

**DRAFT  
INITIAL STUDY  
AND  
MITIGATED NEGATIVE DECLARATION  
Point Dume Natural Preserve**



**Boardwalk Construction**

**February 2003**

Prepared for the California Department of Parks and Recreation  
Angeles District





## MITIGATED NEGATIVE DECLARATION

**PROJECT:** POINT DUME NATURAL PRESERVE

**LEAD AGENCY:** California Department of Parks and Recreation

**AVAILABILITY OF DOCUMENTS:** The Initial Study for this Mitigated Negative Declaration is available for review at:

- Southern Service Center  
California Department of Parks & Recreation  
8885 Rio San Diego Drive, Suite 270  
San Diego, California 92108
- Angeles District Headquarters  
California Department of Parks & Recreation  
1925 Las Virgenes Road  
Calabasas, California 91302
- Angeles District – Malibu Sector  
California Department of Parks & Recreation  
39996 Pacific Coast Highway  
Malibu, California 90265
- County of Los Angeles - Malibu Library  
23519 Civic Center Way  
Malibu, California 90265
- City of Calabasas Library  
12400 Imperial Highway, Rm. #1  
Calabasas, California 90265

### PROJECT DESCRIPTION:

A copy of the Initial Study is attached. Questions or comments regarding this Initial Study/Mitigated Negative Declaration may be addressed to:

Tina Robinson, Environmental Coordinator  
California Department of Parks and Recreation  
Southern Service Center  
8885 Rio San Diego Drive, Suite 270  
San Diego, California 92108

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (CDPR) has independently reviewed and analyzed

the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of California State Parks. As lead agency, California State Parks also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

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# CHAPTER 1 INTRODUCTION

## 1.1 INTRODUCTION AND REGULATORY GUIDANCE

The Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (California State Parks) to evaluate the potential environmental effects of the proposed Boardwalk Construction project at Point Dume Natural Preserve in the Malibu Sector of the Los Angeles District in Los Angeles County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq.*, and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq.*

An Initial Study (IS) is conducted by a lead agency to determine if a project may have a significant effect on the environment [CEQA Guidelines §15063(a)]. If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals (made by or agreed to) mitigate the potentially significant effects to a less-than-significant level, a Mitigated Negative Declaration may be prepared instead of an EIR [CEQA Guidelines §15070(b)]. The lead agency prepares a written statement describing the reasons a proposed project will not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This IS/MND conforms to the content requirements under CEQA Guidelines §15071.

## 1.2 LEAD AGENCY

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is California State Parks. The contact person for the lead agency is:

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Southern Service Center  
8885 Rio San Diego Drive, Suite 270  
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### **1.3 PURPOSE AND DOCUMENT ORGANIZATION**

The purpose of this document is to evaluate the potential environmental effects of the proposed Boardwalk Construction project at Point Dume Natural Preserve. Mitigation measures have also been incorporated into the project to eliminate any potentially significant impacts or reduce them to a less-than-significant level.

This document is organized as follows:

- Chapter 1 - Introduction.  
This chapter provides an introduction to the project and describes the purpose and organization of this document.
- Chapter 2 - Project Description.  
This chapter describes the reasons for the project, scope of the project, and project objectives.
- Chapter 3 - Environmental Setting, Initial Study/Impacts, and Mitigation Measures.  
This chapter explains the environmental setting for each environmental issue, identifies the significance of potential environmental impacts, and evaluates the potential impacts identified in the CEQA Environmental (Initial Study) Checklist. Where appropriate, mitigation measures are incorporated to reduce potentially significant impacts to a less-than-significant level.
- Chapter 4 - Mandatory Findings of Significance  
This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impacts to humans, as identified in the Initial Study.
- Chapter 5 – Project Alternatives  
This chapter summarizes the alternatives that were considered for this project.
- Chapter 6 - Summary of Mitigation Measures.  
This chapter summarizes the mitigation measures incorporated into the project as a result of the Initial Study.
- Chapter 7 - References.  
This chapter identifies the references and sources used in the preparation of this IS/MND. It also provides a list of those involved in the preparation of this document.

### **1.4 SUMMARY OF FINDINGS**

Chapter 3 of this document contains the Initial Study Checklist that identifies the potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project.

Based on the IS and supporting environmental analysis provided in this document, the proposed Boardwalk Construction Project will result in less-than-significant impacts for the following issues: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

In accordance with §15064(f) of the CEQA Guidelines, a MND shall be prepared if the proposed project will not have a significant effect on the environment after the inclusion of mitigation measures in the project. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that, after the incorporation of mitigation measures, the proposed project will have a significant effect on the environment. It is proposed that a Mitigated Negative Declaration be adopted in accordance with the CEQA Guidelines.



## **CHAPTER 2 PROJECT DESCRIPTION**

### **2.1 INTRODUCTION**

This IS/MND evaluates the environmental effects of the proposed Boardwalk Construction project at Point Dume Natural Preserve. This project will improve visitor services, improve public interpretation of the resource values, bring facilities into compliance with the Americans with Disabilities Act (ADA) and current codes, protect and improve natural resources and park aesthetics, protect cultural resources and support continued use and maintenance of park facilities.

### **2.2 PROJECT LOCATION**

Point Dume Natural Preserve contains significant natural and scenic features, and is one of the last remaining undeveloped coastal terrace/bluff areas in southern California. The Preserve consists of approximately 34 acres of land including the upland terrace, bluff faces, and “Pirate’s Cove” (a small beach on the southwestern side of the point). Although the top of the headland was graded, it remains the highest point (203 ft. or 65 m) along the immediate coastline. The relatively flat terrace area ends abruptly at the nearly vertical bluff, which drops 100ft. (30m.) to the beach. Up coast lies Westward Beach, which is developed and highly visited. The relatively isolated and undeveloped Dume Beach lies down coast of the Preserve. The terrace portion of the Preserve is bounded by residential development to the northwest, north and northeast, with Cliffside Drive separating the Preserve from the residences to the north. The proposed site improvements are to be located on top of the bluff providing access from the new public parking area connecting to the existing boardwalk and viewing platform.

### **2.3 EXISTING FACILITIES AND NEED FOR THE PROJECT**

Facilities at Point Dume Natural Preserve now consist of:

- Public Parking area including a total of ten spaces (Owned by City of Malibu).
- Hiking trail system that provides beach access
- Boardwalk and viewing platform.

Point Dume Natural Preserve is a highly significant, environmentally sensitive, 34 acre Natural Preserve at the western end of the Santa Monica Bay. The Preserve features headlands, cliffs, rocky coves and beach access. The area beach, classified as State Beach, is noted for swimming, surfing, scuba diving, and fishing. Point Dume is also a great place to watch for the California gray whales during the December to March migration period.

Public access through the Preserve has for years impacted the site, which has accelerated erosion problems and created an unorganized trail system. The recently constructed roadside public parking along Cliffside Drive offers an opportunity for access to the Natural Preserve from this area.

The primary purposes of this project are:

- To provide access from accessible roadside parking at the Preserve boundary to an existing accessible boardwalk and viewing platform.
- To protect the unique and highly sensitive natural and cultural resources of the area and to provide public access by providing defined path of travel.
- Re-vegetate and restore redundant trails that are not ADA accessible.
- To provide a place to support interpretive programs regarding sensitive resource protection and preservation.

## **2.4 PROJECT OBJECTIVES**

The purpose of this project is to provide a high quality recreational and educational experience at Point Dume Natural Preserve while preserving the natural, cultural, scenic, and recreational resources of the unit. The objectives related to this proposed project center primarily on the improvement of existing park facilities and enhancement of the visitor experience. These include:

- Providing improved public access, including ADA accessibility and facilitating educational and interpretive opportunities.
- Providing facilities to improve access from public parking areas to existing boardwalk and viewing platform.

The proposed project, as outlined above, will further the Department's mission by:

- Improving the quality of life in California by increasing the diversity and availability of high quality recreational experiences and opportunities.
- Providing and maintaining a supportive infrastructure for continued park use and maintenance, and the protection of park resources.
- Providing education, interpretation, and leadership to assist the public in understanding the significance and value of the state's natural and cultural resources.
- Providing a safe environment within State Parks.
- Maintaining ecosystems and constituent elements in good condition.

## **2.5 PROJECT DESCRIPTION**

California State Parks proposes to make the improvements described herein. Project maps are contained in Appendix A. The following is a summary of the planned improvements:

The proposed Boardwalk Construction Project is at Point Dume Natural Preserve, Angeles District, Malibu Sector. The project consists of installing approximately 1100 linear feet (LF) of accessible boardwalk. Approximately 450 LF will be constructed along an existing trail. The

balance of approximately 650 LF will cross vegetated areas, keeping primarily to previously disturbed areas. The entire new boardwalk will be ADA accessible with ramps and continuous handrails, viewing platforms, rest areas, and benches similar to the existing boardwalk and view deck (wood, concrete, galvanized steel, cable rail and recycled wood products, where feasible). The elevated boardwalk will consist of approximately 210 posthole footings that are 12" in diameter and range in depth from 2' minimum to 6' maximum. The width of the boardwalk will be ADA accessible, 5'8" across in order to allow two wheelchairs to pass.

The new 1100 LF boardwalk can be divided into three segments. Segment one runs along an existing trail that begins in the public parking area and extends to the proposed overlook. This section of the new boardwalk will be raised approximately 1' to 5' off the ground, relative to changes in ground level. Segment two approximately parallels Cliffside drive and will be constructed as an on grade boardwalk through previously disturbed vegetation. The proposed boardwalk on segment three will cut across existing native vegetation and link with the existing boardwalk.

A trail running diagonally from the public parking area to the proposed view deck will be closed and rehabilitated with native vegetation. A second trail running along the bluff top edge, between the existing stairs to the beach and existing boardwalk, will be closed and restored with native vegetation. These trails are redundant and are causing severe erosion and damage to native vegetation. Trail closure and rehabilitation will occur subsequent to the boardwalk construction. Trail closure shall require re-contouring of the land and replanting with native coastal bluff scrub vegetation.

Opportunities for rest stops and interpretive signage, about natural, cultural and historical resources, will be available at designated viewing platforms. This project will improve visitor services, improve public interpretation of the resource values, protect public health and safety, bring facilities into compliance with the American with Disabilities Act (ADA) and current codes, protect and improve natural resources and park aesthetics, and support continued use and maintenance of park facilities.

As stated above in Section 2.3 Point Dume Natural Preserve has an unorganized trail system which has accelerated problems with erosion and disturbed natural and cultural resources. The purpose of this project is to establish well defined accessible trails that protect the unique and highly sensitive natural and cultural resources of the area. The proposed project will partially eliminate direct human impact to the surface of the Natural Preserve and provide access to a few key points in the Preserve, providing a unique high quality outdoor recreation experience. With the addition of the proposed accessible boardwalk redundant trails will be restored and rehabilitated with native vegetation. Increased use and changes in access routes have resulted in facilities that are inadequate or degraded by existing demands.

## **2.6 PROJECT CONSTRUCTION**

The construction for this project will be limited to times that avoid bird nesting season, if possible. If not possible, the site shall be surveyed for nesting birds prior to construction and nests avoided. Project construction should take place while native plants are dormant (i.e.

August and September) in order to allow for replanting during the rainy season. Existing areas of the park will remain open to the public during construction. However, access may be limited at the specific project sites during construction. Public areas around the site of the new boardwalk will be fenced off to deter unauthorized access. Inconvenience to the public will be minimal. All work will occur during daylight hours Monday through Friday. Heavy equipment use will not occur before 7:00a.m. or after 7:00p.m.

Staging areas for construction equipment will be limited to existing hard surfaces or designated parking areas. No staging will be allowed in natural habitat areas or in archaeologically sensitive areas.

## **2.7 VISITATION TO POINT DUME NATURAL PRESERVE**

During the spring and summer months 70-80% of the visitors use Point Dume Natural Preserve as a gateway to Dume Beach. The remainder of the visitors use the Preserve for photography, painting, exercising, meditating, and sightseeing. During the fall and winter months visitors come to see the gray whales migrate and the blooming native vegetation, like the giant sea dahlias. Visitation has steadily increased over the past few years (FY 2000-2002) with a year over year increase of 20-25% in the fall/winter and 10-15% in the spring/summer.

## **2.8 CONSISTENCY WITH LOCAL PLANS AND POLICIES**

This proposed project is consistent with the City of Malibu's General Plan (11/95) and Municipal Code and Interim Zoning Ordinances for open space.

## **2.9 DISCRETIONARY APPROVALS**

California State Parks has approval authority for this proposed project. The project may require consultation with the California Department of Fish and Game (DFG) and California Coastal Commission (CCC), prior to the start of construction, and any permitting requirements will be incorporated into the scope of work for this project.

## **2.10 RELATED PROJECTS**

California State Parks often has other projects and/or maintenance programs planned for a park unit. Because the mission of Point Dume Natural Preserve is to protect and preserve natural and cultural resources of the area, while making them available for public education and enjoyment, there are numerous maintenance and restoration projects on-going at anytime. Currently ongoing or proposed projects include native vegetation restoration projects and management plans including Trails and Interim.

## **CHAPTER 3 ENVIRONMENTAL SETTING**

### **3.1 GENERAL ENVIRONMENTAL DESCRIPTION**

Point Dume Natural Preserve is a sub-unit of Point Dume State Beach, a California State Park unit operated by the Malibu Sector of the Angeles District of the California Department of Parks and Recreation. The Preserve consists of approximately 34 acres of land with significant natural and scenic features, and represents one of the last remaining undeveloped coastal terrace/bluff areas in southern California. Public Resources Code, Sec. 5019.71, California State Park and Recreation Commission Policy II.3 (amended 5/4/94), and State Park Resource Management Directive 9 and 27 (adopted 5/79) govern the establishment and management of Natural Preserves. The purpose of Natural Preserves is to protect distinct areas of outstanding natural or scientific significance within state park system units. Relevant to this project, developments in Natural Preserves are limited to trails and interpretive facilities required for visual and sensory enjoyment of the resources by visitors. Parking and other facilities are to be placed outside of the Preserve boundary (Resource Management Directive #9).

The Preserve is surrounded on three sides by residential development, to the northwest, north and northeast, with Cliffside Drive, a residential street, separating the Preserve from the residences to the north. The Preserve's northern boundary is defined as the southern boundary of the City of Malibu's right-of-way, which is 30 feet from the centerline of Cliffside Drive.

#### **3.1.1 AESTHETICS**

Point Dume forms the western and northern terminus of Santa Monica Bay and is a highly visible landmark. Its resistant volcanic rocks have withstood erosive wave-cutting better than surrounding lands, forming a distinctive promontory. From its plateau, one can view the entire bay, the Santa Monica Mountains and some of the Channel Islands. California gray whales pass close by the point during their annual winter migration, making Point Dume an important whale watcher's destination. In the spring and early summer native plants can produce an impressive flowering display, particularly the giant sea dahlia, sand verbena, bush sunflower and coast prickly pear.

#### **3.1.2 AGRICULTURAL RESOURCES**

Point Dume Natural Preserve is located within an urban area. Located within the City of Malibu, Point Dume Natural Preserve is not subject to issues related to agricultural resources.

### 3.1.3 AIR QUALITY

The city of Malibu, including Point Dume Natural Preserve, is part of the South Coast Air Quality Management District (AQMD). The South Coast AQMD is the air pollution control agency for Orange County and major portions of Los Angeles, San Bernardino and Riverside counties in Southern California. According to the 2000 Air Quality Report for the South Coast Air Basin, this basin is no longer recording the highest ozone concentration in the nation. Although, the maximum pollutant concentration in the South Coast Air Basin still exceeds the federal standards for ozone, carbon monoxide and particulate matter. Current air quality is consistent with a continuation of downtrends reported previously.

