Figure 3). The project includes 44 acres with approximately 12.6 acres considered as usable acres for the proposed recreational park. The proposed park may include lighted multi-purpose sports fields, a skate park, a lighted basketball court, children's play areas, a comfort station/concession building, picnic facilities including picnic shelter, viewpoints/overlooks and interpretive signage, bicycle paths and racks, nature trails, parking areas, walkways, security lighting, and landscaping. For the archaeological survey, the area of potential effect (APE) includes 44 acres (Figure 4). The project is currently in the conceptual design and preliminary environmental review phase.

3.0 Physical and Cultural Setting

3.1 Natural Setting

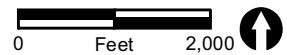
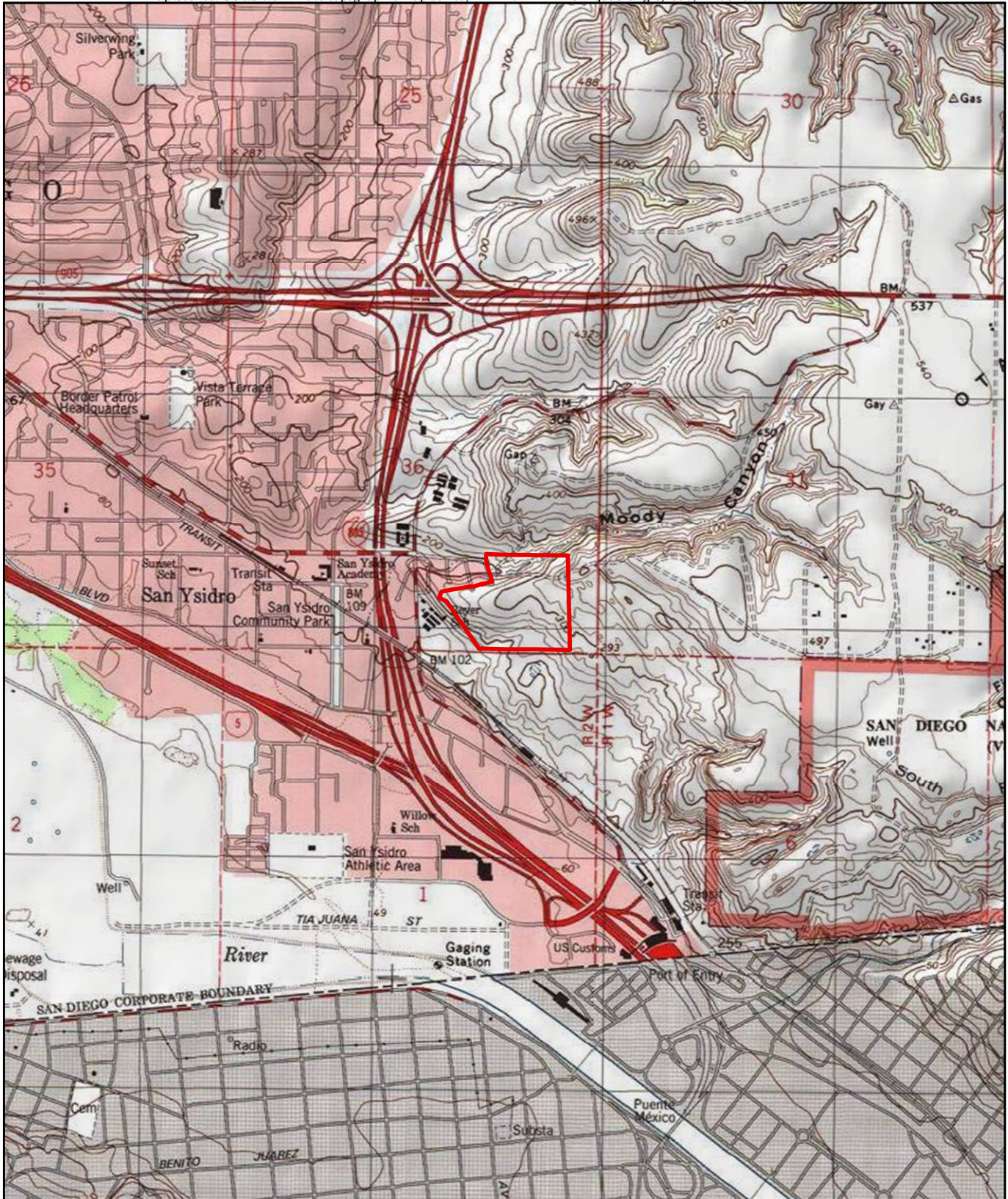
The APE is within the communities of San Ysidro and Otay Mesa in the city of San Diego. The APE is located on the western end of the Otay Mesa terrace and is largely characterized by steep north-, south- and west-facing slopes. The western end of Otay Mesa rises from 80 to 500 feet above mean sea level (AMSL) approximately 5.5 miles inland. The Tijuana River forms its southern boundary while the Otay River forms its northern boundary. The elevation of the APE ranges from 180 feet AMSL in the southern half to 380 feet AMSL at the northeast corner. Moody Canyon runs east-west through the northern part of the APE.

The APE is underlain by very old paralic deposits (Ovop) and San Diego Formation (Tsdss). The very old paralic deposits date to the late to middle Pleistocene and consist of poorly sorted reddish-brown, interfingered strandline, beach, estuarine, and colluvial deposits of siltstone, sandstone, and conglomerate (Kennedy and Tan 2008). This geologic unit has also been called Linda Vista Formation (GEOCON 2012). The San Diego Formation dates to the early Pleistocene and late Pliocene and consists of yellowish-brown and grey, fine- to medium-grained poorly indurated fossiliferous marine sandstone (Kennedy and Tan 2008).



