

MOUNTAINS RECREATION AND CONSERVATION AUTHORITY

Existing Conditions and Opportunities **Lechuza Beach Public Access Improvement Plan**



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March 2007

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INTRODUCTION

In Spring 2002, the Mountains Recreation and Conservation Authority (MRCA) acquired spectacular Lechuza Beach, near Matador State Beach in Malibu. Purchased with a grant from the State Coastal Conservancy, it is the first beach property ever acquired by the MRCA. The beach includes exquisite rock formations and views northward up the coast. With easy public access, Lechuza Beach is Malibu's first new public beach in 18 years.

Santa Monica Mountains Conservancy 2002 Annual Report

According to the Coastal Act of 1976, the Mountains Recreation and Conservation Authority (MRCA)—the public agency responsible for the management and maintenance of Lechuza Beach—is charged with providing “maximum public access and recreational opportunities . . . for all the people” at this new public beach. Both federal law (the Americans with Disabilities Act) and statewide code (Title 24 of the California Building Code) also require MRCA to provide access and facilities that are usable by people with disabilities. Although public access at Lechuza Beach may be “easier” than at other Malibu beach parks, it presents many challenges. Public parking is limited and all current public pedestrian access routes have barriers—such as stairways or steep roadways—that would prevent many people with disabilities from using existing routes. The goal of the Lechuza Beach Public Access Improvement Plan is to provide an independent, meaningful and equivalent experience for all park users—including people with limited physical mobility, low vision, hearing difficulty, or cognitive impairment—that is not necessarily available at other public beaches along the Malibu coastline and that meets applicable federal, state, and local requirements.

Improved public access at Lechuza Beach has two components:

1. improvements to the routes available to park visitors from public transit and parking opportunities to the beach (**public access**) and
2. providing an equal experience for all visitors at the beach itself (**beach access**).

This plan proposes to provide improved public access entry points that are integrated into the existing neighborhood and that respect coastal natural resources.

On May 19, 2006, several members of the Design Team¹ conducted a site visit to review existing conditions and opportunities at Lechuza Beach and to provide recommendations that support the project goals for public access to and visitor enjoyment of the beach. The recommendations from this site visit were further reviewed with regard to the legal requirements for public access outlined in the following section. As a result, additional options for meeting the project's goal of providing improved and equal public access are considered in this report, which presents a brief analysis of this site's opportunities and constraints, including:

¹ Cathleen Summers, MEHOA, Shari Plummer, MEHOA, Laurel Kelly, MIG, and Yuri Kilburg, MIG

- **Site Conditions**
 - **Summary of Legal Requirements:** for providing public access in general, accessibility for persons with disabilities, and safety
 - **Visitor experience**
 - **Views:** from the beach, on public access routes to the beach and views of the beach from neighboring residences
 - **Environmental considerations:** biology, hydrology, soils/geomorphology

- **Public Access: Pedestrian Access**
 - **Improved on-street public access via East and West Sea Level Drive**
 - **Improved off-street public access via Lot I corridor**
 - **Improved beach-level access**
 - **Existing park entries:** accessibility, aesthetic, and security concerns regarding pedestrian entry gates at Broad Beach Road intersections with East Sea Level Drive, West Sea Level Drive and Bunnie Lane, including signage, accessible routes to the gates, accessible routes from the gates, gate configuration and hardware, security, and access
 - **New park entry:** feasibility of providing a new pedestrian entry near the intersection of Pacific Coast Highway and Broad Beach Road
 - **Pathway and stairways** at Bunnie Lane/Broad Beach Road (Lot I) and West Sea Level Drive: maintenance issues, security, accessibility, and safety concerns
 - **Overlook at West Sea Level Drive:** maintenance issues, security, accessibility, and safety concerns

- **Public Access: Parking and Transportation**
 - **On-street parking at Broad Beach Road:** accessibility and safety concerns regarding opportunities to provide public parking at existing park entrances
 - **On-street parking at Sea Level Drive:** accessibility, safety, and security concerns regarding opportunities to provide accessible parking for an improved beach access route at East Sea Level Drive and for the existing beach overlook at West Sea Level Drive
 - **Public transportation**
 - **Bicycle access**
 - **Potential traffic impacts**

- **Beach Access**
 - **Beach access route:** location, permanent versus temporary structures, beach access devices and storage

- **Design Guidelines**

This project proposes to provide integrated recreational experiences at Lechuza Beach for all visitors—with and without disabilities—by employing the principles of universal design. Where full compliance with accessibility guidelines and technical requirements is determined to be infeasible, public access routes and park facilities will incorporate those accessible features described in the design guidelines that can be reasonably accommodated in order to provide the greatest degree of accessibility for the widest range of abilities.

As stated above, the primary responsibility of MRCA and the goal of improvements recommended in this report are to provide a fully integrated beach experience for people of all ages and abilities at Lechuza Beach. The minimum requirement for fulfilling this responsibility is the establishment of a fully accessible beach access route (which has been defined in detail by the U.S. Access Board and which is a requirement of the State of California as outlined in the consent decree for *Tucker, et al v. State of California Department of Parks and Recreation, et al*—see **Appendix B**) as well as making required safety and accessibility improvements to park features such as stairs, entry gates and signage. While the exact location of a beach access route for Lechuza Beach has yet to be determined, critical constraints are the requirements for accessible public parking spaces and/or a passenger-loading zone serving the beach access route and an accessible route from parking/drop-off to the beach access route itself.

The only location in the study area that currently has the potential for easily meeting the criteria for a beach access route is the end of East Sea Level Drive, which has nearby on-street parking opportunities and a possible location for an accessible path of travel from parking to the beach. For this reason, recommendations resulting from the May 2006 site visit are focused on providing public access improvements on the section of East Sea Level Drive that parallels Lechuza Beach (between Lots 125 and 140) in order to connect to a beach access route in the area of the beach closest to the end of East Sea Level Drive.

Following the site visit, additional options for improvements to other routes (particularly off-street routes) that could connect to a beach access route were explored as well as opportunities for making additional improvements at the beach itself that would allow for greater flexibility in locating the beach access route, increased public safety, the protection of natural resources, and an enhanced experience for all park visitors.

SITE CONDITIONS AND OPPORTUNITIES

Existing Conditions

Lechuza Beach in Malibu is primarily a sandy beach (both wet and dry) with several interesting rock outcroppings along its almost one-quarter mile length. The beach is a combination of private and public ownership and has over 1,000 feet of public beach frontage (from the toe of the bluff to the Pacific Ocean) upcoast from the end of the public stairway opposite Bunnie Lane (at its highest elevation) and the end of the pavement on East Sea Level Drive (at its lowest elevation). A small private beach lot is located about forty-five feet west of the Bunnie Lane stairway and is only available for public use seaward of the mean high tide line and pursuant to a twenty-five-foot wide recreational easement. The public portion of Lechuza Beach was purchased for more than \$9,000,000 with a grant from the State Coastal Conservancy to the Mountains Recreation and Conservation Authority (MRCA). In addition, several lots on the beach were donated to MRCA (see Figure 1).



