PHASE I CULTURAL RESOURCE SURVEY FOR 8276 PASEO DEL OCASO

CITY OF SAN DIEGO

Project No. 556536

Submitted to:

City of San Diego
Development Services Department
1222 First Avenue, MS 501
San Diego, California 92101

Prepared for:

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Prepared by:

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Archaeological Database Information

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USGS Quadrangle:	*La Jolla, California* (7.5 minute)
Study Area:	8276 Paseo Del Ocaso
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I. PROJECT DESCRIPTION AND LOCATION

At the request of the Marengo Morton Architects, Inc., Brian F. Smith and Associates, Inc. (BFSA) conducted an archaeological survey of the residential parcel at 8276 Paseo Del Ocaso. The property is located in unsectioned Pueblo Lands of San Diego in projected Township 15 South, Range 4 West of the *La Jolla, California* USGS 7.5-minute Quadrangle. The archaeological survey was undertaken in order to determine if cultural resources exist within the property and to assess the possible effects of the proposed additions and modifications to the existing single-family residence. Maps of the property location have been included in Attachment B. BFSA conducted the archaeological survey on March 28, 2017 accompanied by a Native American monitor from Red Tail Monitoring & Research, Inc. (Red Tail). Although the property is recorded as being within the boundaries of Site SDI-20,130/W-2, no evidence of cultural resources was encountered during the survey. However, ground visibility within the property was constrained due to the extent of hardscape surrounding the residential structure and garage.

II. SETTING

The project setting includes both physical and biological contexts of the proposed project, as well as the cultural setting of prehistoric and historic human activities in the general area.

Natural Environment

The 0.12-acre project is situated in the western portion of the Peninsular Ranges geomorphic province of southern California. Vegetation within the vicinity of the project is classified as entirely urban landscaping, including various species of shrubs, succulents, and lawn. The Area of Potential Effect (APE) is located in the Coastal Plains Physiographic Province of San Diego County and contains mostly disturbed graded soil that sits upon the Quaternary-age Bay Point Formation (Adler and High 2001). An overview of the project is provided in Plate 1.

Plate 1: View of the front of the residence at 8276 Paseo Del Ocaso, facing west.

Cultural Environment

The cultures that have been identified in the general vicinity of the project consist of a possible Paleo Indian manifestation of the San Dieguito Complex, the Archaic and Early Milling Stone horizons represented by the La Jolla Complex, and the Late Prehistoric Kumeyaay culture. The area was used for ranching and farming following the Hispanic intrusion into the region and continued through the historic period. A brief discussion of the cultural elements within the project is provided below.

Paleoenvironment

Because of the close relationship between prehistoric settlement and subsistence patterns and the environment, it is necessary to understand the setting in which these systems operated. At the end of the final period of glaciation, approximately 11,000 to 10,000 years before the present (YBP), the sea level was considerably lower than it is now; the coastline at that time would have been approximately two miles west of its present location (Smith and Moriarty 1985). At approximately 7,000 YBP, the sea level rose rapidly, filling in many coastal canyons that had been dry during the glacial period. The period between 7,000 and 4,000 YBP was characterized by conditions that were drier and warmer than they were previously, followed by a cooler, moister environment (Robbins-Wade 1990). Changes in sea level and coastal topography are often manifested in archaeological sites through the types of shellfish that were utilized by

prehistoric groups. Different species of shellfish prefer certain types of environments, and dated sites that contain shellfish remains reflect the setting that was exploited by the prehistoric occupants.

Unfortunately, pollen studies have not been conducted for this section of San Diego; however, studies in other areas of southern California, such as Santa Barbara, indicate that the coastal plains supported a pine forest between approximately 12,000 and 8,000 YBP (Robbins-Wade 1990). After 8,000 YBP, this environment was replaced by more open habitats, which supported oak and non-arboreal communities. The coastal sage scrub and chaparral environments of today appear to have become dominant after 2,200 YBP (Robbins-Wade 1990).

Prehistory

In general, the prehistoric record of San Diego County has been documented in many reports and studies, several of which represent the earliest scientific works concerning the recognition and interpretation of the archaeological manifestations present in this region. Geographer Malcolm Rogers initiated the recordation of sites in the area during the 1920s and 1930s, using his field notes to construct the first cultural sequences based upon artifact assemblages and stratigraphy (Rogers 1966). Subsequent scholars expanded the information gathered by Rogers and offered more academic interpretations of the prehistoric record. Moriarty (1966, 1967, 1969), Warren (1964, 1966), and True (1958, 1966) all produced seminal works that critically defined the various prehistoric cultural phenomena present in this region (Moratto 1984). Additional studies have sought to refine these earlier works to a greater extent (Cardenas 1986; Moratto 1984; Moriarty 1966, 1967; True 1970, 1980, 1986; True and Beemer 1982; True and Pankey 1985; Waugh 1986). In sharp contrast, the current trend in San Diego prehistory has also resulted in a revisionist group that rejects the established cultural historical sequence for San Diego. This revisionist group (Warren et al. 1998) has replaced the concepts of La Jolla, San Dieguito, and all of their other manifestations with an extensive, all-encompassing, chronologically undifferentiated cultural unit that ranges from the initial occupation of southern California to around A.D. 1000 (Bull 1983, 1987; Ezell 1983, 1987; Gallegos 1987; Kyle et al. 1990; Stropes 2007). For the present study, the prehistory of the region is divided into four major periods: Early Man, Paleo Indian, Early Archaic, and Late Prehistoric.

Early Man Period (Prior to 8500 B.C.)

At the present time, there has been no concrete archaeological evidence to support the occupation of San Diego County prior to 10,500 YBP. Some archaeologists, such as Carter (1957, 1980) and Minshall (1976), have been proponents of Native American occupation of the region as early as 100,000 YBP. However, their evidence for such claims is sparse at best and they have lost much support over the years as more precise dating techniques have become available for skeletal remains thought to represent early man in San Diego. In addition, many of the "artifacts" initially identified as products of the Early Man Period in the region have since

been rejected as natural products of geologic activity. Some of the local proposed Early Man Period sites include Texas Street, Mission Valley (San Diego River Valley), Del Mar, La Jolla, Buchanan Canyon, and Brown (Bada et al. 1974; Carter 1957, 1980; Minshall 1976, 1989; Moriarty and Minshall 1972; Reeves 1985; Reeves et al. 1986).

Paleo Indian Period (8500 to 6000 B.C.)

For the region, it is generally accepted that the earliest identifiable culture in the archaeological record is represented by the material remains of the Paleo Indian Period San Dieguito Complex. The San Dieguito Complex was thought to represent the remains of a group of people who occupied sites in this region between 10,500 and 8,000 YBP, and who were related to or contemporaneous with groups in the Great Basin. As of yet, no absolute dates have been forthcoming to support the great age attributed to this cultural phenomenon. The artifacts recovered from San Dieguito Complex sites duplicate the typology attributed to the Western Pluvial Lakes Tradition (Moratto 1984; Davis et al. 1969). These artifacts generally include scrapers, choppers, large bifaces, large projectile points, and few milling tools. Tools recovered from San Dieguito Complex sites, along with the general pattern of their site locations, led early researchers to believe that the people of the San Dieguito Complex were a wandering hunter-gatherer society (Moriarty 1969; Rogers 1966).

The San Dieguito Complex is the least understood of the cultures that have inhabited the San Diego County region. This is due to an overall lack of stratigraphic information and/or datable materials recovered from sites identified as the San Dieguito Complex. Currently, controversy exists among researchers regarding the relationship of the San Dieguito Complex and the subsequent cultural manifestation in the area, the La Jolla Complex. Although, firm evidence has not been recovered to indicate whether the San Dieguito Complex "evolved" into the La Jolla Complex, the people of the La Jolla Complex moved into the area and assimilated with the people of the San Dieguito Complex, or the people of the San Dieguito Complex retreated from the area due to environmental or cultural pressures.

Early Archaic Period (6000 B.C. to A.D. 0)

Based upon evidence suggesting climatic shifts and archaeologically observable changes in subsistence strategies, a new cultural pattern is believed to have emerged in the San Diego region around 6000 B.C. Archaeologists believe that this Archaic Period pattern evolved from or replaced the San Dieguito Complex culture, resulting in a pattern referred to as the Encinitas Tradition. In San Diego, the Encinitas Tradition is thought to be represented by the coastal La Jolla Complex and its inland manifestation, the Pauma Complex. The La Jolla Complex is best recognized for its pattern of shell middens, grinding tools closely associated with marine resources, and flexed burials (Shumway et al. 1961; Smith and Moriarty 1985). Increasing numbers of inland sites have been identified as dating to the Archaic Period, focusing upon terrestrial subsistence (Cardenas 1986; Smith 1996; Raven-Jennings and Smith 1999a, 1999b).

The tool typology of the La Jolla Complex displays a wide range of sophistication in the lithic manufacturing techniques used to create the tools found at their sites. Scrapers, the dominant flaked tool type, were created by either splitting cobbles or by finely flaking quarried material. Evidence suggests that after about 8,200 YBP, milling tools began to appear in the La Jolla Complex sites. Inland sites of the Encinitas Tradition (Pauma Complex) exhibit a reduced quantity of marine-related food refuse and contain large quantities of milling tools and food bone. The lithic tool assemblage shifts slightly to encompass the procurement and processing of terrestrial resources, suggesting seasonal migration from the coast to the inland valleys (Smith 1996). At the present time, the transition from the Archaic Period to the Late Prehistoric Period is not well understood. Many questions remain concerning cultural transformation between periods, possibilities of ethnic replacement, and/or a possible hiatus from the western portion of the county.

Late Prehistoric Period (A.D. 0 to 1769)

The transition into the Late Prehistoric Period in the project area is primarily represented by a marked change in archaeological patterning known as the Yuman Tradition. This tradition is primarily represented by the Cuyamaca Complex, which is believed to be derived from the mountains of southern San Diego County. The people of the Cuyamaca Complex are considered ancestral to the ethnohistoric Kumeyaay (Diegueño). Although several archaeologists consider the local Native American tribes to be latecomers, the traditional stories and histories that are orally passed down by the local Native American groups speak both presently and ethnographically to tribal presence in the region as being since the time of creation.

The Kumeyaay Native Americans were a seasonal hunting and gathering people with cultural elements that were very distinct from the people of the La Jolla Complex. Noted variations in material culture included cremation, the use of the bow and arrow, and adaptation to the use of the acorn as a main food staple (Moratto 1984). Along the coast, the Kumeyaay made use of marine resources by fishing and collecting shellfish for food. Game and seasonally available plant food resources (including acorns) were sources of nourishment for the Kumeyaay. The most important food resource for these people was the acorn, which represented a storable surplus, which in turn allowed for seasonal sedentism and its attendant expansion of social phenomena.

Firm evidence has not been recovered to indicate whether the people of the La Jolla Complex were present when the Kumeyaay Native Americans migrated into the coastal zone. However, stratigraphic information recovered from Site SDI-4609 in Sorrento Valley suggests a possible hiatus of 650 ± 100 years between the occupation of the coastal area by the La Jolla Complex (1,730 ± 75 YBP is the youngest date for the La Jolla Complex inhabitants at SDI-4609) and Late Prehistoric cultures (Smith and Moriarty 1983). More recently, a reevaluation of two prone burials at the Spindrift Site excavated by Moriarty (1965) and radiocarbon dates of a pre-ceramic phase of Yuman occupation near Santee suggest a commingling of the latest La Jolla

Complex inhabitants and the earliest Yuman inhabitants about 2,000 YBP (Kyle and Gallegos 1993).

History

Exploration Period (1530 to 1769)

The historic period around San Diego Bay began with the landing of Juan Rodriguez Cabrillo and his men in 1542 (Chapman 1925). Sixty years after the Cabrillo expeditions (1602 to 1603), Sebastian Vizcaíno made an extensive and thorough exploration of the Pacific coast. Although his voyage did not extend beyond the northern limits of the Cabrillo track, Vizcaíno had the most lasting effect on the nomenclature of the coast. Many of the names Vizcaíno gave to various locations throughout the region have survived to the present time, whereas nearly every one of Cabrillo's has faded from use. For example, Cabrillo gave the name "San Miguel" to the first port he stopped at in what is now the United States; 60 years later, Vizcaíno changed the port name to "San Diego" (Rolle 1969).

Spanish Colonial Period (1769 to 1821)

The Spanish occupation of the claimed territory of Alta California took place during the reign of King Carlos III of Spain (Engelhardt 1920). Jose de Gálvez, a powerful representative of the king in Mexico, conceived the plan to colonize Alta California and thereby secure the area for the Spanish Crown (Rolle 1969). The effort involved both military and religious contingents, where the overall intent of establishing forts and missions was to gain control of the land and the native inhabitants through conversion. Actual colonization of the San Diego area began on July 16, 1769, when the first Spanish exploring party, commanded by Gaspar de Portolá (with Father Junípero Serra in charge of religious conversion of the native populations), arrived by the overland route to San Diego to secure California (Palou 1926). The natural attraction of the harbor at San Diego and the establishment of a military presence in the area solidified the importance of San Diego to the Spanish colonization of the region and the growth of the civilian population. Missions were constructed from San Diego to as far north as San Francisco. The mission locations were based upon important territorial, military, and religious considerations. Grants of land were made to those who applied, but many tracts reverted back to the government due to lack of use. As an extension of territorial control by the Spanish Empire, each mission was placed so as to command as much territory and as large a population as possible. While primary access to California during the Spanish Period was by sea, the route of El Camino Real served as the land route for transportation, commercial, and military activities within the colony. This route was considered to be the most direct path between the missions (Rolle 1969; Caughey 1970). As increasing numbers of Spanish and Mexican peoples, as well as the later Americans during the Gold Rush, settled in the area, the Native American population diminished as they were displaced or decimated by disease (Carrico and Taylor 1983).

Mexican Period (1821 to 1846)

On September 16, 1810, the priest Father Miguel Hidalgo y Costilla started a revolt against Spanish rule. He and his untrained Native American followers fought against the Spanish, but his revolt was unsuccessful and Father Hidalgo was executed. After this setback, Father José Morales led the revolutionaries, but he too failed and was executed. These two men are still symbols of Mexican liberty and patriotism. After the Mexican-born Spanish and the Catholic Church joined the Revolution, Spain was finally defeated in 1821. Mexican Independence Day is celebrated on September 16 of each year, signifying the anniversary of the start of Father Hidalgo's revolt. The revolution had repercussions in the northern territories, and by 1834, all of the mission lands had been removed from the control of the Franciscan Order under the Acts of Secularization. Without proper maintenance, the missions quickly began to disintegrate, and after 1836, missionaries ceased to make regular visits inland to minister the needs of the Native Americans (Engelhardt 1920). Large tracts of land continued to be granted to those who applied or who had gained favor with the Mexican government. Grants of land were also made to settle government debts and the Mexican government was called upon to reaffirm some older Spanish land grants shortly before the Mexican-American War of 1846 (Moyer 1969).

Anglo-American Period (1846 to Present)

California was invaded by United States troops during the Mexican-American War from 1846 to 1848. The acquisition of strategic Pacific ports and California land was one of the principal objectives of the war (Price 1967). At the time, the inhabitants of California were practically defenseless, and they quickly surrendered to the United States Navy in July of 1847 (Bancroft 1886).

The cattle ranchers of the "counties" of southern California prospered during the cattle boom of the early 1850s. They were able to "reap windfall profit … pay taxes and lawyer's bills … and generally live according to custom" (Pitt 1966). However, cattle ranching soon declined, contributing to the expansion of agriculture. With the passage of the "No Fence Act," San Diego's economy shifted from raising cattle to farming (Robinson 1948). The act allowed for the expansion of unfenced farms, which was crucial in an area where fencing material was practically unavailable. Five years after its passage, most of the arable lands in San Diego County had been patented as either ranchos or homesteads, and growing grain crops replaced raising cattle in many of the county's inland valleys (Blick 1976; Elliott 1883 [1965]).

By 1870, farmers had learned to dry farm and were coping with some of the peculiarities of San Diego County's climate (*San Diego Union,* February 6, 1868; Van Dyke 1886). Between 1869 and 1871, the amount of cultivated acreage in the county rose from less than 5,000 acres, to more than 20,000 acres (*San Diego Union,* January 2, 1872). Of course, droughts continued to hinder the development of agriculture (Crouch 1915; *San Diego Union,* November 10, 1870; Shipek 1977). Large-scale farming in San Diego County was limited by a lack of water and the

small size of arable valleys. The small urban population and poor roads also restricted commercial crop growing. Meanwhile, cattle continued to be grazed in parts of inland San Diego County. In the Otay Mesa area, for example, the "No Fence Act" had little effect on cattle farmers because ranches were spaced far apart and natural ridges kept the cattle out of nearby growing crops (Gordinier 1966).

During the first two decades of the twentieth century, the population of San Diego County continued to grow. The population of the inland county declined during the 1890s, but between 1900 and 1910, it rose by about 70 percent. The pioneering efforts were over, the railroads had broken the relative isolation of southern California, and life in San Diego County had become similar to other communities throughout the west. After World War I, the history of San Diego County was primarily determined by the growth of San Diego Bay. In 1919, the United States Navy decided to make the bay the home base for the Pacific Fleet (Pourade 1964), followed by the aircraft industry in the 1920s (Heiges 1976). The establishment of these industries led to the growth of the county as a whole; however, most of the civilian population growth occurred in the north county coastal areas, where the population almost tripled between 1920 and 1930. During this time period, the history of inland San Diego County was subsidiary to that of the city of San Diego, which had become a Navy center and an industrial city (Heiges 1976). In inland San Diego County, agriculture became specialized and recreational areas were established in the mountain and desert areas. Just before World War II, urbanization began to spread to the inland parts of the county.

History of the La Jolla Area

A limited research effort was initiated in order to characterize the circumstances of the early development of La Jolla so that the current project could be placed in context with the surrounding community. Several early land developments contributed to the overall disturbance of the major prehistoric sites in the area of the project. However, small development projects continuously encounter pockets of cultural sites that have survived grading and construction impacts throughout the years.

The origin of the name La Jolla, most researchers agree, is a variation of the original "La Hoya," which literally translated from Spanish means "pit, hole, grave, or valley." The equivalent American translation is "river basin" (Castillo and Bond 1975). The city surveyor, James Pascoe, spelled it "La Joya" on his map of city land in 1870, which translates as "the jewel." The location of La Hoya (or La Joya) was consistently shown as the canyon in which the southern portion of Torrey Pines Road is currently located. The first post office was established on February 28, 1888 and closed on March 31, 1893, but reopened as "Lajolla" (one word) on August 17, 1894. On June 19, 1905, the name of this post office was changed to "La Jolla" (two words) (Salley 1977).

The first purchase of Pueblo Lands in this area occurred on February 27, 1869, when the City of San Diego sold Pueblo Lot 1261 to Samuel Sizer. On the same day, the City sold Pueblo

Lot 1259 to Daniel Sizer. These lots sold for $1.25 per acre. Both lots were located south of "La Hoya Valley." The *San Diego Union* (March 31, 1869) referred to the canyon as "La Hoya" when describing Sizer's agricultural development to the south. By the 1870s, excursions to the point and cove were offered by the Horton House in their Concord Coach, a stagecoach drawn by four horses (*San Diego Union,* August 9, 1932).

The boom of the 1880s extended to La Jolla in the form of the construction of a hotel and rental cottages (Randolph 1955). Initially, water supplies were unreliable, consisting of only two sources: a small well in Rose Canyon and a small pipeline connected to the Pacific Beach water supply. Reliable transportation to La Jolla came with the extension of the San Diego, Old Town, and Pacific Beach Railway to La Jolla in 1894. This narrow-gauge railroad was responsible for bringing passengers and prefabricated cottages (on flat cars) to the growing community (Randolph 1955). The railroad was dismantled in 1919, but not before an unsuccessful experiment with a gasoline-powered rail car (known locally as the "Red Devil") was conducted.

As the number of residences and businesses increased in La Jolla, so did the need for public services. On July 10, 1888, the San Diego City Council passed an ordinance providing for the disposal for garbage, night soil, dead animals, ashes, and rubbish (Document 101817). In 1909, natural gas was brought to La Jolla, and in 1911, electricity was made available to the community (Randolph 1955). An electric railway provided service to La Jolla between 1924 and 1940. In 1918, street paving began, and by 1922, the Girard Street business section was completely paved.

Visitors to La Jolla enjoyed the park at Alligator Head from the earliest days of stagecoach excursions. Trees and shrubs were planted around the park, but a months-long failure of the water supply during 1890 caused many of the plants to die. During the 1890s, the park was also the focus of construction for guest cottages and hotels, such as the La Jolla Beach House, which indicates that developmental impacts to prehistoric archaeological resources, as well as impacts from increased visitation, occurred as a result of this early period. Randolph (1955) wrote about a Native American settlement at La Jolla (probably SDI-39), which was supported by Native American informants and the recovery of several artifacts, including metates, stone utensils, and other relics from La Jolla Cove. As the development of La Jolla continued, other subdivisions, such as the "La Jolla Vista" subdivision of 1923, and plots were converted from farming and/or grazing to residential use (San Diego County Engineering Map Records).

The earliest notable development in this area was the construction of the Spindrift Inn southwest of the subject property in the 1920s. Also at this time, the initial development of the La Jolla Beach and Tennis Club (originally the La Jolla Beach and Yacht Club) took place to the southwest of the subject parcel. These early facilities gained in popularity and were successful in spite of the Depression that gripped the country between the stock market crash of 1929 and the opening of World War II. The La Jolla Vista subdivision, on the other hand, was slow in building to capacity, possibly because of the real estate bust from 1925 to 1926 (Brandes et al.

1999).

Two military training camps came to La Jolla during World War II: Camp Callan and Camp Elliot. In addition, two emplacements on Mount Soledad and one on the beach in La Jolla were established during the war years (Pierson 2001). Although these military installations were replaced after the Korean War with the University of California at San Diego campus and the expansion of the Scripps Institution of Oceanography, the economic base of La Jolla grew to include a substantial business element. Today, this trend continues with ever-present tourism playing a significant part in the local economy. Throughout the history of this community, the residential population has included both permanent and seasonal residents, many of whom have achieved a significant degree of financial and historical notoriety and success.

III. AREA OF POTENTIAL EFFECT

This archaeological survey encompassed one residential parcel at 8276 Paseo Del Ocaso in the La Jolla community of the city of San Diego. The APE can be characterized as entirely developed land covered by a one-story, single-family residence and associated landscaping and hardscape (Plates 2 through 4). The property lies between El Paseo Grande and Paseo Del Ocaso, immediately southwest of the intersection of Calle Frescota and Paseo Del Ocaso in the La Jolla Shores area of San Diego (Figures 1 through 3: Attachment B). The proposed project includes a first-floor addition, the addition of a second story and second-story balcony, a new basement area, and selective hardscape and landscape removal (Figure 4: Attachment B).

Plate 2: Overview of the backyard at 8276 Paseo Del Ocaso, facing northeast.