***** Project Location

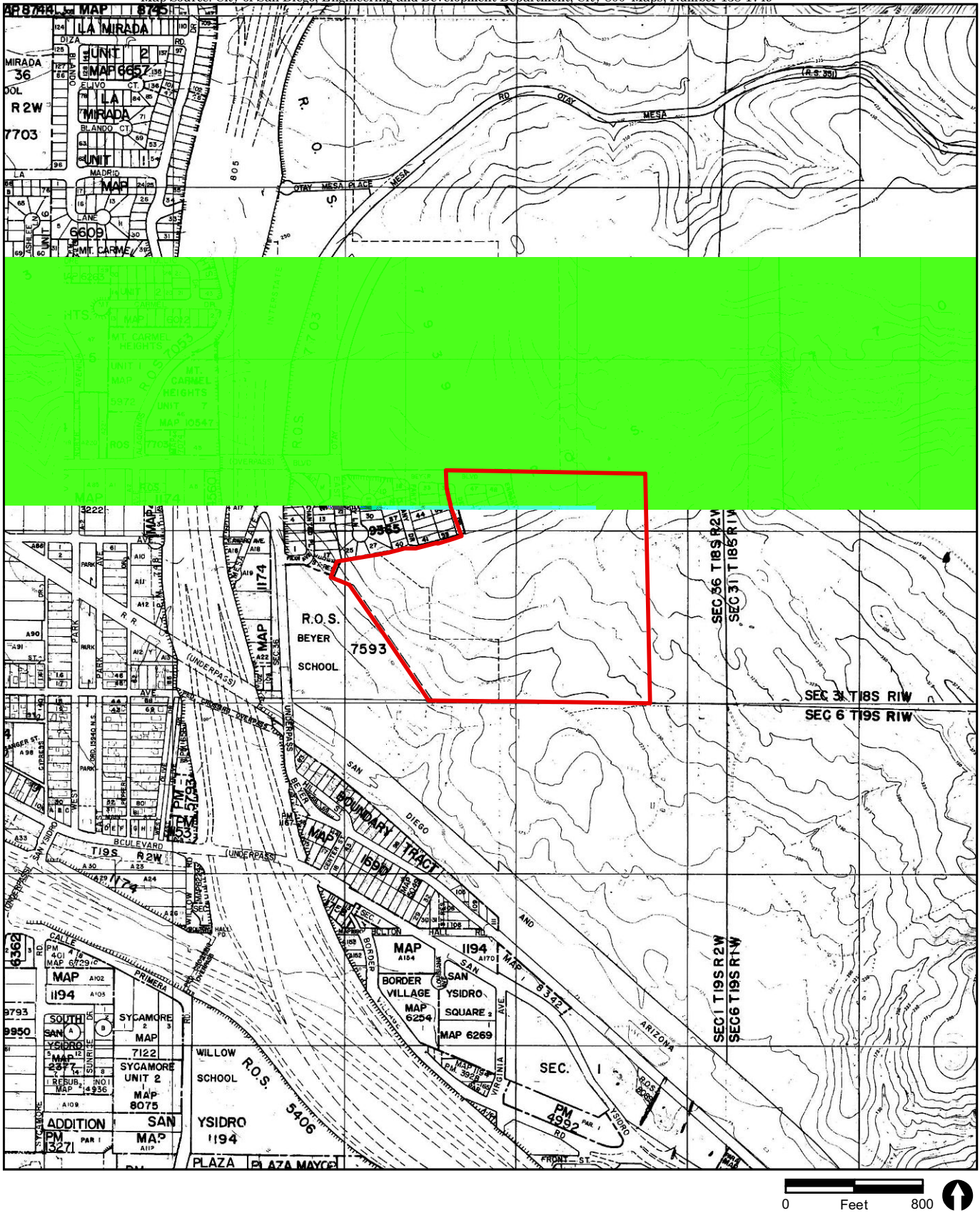
FIGURE 1
Regional Location



 Project Boundary

FIGURE 2


Project Location on USGS Map



 Project Boundary

FIGURE 3
Project Location on City 800' Map



 Project Boundary

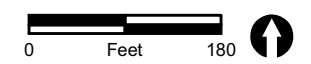


FIGURE 4
Project Location on Aerial Photograph

Additionally, there are known landslides within the APE that have increased in size. Landslides on Otay Mesa can occur on steep drainage slopes like those in the APE (GEOCON 2012).

The soils in the APE are classified as Olivenhain series, which consist of well-drained, moderately deep to deep cobbly loams with a very old cobbly clay subsoil. The majority of the APE is covered by Olivenhain cobbly loam (OhF) with 30 to 50 percent slope. The erosion hazard is high. Olivenhain cobbly loam (OhF) with 9 to 30 percent slopes covers the southeastern corner. The erosion hazard is moderate to high for this less steep area (USDA 1973).

Current vegetation communities within the APE include six communities: mule fat scrub, maritime succulent scrub, Diegan coastal sage scrub, disturbed maritime succulent scrub, disturbed Diegan coastal sage scrub, and disturbed land. The mule fat scrub occurs within Moody Canyon. Maritime succulent scrub occurs on the south-, north-, and west-facing slopes in the eastern part of the APE. A small area within Moody Canyon and a small portion in the western third of the APE is Diegan coastal sage scrub. The remainder of the APE consists of disturbed maritime succulent scrub, disturbed Diegan coastal sage scrub, and disturbed land.

Water sources are intermittent, consisting of one naturally-occurring seasonally running stream (Moody Canyon) and one depressional wetland, which is located in an artificial ditch between an old dirt road bed and the top of a manufactured slope. It is generally accepted that in prehistoric times drainages had more substantial flows and the water table was generally higher (Christenson 1989). These conditions may have resulted in water being available on the mesa for a longer period of the year than it is now. The Otay River would have been a more regular source of water in prehistoric times.

Prior to European settlement, the mesa tops on western Otay Mesa would have been covered with a combination of vernal pool/perennial grassland areas interspersed with coastal sage scrub and maritime succulent scrub communities. Riparian communities such as southern willow scrub and freshwater marsh would have existed in the bottoms of the larger drainages such as Moody Canyon, and moderate to dense chamise chaparral communities would have extended up onto the edges of the mesa (Holland 1986).

A variety of usable resources would have been available to prehistoric populations in and around the project area. The coastal sage scrub, chamise chaparral, and maritime succulent scrub communities contain many plants used by the ethnographic Kumeyaay population. Three plants in particular, manzanita (*Arctostaphylos* spp.), white sage (*Salvia apiana*), and blue elderberry (*Sambucus nigra* ssp. *caerulea* [*S. Mexicana*]), were used for a variety of purposes in prehistoric times. These plants served as sources of food and wood, and were used for medicinal and ceremonial purposes. Animals available on the mesa would include jackrabbit (*Lepus californicus*), brush rabbit (*Sylvilagus bachmani*), desert cottontail (*S. audubonii*), California ground squirrel (*Spermophilus beecheyi*), woodrat (*Neotoma* spp.), other small rodents, mule deer (*Odocoileus hemionus*), and various small birds and reptiles.

3.2 Cultural Setting

3.2.1 Prehistory

The prehistoric cultural sequence in northern San Diego County is generally conceived as comprising three basic periods: (1) the Paleoindian Period, dated between about 11,500 and 8,500 years ago; (2) the Archaic Period, lasting from about 8,500 to 1,500 years ago (A.D. 500); and (3) the Late Prehistoric Period, lasting from about 1,500 years ago to historic contact (i.e., 500 to 1769) and represented by the Cuyamaca Complex.

3.2.1.1 Paleoindian Period

The Paleoindian Period in San Diego County is most closely associated with the San Dieguito Complex, as identified by Rogers (1938, 1939, and 1945). The San Dieguito assemblage consists of well-made scraper planes, choppers, scraping tools, crescentics, elongated bifacial knives, and leaf-shaped projectile points. The most thoroughly investigated San Dieguito component in San Diego County is found at CA-SDI-149 (the C.W. Harris site), located on a terrace overlooking the San Dieguito River. The San Dieguito Complex is thought to represent an early emphasis on hunting (Warren et al. 1993: III-33).

3.2.1.2 Archaic Period

The Archaic Period in coastal San Diego County is represented by the La Jolla Complex, a local manifestation of the widespread Millingstone Horizon. This period brings an apparent shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish. The local cultural manifestations of the Archaic Period are called the La Jollan Complex along the coast and the Pauma Complex inland. Pauma Complex sites lack the shell that dominates many La Jollan sites. Along with an economic focus on gathering plant resources, the settlement system appears to have been more sedentary than earlier periods. The La Jollan assemblage is dominated by rough, cobble-based choppers and scrapers, and slab and basin metates. Elko series projectile points appeared late in the period. Large deposits of marine shell at coastal sites demonstrate the importance of shellfish gathering to the coastal Archaic economy (True 1980).