LECHUZA BEACH
VIEW TO THE SOUTHEAST

MRCA holds legal title to the beach itself and a narrow public access corridor (also known as Lot I), which has a gated park entry at the intersection of Bunnie Lane and Broad Beach Road and a series of stairways down to the eastern boundary of the beach.¹ MRCA has also secured deeded public access easements on both West and East Sea Level Drive. An additional easement adjacent to Lot I (on its western edge), which increases the width of that corridor by five (5) feet in the section closest to Broad Beach Road and ten (10) feet in the section nearest the beach, is owned by the State Coastal Conservancy. Finally, MRCA has received offers to dedicate public access easements (OTD) on three beachfront lots east of Lot I; however, public access improvements discussed in this report are not proposed at these three locations (see Figure 1). More detailed examinations of existing conditions and opportunities for MRCA properties such as the mid-block pathway (Lot I) and the overlook are found in the following section on ***Pedestrian Access***.

The extents of Lechuza Beach, including public access easements and park entry locations, are shown in Figure 2.

¹It appears that MRCA also owns fee title to an overlook at the terminus of West Sea Level Drive, which includes a stairway down to the western beach boundary.

All pedestrian park entrances are located on Broad Beach Road, which connects with Pacific Coast Highway at Trancas Canyon Road and again about 1.5 miles west (upcoast). Broad Beach Road is a public thoroughfare through a residential neighborhood. However, many of the connecting streets to the south are privately held. This is the case with the two reaches of Sea Level Drive, which roughly define the extents of both Lechuza Beach and those residences represented by the Malibu-Encinal Home Owners Association (MEHOA). Per easements granted to MRCA, the public has additional pedestrian access to Lechuza Beach via gated entrances at East and West Sea Level Drive as well as the right to establish up to four (4) accessible parking spaces on Sea Level Drive for vehicles displaying a Disabled Person Parking Placard or license plate.² The terminus of East Sea Level Drive has an elevation of about 20 feet above sea level and has the potential for providing beach level access for people with mobility disabilities. On the other hand, the terminus of West Sea Level Drive is more than 35 feet above sea level and does not provide this opportunity for easy access. A more detailed examination of public access to the beach is found in the following sections on ***Pedestrian Access*** and ***Parking / Transportation***.

²Although MRCA has deeded public access rights along West Sea Level Drive, it appears that the current route from Broad Beach Road to the pedestrian and vehicular gates is located on a private residential lot and not in the West Sea Level Drive right-of-way.

Summary of Legal Requirements

The Lechuza Beach Public Access Improvement Plan is subject to federal, state and local government requirements regarding the provision of public access in general, safety and accessibility for park visitors with disabilities.

Public Access

The California Coastal Act (1976) directs public agencies that own and/or manage beach properties to provide “maximum public access and recreational opportunities...for all people.” The California Public Resources Code also encourages the provision of public access between the sea and the first public road (Section 30212) as well as the geographic distribution of public access facilities so as to avoid overcrowding of any single area (Section 30212.5). The City of Malibu’s Local Coastal Program (2002) Policy 2.1 states, in part:

The shoreline, parklands, beaches and trails located within the City provide a wide range of recreational opportunities in natural settings which include hiking, equestrian activities, bicycling, camping, educational study, picnicking, and coastal access. These recreational opportunities shall be protected, and where feasible, expanded or enhanced as a resource of regional, state and national importance.

Accessibility for Persons with Disabilities

The Americans with Disabilities Act (ADA) is a comprehensive civil rights law for persons with disabilities in both employment and the provision of goods and services. The ADA states that its purpose is to provide a “clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities.” Congress has emphasized that the ADA seeks to dispel stereotypes and assumptions about disabilities and to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for people with disabilities. The Lechuza Beach Public Access



EQUAL ACCESS
TO OUTDOOR RECREATION

Improvement Plan is prepared in fulfillment of the requirements set forth in Title II of the ADA, which states that a public entity must reasonably modify its policies, practices or procedures to avoid discrimination against people with disabilities.

The U.S. Access Board has developed two sets of guidelines that apply to improvements at Lechuza Beach that are intended to provide accessibility for persons with disabilities under the requirements of the ADA: *ADA Accessibility Guidelines for Buildings and Facilities* (ADAAG), which address requirements for public facilities such as parking, entries, stairs and walks, and the Regulatory Negotiation Committee’s Final Report on *Accessibility Guidelines for Outdoor Developed Areas*, which addresses requirements for many public facilities not specifically addressed in ADAAG, such as beach access routes.

As part of the Consent Decree that summarizes the recent settlement of the class action suit, *Tucker, et al v. State of California Department of Parks and Recreation, et al* (filed in U.S. District Court in the Northern District of California in 1998 and in San Francisco Superior Court in 1999), the Department of Parks and Recreation has committed to a comprehensive plan for improving access for park visitors with mobility and sensory disabilities so that they can fully participate in

the many recreational programs offered at California State Parks. For example, the Department has extensively revised the *California State Parks Accessibility Guidelines* to incorporate improved access standards, which will be used as the standard for implementing access improvements pursuant to the Consent Decree. All of the accessibility modifications and accommodations provided by the Department of Parks and Recreation will comply with federal and state standards of accessibility, whichever applies and provides the higher level of access. All new parks acquired and/or new construction undertaken by the Department will conform to the applicable access requirements. The Department will make park activities (including bicycling, exhibits/interpretive programs, fishing, hiking, picnicking, and water access) programmatically accessible. The Department will make supporting facilities—such as park entrances, parking, paths of travel and signage—programmatically accessible, which is the norm for public projects. The Lechuza Beach Public Access Improvement project shall comply with the *California State Parks Accessibility Guidelines*. The Consent Decree is included as **Appendix B** of this report.

The California Code of Regulations, Title 24, Part 2 mandates that all publicly funded buildings, structures, and related facilities shall be accessible to and usable by persons with disabilities. Title 24 includes specific requirements related to accessibility for many public facilities also addressed in ADAAG.

Safety

In addition to providing accessibility requirements, Title 24 of the California Code of Regulations also provides requirements for safety features for public facilities (such as guardrails on elevated structures).

Visitor Experience

Lechuza Beach provides a unique visitor experience for Malibu beachgoers. Unlike Zuma Beach, which is located about three miles to the east, Lechuza Beach is a cove, sheltered from highways, roads and commercial operations by seventy-foot bluffs at its northern edge. It is relatively isolated, with no close-up public parking (such as at Zuma Beach), and supports more contemplative activities such as walking, picnicking and wildlife viewing. Other beach recreational activities include running, swimming, surfing, kayaking, fishing, snorkeling and diving. Although there are beachfront homes with private beaches along the paved portion of East Sea Level Drive directly to the east, there are no private residences along the length of Lechuza Beach itself, which makes for a more intimate beach experience for all users—visitors and residents alike.