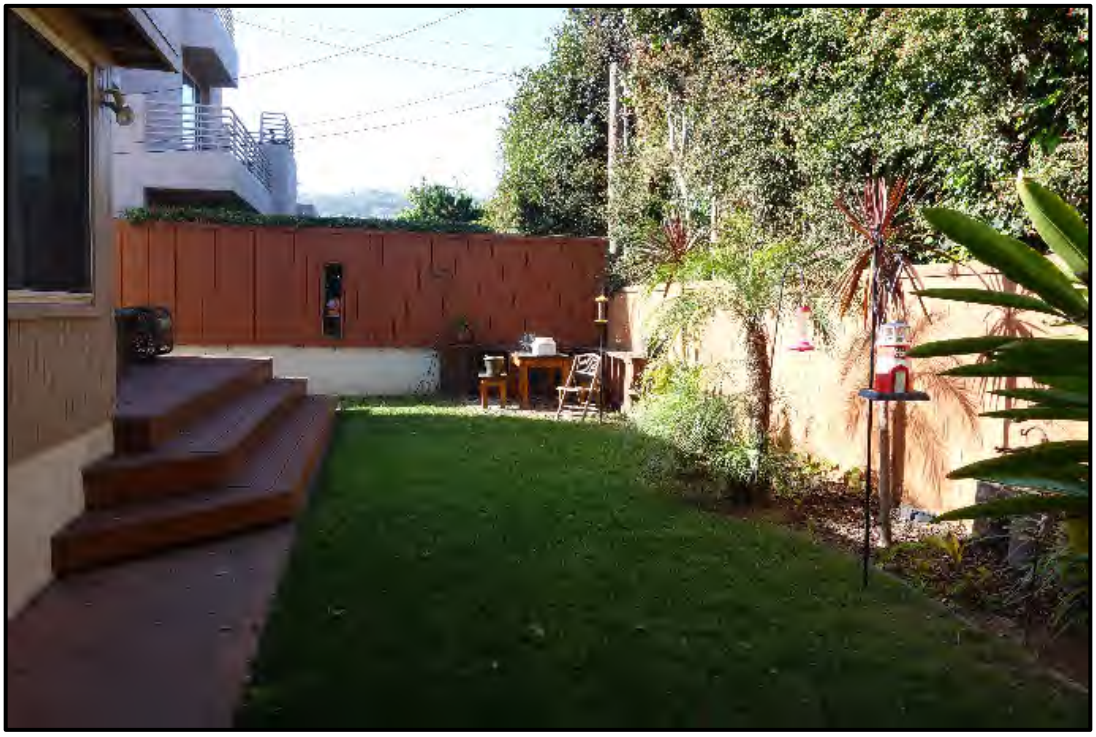

Plate 3: Overview of the backyard at 8276 Paseo Del Ocaso, facing south.

Plate 4: Overview of the side yard at 8276 Paseo Del Ocaso, facing east.

Preliminary background research for the property was conducted to evaluate the potential of the project to contain subsurface prehistoric resources. Previous studies indicate that the project is located within the recorded boundaries of SDI-20,130. At least 12 burials or portions of burials were previously recovered from the site by Rogers in the 1920s. In addition, more recent work by Pigniolo et al. (2012) has demonstrated the presence of sensitive cultural materials in the vicinity of the project APE as part of the Pigniolo et al. 2012 research and testing report at the La Jolla Shores Site (SDM-W-2) and the La Jolla Shores Extension Site (SDM-W-199). The primary prehistoric sites in the area are SDI-20,130/W-2, SDI-39/W-1, and SDI-20,129/W-199, which together span the length of La Jolla Shores and Spindrift Drive. These sites have been spread over a large area as a consequence of early development of the vicinity in the 1930s and 1940s. Evidence of the prehistoric sites is found throughout the existing neighborhood in La Jolla Shores. Additional archaeological sites (including SDI-39) have been registered to the south of the La Jolla Beach and Tennis Club in the vicinity of the Spindrift neighborhood.

IV. STUDY METHODS

The archaeological assessment included a reconnaissance of the property and an institutional records search review of previous studies in the area. The archaeological reconnaissance was monitored by Native American monitor Gabe Kitchen from Red Tail. BFSA reviewed the results of a records search completed by the South Coastal Information Center (SCIC) at San Diego State University (SDSU) for the project to determine the presence of any previously recorded cultural resources (Attachment C).

The results of the records search identified a portion of prehistoric Site SDI-20,130 within the property at 8276 Paseo Del Ocaso. An additional 13 recorded sites (four prehistoric and nine historic) and 10 historic addresses were identified within one-quarter mile of the property. The majority of the recorded sites are historic residences, historic trash scatters, or sidewalk stamps. The prehistoric sites include prehistoric habitation and shell midden sites. The records search also indicated that 43 previous investigations have been conducted within one-quarter mile of the project, three of which encompassed portions of the project (Mattingly 2007; Pigniolo et al. 2012; Zepeda-Herman 2011).

BFSA requested a Sacred Lands File search from the Native American Heritage Commission (NAHC), which yielded negative results. Tribes that are culturally affiliated with the project APE received a letter from BFSA regarding the project. As of the date of this report, only the Viejas Band of Kumeyaay Indians have responded, who requested that a Kumeyaay cultural monitor be present for all ground-disturbing activities related to this project (Attachment D).

V. RESULTS OF THE STUDY

Background Research

There is documented evidence of the presence of the Archaic La Jolla cultural horizon and Late Prehistoric Kumeyaay temporary camps and village sites in the general area of the project. The project property is identified as being north of the Spindrift archaeological site (SDI-39), south of SDI-20,129, and within the recorded boundary of SDI-20,130. Documentation of SDI-20,130 is continually being updated as new projects encounter buried parts of the site (both intact and disturbed). Recent work by Pigniolo et al. (2012) states the following:

> The archival data indicate that the location of SDM-W-2 was focused on what is now the northeast corner of the intersection of El Paseo Grande and Vallecitos. The site was located on a natural ridge that was part of a Pleistocene sand bar. The site included as many as 19 burials along with a sparse midden deposit with small amounts of shell and a moderate amount of artifacts. The human remains at the site dated between roughly 1700 to 6300 BP, with the majority of the dates being at the older end of the spectrum. The site included three major strata including a midden layer that contained the majority of the shell, a "red sand layer" made up of slopewash alluvium from the Linda Vista Formation on nearby hills. This layer was essentially sterile. Finally a yellow/white sand layer formed the base of the ridge. This layer reportedly included human remains as well, but was otherwise completely sterile.
>
> The portions of SDM-W-2 that were identified during the current testing program indicate that elements of the site are still present. Only a small portion of the site was relocated. The material recovered from Unit 1 does not meet the quantitative requirements established in the research design to address the research questions, but additional site material is likely in the vicinity of Unit 1. A larger sample of this area would likely produce the amount of material necessary to address the research questions. The remaining portions of SDM-W-2 are recommended as eligible for the California Register under Criterion A, B, and D. Although human remains were not identified during the current testing program, the number of previous discoveries at this site indicate the potential for isolated discoveries remains.

Based upon the background research and the location of the project, the APE is considered sensitive for potential cultural resources. Because of this potential, and in accordance with City of San Diego guidelines, an archaeological survey was necessary to determine if archaeological

resources exist within the project boundaries that might be impacted by the proposed project.

Field Reconnaissance

On March 28, 2017, Principal Investigator Brian F. Smith conducted the field survey of the property. Gabe Kitchen, a Native American monitor from Red Tail, actively participated in the survey. The survey was limited by the constraints of the landscaping, hardscape, and existing single-family residence, which collectively covered approximately 90 percent of the 0.12-acre property. As a result of the development of the property, only the backyard lawn and planter beds provided access to view the ground. Brian Smith carefully inspected exposed ground surfaces within the exposed landscaping. The survey did not result in the observation of any artifacts, cultural ecofacts, or other materials related to the prehistoric or historic land use within the project boundaries. No midden soils or cultural resources were observed during the survey; however, the survey coverage was limited by the existing landscaping, hardscape, and structures. Based upon aerial photographs, the existing residence on the property is at least 50 years old but it has been extensively remodeled and expanded.

Evaluation

Based upon the results of the survey and records search, no cultural resources have been identified on the subject property. No further investigations are necessary as part of this survey process.

VI. RECOMMENDATIONS

The City of San Diego typically requires two tasks for an archaeological study of this nature: assessment of the potential for cultural resources on the property and a visual inspection for the presence of cultural resources. As noted previously, no evidence of any historic or prehistoric cultural resources was identified within the property during the survey. However, due to the project being within the recorded boundary of prehistoric Site SDI-20,130, the presence of recorded cultural resources within a one-quarter-mile radius of the project, and the limited visibility encountered during the archaeological survey, the potential exists that buried cultural deposits may be present under the landscaping, hardscape, and structures that cover the property. Based upon the potential to encounter buried archaeological deposits or artifacts associated with the prehistoric occupation of SDI-20,130 and other known sites within the La Jolla neighborhood over the past 8,000 years, as well as the historic use and development of La Jolla since the late 1800s, archaeological and Native American monitoring of grading or trenching is recommended for the 8276 Paseo Del Ocaso Project.

VII. SOURCES CONSULTED — DATE

National Register of Historic Places ☑	Month and Year: March 2017
California Register of Historical Resources ☑	Month and Year: March 2017
City of San Diego Historical Resources Register ☑	Month and Year: March 2017
Archaeological/Historical Site Records: South Coastal Information Center ☑	Month and Year: March 2017
Other Sources Consulted: NAHC Sacred Lands File Search (Attachment D) References (Attachment A)	

VIII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief, and have been compiled in accordance with California Environmental Quality Act criteria as defined in Section 15064.5 and City of San Diego Historical Resources Guidelines.

May 8, 2017

Brian F. Smith
Principal Investigator

Date

IX. ATTACHMENT A

References
Resumes

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Education

Master of Arts, History, University of San Diego, California **1982**

Bachelor of Arts, History, and Anthropology, University of San Diego, California **1975**

Professional Memberships

Society for California Archaeology

Experience

Principal Investigator **1977–Present**
Brian F. Smith and Associates, Inc. **Poway, California**

Brian F. Smith is the owner and principal historical and archaeological consultant for Brian F. Smith and Associates. Over the past 32 years, he has conducted over 2,500 cultural resource studies in California, Arizona, Nevada, Montana, and Texas. These studies include every possible aspect of archaeology from literature searches and large-scale surveys to intensive data recovery excavations. Reports prepared by Mr. Smith have been submitted to all facets of local, state, and federal review agencies, including the US Army Crops of Engineers, the Bureau of Land Management, the Bureau of Reclamation, the Department of Defense, and the Department of Homeland Security. In addition, Mr. Smith has conducted studies for utility companies (Sempra Energy) and state highway departments (CalTrans).

Professional Accomplishments

These selected major professional accomplishments represent research efforts that have added significantly to the body of knowledge concerning the prehistoric life ways of cultures once present in the Southern California area and historic settlement since the late 18th century. Mr. Smith has been principal investigator on the following select projects, except where noted.

Downtown San Diego Mitigation and Monitoring Reporting Programs: Large numbers of downtown San Diego mitigation and monitoring projects submitted to the Centre City Development Corporation, some of which included Strata (2008), Hotel Indigo (2008), Lofts at 707 10th Avenue Project (2007), Breeza (2007), Bayside at the Embarcadero (2007), Aria (2007), Icon (2007), Vantage Pointe (2007), Aperture (2007), Sapphire Tower (2007), Lofts at 655 Sixth Avenue (2007), Metrowork (2007), The Legend (2006), The Mark (2006), Smart Corner (2006), Lofts at 677 7th Avenue (2005), Aloft on Cortez Hill (2005), Front and

Beech Apartments (2003), Bella Via Condominiums (2003), Acqua Vista Residential Tower (2003), Northblock Lofts (2003), Westin Park Place Hotel (2001), Parkloft Apartment Complex (2001), Renaissance Park (2001), and Laurel Bay Apartments (2001).

Archaeology at the Padres Ballpark: Involved the analysis of historic resources within a seven-block area of the "East Village" area of San Diego, where occupation spanned a period from the 1870s to the 1940s. Over a period of two years, BFSA recovered over 200,000 artifacts and hundreds of pounds of metal, construction debris, unidentified broken glass, and wood. Collectively, the Ballpark Project and the other downtown mitigation and monitoring projects represent the largest historical archaeological program anywhere in the country in the past decade (2000-2007).

4S Ranch Archaeological and Historical Cultural Resources Study: Data recovery program consisted of the excavation of over 2,000 square meters of archaeological deposits that produced over one million artifacts, containing primarily prehistoric materials. The archaeological program at 4S Ranch is the largest archaeological study ever undertaken in the San Diego County area and has produced data that has exceeded expectations regarding the resolution of long-standing research questions and regional prehistoric settlement patterns.

Charles H. Brown Site: Attracted international attention to the discovery of evidence of the antiquity of man in North America. Site located in Mission Valley, in the city of San Diego.

Del Mar Man Site: Study of the now famous Early Man Site in Del Mar, California, for the San Diego Science Foundation and the San Diego Museum of Man, under the direction of Dr. Spencer Rogers and Dr. James R. Moriarty.

Old Town State Park Projects: Consulting Historical Archaeologist. Projects completed in the Old Town State Park involved development of individual lots for commercial enterprises. The projects completed in Old Town include Archaeological and Historical Site Assessment for the Great Wall Cafe (1992), Archaeological Study for the Old Town Commercial Project (1991), and Cultural Resources Site Survey at the Old San Diego Inn (1988).

Site W-20, Del Mar, California: A two-year-long investigation of a major prehistoric site in the Del Mar area of the city of San Diego. This research effort documented the earliest practice of religious/ceremonial activities in San Diego County (circa 6,000 years ago), facilitated the projection of major non-material aspects of the La Jolla Complex, and revealed the pattern of civilization at this site over a continuous period of 5,000 years. The report for the investigation included over 600 pages, with nearly 500,000 words of text, illustrations, maps, and photographs documenting this major study.

City of San Diego Reclaimed Water Distribution System: A cultural resource study of nearly 400 miles of pipeline in the city and county of San Diego.

Master Environmental Assessment Project, City of Poway: Conducted for the City of Poway to produce a complete inventory of all recorded historic and prehistoric properties within the city. The information was used in conjunction with the City's General Plan Update to produce a map matrix of the city showing areas of high, moderate, and low potential for the presence of cultural resources. The effort also included the development of the City's Cultural Resource Guidelines, which were adopted as City policy.

Draft of the City of Carlsbad Historical and Archaeological Guidelines: Contracted by the City of Carlsbad to produce the draft of the City's historical and archaeological guidelines for use by the Planning Department of the City.

The Mid-Bayfront Project for the City of Chula Vista: Involved a large expanse of undeveloped agricultural land situated between the railroad and San Diego Bay in the northwestern portion of the city. The study included the analysis of some potentially historic features and numerous prehistoric sites.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Audie Murphy Ranch, Riverside County, California: Project manager/director of the investigation of 1,113.4 acres and 43 sites, both prehistoric and historic—included project coordination; direction of field crews; evaluation of sites for significance based on County of Riverside and CEQA guidelines; assessment of cupule, pictograph, and rock shelter sites, co-authoring of cultural resources project report. February-September 2002.

Cultural Resources Evaluation of Sites Within the Proposed Development of the Otay Ranch Village 13 Project, San Diego County, California: Project manager/director of the investigation of 1,947 acres and 76 sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of San Diego and CEQA guidelines; co-authoring of cultural resources project report. May-November 2002.

Cultural Resources Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County: Project manager/director for a survey of 29 individual sites near the U.S./Mexico Border for proposed video surveillance camera locations associated with the San Diego Border barrier Project—project coordination and budgeting; direction of field crews; site identification and recordation; assessment of potential impacts to cultural resources; meeting and coordinating with U.S. Army Corps of Engineers, U.S. Border Patrol, and other government agencies involved; co-authoring of cultural resources project report. January, February, and July 2002.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee West GPA, Riverside County, California: Project manager/director of the investigation of nine sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of Riverside and CEQA guidelines; historic research; co-authoring of cultural resources project report. January-March 2002.

Mitigation of An Archaic Cultural Resource for the Eastlake III Woods Project for the City of Chula Vista, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. September 2001-March 2002.

Cultural Resources Survey and Test of Sites Within the Proposed French Valley Specific Plan/EIR, Riverside County, California: Project manager/director of the investigation of two prehistoric and three historic sites—included project coordination and budgeting; survey of project area; Native American consultation; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Lawson Valley Project, San Diego County, California: Project manager/director of the investigation of 28 prehistoric and two historic sites—included project coordination; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resource Survey and Geotechnical Monitoring for the Mohyi Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; field survey; assessment of parcel for potentially buried cultural deposits; monitoring of geotechnichal borings; authoring of cultural resources project report. Brian F. Smith and Associates, San Diego, California. June 2000.

Enhanced Cultural Resource Survey and Evaluation for the Prewitt/Schmucker/Cavadias Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; direction of field crews; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. June 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee Ranch, Riverside County, California: Project manager/director of the investigation of one prehistoric and five historic sites—included project coordination and budgeting; direction of field crews; feature recordation; historic structure assessments; assessment of sites for significance based on CEQA guidelines; historic research; co-authoring of cultural resources project report. February-June 2000.

Salvage Mitigation of a Portion of the San Diego Presidio Identified During Water Pipe Construction for the City of San Diego, California: Project archaeologist/director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project, Pacific Beach, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. March-April 2000.

Salvage Mitigation of a Portion of Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project and Caltrans, Carlsbad, California: Project achaeologist/ director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. December 1999-January 2000.

Survey and Testing of Two Prehistoric Cultural Resources for the Airway Truck Parking Project, Otay Mesa, California: Project archaeologist/director—included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; authoring of cultural resources project report, in prep. December 1999-January 2000.

Cultural Resources Phase I and II Investigations for the Tin Can Hill Segment of the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for a survey and testing of a prehistoric quarry site along the border—NRHP eligibility assessment; project coordination and budgeting; direction of field crews; feature recordation; meeting and coordinating with U.S. Army Corps of Engineers; co-authoring of cultural resources project report. December 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Westview High School Project for the City of San Diego, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. October 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Otay Ranch SPA-One West Project for the City of Chula Vista, California: Project archaeologist/director—included direction of field crews; development of data recovery program; management of artifact collections cataloging and curation; assessment of

site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report, in prep. September 1999-January 2000.

Monitoring of Grading for the Herschel Place Project, La Jolla, California: Project archaeologist/ monitor—included monitoring of grading activities associated with the development of a single-dwelling parcel. September 1999.

Survey and Testing of a Historic Resource for the Osterkamp Development Project, Valley Center, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; budget development; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Testing of a Prehistoric Cultural Resource for the Proposed College Boulevard Alignment Project, Carlsbad, California: Project manager/director —included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report, in prep. July-August 1999.

Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California: Project archaeologist—included direction of field crews; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Evaluation of Cultural Resources at the Village 2 High School Site, Otay Ranch, City of Chula Vista, California: Project manager/director —management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report. July 1999.

Cultural Resources Phase I, II, and III Investigations for the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for the survey, testing, and mitigation of sites along border—supervision of multiple field crews, NRHP eligibility assessments, Native American consultation, contribution to Environmental Assessment document, lithic and marine shell analysis, authoring of cultural resources project report. August 1997-January 2000.

Phase I, II, and II Investigations for the Scripps Poway Parkway East Project, Poway California: Project archaeologist/project director—included recordation and assessment of multicomponent prehistoric and historic sites; direction of Phase II and III investigations; direction of laboratory analyses including prehistoric and historic collections; curation of collections; data synthesis; coauthorship of final cultural resources report. February 1994; March-September 1994; September-December 1995.

Archaeological Evaluation of Cultural Resources Within the Proposed Corridor for the San Elijo Water Reclamation System Project, San Elijo, California: Project manager/director —test excavations; direction of artifact identification and analysis; graphics production; coauthorship of final cultural resources report. December 1994-July 1995.

Evaluation of Cultural Resources for the Environmental Impact Report for the Rose Canyon Trunk Sewer Project, San Diego, California: Project manager/Director —direction of test excavations; identification and analysis of prehistoric and historic artifact collections; data synthesis; co-authorship of final cultural resources report, San Diego, California. June 1991-March 1992.

Reports/Papers

Author, coauthor, or contributor to over 2,500 cultural resources management publications, a selection of which are presented below.

2015 An Archaeological/Historical Study for the Safari Highlands Ranch Project, City of Escondido, County of San Diego.

2015 A Phase I and II Cultural Resources Assessment for the Decker Parcels II Project, Planning Case No. 36962, Riverside County, California.

2015 A Phase I and II Cultural Resources Assessment for the Decker Parcels I Project, Planning Case No. 36950, Riverside County, California.

2015 Cultural Resource Data Recovery and Mitigation Monitoring Program for Site SDI-10,237 Locus F, Everly Subdivision Project, El Cajon, California.

2015 Phase I Cultural Resource Survey for the Woodward Street Senior Housing Project, City of San Marcos, California (APN 218-120-31).

2015 An Updated Cultural Resource Survey for the Box Springs Project (TR 33410), APNs 255-230-010, 255-240-005, 255-240-006, and Portions of 257-180-004, 257-180-005, and 257-180-006.

2015 A Phase I and II Cultural Resource Report for the Lake Ranch Project, TR 36730, Riverside County, California.

2015 A Phase II Cultural Resource Assessment for the Munro Valley Solar Project, Inyo County, California.

2014 Cultural Resources Monitoring Report for the Diamond Valley Solar Project, Community of Winchester, County of Riverside.

2014 National Historic Preservation Act Section 106 Compliance for the Proposed Saddleback Estates Project, Riverside County, California.

2014 A Phase II Cultural Resource Evaluation Report for RIV-8137 at the Toscana Project, TR 36593, Riverside County, California.

2014 Cultural Resources Study for the Estates at Del Mar Project, City of Del Mar, San Diego, California (TTM 14-001).

2014 Cultural Resources Study for the Aliso Canyon Major Subdivision Project, Rancho Santa Fe, San Diego County, California.

2014 Cultural Resources Due Diligence Assessment of the Ocean Colony Project, City of Encinitas.

2014 A Phase I and Phase II Cultural Resource Assessment for the Citrus Heights II Project, TTM 36475, Riverside County, California.

2013 A Phase I Cultural Resource Assessment for the Modular Logistics Center, Moreno Valley, Riverside County, California.

2013 A Phase I Cultural Resources Survey of the Ivey Ranch Project, Thousand Palms, Riverside County, California.

2013 Cultural Resources Report for the Emerald Acres Project, Riverside County, California.

2013 A Cultural Resources Records Search and Review for the Pala Del Norte Conservation Bank Project, San Diego County, California.

2013 An Updated Phase I Cultural Resources Assessment for Tentative Tract Maps 36484 and 36485, Audie Murphy Ranch, City of Menifee, County of Riverside.

2013 El Centro Town Center Industrial Development Project (EDA Grant No. 07-01-06386); Result of Cultural Resource Monitoring.

2013 Cultural Resources Survey Report for the Renda Residence Project, 9521 La Jolla Farms Road, La Jolla, California.

2013 A Phase I Cultural Resource Study for the Ballpark Village Project, San Diego, California.

2013 Archaeological Monitoring and Mitigation Program, San Clemente Senior Housing Project, 2350 South El Camino Real, City of San Clemente, Orange County, California (CUP No. 06-065; APN-060-032-04).

2012 Mitigation Monitoring Report for the Los Peñasquitos Recycled Water Pipeline.

2012 Cultural Resources Report for Menifee Heights (Tract 32277).

2012 A Phase I Cultural Resource Study for the Altman Residence at 9696 La Jolla Farms Road, La Jolla, California 92037.

2012 Mission Ranch Project (TM 5290-1/MUP P87-036W3): Results of Cultural Resources Monitoring During Mass Grading.

2012 A Phase I Cultural Resource Study for the Payan Property Project, San Diego, California.

2012 Phase I Archaeological Survey of the Rieger Residence, 13707 Durango Drive, Del Mar, California 92014, APN 300-369-49.