3.2.1.3 Late Prehistoric Period

Near the coast and in the Peninsular Mountains beginning approximately 1,500 years ago, patterns began to emerge which suggest the ancestors of the ethnohistoric Kumeyaay occupied the area. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversify and intensify during this period, with the continued elaboration of trade networks, the use of shell-bead currency, cremation burial practices, and the appearance of more labor-intensive but effective technological innovations. The late prehistoric archaeology of the San Diego coast and foothills is characterized by the Cuyamaca Complex. It is primarily known from

the work of D.L. True (1970) at Cuyamaca Rancho State Park. The Cuyamaca Complex is characterized by the presence of steatite arrowshaft straighteners, steatite pendants, steatite comales (heating stones), Tizon Brownware pottery, ceramic figurines reminiscent of Hohokam styles, ceramic “Yuman bow pipes,” ceramic rattles, miniature pottery various cobble-based tools (e.g., scrapers, choppers, hammerstones), bone awls, manos and metates, mortars and pestles, and Desert Side-Notched (more common) and Cottonwood Series projectile points (True 1970).

3.2.1.4 Ethnohistory

The Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño) occupied the southern two-thirds of San Diego County. The Kumeyaay lived in semi-sedentary, politically autonomous villages or rancherías. A settlement system typically consisted of two or more seasonal villages with temporary camps radiating away from these central places (Cline 1984). Their economic system consisted of hunting and gathering, with a focus on small game, acorns, grass seeds, and other plant resources. The most basic social and economic unit was the patrilocal extended family. A wide range of tools was made of locally available and imported materials. A simple shoulder-height bow was used for hunting. Numerous other flaked-stone tools were made, including scrapers, choppers, flake-based cutting tools, and biface knives. Preferred stone types were locally available metavolcanics, cherts, and quartz. Obsidian was imported from the deserts to the north and east. Ground stone objects include mortars and pestles typically made of locally available fine-grained granite; both portable and bedrock types are known. The Kumeyaay made fine baskets, employing either coiled or twined construction. The Kumeyaay also made pottery, using the paddle-and-anvil technique. Most were a plain brown utility ware called Tizon Brownware, but some were decorated (May 1978; Spier 1923).

3.2.2 Historic Period

The Spanish Period in Alta California (1769–1821) represents a time of European exploration and settlement. Military and religious contingents established the San Diego Presidio and the San Diego Mission in 1769. The major land use during the Spanish Period was cattle grazing. The mission system used forced Native American labor and introduced horses, cattle, and other agricultural goods and implements. Native American culture in the coastal strip of California rapidly deteriorated despite the Native Americans’ repeated attempts at revolt against the Spanish invaders (Cook 1976). Disease, starvation, and a general institutional collapse caused emigration, birth rate declines, and high adult and infant mortality levels for the Native American groups in San Diego County (Shipek 1991). One of the hallmarks of the Spanish colonial scheme was the rancho system. In an attempt to encourage settlement and development of the colonies, large land grants were made to well-connected individuals.

In 1821, Mexico declared its independence from Spain. During the Mexican period (1821–1848), the missions were secularized, opening vast tracts of former mission lands for private use and settlement. The numerous grants dramatically expanded the rancho system. The southern California economy became increasingly based on cattle ranching.

The Mexican period ended when Mexico signed the Treaty of Guadalupe Hidalgo on February 2, 1848, concluding the Mexican-American War (1846–1848) (Rolle 1998). Just prior to signing the Treaty of Guadalupe-Hidalgo, gold was discovered in the northern California Sierra Nevada foothills. The news was published on March 15, 1848, and the California Gold Rush began. California became a state in 1850.

The great influx of Americans and Europeans, beginning with the Gold Rush, eliminated many remaining vestiges of Native American culture. The American homestead system encouraged settlement beyond the coastal plain into areas where Native Americans had retreated to avoid the worst of Spanish and Mexican influences (Carrico 1987; Cook 1976). By the late 1800s, San Diego County witnessed the gradual development of a number of outlying communities, many of which were established around previously defined ranchos and land grants. These communities were composed of an aggregate of people who lived on scattered farmsteads tied together through a common school district, church, post office, and country store (Hector and Van Wormer 1986, Pourade 1963).

Otay Mesa developed similarly to other San Diego County communities. Farming developed through the 1870s, and by 1879 most of the mesa was under intensive agriculture. The most widely grown crops on the mesa were wheat, barley, corn, tomatoes, and beans. Water for crops was obtained from nearby streams and the Otay River, and by the early 1900s an extensive system of dams had developed (Pryde 1992). The Alta School District was established in 1886, and a schoolhouse was constructed near what is present-day Brown Field.

Ranching and farming continued to be the main occupations of residents in and around the project area through most of the twentieth century. After World War II, the Otay Mesa Municipal Water District was established and was a source of dependable water. This water supply allowed for vegetable farming including tomatoes, celery, bell peppers, cucumbers, and barley (City of San Diego 2008). Over the past decades, large tracts of this formerly open land have been developed for light industrial, and more recently, residential projects (Pryde 1992).

4.0 Previous Research

4.1 Record Search Background

A records search was requested from the California Historical Resources Information System South Coastal Information Center (SCIC) with a one-mile radius of the project site. This included previously recorded cultural resources; previous archaeological surveys and excavations; and historic maps and historic addresses. The National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR) for San Diego County, and the City's Historic Properties list were also reviewed.

The SCIC records search indicates four investigations have surveyed portions of the project area (Confidential Attachment 1). One additional survey, not listed at SCIC, was completed in 2007 by Tierra Environmental (McGinnis 2007). The report was provided by the City,

and it contained the results of a constraints study for the Beyer Athletic Fields project. The footprint of the project was similar to, but not exactly the same as the current footprint. The survey identified five lithic scatters (one being CA-SDI-10206), a lithic and shell scatter, and one isolated hammerstone. This report was reviewed after the current RECON survey.

Based on the SCIC records and the above survey, a total of 55 prehistoric sites, 7 historic sites, 16 isolated prehistoric artifacts, one isolated historic artifact, and two multi-component sites have been recorded within a one-mile radius of the project area (Table 1).

PNumber	Trinomial	Period	Site Type
BAA-2*		Prehistoric	Lithic scatter
BAA-3		Prehistoric	Lithic scatter
BAA-4		Prehistoric	Lithic scatter
BAA-5*		Prehistoric	Lithic scatter
BAA-6*		Prehistoric	Lithic and shell scatter
BAA-7*		Prehistoric	Isolate: hammerstone
P-37-004571	CA-SDI-004571	Prehistoric	Quarry site
P-37-004934	CA-SDI-004934	Prehistoric	Lithic scatter
P-37-005555	CA-SDI-005555	Prehistoric	Quarry site and shell scatter
P-37-007604	CA-SDI-007604	Prehistoric	Lithic scatter
P-37-008640	CA-SDI-008640	Prehistoric	Artifact scatter
P-37-008641	CA-SDI-008641	Prehistoric	Lithic scatter
P-37-008642	CA-SDI-008642	Prehistoric	Lithic scatter
P-37-008643	CA-SDI-008643	Prehistoric	Lithic scatter
P-37-008644	CA-SDI-008644	Prehistoric	Lithic scatter
P-37-008750	CA-SDI-008750	Prehistoric	Lithic scatter
P-37-008751	CA-SDI-008751	Prehistoric	Lithic scatter
P-37-008752	CA-SDI-008752	Prehistoric	Lithic scatter
P-37-008753	CA-SDI-008753	Prehistoric	Lithic scatter
P-37-010194	CA-SDI-010194	Prehistoric	Lithic and shell scatter
P-37-010195	CA-SDI-010195	Prehistoric	Lithic scatter
P-37-010197	CA-SDI-010197	Prehistoric	Temporary camp/artifact scatter
P-37-010200	CA-SDI-010200	Prehistoric	Temporary camp/lithic and shell scatter
P-37-010206*	CA-SDI-010206	Prehistoric	Lithic scatter
P-37-010207	CA-SDI-010207	Prehistoric	Quarry site
P-37-010208	CA-SDI-010208	Prehistoric	Lithic and shell scatter
P-37-010209	CA-SDI-010209	Prehistoric	Lithic scatter
P-37-010511	CA-SDI-010511	Prehistoric	Lithic and shell scatter
P-37-010512	CA-SDI-010512	Prehistoric	Lithic scatter
P-37-010513	CA-SDI-010513	Prehistoric	Lithic scatter
P-37-010514	CA-SDI-010514	Prehistoric	Lithic scatter
P-37-010515	CA-SDI-010515	Prehistoric	Lithic scatter
P-37-010516	CA-SDI-010516	Prehistoric	Lithic scatter
P-37-010517	CA-SDI-010517	Prehistoric	Lithic scatter
P-37-010518	CA-SDI-010518	Prehistoric	Lithic scatter
P-37-010519	CA-SDI-010519	Prehistoric	Lithic scatter
P-37-010520	CA-SDI-010520	Prehistoric	Lithic scatter

