
APPENDIX D

CULTURAL RESOURCES SURVEY

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CULTURAL RESOURCES SURVEY REPORT FOR THE RANCHO PALOS VERDES PORTUGUESE BEND LANDSLIDE MITIGATION PROJECT

City of Rancho Palos Verdes

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January 19, 2023

5 Hutton Centre Drive, Suite 750

Santa Ana, CA 92707

(21243)

Mr. Ramzi Awwad
Director of Community Development
City of Rancho Palos Verdes
30940 Hawthorne Boulevard
Rancho Palos Verdes, CA 90275

Subject: Cultural Resources Survey Report for the Rancho Palos Verdes Portuguese Bend Landslide Mitigation Project

Dear Mr. Awwad

Chambers Group has been retained by the City of Rancho Palos Verdes (City) to provide a Cultural Resources Phase I and Paleontological Pedestrian Survey. In addition to the initial survey focused on the Project elements with proposed ground disturbance associated (design features), two supplemental surveys were completed to address changes to the Project and new or modified design features. The research and surveys were conducted to determine the presence of and potential for prehistoric and/or historic cultural resources within the Project area and to assess potential impacts to those resources from Project activities in compliance with applicable City, county, and state regulations, and statutes. The paleontological review and survey were conducted to determine the presence or absence of new or previously documented paleontological resources within the Project area and confirm the general understanding of local geology and the potential for paleontological resources within the Project area. As well as to confirm the assumed appropriate next step of a paleontological mitigation plan to further outline the mitigation and monitoring protocols after final design and Project environmental document completion.

The surveys, as conducted, were negative for new and previously documented cultural and paleontological resources.

Project Area Location and Description

The proposed Project area is located in Los Angeles County, California, in the City of Rancho Palos Verdes. The Project area is found on the United States Geological Survey (USGS) *San Pedro*, California, 7.5-minute topographic quadrangle, in Township 5 South, Range 14 West (USGS 1964). The Project is situated in the Portuguese Bend region, including the coastal region starting in the southwest at Portuguese Point, continuing east past Inspiration Point to Klondike Canyon, and extending inland to the north across Palos Verdes Drive South into the Portuguese Bend Reserve just south of Portuguese Canyon (Attachment 1: Figure 1).

Documented geologic disturbance activity in the Portuguese Bend landslide area began in 1956. The continued land movement has resulted in significant infrastructure damage to private property, utilities, and roadways. The City of Rancho Palos Verdes and its citizens seek to take active steps to stabilize the area to protect and preserve private lands and buildings and structures, public infrastructure, open lands, and passive recreational and open space features of the Palos Verdes Nature Preserve. These steps consist of employing engineering strategies



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including subsurface fracture infilling, surface water drainage improvements, and installing sets of groundwater mitigation drains (i.e., hydraugers).

The Project area is primarily defined by the Portuguese Bend Landslide Complex (PBLC) located along the south section of the Palos Verdes Peninsula within the City of Rancho Palos Verdes. The south end of the Project area runs along the coast, with the southwest corner on Portuguese Point and extending east along the coastline to a point on the coastline south of Klondike Canyon, then extending and narrowing to the north coming to a point north of the northmost end of Peppertree Drive and south of Portuguese Canyon at elevation 431 feet (131 meters) above mean sea level (amsl). The terminus of the active landslide complex, and generally the southern boundary of the PBLC, is the Pacific Ocean. The PBLC-defined Project area is approximately 250 acres and includes approximately 96 acres of preserve land associated with the Palos Verdes Peninsula Land Conservancy, Portuguese Bend Reserve, and the Abalone Cove conservancy area.

Regulatory Framework

California Environmental Quality Act

Work for this Project was conducted in compliance with California Environmental Quality Act (CEQA). The regulatory framework as it pertains to cultural resources under CEQA has been detailed below. Under the provisions of CEQA, including the CEQA Statutes (Public Resources Code [PRC] §§ 21083.2 and 21084.1), the CEQA Guidelines (Title 14 California Code of Regulations [CCR], § 15064.5), and PRC § 5024.1 (Title 14 CCR § 4850 et seq.), properties expected to be directly or indirectly affected by a proposed project must be evaluated for California Register of Historical Resources (CRHR) eligibility (PRC § 5024.1).

The purpose of the CRHR is to maintain listings of the state’s historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change. The term *historical resources* includes a resource listed in or determined to be eligible for listing in the CRHR; a resource included in a local register of historical resources; and any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CCR § 15064.5[a]). The criteria for listing properties in the CRHR were expressly modeled after the previously established criteria developed for listing in the National Register of Historic Places (NRHP). The California Office of Historic Preservation (OHP 1995:2) regards “any physical evidence of human activities over 45 years old” as meriting recordation and evaluation.

California Register of Historical Resources

A cultural resource is considered “historically significant” under CEQA if the resource meets one or more of the criteria for listing on the CRHR. The CRHR was designed to be used by state and local agencies, private groups, and citizens to identify existing cultural resources within the state and to indicate which of those resources should be protected, to the extent prudent and feasible, from substantial adverse change. The following criteria have been established for the CRHR. A resource is considered significant if it:

1. is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. is associated with the lives of persons important in our past;
3. embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or



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4. has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, historical resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be able to convey the reasons for their significance. Such integrity is evaluated in regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Under CEQA, if an archeological site is not a historical resource but meets the definition of a “unique archeological resource” as defined in PRC § 21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined as follows:

- An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
 - Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
 - Has a special and particular quality, such as being the oldest of its type or the best available example of its type.
 - Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Resources that neither meet any of these criteria for listing in the CRHR nor qualify as a “unique archaeological resource” under CEQA PRC § 21083.2 are viewed as not significant. Under CEQA, “A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects” (PRC § 21083.2[h]).

Impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. Impacts to historical resources from a proposed project are thus considered significant if the project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource which contributes to its significance; or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

Assembly Bill 52

Assembly Bill (AB) 52 was enacted in 2015 and expands CEQA by defining a new resource category: tribal cultural resources (TCRs). AB 52 establishes that “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency. It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a



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tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and meets either of the following criteria:

- Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k).
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. (In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)

Paleontology

CEQA is the principal statute governing environmental review of projects occurring in the state and is codified at Public Resources Code (PRC) Section 21000 et seq. CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on paleontological resources. Guidelines for the Implementation of CEQA, as amended December 28, 2018 (Title 14, Chapter 3, California Code of Regulations 15000 et seq.), define procedures, types of activities, persons, and public agencies required to comply with CEQA, and include as one of the questions to be answered in the Environmental Checklist (Section 15023, Appendix G, Section VII, Part f) the following: will the proposed project “directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?”

CEQA requires a lead agency determine whether a project may have a significant effect on paleontological resources. Chapter 1, Section 21002 states:

It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

The CEQA Guidelines (Article 1, Section 15002(a)(3)) state that CEQA is intended to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible. If paleontological resources are identified during the Preliminary Environmental Analysis Report, or other initial project scoping studies (e.g., Preliminary Environmental Study), as being within the proposed project area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

Cultural Setting

Prehistoric Overview

During the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes within all or portions of Southern California (Moratto 1984; Jones and Klar 2007). A prehistoric chronology was devised for the Southern California coastal region based on early studies and focused on data synthesis that included four horizons: Early Man, Milling Stone, Intermediate, and Late Prehistoric (Wallace 1955,



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1978). Though initially lacking the chronological precision of absolute dates (Moratto 1984:159), Wallace's 1955 synthesis has been modified and improved using thousands of radiocarbon dates obtained by Southern California researchers over recent decades (Byrd and Raab 2007:217; Koerper and Drover 1983; Koerper et al. 2002). The prehistoric chronological sequence for Southern California presented below is a composite based on Wallace (1955) and Warren (1968) as well as later studies, including Koerper and Drover (1983).

It is generally believed that human occupation of Southern California began at least 10,000 years before present (BP). The archaeological record indicates that between approximately 10,000 and 6,000 years BP, a predominantly hunting and gathering economy existed, characterized by archaeological sites containing numerous projectile points and butchered large animal bones. The most heavily exploited species were likely those species still alive today. Bones of extinct species have been found but cannot definitively be associated with human artifacts in California, unlike other regions of the continent. Although small animal bones and plant grinding tools are rarely found within archaeological sites of this period, small game and vegetal foods were likely exploited. A lack of deep cultural deposits from this period suggests small groups practiced high residential mobility during this period (Wallace 1978).

The three major periods of prehistory for the greater Los Angeles Basin region have been refined by recent research using radiocarbon dates from archaeological sites in coastal Southern California (Koerper and Drover 1983; Mason and Peterson 1994):

- Millingstone Period (6,000–1,000 B.C., or about 8,000–3,000 years ago)
- Intermediate Period (1,000 B.C.–A.D. 650, or 3,000–1,350 years ago)
- Late Prehistoric Period (A.D. 650–about A.D. 1800, or 1,350–200 years ago)

Around 6,000 years BP, a shift in focus from hunting toward a greater reliance on vegetal resources occurred. Archaeological evidence of this trend consists of a much greater number of milling tools (e.g., metates and manos) for processing seeds and other vegetable matter (Wallace 1978). This period, known to archaeologists as the Millingstone Period, was a long period of time characterized by small, mobile groups that likely relied on a seasonal round of settlements that included both inland and coastal residential bases. Seeds from sage and grasses, rather than acorns, provided calories and carbohydrates. Faunal remains from sites dating to this period indicate similar animals were hunted. Inland Millingstone sites are characterized by numerous manos, metates, and hammerstones. Shell middens are common at coastal Millingstone sites. Coarse-grained lithic materials, such as quartzite and rhyolite, are more common than fine-grained materials in flaked stone tools from this time. Projectile points are found in archaeological sites from this period, but they are far fewer in number than from sites dating to before 6,000 years BP. An increase in the size of groups and the stability of settlements is indicated by deep, extensive middens at some sites from this period (Wallace 1978).