Lechuza Beach does have easier public access than two nearby beaches and, therefore, has the greatest potential for providing a year-round, safe and accessible beach experience for park visitors of all ages and abilities. Public access at Broad Beach (a private beach approximately 1,850 feet to the east of Lechuza Beach) is quite limited, with only two vertical access routes (twenty feet wide) and lateral access that is restricted to the section of beach seaward from the mean high tide line or the daily high water line. El Matador State Beach, about one-quarter mile to the west of Lechuza Beach, is a “pocket beach” with a single point of access—a dirt trail leading from the public parking area on the bluffs to a steep stairway down to the beach. The majority of pedestrians who visit Lechuza Beach via tidelands come from El Matador State Beach.

Opportunities

It is recommended that priority be placed on providing public access to Lechuza Beach for park users of all ages and abilities. The unique setting and the potential for improved public access provide an unparalleled opportunity for recreational, interpretive and educational features for a sector of the population that is not otherwise accommodated in Malibu.

Views

Spectacular views are available from Lechuza Beach itself and from several vantage points along the vertical access routes. Lechuza Beach itself is not visible from Pacific Coast Highway.

East Sea Level Drive

Houses are located on the north side of the road along most of the section that parallels the beach and they do not block views from the road to the beach and ocean.

West Sea Level Drive

A sheltered overlook at the end of road provides a panoramic view of the ocean from about thirty-five feet above sea level.

Lot I (Bunnie Lane/Broad Beach Road)

Although views to the beach and ocean are not available at the pedestrian entry gate, there are significant viewing opportunities along the lower stairway.



LECHUZA BEACH
VIEW TO THE NORTHWEST

Lechuza Beach

Ocean views to the south and west are unobstructed from the beach itself. Views to the west feature sandy beach, rock outcroppings, and bluffs (with some private residences visible), while views to the east feature beachfront homes in closer view and Zuma Beach in the distance. Private stairways and bluff-top residences to the north are also visible from the beach.

There are views of the beach from private residences to the east. Although the beach is undoubtedly visible from the southern edge of the private lots on the bluffs above the beach, it may not be visible from the residences themselves.

Opportunities

Views to the beach

- It is recommended that all beach-viewing opportunities be enhanced where feasible. In general, landings at stairways and ramps should be configured to maximize views, with benches and interpretive features included at selected locations. The overlook at West Sea Level Drive, which is discussed in the ***Pedestrian Access*** section of this report, should be renovated to meet current safety and accessibility standards. It provides a unique beach experience with magnificent views for people unable or unwilling to travel down to the beach on the stairway at this location.

Views of the beach

- It is recommended that, wherever possible, consideration be given to locating improvements so that they do not block neighbors' existing views of the beach. In addition, screening is recommended to block neighbors' views of improvements in general.

Environmental Considerations

Protecting, conserving, restoring and enhancing the resources of this stretch of coastline and ocean are vital components of the Lechuza Beach Public Access Improvement Plan. According to the California Coastal Commission, California has lost ninety percent of coastal wetlands that originally existed, and almost every major coastal river has been dammed or canalized in concrete, which deprives coastal estuaries of freshwater and robs beaches of sand.

Existing Conditions

Biology

Lechuza Beach has been described by the neighbors as a “living beach,” with a thriving kelp bed and a wide range of marine animal life. The offshore area in proximity to Lechuza has been recognized in State Board findings as being an Area of Special Biological Significance and in a natural state with the largest open coast kelp beds remaining in the region. Since it is located on a major route of the Pacific Flyway, the beach is also visited by many local and migrating birds.

The general area is subject to wildfires, which are an inherent threat in the native chaparral plant community. However, much of the native coastal bluff plant community has been replaced by ornamental plantings. Invasive non-native plants that threaten wildlands in California were observed on both private and public areas on and in the vicinity of Lechuza Beach. For example, iceplant (*Carpobrotus spp.*) was observed at the stairway near the end of East Sea Level Drive.



ICEPLANT AT
EAST SEA LEVEL DRIVE

Hydrology

There are no surveyed creeks in the area between West and East Sea Level Drive; however, there is a riparian corridor immediately to the west of Sea Level Drive. Several recent landslides and slumps due to uncontrolled drainage were observed along the slope directly north of Lechuza Beach and at the walkway between the sets of stairs in the mid-block pathway from Broad Beach Road and Bunnie Lane (Lot I) to the beach. Drainage structures, which may empty directly onto the beach, were also observed at various locations along the bluffs above the beach.

Soil Conditions / Geomorphology

The Santa Monica Mountains area, in which Lechuza Beach is located, is subject to such geologic hazards as landslides, erosion and flooding, including flooding and erosion from storm waves, storm surges and high tides. Although a geologic investigation was not conducted at the time of the site visit, it was observed that the bluffs above Lechuza Beach currently support constructed features such as stairways, decks and private residences. However, all development along the Malibu coast is at risk and many areas have received extensive damage from storm-triggered mudslides and landslides (1977 and 1978) and El Niño high tides and storm waves (1982 and 1983).

Opportunities

The following recommendations for further study include proposals to protect and enhance the project area's natural resources while providing easier access for an improved visitor experience.

- A controlled study by a qualified biologist will be provided as part of the environmental review to evaluate existing biologic resources, potential impacts and the need (if any) for mitigation measures. This study will evaluate, among other issues, the potential for plant or animal species of special concern within the project area or that may be affected by improvements proposed in this plan.
- Hillside drainage at all properties should be addressed as part of this project. It is recommended that property owners within the project area take measures to protect the beach and the hillside from further damage due to water runoff and to protect water quality in offshore areas.
- Where invasive non-native plant removal and/or habitat restoration are required or appropriate, it is recommended that the planting palette be developed with the guidance of environmental specialists on the Design Team.
- Detailed engineering studies will be conducted to determine the feasibility of any improvements as part of this plan, particularly those that may be affected by soil conditions or slope stability.

PUBLIC ACCESS EXISTING CONDITIONS AND OPPORTUNITIES: PEDESTRIAN ACCESS

This section describes existing pedestrian public access to Lechuza Beach from three park entry points on Broad Beach Road (a public right of way) along separate routes through a private residential development in Malibu.

Existing conditions and opportunities for improvements to public access are first summarized for each major route. Entries, pathways, stairways and the overlook are then examined in more detail and recommendations are provided for required safety and accessibility improvements that would enhance general visitor enjoyment and provide increased accessibility for people with disabilities.

A more detailed examination of and recommendations for beach-level access are found in the *Beach Access* section of this report. Once park visitors reach the beach via the stairways from the West Sea Level Drive overlook, from the deck at the end of East Sea Level Drive or through Lot I, there are no opportunities for people with disabilities to cross the sandy beach to reach the ocean or travel from one end of the beach to the other.

Public Access Routes

Existing Conditions and Opportunities

None of the public access routes to Lechuza Beach have walks, pathways or trails that meet the definition of an accessible pedestrian path of travel under the Americans with Disabilities Act (ADA) or Title 24 of the California Building Code.