Table 1			
Previously Recorded Resources Within One Mile of the APE			
PNumber	Trinomial	Period	Site Type
P-37-010521	CA-SDI-010521	Prehistoric	Lithic scatter
P-37-010522	CA-SDI-010522	Prehistoric	Lithic scatter
P-37-010523	CA-SDI-010523	Prehistoric	Lithic scatter
P-37-010524	CA-SDI-010524	Prehistoric	Lithic scatter
P-37-010525	CA-SDI-010525	Prehistoric	Lithic scatter
P-37-010526	CA-SDI-010526	Prehistoric	Lithic scatter
P-37-010527	CA-SDI-010527	Prehistoric	Lithic scatter
P-37-010613	CA-SDI-010613	Prehistoric	Lithic scatter
P-37-010614*	CA-SDI-010614	Prehistoric	Quarry site
P-37-011079	CA-SDI-011079	Multi-component	Temporary camp or habitation site
P-37-011969	CA-SDI-011969	Prehistoric	Quarry site
P-37-013532	CA-SDI-013532	Prehistoric	Lithic scatter
P-37-014287	CA-SDI-014086	Multi-component	Trash and lithic scatter
P-37-014288	CA-SDI-014087	Prehistoric	Lithic scatter
P-37-014289	CA-SDI-014088	Prehistoric	Lithic scatter
P-37-014290	CA-SDI-014089	Prehistoric	Artifact scatter
P-37-014297		Prehistoric	Lithic scatter
P-37-014754		Prehistoric	Isolate: scraper
P-37-014797		Prehistoric	Isolate: flake
P-37-014991		Historic	Isolate: ceramic
P-37-014992		Prehistoric	Isolate: flake
P-37-019178		Historic	Building
P-37-023917		Historic	Building
P-37-025213	CA-SDI-016705	Prehistoric	Artifact scatter
P-37-025680		Historic	Structure
P-37-028199		Historic	Building
P-37-028467		Prehistoric	Isolate: core, flake
P-37-028468		Prehistoric	Isolate: flakes
P-37-028469		Prehistoric	Isolate: metate, flake
P-37-031175	CA-SDI-019751	Historic	Foundations/structure pads and walls/fences
P-37-031359		Prehistoric	Isolate: flakes
P-37-031491		Historic	Highway/trail
P-37-031492		Prehistoric	Isolate: flake
P-37-031493		Prehistoric	Isolate: flake
P-37-032101	CA-SDI-020343	Prehistoric	Lithic scatter
P-37-032102	CA-SDI-020344	Prehistoric	Lithic scatter
P-37-034785	CA-SDI-021642	Historic	Foundations/structure pads and wells/cisterns
P-37-034786	CA-SDI-021643	Prehistoric	Quarry site
P-37-034937		Prehistoric	Isolate: scraper
P-37-034940		Prehistoric	Isolate: scraper
P-37-034941		Prehistoric	Isolate: chopper
P-37-034942		Prehistoric	Isolate: flake
P-37-034943		Prehistoric	Isolate: flake
P-37-034944		Prehistoric	Isolate: scraper

*located within the APE

Of these, there are 40 lithic scatters, 5 prehistoric quarry sites, 3 artifact scatters, 4 shell and lithic scatters, 2 temporary camps, 1 shell and quarry site, 3 buildings, a portion of the Union Pacific Railroad, 1 historic road segment, and 2 foundations. Five of the sites, CA-SDI-10206, CA-SDI-10614, BAA-2, BAA-5, and BAA-6, and one isolate (BAA-7) are within the APE (see Confidential Attachment 1); these five sites are described below. There were 17 historic addresses within the one-mile radius; none are within the APE.

CA-SDI-10206 was recorded by RBR & Associates in 1984. It was described as a light scatter of approximately 10 flakes in an approximate area of 19 meters by 38 meters. It is on a bench on the north side of Moody Canyon, near the terminus of Beyer Boulevard (Joines et al. 1984). Disturbance from heavily used footpaths through the site and erosion were noted on the site record form. There is no record of any work on the site besides the initial survey.

During a survey in 2005, the site boundary for CA-SDI-10206 was expanded due to additional artifacts identified within the dirt roads near the site. The expanded site measured 125 meters northwest/southeast by 150 meters northeast/southwest. Artifacts included large secondary flakes, scrapers, and expended cores of fine-grained metavolcanic (FGM) material. Most of the artifacts were found in the dirt roads, but a small number of artifacts were seen in the vegetation covered areas on the sides of the road. The observed width of the artifact scatter was about 15 meters, but dense vegetation obscured the ground surface and may have covered additional cultural material farther from the road. There has been substantial erosion along the roads and on the road cuts from the recent rains, and some of this material may have been moved from its original location (Price 2005). The site was revisited in 2011. Conditions were similar to the 2005 survey (Dalope et al. 2011).

CA-SDI-10614 was recorded by RECON in 1986. It was described as a light intensity quarry site with over 200 flakes and some core fragments in an approximate area of 50 meters by 50 meters. It is on a west face of a steep knoll overlooking the Tijuana River Valley (Van Wormer 1986).

BAA-2 was recorded in 2007 as a low-density lithic scatter on a knoll overlooking a drainage. At least four metavolcanic flakes in a 5-by-5-meter area were identified. Additional flakes may be present, but dense cholla limited the survey (McGinnis 2007).

BAA-5 was recorded in 2007 as a lithic scatter next to and within a dirt road. At least ten flakes were identified; some did not have bulbs of percussion and may be spalls and therefore not prehistoric (McGinnis 2007).

BAA-6 was recorded in 2007 as a lithic and shell scatter on a small flat bench between two drainages. At least seven pieces of shell, possibly California mussel (*Mytilus californianus*), and one flake were noted within a 5-meter radius (McGinnis 2007).

BAA-7 was recorded in 2007 as an isolated hammerstone. It was located on a cobbly bench dissected by dirt roads surrounded by disturbed areas with residential dumping (McGinnis 2007).