In sites post-dating roughly 3,000 years BP, archaeological evidence indicates the reliance on both plant gathering and hunting continued but was more specialized and locally adapted to particular environments. Mortars and pestles were added to metates and manos for grinding seeds and other vegetable material. Chipped-stone tools became more refined and specialized, and bone tools were more common. During this period, new peoples from the Great Basin began entering Southern California. These immigrants, who spoke a language of the Uto-Aztecan linguistic stock, seem to have displaced or absorbed the earlier population of Hokan-speaking peoples. The exact time of their entry into the region is not known; however, they were present in Southern California during the final phase of prehistory. During this period, population densities were higher than before; and settlement became concentrated in villages and communities along the coast and interior valleys (Erlandson 1994; McCawley



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1996). During the Intermediate Period, mortars and pestles appeared, indicating the beginning of acorn exploitation. Use of the acorn – a high-calorie, storable food source – probably facilitated greater sedentism and increased social organization. Large projectile points from archaeological sites of this period indicate that the bow and arrow, a hallmark of the Late Prehistoric Period, had not yet been introduced; and hunting was likely accomplished using the *atlatl* (spear thrower) instead. Settlement patterns during this time are not well understood. The semi-sedentary settlement pattern characteristic of the Late Prehistoric Period may have begun during the Intermediate Period, although territoriality may not yet have developed because of lower population densities. Regional subcultures also started to develop, each with its own geographical territory and language or dialect (Kroeber 1925; McCawley 1996; Moratto 1984). These were most likely the basis for the groups encountered by the first Europeans during the eighteenth century (Wallace 1978). Despite the regional differences, many material culture traits were shared among groups, indicating a great deal of interaction (Erlandson 1994). The Late Prehistoric Period is better understood than earlier periods largely through ethnographic analogy made possible by ethnographic and anthropological research of the descendants of these groups in the late nineteenth and early twentieth centuries.

Ethnographic Overview

The Late Prehistoric Period is marked by the archaeological signatures of groups who are understood more fully because their descendants in the late nineteenth and early twentieth centuries provided additional information to early anthropologists and ethnographers. These groups included the Gabrielino, whose territory included the current Project area.

Gabrielino

The Gabrielino (sometimes spelled Gabrieliño, Gabrieleno or Gabrieleño), are Cupan speakers. The Cupan languages are part of the Takic family, which is part of the Uto-Aztecan linguistic stock. Their tribal territory included the watersheds of the Los Angeles, San Gabriel, and Santa Ana rivers, all of the Los Angeles Basin, the coast from Aliso Creek in the south to Topanga Creek in the north, and the islands of San Clemente, San Nicholas, and Santa Catalina. Villages or triblets were politically autonomous and made up of different lineages. Each lineage had its own leader and would seasonally leave the village to collect resource items (Bean and Smith 1978). Tribal boundaries were not fixed and overlapped with neighboring people, including Chumash (Barbareño, Ventureño, Purisimeño, Obispeño, Ineseño, Cruzeño, Emigdiano, and the Cuyama Chumash), Fernandeno Tataviam, Serrano, Cahuilla, Acjachemen (Juaneño), and Luiseño cultural groups. These overlaps historically have been a source of confusion, contest, conflict, and opportunity, which has persisted to this day.

Gabrielino material culture incorporates a variety of tools, including saws made from deer scapulae, bone or shell needles, fishhooks and awls, scrapers, flakers (of bone or shell), wedges, hafted or unhafted lithic or cane knives, and lithic drills. Food preparation items included bedrock and portable mortars, metates, mullers, shell spoons, and mealing brushes. Wooden items include stirrers, paddles, bark platters, wooden bowls (often inlaid with *Haliotis* shell). Pottery vessels were made by coiling technique and paddle and anvil (Blackburn 1962-1963). The Gabrielino were noted for their objects made of steatite, usually obtained from Santa Catalina Islands, where a veritable steatite industry flourished, either in raw or finished form. The steatite was used in making animal carvings, pipes, "ritual" objects, ornaments, and cooking utensils. Utilitarian items were frequently decorated with shell inlaid in asphaltum, rare minerals, carvings, and painting, and comparable in quality and excellence to that of the Chumash (Bean and Smith 1978).

Baskets were made by the women from the stems of rushes (*funcus* sp.), grass (*Muhlenbergia rigens*), and squawbush (*Rhus trilobata*) with a three-color patterned decoration (Harrington 1942). Coiled wares included



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mortar hoppers; flat baskets used as plates, trays, winnowers, shallow carrying or serving baskets; storage baskets; and small globular baskets used to keep trinkets in.

Weapons included three forms of wooden war clubs, self- and sinew-backed bows, tipped (stone or bone) and untipped cane arrows (simple or compound), wooden sabers, throwing clubs, and slings used for hunting birds and small game (Blackburn 1962-1963).

Houses were domed, circular structures thatched with tule, fern, or carrizo, and in some cases, "so spacious that each will hold fifty people" (Johnston 1962), capable of supporting three or four families living in each one (Costansó 1911). For groups located near the sea, the doorways opened seaward, to avoid the north wind (Harrington 1942). Other structures commonly found in villages included sweathouses (small, semicircular, earth-covered buildings used for pleasure and as a clubhouse or meeting place for adult males), menstrual huts, and a ceremonial enclosure, the *yuva-r*. *Ayuva'r* was built near the chief's house and was essentially an open-air enclosure, oval in plan, made with willows inserted wicker fashion among willow stakes, decorated with eagle and raven feathers, skins, and flowers, and containing inside the enclosure painted and decorated poles. Consecrated anew before every ceremony, these ceremonial enclosures were the centers for activities relating to the Chingichngish cult. The religious beliefs and rituals of the cult originated in the Gabrielino territory and found its way to, and significantly influenced, non-Gabrielino groups (Bean and Smith 1978).

Typically, men hunted, fished, assisted in some gathering activities, and conducted most trading ventures. Large land mammals were hunted with bow and arrow, while smaller game was taken with deadfalls, snares, and traps, or in communal hunts with nets, bow and arrows, and throwing clubs (Blackburn 1962-1963). Along the coast harpoons, spear throwers, and clubs were used. Fishing, typically, took place along shore or along rivers, streams, and creeks with the use of hook and line, nets, basketry traps, spears, bow and arrow, and vegetal poisons. Deep-sea fishing and trading expeditions also occurred between island and mainland groups and were undertaken from boats made of wooden planks lashed and asphalted together. Women were involved mainly in collecting and preparing most floral and some animal food resources, as well as the production of baskets, pots, and clothing (Bean and Smith 1978).

The Gabrielino established a broad, and deep, trade network, ranging between the Channel Islands and the interior California deserts and Southwest regions. Nearby Serrano people exchanged acorns, seeds, obsidian, and deerskins in exchange for shell beads, dried fish, sea otter pelts, shells, possibly salt, and steatite. Colorado River oriented middlemen, such as Cahuilla, Chemehuevi, Mohave, allowed access to items such as Cibola White Ware, while they accepted shell and steatite which was traded to Pueblo dwelling populations. These trading networks to the Southwest may have been in place as early as A.D. 600-800 (Ruby 1970). The principal trade item, however, was steatite. This material, acquired from Santa Catalina Island, was traded, in rough or finished form, to many groups, such as the Chumash, Yokuts, Ipai-Tipai (Diegueño), Luiseño, and the Serrano. Most of the steatite was used to make palettes, arrow straighteners, ornaments, and carvings of animal or animal-like beings (Bean and Smith 1978).

During the Spanish missionization period people from greater area would have been incorporated into the San Gabriel mission. Whether they were Serrano, Cahuilla, Fernandeano Tataviam, Chumash or local Gabrielino, all would have been identified as Gabrielino, or as belonging to Mission San Gabriel. Indeed, even Fernandeano people have been collectively grouped within Gabrielino ethnographic treatments. Today, Fernandeano Tataviam, Gabrieleño Band of Mission Indians-Kihz Nation, and the Gabrielino-Tongva Indian Tribe identify as individual groups.



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Historic Overview

Post-European contact history for the state of California is generally divided into three periods: the Spanish Period (1540–1822), the Mexican Period (1822–1848), and the American Period (1848–present). Briefly, and in very general terms, the Spanish Period encompassed the earliest historic-period explorations of the West, followed by colonization, missionization and proselytization across the western frontier later during their occupation. The Spanish Period witnessed the establishment of pueblos such as Los Angeles and Monterey and a line of missions and presidios with attendant satellite communities, minor prospecting, and a foundational economic structure based on nascent ranchos and cattle herds, and a ship-based trade and exchange system. The Mexican Period initiated with a continuation of the same Spanish structures; however, commensurate with the political changes that led to the establishment of the Mexican state the missions and presidios were secularized, the lands parceled into ranchos, and Indian laborers released from Church lands only to be conscripted into the ranchos. Increased global trade introduced both foreign and American actors into the Mexican economic and political spheres, and both coincidentally and purposefully, smoothing the transition to the American Period. The American Period was ushered in, following the conclusion of the Mexican-American War of 1846, with a momentous influx of people seeking fortune in the Sierra foothills where gold was “discovered” in 1848. By the early 1850s people from all over the globe had made their way to California. Expansive industries were required to supply the early mining operations, such as forestry products and food networks. Grains, poultry, cattle, and water systems, which were initiated in the early Mexican Period, were intensified into a broad system of ranches and supply networks. Additionally, this period witnessed the development and expansion of port cities to supply hard goods and clothes, animals, and people transported along improved trail and road networks throughout the interior regions of the state. California cycled through boom and bust for several decades until World War I when the Department of the Navy began porting war ships along the west coast. Subsequently, California has grown, and contracted, predominantly around military policy along the west coast, and the Pacific Ocean. Following the industrial expansion related to World War II and the Cold War, technology and systems associated have come to fore as economic drivers.