2011 Mission Ranch Project (TM 5290-1/MUP P87-036W3): Results of Cultural Resources Monitoring During Mass Grading.

2011 Mitigation Monitoring Report for the 1887 Viking Way Project, La Jolla, California.

2011 Cultural Resource Monitoring Report for the Sewer Group 714 Project.

2011 Results of Archaeological Monitoring at the 10th Avenue Parking Lot Project, City of San Diego, California (APNs 534-194-02 and 03).

2011 Archaeological Survey of the Pelberg Residence for a Bulletin 560 Permit Application; 8335 Camino Del Oro; La Jolla, California 92037 APN 346-162-01-00 .

2011 A Cultural Resources Survey Update and Evaluation for the Robertson Ranch West Project and an Evaluation of National Register Eligibility of Archaeological sites for Sites for Section 106 Review (NHPA).

2011 Mitigation Monitoring Report for the 43rd and Logan Project.

2011 Mitigation Monitoring Report for the Sewer Group 682 M Project, City of San Diego Project #174116.

2011 A Phase I Cultural Resource Study for the Nooren Residence Project, 8001 Calle de la Plata, La Jolla, California, Project No. 226965.

2011 A Phase I Cultural Resource Study for the Keating Residence Project, 9633 La Jolla Farms Road, La Jolla, California 92037.

2010 Mitigation Monitoring Report for the 15th & Island Project, City of San Diego; APNs 535-365-01, 535-365-02 and 535-392-05 through 535-392-07.

2010 Archaeological Resource Report Form: Mitigation Monitoring of the Sewer and Water Group 772 Project, San Diego, California, W.O. Nos. 187861 and 178351.

2010 Pottery Canyon Site Archaeological Evaluation Project, City of San Diego, California, Contract No. H105126.

2010 Archaeological Resource Report Form: Mitigation Monitoring of the Racetrack View Drive Project, San Diego, California; Project No. 163216.

2010 A Historical Evaluation of Structures on the Butterfield Trails Property.

2010 Historic Archaeological Significance Evaluation of 1761 Haydn Drive, Encinitas, California (APN 260-276-07-00).

2010 Results of Archaeological Monitoring of the Heller/Nguyen Project, TPM 06-01, Poway, California.

2010 Cultural Resource Survey and Evaluation Program for the Sunday Drive Parcel Project, San Diego County, California, APN 189-281-14.

2010 Archaeological Resource Report Form: Mitigation Monitoring of the Emergency Garnet Avenue Storm Drain Replacement Project, San Diego, California, Project No. B10062

2010 An Archaeological Study for the 1912 Spindrift Drive Project

2009 Cultural Resource Assessment of the North Ocean Beach Gateway Project City of San Diego #64A-003A; Project #154116.

2009 Archaeological Constraints Study of the Morgan Valley Wind Assessment Project, Lake County, California.

2008 Results of an Archaeological Review of the Helen Park Lane 3.1-acre Property (APN 314-561-31), Poway, California.

2008 Archaeological Letter Report for a Phase I Archaeological Assessment of the Valley Park Condominium Project, Ramona, California; APN 282-262-75-00.

2007 Archaeology at the Ballpark. Brian F. Smith and Associates, San Diego, California. Submitted to the Centre City Development Corporation.

2007 Result of an Archaeological Survey for the Villages at Promenade Project (APNs 115-180-007-3,115-180-049-1, 115-180-042-4, 115-180-047-9) in the City of Corona, Riverside County.

2007 Monitoring Results for the Capping of Site CA-SDI-6038/SDM-W-5517 within the Katzer Jamul Center Project; P00-017.

2006 Archaeological Assessment for The Johnson Project (APN 322-011-10), Poway, California.

2005 Results of Archaeological Monitoring at the El Camino Del Teatro Accelerated Sewer Replacement Project (Bid No. K041364; WO # 177741; CIP # 46-610.6.

2005 Results of Archaeological Monitoring at the Baltazar Draper Avenue Project (Project No. 15857; APN: 351-040-09).

2004 TM 5325 ER #03-14-043 Cultural Resources.

2004 An Archaeological Survey and an Evaluation of Cultural Resources at the Salt Creek Project. Report on file at Brian F. Smith and Associates.

2003 An Archaeological Assessment for the Hidden Meadows Project, San Diego County, TM 5174, Log No. 99-08-033. Report on file at Brian F. Smith and Associates.

2003 An Archaeological Survey for the Manchester Estates Project, Coastal Development Permit #02-009, Encinitas, California. Report on file at Brian F. Smith and Associates.

2003 Archaeological Investigations at the Manchester Estates Project, Coastal Development Permit #02-009, Encinitas, California. Report on file at Brian F. Smith and Associates.

2003 Archaeological Monitoring of Geological Testing Cores at the Pacific Beach Christian Church Project. Report on file at Brian F. Smith and Associates.

2003 San Juan Creek Drilling Archaeological Monitoring. Report on file at Brian F. Smith and Associates.

2003 Evaluation of Archaeological Resources Within the Spring Canyon Biological Mitigation Area, Otay Mesa, San Diego County, California. Brian F. Smith and Associates, San Diego, California.

2002 An Archaeological/Historical Study for the Otay Ranch Village 13 Project (et al.). Brian F. Smith and Associates, San Diego, California.

2002 An Archaeological/Historical Study for the Audie Murphy Ranch Project (et al.). Brian F. Smith and Associates, San Diego, California.

2002 Results of an Archaeological Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County, California. Brian F. Smith and Associates, San Diego, California.

2002 A Cultural Resources Survey and Evaluation for the Proposed Robertson Ranch Project, City of Carlsbad. Brian F. Smith and Associates, San Diego, California.

2002 Archaeological Mitigation of Impacts to Prehistoric Site SDI-7976 for the Eastlake III Woods Project, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.

2002 An Archaeological/Historical Study for Tract No. 29777, Menifee West GPA Project, Perris Valley, Riverside County. Brian F. Smith and Associates, San Diego, California.

2002 An Archaeological/Historical Study for Tract No. 29835, Menifee West GPA Project, Perris Valley, Riverside County. Brian F. Smith and Associates, San Diego, California.

2001 An Archaeological Survey and Evaluation of a Cultural Resource for the Moore Property, Poway. Brian F. Smith and Associates, San Diego, California.

2001 An Archaeological Report for the Mitigation, Monitoring, and Reporting Program at the Water and Sewer Group Job 530A, Old Town San Diego. Brian F. Smith and Associates, San Diego, California.

2001 A Cultural Resources Impact Survey for the High Desert Water District Recharge Site 6 Project, Yucca Valley. Brian F. Smith and Associates, San Diego, California.

2001 Archaeological Mitigation of Impacts to Prehistoric Site SDI-13,864 at the Otay Ranch SPA-One West Project. Brian F. Smith and Associates, San Diego, California.

2001 A Cultural Resources Survey and Site Evaluations at the Stewart Subdivision Project, Moreno Valley, County of San Diego. Brian F. Smith and Associates, San Diego, California.

2000 An Archaeological/Historical Study for the French Valley Specific Plan/EIR, French Valley, County of Riverside. Brian F. Smith and Associates, San Diego, California.

2000 Results of an Archaeological Survey and the Evaluation of Cultural Resources at The TPM#24003–Lawson Valley Project. Brian F. Smith and Associates, San Diego, California.

2000 Archaeological Mitigation of Impacts to Prehistoric Site SDI-5326 at the Westview High School Project for the Poway Unified School District. Brian F. Smith and Associates, San Diego, California.

2000 An Archaeological/Historical Study for the Menifee Ranch Project. Brian F. Smith and Associates, San Diego, California.

2000 An Archaeological Survey and Evaluation of Cultural Resources for the Bernardo Mountain Project, Escondido, California. Brian F. Smith and Associates, San Diego, California.

2000 A Cultural Resources Impact Survey for the Nextel Black Mountain Road Project, San Diego, California. Brian F. Smith and Associates, San Diego, California.

2000 A Cultural Resources Impact Survey for the Rancho Vista Project, 740 Hilltop Drive, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.

2000 A Cultural Resources Impact Survey for the Poway Creek Project, Poway, California. Brian F. Smith and Associates, San Diego, California.

2000 Cultural Resource Survey and Geotechnical Monitoring for the Mohyi Residence Project. Brian F. Smith and Associates, San Diego, California.

2000 Enhanced Cultural Resource Survey and Evaluation for the Prewitt/Schmucker/ Cavadias Project. Brian F. Smith and Associates, San Diego, California.

2000 Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project. Brian F. Smith and Associates, San Diego, California.

2000 Salvage Excavations at Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project, Carlsbad, California. Brian F. Smith and Associates, San Diego, California.

2000 Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California. Brian F. Smith and Associates, San Diego, California.

2000 Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California. Brian F. Smith and Associates, San Diego, California.

2000 A Report for an Archaeological Evaluation of Cultural Resources at the Otay Ranch Village Two SPA, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.

2000 An Archaeological Evaluation of Cultural Resources for the Airway Truck Parking Project, Otay Mesa, County of San Diego. Brian F. Smith and Associates, San Diego, California.

2000 Results of an Archaeological Survey and Evaluation of a Resource for the Tin Can Hill Segment of the Immigration and Naturalization and Immigration Service Border Road, Fence, and Lighting Project, San Diego County, California. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological Survey of the Home Creek Village Project, 4600 Block of Home Avenue, San Diego, California. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological Survey for the Sgobassi Lot Split, San Diego County, California. Brian F. Smith and Associates, San Diego, California.

1999 An Evaluation of Cultural Resources at the Otay Ranch Village 11 Project. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological/Historical Survey and Evaluation of a Cultural Resource for The Osterkamp Development Project, Valley Center, California. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological Survey and Evaluation of a Cultural Resource for the Proposed College Boulevard Alignment Project. Brian F. Smith and Associates, San Diego, California.

1999 Results of an Archaeological Evaluation for the Anthony's Pizza Acquisition Project in Ocean Beach, City of San Diego (with L. Pierson and B. Smith). Brian F. Smith and Associates, San Diego, California.

1996 An Archaeological Testing Program for the Scripps Poway Parkway East Project. Brian F. Smith and Associates, San Diego, California.

1995 Results of a Cultural Resources Study for the 4S Ranch. Brian F. Smith and Associates, San Diego, California.

1995 Results of an Archaeological Evaluation of Cultural Resources Within the Proposed Corridor for the San Elijo Water Reclamation System. Brian F. Smith and Associates, San Diego, California.

1994 Results of the Cultural Resources Mitigation Programs at Sites SDI-11,044/H and SDI-12,038 at the Salt Creek Ranch Project . Brian F. Smith and Associates, San Diego, California.

1993 Results of an Archaeological Survey and Evaluation of Cultural Resources at the Stallion Oaks Ranch Project. Brian F. Smith and Associates, San Diego, California.

1992 Results of an Archaeological Survey and the Evaluation of Cultural Resources at the Ely Lot Split Project. Brian F. Smith and Associates, San Diego, California.

1991 The Results of an Archaeological Study for the Walton Development Group Project. Brian F. Smith and Associates, San Diego, California.

X. ATTACHMENT B

Project Maps:

General Location Map
USGS Project Location Map
800' Scale City Engineering Map
Site Plan

Figure 1

General Location Map

The 8276 Paseo Del Ocaso Project

DeLorme (1:250,000 series)

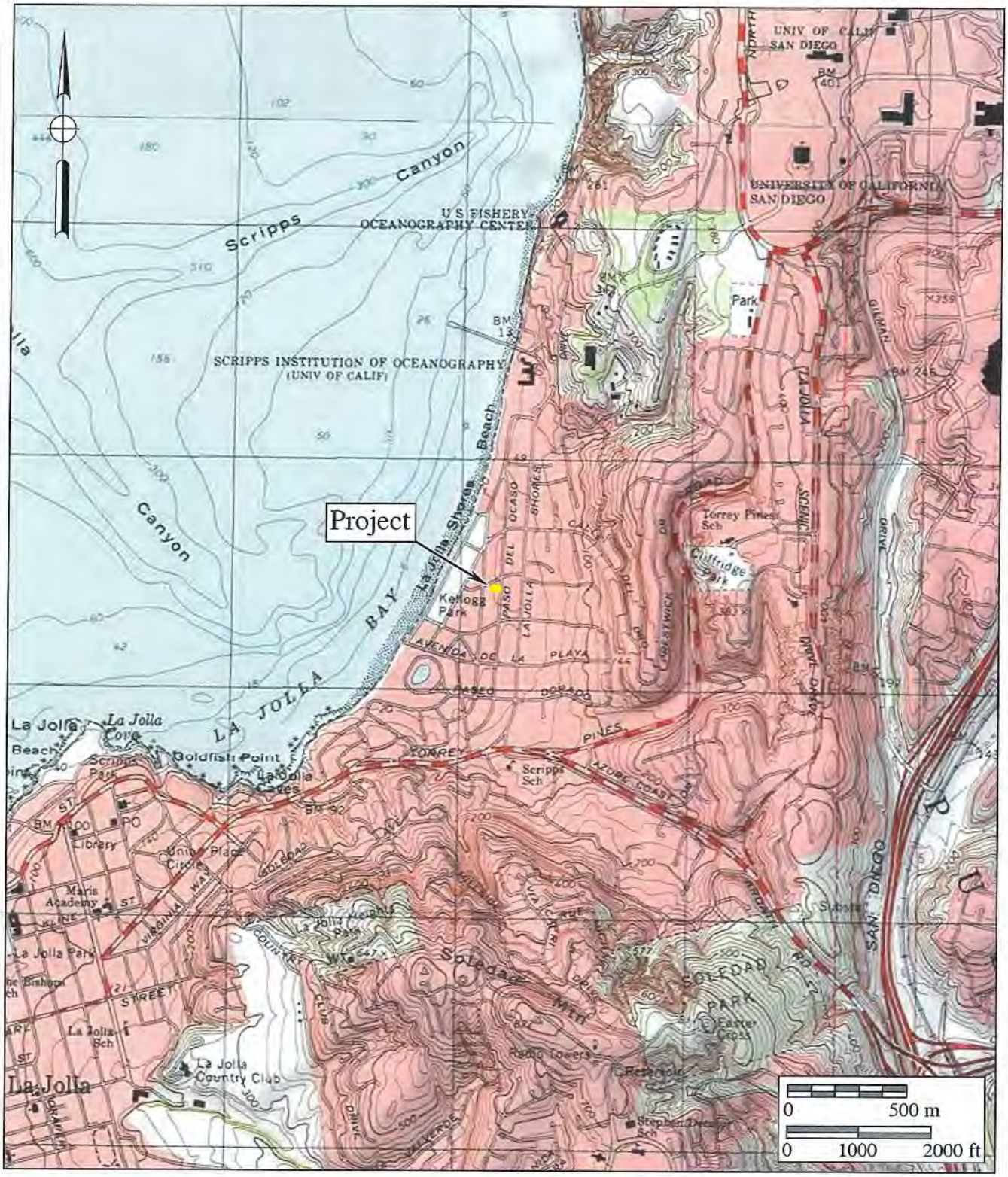


Figure 2

Project Location Map

The 8276 Paseo Del Ocaso Project

USGS *La Jolla OE W* and *La Jolla* Quadrangles (7.5-minute series)

Figure 3

Project Location Map

The 8276 Paseo Del Ocaso Project

Shown on The City of San Diego 1" to 800' Scale Engineering Map

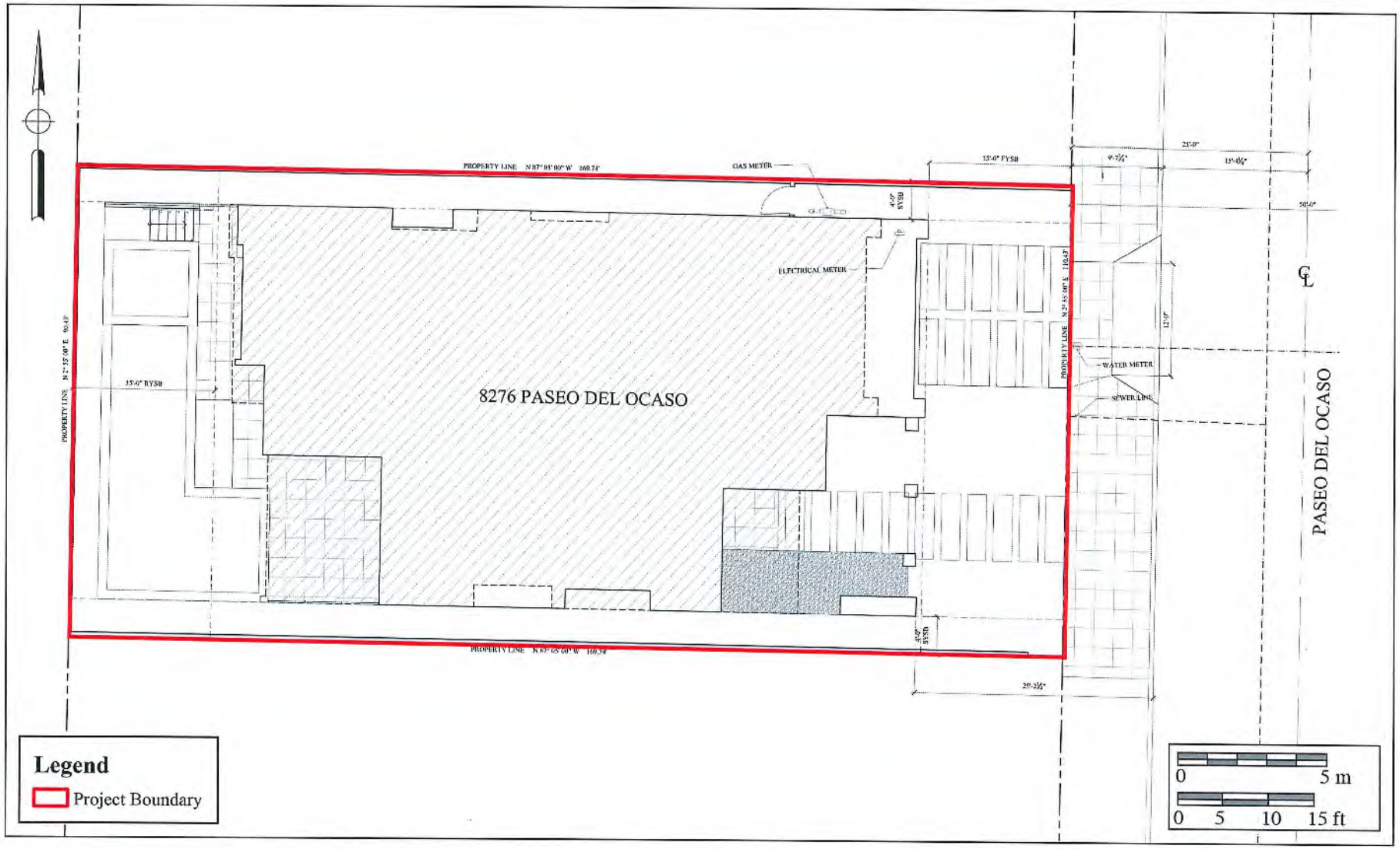


Figure 4

Site Plan

The 8276 Paseo Del Ocaso Project

XI. ATTACHMENT C

Archaeological Records Search Results

BRIAN F. SMITH and ASSOCIATES

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEMS

RECORDS SEARCH

Company: Brian F. Smith and Associates

Processed By: Kris Reinicke

Date Processed: 3-14-2017

Project Identification: The 8276 Paseo Del Ocaso Project

Search Radius: 1/4 Mile

Historical Resources:

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

Fourteen resources have been recorded within the search radius and one (P-37-031696) covers the project area.

Previous Survey Report Boundaries:

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

Forty-three reports has been recorded within the search area and three (SD-10885, SD-13382, and SD-13796) are within the project area.

Historic Addresses:

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

Historic Maps:

The historic maps on file at the South Coastal Information Center have been reviewed.

XII. ATTACHMENT D

NAHC Sacred Lands File Search Results

Brian F. Smith and Associates, Inc.

Archaeology / Biology / History / Paleontology / Air Quality / Traffic / Acoustics

March 14, 2017

For: Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, California 95814

From: Kris Reinicke, M.S.
Brian F. Smith and Associates
14010 Poway Rd. Suite A
Poway, CA 92064

Re: Request for a Sacred Lands File and Native American Contact List for the 8276 Paseo Del Ocaso Project, La Jolla, San Diego County, California.

I am writing to request a record search of the Sacred Lands File and a list of appropriate Native American contacts for my company's project: 8276 Paseo Del Ocaso (Project No. 16-237). This is an archaeological assessment for the development of a single family home on a .12 acre property located at 8276 Paseo Del Ocaso in La Jolla, City of San Diego, California. More specifically, the project is located in the Pueblo Land Grant (Township 15 south, Range 4 west, projected), 7.5-minute USGS *La Jolla OE W* California topographic quadrangle. A copy of the project map with the project location has been included for your records.

Sincerely,

Kris Reinicke, M.S.
Archaeologist/GIS Specialist
Phone: 858-484-0915
Email: kris@bfsa-ca.com

Attachments:

USGS *La Jolla OE W* California topographic quadrangle project map

Sacred Lands File Request Form

Sacred Lands File & Native American Contacts List Request
NATIVE AMERICAN HERITAGE COMMISSION
*915 Capitol Mall, RM 364 * Sacramento, CA 95814 * (916) 653-4082 *
(916) 657-5390 – Fax * nahc@pacbell.net

Information Below is Required for a Sacred Lands File Search

Project: The 8276 Paseo Del Ocaso Project

County: San Diego

USGS Quadrangle Name: *La Jolla OE W*

Township: 15S Range: 04W *Projected, in the Pueblo Land Grant

Company/Firm/Agency: Brian F. Smith & Associates Inc.

Contact Person: Kris Reinicke, M.S.