On-Street Public Access via East and West Sea Level Drive

In addition to the Lot I corridor described below, pedestrian access to Lechuza Beach occurs in the roadway of both reaches of Sea Level Drive. Currently, there is no designated pedestrian access route or even a pedestrian circulation path from Broad Beach Road to the terminus of either West or East Sea Level Drive at the overlook and at Lechuza Beach.¹ In fact, under Title 24 of the California Building Code, the public access routes along these streets meet the criteria of a walkway in a hazardous vehicular area (that is, the pedestrian areas and vehicular areas are not separated by curbs, railings or continuous detectable warnings).

Public access from Broad Beach Road to Lechuza Beach via West Sea Level Drive consists of a pedestrian access easement in the roadway to an overlook and stairway at the end of the street. Both vehicular and pedestrian access to the overlook and stairway are currently in question, since the driveway connecting Broad Beach Road and West Sea Level Drive is privately owned.

¹As defined by the final report of the U.S. Access Board's Public Rights-of-Way Advisory Committee, a **pedestrian circulation path** is a prepared exterior or interior way of passage provided for pedestrian travel and a **pedestrian access route** is an accessible portion of the general pedestrian circulation path that has a specified minimum width and cross slope, among other properties, and may include walkways, sidewalks, street crossings and crosswalks, and overpasses and underpasses, courtyards, elevators, platform lifts, stairs, ramps and landings. Where sidewalks are not provided, pedestrian circulation paths may be provided in the street, highway, or shoulder unless pedestrian use is prohibited. Because of the constraints imposed by right-of-way width, a pedestrian access route is relieved of the slope limits (but not the cross slope limits) that would apply to an accessible route on a site, provided it matches the general grade of the adjacent roadway.

Direct beach-level public access via a roadway occurs only at the end of East Sea Level Drive. Public access from Broad Beach Road to Lechuza Beach via East Sea Level Drive consists of a pedestrian access easement in the roadway.

MRCA has the deeded right to establish four public parking spaces at Sea Level Drive for visitors displaying a Disabled Person Parking Placard or license plate.

As noted above, neither reach of Sea Level Drive has sidewalks or designated pedestrian routes. Speed bumps in the roadway, combined with generally steep roadbed slopes and cross slopes, contribute to creating routes that are inaccessible and even unsafe for some people with disabilities.



EAST SEA LEVEL DRIVE

Off-Street Public Access via Lot I Corridor

A mid-block pedestrian route from the intersection of Broad Beach Road and Bunnie Lane provides the only off-street beach-level public access. Fee title on the portion of the easement known as “Lot I” is owned by MRCA, with an additional five-to-ten foot wide public access easement area to the west, which is owned by the State Coastal Conservancy. Although the northern section of this route is relatively level, several stairways through the narrow easement are required to reach the beach. This section addresses general improvements in the off-street public access route at Lechuza Beach. Existing conditions and opportunities for required safety and accessibility improvements in the Lot I corridor are described in more detail in the following subsection: *Existing Pathway and Stairways*.



EXISTING GATE AT LOT I

Opportunities

The following summarize the opportunities related to providing improved public access in general along the major public access routes.

Improved Public Access at East Sea Level Drive for All Park Users

There are many potential benefits to be gained by making public access improvements in this location.

- In order to provide improved access to Lechuza Beach from the intersection of Broad Beach Road and East Sea Level Drive, accessibility improvements to the pedestrian gate are recommended (see the following subsection on *Park Entries*). By removing all architectural barriers to access at this location and providing detailed information about the accessibility and safety of the pedestrian route from the gate to the beach, MRCA will better meet the needs of many park users who are currently unable to approach or operate the pedestrian gate. It should be noted that the California Coastal Commission (CCC) has determined that both the pedestrian and vehicular gates in this location are unpermitted.

- A key component of improved public access is the availability of parking opportunities on Broad Beach Road near the intersection with East Sea Level Drive.
- The provision of accessible parking spaces nearby the beach-level public access point is also recommended. MRCA has the right to provide four (4) accessible parking spaces on Sea Level Drive, although it has discussed limiting the number to two (2) spaces. It is recommended that these spaces be located as close to the new beach access route as possible. In any case, they must be connected to the beach access route on Lot A (Lechuza Beach) by a pedestrian access route that is separated from other vehicular traffic. A system of allowing access to the public accessible parking spaces on either a full-day or part-day basis for park visitors is also required. Beach-level access and parking / transportation are described more fully in following sections.

Improved Public Access at West Sea Level Drive for All Park Users

The potential for improved public pedestrian access at West Sea Level Drive is similar to East Sea Level Drive. An increase in parking opportunities is recommended on Broad Beach Road at its intersection with West Sea Level Drive, as is the removal of architectural barriers at the existing pedestrian gate or the construction of a fully accessible pedestrian gated entry within the Caltrans right-of-way at PCH (both of which are described more fully in following sections).

- Since there is currently no accessible pedestrian route from parking opportunities, transit stops or passenger loading zone locations at Broad Beach Road or Pacific Coast Highway to the Lechuza Beach overlook and stairway at the terminus of West Sea Level Drive, it is recommended that opportunities for accessible parking spaces and a passenger loading zone for persons with disabilities at the overlook be investigated in order to provide a full and equivalent visitor experience. (As is the case with the gates at East Sea Level Drive, the CCC has determined that both the pedestrian and vehicular gates in this location are unpermitted.) For this reason, a system of allowing access to parking and/or a new passenger-loading zone adjacent to the overlook for park visitors is also required in this location.
- In order to provide an inclusive park user experience, accessibility and safety improvements are recommended at the overlook. Replacement of the existing stairway from the overlook to the beach with a new stairway that meets current safety and accessibility standards is also recommended. Both of these improvements are described more fully in the following sections.

Improved Public Access at Lot I for All Park Users

As described in the following section *Existing Pathway and Stairways*, existing conditions preclude replacing the stairs in the entire length of the Lot I corridor with a ramp or series of ramps that would meet code requirements for accessibility. However, stairs and amenities such as benches and trash receptacles that meet current safety and accessibility standards will provide a safer, more enjoyable and accessible experience, which will benefit all park visitors as well as residents.

Entries, Stairways, and the Overlook

Existing Conditions and Opportunities

Each of the existing public access features—entry gates, stairways and overlook—was surveyed to determine its current level of accessibility as described by the ADA Architectural Guidelines, Title 24 of the California Building Code, and the proposed U.S. Access Board *Accessibility Guidelines for Outdoor Developed Areas*. Opportunities for improving public access in general, providing increased opportunities for independent access to Lechuza Beach for visitors with disabilities, and creating a safer experience for all visitors are discussed for each park feature type. Accessibility guidelines are provided in **Appendix A** of this report for gates, overlooks, stairs and handrails, walks, ramps, trails and outdoor access routes as well as for elements that may be included along these routes at Lechuza Beach (such as trash/recycling receptacles, telephones, benches and trail signs).

Park Entries

All three park entrances are controlled by unpermitted pedestrian gates at Broad Beach Road. Unpermitted vehicular gates are also present at both intersections of Sea Level Drive with Broad Beach Road (vehicular access is discussed in the following section on ***Parking and Transportation***). In addition to existing park entrances, a new park entry from Pacific Coast Highway (PCH) is also considered in this section. Opportunities for each existing and proposed park entry follow the description of existing conditions.