Palos Verdes Peninsula

The entire Palos Verdes Peninsula, including the current Project area, was part of a major land grant originally received by a Spanish soldier named Juan Jose Dominguez. The 75,000-acre grant was entitled in 1784, and for 35 years the rancho land was utilized to raise cattle. Don Dolores Sepulveda received the Rancho de los Palos Verdes land grant in 1827. However, the stewardship of the much of the land was passed through various mortgage holders to Jotham Bixby of Rancho Los Cerritos by approximately 1882. The peninsula was host to solely cattle ranching and shepherding through the end of the nineteenth century (Fink 1987). However, a brief attempt to establish a whaling industry on the southern coast of the peninsula, in the Portuguese Bend area, by 1864 was attributed to Captain Clark. The previous site of the whaling station has been designated as California Historical Landmark #381. Per the California Historic Landmark listing with California Office of Historic Preservation (OHP), the whaling station was only active until 1877, when it was abandoned largely due to lack of fuel, rather than a lack of vessels or whales (OHP 2022). The site of the old whaling station is currently marked by a placard on the Portuguese Bend Club signage, well outside of the current Project area. By the onset of the twentieth century, the primary utilization of the peninsula remained focused on cattle ranching and shepherding. During the early 1900s, Bixby began leasing to Japanese farmers for cultivating grains and vegetables. These Japanese families farmed the southern slopes, cultivating beans, peas and tomatoes, while the northern slopes were planted in barley for hay and grain. However, the Peninsula began to experience rapid changes in the early 1900’s (Fink 1987).



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Major changes to Palos Verdes Peninsula were set in motion by 1913, when a consortium of New York investors purchased most of the Bixby land. Frank Vanderlip, a former assistant secretary of the U.S. Treasury and president of the National City Bank of New York, who was later known as the founding father of the Peninsula, was one of the primary investors. Vanderlip envisioned a master planned residential community, dubbed the Palos Verdes Estates Project, that would endeavor to develop the entire peninsula. By 1921, a real estate developer named E.G. Lewis acquired the Palos Verdes Estates Project through exercising an option to acquire the property from Mr. Vanderlip. The Vanderlip and Lewis envisioned utopian community, Palos Verdes Estates, was planned over the entire 16,000 acres but later decreased in development area to 3,225 acres. The planned project encompassed the future City of Palos Verdes Estates and part of the Miraleste area of the current day City of Rancho Palos Verdes. The Palos Verdes Estates Project continued to experience setbacks due to the onset of the Great Depression and, later, World War II. As well as E.G. Lewis' later financial and legal issues (Fink 1987; City 2022).

Vanderlip constructed his first residence on the peninsula in the Portuguese Bend area, the "Old Ranch Cottage," now known as the "Cottage" in 1916. Other buildings were added in the 1920s. In addition to this personal residential development, several recreational facilities were constructed early in the development of the Palos Verdes Estates Project. Six street entrances were planned, three from the east and three from the north. The main broad street, Granvia La Costa (Palos Verdes Drive), considered a parkway with a landscaped center strip, was designed for the unrealized Pacific Electric Railway to run down its center. The Palos Verdes Golf Club was opened in 1924, and the Palos Verdes Swim Club was opened in 1930. Stables for horseback riding were also constructed in Palos Verdes Estates. The Swim Club was renamed the Roessler Pool, in honor of Fred Roessler, mayor of Palos Verdes Estates for 25 years and who was instrumental in the formation of the city of Palos Verdes Estates in 1939. The original Swim Club utilized recirculated ocean water. All the initial development of Palos Verdes was focused on the areas north and east, well outside of the current Project area. The Great Depression, which began in 1929, heavily impacted the growth as many lot owners defaulted on their property taxes and, by 1932, one third of the owners of building sites failed to pay their annual assessments. After Frank Vanderlip's passing in 1937, control of the Palos Verdes Corporation was passed to Vanderlip's son. In 1942, control was passed to Harry Benedict, a friend and business associate who had long been managing the land holdings and living on the peninsula for the absentee Frank Vanderlip, and later passed to Kevin Vanderlip in 1945.

During World War II Japanese farmers and their families who had lived on the Peninsula since 1910 were sent to internment camps. Defensive positions were established at the Haggarty Estate in Malaga Cove. Battery installations were installed at the current location of the Rancho Palos Verdes City Hall (also known as the Civic Center or Upper Point Vicente), as well as at Rocky Point in Lunada Bay in 1943 that included two 16-inch guns. Barracks and support buildings were also constructed in Lunada Bay. An underground observation point was also constructed at Punta Place overlooking Bluff Cove and the South Bay.

By the late 1940s, another recreational facility developed by the Palos Verdes Corporation was completed, the Portuguese Bend Club. This well promoted 105-acre beach club was centered on the Portuguese Bend Clubhouse building that was constructed within the 400 feet of privately owned Portuguese Bend coastline west of the current existing alignment of Seawall Road, east of Inspiration Point, and within the current Project area. Additionally, residences were constructed in the 1940s and 50s for club members, within the area east of the clubhouse building and within the current Portuguese Bend Beach Club area along Seawall Road, Yacht Harbor Drive, and Maritime Road. The Portuguese Bend Clubhouse building was completed by 1948 and the facility featured a large saltwater swimming pool, tennis courts, and other recreational facilities. Additionally, the club included a 425-foot pier that extended from the coast and allowed for boats to dock facilitating fishing,



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recreational boating, and yacht racing. While the Portuguese Bend Club still exists today, the clubhouse and all associated facilities were eventually destroyed by the landslide activity that began in 1956.

In 1956, cracks were observed by County maintenance crews working along Palos Verdes Drive South, north of the Portuguese Bend Clubhouse, indicating earth movement was already taking place. This landslide activity, dubbed the Portuguese Bend Landslide, continues to date. Still, in the months following the initial discovery in 1956 the landslide had substantial impacts to the Portuguese Bend Club and surrounding area. During that period, roughly 200,000 cubic feet of earth gave way, destroying much of Palos Verdes Drive South and Yacht Harbor Drive, which roughly followed the current alignment Yacht Harbor Drive and provided access further west to the clubhouse. This landslide activity also destroyed over a hundred homes and eventually led to the clubhouse closing and the building and all related facilities being demolished by 1958. The pier was damaged as well but portions remained intact until it was removed in 1973. Despite the impacts of the ongoing landslide activity on the Portuguese Bend area, the larger Ranchos Palos Verdes continued to grow and develop steadily in the ensuing decades. The City of Rancho Palos Verdes was incorporated in September 1973 (Fink 1987).

The current Project area is included in the original footprint of the historic Palos Verdes Estates Project, but the only related development within the Project area was the Portuguese Bend Clubhouse. The PBLC-defined Project area in the Portuguese Bend area of the southern peninsula and extends to the coastline, encompassing the previous location of the Portuguese Bend Clubhouse and related facilities, all of which have since been demolished. Due to the ongoing landslide activity, the Project area remains relatively undeveloped aside from Palos Verdes Drive South that bisects the Project area. However, there are substantial hiking and equestrian trail systems throughout the Project area north of Palos Verdes Drive South. The only development in Project area south of Palos Verdes Drive South includes the portion of Seawall Road and Yacht Harbor Drive and an active archery range (South Bay Archery Club) (Figure 1).

Background Research-Cultural

Methods of Review

Chambers Group submitted a records search request with the South-Central Coastal Information Center (SCCIC) for the Project area and a surrounding 0.5-mile study area. The SCCIC is one of 12 regional Information Centers that comprise the California Historical Resources Information System (CHRIS), which works under the direction of the California OHP and the State Historic Resources Commission (SHRC). The SCCIC houses information about prehistoric and historic cultural resources (location and description) and prior cultural studies performed within San Bernardino, Ventura, Los Angeles, and Orange counties. Information Centers provide historical resources information to local governments and individuals with responsibilities under NEPA, NHPA, and CEQA.

The SCCIC records search request was submitted on July 14, 2020. Due to the measures being taken by the SCCIC in response to the COVID-19 global pandemic, the SCCIC was closed to in-person appointments for record searches; all requests were processed by a reduced SCCIC staff, resulting in a significant delay from standard turnaround times. Consequently, the City and Chambers Group decided to proceed with fieldwork, performed August 14, 2020, without the current records search results. The City and Chambers Group reached an understanding that, should the records search results reveal previously recorded cultural resources in the Project area, an additional field visit would be required to relocate those resources and assess any potential Project-related impacts to those resources.

Chambers Group received the SCCIC CHRIS information requested records search results on August 19, 2020. No previously recorded resources were identified within the Project area that required subsequent resurvey update



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based on the understanding with the City. However, due to Project design updates, additional surveys were completed in April and July of 2022.

In addition to the records search review and survey, Chambers Group archaeologists completed extensive background research to determine if any additional historic properties, landmarks, bridges, or other potentially significant or listed properties are located within the Project area or 0.5-mile study area. This background research included, but was not limited to, review of the NRHP, California State Historic Property Data Files, California State Historical Landmarks, California Points of Historical Interest, OHP Archaeological Determinations of Eligibility, historic aerial imagery accessed via Nationwide Environmental Title Research (NETR) Online, Historic USGS topographic maps, Built Environment Resource Directory (BERD), and California Department of Transportation (Caltrans) State and Local Bridge Surveys. Additionally, Chambers Group archaeologists reviewed the Los Angeles County Historical Landmarks inventory, as well as the Palos Verdes Historical Society and local historical newspaper clippings via Newspapers.com, ProQuest Historical Newspapers.com, and the California Digital Newspaper Collection.

Results

No potentially significant or listed properties were identified that are still extant within the Project area. However, there was documented evidence of the previous development of Portuguese Bend Clubhouse and the subsequent disturbances related to the ongoing landslide activity within the Project area. Publicly available historic aerial imagery confirms the landslide destroyed the previous development within the Project area and has limited the ability to construct new development since the late 1950s. Historic aerial imagery displays the Portuguese Bend Clubhouse location, south of Palos Verdes Drive South and within the Project area, in 1952 aerial imagery. Subsequent historic aerial imagery confirms the clubhouse, and all associated facilities were destroyed and no longer evident by 1963, and all remnants of the associated pier are no longer visible by 1980. No evidence of the clubhouse or related facilities, including the portion of Yacht Harbor Drive that once accessed the clubhouse or any remnants of the related parking lots or building foundations, are visible in available aerial imagery from 1980 to 1991. By 1991 the alignment of Bow and Arrow Trail (or Archery Range Road) appears on aerial imagery and roughly follows the current alignment visible today. The more established alignment of Bow and Arrow Trail and associated paved parking areas and modular buildings are present by 1998, within the approximate location of the previous clubhouse, and in roughly the same location and orientation as observed today. Additional changes were noted, including ongoing maintenance, improvements, and slight alterations to the alignment of Palos Verdes Drive South from 1952 to present. These minor changes observed in aerial imagery are related to the dynamic nature of the PBLC and associated landslide activity that continues to date. The only other built environment observed in historic aerials within the Project area (outside proposed impact areas) included a residential building located at the current terminus of Cherry Hill Lane (#8), just north of Palos Verdes Drive South. Historic aerials display at least two buildings in this approximate location from 1952. As the historic dwelling is well outside the proposed project elements (design features), there was no need to record nor evaluate the building for the purposes of this Project. In general, the historic aerial imagery of the overall Project area north of Palos Verdes Drive South displays minimal changes from 1952 to present aside from variations in vegetation coverage and the development of well-maintained hiking and equestrian trails systems (NETR online 2022).