Street Address: 14010 Poway Road, Suite A

City: Poway Zip: 92064

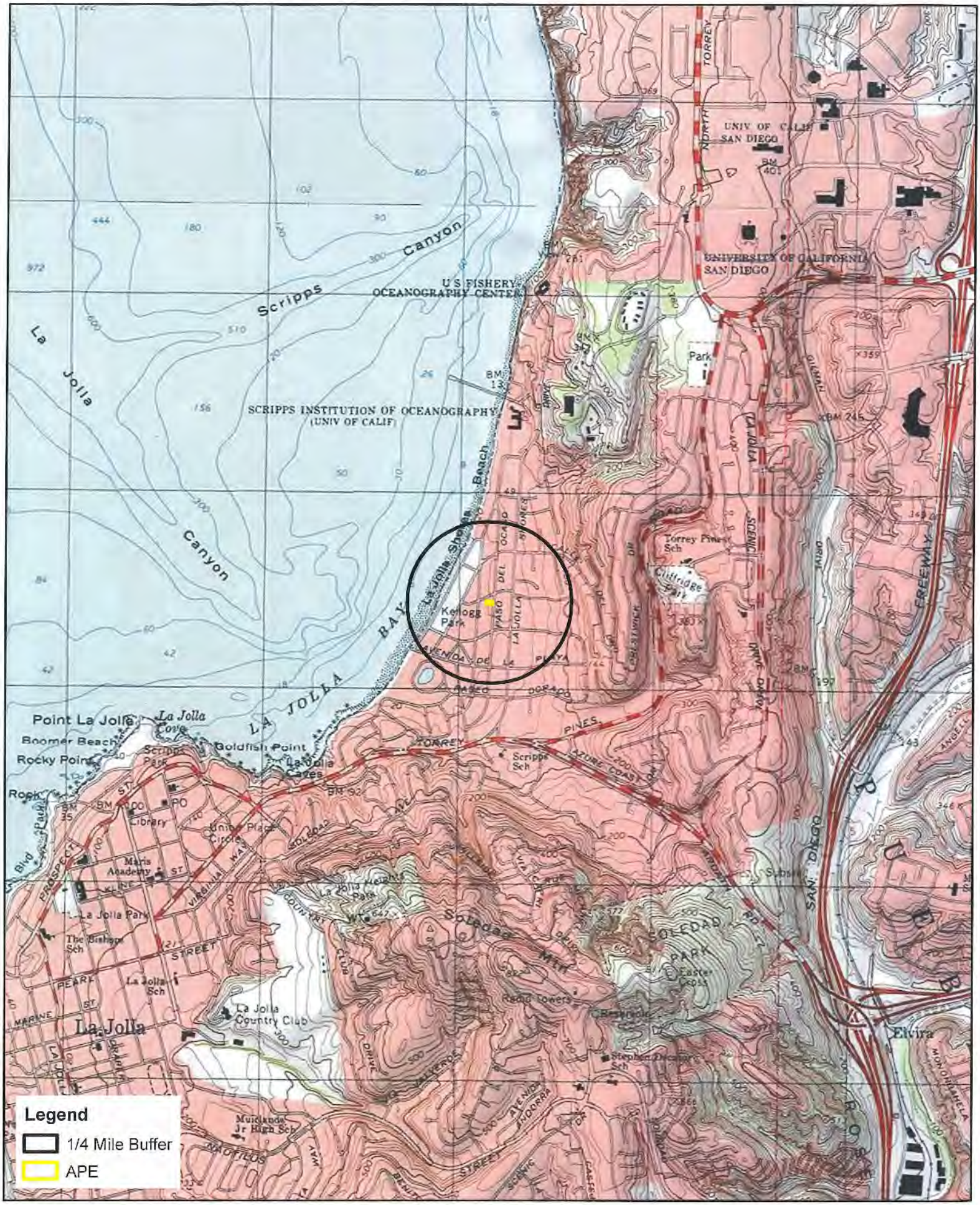
Phone: 858-484-0915

Fax: 858-679-9896

Email: kris@bfsa-ca.com

Project Description:

This records search is for my company's project: 8276 Paseo Del Ocaso (Project No. 16-237). This is an archaeological assessment for the development of a single family home on a .12 acre property located at 8276 Paseo Del Ocaso in La Jolla, City of San Diego, California. More specifically, the project is located in the Pueblo Land Grant (Township 15 south, Range 4 west, projected), 7.5-minute USGS *La Jolla OE W* California topographic quadrangle. A copy of the project map with the project location has been included for your records.



0 1,000 2,000 Feet

Record Search Location Map
The 8276 Paseo Del Ocaso Project
USGS La Jolla OE W Quadrangle (7.5-minute series)

Kris Reinicke, BFSA 3-14-2017

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
Fax (916) 373-5471

March 28, 2017

Kris Reinicke
Brian F. Smith & Associates, Inc.

Sent by E-mail: kris@bfsa-ca.com

RE: Proposed 8276 Paseo Del Ocaso Project, City of La Jolla; La Jolla OE W USGS Quadrangle, San Diego County, California

Dear Ms. Reinicke:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

Native American Heritage Commission
Native American Contact List
San Diego County
3/28/2017

Barona Group of the Capitan Grande
Clifford LaChappa, Chairperson
1095 Barona Road — Kumeyaay
Lakeside, CA, 92040
Phone: (619) 443 - 6612
Fax: (619) 443-0681
cloyd@barona-nsn.gov

Campo Kumeyaay Nation
Ralph Goff, Chairperson
36190 Church Road, Suite 1 — Kumeyaay
Campo, CA, 91906
Phone: (619)478-9046
Fax: (619)478-5818
rgoff@campo-nsn.gov

Ewiiaapaayp Band of Kumeyaay Indians
Robert Pinto, Chairperson
4054 Willows Road — Kumeyaay
Alpine, CA, 91901
Phone: (619)445-6315
Fax: (619)445-9126

Ewiiaapaayp Band of Kumeyaay Indians
Michael Garcia, Vice Chairperson
4054 Willows Road — Kumeyaay
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126
michaelg@leaningrock.net

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 — Kumeyaay
Santa Ysabel, CA, 92070
Phone: (760) 803 - 5694
cjlinton73@aol.com

Iipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 — Kumeyaay
Santa Ysabel, CA, 92070
Phone: (760)765-0845
Fax: (760)765-0320

Inaja Band of Mission Indians
Rebecca Osuna, Chairperson
2005 S. Escondido Blvd. — Kumeyaay
Escondido, CA, 92025
Phone: (760)737-7628
Fax: (760)747-8568

Jamul Indian Village of California
Erica Pinto, Chairperson
P.O. Box 612 — Kumeyaay
Jamul, CA, 91935
Phone: (619)669-4785
Fax: (619)669-4817

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas,
P.O. Box 775 — Kumeyaay
Pine Valley, CA, 91962
Phone: (619)709-4207

La Posta Band of Diegueno Mission Indians
Javaughn Miller, Tribal Administrator
8 Crestwood Road — Kumeyaay
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
jmiller@LPtribe.net

La Posta Band of Diegueno Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road — Kumeyaay
Boulevard, CA, 91905
Phone: (619)478-2113
Fax: (619)478-2125
LP13boots@aol.com

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

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 8276 Paseo Del Ocaso Project, San Diego County.

Native American Heritage Commission
Native American Contact List
San Diego County
3/28/2017

Manzanita Band of the Kumeyaay Nation
Angela Elliott Santos, Chairperson
P.O. Box 1302 Kumeyaay
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957

Manzanita Band of the Kumeyaay Nation
Nick Elliott, Cultural Resources Coordinator
P. O. Box 1302 Kumeyaay
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957
nickmepa@yahoo.com

Mesa Grande Band of Mission Indians
Virgil Oyos, Chairperson
P.O Box 270 Kumeyaay
Santa Ysabel, CA, 92070
Phone: (760)782-3818
Fax: (760)782-9092
mesagrandeband@msn.com

San Pasqual Band of Mission Indians
John Flores, Environmental Coordinator
P. O. Box 365 Kumeyaay
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
johnf@sanpasqualtribe.org

San Pasqual Band of Mission Indians
Allen E. Lawson, Chairperson
P.O. Box 365 Kumeyaay
Valley Center, CA, 92082
Phone: (760)749-3200
Fax: (760)749-3876
allenl@sanpasqualtribe.org

Sycuan Band of the Kumeyaay Nation
Cody J. Martinez, Chairperson
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619)445-2613
Fax: (619)445-1927
ssilva@sycuan-nsn.gov

Sycuan Band of the Kumeyaay Nation
Lisa Haws, Cultural Resources Manager
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 312 - 1935

Viejas Band of Kumeyaay Indians
Robert J. Welch, Chairperson
1 Viejas Grade Road Kumeyaay
Alpine, CA, 91901
Phone: (619)445-3810
Fax: (619)445-5337
jhagen@viejas-nsn.gov

Viejas Band of Kumeyaay Indians
Julie Hagen,
1 Viejas Grade Road Kumeyaay
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337
jhagen@viejas-nsn.gov

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

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 8276 Paseo Del Ocaso Project, San Diego County.

Brian F. Smith and Associates, Inc.
Archaeology / Biology / History / Paleontology / Air Quality / Traffic / Acoustics

March 31, 2017

Allen E. Lawson
Chairperson
San Pasqual Band of Mission Indians
P.O. Box 365
Valley Center, California 92082

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Lawson:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

The project is in San Diego County, California, and includes the development of a 0.12-acre lot into a single-family residence. The project area can be found at 8276 Paseo Del Ocaso in the community of La Jolla, city of San Diego, California. Specifically, this project is located in the unsectioned former Pueblo Land Grant on the USGS 7.5-minute *La Jolla OE W, California* topographic quadrangle (Township 15 South, Range 4 West [Projected]). Please find enclosed sections of the USGS *La Jolla OE W* Quadrangle map on which the project is delineated.

Although a records search of the Sacred Lands File has failed to indicate the presence of Native American cultural resources in the immediate 8276 Paseo Del Ocaso Project area, the Native American Heritage Commission requested that we consult with you directly regarding the potential for the presence of Native American cultural resources that may be impacted by this project. If you do have information to provide regarding any resources on or near the project, please contact Brian Smith or myself at (858) 484-0915, or contact the City of San Diego directly. We would like to extend our thanks for your response regarding this issue.

Sincerely,

Tracy A. Stropes, M.A., RPA
Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
Archaeology / Biology / History / Paleontology / Air Quality / Traffic / Acoustics

March 31, 2017

Angela Elliott Santos
Chairperson
Manzanita Band of the Kumeyaay Nation
P.O. Box 1302
Boulevard, California 91905

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Ms. Santos:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

The project is in San Diego County, California, and includes the development of a 0.12-acre lot into a single-family residence. The project area can be found at 8276 Paseo Del Ocaso in the community of La Jolla, city of San Diego, California. Specifically, this project is located in the unsectioned former Pueblo Land Grant on the USGS 7.5-minute *La Jolla OE W, California* topographic quadrangle (Township 15 South, Range 4 West [Projected]). Please find enclosed sections of the USGS *La Jolla OE W* Quadrangle map on which the project is delineated.

Although a records search of the Sacred Lands File has failed to indicate the presence of Native American cultural resources in the immediate 8276 Paseo Del Ocaso Project area, the Native American Heritage Commission requested that we consult with you directly regarding the potential for the presence of Native American cultural resources that may be impacted by this project. If you do have information to provide regarding any resources on or near the project, please contact Brian Smith or myself at (858) 484-0915, or contact the City of San Diego directly. We would like to extend our thanks for your response regarding this issue.

Sincerely,

Tracy A. Stropes, M.A., RPA
Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

14010 Poway Road, Suite A, Poway, CA 92064; Phone (858) 679-8218 or (951) 681-9950; Fax (858) 679-9896; www.bfsa-ca.com
Business Office: 14678 Ibex Court, San Diego, CA 92129; Phone (858) 484-0915; Fax (858) 484-0988

Brian F. Smith and Associates, Inc.
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March 31, 2017

Carmen Lucas
Kwaaymii Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, California 91962

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Ms. Lucas:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Senior Project Archaeologist
tstropes@bfsa-ca.com

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Brian F. Smith and Associates, Inc.
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March 31, 2017

Clifford LaChappa
Chairperson
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, California 92040

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. LaChappa:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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tstropes@bfsa-ca.com

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Brian F. Smith and Associates, Inc.
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March 31, 2017

Clint Linton
Director of Cultural Resources
Iipay Nation of Santa Ysabel
P.O. Box 507
Santa Ysabel, California 92070

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Linton:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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tstropes@bfsa-ca.com

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Brian F. Smith and Associates, Inc.
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March 31, 2017

Cody J. Martinez
Chairperson
Sycuan Band of the Kumayaay Nation
1 Kwaaypaay Court
El Cajon, California 92019

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Martinez:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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tstropes@bfsa-ca.com

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Brian F. Smith and Associates, Inc.
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March 31, 2017

Erica Pinto
Chairperson
Jamul Indian Village of California
P.O. Box 612
Jamul, California 91935

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Ms. Pinto:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
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March 31, 2017

Gwendolyn Parada
Chairperson
La Posta Band of Diegueño Mission Indians
8 Crestwood Road
Boulevard, California 91905

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Ms. Parada:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
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March 31, 2017

Javaughn Miller
Tribal Administrator
La Posta Band of Diegueño Mission Indians
8 Crestwood Road
Boulevard, California 91905

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Miller:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
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March 31, 2017

John Flores
Environmental Coordinator
San Pasqual Band of Mission Indians
P.O. Box 365
Valley Center, California 92082

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Flores:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Tracy A. Stropes, M.A., RPA
Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
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March 31, 2017

Julie Hagen
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, California 91901

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Ms. Hagen:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
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March 31, 2017

Lisa Haws
Cultural Resources Manager
Sycuan Band of the Kumayaay Nation
1 Kwaaypaay Court
El Cajon, California 92019

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Ms. Haws:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Senior Project Archaeologist
tstropes@bfsa-ca.com

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USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
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March 31, 2017

Michael Garcia
Vice Chairperson
Ewiiaapaayp Band of Kumeyaay Indians
4054 Willows Road
Alpine, California 91901

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Garcia:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

14010 Poway Road, Suite A, Poway, CA 92064; Phone (858) 679-8218 or (951) 681-9950; Fax (858) 679-9896; www.bfsa-ca.com
Business Office: 14678 Ibex Court, San Diego, CA 92129; Phone (858) 484-0915; Fax (858) 484-0988

Brian F. Smith and Associates, Inc.
Archaeology / Biology / History / Paleontology / Air Quality / Traffic / Acoustics

March 31, 2017

Nick Elliott
Cultural Resources Coordinator
Manzanita Band of the Kumeyaay Nation
P.O. Box 1302
Boulevard, California 91905

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Elliott:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Senior Project Archaeologist
tstropes@bfsa-ca.com

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USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
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March 31, 2017

Ralph Goff
Chairperson
Campo Kumeyaay Nation
36190 Church Road, Suite 1
Campo, California 91906

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Goff:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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tstropes@bfsa-ca.com

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Brian F. Smith and Associates, Inc.
Archaeology / Biology / History / Paleontology / Air Quality / Traffic / Acoustics

March 31, 2017

Rebecca Osuna
Chairperson
Inaja Band of Mission Indians
2005 South Escondido Boulevard
Escondido, California 92025

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Ms. Osuna:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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tstropes@bfsa-ca.com

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Brian F. Smith and Associates, Inc.
Archaeology / Biology / History / Paleontology / Air Quality / Traffic / Acoustics

March 31, 2017

Robert J. Welch
Chairperson
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, California 91901

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Welch:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

The project is in San Diego County, California, and includes the development of a 0.12-acre lot into a single-family residence. The project area can be found at 8276 Paseo Del Ocaso in the community of La Jolla, city of San Diego, California. Specifically, this project is located in the unsectioned former Pueblo Land Grant on the USGS 7.5-minute *La Jolla OE W, California* topographic quadrangle (Township 15 South, Range 4 West [Projected]). Please find enclosed sections of the USGS *La Jolla OE W* Quadrangle map on which the project is delineated.

Although a records search of the Sacred Lands File has failed to indicate the presence of Native American cultural resources in the immediate 8276 Paseo Del Ocaso Project area, the Native American Heritage Commission requested that we consult with you directly regarding the potential for the presence of Native American cultural resources that may be impacted by this project. If you do have information to provide regarding any resources on or near the project, please contact Brian Smith or myself at (858) 484-0915, or contact the City of San Diego directly. We would like to extend our thanks for your response regarding this issue.

Sincerely,

Tracy A. Stropes, M.A., RPA
Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
Archaeology / Biology / History / Paleontology / Air Quality / Traffic / Acoustics

March 31, 2017

Robert Pinto
Chairperson
Ewiiaapaayp Band of Kumeyaay Indians
4054 Willows Road
Alpine, California 91901

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Pinto:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Sincerely,

Tracy A. Stropes, M.A., RPA
Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

14010 Poway Road, Suite A, Poway, CA 92064; Phone (858) 679-8218 or (951) 681-9950; Fax (858) 679-9896; www.bfsa-ca.com
Business Office: 14678 Ibex Court, San Diego, CA 92129; Phone (858) 484-0915; Fax (858) 484-0988

Brian F. Smith and Associates, Inc.
Archaeology / Biology / History / Paleontology / Air Quality / Traffic / Acoustics

March 31, 2017

Virgil Oyos
Chairperson
Mesa Grande Band of Mission Indians
P.O. Box 270
Santa Ysabel, California 92070

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Oyos:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Sincerely,

Tracy A. Stropes, M.A., RPA
Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

Brian F. Smith and Associates, Inc.
Archaeology / Biology / History / Paleontology / Air Quality / Traffic / Acoustics

March 31, 2017

Virgil Perez
Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, California 92070

Subject: Information regarding Native American cultural resources on or near the 8276 Paseo Del Ocaso Project, San Diego County, California

Dear Mr. Perez:

This inquiry is requesting information you may have regarding the existence of Native American cultural resources on or near the 8276 Paseo Del Ocaso Project. The information you provide will be used to assess areas of potential adverse impact within the proposed project's Area of Potential Effect (APE). Any information you might provide will be kept confidential and will not be divulged to the public.

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Sincerely,

Tracy A. Stropes, M.A., RPA
Senior Project Archaeologist
tstropes@bfsa-ca.com

Attachment:
USGS 7.5-minute *La Jolla OE W, California* topographic map with project area delineated

VIEJAS
TRIBAL GOVERNMENT

P.O Box 908
Alpine, CA 91903
#1 Viejas Grade Road
Alpine, CA 91901

Phone: 6194453810
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viejas.com

April 14, 2017

Tracy A. Stropes
Senior Project Archaeologist
Brian F. Smith and Associates, Inc.
14010 Poway Road, Suite A
Poway, CA 92064

RE: 8276 Paseo Del Ocaso

Dear Tracy A. Stropes,

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site is has cultural significance or ties to Viejas.

Viejas Band request that a Kumeyaay Cultural Monitor be on site for ground disturbing activities to inform us of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

Please call Ernest Pingleton for scheduling at 619-659-2314 or email epingleton@Viejas-nsn.gov. Thank you.

Sincerely,

Ray Teran, Resource Management
VIEJAS BAND OF KUMEYAAY INDIANS

SDVOSB . DVBE

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GEOTECHNICAL INVESTIGATION
PROPOSED RESIDENCE
8276 PASEO DEL OCASO
LA JOLLA, CALIFORNIA

PREPARED FOR:

MR. MICHAEL MORTON, AIA
MARENGO MORTON ARCHITECTS, INC
7724 GIRARD, SUITE 200
LA JOLLA, CALIFORNIA 92037

PREPARED BY:

SCST, INC.
6280 RIVERDALE STREET
SAN DIEGO, CALIFORNIA 92120

Providing Professional Engineering Services Since 1959

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May 5, 2017

SCST No. 170179N
Report No. 1

Mr. Michael Morton, AIA
Marengo Morton Architects, Inc.
7724 Girard Avenue, Suite 20
La Jolla, California 92037

Subject: GEOTECHNICAL INVESTIGATION
PROPOSED RESIDENCE
8276 PASEO DEL OCASO
LA JOLLA, CALIFORNIA

Dear Mr. Morton:

SCST, Inc. (SCST) is pleased to present our report describing the geotechnical investigation performed for the subject project. We conducted the geotechnical investigation in general conformance with the scope of work presented in our proposal dated January 12, 2017. Based on the results of our investigation, we consider the planned development feasible from a geotechnical standpoint provided the recommendations of this report are followed. If you have any questions, please call us at (619) 280-4321.

Respectfully submitted,
SCST, INC.

REGISTERED PROFESSIONAL ENGINEER
SCOTT H. VACULA
No. C72600
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

Scott H. Vacula, PE C72600
Senior Engineer

REGISTERED PROFESSIONAL GEOLOGIST
DOUGLAS A. SKINNER
No. 2472
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Douglas A. Skinner, CEG 2472
Senior Geologist

DAS:SHV:aw

(1) Addressee via e-mail at Michael@marengomortonarchitects.com

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EXECUTIVE SUMMARY

This report presents the results of the geotechnical investigation SCST, Inc. (SCST) performed for the subject project. We understand that the currently planned project will consist of the design and construction of a second story addition to an existing single family residence, a subterranean level, garage and associated improvements. The purpose of our work is to provide conclusions and recommendations regarding the geotechnical aspects of the project.

SCST explored the subsurface conditions by drilling 2 borings to depths of about 17 feet below the existing ground surface (bgs) using a tri-pod mounted solid flight auger. Both borings collapsed due to saturated, unconsolidated sands between 16 and 17 feet bgs. Additionally, SCST excavated two hand dug test pits adjacent to the existing structure to observe the existing footings. An SCST engineer logged the borings and test pits collected samples of the materials encountered for laboratory testing. SCST tested selected samples from the borings to evaluate pertinent soil classification and engineering properties to assist in developing geotechnical conclusions and recommendations.

The materials encountered in the borings consist of fill and old paralic deposits. The fill consists of loose to medium dense to dense silty sand. The old paralic deposits consist of dense, weakly cemented silty sandstone. Groundwater was encountered in the borings at a depth of approximately 16 feet bgs.

The main geotechnical considerations affecting the project are the presence of potentially compressible fill and unconsolidated old paralic deposits. To reduce the potential for settlement, the existing fill should be excavated in its entirety beneath new settlement sensitive structures and improvements. We anticipate that the bottom of the subterranean level will extend through the existing fill and into competent old paralic deposits. The planned structure can be supported on shallow spread footings with bottom levels on old paralic deposits. Site preparation will need to be performed in areas to receive at-grade slabs, pavements, retaining walls or new fill to reduce the potential for distress to the improvements. Strongly cemented zones may be encountered within the old paralic deposits. Gravel and cobbles should also be anticipated. Contract documents should specify that the contractor mobilize equipment capable of excavating and compacting materials with concretions, gravel and cobbles. The recommendations presented herein may need to be updated once final plans are developed.

1. INTRODUCTION

This report presents the results of the geotechnical investigation SCST, Inc. (SCST) performed for the subject project. We understand that the currently planned project will consist of the design and construction of a second story addition to an existing single family residence, a subterranean level, garage and associated improvements. The purpose of our work is to provide conclusions and recommendations regarding the geotechnical aspects of the project. Figure 1 presents a site vicinity map. Figure 2 presents the site location on the United States Geologic Survey 7.5 Minute Quadrangle Map.

2. SCOPE OF WORK

2.1 FIELD INVESTIGATION

We explored the subsurface conditions by drilling 2 borings to depths of about 17 feet below the existing ground surface (bgs). Both borings collapsed due to saturated, unconsolidated sands between 16 and 17 feet bgs. Additionally, SCST excavated two hand dug test pits adjacent to the existing structure to observe the existing footings. Figure 3 shows the approximate locations of the borings and test pits. An SCST engineer logged the borings and test pits and collected samples of the materials encountered for laboratory testing. Logs of the borings and test pits are presented in Appendix I. Soils are classified according to the Unified Soil Classification System illustrated on Figure I-1.

2.2 LABORATORY TESTING

Selected samples were tested to evaluate pertinent soil classification and engineering properties and enable development of geotechnical conclusions and recommendations. The laboratory tests consisted of in situ moisture and density, grain size distribution, Atterberg Limits, corrosivity and direct shear. The results of the laboratory tests and brief explanations of the test procedures are presented in Appendix II.

2.3 ANALYSIS AND REPORT

The results of the field and laboratory tests were evaluated to develop conclusions and recommendations regarding:

- Subsurface conditions beneath the site
- Potential geologic hazards
- Criteria for seismic design in accordance with the 2013 California Building Code (CBC)
- Site preparation and grading
- Foundation alternatives and geotechnical engineering criteria for design of the foundations
- Estimated foundation settlements
- Support for concrete slabs-on-grade
- Lateral pressures for the design of retaining walls
- Soil corrosivity

3. SITE DESCRIPTION

The site is located on the west side of Paseo Del Ocaso, and south of Calle Frescota in the La Jolla community of San Diego, California. The site consists of a single family residential lot developed with an existing residential structure, an attached garage, and associated hardscape. The site is relatively flat in its current configuration with an elevation of approximately 20 feet. Vegetation consists of grasses, trees, and bushes in landscaped areas.