Lot I (Bunnie Lane at Broad Beach Road)

The pedestrian park entry gate is located between private residences and is set back a few feet from the paved portion of Broad Beach Road where it intersects Bunnie Lane to the north. Public parking is currently available on the north side of Broad Beach Road.

The entry gate is not accessible. The required 60 inches of level space on the push side of the gate is not provided and adequate maneuvering space is not available at either side of the gate. Nearby plantings do not allow the gate to be opened fully and some low-hanging, thorny branches also reduce the vertical clearance to less than the required minimum of 80 inches. A smooth, uninterrupted bottom rail or kick plate that is 10 inches minimum in height is not provided at the push side of the gate. Directional signs to indicate the location of an accessible gate within the project area are not present at this location.



EXISTING GATE AT LOT I
BROAD BEACH ROAD/BUNNIE LANE

Opportunities

- It is recommended that the entry gate be modified or replaced with a gate that meets the accessibility guidelines described in this report.
- There is some latitude in repositioning the gate since the width of the corridor can be increased by five feet in this area as a result of the public access easement to the west. It is recommended, however, that the gate remain near Broad Beach Road rather than further south along the pathway. There are no significant beach

viewing opportunities or other amenities in the upper portion of the pathway that would be available to the public during the hours when the beach is closed.

- Plantings in the vicinity of the gate should be maintained so that they do not block the gateway or reduce the vertical clearance to less than 80 inches.
- Obstacles and/or hazards in the access route from parking spaces on Broad Beach Road to the gate should be removed.
- It is recommended that secure bicycle parking be provided at this location.
- Improved opportunities for public parking are described in the following section on ***Parking and Transportation***.

East Sea Level Drive at Broad Beach Road

Both the pedestrian park entry gate and vehicular gate are located between private residences and are set back about forty feet from the southeast corner of the intersection of Broad Beach Road and East Sea Level Drive. A short section of pavement runs from the corner toward the gate, but is interrupted by several non-native trees. Public parking is currently available on the north side of Broad Beach Road.

The entry gate is not accessible. Trees obstruct the access route from parking along the north side of Broad Beach Road to the gate. The required 60 inches of level space in front of the gate is not provided and adequate maneuvering space is not available at either side of the gate. There is no curb cut on either side of the gate. The gate requires more than 5 lbs of pressure to open. A smooth, uninterrupted bottom rail or kick plate that is 10 inches minimum in height is not provided at the push side of the gate. Directional signs to indicate the location of an accessible gate within the project area are not present at this location.



APPROACH TO ENTRY GATE AT
EAST SEA LEVEL DRIVE



ENTRY GATE AT
EAST SEA LEVEL DRIVE

Opportunities

- Even though it is unlikely that the pedestrian routes from available public parking on Broad Beach Road to the gate and from the gate to the end of East Sea Level Drive can be improved so that they are fully accessible, it is recommended that the entry gate be modified or replaced with a gate that meets the accessibility design guidelines described in this report.
- Providing curb cuts, relocating the non-native trees on either side of the gate, removing the short section of fence beyond the gate, and extending the sidewalk (in addition to modifying or replacing the existing gate) would provide an accessible route from parking on Broad Beach Road to and through the pedestrian entry gate.
- Relocating the pedestrian gate into the roadway would appear to require modifications to the existing vehicular gate as well. If it is not possible to remove the obstacles in the access route on either side of the pedestrian gate, it may be necessary to replace the entire gate structure.

West Sea Level Drive at Broad Beach Road

The gates (both pedestrian and vehicular) are located about forty feet west of the intersection. From a review of recent surveys, more than 150 feet of West Sea Level Drive in this area appear to be within the property lines of private residences. In addition, vehicular and foot traffic are routed in close proximity to the entrance of the residence nearest to the intersection.

The pedestrian entry gate is not accessible. The route from parking available on Broad Beach Road to the entry gate has a 7 to 9 percent slope. The required 60 inches of level space in front of the gate is not provided on both the push and pull sides of the gate. The gate handle requires grasping and more than 5 lbs of pressure to open.

Although the width of the gate is 40 inches, the swing of the gate is less than 90 degrees and the required clearance of 32 inches is not provided. A smooth, uninterrupted bottom rail or kick plate that is 10 inches minimum in height is not provided at the push side of the gate. Directional signs to indicate the location of an accessible gate within the project area are not present at this location.



WEST SEA LEVEL DRIVE &
BROAD BEACH ROAD INTERSECTION

Opportunities

- Even though it is unlikely that the pedestrian routes from available public parking on Broad Beach Road to the gate and from the gate to the overlook and stairway can be improved so that they are fully accessible, it is recommended that the entry gate be modified or replaced with a gate that meets the accessibility design guidelines described in this report.
- It is recommended that the feasibility of constructing a new park entry directly from Pacific Coast Highway to West Sea Level Drive be investigated. Relocating the public pedestrian park entry gate from its present location to a new location on Pacific Coast Highway would avoid the issue of making improvements to features that are not on public property. Existing conditions and opportunities for this option are discussed later in this report.
- Although there is no buffer or setback between the roadway and the residence at the intersection of West Sea Level Drive and Broad Beach Road, it is recommended that, if possible, an accessible pedestrian entry remain in this location to provide access for visitors and residents to West Sea Level Drive.



GATED ENTRY AT WEST SEA LEVEL DRIVE

New Park Entry at Pacific Coast Highway

The public right-of-way at Pacific Coast Highway (PCH) offers the potential of providing an alternate pedestrian entrance directly from PCH to West Sea Level Drive. Park visitors could arrive by private car (which would require parking along PCH), bicycle (which would require secure bicycle parking at PCH), or public transportation / paratransit (which would require safe passenger loading zones at PCH and a safe pedestrian crossing).

Opportunities

- It is recommended that the feasibility of constructing an accessible pedestrian route (such as a ramp or series of ramps) directly from Pacific Coast Highway to West Sea Level Drive be investigated. A stairway, however, may be the more feasible option due to the width of the easement and the steepness of the slope in this location.
- It is recommended that secure bicycle parking be provided at this location.



VIEW FROM PACIFIC COAST HWY

Existing Pathway and Stairways

Lot I Pathway

The public access easement through Lot I is a narrow corridor approximately 300 feet long with a 65-foot elevation change (see Figure 3). Most of the corridor is owned by MRCA with an adjacent public access easement to west (described below), which is owned by the State Coastal Conservancy. The pathway is divided into three sections: the upper section, which runs south for about 165 feet from the entry gate at the intersection of Bunnie Lane and Broad Beach Road; the midsection, which is fairly level and runs east/west for about 40 feet; and the lower section, which runs north/south for about 95 feet and terminates at a deck at the same elevation as the terminus of East Sea Level Drive (approximately 20 feet above sea level). The public access easement on a private lot to the west adds five feet to the width of the upper and middle sections (for an overall width of 15 feet) and 10 feet to the lower section (for an overall width of 20 feet). Although these stairs are located on the coastal bluffs that are included in the Lechuza Beach area, the Coastal Commission has found that they have the beneficial impact of minimizing erosion on the bluff and the loss of bluff vegetation and habitat that would result from multiple vertical access routes.