Previous Cultural Resources Studies

Results of the August 2020 CHRIS records search indicated that 36 previous cultural resource investigations have been conducted within the 0.5-mile radius of the Project area. Of the 36 previous studies, 11 included portions of the Project area. The non-confidential details pertaining to the investigations are listed below in Table 1, while confidential locational data are included in Attachment 2: Figure 2.



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Table 1. Previous Cultural Resources Studies within 0.5 mile of the Project Area

SCCIC Report Number	Author/Company	Year	Study Title	Within Project Area?
LA-00085	Kaufman, Susan Hector and Martin D. Rosen	1975	Evaluation of the Archaeological Resources and Potential Impact of Proposed Further Developments of the Abalone Cove Beach Area, Los Angeles County, California	Not within Project area
LA-00412	Eggers, A.V.	1978	Report on a Preliminary Cultural Resource Survey of an 82 Acre Parcel (Burbell Ranch) Near Portuguese Bend in Rancho Palos Verdes, California	Not within Project area
LA-01494	McCauley, Tamara	1985	Archaeological Resource Survey and Impact Assessment of the Proposed Palos Verdes Drive South Improvement Project, Los Angeles County, California	Not within Project area
LA-01769	Foster, John M.	1989	Environmental Impact Report Abalone Cove Landslide Stabilization Project, County of Los Angeles Department of Public Works, Appendix G Archaeological Report	Not within Project area
LA-02051	Jertberg, Patricia R. and Beth Padon	1989	Archaeological/Scientific Resources Assessment for Rancho Palos Verdes Coastal Development Subregions 7 and 8 Revised	Not within Project area
LA-02264	Brown, Joan C.	1991	Cultural Resources Reconnaissance of 378 Acres Located in Rancho Palos Verdes, Portuguese Bend, Los Angeles County, California	<i>Included a portion of Project area</i>
LA-02441	Gallegos, Dennis R. and Ivan H. Strudwick	1991	Historical/Archaeological CEQA Evaluation for CA-LAN-999, Locus B Rancho Palos Verdes, California	Not within Project area
LA-02587	White, Laura S., Robert S. White, and David M. Van Horn	1986	An Archaeological Survey of an 18.1 Acre Parcel of Property in the Portuguese Bend Area of the City of Rancho Palos Verdes, California	Not within Project area



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Table 1. Previous Cultural Resources Studies within 0.5 mile of the Project Area

SCCIC Report Number	Author/Company	Year	Study Title	Within Project Area?
LA-03097	Van Horn, David M. and Laurie White	1993	Test Excavations at PBC-1 a Millingstone Horizon Marine Shell Deposit Located in the Portuguese Bend Club Phase II Area of the City of Rancho Palos Verdes, Los Angeles County, California	Not within Project area
LA-03338	Sundberg, Frederick A. and Whitney-Desautels, Nancy	1990	Archaeological and Paleontological Survey of the Portuguese Bend Landslide Grading Project Rancho Palos Verdes Los Angeles County, California	<i>Included a portion of Project area</i>
LA-03339	Maki, Mary K.	1995	A Phase I Negative Archaeological Survey of 2.5 Acres for the Palos Verdes Drive South Narcissa Drive to Peppertree Drive Project City of Rancho Palos Verdes, Los Angeles County, California	<i>Included a portion of Project area</i>
LA-03416	Breece, William H.	1995	Results of a Record Search and Archaeological Survey of Three Project Areas in Rancho Palos Verdes, California	<i>Included a portion of Project area</i>
LA-03417	Maki, Mary K.	1995	A Phase I Negative Archaeological Survey of 1.2 Acres for the Portuguese Bend Flexible Drainage System Replacement Project, City of Rancho Palos Verdes, Los Angeles County, California	<i>Included a portion of Project area</i>
LA-03518	Hayden, William E. and Michael E. Macko	1995	Report of Archaeological Monitoring and Partial Manual Excavation of Well Sites and Access Road Construction, Rancho Palos Verdes, CA	Not within Project area
LA-03683	Eggers, A.V.	1998	Report on the Cultural Resources Survey of Goode & Goode Parcel No. 15 in Rancho Palos Verdes, California	<i>Included a portion of Project area</i>



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Table 1. Previous Cultural Resources Studies within 0.5 mile of the Project Area

SCCIC Report Number	Author/Company	Year	Study Title	Within Project Area?
LA-03852	Anonymous	1997	Phase II Test Excavations and Determinations of Significance at CA-LAN-303, -821, -1019, -2485 and -2486, City of Rancho Palos Verdes, Los Angeles County, California	Not within Project area
LA-03853	Anonymous	1996	Phase I Archaeological Survey and Cultural Resources Assessment of the Point View Project Study Area, City of Rancho Palos Verdes, Los Angeles County, California	Not within Project area
LA-04177	Unknown	1996	Abalone Cove Well Conversion Project Draft Environmental Impact Report (EIR)	Not within Project area
LA-04229	Breece, William H.	1995	Results of a Records Search and Archaeological Survey of Three Project Areas in Rancho Palos Verdes, California	<i>Included a portion of Project area</i>
LA-04230	Hayden, William E. and Macko, Michael E.	1995	Archaeological Investigations Conducted for the Abalone Cove Dewatering Wells, City of Rancho Palos Verdes, Los Angeles County, California	Not within Project area
LA-04231	Unknown	1995	Phase I Archaeological Survey and Cultural Resources Assessment of the Abalone Cove Sewer Project Study Area, City of Rancho Palos Verdes, Los Angeles County, California	<i>Included a portion of Project area</i>
LA-05620	McKenna, Jeanette A.	2001	Results of a Phase I Cultural Resources Investigation, Paleontological Overview, and Monitoring Program for the Proposed Palos Verdes Drive South Emergency Washout Repair Project City of Rancho Palos Verdes, Los Angeles County, California	<i>Included a portion of Project area</i>
LA-06097	Chakurian, Anthony	2003	Request for SHPO Review of Federal Communications Commission (FCC) Undertaking at Intersection of Palos Verdes Drive South and Narcissa Drive, Rancho Palos Verdes	Not within Project area



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Table 1. Previous Cultural Resources Studies within 0.5 mile of the Project Area

SCCIC Report Number	Author/Company	Year	Study Title	Within Project Area?
LA-06098	Pletka, Nicole	2003	Cultural Resource Assessment AT & T Wireless Services Facility No. 05021b Rancho Palos Verdes, Los Angeles County, California	Not within Project area
LA-08225	Maki, Mary K.	2001	Phase I Archaeological Survey for the Altamira Canyon Drainage Control Project City of Rancho Palos Verdes, Los Angeles County, California	Not within Project area
LA-08414	Schmidt, June A.	2007	DWO 6044-4800; A.I. No. 7-4800, 7-4801, 7-4802, 7-4804, 7-4805, 7-4806, 7-4807, 7-4811; South Bay District Deteriorated Pole Replacement Project, Los Angeles County, California	<i>Included a portion of Project area</i>
LA-10017	Stickel, Gary E.	1999	Archaeological Investigations of Seven Prehistoric Sites Located Within the Ocean Trail Palos Verdes Development, City of Rancho Palos Verdes, California	Not within Project area
LA-10065	Unknown	2005	Draft EIR Point View Project	Not within Project area
LA-10072	Simon, Joseph M.	2006	Phase I Archaeological Survey of a Geological Bore Hole Location in Abalone Cove Shoreline Park, City of Rancho Palos Verdes, Los Angeles County, California	Not within Project area
LA-11138	Pierson, Larry, Shiner, Gerald, and Slater, Richard	1987	California Outer Continental Shelf, Archaeological Resource Study: Morro Bay to Mexican Border, Final Report.	<i>Included a portion of Project area</i>
LA-11219	Loftus, Shannon	2010	Cultural Resource Records Search and Site Survey and Historic Architectural Resource-Inventory and Assessment – NEXTG Palos Verdes Das Node Site: VZ1018CA-SP25 Pole #4315934E Row Adjacent to 4207 Palos Verdes Drive South Rancho Palos Verdes, Los Angeles, CA	Not within Project area



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Table 1. Previous Cultural Resources Studies within 0.5 mile of the Project Area

SCCIC Report Number	Author/Company	Year	Study Title	Within Project Area?
LA-11482	Racer, F.H.	1939	Camp Sites in Harbor District – F.H. Racer	Not within Project area
LA-11596	Schonburn, Eduardo	2012	Draft Initial Study/Mitigated Negative Declaration (IS/MND), Point View Master Use Plan, City of Rancho Palos Verdes, California	Not within Project Area
LA-12309	Demcak, Carol	2013	Report of Archaeological and Paleontological Monitoring for 37 Cinnamon Lane Tract 14195, Rancho Palos Verdes, Los Angeles County, California	Not within Project area
LA-12636	Demcak, Carol	2014	Report of Phase Archaeological Assessment for Abalone Cove Shoreline Park Improvements, Rancho Palos Verdes, Los Angeles County, California	Not within Project area
LA-13100	Demcak, Carol R.	2014	Report of Archaeological Monitoring Program for Abalone Cove Shoreline Park Improvements, Rancho Palos Verdes, Los Angeles County, California	Not within Project area

Previously Recorded Cultural Resources

The CHRIS records search also identified 15 previously recorded cultural resources located within 0.5 mile of the Project area. Of these 15 resources, only two are mapped within the Project area. Further details regarding the previously recorded resources are included below in Table 2 and are also displayed in Figure 2.