4. PROPOSED DEVELOPMENT

We understand that the currently planned project will consist of the design and construction of a second story addition to an existing single family residence, a subterranean level, garage and associated improvements. Design-level drawings were not available at the time of this report. However, we understand that excavations up to about 12 feet deep may be required to reach the lowest subterranean level.

5. GEOLOGY AND SUBSURFACE CONDITIONS

The materials encountered in our borings consist of fill and old paralic deposits. Descriptions of the materials are presented below. Figure 3 presents the site-specific geology. Figure 4 presents a cross section of the site. Figure 5 presents the regional geology near the site.

Fill: The fill consists of loose to dense silty sand. The fill extends to depths varying from about 5 to 6 feet below the existing ground surface.

Old Paralic Deposits: The fill is underlain by old paralic deposits. These deposits consist of dense to very dense, weakly cemented well graded sandstone.

Groundwater: Groundwater was encountered in the borings at a depth of approximately 16 feet. The permanent groundwater table is expected to be below a depth that will influence planned construction. However, groundwater levels may fluctuate in the future due to rainfall, irrigation, broken pipes, or changes in site drainage. Because groundwater rise or seepage is difficult to predict, such conditions are typically mitigated if and when they occur.

6. GEOLOGIC HAZARDS

6.1 CITY OF SAN DIEGO SEISMIC SAFETY STUDY

Figure 6 shows the approximate site location on the City of San Diego Seismic Safety Study map. The site is located in Geologic Hazard Category 52, which is defined as other level areas with favorable geologic structure and low risk. In our opinion, the potential for adverse geologic structure is negligible.

6.2 CBC SEISMIC DESIGN PARAMETERS

A geologic hazard likely to affect the project is groundshaking as a result of movement along an active fault zone in the vicinity of the subject site. The site coefficients and Risk-Targeted Maximum Considered Earthquake (MCE_R) spectral response acceleration parameters in accordance with the 2013 CBC are presented below:

Site Coordinates: Latitude 32.856749°
Longitude -117.254837°
Site Class: D
Site Coefficients, F_a = 1.000
F_v = 1.500
S_s = 1.298g
S_1 = 0.503g
S_{DS} = 0.865g
S_{D1} = 0.503g
PGA_M = 0.589g

6.3 FAULTING AND SURFACE RUPTURE

The closest known active fault is the Rose Canyon fault zone (Del Mar section) located about 0.3 miles (0.5 kilometer) west-southwest of the site. The site is not located in an Alquist-Priolo Earthquake Fault Zone. No active faults are known to underlie or project toward the site. Therefore, the probability of fault rupture is low.

6.4 LIQUEFACTION AND DYNAMIC SETTLEMENT

Liquefaction occurs when loose, saturated, generally fine sands and silts are subjected to strong ground shaking. The soils lose shear strength and become liquid; resulting in large total and differential ground surface settlements as well as possible lateral spreading during an earthquake. Given the relatively dense nature of the materials beneath the site, the potential for liquefaction and dynamic settlement to occur is considered low.

6.5 LANDSLIDES AND SLOPE STABILITY

Evidence of landslides or slope instabilities was not observed. The potential for landslides or slope instabilities to occur at the site is considered negligible.

6.6 FLOODING, TSUNAMIS AND SEICHES

The site is not located within a mapped area on the State of California Tsunami Inundation Maps (Cal EMA, 2009); therefore, damage due to tsunamis is considered low. Seiches are periodic oscillations in large bodies of water such as lakes, harbors, bays, or reservoirs. The site is not located adjacent to any lakes or confined bodies of water; therefore, the potential for a seiche to affect the site is considered negligible. The site is not located within a flood zone or dam inundation area (County of San Diego, 2012).

6.7 SUBSIDENCE

The site is not located in an area of known subsidence associated with fluid withdrawal (groundwater or petroleum); therefore, the potential for subsidence due to the extraction of fluids is considered negligible.

6.8 HYDRO-CONSOLIDATION

Hydro-consolidation can occur in recently deposited sediments (less than 10,000 years old) that were deposited in a semi-arid environment. Examples of such sediments are aolian sands, alluvial fan deposits, and mudflow sediments deposited during flash floods. The pore spaces between the particle grains can re-adjust when inundated by groundwater causing the material to consolidate. The relatively dense materials underlying the site are not considered susceptible to hydro-consolidation.

7. CONCLUSIONS

The main geotechnical considerations affecting the project are the presence of potentially compressible fill and unconsolidated old paralic deposits. To reduce the potential for settlement, the existing fill should be excavated in its entirety beneath new settlement sensitive structures and improvements. We anticipate that the bottom of the subterranean level will extend through the existing fill and into competent old paralic deposits. The planned structure can be supported on shallow spread footings with bottom levels on old paralic deposits. Site preparation will need to be performed in areas to receive at-grade slabs, pavements, retaining walls or new fill to reduce the potential for distress to the improvements. Strongly cemented zones may be encountered within the old paralic deposits. Gravel and cobbles should also be anticipated. Contract documents should specify that the contractor mobilize equipment capable of excavating and compacting materials with concretions, gravel and cobbles.

8. RECOMMENDATIONS

8.1 SITE PREPARATION AND GRADING

8.1.1 Site Preparation

Site preparation should begin with the removal of existing improvements, vegetation and debris. Subsurface improvements that are to be abandoned should be removed, and the resulting excavations should be backfilled and compacted in accordance with the recommendations of this report. Pipeline abandonment can consist of capping or rerouting at the project perimeter and removal within the project perimeter. If appropriate, abandoned pipelines can be filled with grout or slurry as recommended by and observed by the geotechnical consultant.

8.1.2 Remedial Grading

The existing fill should be excavated in its entirety beneath structures and settlement sensitive improvements. We anticipate that the bottom of the planned subterranean structures will extend through the existing fill and into competent old paralic deposits. Horizontally, remedial excavations should extend at least 5 feet outside the planned perimeter foundations, at least 2 feet outside the planned hardscape/pavements, or up to temporary shoring or existing improvements, whichever is less. An SCST representative should observe conditions exposed in the bottom of excavation to determine if additional excavation is required.

8.1.3 Compacted Fill

Excavated material, except for soil containing roots, debris and rock greater than 6 inches, can be used as compacted fill. Exterior concrete slabs-on-grade should be underlain by at least 2 feet of material with an expansion index of 20 or less determined in accordance with ASTM D4829. We expect that most of the onsite materials will meet the expansion index criteria. Fill should be placed in 6- to 8-inch thick loose lifts, moisture conditioned to near optimum moisture content, and compacted to at least 90% relative compaction. The maximum density and optimum moisture content for the evaluation of relative compaction should be determined in accordance with ASTM D1557. Utility trench backfill beneath structures, pavements and hardscape should be compacted to at least 90% relative compaction. The top 12 inches of subgrade beneath pavements should be compacted to at least 95% relative compaction.

8.1.4 Imported Soil

Imported soil should consist of predominately granular soil free of organic matter and rocks greater than 6 inches. Imported soil should have an expansion index of 20 or less and should be inspected and, if appropriate, tested by SCST prior to transport to the site.

8.1.5 Expansive Material

The onsite materials tested have a very low to low expansion potential. The foundation recommendations presented in this report reflect a very low expansion potential.

8.1.6 Site Excavation Characteristics

It is anticipated that excavations can be achieved with conventional earthwork equipment in good working order. Difficult excavation should be anticipated in cemented zones within the old paralic deposits. Gravel and cobbles should also be anticipated within the old paralic deposits. Contract documents should specify that the contractor mobilize

equipment capable of excavating and compacting strongly cemented materials with gravel and cobbles.

8.1.7 Oversized Material

Excavations may generate oversized material. Oversized material is defined as rocks or cemented clasts greater than 6 inches in largest dimension. Oversized material should be broken down to no greater than 6 inches in largest dimension for use in fill, used as landscape material, or disposed offsite.

8.1.8 Temporary Excavations

Temporary excavations 3 feet deep or less can be made vertically. Deeper temporary excavations in fill should be laid back no steeper than 1:1 (horizontal:vertical). Deeper temporary excavations in old paralic deposits should be laid back no steeper than ¾:1 (horizontal:vertical) up to 30 feet deep. The faces of temporary slopes should be inspected daily by the contractor's Competent Person before personnel are allowed to enter the excavation. Any zones of potential instability, sloughing or raveling should be brought to the attention of the Engineer and corrective action implemented before personnel begin working in the excavation. Excavated soils should not be stockpiled behind temporary excavations within a distance equal to the depth of the excavation. SCST should be notified if other surcharge loads are anticipated so that lateral load criteria can be developed for the specific situation. If temporary slopes are to be maintained during the rainy season, berms are recommended along the tops of slopes to prevent runoff water from entering the excavation and eroding the slope faces. Slopes steeper than those described above will require shoring. Additionally, temporary excavations that extend below a plane inclined at 1½:1 (horizontal:vertical) downward from the outside bottom edge of existing structures or improvements will require shoring.

8.1.9 Temporary Shoring

For design of cantilevered shoring with level backfill, an active earth pressure equal to a fluid weighing 35 pounds per cubic foot (pcf) can be used. For design of tied-back shoring with level backfill, a trapezoidal earth pressure distribution with a maximum pressure of 25H pounds per square foot (psf) at 0.2H down from the top of shoring and 0.2H up from the base of shoring, where H is the height of shoring in feet, can be used. The surcharge loads from traffic and construction equipment adjacent to the shored excavation can be modeled by assuming an additional 2 feet of soil behind the shoring.

For design of soldier piles embedded in old paralic deposits, an allowable passive pressure of 350 psf per foot of embedment over three times the pile diameter or the

spacing of the piles, whichever is less, up to a maximum of 7,500 psf can be used. Soldier piles should be spaced at least three pile diameters, center to center.

For design of tie-backs, a friction angle of 35 degrees, a cohesion of 200 psf and an average frictional resistance of 600 psf can be used for the portion of anchor embedded in old paralic deposits. Only the frictional resistance developed beyond the active wedge will be effective in resisting lateral loads. It can be assumed that the active wedge adjacent to the shoring wall is defined by a plane drawn at 35 degrees from vertical through the bottom of the excavation. Anchor capacities should be proof-tested during construction. Where satisfactory tests are not achieved, the anchor diameter and/or length should be increased until satisfactory test results are obtained.

Continuous lagging will be required throughout. The soldier piles and tie-back anchors should be designed for the full-anticipated lateral pressure; however, the pressure on the lagging will be less due to arching in the soils. For design of lagging, the earth pressure but can be limited to a maximum value of 400 psf.

We recommend that the performance of the shoring system be monitored. The monitoring should consist of periodic surveying of the lateral and vertical locations of the tops of all soldier piles and the lateral movement along the lengths of selected soldier piles. We recommend that structures and improvements adjacent to the shoring be surveyed by the contractor prior to excavation and monitored weekly during construction.

8.1.10 Temporary Dewatering

Groundwater seepage may occur locally and should be anticipated in excavations. Temporary dewatering can be accomplished by sloping the excavation bottom to a sump and pumping from the sump. A layer of gravel about 6 inches thick placed in the bottom of the excavation will facilitate groundwater flow and can be used as a working platform.

8.1.11 Slopes

All permanent slopes should be constructed no steeper than 2:1 (horizontal:vertical). Faces of fill slopes should be compacted either by rolling with a sheep-foot roller or other suitable equipment, or by overfilling and cutting back to design grade. All slopes are susceptible to surficial slope failure and erosion. Water should not be allowed to flow over the top of slopes. Additionally, slopes should be planted with vegetation that will reduce the potential for erosion.

8.1.12 Surface Drainage

Final surface grades around structures should be designed to collect and direct surface water away from the structure and toward appropriate drainage facilities. The ground

around the structure should be graded so that surface water flows rapidly away from the structure without ponding. In general, we recommend that the ground adjacent to the structure slope away at a gradient of at least 2%. Densely vegetated areas where runoff can be impaired should have a minimum gradient of at least 5% within the first 5 feet from the structure. Roof gutters with downspouts that discharge directly into a closed drainage system are recommended on structures. Drainage patterns established at the time of fine grading should be maintained throughout the life of the proposed structures. Site irrigation should be limited to the minimum necessary to sustain landscape growth. Should excessive irrigation, impaired drainage, or unusually high rainfall occur, saturated zones of perched groundwater can develop.

8.1.13 Grading Plan Review

SCST should review the grading plans and earthwork specifications to ascertain whether the intent of the recommendations contained in this report have been implemented, and that no revised recommendations are needed due to changes in the development scheme.

8.2 FOUNDATIONS

8.2.1 Shallow Spread Footings

Shallow spread footings with bottom levels on old paralic deposits can be used to support the planned subterranean parking structures. Shallow spread footings with bottom levels on compacted fill or old paralic deposits can be used to support minor at-grade structures or site retaining walls. Footings should extend at least 24 inches below lowest adjacent finished grade. A minimum width of 12 inches is recommended for continuous footings and 24 inches for isolated or retaining wall footings. An allowable bearing capacity of 5,000 psf can be used for footings supported on old paralic deposits. An allowable bearing capacity of 2,500 psf can be used for footings supported on compacted fill. The allowable bearing capacity can be increased by 500 psf for each foot of depth below the minimum and 250 psf for each foot of width beyond the minimum up to a maximum of 8,000 psf on old paralic deposits or 5,000 psf on compacted fill. The bearing value can be increased by ⅓ when considering the total of all loads, including wind or seismic forces. Footings located adjacent to or within slopes should be extended to a depth such that a minimum horizontal distance of 7 feet exists between the lower outside footing edge and the face of the slope.

Lateral loads will be resisted by friction between the bottoms of footings and passive pressure on the faces of footings and other structural elements below grade. An allowable coefficient of friction of 0.35 can be used. Passive pressure can be computed using an allowable lateral pressure of 350 psf per foot of depth below the ground surface for level ground conditions. The passive pressure can be increased by ⅓ when considering the

total of all loads, including wind or seismic forces. The upper 1 foot of soil should not be relied on for passive support unless the ground is covered with pavements or slabs.

8.2.2 Settlement Characteristics

Total foundation settlements are estimated to be less than 1 inch. Differential settlements between adjacent columns and across continuous footings are estimated to be less than ½ inch over a distance of 40 feet. Settlements should be completed shortly after structural loads are applied.

8.2.3 Foundation Plan Review

SCST should review the foundation plans to ascertain that the intent of the recommendations in this report has been implemented and that revised recommendations are not necessary as a result of changes after this report was completed.

8.2.4 Foundation Excavation Observations

A representative from SCST should observe the foundation excavations prior to forming or placing reinforcing steel.

8.3 SLABS-ON-GRADE

8.3.1 Parking Structure Slabs-on-Grade

The project structural engineer should design the parking structure slabs-on-grade. However, we recommend that the slab have a minimum thickness of 6 inches and be underlain by at least 6 inches of aggregate base material. The slab should be reinforced with at least No. 4 reinforcing bars placed at 16 inches on center each way. Reinforcement should be placed approximately at mid-height of the slab. Concrete should have a minimum compressive strength of 3,250 psi.

A vapor barrier should be placed beneath the slab-on-grade where moisture sensitive floor coverings or equipment are planned. If plastic is used, a minimum 10-mil is recommended. The plastic should comply with ASTM E1745. Installation should comply with ASTM E1643. Current construction practice typically includes placement of a 2-inch thick sand cushion between the bottom of the concrete slab and the moisture vapor barrier. This cushion can provide some protection to the vapor barrier during construction, and may assist in reducing the potential for edge curling in the slab during curing. However, the sand layer also provides a source of moisture to the underside of the slab that can increase the time required to reduce vapor emissions to limits acceptable for the type of floor covering placed on top of the slab. The slab can be placed directly on the vapor barrier. The floor covering manufacturer should be contacted to determine the volume of

moisture vapor allowable and any treatment needed to reduce moisture vapor emissions to acceptable limits for the particular type of floor covering installed.

8.3.2 Exterior Slabs-on-Grade

Exterior slabs should be at least 4 inches thick and reinforced with at least No. 3 bars at 18 inches on center each way. Slabs should be provided with weakened plane joints. Joints should be placed in accordance with the American Concrete Institute (ACI) guidelines. The project architect should select the final joint patterns. A 1-inch maximum size aggregate mix is recommended for concrete for exterior slabs. The corrosion potential of on-site soils with respect to reinforced concrete will need to be taken into account in concrete mix design. Coarse and fine aggregate in concrete should conform to the "Greenbook" Standard Specifications for Public Works Construction.

8.4 CONVENTIONAL RETAINING WALLS

8.4.1 Foundations

The recommendations provided in the foundation section of this report are also applicable to conventional retaining walls.

8.4.2 Lateral Earth Pressures

The at-rest earth pressure for the design of restrained retaining wall with level backfills can be taken as equivalent to the pressure of a fluid weighing 55 pcf. The active earth pressure for the design of unrestrained retaining walls with level backfills can be taken as equivalent to the pressure of a fluid weighing 35 pcf. These values assume a granular and drained backfill condition. An additional 20 pcf should be added to these values for walls with 2:1 (horizontal:vertical) sloping backfill. An increase in earth pressure equivalent to an additional 2 feet of retained soil can be used to account for surcharge loads from light traffic. The above values do not include a factor of safety. Appropriate factors of safety should be incorporated into the design. If any other surcharge loads are anticipated, SCST should be contacted for the necessary increase in soil pressure.

Retaining walls should be designed to resist hydrostatic pressures or be provided with a backdrain to reduce the accumulation of hydrostatic pressures. Backdrains may consist of a 2-foot wide zone of ¾-inch crushed rock. The backdrain should be separated from the adjacent soils using a non-woven filter fabric, such as Mirafi 140N or equivalent. Weep holes should be provided or a perforated pipe should be installed at the base of the backdrain and sloped to discharge to a suitable storm drain facility. As an alternative, a geocomposite drainage system such as Miradrain 6000 or equivalent placed behind the wall and connected to a suitable storm drain facility can be used. The project architect

should provide waterproofing specifications and details. Figure 7 presents typical conventional retaining wall backdrain details.

8.4.3 Seismic Earth Pressure

If required, the seismic earth pressure can be taken as equivalent to the pressure of a fluid weighing 20 pcf. This value is for level backfill and does not include a factor of safety. Appropriate factors of safety should be incorporated into the design. This pressure is in addition to the un-factored, static active earth pressure. The passive pressure and bearing capacity can be increased by ⅓ in determining the seismic stability of the wall.

8.4.4 Backfill

Wall backfill should consist of granular, free-draining material. Expansive or clayey soil should not be used. Additionally, fill within 3 feet from the back of the wall should not contain rocks greater than 3 inches in dimension. We anticipate that a portion of the onsite soils will be suitable for wall backfill. Backfill should be compacted to at least 90% relative compaction. Backfill should not be placed until walls have achieved adequate structural strength. Compaction of wall backfill will be necessary to minimize settlement of the backfill and overlying settlement sensitive improvements. However, some settlement should still be anticipated. Provisions should be made for some settlement of concrete slabs and pavements supported on backfill. Additionally, any utilities supported on backfill should be designed to tolerate differential settlement.

8.5 MECHANICALLY STABILIZED EARTH RETAINING WALLS

The following soil parameters can be used for design of mechanically stabilized earth (MSE) retaining walls.

MSE Wall Design Parameters

Soil Parameter	Reinforced Soil	Retained Soil	Foundation Soil
Internal Friction Angle (degrees)	32°	32°	32°
Cohesion (psf)	0	0	0
Moist Unit Weight (pcf)	130	130	130

The reinforced soil should consist of granular, free-draining material with an expansion index of 20 or less. The bottom of MSE walls should extend to such a depth that a total of 5 feet exists between the bottom of the wall and the face of the slope. MSE retaining walls may experience lateral movement over time. The wall engineer should review the configuration of proposed improvements adjacent to the wall and provide measures to help reduce the potential for distress to these improvements from lateral movement.

8.6 SOIL NAIL WALLS

It is anticipated that the soil nails will generally encounter old paralic deposits. The following soil parameters can be used for the design of the soil nails.

- **Soil Unit Weight:** 130 pcf
- **Internal Friction Angle:** 35 degrees
- **Ultimate Bond Stress:** 1,500 psf

Bond stress capacity is influenced by soil and rock condition, method of construction and grouting techniques. The contractor should verify the bond stress capacity in the field prior to production nail installation.

8.7 SOIL CORROSIVITY

Representative samples of the onsite soils were tested to evaluate corrosion potential. The test results are presented in Appendix II. The project design engineer can use the sulfate results in conjunction with ACI 318 to specify the water/cement ratio, compressive strength and cementitious material types for concrete exposed to soil. A corrosion engineer should be contacted to provide specific corrosion control recommendations.

9. GEOTECHNICAL ENGINEERING DURING CONSTRUCTION

The geotechnical engineer should review project plans and specifications prior to bidding and construction to check that the intent of the recommendations in this report has been incorporated. Observations and tests should be performed during construction. If the conditions encountered during construction differ from those anticipated based on the subsurface exploration program, the presence of the geotechnical engineer during construction will enable an evaluation of the exposed conditions and modifications of the recommendations in this report or development of additional recommendations in a timely manner.

10. CLOSURE

SCST should be advised of any changes in the project scope so that the recommendations contained in this report can be evaluated with respect to the revised plans. Changes in recommendations will be verified in writing. The findings in this report are valid as of the date of this report. Changes in the condition of the site can, however, occur with the passage of time, whether they are due to natural processes or work on this or adjacent areas. In addition, changes in the standards of practice and government regulations can occur. Thus, the findings in this report may be invalidated wholly or in part by changes beyond our control. This report should not be relied upon after a period of two years without a review by us verifying the suitability of the conclusions and recommendations to site conditions at that time.

In the performance of our professional services, we comply with that level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions and in the same locality. The client recognizes that subsurface conditions may vary from those encountered at the boring locations, and that our data, interpretations, and recommendations are based solely on the information obtained by us. We will be responsible for those data, interpretations, and recommendations, but shall not be responsible for interpretations by others of the information developed. Our services consist of professional consultation and observation only, and no warranty of any kind whatsoever, express or implied, is made or intended in connection with the work performed or to be performed by us, or by our proposal for consulting or other services, or by our furnishing of oral or written reports or findings.