Beach-level access is provided by a set of wooden stairs from the deck at the terminus of East Sea Level Drive. There is currently no access from these stairs across the sandy beach to the mean high tide line at the ocean.

The pathway and stairways in this area have maintenance, security, accessibility and safety concerns. The overall pathway from the entry gate to the beach is not accessible. None of the stairways meet California Building Code requirements.

Upper Section

The upper section has a path with a soft surface (soil), several short sets of stairs, and a relatively steep set of stairs. The residence on Lot 20 (to the east) is located less than 5 feet from the public access easement in the Lot I corridor.

A short wooden stairway with four (4) risers occurs just a few feet from the entry gate. There are no handrails at this set of stairs. The path between this set of stairs and the next has a slope that varies between 7 and 9 percent. The existing path is very narrow in this location (10 feet) with no setback from adjoining properties (with a chain link fence on the west side and a low timber retaining wall on the east side). Planting reduces the vertical clearance to less than the required minimum of 80 inches along portions of the pathway.



UPPER PATH AND STAIRS NEAR THE ENTRY GATE

A second short set of wooden stairs (similar to the first) occurs about midway in the upper section.

The risers on the third, steeper set of stairs are not uniform. Stair nosings do not have a two-inch strip of contrasting color. The timber stairs are worn and contain divots. Although handrails are present on both sides of this set of stairs, in some areas they are obscured by plantings. In general handrails at all sets of stairs do not have the required dimensions or upper and lower extensions.

Midsection

A recent slump or landslide was observed at the short section of boardwalk between the second and bottom set of stairs. There is a low timber retaining wall on the upslope side of the boardwalk. A low wooden guardrail separates the boardwalk from the fence at the northern end of Lot 84 but does not provide much visual screening or security for neighbors from the public right-of-way.

Lower Section

The timber risers on the bottom set of stairs are not uniform (varying between 5 and 7 inches high). Stair nosings do not have a two-inch strip of contrasting color. The stairs are steep and worn. There is a handrail on the east side of the stairs, which meets the requirements for height and width, but handrails are not present on both sides of all stair runs as required by code. The lower set of stairs and a discontinuous security fence are located about 5 feet from the western property line of Lot 84. The residence on this lot is located close to its western property line, at the approximate elevation of East Sea Level Drive. The stairs are closest to Lot 83, although the residence on this lot is located upslope in the vicinity of Broad Beach Road and more than 100 feet from the Lot I corridor.



UPPER SECTION:
THIRD SET OF STAIRS



MIDSECTION BOARDWALK



HANDRAILS ARE REQUIRED
ON BOTH SIDES OF STAIRWAY



STAIRWAY IN LOWER SECTION

Beach-Level Access

Several sets of timber stairs provide beach-level access from a 55-square-foot wooden deck at the base of the lower stairway in the Lot I corridor and from street-level at the end of East Sea Level Drive. There are several short sets of steps in the upper, east-west section, and a slightly longer run in the north-south section, which also has a handrail on one side. These stairs, which do not traverse the bluffs and are located on road fill within the wave runup zone, also do not meet code requirements.

Opportunities

- It is recommended that the existing stairways be replaced with new stairways that meet current safety and accessibility standards. In addition, the feasibility of providing overlooks and interpretive opportunities along this route should be investigated.
- The sections of pathway between each set of stairs should be regraded to have a slope of 5 percent or less and all tread obstacles and hazards should be removed. Where it is infeasible to achieve a 5 percent grade, it is recommended that ramped access be considered (such as from the pedestrian gate at Broad Beach Road to a new stairway in the upper section of this corridor). Some of the wider level landings at the ramp and the stairs could include benches and interpretive information.
- Both the upper and lower north-south sections of path are located in close proximity to residences. It is recommended that measures be investigated to screen views from the residences to the public access easements without restricting desired views to the ocean and/or other natural features. In addition, proximity to existing residences should be considered when locating improvements such as new stairs, benches, etc. within the Lot I corridor.
- The slope above the midsection boardwalk should be stabilized before replacing or repairing the boardwalk. It is recommended that seating opportunities be investigated in this location (a widened seating surface at the retaining wall or an alcove with a bench).



BEACH-LEVEL ACCESS FROM
LOT I STAIRWAY

Stairs at West Sea Level Drive

A set of elevated stairs adjacent to the overlook at the terminus of West Sea Level Drive provides access to the beach from this location (about a 25-foot elevation change). At some point after 1975, these stairs were built to replace several at-grade footpaths, which have since revegetated, thus reducing the potential erosion on this bluff. Both the overlook and the stairway provide a controlled and limited access point to the beach and viewpoint on the bluff. However, there is currently no access from these stairs across the sandy beach to the mean high tide line at the ocean.

There are two runs of stairs (totaling 50 feet) with an intermediate landing where the bottom stairs change direction at about a 60-degree angle.

The stairs from the overlook to the beach are not accessible. Some of the stairs are poured-in-place concrete and some are suspended wood steps with open risers. There is no safety striping on the nosings. Risers are not uniform (varying from 6 to 7 inches high). Although treads meet the required minimum width of 11 inches, they are not uniform in width. The handrails are not continuous, they do not have the required upper and lower extensions, and they are not provided on both sides of all stair runs. The heights of the wooden handrails vary and some exceed the maximum allowable height of 38 inches by as much as 3 inches.

The landing that terminates at the beach is located within the wave runup zone and has evidence of water and storm damage. The base of the concrete steps at the bottom of the wooden stairway is chipped and broken and the metal fasteners are rusted.

Opportunities

- It is recommended that the stairs at the end of West Sea Level Drive be replaced with stairs that meet current safety and accessibility codes.
- Further study is recommended to determine if there are opportunities for relocating the stairs (within the general vicinity of their current location) in order to provide a landing that is less likely to be damaged by high tides during storms.



STAIRS FROM OVERLOOK
TO LECHUZA BEACH



DAMAGED LANDING
AT BASE OF STAIRS

Overlook at West Sea Level Drive

West Sea Level Drive terminates in a public access easement approximately 35 feet above sea level. This area has been improved with a stairway (described in the previous section) and amenities such as chairs, benches, tables and surface paving to create an overlook with an uninterrupted ocean view. The overlook provides an excellent opportunity for some visitors with disabilities (or any park user who does not wish to access the beach level at this point) to experience the sights and sounds of the beach environment despite the current lack of a pedestrian route to the beach itself that meets current safety and accessibility codes.

An accessible route is potentially available from the end of West Sea Level Drive to the overlook. The overlook itself is relatively level and approximately 28 feet long by 13 feet wide. One length of the overlook is contained by a fence/wall. However, there are no guardrails at the drop-off above the stairs on the south side of the overlook or at the steep drop-off at the east end of the overlook, which is obscured by dense planting. Some of the wooden site furnishings (chairs and tables) have been damaged by vandalism.