Table 2. Previously Recorded Cultural Resources in the 0.5-Mile Radius of the Project Area

Primary Number	Trinomial	Resource Type	Recorded by and Year Recorded	Resource Description	Within Project Area?
19-000104	CA-LAN-000104	Prehistoric	1939 (F.H. RACER)	Resource Name – Racer’s Site #18; 18A, 18B (C. Rozaire); Other – LA-104 [AP09; AP15]	Not within Project area



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Table 2. Previously Recorded Cultural Resources in the 0.5-Mile Radius of the Project Area

Primary Number	Trinomial	Resource Type	Recorded by and Year Recorded	Resource Description	Within Project Area?
19-000140	CA-LAN-000140	Prehistoric	1912 (N. C. Nelson)	Resource Name – Nelson #8 Camp Site [AP15]	Not within Project area
19-000141	CA-LAN-000141	Prehistoric	1912 (NELSON); 1995 (William Hayden, Macko Archaeological Consulting)	Resource Name – Nelson #9 Refuse Heap; Other – GA-1 [AP02; AP15; AP16]	Not within Project area
19-000821	CA-LAN-000821	Prehistoric	1975 (S. Hector, M.D. Rosen); 1995 (William Hayden, Macko, Inc); 2005 (JM Simon, W&S Consultants)	[AP02; AP15]	Not within Project area
19-000822	CA-LAN-000822	Prehistoric	1975 (S. Hector, M.D. Rosen); 2014 (Carol Demcak, ARMC)	[AP02; AP15]	Not within Project area
19-000999	CA-LAN-000999/H	Prehistoric, Historic	1979 (M.D. Rosen); 1991 (Joan C. Brown, RMW Paleo Associates); 2011 (D. Ruzicka, ArchaeoPaleo Resource Management, Inc.)	Resource Name – Eggers’ Areas A, B, and C; Other – Del Cerro Park [AP02; AP15; AP16; HP39]	Not within Project area
19-001019	CA-LAN-001019	Prehistoric	1969 (J. Evans); 1979 (Martin D. Rosen); 1995 (William Hayden, Macko, Inc.)	Resource Name – The Little Big Horn Indian Camp [AP02; AP15]	Not within Project area
19-002253	CA-LAN-002253	Prehistoric	1992 (David Van Horn, Archaeological Associates)	Resource Name – PBC-1 [AP02; AP15]	<i>Within Project area</i>
19-002584	CA-LAN-002584	Prehistoric	1997 (Richard Cerreto, Chambers Group)	Resource Name – Portuguese-1 [AP02]	Not within Project area
19-002585	CA-LAN-002585H	Historic	1997 (Richard Cerreto, Chambers Group)	Resource Name – Portuguese-2 [AH02; AH04; AH06]	Not within Project area



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Table 2. Previously Recorded Cultural Resources in the 0.5-Mile Radius of the Project Area

Primary Number	Trinomial	Resource Type	Recorded by and Year Recorded	Resource Description	Within Project Area?
19-002586	CA-LAN-002586/H	Prehistoric, Historic	1997 (Richard Cerreto, Chambers Group)	Resource Name – Portuguese-3 [AH04; AP02]	<i>Within Project area</i>
19-177478	-	Historic	1985 (D. Cameron, Owners Mr. & Mrs. Bara)	OHP Property Number – 028156; Resource Name – Villa Francesca; Other – Harry E Benedict Estate [HP02]	Not within Project area.
19-186554	-	Historic	1980 (J. Arbuckle)	OHP Property Number – 090237; Resource Name – Site of Old Whaling Station [HP06]	Not within Project area
19-187590	-	Historic	2004 (Rev. Harvey A. Tafel, Wayfarers Chapel Administrator)	OHP Property Number – 148090; Resource Name – Wayfarers Chapel [HP16]	Not within Project area
19-189464	-	Historic	2010 (Shannon L. Loftus, ACE Environmental)	Resource Name – SP25 [HP11]	Not within Project area

Of these previously recorded cultural resources, P-19-002253 and P-19-002586 overlap with the Project area boundary, as currently mapped. However, the locally listed historic property “Villa Francesca” is located just outside the Project area.

P-19-177478

P-19-177478, described as “Villa Francesca” and also known as the Harry E. Benedict Estate, is a historic property (built circa 1929). Based on the record received from the SCCIC, which includes the 1985 application for inclusion on the NRHP, “Villa Francesca” was determined by the California SHPO in 1986 to be of local significance but was determined not to meet the criteria for significance and inclusion on the CRHR or NRHP. This property is situated just outside the current Project area, immediately west of Peppertree Drive and north of Palos Verdes Drive South (Figure 2). Based on the current proposed Project design and a verification conducted during surveys, this property is no longer within the Project area.

P-19-002253 (CA-LAN-002253)

The prehistoric site P-19-002253 was recorded by Archaeological Associates in 1992 and was described as a deposit of marine shell and lithic debitage. The full assemblage documented included an unknown number of shell fragments and Monterey chert flakes, cores, and scrapers. The site was subject to subsurface testing program that



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did not result in significant findings. The site is located adjacent to Yacht Harbor Drive (Figure 2). The site record notes that half the site was destroyed by the construction of Yacht Harbor Drive with further disturbances observed from agricultural activity within the site. The current Project proposes to utilize Yacht Harbor Drive for access. No evidence of P-19-002253 was observed during surveys. Given that the proposed access along Yacht Harbor Drive will utilize the existing road surface and there is no ground disturbance proposed in or near the site, the Project will not impact this site.

P-19-002586 (CA-LAN-002586/H)

This multi-component site was first documented in 1997 by Chambers Group. The site is described as a deposit of marine shell and lithic debitage, as well as a historic refuse deposit consisting of construction debris. The site record notes that the site is in fair condition, while highlighting that the underlying soils are eroding and an equestrian/hiking trail bisected the site, representing ongoing disturbance of the site. The current Project proposes to utilize an area immediately north of Palos Verdes Drive South and adjacent to the southern margin of P-19-002586, as currently mapped, for a material stockpile area. This area is currently graded, utilized, and maintained as a pull-out area along the Palos Verdes Drive South. No evidence of P-19-002586 was observed during the surveys. Given that the stockpile area will utilize the existing roadside shoulder that is graded and maintained and there is no ground disturbance proposed within or near the site, the Project will not impact this site.

As a result of the records search review and archival research, only the portions of P-19-002586 and P-19-002253, as currently documented, overlap with the Project area. No other previously recorded resources or any other listed or potentially significant historic properties, or cultural resources are located within the Project area.

Background Research-Native American

Chambers Group submitted a request for a Sacred Lands File (SLF) records search with the Native American Heritage Commission (NAHC) on July 13, 2020. The results were received on July 17, 2020, and the results were negative for the Project area and its surrounding 0.5-mile study area. The NAHC included a list of local tribal groups that may have further insight into the potential tribal interests or concerns in the Project area.

AB 52 Consultation

The City is the lead agency per CEQA Guidelines, and as such, is responsible for initiating tribal consultation under AB 52. Upon request by the City, Chambers Group drafted AB 52 notification letters on behalf of the City in August 2020. The City transmitted the notification letters to the NAHC listed tribal groups on August 5, 2020, with responses going directly to the City. Should any tribal groups request consultation on the Project under AB 52, they may request information on findings of cultural resources within the Project area and surrounding area, request formal consultation with the City, and may request that additional mitigation measures or conditions of approval are included to address potential impacts to TCRs.

As discussed above, a resource may be defined as a TCR if it meets either of the following criteria:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that are listed, or determined to be eligible for listing, in the national or state register of historical resources, or listed in a local register of historic resources; or
- A resource that the lead agency determines, in its discretion, is a tribal cultural resource (PRC Section 21074).



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Background Research-Paleontological

Methods of Review

Due to the basic understanding of the geologic context of the Palos Verdes Peninsula and potential to encounter fossils in the geologic units underlying the Peninsula, Chambers Group proposed that the results of a field survey could assist in determining if these deposits are fossiliferous in the Project area and confirm the requirement for a future paleontological mitigation program. To this end, Chambers Group conducted an initial field survey of the Project area by a qualified paleontologist. Additionally, a formal paleontological records search was requested from the Natural History Museum of Los Angeles County (NHMLAC) for the Project area and surrounding 0.5-mile study area. The paleontological records search was requested to determine if paleontological resources are documented within the Project area and surrounding 0.5-mile vicinity.

Results

The City of Rancho Palos Verdes is located on the Palos Verdes Peninsula, which is documented as primarily comprised of marine sediments of the Middle to late Miocene age Monterey Formation that were deposited from the Middle Miocene to the Upper Miocene (13.82 to 5.333 million of years (Ma)) (Cohen et al, 2013; Woodring et al. 1946). The current Project area is located on the southern portion of the peninsula within the PBLC and the most prevalent geologic unit mapped in the Project area is Quaternary landslide deposits (QIs), from the Pleistocene to Holocene (2.588 to 0 Ma) (Cohen et al, 2013; Dibblee 1999). These Quaternary landslide deposits have been identified as landslide debris, comprised primarily of the Altamira Shale Member of the Monterey Formation (Dibblee 1999; Saucedo et. al. 2016). Additional general characterizations of these younger surficial Quaternary landslide deposits are described by Saucedo (2016) as “slightly consolidated to cemented and slightly to moderately dissected. Alluvial fan deposits typically have high coarse-fine clast ratios. Young surficial units have upper surfaces that are capped by slight to moderately developed pedogenic soil profiles”. While general characteristics of the older Altamira Shale Member of the Monterey Formation are described by Saucedo (2016) as “siliceous shale, silty and sandy shale, cherty shale, chert, siltstone, bituminous shale, diatomaceous shale, diatomite, phosphatic shale, tuffaceous shale, limestone, sandstone, conglomerate, breccia, and silicified limestone and shale”.