11. REFERENCES

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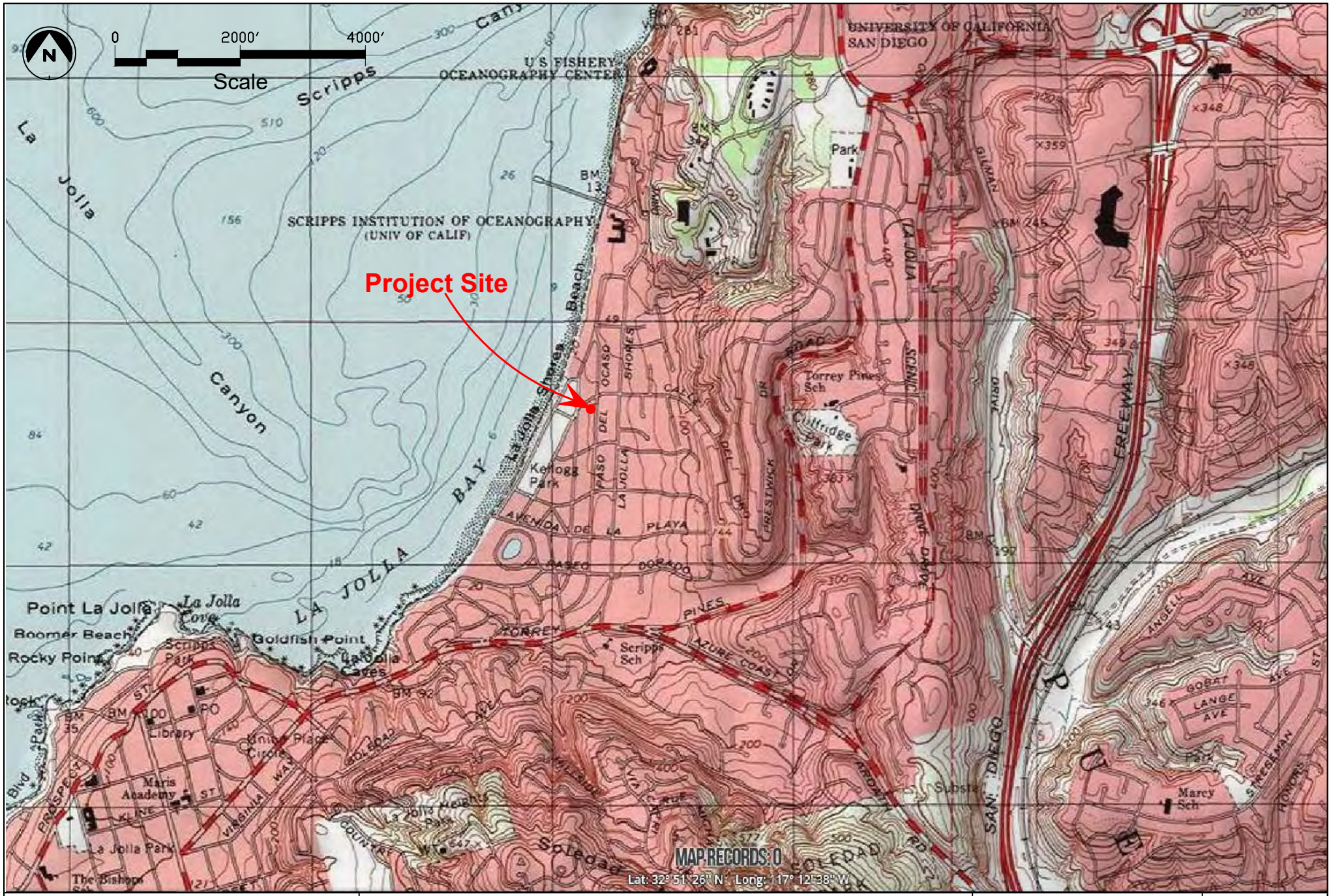
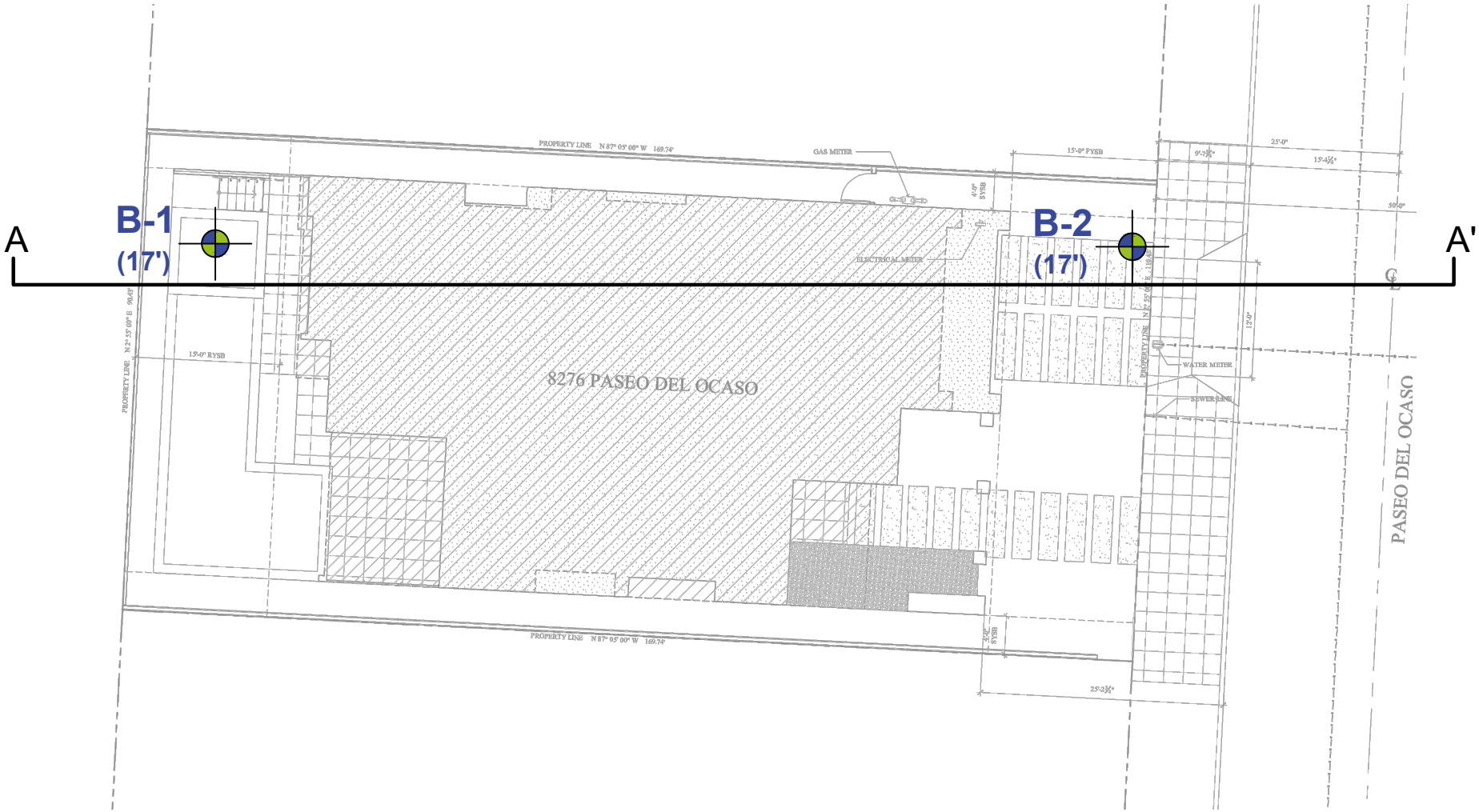
SCST, Inc.	SITE VICINITY MAP 8276 Paseo Del Ocaso La Jolla, California	Date: May, 2017 By: MAW Job No.: 170179N-1	Figure: 1



SCST, Inc.	USGS QUADRANGLE MAP 8276 Paseo Del Ocaso La Jolla, California	Date: May, 2017 By: MAW Job No.: 170179N-1	Figure: 2



SCST LEGEND:

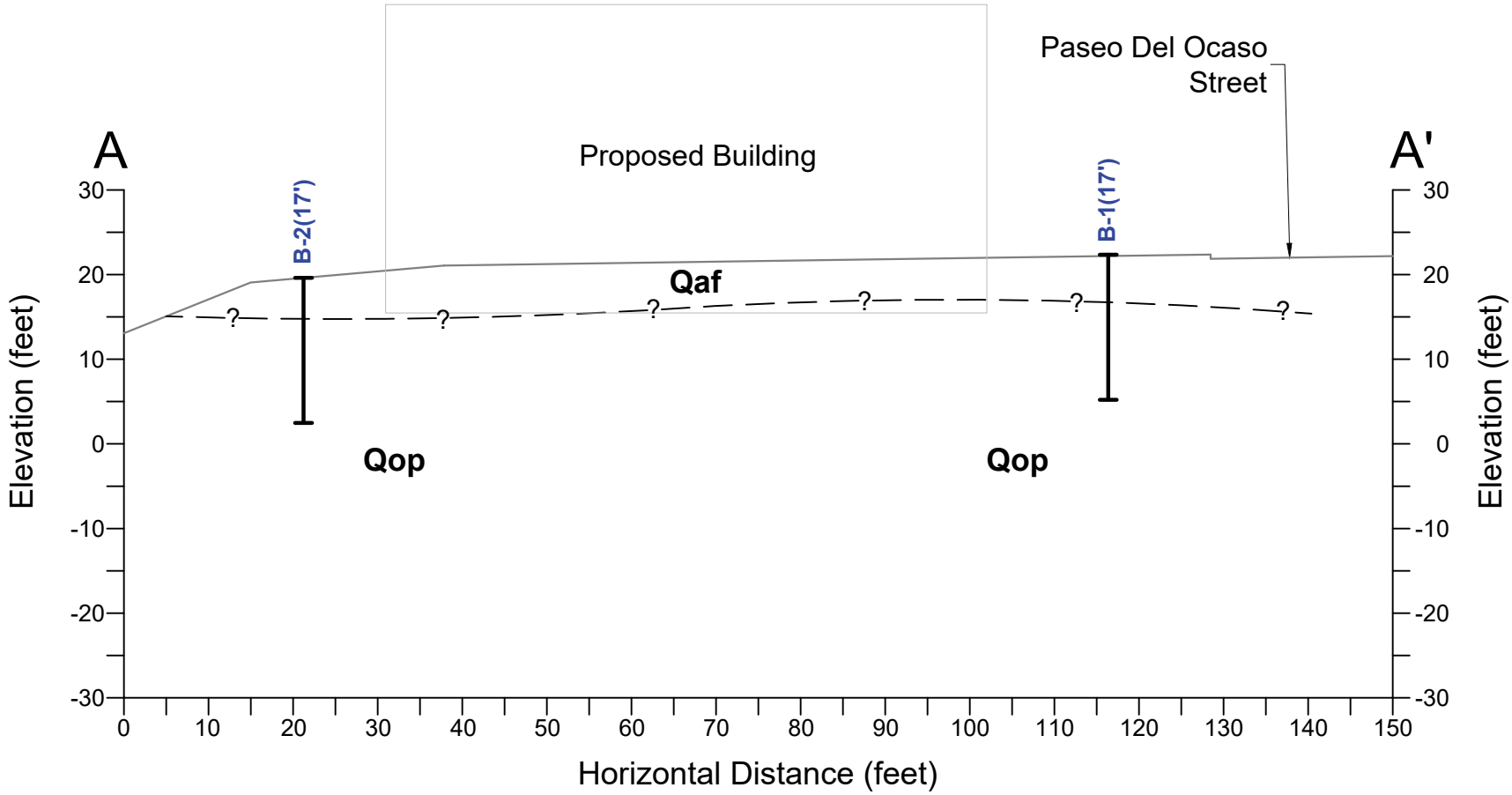
B-2 (10') — Approximate Location of Boring (with Depth in Feet)

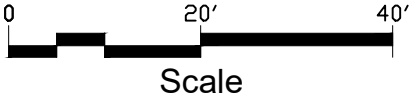
A — A' Approximate Location of Cross Section

SCALE
1/16" = 1'

N

SCST, Inc.	SUBSURFACE EXPLORATION MAP 8276 Paseo Del Ocaso La Jolla, California	Date: May, 2017 By: MAW Job No.: 170179N-1	Figure: 3





SCST LEGEND:

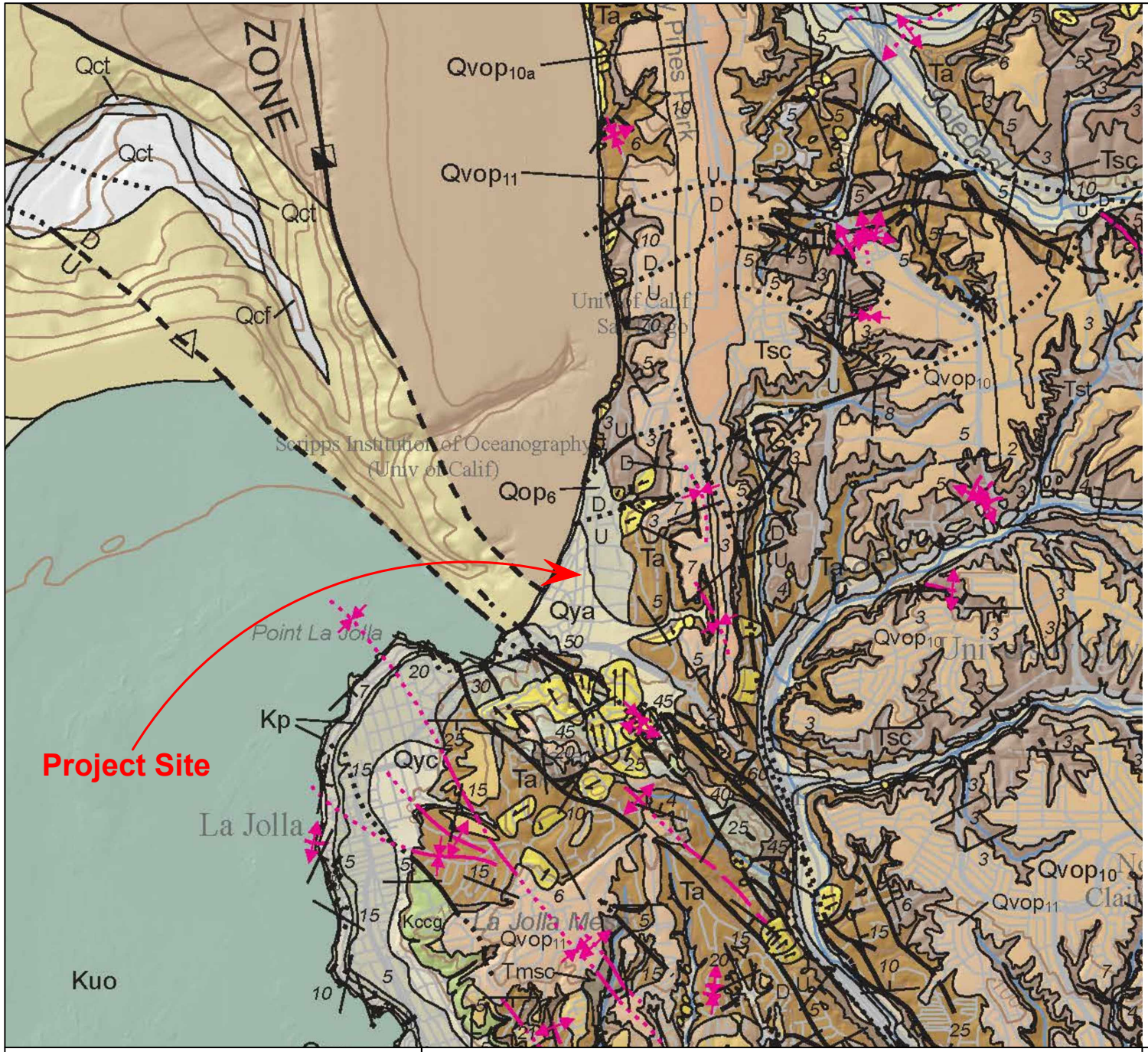
B-2 Approximate Location of Boring (with Depth in Feet)

Qf Fill

Qal Old Paralic Deposits

– – – Approximate Geologic Contact

SCST, Inc.	GEOLOGIC CROSS SECTION 8276 Paseo Del Ocaso La Jolla, California	Date: May, 2017 By: MAW Job No.: 170179N-1	Figure: 4



Qpe — Paralic estuarine deposits (late Holocene)

OLD SURFICIAL DEPOSITS

Qoa — Old alluvial flood-plain deposits, undivided (late to middle Pleistocene)

Qop — Old paralic deposits, undivided (late to middle Pleistocene)

- Qop_7 — Unit 7
- Qop_6 — Unit 6
- Qop_{2-4} — Units 2-4, undivided

Qvop — Very old paralic deposits, undivided (middle to early Pleistocene)

- $Qvop_7$ — Unit 7
- $Qvop_6$ — Unit 6
- $Qvop_5$ — Unit 5
- $Qvop_4$ — Unit 4
- $Qvop_3$ — Unit 3
- $Qvop_2$ — Unit 2
- $Qvop_1$ — Unit 1
- $Qvop_{13}$ — Unit 13
- $Qvop_{12}$ — Unit 12
- $Qvop_{11}$ — Unit 11
- $Qvop_{10}$ — Unit 10
- $Qvop_9$ — Unit 9
- $Qvop_8$ — Unit 8
- $Qvop_{11a}$ — Unit 11a
- $Qvop_{10a}$ — Unit 10a
- $Qvop_{9a}$ — Unit 9a
- $Qvop_{8a}$ — Unit 8a

Tsc — Scripps Formation (middle Eocene)
Tscu - upper unit

Ta — Ardath Shale (middle Eocene)

MzU — Metamorphosed and unmetamorphosed volcanic and sedimentary rocks, undivided (Mesozoic)

Contact - Contact between geologic units; dotted where concealed.

Fault - Solid where accurately located; dashed where approximately located; dotted where concealed. U = upthrown block, D = downthrown block. Arrow and number indicate direction and angle of dip of fault plane.

Fault - Solid where well defined; dashed where approximately located; short dash where inferred; dotted where concealed; queried where uncertain. Where fault offsets sea floor, age symbol is shown on bar on downthrown side. Where age was determined, age symbol is shown astride fault and relative offset, if known, is shown by "D" and "U" on downthrown and upthrown sides. Ages of faults are indicated as follows:

- cuts strata of Holocene age
- cuts strata of late Quaternary age
- cuts strata of Quaternary age
- cuts Miocene or older strata

Anticline - Solid where accurately located; dashed where approximately located; dotted where concealed. Arrow indicates direction of axial plunge.

Syncline - Solid where accurately located; dotted where concealed. Arrow indicates direction of axial plunge.

Qls? — Landslide - Arrows indicate principal direction of movement. Queried where existence is questionable.

Strike and dip of beds

70 — Inclined

Strike and dip of igneous joints

60 — Inclined

Vertical

Strike and dip of metamorphic foliation

55 — Inclined

0 1mile 2miles

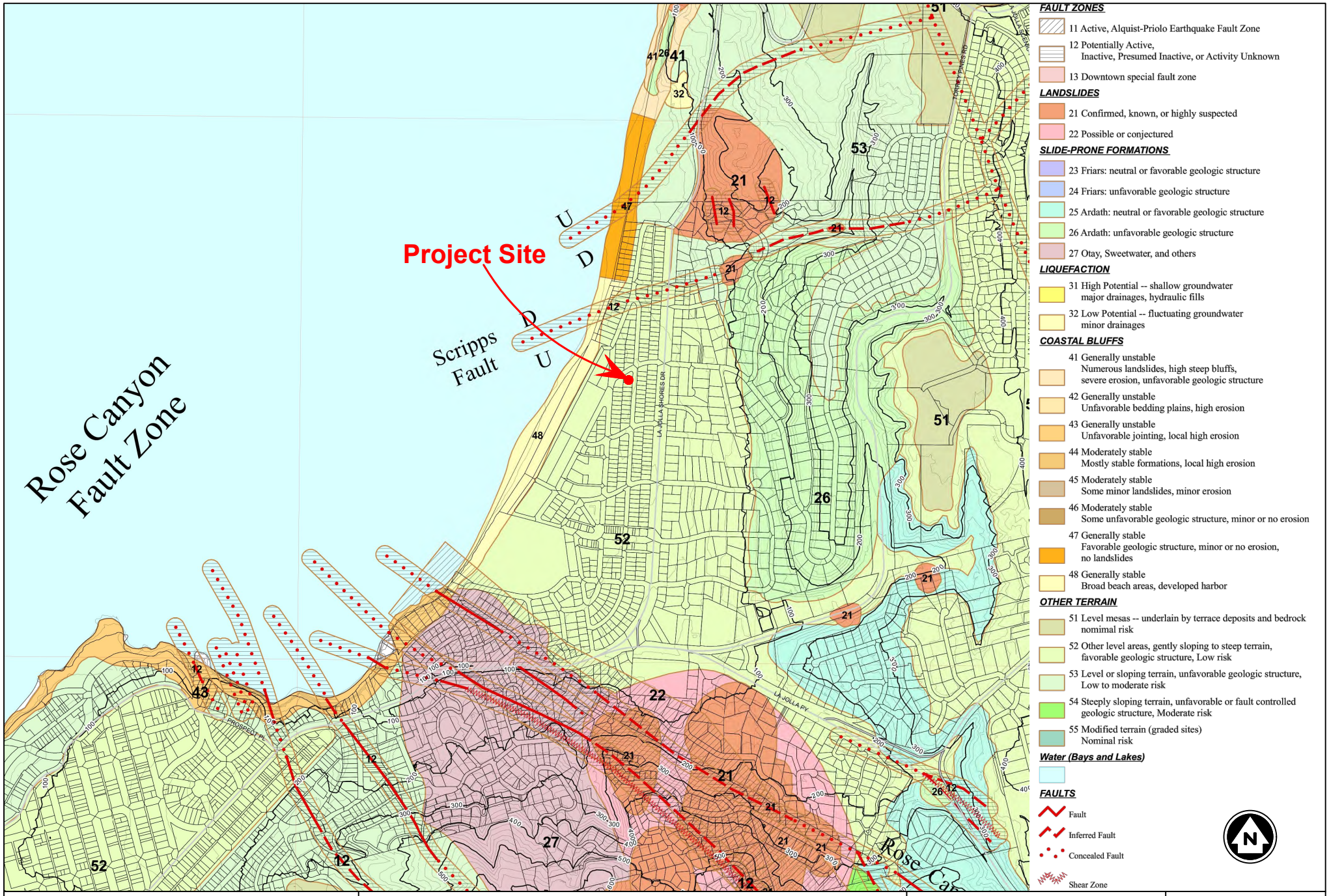
SCST, Inc.

REGIONAL GEOLOGY & FAULT MAP

8276 Paseo Del Ocaso
La Jolla, California

Date: May, 2017
By: MAW
Job No.: 170179N-1

Figure: 5



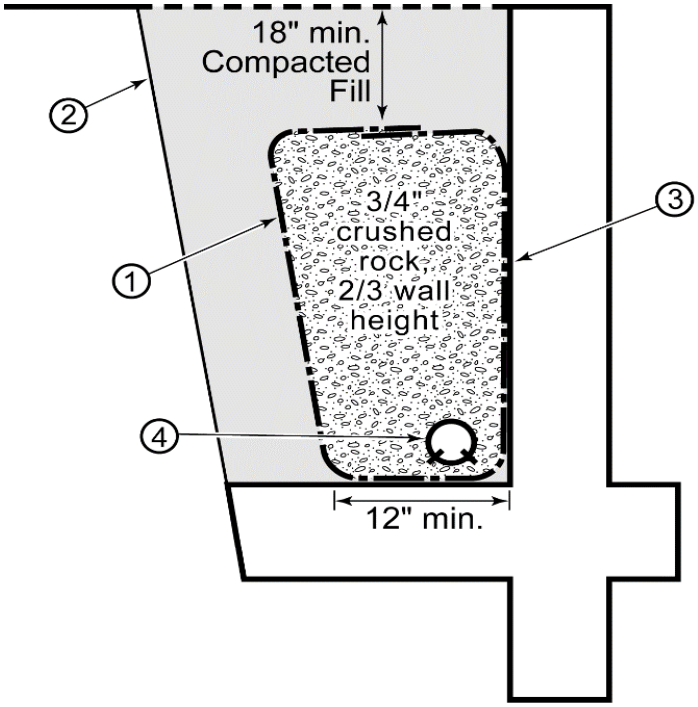
SCST, Inc.