### 3.1.4 BIOLOGICAL RESOURCES

#### 3.1.4.1 Plant Life

There are principally three vegetation types at Point Dume Natural Preserve; southern coastal bluff scrub, coastal dune, and annual grassland (Holland, 1986). Southern coastal bluff scrub covers most of the site and is dominated primarily by low coastal shrubs of lemonadeberry (*Rhus integrifolia*), false heather (*Ericameria ericoides*) and California encelia (*Encelia californica*). Scattered patches of coastal prickly pear (*Opuntia littoralis*), giant sea dahlia (*Coreopsis gigantea*), Chamisso's burweed (*Ambrosia chamissonis*), California sagebrush (*Artemisia californica*), and coyote brush (*Baccharis pilularis ssp. consanguinea*) are also prominent elements of the natural vegetation there. Although Point Dume is a relatively well preserved natural area and one of the best of the few remaining stands of coastal bluff scrub in the Malibu area, there are several exotic plant species that have invaded the site and need to be controlled in order to preserve the natural vegetation. Most prominent among these are the *Carpobrotus* spp. ice plants, but annual ice plant (*Mesembryanthemum* spp.), tree tobacco (*Nicotiana glauca*), Australian saltbush (*Atriplex semibaccata*), fennel (*Foeniculum vulgare*), tumbleweed (*Salsola tragus*), pampas grass (*Cortaderia selloana*), and mustard (*Brassica* spp.) are also present.

The grassland community is dominated with non-native species, including wild oats (*Avena fatua*), bromes (*Bromus* spp.), black mustard, filaree (*Erodium* spp.) and ice plants. This community appears to have been long-dominated by non-native species, but in reviewing aerial photographs, it appears that native shrubs from the coastal scrub vegetation are invading the grasslands to some degree. It is unclear whether the grassland is a natural vegetation component or a result of past disturbance to the site.

The coastal dune vegetation is dominated by beach sand verbena (*Abronia umbellata*), giant sea dahlia, California croton (*Croton californicus*), California encelia, and lemonadeberry. Ice plant is also a problem in this vegetation type.

The California Department of Fish and Game's California Natural Diversity Database (Rarefind 1999) includes nine sensitive plant species from the Point Dume U.S.G.S. 7.5' topographic quadrangle map. There are no known collections of these taxa from the Preserve, however, and these plants have not been observed on November 30, 1988 [W. E. Tippetts], February 20, 1989 [R. Mattoni] and January 10, 1990 [J. C. Dice and S. Goode]. Nevertheless, there may be appropriate habitat on site for Coulter's atriplex (*Atriplex coulteri*, List:1B, 2-2-2), Parry's spineflower (*Chorizanthe parryi* var. *parryi*, ist:3, 1-2-3), Blochman's

dudleya (*Dudleya blochmaniae* ssp. *Blochmaniae*: List 1B, 2-2-2), and Marcescent dudleya (*Dudleya cymosa* ssp. *marcescens*). The California spineflower (*Mucronea californica*, List: 4, 1-2-3) has been documented on site, though it does not show up in the official databases. A list of species observed at Point Dume is attached.

### **3.1.4.2 Animal Life**

Point Dume supports a great variety of animal species, including many species of special concern. Detailed, systematic surveys and research collection of animals have not been conducted, but the area's proximity to known populations and availability of appropriate habitats implies a high likelihood of their occurrence. Subspecies of five butterflies that may have localized populations within the Preserve, based upon known plant preferences and general distribution data include: *Apodemia mormo*, *Euphilotes battoides*, *Euphydryas editha*, *Glaucopsyche lygdamus*, and *Philotes sonorensis* (J. Brown, pers. comm. and J. Donahue, pers. comm.). Autumnal sites for the monarch butterfly have been reported from residential landscape areas along Cliffside Drive and elsewhere on the headland, and vegetation on the Preserve may provide nectar, but not roosting habitat. The sand dunes may contain tiger beetles (Cincindelidae) and a variety of ground beetles (Tenebrionidae); tiger beetles are becoming regionally rare in southern California beach areas.

Herpetofauna that are reported from or that are likely to occur at Point Dume include: western yellow belly racer, California whipsnake, Southern Pacific rattlesnake, California king snake, western fence lizard, side-blotch lizard, San Diego alligator lizard, coastal western whiptail, silvery legless lizard and San Diego horned lizard. The silvery legless lizard (*Anniella pulchra pulchra*, FSC, CSC) is indigenous to the central California to northern Baja California coastline, where it occurs in loose alluvium of permanent and intermittent streams and in the dune sand of beaches. Urban development and farming appear to have eliminated this species from much of its historic range. It can still be found in some abundance at Point Dume (Brattstrom, pers. comm.; P. R. Brown, pers. comm., Wright pers. comm., S. Goode pers. comm.). The San Diego horned lizard (*Phrynosoma coronatum blainvillei*, FSC, CSC) has been reported from Point Dume area, but there have been no known recent collections from the Preserve, although suitable habitat for them exists on the coastal terrace. There is also habitat for the coastal western whiptail (*Cnemidophorus tigris multiscutatus*, FSC).

Upland birds that are known to occur here include mourning dove, wrens, towhees, sparrows, roadrunner and various raptors. Suitable habitat exists for the California gnatcatcher (*Polioptila californica*, FT, CSC) and cactus wren (*Campylorhynchus brunneicapillus couesi*, CSC), however, neither species has been reported from the coastal terrace recently. Neither of these were observed during recent field surveys (K. Miner, 2000 and K. Marsden 2002).

Native mammals that are known or expected to occur on the property include coyote, striped skunk, raccoon, pocket gopher, brush rabbit, and field mice. Non-native species (rats, house mice, red foxes, cats and dogs) are expected to visit the area and prey on some native species.

### **3.1.5 CULTURAL RESOURCES**

#### **3.1.5.1 Prehistoric Background**

The Santa Monica coastline has been inhabited by Native American people for over 8000 years. However, occupation at Point Dume is much more recent in history. The Chumash lived at Pt. Dume around A.D. 1080 – A.D.1200, based on information recovered from archaeological testing at the site. Point Dume does not appear to have been occupied for a long period of time and this site was not a village site. Point Dume's significance, prior to Spanish or English exploration, centered on its geographic location. This headland jutting out in to the Pacific ocean served as an outstanding outlook to view seasonal migrations of sea mammals, school of fish, and movements of people up and down the coast. Due to its outstanding location and geographical status, it appears that the Native Americans utilized it as an outlook. There are many significant archaeological sites in the vicinity of Point Dume. However, there is only one recorded site in the park: LAN-454. This site's significance is related to its position and the grandeur of its views. The function of the site may best be summed up by Native American informant: Fernando Librado, who stated that Point Dume 'was used as a sun shrine.'

#### **3.1.5.2 Historic Background**

For over 400 years, this craggy headland, along with its associated beaches, has been a passive witness to the struggle for the possession and development of this scenic and valuable coastline. It played silent witness to the voyage of Spanish explorer Captain Juan Rodrigues Cabrillo in October 9, 1542, and British sea captain George Vancouver on November 24, 1793. The latter, misspelled the promontory Dume after Father Francisco Dumetz, the Spanish friar who had graciously received him at the Mission San Buenaventura. For its association with Captain Vancouver and its importance as a prominent historic navigational landmark, Point Dume was listed as a State Historical landmark in 1985.

Point Dume was part of the historic 1804 *Rancho Topanga Malibu Sostomo Simi Sequit*, one of the few California ranchos bestowed under Spanish rule. Besides being used to gaze cattle and horses, sea otter pelt smugglers, as well as horse and cattle rustlers frequented its isolated beaches. During prohibition bootleggers continued to use them as drop off points for illegal "hooch."

Recent historical research has revealed that Point Dume may have played an important role during World War II as one of three coastal and one offshore U.S. Army anti-aircraft artillery (AAA) training centers in the Los Angeles-San Diego area. Apparently after the War, promontory was leveled off in preparation for potential hotel development, which never occurred. Since then, it has been one of several key locations frequented by members of Southern California's "surf culture" and used as a location for motion picture and television production.

California State Parks divided Point Dume State Beach administratively into two areas: the "upcoast" (Westward) beach portion, which is now managed by the County of Los Angeles, and the "down coast" (Dume) beach and coastal terrace, which included the Point Dume promontory. California State Parks acquired the latter section in 1978 as an addition to the upcoast section, and transferred ownership to the California State Department of Fish and

Game (DFG) one year later. Because legislative control language had directed that the "downcoast" section be managed as a natural reserve or preserve, the land was administrated as the Point Dume Natural Preserve. In 1990, DFG relinquished its administrative control back to California State Parks.

### **3.1.6 GEOLOGY/SOILS**

Point Dume forms the western and northern end of the Santa Monica Bay and is a significant topographical feature. Although the top of the headland was graded flat as part of a failed attempt at development, it remains the highest point (203 feet or 65 meters) along the immediate coastline. The relatively flat terrace area ends abruptly at the nearly vertical bluff, which drops 100 feet (30 meters) to the beach.

The Malibu coastline has several different terrace levels; the Dume terrace is just north of Point Dume and the Malibu surface at the top of Point Dume. Sedimentary and volcanic rocks of Cretaceous to Miocene age comprise most of the bedrock along the coastline. Point Dume consists of resistant dark volcanic rock in fault contact with softer white sedimentary beds. The volcanic rock is so much harder than the adjacent rocks, that it has protected a wedge of land behind it, forming a triangle, as seen from the air. A submarine canyon extends from Point Dume southward. The potentially active Malibu Coast fault runs east-west, north of the Preserve.

Soils of the Preserve originate from marine sands and gravels, stream sands and gravels, and alluvium on the terrace and beach sands below. Soil development is poor: clayey sands support grassland and southern coastal bluff scrub vegetation; marine sands support the sand dune coastal strand vegetation.

### **3.1.7 HAZARDS**

None of the facilities at Point Dume Natural Preserve use or store substantial amounts of hazardous materials on-site. There is no known hazardous contamination and the site is not suspected of containing any hazardous wastes, debris, or soil contamination.

### **3.1.8 HYDROLOGY**

The area receives runoff from adjacent developed areas, including Cliffside Drive, but hydrology is otherwise limited to on-site surface drainage. Culvert pipes take some local surface runoff over the bluff and to the beach. The graded area on top of the hill, as well as some of the existing unofficial trails, collect rainwater and channel it down the bluff face causing erosion. The erosion is enhanced in these areas by continuing off-trail pedestrian traffic.

### **3.1.9 LAND USE & PLANNING**

Existing land use in Point Dume Natural Preserve includes recreation, interpretation, and habitat rehabilitation. The unit has been sub-classified as a Natural Preserve, within Point Dume State Beach. Section 5019.71 of the Public Resources Code states:

Natural preserves consist of distinct areas of outstanding natural or scientific significance established within the boundaries of other state park system units. The purpose of natural preserves shall be to preserve such features as rare or endangered plant and animal species and their supporting ecosystems, representative examples of plant or animal communities existing in California prior to the impact of civilization, geologic features illustrative of geological processes, significant fossil occurrences or geological features of cultural or economic interest, or topographic features illustrative of representative or unique biogeographical patterns. Areas set aside as natural preserves shall be of sufficient size to allow, where possible, the natural dynamics of ecological interaction to continue without interference, and to provide, in all cases, a practicable management unit. Habitat manipulation shall be permitted only in those areas found by scientific analysis to require manipulation to preserve the species or associations which constitute the basis for the establishment of the natural preserve.

### **3.1.10 MINERALS**

No regional mineral resources have been identified around the park.

### **3.1.10 NOISE**

There is vehicular traffic noise along the northern border of the park that is generated by Cliffside Drive. Point Dume Natural Preserve is located on the edge of residential neighborhood in the city of Malibu. As a result, noise may occur from surrounding residences.

### **3.1.12 POPULATION & HOUSING**

The proposed project is located within the incorporated City of Malibu. Malibu was incorporated as a city on March 28, 1991 and has a population of 12,757 people within its 20.0 square mile radius. The number of housing units in Malibu is approximately 8,516, with an 85.6% occupancy. Malibu is located with the County of Los Angeles which has a population of 3,270,909 according to the 2000 census. This project will serve the residents of Malibu and regional visitors from the County of Los Angeles.

### **3.1.13 PUBLIC SERVICES**

California State Parks has a Lifeguard Peace Officer assigned specifically to the Natural Preserve to provide for public safety and resource protection.

### **3.1.14 RECREATION**

Current recreational use of the Preserve includes nature walks, painting, exercising, photography, meditating, and sightseeing. During the fall and winter months visitors come to see the gray whales migrate and blooming native vegetation, like the giant sea dahlias.

### **3.1.15 TRANSPORTATION/TRAFFIC**

Traffic on Cliffside Drive is relatively light (less than 900 trips per weekend day on a street with a 2000 trip per day capacity).

### **3.1.16 UTILITIES**

Sewer, water, electricity and telephone are not available Point Dume Natural Preserve.

### 3.2 ENVIRONMENTAL CHECKLIST

<b>PROJECT INFORMATION</b>	
1. Project Title:	Point Dume Natural Preserve Boardwalk Construction
2. Lead Agency Name & Address:	California Department of Parks and Recreation
3. Contact Person & Phone Number:	Tina Robinson, Environmental Coordinator (619) 220-5300
4. Project Location:	Malibu, California
5. Project Sponsor Name & Address:	Angeles District – Malibu Sector California Department of Parks & Recreation 39996 Pacific Coast Highway Malibu, California 90265
6. Designation:	Natural Preserve
7. Zoning:	Park Land/Open Space
8. Description of Project:	The proposed Boardwalk Construction Project is at Point Dume Natural Preserve, Angeles District, Malibu Sector. The project consists of installing approximately 1100 linear feet (LF) of accessible boardwalk. Approximately 450 LF will be constructed along an existing trail. The entire new boardwalk will be ADA accessible with ramps and continuous handrails, viewing platforms, rest areas, and benches similar to the existing boardwalk and view deck (wood, concrete, galvanized steel, cable rail and recycled wood products, where feasible). The elevated boardwalk will consist of approximately 210 posthole footings that are 12” in diameter and range in depth from 2’ minimum to 6’ maximum. Opportunities for rest stops and interpretive signage, about natural, cultural and historical resources, will be available at designated viewing platforms. Increased use on existing access routes have resulted in facilities that are inadequate or degraded by existing demands. This project will improve visitor services, improve public interpretation of the resource values, protect public health and safety, bring facilities into compliance with the American with Disabilities Act (ADA) and current codes, protect and improve natural resources and park aesthetics, and support continued use and maintenance of park facilities.
9. Surrounding Land Uses & Setting:	Refer to (Section IX, Land Use Planning) in this chapter.
10. Approval Required from Other Public Agencies	The project may require consultation with the DFG and a CCC permit, prior to the start of construction.

**1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below will be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact", as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                    | <input type="checkbox"/> Agricultural Resources             | <input type="checkbox"/> Air Quality            |
| <input type="checkbox"/> Biological Resources          | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology/Soils          |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality            | <input type="checkbox"/> Land Use/Planning      |
| <input type="checkbox"/> Mineral Resources             | <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing     |
| <input type="checkbox"/> Public Services               | <input type="checkbox"/> Recreation                         | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems     | <input type="checkbox"/> Mandatory Findings of Significance | <input checked="" type="checkbox"/> None        |

**DETERMINATION**

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment and a **NEGATIVE DECLARATION** will be prepared.

I find that, although the original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

I find that the proposed project **MAY** have a significant effect on the environment and an **ENVIRONMENTAL IMPACT REPORT** or its functional equivalent will be prepared.

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents.

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required.