Again, there is a general understanding of the geologic context of the Palos Verdes Peninsula and potential to encounter fossils in the geologic units underlying the Peninsula. Additionally, due to the Project area located within the PBLC, there is a known limitation on the stratigraphic location and position of any important fossil specimens recovered due to the nature of the landslide and the downward motion of deposits demonstrated by previous studies of the Portuguese Bend Landslide since the 1950’s. However, this area is designated as type area for the Middle to late Miocene age Altamira Shale Member of the Monterey Formation which does restrict the age as recognized for this unit in the Palos Verdes Peninsula and elsewhere in California. As such, it is possible that significant vertebrate fossil remains and other fossils such as invertebrate and plant remains may be discovered during excavation activities associated with this Project.

The paleontological records search of the NHMLAC was completed prior to conducting fieldwork in August 2020. The results revealed a total of three documented fossil localities within the 0.5-mile region surrounding the Project area, LACM VP 413, LACM VP 7936, and LACM IP 12611. Of these three localities identified by the NHMLAC, only LACM VP 413 is located within the Project area. However, this locality is not within or near any proposed design features with associated ground disturbance. Still, the three NHMLAC documented fossil localities recorded in the Project area and surrounding 0.5-mile study area indicate that the geologic units mapped underlying much of the Project area have yielded fossils. The confidential locational data of the fossil localities identified by the NHMLAC are displayed relative to the Project area in Attachment 3: Figure 3.



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Survey

Methodology and Conditions

Chambers Group conducted the initial pedestrian survey on August 14, 2020, performed by cultural resources specialist and cross-trained paleontological surveyor Ken Hazlett, and qualified paleontologist Hugh Wagner, PhD. All currently proposed hydrauger locations (A1, A2, A3, A5, and A6), the stockpile location, staging areas, as well as their proposed access routes and an approximately 30-meter buffer area surrounding each location were surveyed intensively on five- to 10-meter transect intervals. While the entire 250-acre Project area was the subject of literature reviews and background research (and reported herein), approximately 135-acres of proposed project ground disturbance locations (design features) were the subject of intensive pedestrian survey. The survey methodology was implemented due to the proposed Project area encompassing a much larger footprint and only specific proposed design features within the footprint with associated proposed ground disturbance that would be interpreted as potential for impacts. As such, much of the Project area constituted open space with no proposed design features or alterations of any kind to existing conditions. Thus, the remainder of the Project area (approximately 115-acres) was not subject to intensive survey.

Additional factors influencing the survey methods included dense vegetation throughout that limited ground surface visibility to an average of 0 to 60 percent, and topography that limited safe access to many areas within the large Project area. The survey methods applied included the focused effort to survey the proposed design features (totaling approximately 135-acres) with buffered areas of up to 30 meters on all sides, when feasible. The surveys consisted of systematic surface inspection with transects at five to 10-meter intervals to ensure that any evidence of surface-exposed cultural materials and/or evidence of paleontological resources could be identified within these focused areas surrounding all proposed design features with associated ground disturbance. Chambers Group examined the ground surface for the presence of prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools), historical artifacts (e.g., metal, glass, ceramics), sediment discoloration that might indicate the presence of a cultural midden, roads and trails, and depressions and other features that might indicate the former presence of structures or buildings (e.g., post holes, foundations). The surveyors also inspected for any evidence of surface-exposed paleontological resources. In addition to the surface inspection, any safely accessible cliff-sides and exposed subsurface profiles were investigated for any evidence of both cultural and paleontological resources.

Following design changes to the Project in April 2022, Chambers Group conducted a supplemental survey on April 28, 2022, performed by cultural resources specialist and cross-trained paleontological surveyor Ken Hazlett. The supplemental survey was specifically focused on new project features and areas with proposed ground disturbance associated with the design changes provided in April 2022. These changes included slight alterations in the location of the hydraugers A1, A2, A3, A5, A6, as well as the removal of the proposed hydrauger A4. Further design changes included a boundary change and proposed access routes to the hydrauger locations.

Following additional design changes to the Project in June 2022, Chambers Group conducted another supplemental survey on July 1, 2022. The supplemental survey was performed by cultural resources specialist and cross-trained paleontological surveyor Ken Hazlett. The supplemental survey was specifically focused on new project features and areas with associated ground disturbance proposed with the design updates provided in June 2022.

Results

Following the initial pedestrian survey, and the two subsequent focused supplemental surveys of the locations of design features associated proposed ground disturbance, no new or previously recorded cultural or



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paleontological resources were observed or recorded within the approximately 135-acres of project elements/design features within the larger 250-acre Project area.

Where the ground surface was visible it was observed as comprised of a light brown, medium-grained to fine-grained silty sandstone that was broken into angular fragments dominated by small tabular cobbles two to four inches in diameter. No fossils were identified in these exposed surface areas of visible ground surface throughout the survey. However, these observations align with the general characteristics of the young surficial deposits of the Quaternary landslide deposits mapped in the Project area, as described by Saucedo (2016).

All proposed hydrauger features and approximately 30-meter survey buffer areas surrounding the hydrauger locations were observed with an average ground surface visibility (0 to 60 percent). All currently proposed hydrauger locations (A1, A2, A3, A5, and A6), as well as their proposed access routes and an approximately 30-meter buffer area surrounding each location were surveyed more intensively on five- to 10-meter transect intervals. No previously documented or newly discovered cultural or paleontological resources were identified within the proposed hydrauger locations or associated access routes.

Proposed hydrauger location A1 was observed west of Seawall Road (Figure 1). The ground surface visibility was impeded by vegetation outside of previously disturbed areas associated with the roadways and associated infrastructure construction and maintenance (Photograph 1). Evidence of previous disturbance was observed, and review of historic aerial imagery confirmed that this area, including the proposed A1 location, has been previously disturbed and cleared multiple times. Previous disturbances are evident in historic aerial imagery of the area before and after the current alignment of Seawall Road and Yacht Harbor Drive was constructed, which was completed in the late 1990s. The proposed access route to A1, which largely utilizes the existing Seawall Road and Yacht Harbor Drive, was surveyed as well. The previously recorded cultural resource P-19-002253 is documented just north of Yacht Harbor Drive and overlaps with the Project area boundary along this access route, as currently mapped (Figure 2). This previously recorded site was not relocated during the survey. No previously documented or newly discovered cultural or paleontological resources were identified within this proposed hydrauger location or associated access route.

Proposed hydrauger location A2 was observed south of Portuguese Canyon, adjacent to the established Peppertree Trail (Figure 1). The surface visibility was impeded by vegetation outside of the well-maintained hiking trail (Photograph 2). The proposed A2 location and surrounding 30-meter survey buffer was inspected for any evidence of cultural or paleontological resources. The proposed access route to A2, which largely utilizes the existing well-maintained Peppertree Trail, was surveyed as well. No previously documented or newly discovered cultural or paleontological resources were identified within this proposed hydrauger location or associated access route.

Proposed hydrauger location A3 was observed at the confluence of the well-developed Peppertree and Vanderlip trails (Figure 1). The surface visibility was once again impeded by vegetation outside of the well-maintained hiking trails (Photograph 3). Proposed A3 location and surrounding 30-meter survey buffer were inspected for any evidence of cultural or paleontological resources. The proposed access route to A3, which utilizes the existing well-maintained Peppertree Trail, was surveyed as well. No previously documented or newly discovered cultural or paleontological resources were identified within this proposed hydrauger location or associated access route.

Proposed hydrauger location A5 was observed on the western side of Inspiration Point at the coastline (Figure 1). The ground surface was clear of vegetation, and visibility was unimpeded (Photograph 4). However, the dynamic nature of the location along the coastline limits the potential for intact or in-situ cultural resources. The proposed



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A5 location and surrounding 30-meter survey buffer were inspected closely. The proposed access route to A5, which utilizes existing road or well-established trails to a lesser degree than most of the proposed access routes, was surveyed to the greatest degree while maintaining safe work practices. No previously documented or newly discovered cultural or paleontological resources were identified within this proposed hydrauger location or associated access route.

Proposed hydrauger location A6 was observed on the eastern side of Inspiration Point at the coastline (Figure 1). The surface was clear, and visibility was unimpeded (Photograph 5). The dynamic nature of this location along the coastline and abutting an eroding cliff limit the potential for intact or in-situ cultural resources. Proposed A6 location and surrounding 30-meter survey buffer were inspected for any evidence of cultural resources. The proposed access route to A6, which largely follows the existing Bow and Arrow Trail that provides vehicle access to an archery range, was surveyed as well. No previously documented or newly discovered cultural or paleontological resources were identified within this proposed hydrauger location or associated access route.

Particular attention was given to the A6 location due to the presence of the previously documented fossil locality, LACM IP 12611, in the vicinity but just outside the Project area boundary. Additionally, the exposed cliff in conjunction with previously documented paleontological resource nearby indicated a higher potential to observe intact fossil bearing geologic units. Examination of the area did not reveal any evidence of fossils or any fossil shell fragments. Parts of a slump surface below the Inspiration Point is paved over, and no sediments could be observed. The eastern edge of Inspiration Point is now so vertical that fossils could be identified at the surface. No fossils were observed within visible portion of the cliff face adjacent to A6 location.

The proposed stockpile area is directly adjacent to the north margin of Palos Verdes Drive South within an established roadside shoulder turn-out area that is cleared, graded, and well maintained. The previously recorded cultural resource P-19-002586 is documented just north of this proposed stockpile area and overlaps with the Project area boundary (Figure 2). However, no evidence of the site was observed within the Project area during the survey. A secondary staging area is proposed south of Palos Verdes Drive South along Bow and Arrow Trail and within an archery range. While the background research indicated that this is the approximately location of the previous Portuguese Bend Clubhouse, the facility is documented and demolished and removed. The survey results confirmed this understanding, as no evidence of this previous development was observed during the survey of the secondary staging area. The proposed stockpile area and secondary staging area were surveyed, and no evidence of cultural or paleontological resources was observed.