SEISMIC SAFETY STUDY MAP

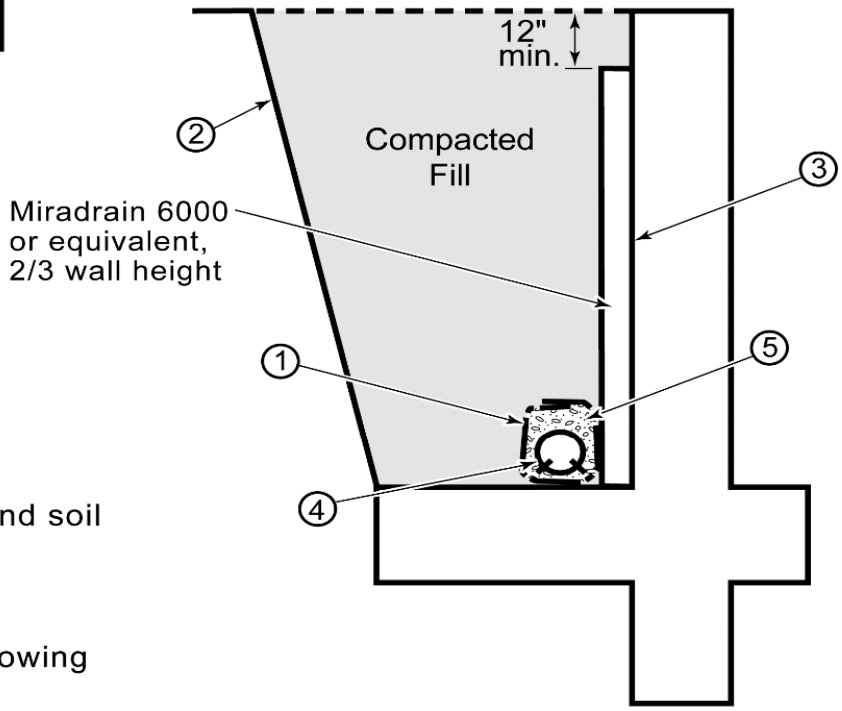
8276 Paseo Del Ocaso
La Jolla, California

Date: May, 2017
By: MAW
Job No.: 170179N-1

Figure: 6



Typical Retaining Wall
Backdrain Detail
Not to Scale



1. Filter fabric between rock and soil
2. Backcut
3. Waterproof back of wall following architect's specifications
4. 4" minimum perforated pipe, SDR35 or equivalent, holes down, 1% fall to outlet, encased in 3/4" crushed rock. Provide 3 cubic feet per linear foot crushed rock minimum. Crushed rock to be surrounded by filter fabric (Mirafi 140N or equivalent), with 6" minimum overlap. Provide solid outlet pipe at suitable location.
5. 3/4" crushed rock

SCST INC.	8276 Paseo Del Ocaso		
	By: MAW	Date:	May, 2017
	Job No: 170179N-1	Figure:	7

APPENDIX I
FIELD INVESTIGATION

Our field investigation consisted of a visual reconnaissance of the site and drilling 2 borings on April 6, 2017 to depths of about 17 feet below the existing ground surface using a tri-pod mounted solid flight auger. Figure 2 presents the approximate locations of the current and previous borings. Our field investigation was performed under the observation of an SCST engineer who also logged the borings and obtained samples of the materials encountered.

Relatively undisturbed samples were obtained using a modified California (CAL) sampler, which is a ring-lined split tube sampler with a 3-inch outer diameter and 2½-inch inner diameter. Standard Penetration Tests (SPT) were performed using a 2-inch outer diameter and 1⅜-inch inner diameter split tube sampler. The CAL and SPT samplers were driven with a 140-pound weight dropping 30 inches. The number of blows needed to drive the samplers the final 12 inches of an 18-inch drive is noted on the boring logs as “Driving Resistance (blows/ft of drive).” SPT and CAL sampler refusal was encountered when 50 blows were applied during any one of the three 6-inch intervals, a total of 100 blows was applied, or there was no discernible sampler advancement during the application of 10 successive blows. The SPT penetration resistance was normalized to a safety hammer (cathead and rope) with a 60% energy transfer ratio in accordance with ASTM D6066. The normalized SPT penetration resistance is noted on the boring logs as “N_{60}.” Disturbed bulk samples were obtained from the SPT sampler and the drill cuttings.

The soils are classified in accordance with the Unified Soil Classification System as illustrated on Figure I-1. Logs of the current borings are presented in the following Figures I-2 through I-3.

SUBSURFACE EXPLORATION LEGEND

UNIFIED SOIL CLASSIFICATION CHART

SOIL DESCRIPTION		GROUP SYMBOL	TYPICAL NAMES
I. COARSE GRAINED, more than 50% of material is larger than No. 200 sieve size.			
GRAVELS More than half of coarse fraction is larger than No. 4 sieve size but smaller than 3".	CLEAN GRAVELS	GW	Well graded gravels, gravel-sand mixtures, little or no fines
		GP	Poorly graded gravels, gravel sand mixtures, little or no fines.
	GRAVELS WITH FINES (Appreciable amount of fines)	GM	Silty gravels, poorly graded gravel-sand-silt mixtures.
		GC	Clayey gravels, poorly graded gravel-sand, clay mixtures.
SANDS More than half of coarse fraction is smaller than No. 4 sieve size.	CLEAN SANDS	SW	Well graded sand, gravelly sands, little or no fines.
		SP	Poorly graded sands, gravelly sands, little or no fines.
		SM	Silty sands, poorly graded sand and silty mixtures.
		SC	Clayey sands, poorly graded sand and clay mixtures.
II. FINE GRAINED, more than 50% of material is smaller than No. 200 sieve size.			
	SILTS AND CLAYS (Liquid Limit less than 50)	ML	Inorganic silts and very fine sands, rock flour, sandy silt or clayey-silt-sand mixtures with slight plasticity.
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
		OL	Organic silts and organic silty clays or low plasticity.
	SILTS AND CLAYS (Liquid Limit greater than 50)	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
		CH	Inorganic clays of high plasticity, fat clays.
		OH	Organic clays of medium to high plasticity.
III. HIGHLY ORGANIC SOILS		PT	Peat and other highly organic soils.

SAMPLE SYMBOLS

- ☒ - Bulk Sample
- CAL - Modified California sampler
- CK - Undisturbed Chunk sample
- MS - Maximum Size of Particle
- ST - Shelby Tube
- SPT - Standard Penetration Test sampler

GROUNDWATER SYMBOLS

- ▽ - Water level at time of excavation or as indicated
- ≀≀ - Water seepage at time of excavation or as indicated

LABORATORY TEST SYMBOLS

- AL - Atterberg Limits
- CON - Consolidation
- COR - Corrosivity Tests (Resistivity, pH, Chloride, Sulfate)
- DS - Direct Shear
- EI - Expansion Index
- MAX - Maximum Density
- RV - R-Value
- SA - Sieve Analysis
- UC - Unconfined Compression

SCST, Inc.	8276 Paseo Del Ocaso La Jolla, California		
	By: DAS	Date:	May, 2017
	Job Number: 170179N-01	Figure:	I-1

LOG OF BORING B-1

Date Drilled: 4/6/2017 | Logged by: MN
Equipment: Tripod, Solid Flight Auger, 140 lb Hammer | Project Manager: DAS
Elevation (ft): 22 | Depth to Groundwater (ft): 16 bgs

DEPTH (ft)	USCS	SUMMARY OF SUBSURFACE CONDITIONS	SAMPLES: DRIVEN	SAMPLES: BULK	DRIVING RESISTANCE (blows/ft of drive)	N_{60}	MOISTURE CONTENT (%)	DRY UNIT WEIGHT (pcf)	LABORATORY TESTS
1	SM	**FILL (Qf):** SILTY SAND, yellow brown, fine to medium grained, moist, loose to medium dense.							
2			CAL		13				
3									
4			SPT		31				
5									
6	SW	**OLD PARALIC DEPOSITS (Qop):** WELL GRADED SAND, orange brown, fine to coarse grained, moist, dense.							
7									
8									
9	SM	...becomes light brown, increase in fines	CAL		50/6"				SA, DS
10									
11									
12									
13									
14			SPT		48				
15		…becomes grayish brown							
16		Groundwater at 16 feet bgs							
17		BORING TEMINATED AT 17 FEET DUE TO CAVING							
18									
19									
20									

SCST, Inc.	8276 Paseo Del Ocaso La Jolla, California		
	By: DAS	Date:	May, 2017
	Job Number: 170179N-01	Figure:	I-2

LOG OF BORING B-2

Date Drilled: 4/6/2017
Equipment: Tripod, Solid Flight Auger, 140 lb Hammer
Elevation (ft): 22

Logged by: MN
Project Manager: DAS
Depth to Groundwater (ft): 16 bgs

DEPTH (ft)	USCS	SUMMARY OF SUBSURFACE CONDITIONS	SAMPLES DRIVEN	SAMPLES BULK	DRIVING RESISTANCE (blows/ft of drive)	N_{60}	MOISTURE CONTENT (%)	DRY UNIT WEIGHT (pcf)	LABORATORY TESTS
1	SM	**FILL (Qf):** SILTY SAND, yellow brown, fine to medium grained, moist, loose to medium dense.							
2				X					
3				X					
4			CAL	X	52				SA, DS
5	SW	**OLD PARALIC DEPOSITS (Qop):** WELL GRADED SAND, orange brown, fine to coarse grained, moist, dense.							
6									
7									
8									
9		...becomes gray brown	SPT		50				
10									
11									
12									
13									
14			CAL		50/4"				
15									
16		Groundwater at 16 feet bgs							
17		**BORING TEMINATED AT 17 FEET DUE TO CAVING**							
18									
19									
20									

SCST, Inc.

8276 Paseo Del Ocaso
La Jolla, California

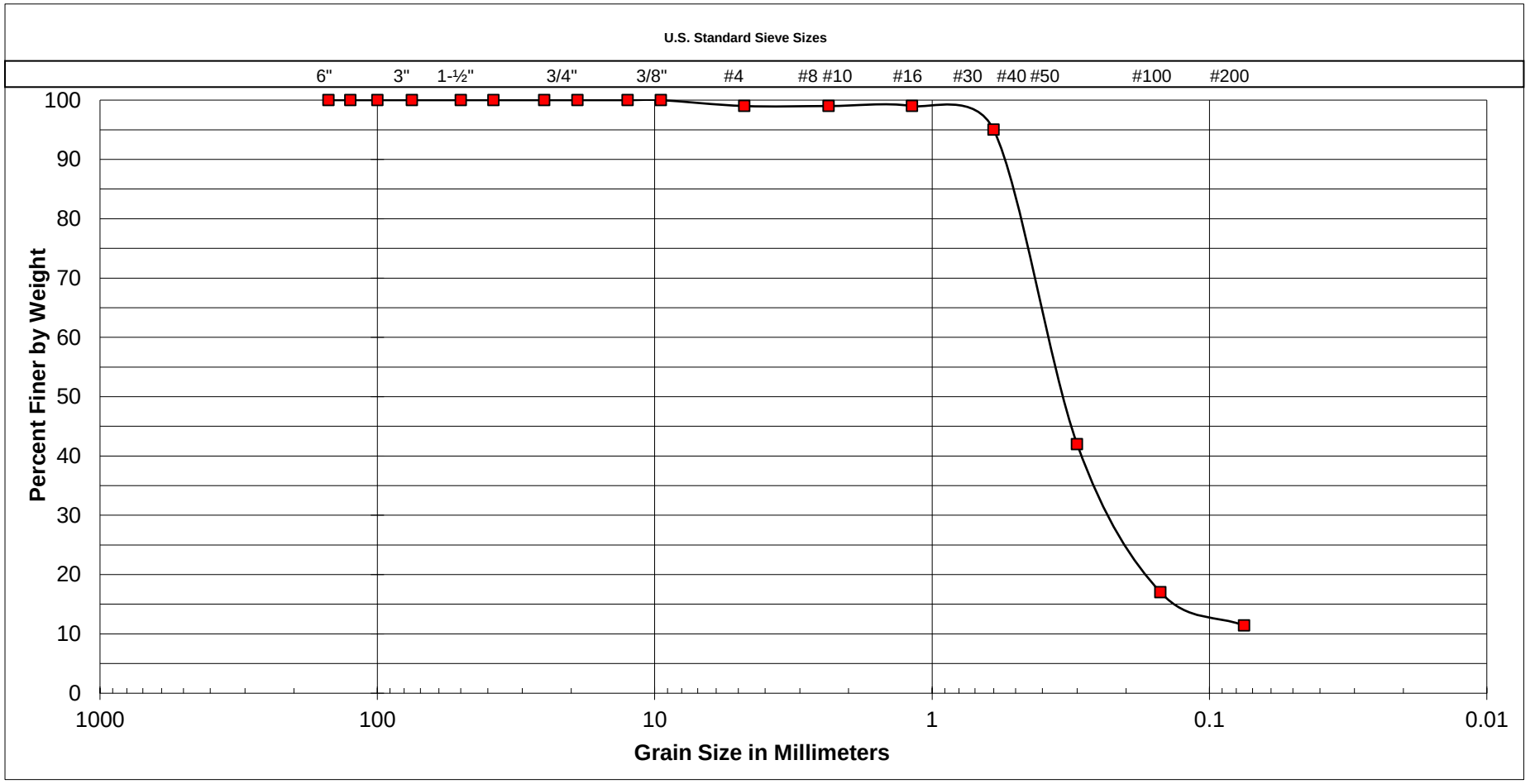
By:	DAS	Date:	May, 2017
Job Number:	170179N-01	Figure:	I-3

APPENDIX II
LABORATORY TESTING

Laboratory tests were performed to provide geotechnical parameters for engineering analyses. The following tests were performed:

- **CLASSIFICATION:** Field classifications were verified in the laboratory by visual examination. The final soil classifications are in accordance with the Unified Soil Classification System.
- **GRAIN SIZE DISTRIBUTION:** The grain size distribution was determined on three soil samples in accordance with ASTM D422. Figures II-1 through II-3 present the test results.
- **CORROSIVITY**: Corrosivity tests were performed on one soil sample. The pH and minimum resistivity were determined in general accordance with California Test 643. The soluble sulfate content was determined in accordance with California Test 417. The total chloride ion content was determined in accordance with California Test 422. Figure II-4 presents the test results.
- **DIRECT SHEAR:** Direct shear tests were performed on two soil samples in accordance with ASTM D3080. The shear stress was applied at a constant rate of strain of 0.003 inch per minute. Figures II-5 and II-6 present the test results.

Soil samples not tested are now stored in our laboratory for future reference and analysis, if needed. Unless notified to the contrary, all samples will be disposed of 30 days from the date of this report.



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-1 at 0 to 5 feet

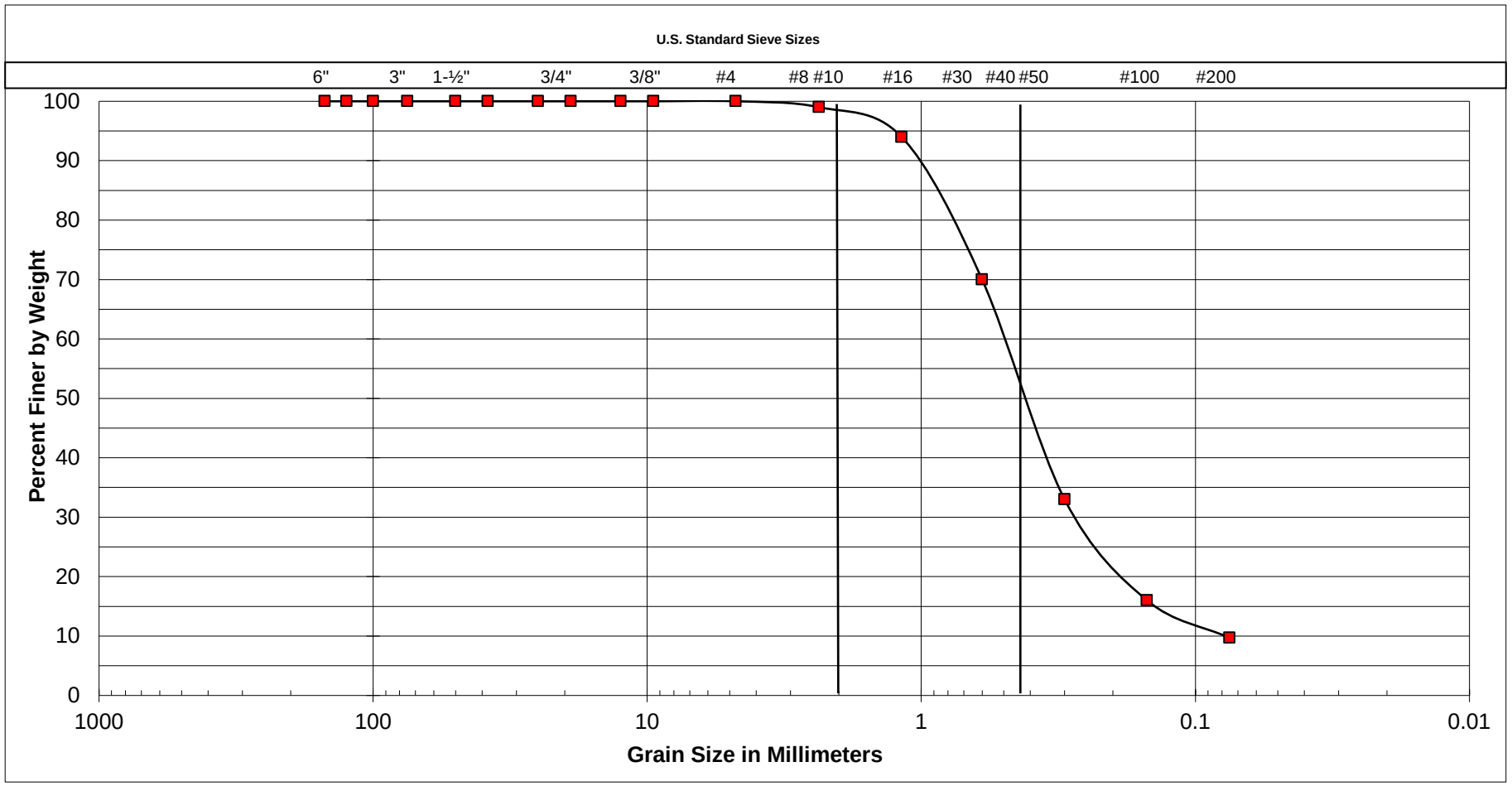
UNIFIED SOIL CLASSIFICATION:	SM
DESCRIPTION	SILTY SAND

ATTERBERG LIMITS	
LIQUID LIMIT	N/A
PLASTIC LIMIT	NP
PLASTICITY INDEX	--

SCST, Inc.

8276 Paseo Del Ocaso
La Jolla, California

By:	DAS	Date:	May, 2017
Job Number:	170179N-1	Figure:	II-1



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-1 at 9½ to 10 feet

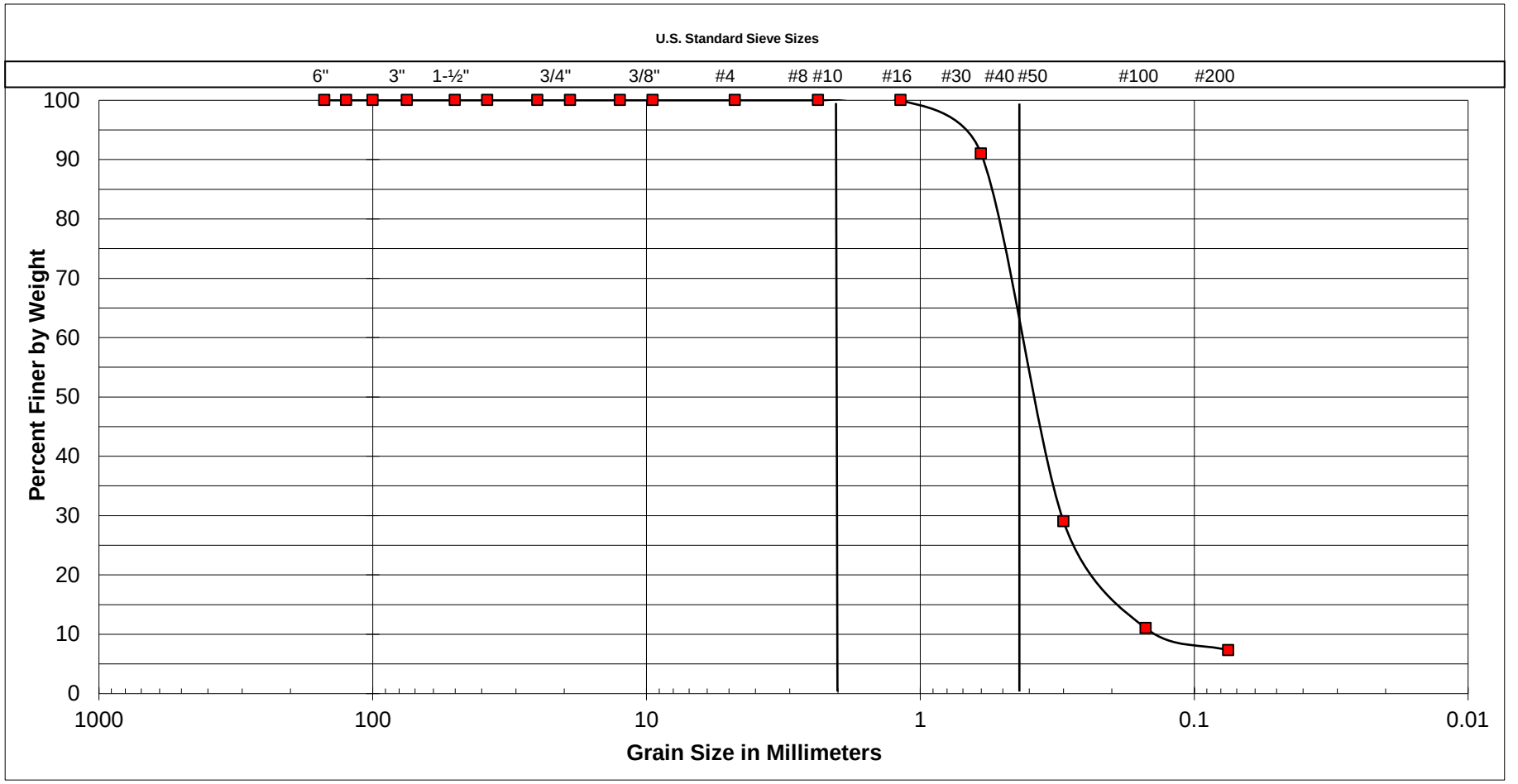
UNIFIED SOIL CLASSIFICATION:	SM
DESCRIPTION	SILTY SAND

ATTERBERG LIMITS	
LIQUID LIMIT	N/A
PLASTIC LIMIT	NP
PLASTICITY INDEX	NP

SCST, Inc.

8276 Paseo Del Ocaso
La Jolla, California

By:	DRB	Date:	May, 2017
Job Number:	170179N	Figure:	II-2



Cobbles	Gravel		Sand			Silt or Clay
	Coarse	Fine	Coarse	Medium	Fine	

SAMPLE LOCATION
B-2 at 4 to 4½ feet

UNIFIED SOIL CLASSIFICATION:	SW
DESCRIPTION	WELL GRADED SAND

ATTERBERG LIMITS	
LIQUID LIMIT	N/A
PLASTIC LIMIT	NP
PLASTICITY INDEX	NP

SCST, Inc.