\_\_\_\_\_  
Tina Robinson  
Environmental Coordinator - Southern Service Center

\_\_\_\_\_  
Date

## EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers, except "No Impact", that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact does not apply to the project being evaluated (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on general or project-specific factors (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must consider the whole of the project-related effects, both direct and indirect, including off-site, cumulative, construction, and operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether that impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate when there is sufficient evidence that a substantial or potentially substantial adverse change may occur in any of the physical conditions within the area affected by the project that cannot be mitigated below a level of significance. If there are one or more "Potentially Significant Impact" entries, an Environmental Impact Report (EIR) is required.
4. A "Mitigated Negative Declaration" (Negative Declaration: Less Than Significant with Mitigation Incorporated) applies where the incorporation of mitigation measures, prior to declaration of project approval, has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact with Mitigation." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR (including a General Plan) or Negative Declaration [CCR, Guidelines for the Implementation of CEQA, § 15063(c)(3)(D)]. References to an earlier analysis should:
  - a) Identify the earlier analysis and state where it is available for review.
  - b) Indicate which effects from the environmental checklist were adequately analyzed in the earlier document, pursuant to applicable legal standards, and whether these effects were adequately addressed by mitigation measures included in that analysis.
  - c) Describe the mitigation measures in this document that were incorporated or refined from the earlier document and indicate to what extent they address site-specific conditions for this project.
6. Lead agencies are encouraged to incorporate references to information sources for potential impacts into the checklist or appendix (e.g., general plans, zoning ordinances, biological assessments). Reference to a previously prepared or outside document should include an indication of the page or pages where the statement is substantiated.
7. A source list should be appended to this document. Sources used or individuals contacted should be listed in the source list and cited in the discussion.
8. Explanation(s) of each issue should identify:
  - a) the criteria or threshold, if any, used to evaluate the significance of the impact addressed by each question **and**
  - b) the mitigation measures, if any, prescribed to reduce the impact below the level of significance.

## ENVIRONMENTAL ANALYSIS

The Environmental Analysis (Initial Study) Checklist was prepared to assess the proposed project's potential impacts on the environment. The environmental settings for each topic are found in Section 3.1 above. Potential environmental impacts, identified by checklist point, are addressed in the discussion section. For each impact identified as "less than significant with mitigation", mitigation measures have been specified to reduce the impact to a less than significant level.

### I. AESTHETICS

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### DISCUSSION

- a) Point Dume Natural Preserve is a significant scenic area and affords a panoramic view of the ocean and the coastline, both up and down the coast. The boardwalk will be designed to have a minimal impact on the surrounding cultural and natural environment, including viewsheds. The chosen alignment follows the contours of the land, thus minimizing grading and ground disturbance required to construct the boardwalk. Materials will be chosen that match the existing boardwalk and blend with the natural environment, such as wood, recycled wood products, and galvanized steel. Construction activities may have a limited temporary impact on the viewshed, but obstructions will be extremely limited and of brief duration.

<b>MITIGATION MEASURES: AESTHETICS - 1</b>
--

- |   |
|---|
| <ul style="list-style-type: none"> <li>• The new boardwalk has been designed to follow the natural contours of the land and to allow native vegetation to serve as a natural screen. Where feasible, elevated areas of the boardwalk (0'-5' high) will be screened by native vegetation that is taller than the boardwalk.</li> <li>• The color and texture of the proposed boardwalk will blend with the existing boardwalk and the surrounding landscape by using materials such as, wood, recycled wood products, and galvanized steel.</li> </ul> |
|---|

- b) The boardwalk will be constructed in three segments. The first segment will be located along an existing trail, the second segment parallel to Cliffside Drive and the third segment will follow the natural contours of the land in order to connect with the existing boardwalk. Impacts to scenic resources, i.e. native vegetation, will be less than significant. Native plants that are removed during construction will be re-transplanted onsite in order to rehabilitate native habitat.

The boardwalk and viewing platforms will provide accessibility to the panoramic views of the ocean and coastline.

- c) 450 LF on the proposed boardwalk will be constructed on grade level. 650 LF of the boardwalk will be elevated ranging from 1' to 5' off the ground. Native vegetation will screen the visual impacts of the boardwalk.
- d) The boardwalk construction will not create a new source of substantial light or glare. Less than significant impact.

**II. AGRICULTURAL RESOURCES**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\* In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model for use in assessing impacts on agricultural and farmland.

**DISCUSSION**

a-c) As noted in the environmental setting above, Point Dume Natural Preserve is located in an Urban residential area and does not support any agricultural operations or farmland. None of the land within the Point Dume Natural Preserve, the area immediately surrounding the park, or area impacted by the proposed project is included in any of the important farmland categories, as delineated by the California Department of Conservation, under the Farmland Mapping and Monitoring Program (FMMP). This project contains no component that would have an effect on any category of California Farmland, conflict with any existing zoning for agricultural use or Williamson Act contract, or interfere with the use or result in the conservation of agricultural land to a non-agricultural use.

**III. AIR QUALITY**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Conflict with or obstruct implementation of the applicable air quality plan or regulation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations (e.g., children, the elderly, individuals with compromised respiratory or immune systems)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\* Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make these determinations.

## DISCUSSION

a-e) Work proposed in this project is not in conflict with or would not obstruct implementation of any applicable air quality plans for the South Coast Air Basin (Orange County and major portions of Los Angeles, San Bernardino and Riverside counties in Southern California). No impact.

## IV. BIOLOGICAL RESOURCES

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands, as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION**

a) Potential Adverse Effects To Sensitive Habitats or Species (See Appendix C Biological Investigations). The California Department of Fish and Game’s California Natural Diversity Database (Rarefind 2000, updated 8/2/02) includes nine sensitive plant species (including the Federally threatened and State rare Marscescent Dudleya, State rare Santa Susana Tarplant, and the Federal and State endangered Lyon’s Pentachaeta), and seven animal species (including the State threatened Bank Swallow) from the Point Dume U.S.G.S. 7.5’ topographic quadrangle map. There are no known populations of these sensitive plant taxa within the Preserve and these plants have not been observed on-site. Of the sensitive animals, only the San Diego Horned Lizard, Silvery Legless Lizard and Coastal Western Whiptail (all three California Species of Special Concern) have the potential to occur within the project area. The silvery legless lizard is abundant on site and construction of this project will likely impact individuals of this species. Impacts to this species will be mitigated to a level below significance, because the project will not result in an overall decrease in protected prime habitat for this species.

It is anticipated that the project will allow more people to visit the Preserve, with the potential for increased disturbance to native flora and fauna. However, this project will establish a defined trail system leading from the public parking areas that will minimize impacts to the Natural Preserve and its resources by visitors. In addition, the project includes restoration of redundant trails and installation of interpretive signs to inform visitors of the Preserve’s sensitivities.

**MITIGATION MEASURES: BIOLOGICAL-1 (Habitat Mitigation Measures)**

- A trail running diagonally from the public parking area to the proposed view deck will be closed and rehabilitated with native vegetation. A second trail running along the bluff top edge, between the existing stairs to the beach and existing boardwalk, will be closed and restored with native vegetation. These trails are redundant and are causing severe erosion and damage to native vegetation. The closure and re-vegetation of these trails will provide additional native habitat for the Silvery Legless Lizard and additional native species. Trail closure and rehabilitation will be subsequent to the boardwalk construction.
- Native succulent plant species, including coreopsis, opuntia, and dudleya removed during boardwalk construction will be transplanted on-site. Native vegetation used for restoration will be obtained from the local native stock. Non-native species, including ice plant, in the project area will be removed.
- Construction should avoid bird nesting season if possible, or at least the site shall be surveyed for nesting birds prior to construction and nests avoided.

**MITIGATION MEASURES: BIOLOGICAL-2 (Design Measures)**

- 450 linear feet of the boardwalk will be constructed along an existing dirt trail. The additional 650 linear feet of boardwalk shall follow areas that have been previously disturbed, as much as possible.

- b) Sensitive Riparian areas are not present within the project site. The proposed project will not have an impact on riparian habitat.
- c) Federally protected wetlands are not present within the Preserve or project site. The proposed boardwalk construction project will not have an impact on wetlands.
- d) The proposed project will not interfere with the movement of native resident or migratory fish or wildlife or with establishes native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) There are no conservation plans, policies, or ordinances beyond those of California State Parks that apply to the project or project area.
- f) See IV (e) Discussion above, No impact.

**V. CULTURAL RESOURCES**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**DISCUSSION**

- a) There are no above ground historic resources located within the Area of Potential Effect (A.P.E.). However, there is the possibility for the discovery of buried historical archaeological features associated with the area’s ranch, railroad, military, and recreational history. A state archaeologist shall monitor the project to observe and record the presence of such features. If present, a minor realignment of the trail and boardwalk may be necessary. Impacts will be mitigated to a level below significance.
- b) Cultural remains are present, in differing densities, throughout the site area. The low artifact densities recovered during auger testing cannot provide a completely clear picture of the nature of the archaeological deposits in the project area. Cultural materials appear to be buried at least 50 cm (~1.5 feet) under the soil in most areas tested, with many of the higher density areas continuing below the depth of the auger (100-120cm or ~3.5 feet). The main area of concern is the area around the end of trail segment 2 and the beginning of trail segment 3 (augers 29-34 & 45), where some of the augers were not deep enough to reach sterile soil below cultural layers (See Appendix C Archaeological Teasting). Monitoring and some surface collection shall occur in areas of ground-disturbing boardwalk construction activities. Implementation of the mitigation measures listed below will further reduce the potential for impacts to significant archaeological resources.

**TREATMENT MITIGATION MEASURES: CULTURAL-1**

- A qualified State Park Archaeologist must be present during all ground disturbing construction activities. The boardwalk shall follow previously disturbed areas and existing trails. As much as possible, alignment of the elevated boardwalk shall be modified to lessen impacts to CA-LAN-454 as determined by the project Archaeologist during testing and monitoring.

- c) No human remains or burial sites have been documented in Point Dume Natural Preserve. Although unlikely, the inadvertant discovery of human remains is always possible and must be considered. The following mitigation measures will reduce potential impacts to a less than significant level.

**TREATMENT/MITIGATION MEASURES: CULTURAL-2 (HUMAN REMAINS)**

- If construction involves digging in a deep sensitive area, such as for the large landing, an excavation unit shall be dug in the area to recover and document any evidence of the archaeological site prior to its disturbance. A 1 x 2 meter unit shall be excavated. If human remains are uncovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate California State Parks personnel. The County Coroner will

be notified in accordance with §7050.5 of the California Health and Safety Code. Minor realignment of the trail may be necessary. If the coroner determines the remains represent Native American interment, the Native American Heritage Commission in Sacramento will be consulted to identify the most likely descendants and appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is arranged (PRC §5097.98).

## VI. GEOLOGY AND SOILS

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area, or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that will become unstable, as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems, where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION**

a-f) The Malibu Coast Fault is located approximately 2.5 miles to the North of the project site. There is potential for seismic ground shaking at the site, however, the imposed improvements do not provide long term occupation of the site. Therefore, exposure of the public to seismic impacts by this project is less than significant. With regards to erosion, the soils on the project site are classified as Corralitos loamy sand, 2-9 percent slope, with very rapid permeability and low shrink-swell potential. Due to its course texture, the soil erosion hazard at this site is high (primarily by wind) (USDA 1967). This project involves minimal grading (minor leveling or re-contouring) and will primarily follow existing topography at the site. Appropriate measures will be taken during construction to reduce wind erosion and dust. As part of the project, native vegetation will be planted and maintained on all exposed soils that are disturbed during construction.

**VII. HAZARDS AND HAZARDOUS MATERIALS**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials, substances, or waste into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites, compiled pursuant to Government Code §65962.5, and, as a result, create a significant hazard to the public or environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be located in the vicinity of a private airstrip? If so, will the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury, or death from wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION**

a-h) None of the facilities at Point Dume Natural Preserve use or store substantial amounts of hazardous materials on-site. There is no known hazardous contamination and the site is not suspected of containing any hazardous wastes, debris, or soil contamination. This project will have no impact.

**VIII. HYDROLOGY AND WATER QUALITY**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level that will not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which will result in substantial on- or off-site erosion or siltation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in on- or off-site flooding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place structures that will impede or redirect flood flows within a 100-year flood hazard area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**DISCUSSION**

- a-b) This project will not affect any surface waters or groundwater nor result in discharge, so there are no effects to water quality or quantity.
- c-d) There is no stream or river in or adjacent to the preserve. The installation of the boardwalk will not substantially alter the existing drainage pattern, as there is no grading or change in topography except for minor leveling of the sand during placement of the on-grade portions of the boardwalk. The project will also not result in any increase in rate or amount of surface runoff. Portions of some existing trails currently funnel runoff causing increased localized on-site erosion. The boardwalk project, including restoration of existing trail segments is designed to improve this situation by re-contouring the closed trail segments and planting vegetation.
- e) The project will not contribute runoff to any storm drainage system.
- f) See VII (a-b).
- g) This project does not include the construction of housing and would not be within a 100-year flood hazard area. No impact
- h) See VIII(g) discussion above. No impact.
- i) There is no levee or dam in any location that could threaten people or structures within Point Dume Natural Preserve, with or without the project. No impact.
- j) Point Dume is located on bluff 100 feet above the Pacific Ocean. The possibility for inundation by seiche, tsunami, or mudflow will not be increased as a result of this project. Less than significant impact.

**IX. LAND USE AND PLANNING**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION**

- a) The project will not divide an established community because there are non existing within the boundaries of Point Dume Natural Preserve.

- b) There is currently no General Plan for Point Dume State Beach and Natural Preserve. However, the improvements located within the boundaries of the Natural Preserve (fencing, trail rehabilitation, boardwalk and interpretive signage) are consistent with the designation of Natural Preserve (PRC Sec. 5019.71), State Park and Recreation Commission Policy II.3, and the State Park Resource Management Directives (II.B.2 and Department Operations Manual Sec. 1812.2).
- c) There are no required conservation plans that apply to this project area. No impact.

**X. MINERAL RESOURCES**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Result in the loss of availability of a known mineral resource that is or will be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION**

- a) No known mineral resources of local or regional importance have been identified in the park by the Mineral Land Classification Program, administered by the California Department of Mines and Geology. Therefore, no loss of mineral resources will occur as a result of the proposed project. No impact.
- b) The project site has not been classified or nominated as a locally important mineral resource recovery site. No impact.

**XI. NOISE**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be in the vicinity of a private airstrip? If so, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION**

- a,d) There will be an increase in noise levels during construction activities, which will only occur between 7am and 7pm. Construction noise levels will not exceed City of Malibu noise limits of 70db for parks and 75db for residential areas.
- b) Construction activity will not involve the use of explosives, pile driving, or other intensive construction techniques that could generate significant ground vibration or noise. Therefore, groundborne vibration or noise generated by the project will have no impact.
- c) Nothing within the scope of the proposed project will result in a substantial permanent increase in ambient noise levels. The project's primary emphasis is to repair and improve existing trails, resulting in negligible expansion of use beyond current levels.
- e,f) Point Dume Natural Preserve is not located within an airport land use plan, or within two miles of a public use airport. Therefore, no impact will occur as a result of this project.

**XII. POPULATION AND HOUSING**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION**

a-c) This project is a recreation improvement project to provide for existing usage. There are no impacts to housing or population growth.

Note: Lower income and minority populations are generally underrepresented for public parks. Therefore the proposed project provides needed park facilities and interpretive values that can be utilized by nearby residents and schools improving any disproportionate park representation in the local area.

**XIII. PUBLIC SERVICES**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION**

a) Alterations to public services as a result of the proposed project will be minor. It is not anticipated that there will be any significant increase in the demands on public services. No impact.