4.2 Literature Search

The APE was included in the Management Plan for Otay Mesa Prehistoric Resources (MPOMPR) (Gallegos et al. 1998). The purpose of the plan was to provide archaeologists, researchers, and agencies with a better understanding of the prehistoric use of the area and planning and preservation recommendations. Site types found within the plan area include lithic scatters, lithic reduction concentrations, quarries, habitation sites, temporary camps, scatters, and bedrock milling sites. The plan indicates that there is nearly a continuous sparse lithic scatter across the mesa where Lindavista and Otay formations occur. The continuous lithic scatter is referred to as background noise and could have been the result of agricultural activity over the past 100 years. The scatters lack temporally diagnostic artifacts and intact subsurface deposit. Occasionally, there is a diagnostic artifact. In order to deal with this from a management perspective, sites in their study were divided into three categories: habitation sites, temporary camps/artifact scatters, and non-sites. Habitation sites were defined based on subsurface artifact density ratios; habitation sites have an average of 100 artifacts per cubic meter. Temporary camps/artifact scatters were defined by a surface artifact density of lithic and ground stone artifacts and the presence of faunal material, shell, and subsurface deposits. Non-sites were defined by the lack of substantial subsurface deposit and surface artifact density ratios of less than 0.03. Sparse lithic scatters fall in the “non-sites” category (Gallegos et al. 1998).

Gallegos et al. (1998) suggest that much of the effort to date on Otay Mesa has been wasted on these sparse lithic scatters, which have little or no research potential. This is made worse because they have been recorded and/or tested one small piece at a time as each parcel is developed. Research on these low-density lithic scatters wastes research resources and has yielded virtually no meaningful insights into prehistory. They assert that these low-density lithic scatters should be treated as archaeological noise and not recorded in future research, because they get in the way of more productive research. Work in the future should be concentrated on the few habitation sites that remain, since they would provide information to answer research questions concerning settlement patterns, chronology, lithic technology, trade, and diet (Gallegos et al. 1998).

Management recommendations identified in the MPOMPR include survey and excavation methods. The survey method indicates that a site will be identified by the presence of at least 3 artifacts within each of four contiguous 10-by-10-meter areas (or at least 12 artifacts within a 20-meter radius). Sparse scatters of debitage will be ignored, and isolated tools will be recorded as isolates (4–13) (Gallegos et al. 1998). The excavation methods include surface collection and subsurface excavation units based on site size.

5.0 Methods

The archaeological resources survey included both an archival search and an on-foot survey of the APE. As noted above, a records search with a one-mile-radius buffer was requested from the SCIC in order to determine if previously recorded prehistoric or historic cultural resources occur on the APE. Historic aerial photographs were also checked in order to see past development within and near the project area.

A letter was sent to the Native American Heritage Commission (NAHC) requesting they search their files to identify spiritually significant and/or sacred sites or traditional use areas in the project vicinity. The NAHC was also asked to provide a list of local Native American tribes, bands, or individuals who may have concerns or interests in the cultural resources of the project. No response has been received as of the writing of this report.

The investigation consisted of an on-foot survey of the 44-acre APE. RECON archaeologists Harry Price and Carmen Zepeda-Herman conducted the field survey on January 18, 2017 in cloudy and breezy conditions. The RECON archaeologists were accompanied by Native American monitor Gabe Kitchen of Red Tail Monitoring. The primary goal of this investigation was to systematically survey the project area to determine (1) if there are previously unrecorded cultural resources present, and if so, document the resources' locations and what they consist of and (2) to update conditions of previously recorded cultural resources. The project area was inspected for evidence of archaeological materials such as flaked and ground stone tools or fragments, ceramics, milling features, and human remains. Intervals between archaeologists were approximately 15 to 20 meters. When archaeological materials were found, the transect intervals were reduced to 3 to 5 meters. The survey method outlined in the MPOMR for sparse lithic scatters consisting of debitage and isolated tools was followed. Photographs were taken to document the environmental setting and general conditions.

During the survey, the field team navigated the APE and recorded resource locations using a hand-held global positioning system (GPS) unit with a georeferenced map. RECON maintains a geographic information system (GIS) database with ESRI's ArcView, ArcInfo, and ArcGIS programs to manage, analyze, and display this information. The field GPS unit consisted of a handheld Trimble GEO 7 series with Floodlight™ satellite shadow reduction technology allowing data collection even when working in areas of heavy overhead cover, such as trees and buildings. This instrument provided the field team with sub-meter accuracy and real-time position correction and recording capability. Isolated flakes were not recorded per the MPOMPR survey approach (Gallegos et al. 1998). Only tools were recorded. Aerial photographs of the project area and compasses were also used to help navigate the APE. California Department of Parks and Recreation site forms, update forms, and maps will be submitted to the SCIC.

6.0 Report of Findings

Two previously recorded cultural resources (CA-SDI-10602 and CA-SDI-10614), two new prehistoric sites, and four new prehistoric isolated artifacts were located during the field survey within the APE. The lithic scatters identified in 2007 were not found. Confidential Attachment 2 presents the locations of the cultural resources, and Confidential Attachment 3 contains site forms for new sites, updated site forms, and the new isolate forms. These site forms will be submitted to SCIC.

Isolated flakes were scattered throughout the eastern portion of the APE but were not recorded per the approach of the MPOMPR (Gallegos et al. 1998).

6.1 Project Area Conditions

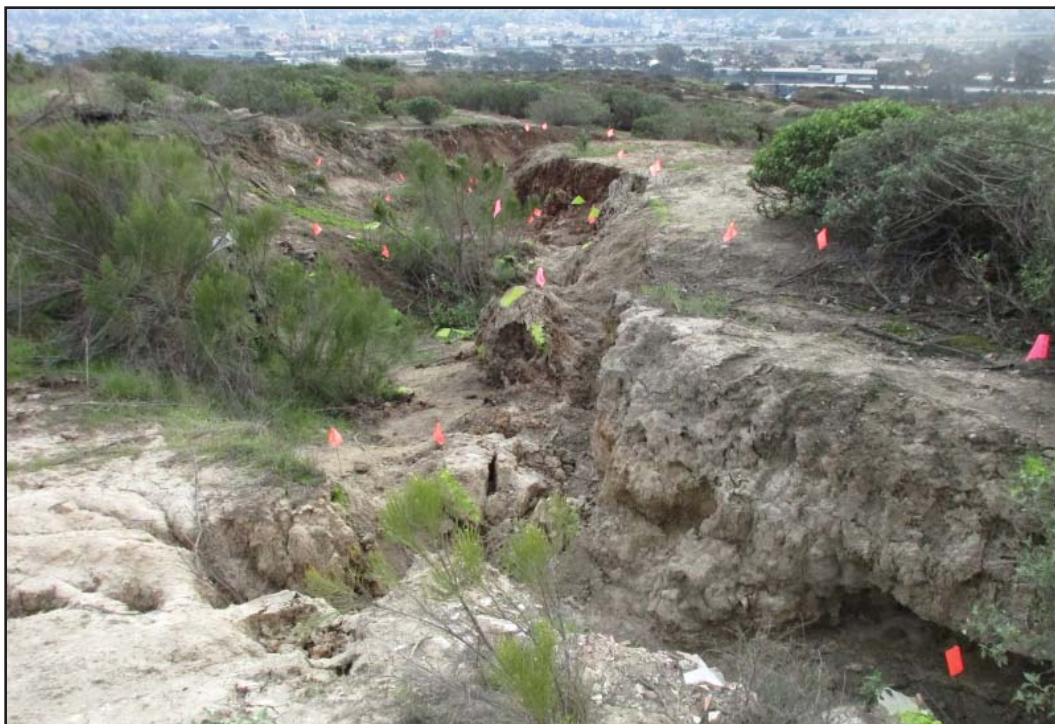
The majority of the APE was crisscrossed by numerous dirt roads (Photograph 1). The APE has been used for recreational purposes, transient encampments, and as a dumping area for residential debris. Residential debris, glass and plastic bottles, trash, concrete rubble, and shoes were scattered throughout the APE but were more concentrated in the western portion. On the western half, there was a course for remote control trucks/vehicles that was delineated with pin flags and bridges (Photograph 2). There is also evidence of off-road vehicular activity throughout the site, which is concentrated in the center of the APE. An unlined drainage ditch was noted along the western boundary. The western area has been disturbed in the past, but vegetation has grown back (Photograph 3). The conglomerate cobbles have been pushed and scattered in this area (Photograph 4). The central area appears to have been graded flat in the past; vegetation has not grown back, leaving open soil and numerous rills and gullies, which have formed from water washing down slope (Photographs 5 and 6).