OVERLOOK AT
WEST SEA LEVEL DRIVE

Public parking and/or a passenger-loading zone at the end of West Sea Level Drive are described more fully in the following ***Parking and Transportation*** section of this report.

Opportunities

There appear to be opportunities for providing a fully accessible route to the overlook from a passenger loading zone or designated accessible parking space(s) at the end of West Sea Level Drive and these should be investigated further. Accessibility guidelines are provided in ***Appendix A*** for overlooks as well as for elements that may be included in the renovation of this overlook (benches, picnic tables, trash/recycling receptacles, a drinking fountain, signs and viewing aids such as telescopes). The following additional recommendations are made for increasing safety and enhancing the overlook to provide an improved visitor experience and for its independent use by people with disabilities.

- A guardrail (consisting of a top rail, midrail or equivalent protection, and posts with a vertical height within the range of 42 inches to 45 inches from the upper surface of the top rail to the ground surface) should be provided at all edges of the overlook that have a drop-off greater than 30 inches high. However, the design of the guardrail should include sections that do not block the view of users seated at benches or in wheelchairs at eye levels between 32 to 51 inches.

- In addition to providing accessible benches with backs, armrests and companion seating areas as described in the guidelines and technical requirements for accessibility, a range of seating opportunities should be provided (similar to the current seating which varies in height) to allow for a flexible, functional and enjoyable experience by all users, young and old, with and without disabilities, and a clear line of sight to important elements for any seated or standing user. An example is the Rest Seat (designed by Brian F. Donnelly, Donnelly Design, of Davis, California), which has a higher seating surface that is pitched forward more than conventional bench seating. This results in a minimum of fatigue, and the additional clearance beneath the seat also allows the user to push up to a standing position more easily.
- Furnishings should reflect the site's natural setting, blending in with and complementing the wild beach landscape.
- It is recommended that any invasive exotics planted in this area be removed and replaced with California native plants suitable for coastal habitats.



A VARIETY OF SEATING CHOICES
ACCESSIBLE BENCHES & THE REST SEAT

PUBLIC ACCESS EXISTING CONDITIONS AND OPPORTUNITIES: PARKING AND TRANSPORTATION

Parking, Public Transportation and Bicycle Access

Existing Conditions

In general, public on-street parking for Lechuza Beach is limited and is in high demand for residents, their guests and park visitors particularly during summer months, weekends and holidays. Currently, private automobiles provide the primary access to Lechuza Beach and to area residences represented by the Malibu-Encinal Home Owners Association (MEHOA), which includes residences along Sea Level Drive and on the south side of Broad Beach Road. Public on-street parking is currently available along Broad Beach Road, although available parking on the south side is more limited than on the north side due to a narrower public right of way. Parking on Sea Level Drive is restricted to private use with the exception of a public access easement that includes the provision of accessible parking spaces on Sea Level Drive and MRCA administrative use.

Public transportation is not directly available to any Lechuza Beach pedestrian entrance. Public transportation is provided to the general area by Metropolitan Transit Authority (MTA) bus line 534 from Los Angeles (Fairfax/Washington) to locations along Pacific Coast Highway (Highway 1) in Malibu. However, this line terminates at the eastern intersection of Broad Beach Road / Trancas Canyon Road and PCH (about 1.5 miles from the pedestrian entrances to Lechuza Beach).

In addition, the National Park Service, the Santa Monica Mountains Conservancy, California State Parks and Los Angeles County Beaches and Harbors currently sponsor the ParkLINK shuttle, which provides scheduled, hourly shuttle service to parks in the Santa Monica Mountains National Recreation Area. Park visitors can transfer from Metro Bus 534 from the West LA Transit Center to Trancas Canyon Road and Pacific Coast Highway and other shared stops in Malibu or along PCH or they have the option of parking their cars at any of the public parking lots along the route to access the shuttle. Currently the closest shuttle stop to Lechuza Beach is at Zuma Beach to the east, where the Calabasas Beach Bus also provides public transportation from the north on weekdays during the summer.

Pacific Coast Highway is a designated Class III on-road bike route. Currently, secure bicycle parking is not available on PCH, Broad Beach Road or at Lechuza Beach.

Opportunities

There are transportation and parking opportunities for improved and increased public access in general as well as independent access to Lechuza Beach for visitors with disabilities. There are also opportunities to encourage the use of alternate modes of transportation (such as bicycles and public transportation/paratransit), which would have positive impacts on traffic volume in the area.

- It is recommended that the feasibility of extending the ParkLINK shuttle to Lechuza Beach be investigated. In order to provide an equivalent experience for all park visitors, the passenger loading zone for shuttle service should be located

at accessible park facilities such as a new beach access route at the end of East Sea Level Drive.

- The feasibility of extending public bus service along PCH to the intersection of Broad Beach Road and West Sea Level Drive should be pursued with MTA. This improved transportation service would benefit residents and park visitors equally.
- The addition of designated passenger loading zones at each park entrance would also benefit all park users, including those who are qualified to use paratransit services.
- Secure bicycle parking at all park entrances would promote the use of non-motorized vehicular access to the beach.

Public access conditions and opportunities for parking and transportation for Broad Beach Road (a public right-of-way) and Sea Level Drive (a privately held right-of-way) are described in greater detail below.

Broad Beach Road

Broad Beach Road is the abandoned alignment of Pacific Coast Highway (PCH) and roughly parallels it to the south. Broad Beach Road intersects PCH twice: at Trancas Canyon Road and then again near West Sea Level Drive about 1.5 miles to the west. The western intersection is closest to the Lechuza Beach project area.

On-street public parking opportunities are currently present in the public right-of-way. Some (such as the area near Bunnie Lane and the Lot I park entry shown below) are deep enough to support angled parking.

- From information provided on the survey distributed at the May 1, 2006 Design Team Meeting, Broad Beach Road has an 80-foot right-of-way (40 feet on each side of the centerline of the road). However, portions of the abandoned Highway 1 right-of-way on the south side of Broad Beach Road are privately held.
- There are no continuous sidewalks along Broad Beach Road in the Lechuza Beach project area.
- Most on-street parking opportunities on the south side of the road are considerably narrower than marked parking areas on the north side.
- Some of the roadside areas on the south side of Broad Beach Road are landscaped. At the time of the site visit, some areas had *private property, no parking, or reserved* parking signs, which were encroachments in the public right-of-way.



BROAD BEACH ROAD
(VIEW TO THE WEST)

- Grades along Broad Beach Road between East and West Sea Level Drive are relatively level, although roadway crowning produces cross slopes that exceed 2 percent.
- There are limited opportunities for providing a fully accessible route (particularly for people with mobility disabilities) from existing parking opportunities to any of the park entrances at Broad Beach Road.