**XIV. RECREATION**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility will occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**DISCUSSION**

- a) The park will continue to receive the same level and type of use following the completion of the proposed project as it currently receives. No project component will substantially increase visitation or demands to this or any other park or recreational facility in the area. No impact.
- b) The proposed ADA-accessible boardwalk trail would increase the amount of trail facilities in the Preserve that could have a negative impact to vegetation in the Preserve. However, impacts to vegetation will be mitigated by closure and re-vegetation of redundant trails that are not ADA-accessible. Any potential adverse impacts to the environment will be mitigated to a level below significance.

**MITIGATION MEASURES RECREATION - 1**

- The development and design of the boardwalk will have a less than significant adverse physical effect on the environment. See Treatment/Mitigation Measures in Chapter 6 for biological, cultural and aesthetic resources.

**XV. TRANSPORTATION/TRAFFIC**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system (i.e., a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Cause a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that will substantially increase hazards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DISCUSSION**

- a) A significant increase in visitation to Point Dume Natural Preserve is not anticipated as a result of this project. All construction activities will occur within the boundaries of the park and work will not restrict access to or block any public roads. No impact.

- b) The impact on congestion resulting from additional construction vehicles on Highway 1 or surface roads will be minimal and have no impact on the acceptable level of service for this area.
- c) Nothing in the proposed project will in any way affect or change existing air traffic patterns in the area. Therefore, no impact will occur as a result of this project.
- d) As noted in XV ( a ) discussion above, all construction activities associated with the project will occur within the boundaries of Point Dume Natural Preserve, and work will not restrict access to or block any public road. There are no incompatible uses related to this proposed project. No impact.
- e) All construction activities associated with the project will occur within the boundaries of the park and work will not restrict access to or block any public road. All areas within the park will remain open to the public during construction. No impact.
- f) Project construction may generate a temporary demand for construction worker vehicle parking. This parking demand will not be substantial and will likely be accommodated in the construction staging area (existing hard surfaces and/or designated parking areas). During peak times the demand for parking may exceed the 10 parking spaces available. A shuttle bus program, during peak use periods, including information signage is intended to provide motorists with alternative parking at westward beach and transportation to the Preserve. Less than significant impact.
- g) There are no policies, plans, or programs supporting alternative transportation that apply to the proposed project. The project will have no impact.

**XVI. UTILITIES AND SERVICE SYSTEMS**

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Exceed wastewater treatment restrictions or standards of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the construction of these facilities cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the construction of these facilities cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
e) Result in a determination, by the wastewater treatment provider that serves or may serve the project, that it has adequate capacity to service the project's anticipated demand, in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations as they relate to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## DISCUSSION

- a) Point Dume Natural Preserve is within the jurisdiction of the Los Angeles Regional Water Quality Control Board. The project will be in compliance with all applicable water quality standards and waste discharge requirements. No impact.
- b) The proposed project contains no elements that will have an impact on public water or wastewater treatment facilities. No impact
- c) Some alteration of existing drainage patterns will be a part of this project in order to restore natural drainage patterns and decrease stormwater erosion. However, alteration to overall drainage patterns will be minimal. Therefore, the proposed project will have no impact on existing stormwater drainage facilities or require the construction of new facilities.
- d) Current supplies are adequate for existing demands, minimal additional demands associated with the proposed construction, and projected use. Therefore, this project will have no impact on water supplies.
- e,f) Existing facilities have the capacity to handle current and future demands. No impact. The proposed work will not increase the park's solid waste disposal needs over historic uses; therefore, this project will have no impact.
- g) The project will comply with federal, state, and local statutes and regulations as they relate to solid waste. No impact will result from this project.



## CHAPTER 4

### MANDATORY FINDINGS OF SIGNIFICANCE

	<u>POTENTIALLY SIGNIFICANT IMPACT</u>	<u>LESS THAN SIGNIFICANT WITH MITIGATION</u>	<u>LESS THAN SIGNIFICANT IMPACT</u>	<u>NO IMPACT</u>
<b>WILL THE PROJECT:</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have the potential to eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probably future projects?)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### DISCUSSION

- a) The proposed project was evaluated for potential significant adverse impacts to the natural environment. The project will not substantially affect any endangered, threatened, or rare species as defined by CEQA. Full implementation of all mitigation measures incorporated into this project will avoid or minimize potential impacts to a less than significant level.
- b) There are no above ground historic features present on site. The proposed project incorporates testing and monitoring by California State Archaeologists to assure that any buried cultural remains are evaluated when encountered and preserved.
- c) The project reduces the overall impacts to the environment by replacing existing paths of travel with a boardwalk and restoring abandoned trail segments to the natural conditions, such that there is a less than significant contribution to cumulative effects of past and future projects. Future projects are also for the purpose of environmental protection and restoration.
- d) This project will not cause adverse effects to humans.



## CHAPTER 5

### PROJECT ALTERNATIVES

There have been various locations and layouts proposed for the boardwalk at Point Dume Natural Preserve. During the planning process, five possible layouts of the boardwalk were examined and judged against a list of criteria:

- Has ease of vehicular access?
- Has ease of trail access?
- Protects the integrity of cultural sites?
- Protects natural values?
- Has the ability to be screened by natural features?
- Has the ability to meet American Disabilities Act (ADA) requirements?
- Meets interpretive needs?

The current preferred location was chosen because it met all the criteria except one (the protection of natural values due to placement of the boardwalk in segment 3). All impacts will be mitigated to a level below significance (see section 3.1 IV). The other layouts only met between two and four of the seven criteria.

Three alternatives have been considered for this project:

**Alternative 1 (No Project):** This alternative would leave visitors with disabilities using the new parking area with no viable destination. It would also result in continued site erosion impacts. This alternative would allow for significant on-going impact to the Natural Preserve. Further, this alternative does not allow the department to meet its mission to protect and preserve natural and cultural resources, to provide the visitor with a better understanding of the significance and value of the state's resources, to provide a safe environment for public enjoyment of the resources or to provide visitors with diverse, high quality recreational experiences and opportunities.

**Alternative 2:** This alternative proposed to create a hardened surface trail made of decomposed granite and/or road oyl to link the existing boardwalk trail system with the ADA-accessible parking stalls. This alternative would require significant grading, in order to meet ADA slope requirements, which would negatively affect natural resources, and sensitive cultural areas. In the long term, this type of trail would require a significant amount of maintenance and repairs.

**Alternative 3 (Preferred Alternative):** This alternative proposes to construct a boardwalk and view deck similar to the existing boardwalk and view deck (wood, concrete, and recycled wood type product). Many areas of the boardwalk will be elevated to provide the correct grade for accessibility. The on-grade trail boardwalk is to be constructed with the minimal amount of surface disturbance as possible. The boardwalk construction has been modified to avoid significant impacts to the viewshed, native vegetation, and archaeological resources. With the mitigation measures proposed in this Mitigated Negative Declaration, all potential impacts will be reduced to a level below significance, making this the preferred alternative.



## **CHAPTER 6**

### **SUMMARY OF TREATMENT/ MITIGATION MEASURES**

The following treatment/mitigation measures will be implemented by California State Parks as part of Point Dume Natural Preserve Boardwalk Construction Project.

#### **MITIGATION MEASURES: AESTHETICS -1**

- The new boardwalk has been designed to follow the natural contours of the land and to allow native vegetation to serve as a natural screen. Where feasible, elevated areas of the boardwalk (0'-5' high) will be screened by native vegetation that is taller than the boardwalk.
- The color and texture of the proposed boardwalk will blend with the existing boardwalk and the surrounding landscape by using materials such as, wood, recycled wood products, and galvanized steel.

#### **MITIGATION MEASURES: BIOLOGICAL-1 (HABITAT)**

- Rehabilitate two non ADA-accessible trails with local native stock (trails are redundant dirt trails causing erosion).
- All native succulent plant species, including coreopsis, opuntia, and dudleya removed as a result of the boardwalk construction project will be transplanted on-site.
- Remove non-native vegetation that is present in the project area.
- Avoid bird nesting season and/or have the site surveyed for nesting birds prior to construction and avoid nests.

#### **MITIGATION MEASURES: BIOLOGICAL-2 (Design Measures)**

- Construct boardwalk on existing trails and previously disturbed areas, as much as possible.

#### **TREATMENT/MITIGATION MEASURES: CULTURAL-1**

- A qualified State Park Archaeologist must be present during all ground disturbing construction activities.
- The boardwalk shall follow previously disturbed areas and existing trails, as much as possible.
- Alignment of the elevated boardwalk shall be modified to lessen impacts on site and to CA-LAN-454 as determined by the project Archaeologist during testing and monitoring.

#### **TREATMENT/MITIGATION MEASURES: CULTURAL-2 (HUMAN REMAINS)**

- If construction involves digging in a deep sensitive area, such as for the large landing, an excavation unit shall be dug in the area to recover and document any evidence of the archaeological site prior to its disturbance. A 1 x 2 meter unit shall be excavated.
- If human remains are uncovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate California State Parks personnel.
- The County Coroner will be notified in accordance with §7050.5 of the California Health and Safety Code. Minor realignment of the trail may be necessary. If the coroner determines the remains represent Native American interment, the Native American Heritage Commission in

Sacramento will be consulted to identify the most likely descendants and appropriate disposition of the remains.

- Work will not resume in the area of the find until proper disposition is arranged (PRC §5097.98).

**MITIGATION MEASURES: RECREATION**

- See treatment/mitigation measures above for biological, cultural, and aesthetic resources. The development and design of the boardwalk will have a less than significant adverse physical effect on the environment.

## CHAPTER 7 REFERENCES

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- Raven, P. H., H. J. Thompson and B. A. Prigge. 1986. NLFlora of the Santa Monica Mountains, California, Second Edition. Southern California Botanists, Special Publication No. 2. University of California, Los Angeles. 181 pp
- Point Dume is the southern limit for the distribution of giant sea dahlia (*Coreopsis gigantea*) (Raven et al. 1986).
- Point Dume is the southern limit for the distribution of *Dudleya caespitosa* (Moran, 1951;Uhl and Moran, 1953; Verity pers. comm.).
- Point Dume is one of the few locations where false heather (*Ericameria ericoides*) can be found in Los Angeles County and is also near the southern limit of this species.

A possibly undescribed subspecies of California spineflower (*Mucronea* (*Chorizanthe*) (*californica*) may be present on the dune areas at the bluff edge (Mattoni, pers. comm.). However, there is no mention of any subspecific taxa or problematical populations of *M. californica*.

South Coast Air Quality Management District, 2000 Air Quality Report. <http://www.aqmd.gov/>

State of California, Public Resources Code (PRC); <http://www.legoinfor.ca.gov/calaw.html>.

Uhl, C. H. and R. Moran. 1953. The cytotaxonomy of *Dudleya* and *Hasseanthus*. *American Journal of Botany* 40(7):492-502.

## **REPORT PREPARATION**

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Associate State Archaeologist  
Southern Service Center