The primary staging area is proposed north of Palos Verdes Drive South and west of Peppertree Trail (Figure 1). The Project design includes the conversion of this primary staging area to a surface water run-off retention area after its utilization as a staging area. The primary staging area was observed during all survey efforts. The surveys included a focused inspection on five- to 10-meter transect intervals. The entire staging area was accessible for survey, but the ground surface visibility was impeded by dense vegetation. No evidence of previously recorded or new cultural or paleontological resources was observed. However, due to limited visibility and the proposed ground disturbance associated with the Project feature, there remains potential that resources could be present and encountered during ground-disturbing activity.

Several small stream cuts were observed during the survey of the primary staging area to inspect the exposed subsurface profiles, consisting of distorted bedded sequences of gray shales, siltstones, and sandstones that are displaced with chaotic bedding orientations of small contiguous stratified blocks juxtaposed against one another at an angle of approximately 50+ degrees. At one location the jumbled blocks can be observed to be incised by a



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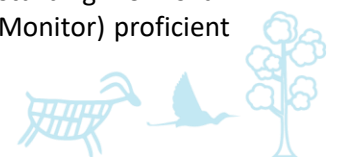
jumbled mass of broken angular sandstone and shale clasts resembling a small debris flow. Examination of some of these clasts revealed no vertebrate or invertebrate fossils. However, these observations do align with the general characteristics of the of the older surficial deposits of the Altamira Shale Member of the Monterey Formation, as described by Saucedo (2016).

The proposed engineered swale feature alignment bisects the Project area from the northernmost extent, where one of the proposed culvert installations will divert water under Burma Road. The swale alignment meanders south-southeast, largely following Peppertree Trail to Palos Verdes Drive South, where the second culvert installation is proposed to divert water under the roadway and downslope to the ocean (Figure 1). The topography and vegetation limited safe access and visibility when surveying portions of the swale alignment. When feasible, the proposed engineered swale feature alignment was surveyed with an approximately 15-meter survey buffer applied on either side of the proposed alignment. Much of the swale alignment follows the existing Peppertree Trail, which allowed for greater access and visibility in those portions. The alignments that run north from Peppertree Trail through open space to Burma Road Trail were surveyed, but the dense vegetation limited the ground surface visibility. However, the culvert location at Burma Road Trail was accessed and surveyed with adequate visibility. The portion of the proposed swale alignment that trends west away from Peppertree Trail cuts through the proposed primary staging area and then follows another established trail southwest to Palos Verdes Drive South. No evidence of cultural or paleontological resources was observed during the survey of the proposed swale feature and associated culvert installations. However, due to limited ground surface visibility and access to portions of the proposed feature alignment, there remains potential that resources could be present on the surface.

Conclusions and Recommendations

The surveys have been completed with no previously recorded resources relocated within the Project area, and no new resources identified. As noted above, surface visibility was limited due to dense vegetation and constraints related to topography; also, safety concerns limited access to much of the Project area. However, the surveys focused on proposed design features with associated ground disturbance, which were all safely accessible and surveyed intensively on five-to-10-meter intervals with an approximate 30-meter buffer around each feature, when feasible. Overall, based on the generally low average ground surface visibility of 0 to 60 percent throughout the Project area due to vegetation as well as constraints to access related to topography and associated safety concerns, the presence of cultural and paleontological resources should still be considered. Also, as mentioned previously, there is a basic understanding of the geologic context of the Palos Verdes Peninsula and potential to encounter fossils in the geologic units underlying the Peninsula. Moreover, based on the limited ground surface visibility, the existence of previously recorded resources within the Project area and the surrounding 0.5-mile study area, and the previously documented fossil localities in the Project area and surrounding 0.5-mile vicinity, there remains potential to encounter previously undocumented cultural and paleontological resources during construction. Thus, Chambers Group recommends the following mitigation measures be implemented prior to Project related ground-disturbing construction activity, with the intent to limit potential impacts to cultural resources to less than significant. The mitigation measures regarding paleontological resources represent the recommended next steps for a future paleontological mitigation program to be prepared to outline the monitoring and mitigation protocols in the effort to reduce potential impacts to paleontological resources to less than significant after final design and associated Project environmental document completion.

- MM CUL-1** Prior to commencing construction, the City of Rancho Palos Verdes (City) shall retain the services of a Qualified Archaeologist, meeting the Secretary of the Interior's Standards. During project-related ground-disturbing construction activities all initial ground-disturbing work shall be monitored by the City's Archaeologist (i.e., an Archaeological Resources Monitor) proficient in artifact and feature identification in monitoring contexts.



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MM CUL-2 Prior to commencing construction activities (and thus prior to any ground disturbance in the proposed Project site), the City's Qualified Archaeologist shall conduct initial Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the Project construction work phase, for which the Lead Contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction personnel on how to work with the Qualified Archaeologist to identify and minimize impacts to archaeological resources and maintain environmental compliance. This WEAP training will educate the monitor(s) of construction procedures to avoid construction-related injury or harm. This training may be performed periodically, such as for new personnel coming on to the Project as needed.

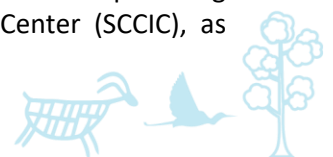
MM CUL-3 Prior to commencing construction, the Project Contractor shall provide the City's Qualified Archaeologist with a schedule of initial potential ground-disturbing activities. A minimum of 48 hours' notice will be provided to the City's Qualified Archaeologist prior to commencement of any initial ground-disturbing activities, such as vegetation grubbing or clearing, grading, trenching, or mass excavation.

The Qualified Archaeologist shall be present on-site at the commencement of ground-disturbing activities related to the Project. The Qualified Archaeologist shall observe initial ground-disturbing activities and provide adequate observation and oversight. The Qualified Archaeologist will have stop-work authority to allow for recordation and evaluation of finds during construction. The Qualified Archaeologist will maintain a daily record of observations to serve as an ongoing reference resource and to provide a resource for final reporting upon completion of the Project.

The City's Qualified Archaeologist, the Project Contractor, and subcontractors, and the City shall maintain a line of communication regarding schedule and activity such that the monitor is aware of all ground-disturbing activities in advance in order to provide appropriate oversight.

MM CUL-4 In the event of the discovery of previously unidentified archaeological materials, the Contractor shall immediately cease all work activities within an area of no less than 50 feet of the discovery. After cessation of excavation, the Contractor shall immediately contact the City. Except in the case of cultural items that fall within the scope of , California Health and Safety Code 7050.5, CEQA Section 15064.5, or California Public Resources Code Section 5097.98, the discovery of any cultural resource within the Project area shall not be grounds for a project-wide "stop-work" notice or otherwise interfere with the Project's continuation except as set forth in this paragraph. In the event of an unanticipated discovery of archaeological materials during construction, the Qualified Archaeologist shall evaluate the significance of the materials prior to resuming any construction-related activities in the vicinity of the find. If the Qualified Archaeologist determines that the discovery constitutes a significant resource under CEQA and it cannot be avoided, the City shall implement an archaeological data recovery program.

MM CUL-5 Withing 60 days of At the the completion of all ground-disturbing activities, the City's Archaeologist, serving as the City's calArchaeological Monitor, shall prepare an Archaeological Resources Monitoring Report summarizing all monitoring efforts and observations, as performed, and any and all prehistoric or historic archaeological finds, as well as providing follow-up reports of any finds to the South Central Coastal Information Center (SCCIC), as required.



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- MM PAL-1** The City of Rancho Palos Verdes (City) shall retain the services of a Qualified Paleontologist meeting the Secretary of the Interior’s Standards prior to commencing construction activity and require that all initial ground-disturbing work be monitored by paleontological specialists (Paleontological Resources Monitor) proficient in fossil identification in monitoring contexts.
- MM PAL-2** Prior to commencing construction activity Upon approval or request by the City, the City’s qualified Paleontologist shall prepare a Paleontological Mitigation Plan (PMP) outlining procedures for paleontological data recovery shall be prepared for the proposed project and submitted to the City for review and approval. The development and implementation of the PMP shall include consultations with the applicant’s engineering geologist as well as a requirement that the curation of all specimens recovered under any scenario shall be conducted through an appropriate repository agreed upon by the City. All specimens become the property of the City unless it chooses otherwise. If the City accepts ownership, the curation location may be revised. The PMP shall include developing a multilevel ranking system, or Potential Fossil Yield Classification (PFYC), as a tool to demonstrate the potential yield of fossils within a given stratigraphic unit. The PMP shall outline the monitoring and salvage protocols to address paleontological resources encountered during ground-disturbing activities as well as the appropriate recording, collection, and processing protocols to appropriately address any resources discovered. The cost of data recovery is limited to the discovery of a reasonable sample of available material. The interpretation of reasonableness rests with the City.
- MM PAL-3** At the completion of all ground-disturbing activities, the City’s Qualified Paleontologist al Resources Consultant shall prepare a final paleontological mitigation report summarizing all monitoring efforts and observations, as performed in line with the PMP, and all paleontological resources encountered, if any. The Paleontologist reports consultant shall also provide follow-up reports of any specific discovery, if necessary.

HUMAN REMAINS – LEGAL REQUIREMENTS. In the event that human remains are discovered during ground-disturbing activities, then the proposed Project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98. If human remains are found during ground-disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the County Coroner shall notify the NAHC, which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials (NPS 1983).

Sincerely,

CHAMBERS GROUP, INC.



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City of Rancho Palos Verdes

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Attachments

Attachment 1: Figure 1: Project Location & Vicinity Map

Attachment 2: Figure 2: CONFIDENTIAL Cultural Resources Map & Updated DPR Records

Attachment 3: Figure 3: CONFIDENTIAL Paleontological Resources Map

Attachment 4: Project Survey Photographs



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References

Bean, Lowell J., and Charles R. Smith

- 1978 Gabrielino. In *California*, edited by Robert F. Heizer, pp. 538-549. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Blackburn, Thomas C.

- 1962-1963 Ethnohistoric Descriptions of Gabrieliño Material Culture. *Annual Reports of the University of California Archaeological Survey* 5:1-50. Los Angeles, California.

Byrd, Brian F., and L. Mark Raab

- 2007 Prehistory of the Southern Bight: Models for a New Millennium. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 215-228. Altamira Press, New York.

Cohen et al.