The west-facing slopes have been cut by erosion running from the top of the mesa, with some areas forming deep gullies (see Photograph 2). This area is part of the landslides identified by GEOCON (2012). The northeastern portion of the APE is characterized by steep slopes covered with maritime succulent scrub including joboba (*Simmondsia chinensis*), San Diego bur-sage (*Ambrosia chenopodiifolia*), California buckwheat (*Eriogonum fasciculatum*), broom baccharis (*Baccharis sarothroides*), coast cholla (*Cylindropuntia prolifera*) (Nordby 2007), and low grasses due to the winter rains.

The 1953, 1964, 1966, 1968, and 1971 historic aerial photographs show some dirt roads in the project area. In the 1980 aerial photograph, the portions of the eastern project area have east-west rows which could represent agriculture fields or mowed/vegetation-cleared areas. The majority of the project area looks like it had been graded or heavily impacted by vehicular travel starting in 1981. In the 1996 aerial photograph, the western third of the APE appears to have been weeded or mowed as suggested by the rows that go north-south and east-west. Aerial photographs from 1989 to 2012 show the project area looking similar to the present-day condition with crisscrossing dirt roads (Nationwide Environmental Title Research 2017).



PHOTOGRAPH 1
Eroded Bluffs in the Background and
Dirt Roads in the Foreground, Looking East



PHOTOGRAPH 2
Deep Erosion with Remote Control
Car Track Delineated by Pin Flags



PHOTOGRAPH 3
Vegetation Growth in Western
Project Area, Looking Southwest



PHOTOGRAPH 4
Disturbed Conglomerate Pushed into Piles



PHOTOGRAPH 5
Overview of Disturbed and Graded Area, Looking West



PHOTOGRAPH 6
Bluffs Cut by Rills and Drainages near
the North End of Project Area, Looking East

6.2 Previously Recorded Sites

6.2.1 CA-SDI-10206

This site has been recorded as a lithic scatter. A portion of the site is mapped outside the APE. Three dirt roads run through the site, which consistent with prior surveys' findings, is where the artifacts were noted. Areas outside the road are covered in dense cholla cactus, which impeded the survey. A total of 2 FGM scrapers, 3 primary FGM flakes, 2 tertiary FGM flakes, 3 secondary fine-grained porphyritic metavolcanic (FGPM) flakes, 27 secondary FGM flakes, and 2 FGM angular waste pieces were noted within the on-site roads. One of the scrapers is dome-shaped and the other is flake-based. The artifacts within the roads are most likely not in situ, as the roads have been graded periodically for maintenance and water has caused erosion. As a result of erosion, artifacts may have been moved downslope and some may have been covered with eroded soils. The identified artifacts are currently concentrated at the bottom of the northeast/southwest trending road where it flattens out some. The southwest corner of the site within the APE has been disturbed by erosion and currently contains riprap. Approximately 30 percent of the site within the APE consists of dirt roads. The remainder of the site was difficult to survey because of the dense cholla. It is likely that additional artifacts exist in the vegetated part of the site. Based on those artifacts in the road, artifact density is 0.11 artifacts per square meter. Per the MPOMPR, this site qualifies as a temporary camp/lithic scatter.

6.2.2 CA-SDI-10614

This site was recorded as a quarry site in 1986. During the current survey, an FGM hammerstone and approximately 6 secondary FGM flakes were identified near the eastern edge of the site boundary. The artifacts were found within a 7-by-7-meter area within the overall site boundary. The majority of the material noted within the recorded site boundaries consisted of spalls that occur naturally. There were a few small boulders that may have been interpreted as having been quarried. RECON did not find evidence of quarrying. This site appears to be a lithic scatter; however, it does not meet the definition of a site per the MPOMPR. Per the MPOMPR, the hammerstone would have been recorded as an isolated artifact, and the flakes would have been noted as part of the sparse lithic scatter that covers the mesa and is considered background noise.

6.2.3 2007 Lithic Scatters

None of the four cultural resources recorded in 2007 were noted during the survey. Because the survey report with these resources was reviewed after the survey, the recorded locations of these four cultural resources were surveyed using basic 15-meter intervals instead of the 3- to 5-meter intervals used within a site. BAA-2 was previously recorded in the northeastern part of the APE downslope from 8359-GK-1. BAA-5 and BAA-6 were located in highly disturbed areas with dirt roads and residential debris. The flakes identified at BAA-2, BAA-5, and BAA-6 may have been seen but were not recorded based on the survey methods from MPOMPR. The flakes were treated as background noise. No tools

or shellfish remains were noted. The hammerstone at BAA-7 was not found. As described in 2007, the area was heavily disturbed by residential dumping. Additional disturbance since 2007 is highly likely. Although BAA-4 is a lithic scatter outside the APE, it is located upslope from 8359-HJP-2 and may be part of this site. As noted below, vegetation may have obscured additional artifacts that could connect these sites.

6.3 Newly Recorded Cultural Resources

6.3.1 8359-GK-1

This site is a sparse lithic scatter with two possible rock features. The lithic scatter consists of four FGM secondary flakes, one FGM primary flake, one FGM angular waste, an oval-shaped rock alignment measuring 4 by 2 meters, and a newer looking circular rock alignment. A measurement of the latter alignment was not taken due to its location under a lemonade berry (*Rhus integrifolia*). This site is located on a steep north-facing slope, with many conglomerate rocks on the surface. It measures 20 by 14 meters. A small dirt road leading into Moody Canyon runs north of the site, and a larger dirt road runs east-west south of the site. Artifact density is 0.021 artifacts per square meter. This does not meet the definition of a site per the MPOMPR; however, it was recorded as one because of the features with indeterminate ages.

6.3.2 8359-HJP-2

This site is a lithic scatter located on a knolltop at the eastern edge of the APE. The scatter consists of at least 15 primary and secondary FGM and FGPM flakes. Only the perimeter flakes were recorded with a GPS unit. Additional artifacts may be covered by the vegetation in the area, and the site may extend further outside and east of the APE. A number of dirt roads are located north, east, and west of the site. The power line is approximately 75 meters southeast. The site measures 18 by 12 meters. The artifact density is 0.069 artifacts per square meter. This meets the definition of a temporary camp/lithic scatter per the MPOMPR.