APPENDIX A  
**MAPS/FIGURES**

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Figure 1. Location Map

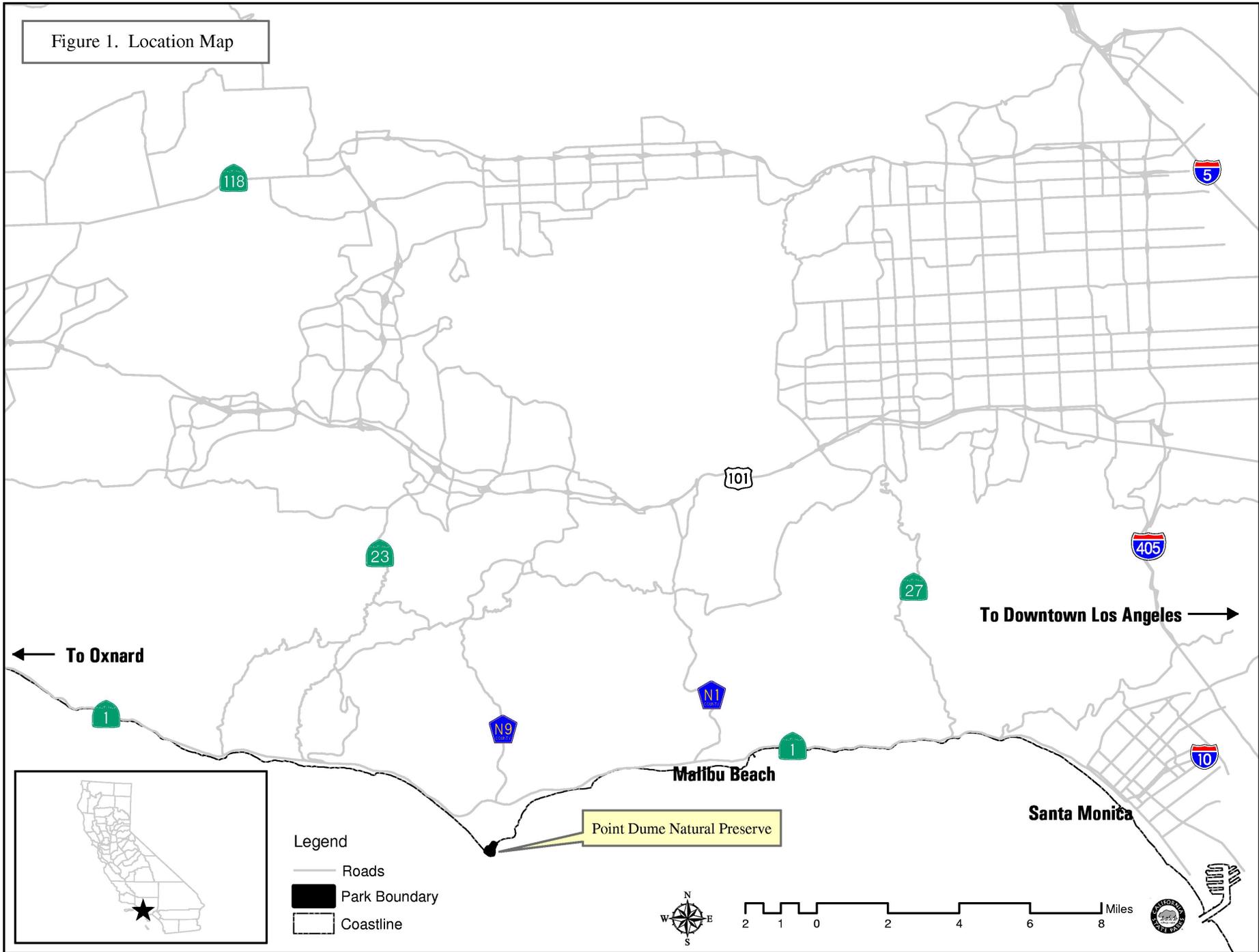


Figure 2. Site Map



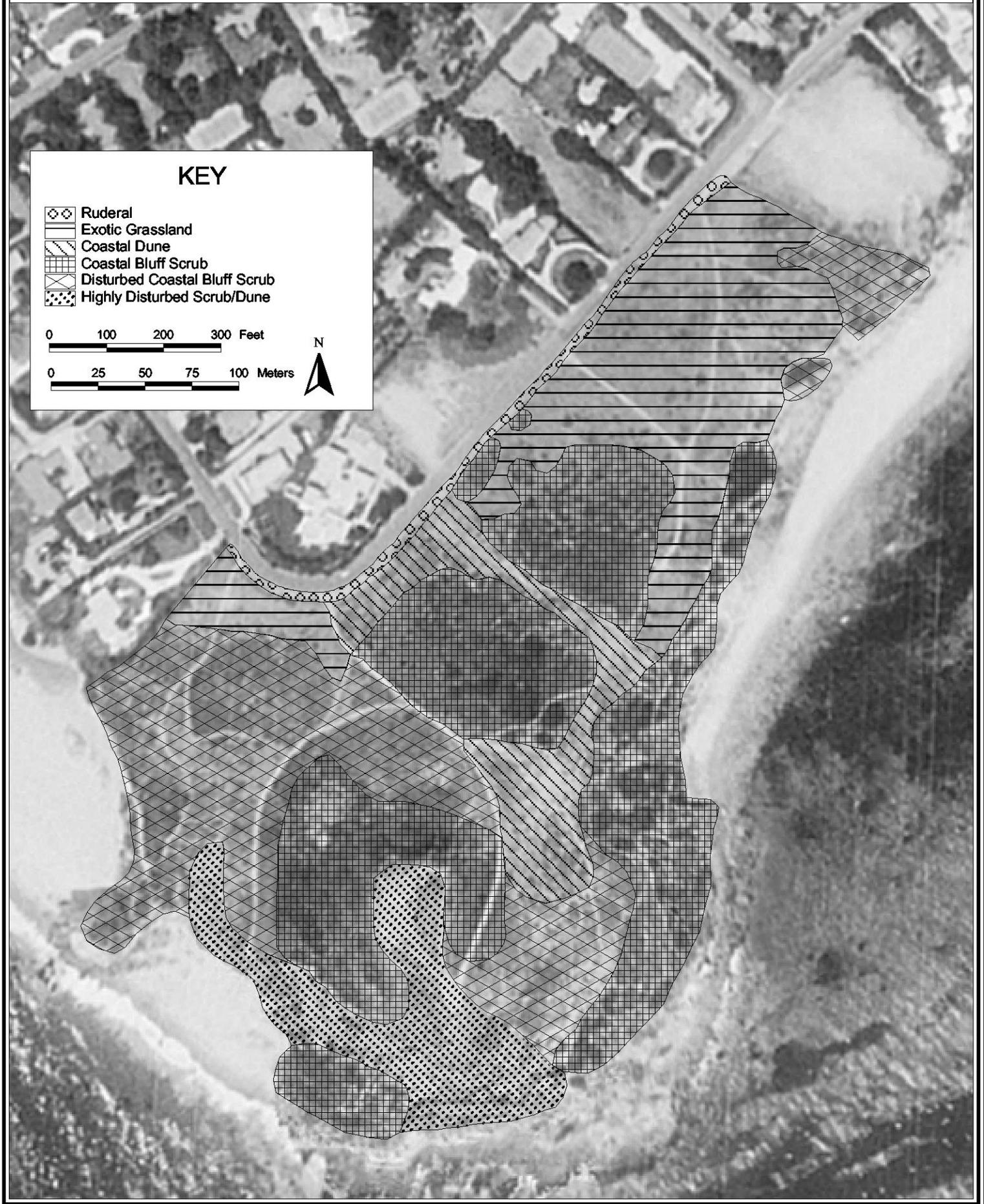
 Park Boundary



200 100 0 200 Meters



Figure 3. Vegetation of Point Dume Natural Preserve  
1994 Imagery



APPENDIX B

# PROJECT DESIGN GRAPHICS

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# BOARDWALK CONSTRUCTION PT. DUME NATURAL PRESERVE

AT:

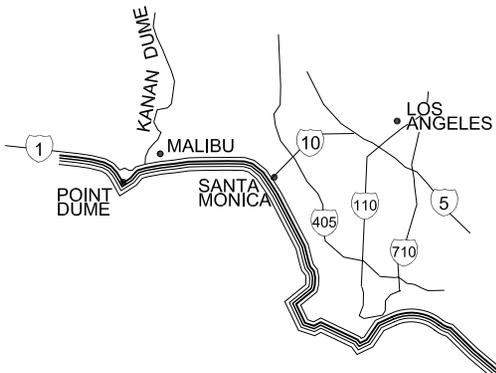
MALIBU SECTOR  
39996 PACIFIC COAST HIGHWAY  
MALIBU, CALIFORNIA 90265  
(310) 457-8143

FOR:

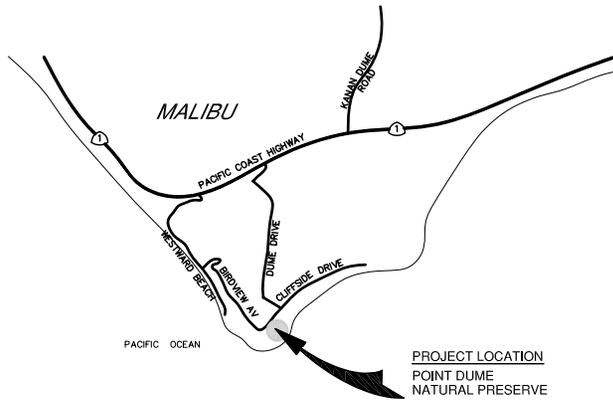
LOS ANGELES DISTRICT  
1925 LAS VIRGENES RD.  
CALABASAS, CALIFORNIA 91302  
(818) 880-0350

PREPARED BY:

CALIFORNIA DEPARTMENT OF PARKS  
AND RECREATION  
SOUTHERN SERVICE CENTER  
8885 RIO SAN DIEGO DRIVE, SUITE 270  
SAN DIEGO, CALIFORNIA 92108  
(619) 220-5300



VICINITY  
NTS



LOCATION  
NTS



SHEET

TITLE SHEET  
SITE PLAN  
DETAILS  
DETAILS  
DETAILS  
DETAILS

SHT. NUM

R-1  
R-2  
R-3  
R-4  
R-5  
R-6

SHEET INDEX

APPROVALS



RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF PARKS AND RECREATION  
SOUTHERN SERVICE CENTER

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SHEET TITLE:  
TITLE SHEET

PROJECT SITE:  
PT. DUME NATURAL PRESERVE  
BOARDWALK CONSTRUCTION

REVISIONS  
xx/xx/xx

DESIGNED RR  
DRAWN RR  
CHECKED BM

DATE xx/xx/xx  
SCALE AS SHOWN

PROJECT NO.  
915-553-04

**R-1**



RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF PARKS AND RECREATION  
SOUTHERN SERVICE CENTER

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SHEET TITLE:  
**SITE PLAN**

PROJECT SITE:  
**PT. DUME NATURAL PRESERVE  
BOARDWALK CONSTRUCTION**

REVISIONS  
A xx/xx/xx

DESIGNED RR  
DRAWN RR  
CHECKED BM

DATE xx/xx/xx  
SCALE AS SHOWN

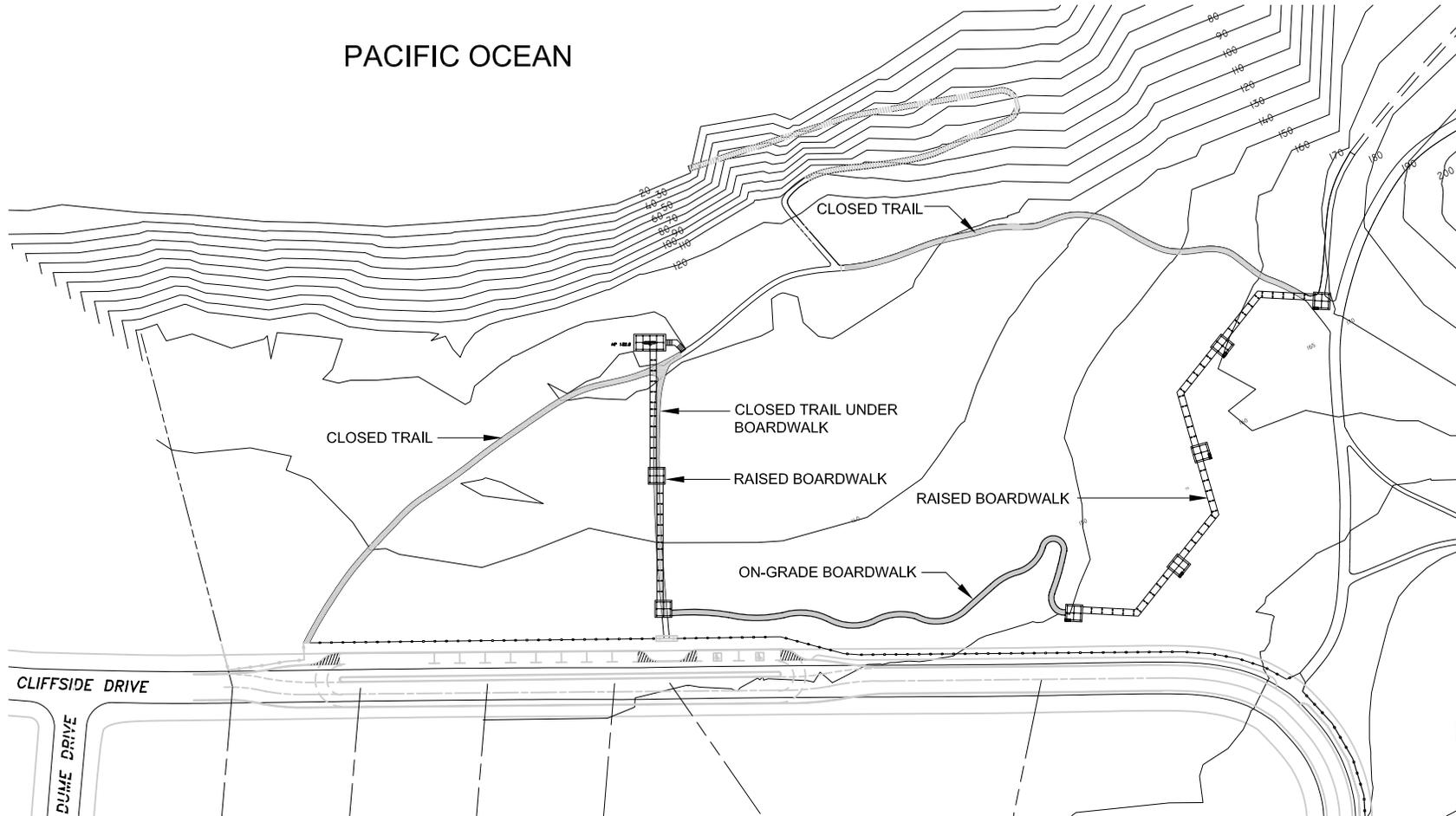
PROJECT NO.  
915-553-04

**R-2**

SHEET 2 OF 6

Z:\PROJECTS\AUTOCAD\

PACIFIC OCEAN



**SITE PLAN**





RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF PARKS AND RECREATION  
SOUTHERN SERVICE CENTER

DATE: \_\_\_\_\_

APPROVED: \_\_\_\_\_

SHEET TITLE:

PLAN DETAILS

PROJECT SITE:  
**PT. DUME NATURAL PRESERVE  
BOARDWALK CONSTRUCTION**

REVISIONS

Δ xx/xx/xx

DESIGNED RR  
DRAWN RR  
CHECKED BM

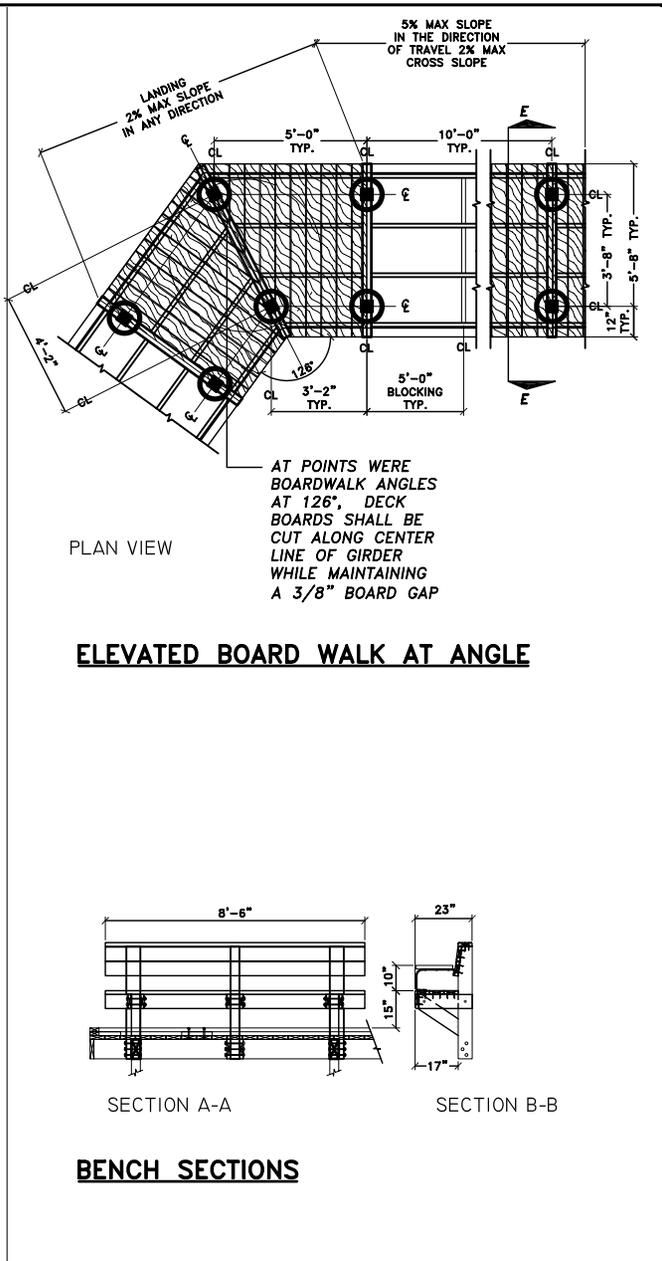
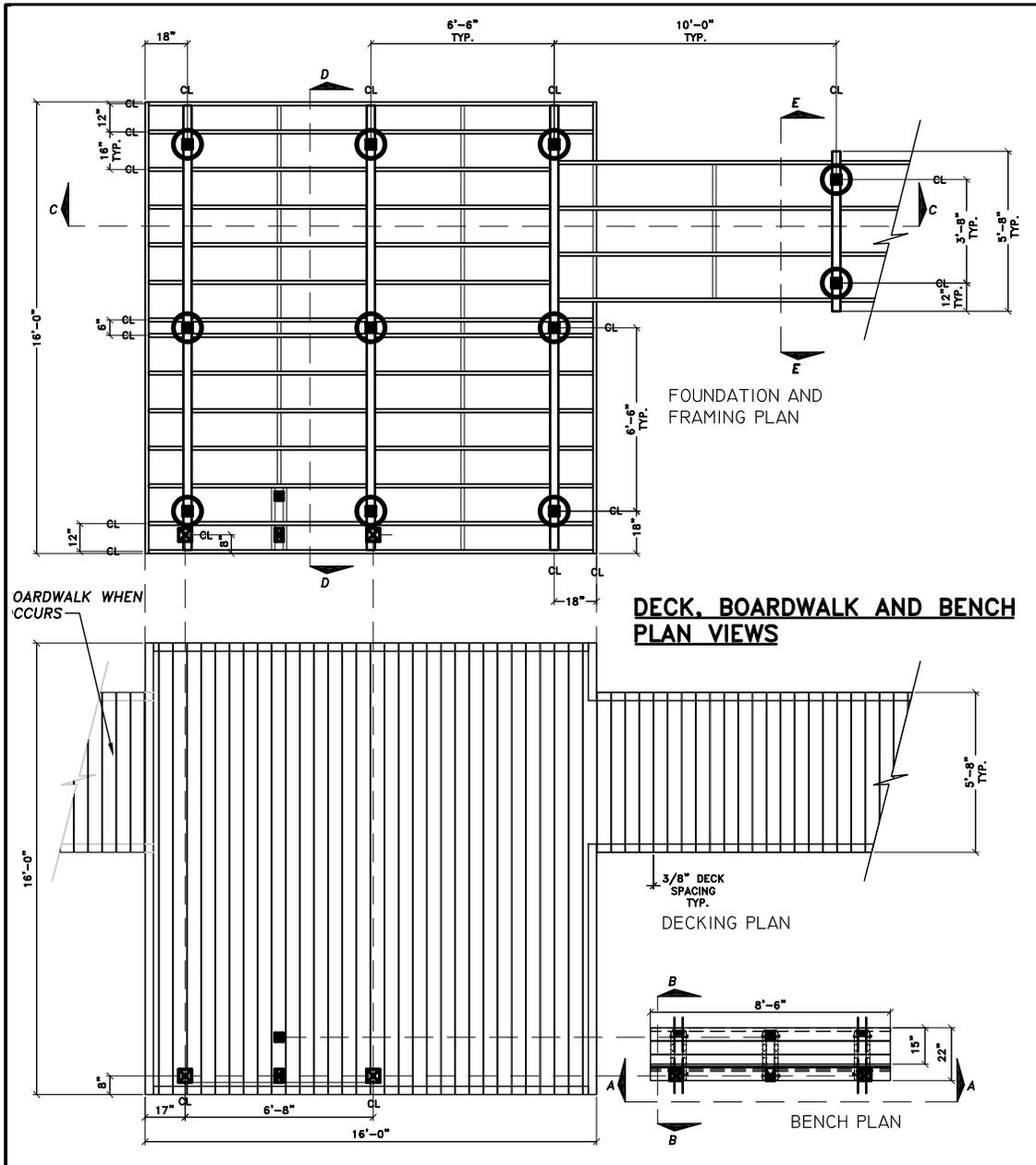
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PROJECT NO.  
915-553-04