- 2013 (2013; updated) The ICS International Chronostratigraphic Chart. Episodes 36: 199-204. URL: Accessed at; <http://www.stratigraphy.org/ICSchart/ChronostratChart2022-02.pdf>

Costansó, Miguel

- 1911 The Portolá Expedition of 1769-1770: Diary of Miguel Costansó. Edited by Frederick J. Teggart. *Publications of the Academy of Pacific Coast History* 2(4):161-327. Berkeley, California.

Dibblee, Jr., T. W.,

- 1999 Geologic map of the Palos Verdes Peninsula and vicinity, Redondo Beach, Torrance, and San Pedro quadrangles, Los Angeles County, California: Dibblee Foundation Geological Map DF-70, scale 1:24,000.

Erlandson, Jon M.

- 1994 *Early Hunter-Gatherers of the California Coast*. Plenum Press, New York.

Fink, Augusta

- 1987 Palos Verdes Peninsula: Time and the Terraced Land. *Western Tanager Press*.

Harrington, John P.

- 1942 Culture Element Distributions, XIX: Central California Coast. *University of California Anthropological Records* 7(1):1-46. Berkeley, California.

Johnston, Bernice E.

- 1962 *California's Gabrielino Indians*. (Frederick Webb Hodge Anniversary Publication Fund 8) Southwest Museum, Los Angeles.

Jones, Terry L., and Kathryn A. Klar, editors

- 2007 *California Prehistory: Colonization, Culture, and Complexity*. AltaMira Press, Lanham, Maryland.



CULTURAL RESOURCES SURVEY REPORT FOR THE RANCHO PALOS VERDES PORTUGUESE BEND LANDSLIDE MITIGATION PROJECT

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CHAMBERS
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Koerper, Henry C., and Christopher E. Drover

- 1983 Chronology Building for Coastal Orange County: The Case from CA-ORA-119-A. *Pacific Coast Archaeological Society Quarterly* 19(2):1-34.

Koerper Henry C., Roger D. Mason, and Mark L. Peterson

- 2002 Complexity, Demography, and Change in Late Holocene Orange County. In *Catalysts to Complexity: The Late Holocene on the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 63–81. Institute of Archaeology, University of California, Los Angeles.

Kroeber, Alfred L.

- 1925 Handbook of the Indians of California. *Bureau of American Ethnology Bulletin* 78. Washington, D.C.

Mason, Roger D., and Mark L. Peterson

- 1994 *Newport Coast Archeological Project: Newport Coast Settlement Systems, Analysis and Discussion*, Volume I. Prepared for Coastal Community Builders, Newport Beach. The Keith Companies Archaeological Division, Costa Mesa. On file, Chambers Group, Inc., Irvine.

McCawley, William

- 1996 *The First Angelinos: The Gabrielino of Los Angeles*. Malki Museum Press. The University of Michigan.

Moratto, Michael J.

- 1984 *California Archaeology*. Academic Press, Inc., San Diego.

National Park Service (NPS)

- 1983 *Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines*. 48 Federal Register 44716-42.
- 1997 National Register Bulletin 15: *How to Apply the National Register Criteria for Evaluation*. Accessed at https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf.

NETR online

- 2022 NETR Online. Aerial Images: 1952, 1953, 1972, 1980, 1985, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2002, 2003, 2004, 2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020. Topographical Maps: 1896, 1899, 1907, 1914, 1925, 1928, 1932, 1942, 1944, 1953, 1957, 1965, 1975, 1982, 2012, 2015, 2018. Accessed at <http://www.historicaerials.com/>.

Office of Historic Preservation (OHP)

- 1995 Instructions for Recording Historical Resources



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City of Rancho Palos Verdes

CHAMBERS
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2022 California Historic Landmarks, Los Angeles County. Accessed at Los Angeles (ca.gov)

Ruby, Jay W.

1970 Culture Contact between Aboriginal Southern California and the Southwest. Unpublished Ph.D. Dissertation in Anthropology, University of California, Los Angeles.

Saucedo, G.J., Greene, H.G., Kennedy, M.P., and Bezore, S.P.

2016 Geologic map of the Long Beach 30'x 60' quadrangle Version 2.0, California: California Geological Survey Preliminary Geologic Map, scale 1:100,000. Accessed at [Preliminary-RGM-LongBeach-100k-v2-Pamphlet.pdf \(ca.gov\)](#)

Society of Vertebrate Paleontology (SVP)

2010 Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources. Society of Vertebrate Paleontology.

U. S. Geological Survey (USGS)

1964 Geologic Map of the *San Pedro* 7.5-Minute Quadrangle, California.

Wallace, William

1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11(3):214-230.

1978 Post-Pleistocene Archaeology, 9000 to 2000 B.C. In *California*, edited by R. F. Heizer. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Warren, Claude N.

1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams. *Eastern New Mexico Contributions in Anthropology* 1(3):1-14. Portales.

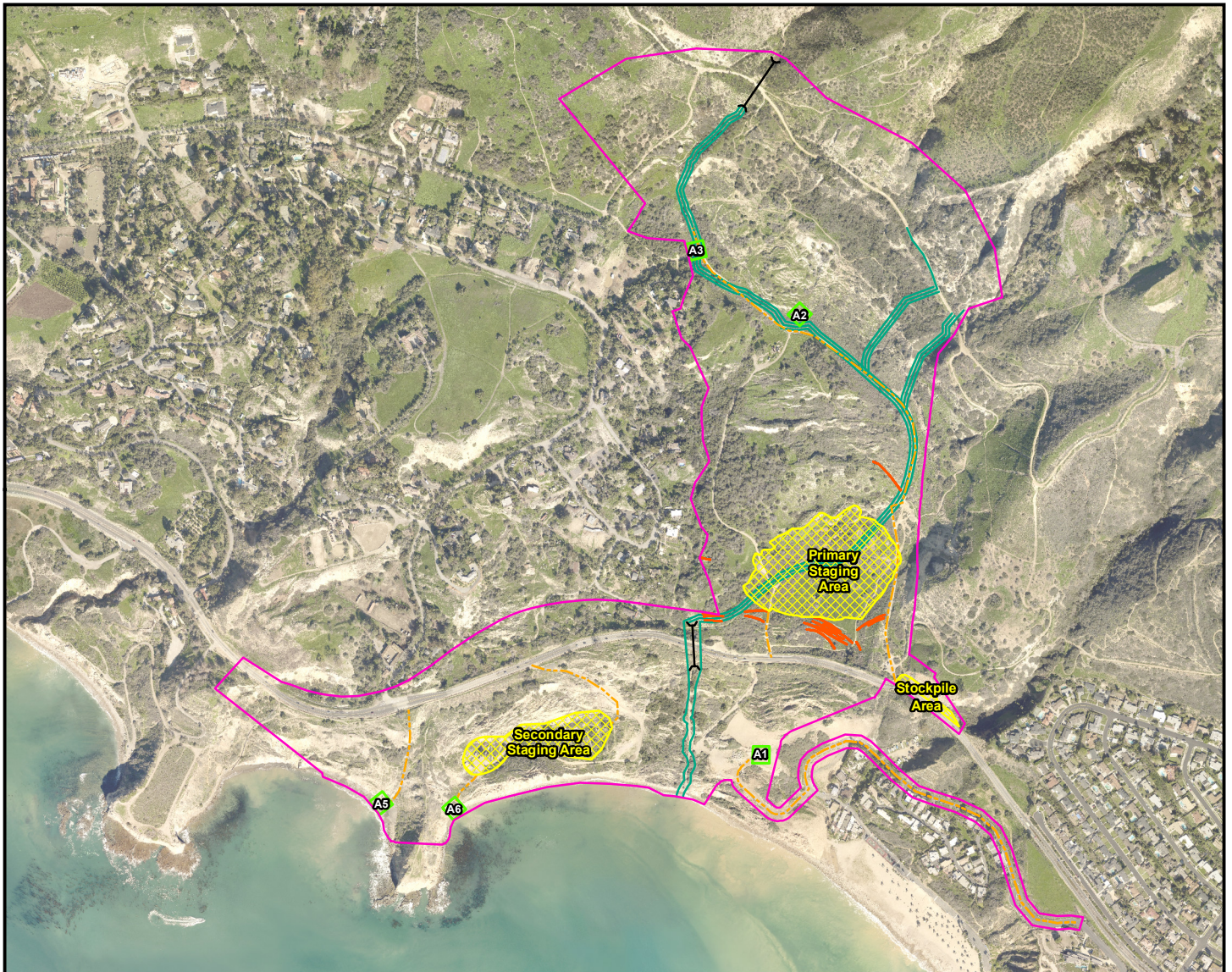
Woodring, W.P., Bramlette, M.N., and Kew, W.S.W.

1946 Geology and paleontology of Palos Verdes Hills, California: U.S. Geological Survey, Professional Paper 207, 145 p.



ATTACHMENT 1 – PROJECT LOCATION & VICINITY MAP





- Proposed Project Limit
- Proposed Hydrauger Work Locations
- Staging Area/Work Location
- Proposed Hydrauger Array Location
- Proposed Access Route
- Proposed Culvert
- Proposed Swale
- Approximate Surface Fracture Locations

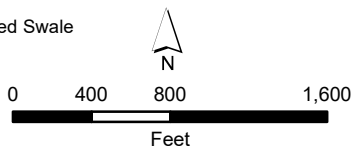


Figure 1
 Portuguese Bend Landslide Mitigation
 Project Location & Vicinity

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ATTACHMENT 3 – CONFIDENTIAL PALEONTOLOGICAL RESOURCES MAP



ATTACHMENT 4 – PROJECT SURVEY PHOTOGRAPHS





Photograph 1: Overview of proposed Hydrauger A1 location. View to east.



Photograph 2: Overview of proposed Hydrauger A2 location, and proposed swale alignment adjacent to A2 and Peppertree Trail. View to north.



Photograph 3: Overview of proposed Hydrauger A3 location, and proposed swale alignment adjacent to A3 and Peppertree Trail. View to northeast.



Photograph 4: Overview of proposed Hydrauger A5 location. View to west.



Photograph 5: Overview of proposed Hydrauger A6 location. View to north.