8276 Paseo Del Ocaso
La Jolla, California

By:	DAS	Date:	May, 2017
Job Number:	170179N	Figure:	II-3

CORROSION TEST RESULTS

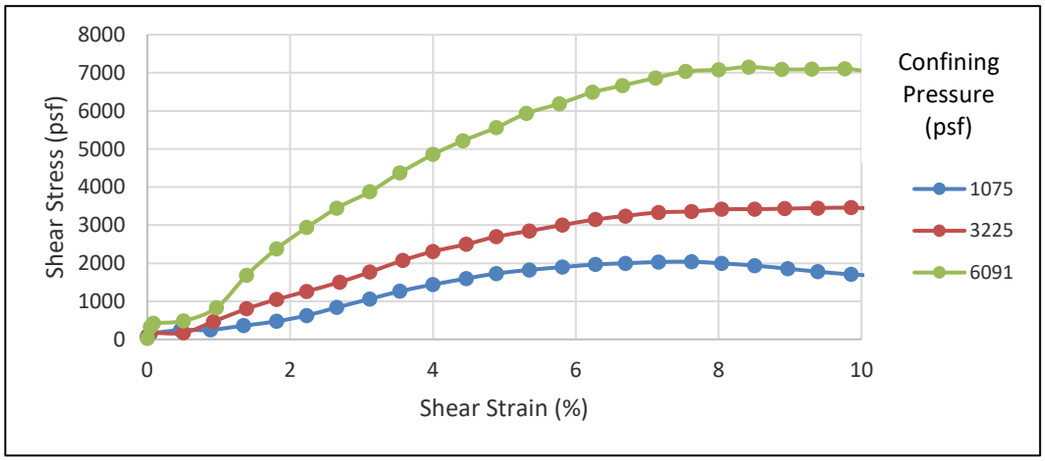
RESISTIVITY, pH, SOLUBLE CHLORIDE and SOLUBLE SULFATE

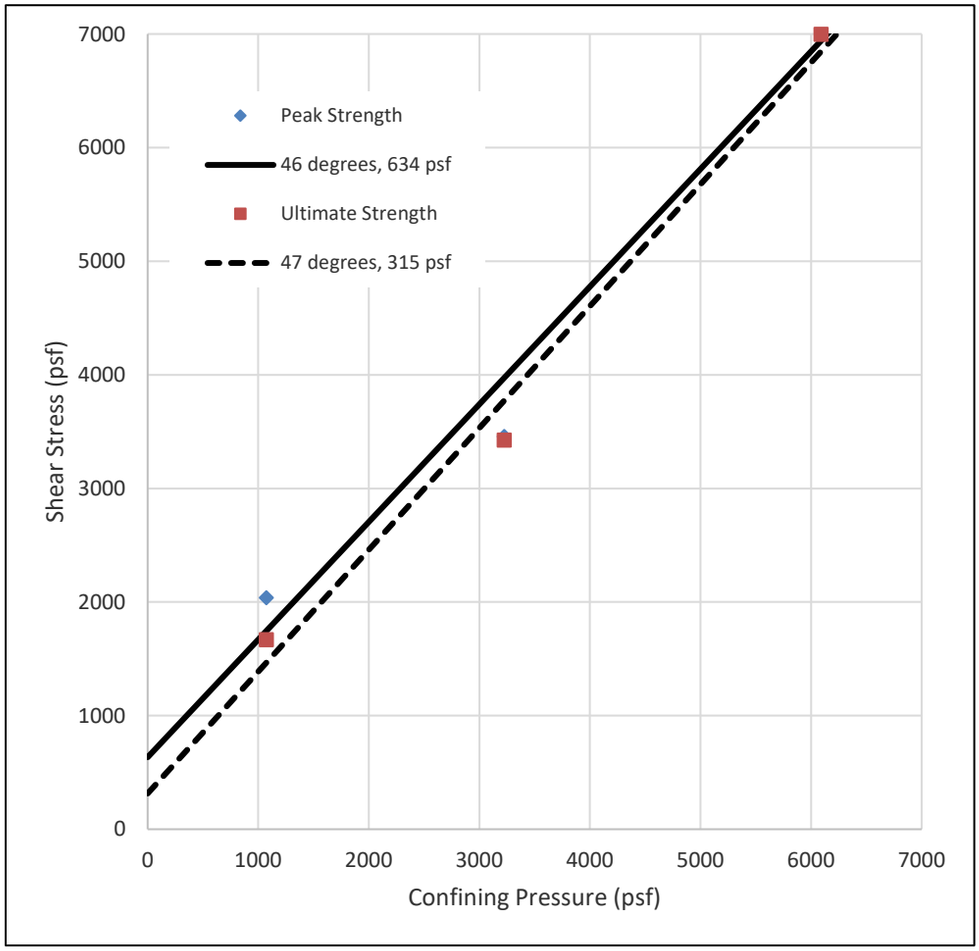
SAMPLE	RESISTIVITY (Ω-cm)	pH	CHLORIDE (%)	SULFATE (%)
B-2 at 2½ to 5 feet	4620	7.19	0.004	0.009

SULFATE EXPOSURE CLASSES [2]

Class	Severity	Water-Soluble Sulfate (SO_4) in Soil, Percent by Mass
S0	Not applicable	$SO_4 < 0.10$
S1	Moderate	$0.10 \leq SO_4 < 0.20$
S2	Severe	$0.20 \leq SO_4 \leq 2.00$
S3	Very Severe	$SO_4 > 2.00$

2. ACI 318, Table 4.2.1





SAMPLE ID: B-1 at 9½ to 10 feet

WELL GRADED SAND

NOTES: Insitu

Strain Rate: 0.003 in/min

Sample was consolidated and drained

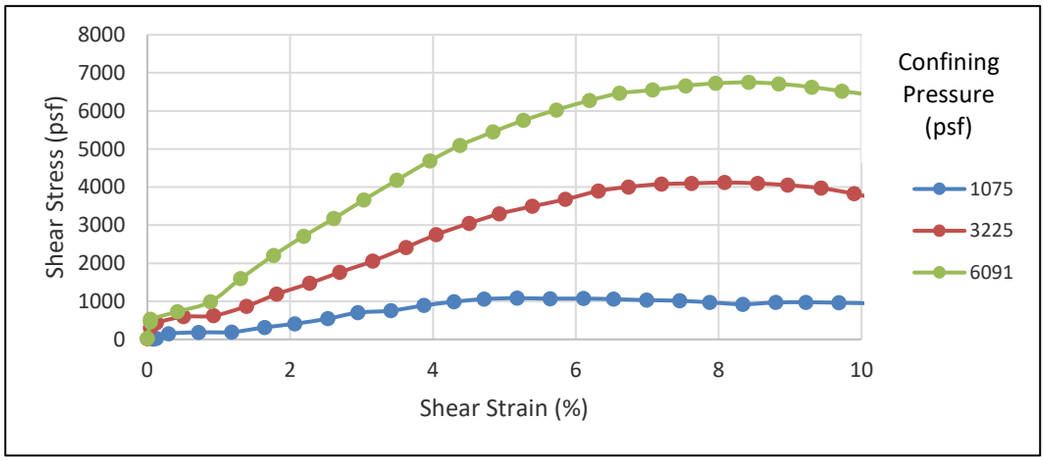
	Peak	Ultimate
Φ	46 °	47 °
c	634 psf	315 psf

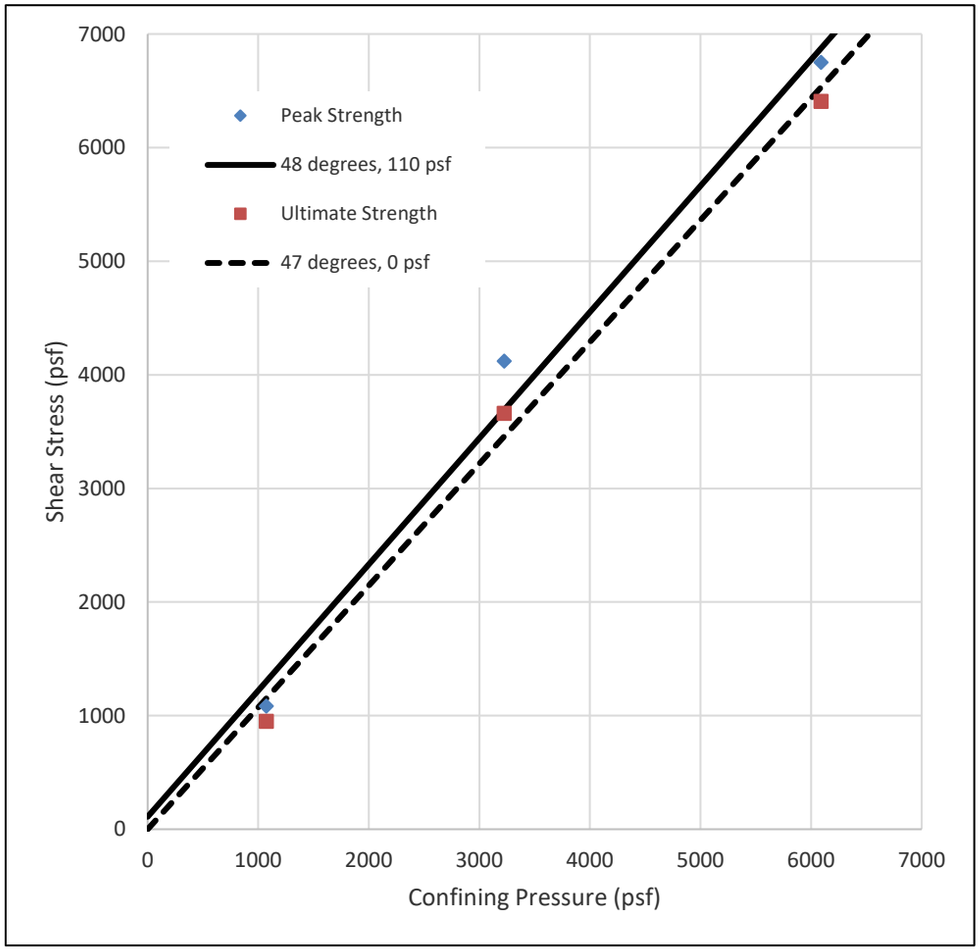
	Initial	Final
γ_d	106.5 pcf	106.5 pcf
w_c	5.4 %	17.9 %
Saturation	27 %	89 %

SCST Inc.

8276 Paseo Del Ocaso
La Jolla, California

By:	DAS	Date:	May, 2017
Job Number:	170179N-1	Figure:	II-5





SAMPLE ID: B-2 at 4½ to 5 feet

Light Brown Sand

NOTES: Insitu

Strain Rate: 0.003 in/min

Sample was consolidated and drained

	Peak	Ultimate
Φ	48 °	47 °
c	110 psf	0 psf

	Initial	Final
γ_d	102.5 pcf	102.5 pcf
w_c	4.8 %	19.6 %
Saturation	20 %	83 %

SCST Inc.

8276 Paseo Del Ocaso
La Jolla, California

By:	DAS	Date:	May, 2017
Job Number:	170179N-1	Figure:	II-6

SDVOSB . DVBE

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September 1, 2017

SCST No. 170179N
Report No. 2

Mr. Michael Morton, AIA
Marengo Morton Architects, Inc.
7724 Girard Avenue, Suite 20
La Jolla, California 92037

Subject: RESPONSE TO CITY REVIEW COMMENTS
PROPOSED RESIDENCE
8276 PASEO DEL OCASO
LA JOLLA, CALIFORNIA

Reference: 1) SCST, Inc., (2017), *Geotechnical Investigation, Proposed Residence, 8276 Paseo Del Ocaso, La Jolla, California,* SCST Report No. 1, May 5.

Dear Mr. Morton:

SCST, Inc. (SCST) prepared this update letter to respond to review comments from the City of San Diego for the subject project. The review comments and our responses are provided below.

Issue No. 2: *Submit an addendum geotechnical report or update letter that specifically addresses the proposed development for the purposes of environmental review and the following:*

Response: This letter and accompanying revised Figures 3 and 4, shall serve as the required update letter.

Issue No. 3: *Provide a site specific geologic/ geotechnical map (or update Figure 3) showing the distribution of fill and geologic units. Circumscribe the limits of recommend remedial grading.*

Response: A site specific geotechnical map (updated Figure 3) showing distribution of fill and geologic units, with circumscribed limits of recommend remedial grading, accompanies this letter (Figure 3).

Issue No. 4: *Update the existing geologic/ geotechnical cross section (Figure 4) to show the currently proposed construction and the groundwater conditions.*

Response: A revised geologic cross section showing the currently proposed construction and groundwater conditions accompanies this letter (Figure 4).

Issue No. 5: *Indicate if the proposed construction will impact groundwater flow or quality.*

Response: Groundwater was encountered in our exploratory borings at a depth of approximately 16 feet below existing grade. That depth approximately corresponds to an approximate elevation of 4 feet Mean Sea Level (MSL). Based on our experience with similar projects in that area, we anticipate the maximum ground water elevation at the site to be approximately 5 feet MSL. Based on the proposed construction, we do not anticipate that groundwater will be present near the elevation of the basement foundations or floor slab of the proposed residence.

Issue No. 6: *Clarify if the proposed basement will be designed to be water tight or if a basement wall drainage system is proposed. The consultant could consider reviewing Chapter 15, Section 1510.0403 of the San Diego Municipal Code.*

Response: See response to comment 5, above. Developer should consult with a qualified Civil Engineer specializing in waterproofing to determine if additional recommendations are required.

Issue No. 7: *The project's geotechnical consultant should provide a conclusion regarding if the proposed development will destabilize or result in settlement of adjacent property or the Right-of-Way.*

Response: In our opinion, the proposed development will not destabilize or result in settlement of the adjacent property or right of way, if the recommendations contained in our geotechnical report are followed.

Issue No. 8: *The projects geotechnical consultant must indicate if the subject site is suitable for the currently proposed development as indicated in Section 2.2.1of the City of San Diego's Guidelines for Geotechnical Reports (2011).*

Response: In our opinion, the subject site is suitable for the currently proposed development.

If you have questions, please call us at (619) 280-4321.

Respectfully submitted,
SCST, INC.

REGISTERED PROFESSIONAL GEOLOGIST
DOUGLAS A. SKINNER
No. 2472
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Douglas A. Skinner, CEG 2472
Senior Geologist

REGISTERED PROFESSIONAL ENGINEER
SCOTT H. VACULA
No.C72600
Exp. 6-30-18
CIVIL
STATE OF CALIFORNIA

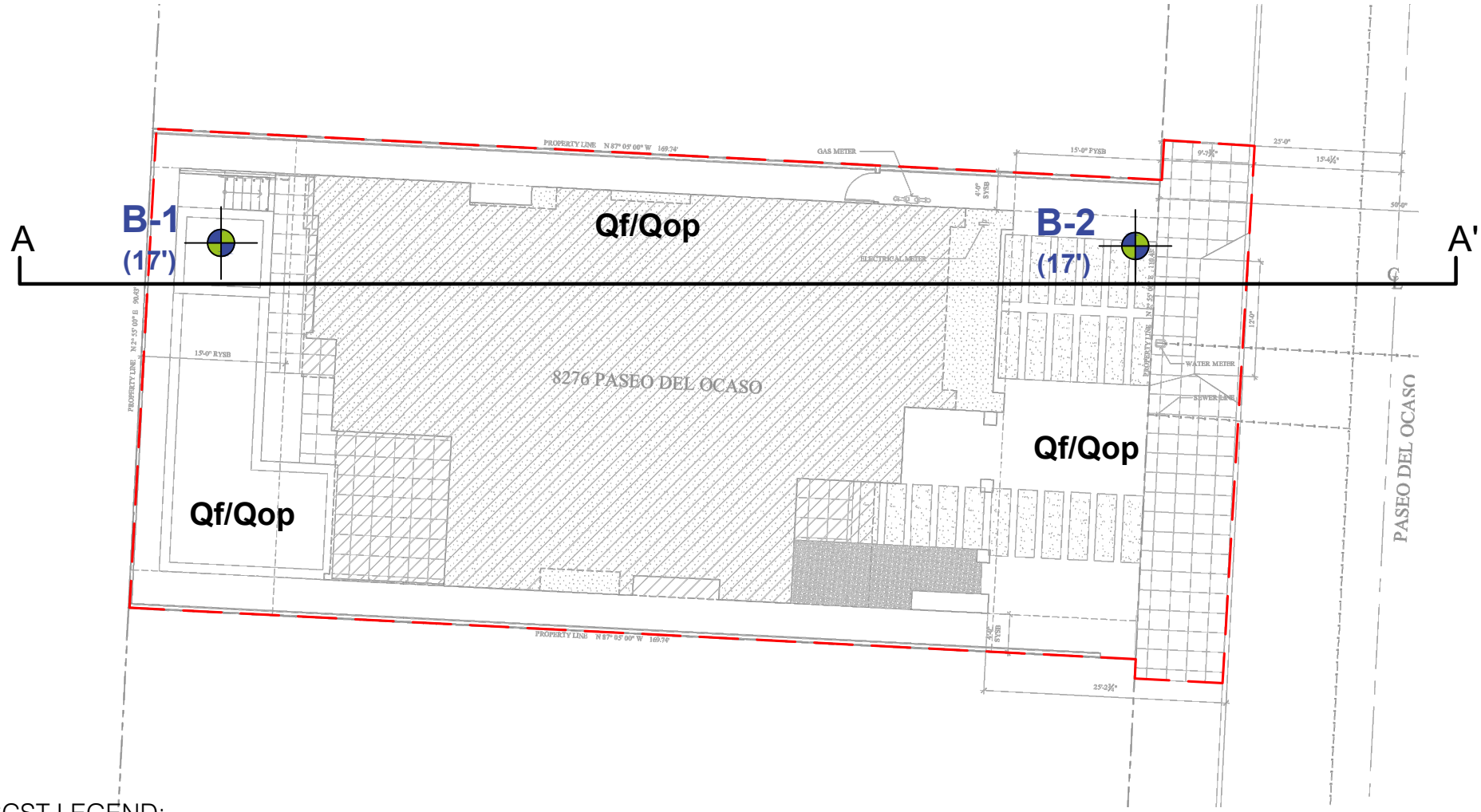
Scott Vacula, PE C72600
Senior Engineer

MAW:aw

Attachments:

Figure 3 - Geotechnical Map
Figure 4 - Geologic Cross Section

(1) Addressee via e-mail at Michael@marengomortonarchitects.com



SCST LEGEND:

B-2 (10') — Approximate Location of Boring (with Depth in Feet)

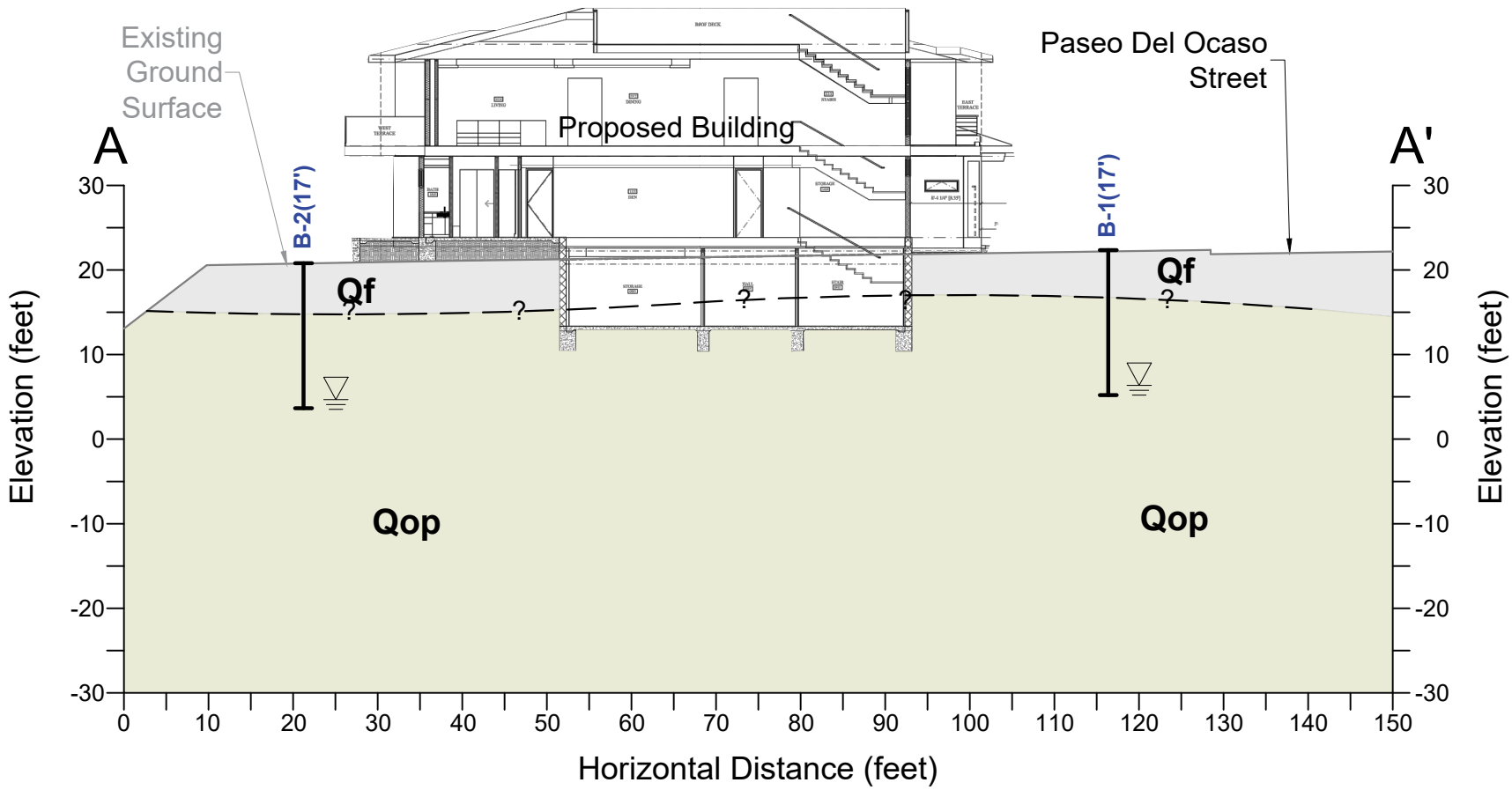
Qf/Qop — Fill Underlain by Old Paralic Deposits

A — A' — Approximate Location of Cross Section

Approximate Limits of Remedial Grading

SCALE
1/16" = 1'

SCST, Inc.	GEOTECHNICAL MAP 8276 Paseo Del Ocaso La Jolla, California	Date: August, 2017 By: MAW Job No.: 170179N-2	Figure: 3



SCST LEGEND:

B-2 Approximate Location of Boring

– –?– Approximate Geologic Contact (Queried Where Uncertain)

Qf Fill

Qop Old Paralic Deposits

Approximate Location of Encountered Groundwater

0 20′ 40′
Scale

SCST, Inc.

GEOLOGIC CROSS SECTION
8276 Paseo Del Ocaso
La Jolla, California

Date: August, 2017
By: MAW
Job No.: 170179N-2

Figure: 4