**R-3**

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SHEET 3 OF 6





RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF PARKS AND RECREATION  
SOUTHERN SERVICE CENTER

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SHEET TITLE:

DETAILS

PROJECT SITE:  
PT. DUME NATURAL PRESERVE  
BOARDWALK CONSTRUCTION

REVISIONS  
A XX/XX/XX

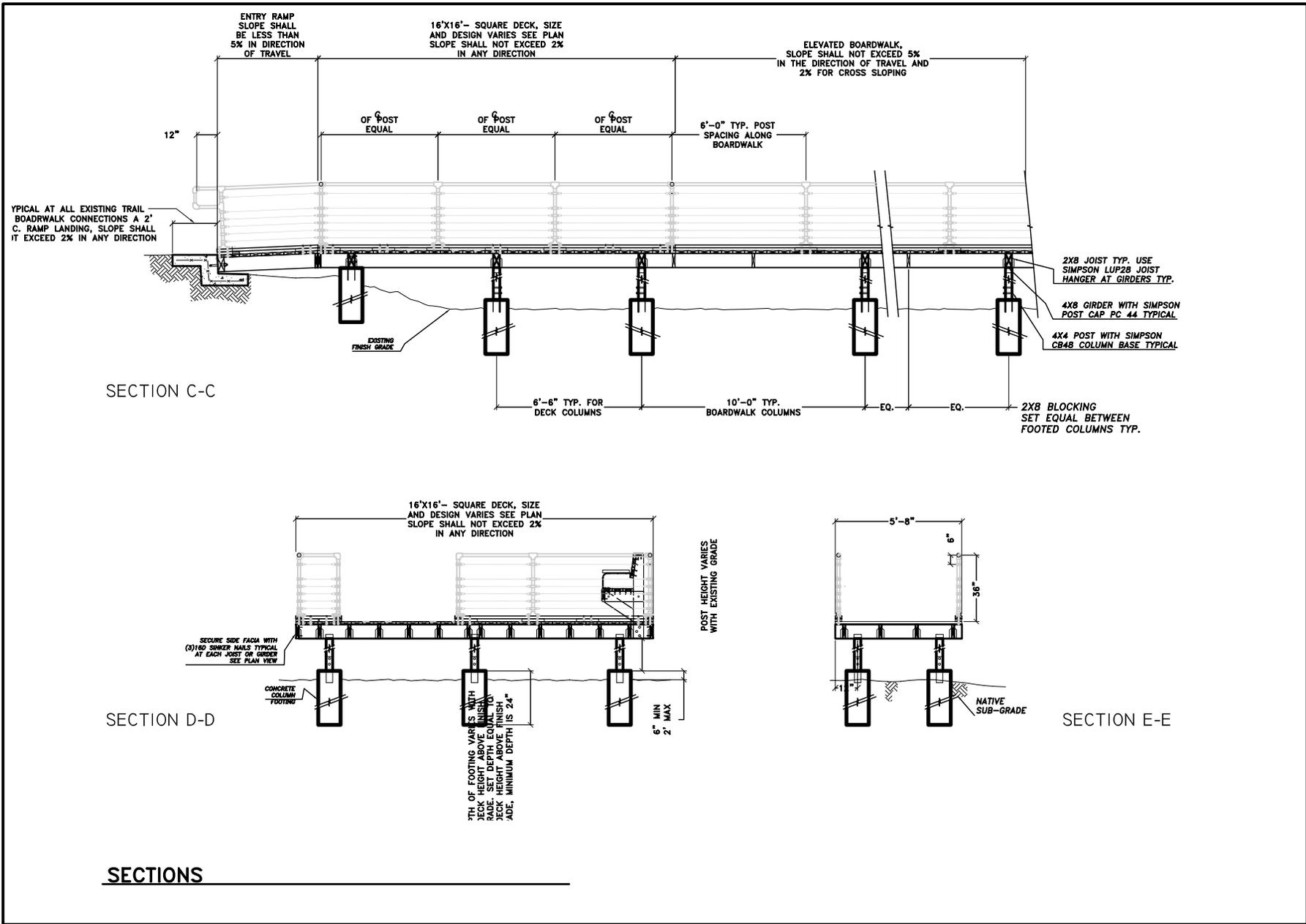
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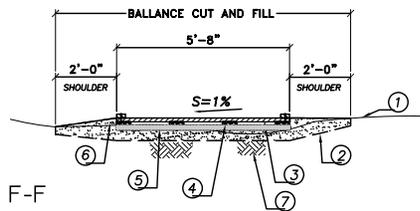
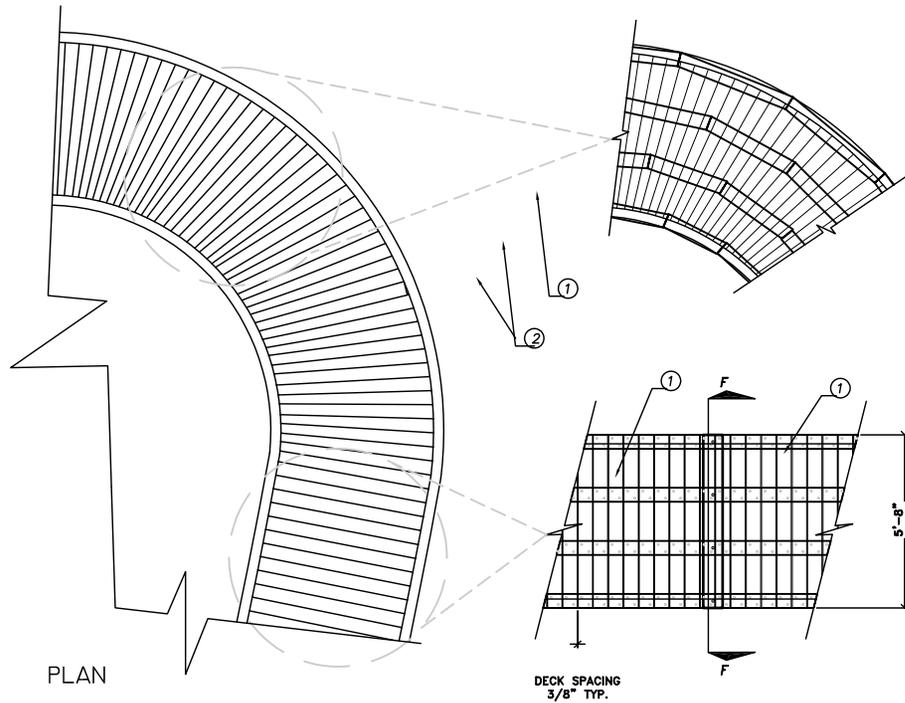
DATE XX/XX/XX  
SCALE AS SHOWN

PROJECT NO.  
915-553-04

**R-4**

SHEET 4 OF 6





ON GRADE BOARDWALK & CURVE

PLAN NOTES

- ①
- ② 2X6 RECYCLED PRODUCT TREX OR STATE APPROVED EQUIVALENT DECK BOARDS WITH 3/8" MAX. SPACING AND 1/4" MIN., TAPER CUT EDGES AT CURVES TO COMPLETE RADIUS
- ③ CONTRACTOR SHALL CREATE SMOOTH TRANSITION BETWEEN CURVED TAPER CUT SECTION AND STRAIGHT SECTIONS OF THE ON GRADE BOARDWALK, EDGES SHALL BE FLUSH
- ④ 2X6 RECYCLED PRODUCT TREX OR STATE APPROVED EQUIVALENT JOISTS (10F4) SPACED EVENLY PHARAEAL WITH PATH OF TRAVEL
- ⑤ 2X8 RECYCLED PRODUCT TREX OR STATE APPROVED EQUIVALENT GIRDERS SET INTO CLASS 2 BASE WITH TOP EXPOSED AT 10' O.C. PERPENDICULAR TO PATH OF TRAVEL
- ⑥ SHOULDER SHALL BE BACKFILLED WITH NATIVE FILL TAKEN FROM CUT FOR BASE AND HAVE A 3" MIN. DEPTH TYPICAL COMPACT TO 90% UNDISTURBED NATIVE SUBGRADE
- ⑦

SECTION NOTES

- ① EXISTING GRADE VARIES
- ② EXTENT OF CUT, BACKFILL WITH 6" CLASS 2 BASE. CLASS 2 BASE SHALL BE COMPACTED TO 90%
- ③ 2X6 RECYCLED PRODUCT TREX OR STATE APPROVED EQUIVALENT DECK BOARDS WITH 3/8" MAX. SPACING AND 1/4" MIN.
- ④ 2X6 RECYCLED PRODUCT TREX OR STATE APPROVED EQUIVALENT JOISTS (10F4) SPACED EVENLY PHARAEAL WITH PATH OF TRAVEL
- ⑤ 2X8 RECYCLED PRODUCT TREX OR STATE APPROVED EQUIVALENT GIRDERS SET INTO CLASS 2 BASE WITH TOP EXPOSED AT 10' O.C. PERPENDICULAR TO PATH OF TRAVEL
- ⑥ SHOULDER SHALL BE BACKFILLED WITH NATIVE FILL TAKEN FROM CUT FOR BASE AND HAVE A 3" MIN. DEPTH TYPICAL COMPACT TO 90%
- ⑦ UNDISTURBED NATIVE SUBGRADE



RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF PARKS AND RECREATION  
SOUTHERN SERVICE CENTER

DATE: \_\_\_\_\_

APPROVED: \_\_\_\_\_

SHEET TITLE:  
**DETAILS**

PROJECT SITE:  
**PT. DUME NATURAL PRESERVE  
BOARDWALK CONSTRUCTION**

REVISIONS  
A xx/xx/xx

DESIGNED RR  
DRAWN RR  
CHECKED BM

DATE xx/xx/xx  
SCALE AS SHOWN

PROJECT NO.  
915-553-04

**R-5**

SHEET 5 OF 6

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 DEPARTMENT OF PARKS AND RECREATION  
 SOUTHERN SERVICE CENTER

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

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**DETAILS**

PROJECT SITE:  
**PT. DUME NATURAL PRESERVE  
 BOARDWALK CONSTRUCTION**

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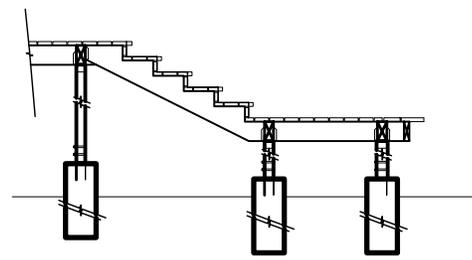
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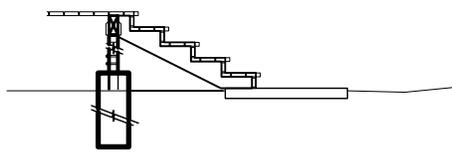
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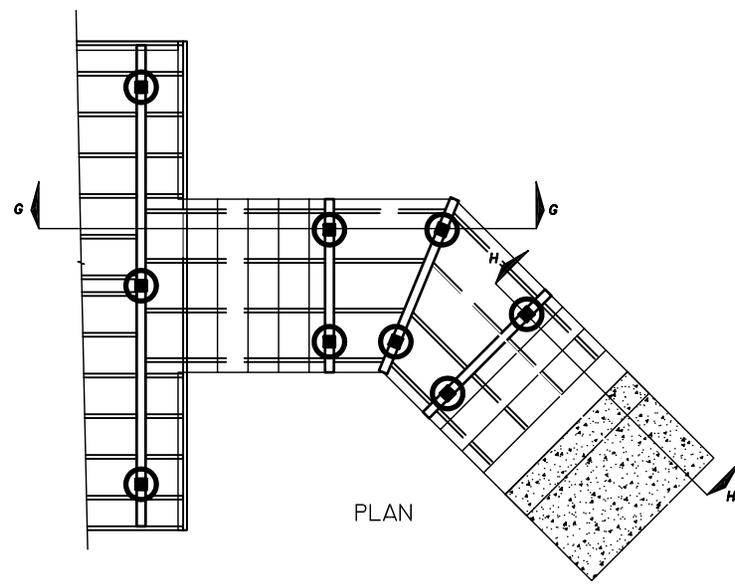
SHEET 6 OF 6



SECTION G-G



SECTION H-H



PLAN

**STAIRCASE PLAN & SECTIONS**

APPENDIX C  
**REPORTS**

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## **NATURAL RESOURCE INVESTIGATIONS (REPORT 1)**

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**Point Dume Natural Preserve  
Boardwalk Construction Project  
Natural Resource Investigations**

**Site Characterization**

Point Dume Natural Preserve contains significant natural and scenic features, and is one of the last remaining undeveloped coastal terrace/bluff areas in southern California. The Preserve consists of approximately 34 acres of land including the upland terrace, bluff faces, and “Pirate’s Cove” (a small beach on the southwestern side of the point). Although the top of the headland was graded, it remains the highest point (203 ft. or 65 m) along the immediate coastline. The relatively flat terrace area ends abruptly at the nearly vertical bluff, which drops 100ft. (30m.) to the beach on the south side of the property. Up coast lies Westward Beach, which is developed and highly visited. The relatively isolated and undeveloped Dume Beach lies down coast (southeast) of the Preserve. The terrace portion of the Preserve is bounded by residential development to the northwest, north and northeast, with Cliffside Drive separating the Preserve from the residences to the north. The proposed boardwalk is located on the flat terrace, connecting the recently constructed parking strip along Cliffside Drive to existing boardwalk and beach access.