6.3.3 8359-ISO-HJP-1

This isolate consists of a felsite core within the drainage in Moody Canyon. The core may have washed downstream and not be in its original location.

6.3.4 8359-ISO-HJP-2

This isolate consists of an FGM retouched flake located on a north-facing slope upslope of Moody Canyon. There is a small east/west dirt road north of the isolate, a small northwest/southeast dirt road west of the isolate, and a large dirt road south of the isolate.

6.3.5 8359-ISO-HJP-3

This isolate consists of an FGM core and an FGM secondary flake located in a west-facing slope that is surrounded by dirt roads.

6.3.6 8359-ISO-HJP-4

This isolate consists of an FGM core and an FGM secondary flake on a west-facing slope. It is located in the southeastern portion of the APE.

7.0 Management Recommendations

7.1 Regulatory Background

The project is subject to state and City environmental regulations and may be subject to federal regulations if jurisdictional waters/wetlands are identified. The City is the lead for the California Environmental Quality Act (CEQA) guidelines and regulations. If required, the U.S. Army Corps of Engineers would be the lead for compliance with Section 106 of the National Historic Places Act and National Environmental Policy Act (NEPA).

The project may be an undertaking as defined in Section 106 of the NHPA. Section 106 of the NHPA, as implemented (36 Code of Federal Regulations [CFR] Part 800), requires federal agencies to take into account the effects of their undertakings on historic properties. A key consideration for management is whether the cultural resources within the APE are eligible for inclusion in the NRHP. A resource must qualify under one or more criteria in order to be considered eligible for listing.

A property that qualifies for the NRHP is considered significant in terms of the planning process under the NHPA, NEPA, and other federal mandates. The NRHP Criteria for Evaluation (36 CFR 60.4) provides guidance in determining a property's eligibility for listing on the NRHP. This states that the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. Is associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Is associated with the lives of persons significant in our past; or
- C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or
- D. Has yielded, or may be likely to yield, information important in prehistory or history [36 CFR 60.4].

To be eligible, sites must also have integrity. For criteria A, B, and C, integrity means that the property must evoke the resource's period of significance to a non-historian or non-archaeologist. If site materials have been removed or vandalized to the extent that an ordinary citizen can no longer envision or grasp the historic activities that took place there, the site is said to lack integrity (National Park Service 1997:45). Cultural isolates (isolated artifacts) are not considered significant because they lack characteristics that would qualify them for listing on the NRHP. Typically, archaeological sites qualify for eligibility under Criterion D, research potential, so integrity in this case means that the deposits are intact and undisturbed enough to make a meaningful data contribution to regional research issues.

A resource that satisfies one or more of these eligibility criteria and that has integrity is then considered significant. Significant cultural resources are also called historic properties, even if they are prehistoric. The terms "significant," "eligible," and "historic property" are typically used interchangeably in cultural resource management documents. In most cases, an archeological testing and evaluation phase investigation is needed to determine formal eligibility. This usually involves instrument mapping with a GPS unit and excavation and ancillary studies such as radiocarbon dating, pollen analysis, macrobotanical analysis, lithic analysis, and faunal analysis. However, at the survey level, one can make provisional recommendations based on site attributes noted on the site surface. A formal testing and evaluation program would be necessary to definitively document the presence or absence of subsurface deposits and the specific research potential of each site.

As stated above, the project is also subject to CEQA guidelines. Significance criteria are found in CEQA Guidelines 15064.5(a) and Section 5024 of the Public Resources Code (PRC), and CEQA Guidelines 15064.5(c).

A resource shall be considered historically significant if it meets one of the following criteria for listing on the CRHR (PRC Section 5024.1):

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

In addition to meeting one of the above criteria, a resource must have integrity; that is, it must evoke the resource's period of significance or, in the case of criterion 4, it may be disturbed, but it must retain enough intact and undisturbed deposits to make a meaningful

data contribution to regional research issues (California Code of Regulations Title 14, Chapter 11.5 Section 4852 [c]).

The City has developed a set of guidelines that ensure compliance with state and federal guidelines for the management of historical resources. These guidelines are stated in the City's Historic Resources Regulations. The Historic Resources Regulations have been developed to implement applicable local, state, and federal policies and mandates. Included in these are the City's Progress Guide and General Plan, the CEQA of 1970, and Section 106 of the National Historic Preservation Act (NHPA) of 1966. The intent of the City's guidelines is to ensure consistency in the identification, evaluation, preservation and mitigation, and development of the City's historical resources.

The criteria used by the City to determine significance for historic resources reflect a more local perspective of historical, architectural, and cultural importance for inclusion on the City's Historical Resources Register. The resource can meet one or more of the following criteria:

- a. Exemplifies or reflects special elements of the city's, a community's, or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or agricultural development.
- b. Is identified with persons or events significant in local, state, or national history.
- c. Embodies distinctive characteristics of a style, type, period, or method of construction or is a valuable example of the use of indigenous materials or crafts.
- d. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman.
- e. Is listed or has been determined eligible by National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historical Preservation Office for listing on the State Register of Historic Resources.
- f. Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest, or aesthetic value, or which represent one or more architectural periods or styles in the history and development of the city.

Unless demonstrated otherwise, archaeological sites with only a surface component are not typically considered significant. The determination of an archaeological site's significance depends on a number of factors specific to that site including size, type, integrity, presence or absence of a subsurface deposit, soil stratigraphy, features, diagnostic artifacts, or datable material; artifact/ecofact density; assemblage complexity; cultural affiliation; association with an important person or event; and ethnic importance. Under the City's guidelines, all archaeological sites are considered potentially significant (City of San Diego 2001:13).

Under the City's Historical Resources Guidelines for the Land Development Code there are historical resource types which are typically considered insignificant for planning purposes. These are isolates, sparse lithic scatters, isolated bedrock milling features, shellfish processing stations, and sites and buildings less than 45 years old (City of San Diego 2001:13).

7.2 Recommendations

The four newly recorded isolates and CA-SDI-10614 are not considered significant, because they lack characteristics that would qualify them for listing on the NRHP, CRHR, or City Historical Resources Register. Based on the survey level of investigation, CA-SDI-10206, 8359-GK-1, and 8359-HJP-2 have the potential to yield information important to prehistory and therefore could qualify under criteria D/4. These sites were categorized as temporary camps per the MPOMPR. By definition, these site types are expected to have subsurface deposits.

According to CEQA, a significant impact is a project effect that may cause a substantial adverse change in the significance of a historical resource. Under Section 106, agencies are required to take into consideration adverse effects to eligible resources or historic properties. Adverse changes include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings resulting in the impairment of the resources significance (Sec. 15064.5.4b, CEQA Guidelines). Mitigation measures are required for adverse effects on significant historical resources (Sec. 21083.2 CEQA Code). Untested archaeological sites, in this case CA-SDI-10206, 8359-GK-1, and 8359-HJP-2, are considered to be significant resources until they are tested and a determination is made. Avoidance of significant cultural resources is the preferred option to mitigate impacts. Currently, the project is in the conceptual design/environmental review phase. After design plans are completed if avoidance is not feasible, a testing program for CA-SDI-10206, 8359-GK-1, and 8359-HJP-2 should be designed and implemented by a qualified archaeologist using current Secretary of Interior's Standards and/or City guidelines. The goal of the testing program would be to determine whether the sites are significant under NRHP, CEQA, and City criteria. The testing program should incorporate the research topics developed in the MPOMPR (Gallegos et al. 1998). These are chronology, subsistence and paleoenvironmental reconstruction, settlement patterns, technology, and trade and travel.