**Methodology**

An inventory of the biological resources of Pt. Dume Natural Preserve was prepared in 1991 by the California Department of Parks and Recreation, Southern Region Office (CDPR 1991) and an update of existing conditions was done in 1999 (Miner 1999). In order to determine potential sensitive biological resources that may be impacted by the project, the California Natural Diversity Data Base was consulted (Rarefind 2000), and field visits were made to the site on 11/08/99, 6/12/00, and 8/15/02. During the first two visits State Park Resource Ecologist Karen Miner surveyed the project area between 0800-1200 for sensitive species. The vegetation communities were mapped using 1994 imagery and ground-truthed during these visits. During the last visit State Park Resource Ecologists Suzanne Goode and Kim Marsden walked the alternative proposed alignments for the boardwalk with the project designer, State Park Landscape Architect R. Risner, to select a route that met both the project objectives for accessibility and interpretation while minimizing impacts to the natural resources. Focused surveys along the preferred alignment were conducted at this time as well.

**Results**

Plant Communities

There are principally three vegetation types at Point Dume Natural Preserve; southern coastal bluff scrub, coastal dune, and annual grassland (Holland 1986). The southern coastal bluff scrub and coastal dune vegetation represents regionally rare plant

communities. The distributions of the plant communities in the vicinity of the project area are shown in Figure 1 (Figure included in Appendix A of the MND).

Southern coastal bluff scrub covers most of the Preserve and is dominated primarily by low coastal shrubs of lemonadeberry (*Rhus integrifolia*), false heather (*Ericameria ericoides*) and California encelia (*Encelia californica*). Scattered patches of coastal prickly pear (*Opuntia littoralis*), giant sea dahlia (*Coreopsis gigantea*), Chamisso's burweed (*Ambrosia chamissonis*), California sagebrush (*Artemisia californica*), and coyote brush (*Baccharis pilularis ssp. consanguinea*) are also prominent elements of the natural vegetation. There are also exotic plant species that have invaded this, as well as the other plant communities, most notably ice plants (*Carpobrotus* and *Mesembryanthemum*).

The coastal dune vegetation is dominated by beach sand verbena (*Abronia umbellata*), giant sea dahlia, California croton (*Croton californicus*), California encelia, and lemonadeberry.

The grassland community is dominated by non-native species, including wild oats (*Avena fatua*), bromes (*Bromus spp.*), black mustard, wild radish (*Raphanus sp.*), filaree (*Erodium spp.*) and ice plants. California poppy (*Eschscholtzia californica*), deerweed (*Lotus scoparius*), and California croton are the native species that can be found scattered in the grassland.

#### Sensitive Plants

The California Department of Fish and Game's California Natural Diversity Database (Rarefind 2000) includes nine sensitive plant species<sup>1</sup> from the Point Dume U.S.G.S. 7.5' topographic quadrangle map. These include:

- Coulter's atriplex, *Atriplex coulteri*, CNPS List: 1B, 2-2-2
- Malibu baccharis, *Baccharis malibuensis*, no status
- Plummer's Mariposa lily, *Calochortus plummerae*, FSC, CNPS List: 1B, 2-2-3
- Parry's spineflower, *Chorizanthe parryi* var. *parryi*, FSC, CNPS List: 3, ?-2-3
- Blochman's dudleya, *Dudleya blochmaniae ssp. blochmaniae*, FSC, CNPS List 1B, 2-2-2
- Marcescent dudleya, *Dudleya cymosa ssp. marcescens*, FT, CR, CNPS List 1B, 3-2-3
- Santa Susana tarplant, *Hemizonia minthornii*, FSC, CR, CNPS List 1B, 2-2-3
- Lyon's pentachaeta, *Pentachaeta lyonii*, FE, CE, CNPS List 1B, 3-3-3
- Sonoran maiden fern, *Thelypteris puberula* var. *sonorensis*, CNPS List 2: 2-2-1

There are no known collections of these taxa from the Preserve, and according to CDPR (1991), these plants have not been observed on-site during visits to Point Dume Natural Preserve on November 30, 1988 (W. E. Tippetts), February 20, 1989 (R. Mattoni) and January 10, 1990 (J. C. Dice and S. Goode). None of these species were observed during field investigations of the project site.

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<sup>1</sup> All status codes explained on last page.

Although there are no sensitive plants presently known from Point Dume, there are some significant floristic features of the vegetation that deserve mention (CDPR 1991). (1) Point Dume is the southern limit for the distribution of giant sea dahlia (Raven et al. 1986). (2) Point Dume is the southern limit for the distribution of *Dudleya caespitosa* (Moran 1951, Uhl and Moran 1953). (3) Point Dume is one of the few locations where false heather (*Ericameria ericoides*) can be found in Los Angeles County and is also near the southern limit of this species. (4) A possibly undescribed subspecies of California spineflower (*Mucronea* [Chorizanthe] *californica*) may be present on the dune areas at the bluff edge (Mattoni, pers. comm. to J. Dice in CDPR 1991).

### Sensitive Wildlife

The California Department of Fish and Game's California Natural Diversity Database (Rarefind 2000) reports seven sensitive animal species<sup>1</sup> previously documented from the Point Dume U.S.G.S. 7.5' topographic quadrangle. These include:

Southwestern pond turtle, *Clemmys marmorata pallida*, CSC  
Coastal western whiptail, *Cnemidophorus tigris multiscutatus*, FSC  
Monarch butterfly, *Danaus plexippus*, no status  
San Diego Horned Lizard, *Phrynosoma coronatum blainvillei*, FSC, CSC  
California Horned Lizard, *Phrynosoma coronatum frontale*, FSC, CSC  
Bank Swallow, *Riparia riparia*, CT  
Two-striped garter snake, *Thamnophis hammondi*, FSC, CSC

Based on distribution and the habitat present on site only the San Diego horned lizard and coastal western whiptail (both California Species of Special Concern) have the potential to occur in the project area. While the horned lizard was recorded on Preserve land in 1966, neither lizard has been documented in the Preserve or on the project site since that time, and neither was seen during field investigations for this project.

Another sensitive wildlife species that is known to occur at Pt. Dume Natural Preserve but is not recorded in CNNDDB, is the silvery legless lizard, *Anniella pulchra pulchra* (FSC, CSC) (De Lisle et al. 1986, Jennings and Hayes 1994). This is a fossorial insectivorous lizard that inhabits loose soil with high sand fractions, and some level of soil moisture. Urban development and farming appear to have eliminated this species from much of its historic range, and exotic plant invasions of dune habitat appears to drastically reduce prey abundance required to support this species (Jennings and Hayes 1994). The legless lizard is still commonly detected within Point Dume Natural Preserve.

Several species of reptiles were observed within the project footprint on the Preserve side of Cliffside Drive during the June field investigation. These included several side-blotched lizards (*Uta stansburiana*), one road-killed western fence lizard (*Sceloporus occidentalis*), one California whipsnake (*Masticophis lateralis*), and one silvery legless lizard. Surprisingly the silvery legless lizard was found on the surface at 0815 hours in full sun, immediately adjacent the edge of Cliffside Drive, near the base of a lone beach-bur (*Ambrosia chamissonis*). It was an adult measuring approximately 155mm snout to

vent. It is unusual to see this species on the surface during summer when it is hot and dry. It may be that the compaction of the road shoulder at the site where the individual was found prevented normal fossorial activity. After taking photographs, the individual was released just inside the Preserve boundary fence, where the soil was loose and native plants were present. No other sensitive species were observed during field investigations.

Birds observed during the June visit included northern mockingbird (*Mimus polyglottos*), American crow (*Corvus brachyrhynchos*), California towhee (*Pipilo fuscus*), greater roadrunner (*Geococcyx californianus*), and house finch (*Carpodacus mexicanus*). Mammals observed included cottontail rabbit (*Sylvilagus audubonii*) and California ground squirrel (*Spermophilus beecheyi*).

### **Project Impacts and Recommended Mitigation**

The proposed boardwalk project is intended to provide controlled access through the Natural Preserve that is compliant with the American's with Disabilities Act (ADA). Potential impacts to native habitat and taxa from off-trail use and erosion of certain trail segments would be reduced by implementation of this project. This is because users would be confined to the boardwalk, and because the boardwalk is to be raised above the vegetated surface in portions, thus minimizing soil disturbance and exposure to wind erosion. Construction of the westward segment of the boardwalk (approximately 650 linear feet), however, will require disturbance to vegetation. In order to minimize disturbance to native coastal bluff scrub vegetation, a team consisting of ecologists and a landscape architect laid out the route of this segment. Roughly half of this segment traverses exotic grassland vegetation. The remainder would impact approximately 3,000 square feet (0.07 ac) of coastal bluff scrub vegetation. Partial mitigation for this impact is realized from the closing and revegetation of two trail segments that would become redundant routes as a result of this project. One of these is subject to continuing erosion of loose, wind blown sandy soils. It is recommended that additional mitigation measures include: salvage of native bushes (e.g. giant sea dahlia) within the path of the boardwalk and re-planting on site (e.g. closed trail segments or disturbed areas adjacent the finished boardwalk); removal off site of any exotic plants (e.g. ice plant) within the project footprint; and revegetation of any disturbed areas left bare following construction of the boardwalk. All native plant materials used for restoration should be obtained from local native stock.

The project has the potential to negatively impact silvery legless lizards and nesting birds. The silvery legless lizard is relatively abundant within the Preserve and a few individuals could be inadvertently killed during project implementation. It is felt that the project overall improves habitat for this species and other wildlife by restoring native habitat and raising foot traffic above the soil surface, such that there is a net benefit to the species that outweighs the loss of a few individuals. In order to avoid disturbance to nesting birds, vegetation disturbance should avoid the bird-nesting season. If this is not possible, then the project site should be surveyed for nesting birds prior to construction, and the nests avoided until nesting is complete.

## References

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- Uhl, C. H. and R. Moran. 1953. The cytotaxonomy of *Dudleya* and *Hasseanthus*. American Journal of Botany 40(7):492-502.

**Status Codes**

SE = State-listed Endangered  
 ST = State-listed Threatened  
 SR = State-listed Rare  
 CSC = California Species of Special Concern  
 FE = Federally listed Endangered  
 FT = Federally listed Threatened  
 FSC = Federal Species of Special Concern

CNPS = California Native Plant Society Sensitivity Lists and Rarity (R), Endangered (E), and Distribution (D) [R-E-D] Codes

<b>List 1A</b>	Species presumed extinct in California
<b>List 1B</b>	Plants rare, threatened, or endangered in California and elsewhere
<b>List 2</b>	Plants rare, threatened or endangered in California, but more common elsewhere
<b>List 3</b>	Plants about which more information is needed
<b>List 4</b>	Plants of limited distribution. A watch list for species that need to be monitored.
<b>Rarity (R)</b>	
<b>1</b>	Rare but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
<b>2</b>	Distributed in a limited number of occurrences, occasionally more if each occurrence is small
<b>3</b>	Distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported.
<b>Endangered</b>	
<b>1</b>	Not Endangered
<b>2</b>	Endangered in a portion of its range
<b>3</b>	Endangered throughout its range
<b>Distribution</b>	
<b>1</b>	More or less widespread outside California
<b>2</b>	Rare outside California
<b>3</b>	Endemic to California

## ARCHAEOLOGICAL TESTING (REPORT 2)

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**Archaeological Testing at CA-LAN-454  
Boardwalk Construction Project  
Pt. Dume State Preserve, Malibu, California**



**By Karen Shabel, Archaeological Project Leader  
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**Pt. Dume Natural Preserve  
Boardwalk Construction - Archaeological Testing**

## **INTRODUCTION**

Archaeological testing at CA-LAN-454 was undertaken at Pt. Dume Natural Preserve October 7-10, 2002 in advance of the Pt. Dume boardwalk construction project (Figure 1). CA-LAN-454 is a middle to late prehistoric Chumash site located on the sand dune that covers the preserve. At present, the site is thought not to have been a habitation area (Meighan 1984), but perhaps a processing area or even a ceremonial site focused on the promontory of the point. State Park personnel conducted testing at the site in 1998 as part of the first phase of boardwalk construction. The previous testing included 65 auger tests as well as four excavation units. Artifacts recovered included bone, flakes, angular waste, and shellfish remains. Occupation of the site was established between A.D. 1080 – A.D. 1200 based on radiocarbon analysis of shell material (See. Dallas and Mealey 1998 for further results).

The current testing was conducted along the proposed route of the new section of boardwalk and was divided into three segments; trail segments 1-3. An auger crew of Karen Shabel and Sarah Jenkins, Southern Service Center Archaeological Project Leaders, conducted the auger testing. Temperatures throughout the four days were moderate with some morning fog, but there were no conditions that inhibited testing.

## **METHODS**

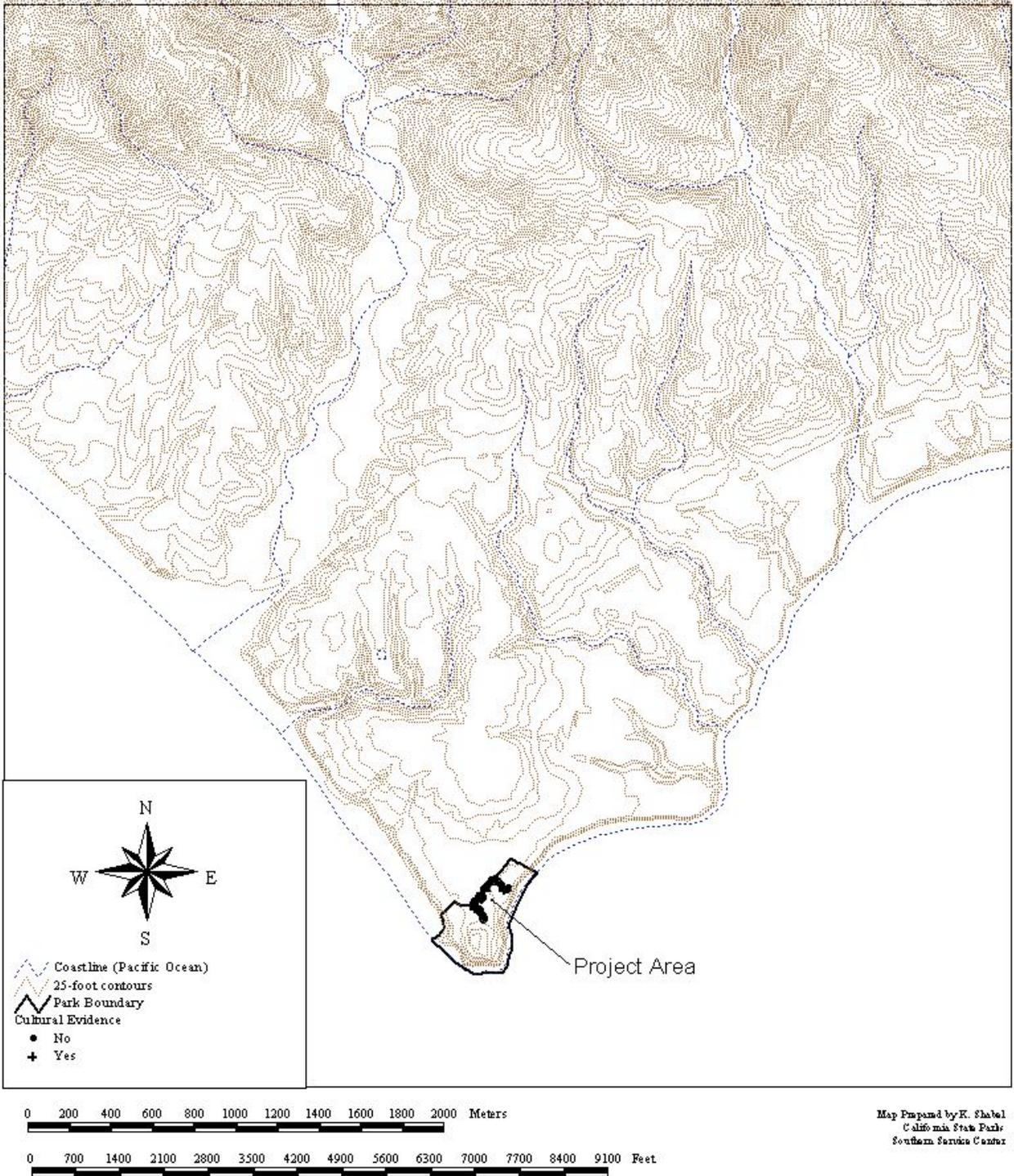
Auger tests were concentrated along the three segments of the proposed boardwalk. Segment 1 runs along an existing trail that begins at the parking area and ends at a proposed overlook. Eight augers (augers 1-8) were placed at 20 meters intervals along the length of the trail (Figure 2). Auger holes were placed on alternate sides of the trail. An additional four augers (augers 9-12) were placed in the area of the proposed overlook. A four-inch barrel auger with a sand bit was used for all augers and each auger was dug at 10 cm intervals, down to 100 cm, except where noted. All sand was screened through 1/8" mesh screen.