The MPOMPR outlines a testing program for sites on the mesa that includes a sample surface collection; excavation of shovel test pits to determine site size and depth; excavation of 1-by-1-meter units to determine site content and integrity; backhoe trenching to identify site size, depth, integrity and the potential for buried deposits; laboratory and data analysis; and preparation of the findings report. Laboratory analysis could include shellfish and faunal analyses, radiocarbon dating, and micro/macrobotanical and protein residue studies (Gallegos et al. 1998). The backhoe trenching is not recommended for these sites due to their small size and low chance of intact buried deposits. The City's Historical Resources Guidelines for the Land Development Code should also be used to determine the number of shovel test pits and units to excavate (City of San Diego 2001). For CA-SDI-10206 it recommended that excavation be limited to the area of dense vegetation

because of the degree of disturbance within the existing roads. In order to do this, the cholla cactus would need to be mechanically removed. This could result in a biological impact and may need mitigation. Surface collection only is recommended within the existing dirt roads.

8.0 Certification and Project Personnel

This report was prepared in compliance with CEQA and with policies and procedures of the City of San Diego. RECON archaeologist Carmen Zepeda-Herman, M.A. served as principal investigator. Ms. Zepeda-Herman is a member of the Register of Professional Archaeologists and meets the Secretary of the Interior Standards for Archaeology and Historic Preservation. The following individuals participated in the field tasks or preparation of this report. Resumes for key personnel are on file with the City of San Diego. To the best of our knowledge, the statements and information contained in this report are accurate.



Carmen Zepeda-Herman, Project Archaeologist

Principal Investigator	Carmen Zepeda–Herman, M.A.
Field Archaeologist	Harry Price
Native American Observer	Gabe Kitchen
Senior Reviewer	Brenna Ogg
Graphic Artist	Chris Nixon
GIS Specialist	Sean Bohac
Production Specialist	Jennifer Gutierrez

9.0 References Cited

Carrico, Richard L.

- 1987 *Strangers in a Stolen Land. American Indians in San Diego 1850-1880.* Sierra Oaks Publishing, Newcastle, California.

Christenson, Lynne

- 1989 The Late Prehistoric Yuman People of San Diego County, California: Their Settlement and Subsistence System. Unpublished Ph.D. dissertation, Department of Anthropology, Arizona State University.

Cline, Lora L.

- 1984 *Just Before Dawn.* L. C. Enterprises, Tombstone, Arizona.

Cook, Shelburne F.

- 1976 *The Population of the California Indians, 1769-1970.* University of California Press, Berkeley.

Dalope, Michelle, Angie Pham, and Gabe Kitchen

- 2011 Site form update for CA-SDI-10206, on file with the South Coastal Information Center, San Diego State University.

Gallegos, Dennis R., Carolyn Kyle, Adella Schroth, and Patricia Mitchell

- 1998 *Management Plan for Otay Mesa Prehistoric Resources, San Diego, California.* Coyote Press, Salinas, California.

GEOCON, Inc.

- 2012 EIR Level Update Geotechnical Report: Otay Mesa Community Plan Update, San Diego, California. Accessed on January 19, 2016. https://www.sandiego.gov/sites/default/files/11_apph_geotechnical_rpt.pdf.

Hector, Susan M., and Stephen R. Van Wormer

- 1986 Broken Fragments of Past Lifeways: Archaeological Excavations at Los Peñasquitos Ranch House, Volumes I and II. RECON.

Holland, Robert F.

- 1986 *Preliminary Descriptions of the Terrestrial Natural Communities of California.* Nongame-Heritage Program, California Department of Fish and Game, Sacramento.

Joines, Sinkovac, and Robbins-Wade

- 1984 Site form for CA-SDI-10206. One file with the South Coastal Information Center, San Diego State University.

Kennedy, Michael P. and Siang S. Tan.

- 2008 *Geologic Map of the San Diego 30'x60' Quadrangle, California*. Regional Geologic Map Series, 1:100,000 scale, Map No. 3. California Department of Conservation.

May, Ronald V.

- 1978 A Southern California Indigenous Ceramic Typology: A Contribution to Malcolm J. Rogers Research. *ASA Journal* 2:2.

McGinnis, Patrick

- 2007 Cultural Resources Constraints Study for the Beyer Athletic Field Project. Unpublished report on file with Tierra Environmental, San Diego.

National Parks Service

- 1997 *Guidelines for Identifying, Evaluating, and Registering Historic Mining Properties*. National Register Bulletin. Department of the Interior, Washington DC.

Nationwide Environmental Title Research, LLC (NETR)

- 2017 Historic Aerials. <http://www.historicaerials.com/> Accessed on January 17.

Nordby, Chris

- 2007 Biological Constraints Analysis for the Beyer Athletic Field Proposed Project Area. Unpublished report on file with Tierra Environmental, San Diego.

Pourade, Richard F.

- 1963 *The Silver Dons*. The History of San Diego. Union-Tribune Publishing, San Diego, California.

Price, H.

- 2005 Site form update for CA-SDI-10206. One file with the South Coastal Information Center, San Diego State University.

Pryde, Philip R.

- 1992 *San Diego: An Introduction to the Region*. Kendall/Hunt, Dubuque, Iowa.

Rogers, M. J.

- 1938 Archaeological and Geological Investigations of the Culture Levels in an Old Channel of San Dieguito Valley. Carnegie Institution of Washington Yearbook 37:344-45.

- 1939 Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. *San Diego Museum of Man Papers* 3.

- 1945 An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology* 1(2):167-198.

Rolle, Andrew

1998 *California: A History*. Harlan Davidson, Wheeling, Illinois.

San Diego, City of

2001 *Historical Resources Guidelines*. San Diego Municipal Land Development Code, San Diego, California

2008 Otay Mesa Community Plan Update: Historic Context Statement and Historic Resource Survey. On file at the City of San Diego, Accessed January 10, 2017. https://www.sandiego.gov/sites/default/files/omcpu_historical_context.130909.pdf

Shipek, Florence C. (editor)

1991 *The Autobiography of Delfina Cuero*. Ballena Press: Menlo Park, CA.

Spier, Leslie

1923 Southern Diegueno Customs. *University of California Publications in American Archaeology and Ethnology* 20(16):295-358. Berkeley.

True, D. L.

1970 *Investigation of a Late Prehistoric Complex in Cuyamaca Rancho State Park, San Diego County, California*. Department of Anthropology Publications, University of California, Los Angeles.

1980 The Pauma Complex in Northern San Diego County: 1978. *The Journal of New World Archaeology* 3(4):1-39.

U.S. Department of Agriculture

1973 *Soil Survey, San Diego Area, California. Edited by Roy H. Bowman. Soil Conservation Service and Forest Service*. December.

Van Wormer, Stephen R.

1986 Site form for CA-SDI-10614. One file with the South Coastal Information Center, San Diego State University.

Warren, Claude N., Gretchen Siegler, and Frank Dittmer

1993 Paleoindian and Early Archaic Periods. In Historic Properties Background Study for the City of San Diego Clean Water Program. On file with City of San Diego Clean Water Program and Mooney Associates, San Diego.