Segment 2 approximately parallels the street and is the segment that will be built directly on the ground surface and not on piers, like the other two segments. Augers were placed every 20 feet along this segment (Figure 2). Auger distance was measured in feet to be more consistent with the construction plans. Seventeen augers (augers 13-29) were dug along this segment. Southern Service Center Landscape Architect, Rich Risner laid out the southwestern most part of this segment, which consisted of a U-shaped loop, to ensure the most accurate placement of our augers.

Segment 3 was laid out entirely by Rich Risner according to the construction design. This segment is the most complex and it cuts across a heavily vegetated area. Most of this segment will be raised on piers, which will be inserted at a depth of two to six feet, depending on location. Pin Flags were inserted at the locations of the piers and yellow flags on stakes were placed at the location of the "rest stops" along the boardwalk. Sixteen augers (augers 30-45) were placed at all

“rest stop” locations (with one exception) with at least one auger between each “rest stop” (Figure 2).

**Figure 1: Location of Pt. Dume Natural Preserve**



**Confidential Map on File at California State Parks  
Southern Service Center San Diego, CA**

## RESULTS

Due to the large number of augers (45), results will be discussed by trail segment and not by individual auger. Auger tests that yielded positive results for cultural materials will be discussed in more detail when applicable. Most cultural material was encountered as we moved southwest along the line of augers, away from Trail Segment 1 and closer to Trail Segment 3.

### TRAIL SEGMENT 1

Augers 1-8 ran the length of the existing trail (Figure 3); while augers 9-12 are in the area of the proposed overlook point. In general, soils were very consistent with very fine, brown (Munsell: 10YR 4/3) silty sand. Two augers (1 & 9) also had dark brown (10YR 3/3) at the lowest depth (90-100 cm). Finally, the upper levels of auger 8 had light yellowish brown (2.5Y 6/3) soil and medium to coarse-grained inclusions. This auger was dug directly into the trail and not on the side of it, which probably accounts for the difference in soil color and composition.



Three of the eight augers along the existing trail had cultural evidence, although it was very sparse. Auger 2 yielded one piece of possible angular waste (50-60 cm) and one small chert flake (60-70cm). Auger 7 had one volcanic flake at 10-20 cm. This same level also had one fragment of clear glass. Auger 8 had one chalcedony flake between 60-80 cm. Almost all of the augers had small fragments of unidentified shell throughout, most appeared to be of recent origin. The low density of artifacts indicates that this area of the preserve is probably on the margins of the site.

Three of the four augers placed at the proposed lookout hit bedrock between 40 and 50 cm, with one (auger 10) terminated at 20 cm. Some of the silty sands in this area were a light olive brown (2.5Y 5/4 & 5/3), probably reflecting the nature of the bedrock below. Only auger 9 reached a depth of 100 cm and contained mostly gravel inclusions and only two pieces of shell.

## TRAIL SEGMENT 2

Trail segment 2 was composed of seventeen augers laid out roughly paralleling the street (Figure 4). Soil composition for the augers at Trail Segment 2 was similar to that of the previous segment. The upper levels contained very fine, brown (10YR 4/3) silty sand, with 5 – 10% gravel content. Most of the augers with positive cultural evidence also had a dark brown (10YR 3/3) component. In some cases, what appeared to be pulverized shell was mixed in. For the most part, these dark brown soils contained little to no gravel.



Figure 4: Overview of Trail Segment 2  
View: SW

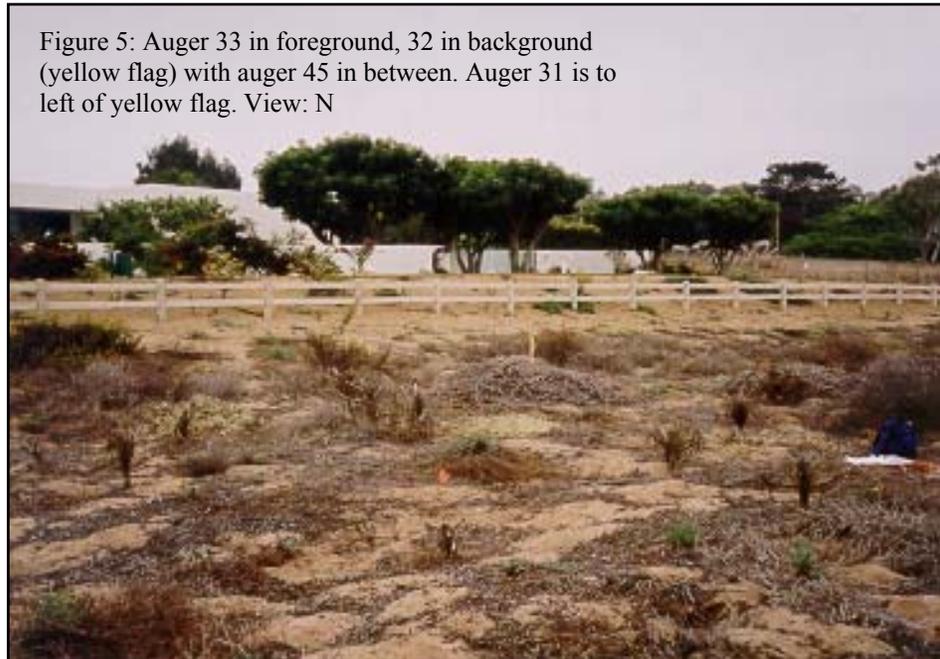
Nine of the seventeen auger holes tested positive for cultural evidence. Flakes, angular waste and shell were noted, although most augers had very low density of materials (i.e. one or two artifacts per auger). Six of the nine augers had material only below the 70 cm level. Auger 24 had the highest density, with artifacts in four levels (all below 60 cm). Even so, auger 24 contained only two flakes, one piece of debitage, and two small pieces of charcoal.

## TRAIL SEGMENT 3

Soils within this segment were generally brown (10YS 4/3) to dark brown (10YR 3/3), however, the lowest levels, have a more compact/moist component analyzed as either very dark brown (10YR 3/2) or very dark grayish brown (10YR 2/2). These darker soils were also associated with bits of pulverized shell and may represent an intact cultural or midden layer.

This trail segment had a much higher occurrence of artifacts than the previous two segments. Twelve of sixteen auger holes had cultural materials. The area with the highest artifact densities was the southwest segment contiguous to Trail Segment 2. Augers 30 – 32 and auger 34 all had multi-level artifact occurrences. Auger 33 appeared to be an exception, with sterile soils through all levels but one (a chert flake at 80-90 cm). Cultural materials were more common in the lower levels (70 cm and below), but they were also scattered throughout higher levels as well. The lower-level artifacts from the above augers generally occurred in the very dark brown midden-type soil described above. Because of higher artifact densities, another auger (45) was placed between auger 32 and 33 (Figure 5). Auger 45 also contained artifacts throughout multiple levels and also contained the very dark brown midden-type soil described above.

The most commonly occurring artifacts were shell fragments and debitage (Table 1). *Mytilus* appears to be the most frequently occurring shell, while debitage included both flakes and angular waste. Much of the debitage is chert, but other materials, such as volcanics and quartzite also occur. It should be noted that although the augers in Trail Segment 3 have higher occurrence of artifacts, it is still a relatively small number of items. Some of the augers, especially those already mentioned, appear to have greater depth of deposit, but could not be explored further because an auger extension was not available.



## FAUNAL REMAINS

### Shellfish

The auger tests at CA-LAN-454 resulted in the collection of 608 total marine shell fragments. Most of the shell collected was unidentifiable, but of the speciated shell, *Mytilus* was the most common. Most of the marine shell collected consisted of bivalves such as *Mytilus*, *Ostrea*, *Tagulus*, *Tivela*, *Saxidomus*, and *Semele*. There were a few gastropods recovered including *Tegula*, *Limpet*, and *Balanus*. There was also one fragment of *Chiton* shell recovered. Most of the shell that was collected had associated flakes. No burned shell was found. The shell in the upper levels appeared to be relatively recent so it was not collected. Shell found in augers 32, 34, 40, 42, and 45 were associated with a dark brown soil and pulverized shell. Shell found in the lower levels of the auger appeared to be highly weathered.

*Mytilus sp.* consisted of 34% (N=206) of the shell collected from the auger tests. *Tivela* was the next highest found, at 2.4% (N=16), followed by *Ostrea* and *Balanus*. Most of the shell species were only represented by only one to two pieces. In all there were 680 shell fragments recovered from the augers, there were no whole shells found. Out of the 680 shell fragments recovered 96.5% was found in recovered augers (auger 31, 16.8%; auger 32, 51.3 %; auger 34, 14.7%; and

auger 45, 13.7%). The rest of the shell recovered from the augers makes up 3.5 percent of the total marine shell found in the test augers. No shellfish samples were submitted for analysis at this time.

## **Bone**

Most of the bone found at CA-LAN-454 was small to medium-sized mammal bone. The mammal bone makes up 72 percent of all of the bone found in the forty-five augers. Reptile bone is the next highest at 12 percent, then rodent at 8 percent, and finally fish and skate at 4 percent. Most of the different types of bone came from auger 32, which made up 32 percent of the bones found. Of the bones found in auger 32, 12 percent were reptile, 4 percent were fish, and 16 percent were mammal. Most of the mammal bone came from auger 34 it made up 40 percent of the total bones found. The skate plate came from auger 30. The rest of the bone comprising of 24 percent of the bones found came from augers 45, 4, and 36.

The mammal bone was far too fragmented to identify species, however the bones did belong to mammals ranging in size from small to medium. The three burnt mammal bone fragments were found in auger 34 at 100-110 centimeters. They are too small to identify the bone element. The burnt bone is possibly evidence of cultural manipulation. The appearance of the skate plate, possibly from the Santa Monica Bay) and fish vertebra (shark) could also be cultural but without excavation of a unit it is not possible to tell.

## **LITHIC MATERIALS**

### **Debitage**

Lithic materials were recovered in the form of angular waste and flakes. Forty-seven flakes and 44 pieces of angular waste comprise a total of 91 flaked stone artifacts. The predominant material type is chert (70% of flakes, 80% of angular waste) with volcanic, fused shale, chalcedony, mudstone, quartz, and quartzite also represented. Although debitage was found in all levels, the highest occurrences were found between 70 and 110 cm (51%). Augers 29-34 & 45 have the highest concentration of lithic materials. Fifty-three percent (N=25) of all flakes and 82% (N=36) of all angular waste was recovered within these seven augers.

No lithic tools were recovered from the auger tests. The absence of tools may indicate that they were not needed for activities taking place in these areas. In addition, the absence of cores or partially formed tools indicates that this was not a tool manufacturing area.

## **OTHER MATERIALS**

### **Ochre**

Ochre was very common in previous excavations at CA-LAN-454 (Dallas and Mealey 1998:23) however, only one piece of red ochre was recovered during auger testing. There was not enough ochre recovered to either affirm the hypothesis of the site as the locus of religious activity.

**Table 1: Artifact Summary, by Depth**

	Angular Waste (Shatter)	Flake	<b>SUBTOTAL</b>	<i>Mytilus Sp.</i>	Balanus	Chiton	Ostrea	Limpet	Tagulus	Tegula	Donax	Saxidomus	Semele	<i>Tivella Sp.</i>	<i>Unidentified Gastropod</i>	Unidentified Bivalve	Unidentified Shell	<b>SUBTOTAL</b>	Mammal Bone	Reptile Bone	Fish Vertebra	Skate Plate	Rodent Bone	Burned Bone*	<b>SUBTOTAL</b>	Glass	Plastic	Metal	<b>SUBTOTAL</b>	Ochre	Charcoal	Wood	<b>SUBTOTAL</b>	TOTALS*
<b>00-10 cm</b>	1	1	2														0							0	11	6	4	21				0	23	
<b>10-20 cm</b>		4	4														0							0	9	4	7	20				0	24	
<b>20-30 cm</b>		1	1														0	1						1	7	4	5	16				0	18	
<b>30-40 cm</b>		3	3														0				1			1	3	1		4				0	8	
<b>40-50 cm</b>	4	2	6				1										1							0	3	1		4				0	11	
<b>50-60 cm</b>	5	3	8	1													1	2						2	2	1		3				0	14	
<b>60-70 cm</b>	3	4	7	3													24	27						0								0	34	
<b>70-80 cm</b>	5	6	11	13								1				2	32	48		2			2	4	1			1				0	64	
<b>80-90 cm</b>	8	3	11	25					1					4			62	92	2					2	2			2				0	107	
<b>90-100 cm</b>	6	8	14	43	1		6					1	1	6			71	129	3					3								0	146	
<b>100-110 cm</b>	3	8	11	40		1								1			51	93	5	1				6					1	2		3	113	
<b>110-120 cm</b>	7	2	9	53	1									3	1	5	111	174	5				3	5								0	188	
<b>120-130 cm</b>	2	2	4	28	4			1		1	1			2			78	115			1			1								0	120	
<b>TOTALS</b>	44	47	91	206	6	1	7	1	1	1	1	2	1	16	1	7	429	680	18	3	1	1	2	3	25	38	17	16	71	1	2	0	3	870

\*Burned Bone is included in other bone categories so it is not counted separately in the totals.

## **Charcoal**

Charcoal was recovered from auger 39 at 40-50 cm. This auger was devoid of other cultural material, including modern trash. Due to the fragmentary nature of the charcoal, no samples were submitted for C-14 analysis.

## **HISTORIC / MODERN ARTIFACTS**

No significant historic material was found. Modern trash including glass, plastic, and metal was common in the assemblage. Forty nine percent (N=22) of all augers had trash in at least one level. It is interesting to note that Trail Segment 3 had a lower occurrence of trash, especially in the more heavily vegetated areas. The highest concentrations of surface trash were along Trail Segment 2, which parallels the fence and street and is easily accessible by visitors.

## **RECOMMENDATIONS**

Cultural remains are present, in differing densities, throughout the site area. The low artifact densities recovered cannot provide a completely clear picture of the nature of the archaeological deposit in the project area. Cultural materials appear to be buried at least 50 cm under the soil in most areas tested, with many of the higher density areas continuing below the depth of the auger (100-120 cm). The main area of concern is the area around the end of trail segment 2 and the beginning of trail segment 3 (augers 29 – 34 & 45), where some of the augers were not deep enough to reach sterile soil below cultural layers.

Considering the importance of such a coastal site and the occurrence of scattered artifacts throughout the project area, monitoring and some surface collection should be a condition of all ground-disturbing boardwalk construction activities. Particular attention should be paid to the area around augers 29-34 and 45, as this area appears to have a fairly dense artifact occurrence. A small unit may be appropriate in order to determine the depth of the deposit and breadth of artifact assemblage in that area.

### **Report by:**

**Karen Shabel, Archaeological Project Leader**

**Sarah Jenkins, Archaeological Project Leader**