Opportunities

Parking at Broad Beach Road

- A survey is recommended along Broad Beach Road to identify both unpermitted encroachments and legal setbacks in the public right of way. All unpermitted obstacles, impediments and signage should then be removed in the public right-of-way along Broad Beach Road to order to increase public access by providing additional safe and convenient parking opportunities, especially in the vicinity of each of the park entrances.
- Once a traffic study has been completed, it will be possible to determine if the addition of these new parking opportunities on Broad Beach Road will be sufficient to accommodate reasonable increases in public use of Lechuza Beach.
- Dedicated, signed accessible parking spaces may be desired on Broad Beach Road in proximity to the Lot I park entrance. The provision of parking spaces and the removal of barriers to accessibility (as described below) will provide for the independent use of Lechuza Beach by many people with disabilities.
- To provide increased safety for all park visitors, the use of crosswalks with in-pavement lights should be considered at park entrances. In this system, amber lights are embedded in the pavement on both sides of the crosswalk and oriented to face oncoming traffic. When a pedestrian activates the system, either by using a push-button or through detection from an automated device, the lights begin to flash at a constant rate, warning motorists that a pedestrian is in the vicinity of the crosswalk ahead.

Sea Level Drive

The alignment of Sea Level Drive is a loop road with two intersections at Broad Beach Road. West Sea Level Drive, an approximately 725-foot long section near the intersection of PCH, terminates about 35 feet above sea level. The East Sea Level Drive intersection with Broad Beach Road is nearly one-half mile to the east. East Sea Level Drive is about .3 miles long and terminates near the sandy beach at Lot I (at an elevation of about 20 feet above sea level). The connecting portion of roadway alignment (about .25 miles long) is now at the sandy beach and is publicly held by MRCA as part of Lechuza Beach.

East and West Sea Level Drives are the primary vehicular and pedestrian access routes for area residents represented by MEHOA. Both reaches of roadway are owned by MEHOA, with portions owned by several residents. The Mountains Recreation and Conservation Authority (MRCA) has a public access easement along the entire length of Sea Level Drive from each of its gated intersections with Broad Beach Road to allow pedestrian access from Sea Level Drive to the beach as well as motorized vehicle parking for park users with disabilities. Currently, all park visitors using East Sea Level Drive to reach Lechuza Beach or West Sea Level Drive to reach the overlook or stairs to the beach must be dropped off at or park their vehicles on Broad Beach Road and then travel by foot in the roadway.

- From information provided on the survey distributed at the May 1, 2006 Design Team Meeting, both reaches of Sea Level Drive have an approximately 20-foot wide roadbed within a 40-foot right-of-way.
- There are no continuous sidewalks along either side of either reach of Sea Level Drive and there are speed bumps in the roadway at regular intervals along East Sea Level Drive
- Since both reaches of Sea Level Drive have unpermitted gates with controlled vehicular and pedestrian access, on-street parking is currently reserved for residents, their guests and service personnel. Park visitors on foot are restricted to use during daylight hours only. The MRCA has deeded rights to four parking spaces for persons with disabilities on Sea Level Drive and has discussed exercising its right for only two spaces.
- Currently the potential exists for establishing accessible on-street parking spaces along both reaches of Sea Level Drive.
- Grades at East Sea Level Drive vary. The roadway slope exceeds 5 percent from the intersection with Broad Beach Road south until the road turns west. The roadway slope becomes fairly level as it parallels the beach.
- With the exception of the area directly south of the entry gate, West Sea Level Drive has a relatively gentle slope (approximately less than 10 percent).



EAST SEA LEVEL DRIVE
AT LECHUZA BEACH

- East and West Sea Level Drive are single ingress/egress routes. A *no parking area* designated for fire truck access and turnaround has been informally signed at the end of both reaches of Sea Level Drive (between Lots 84 and 140 at East Sea Level Drive and across the street from Lot 60 at West Sea Level Drive).

Opportunities

Providing Independent Access at East Sea Level Drive to a New Beach Access Route

Beach-level access to Lechuza Beach is a major component of providing an integrated, meaningful and equivalent beach experience for users of all ages and abilities. Currently, only residents and their guests have access to parking or drop-off spaces close enough to reach the sandy beach without the use of stairs, although access to water's edge is still restricted to those beachgoers with the ability to cross the beach surface. Park visitors using East Sea Level Drive to reach Lechuza Beach must park on Broad Beach Road and walk in the roadway a distance of about .3 miles.

This section discusses the parking and transportation requirements for providing independent access to Lechuza Beach for people with disabilities. The only location in the study area that currently has the potential for easily meeting the criteria for a beach access route is the end of East Sea Level Drive, which has nearby on-street parking opportunities and a possible location for an accessible path of travel from parking to the beach. Current conditions and future opportunities for improved beach access itself are described more fully in the following section.

In order to be considered accessible to people with disabilities, an accessible parking space and/or passenger loading zone must meet state and federal requirements, which are described more fully in **Appendix A**. In contrast to passenger loading zones, accessible parking spaces provide the greatest degree of independent use for people with disabilities. The accessible parking spaces and/or passenger loading zone should be located in the area nearest the beach access route and must be connected to the beach access route by an accessible path of travel (the requirements for which are described in the section on *Walks* in **Appendix A**). In summary, an accessible parking space must be the closest space to the beach access route, have a slope of less than 2 percent in all directions, be firm and stable, and be located so that users do not have to travel behind any parked vehicles (except their own) to get to a destination.

- It is recommended that the accessible parking space or spaces and/or a passenger loading zone be located on the relatively level section at or near the terminus East Sea Level Drive.
- Since it is likely that the use of accessible parking space(s) would be available only by reservation, it may be feasible to vary the location of the space(s) on a regular schedule. This approach is only possible if all potential spaces meet the requirements for an accessible parking space and a permanent safe and accessible route is provided from all potential spaces to the beginning of the beach access route (a safe route is defined as one that does not require users to travel behind parked cars other than their own). Further study is required to determine if the requirements for signage and pavement markings for accessible parking spaces could be waived in the case of rotating parking spaces; however, it is recommended that even in this case, some type of sign indicating the location of the accessible parking space(s) would be necessary.

- If it is not possible or feasible to provide a safe accessible route from all temporary parking spaces to the beach access route, it is recommended that at least one permanent van-accessible parking space and one permanent accessible parking space for cars be established as close to the beginning of the beach access route as possible. It should be noted that MRCA has deeded rights to establish up to four accessible parking spaces along Sea Level Drive.
- Another recommendation for further study is the establishment of a passenger loading zone (potentially in the location of the current fire turnaround at the end of East Sea Level Drive), which would provide the opportunity for increased access for persons with disabilities who are traveling with others in private or public vehicles. For those using private vehicles, the use of a reservation system for accessing the passenger loading zone would also be required. Further study is recommended to explore opportunities for providing public transportation for park visitors with disabilities, either with scheduled or on-demand service. Potential transportation providers include ParkLINK Shuttle (with service from the Zuma Beach parking lot) or local paratransit providers.
- It is recommended that any changes to the parking in this area be reviewed by the Los Angeles County Fire Department.



EXISTING PARKING ON EAST SEA LEVEL DRIVE

Providing Independent Access to the Overlook at West Sea Level Drive

The overlook at the end of West Sea Level is another important and unique feature of Lechuza Beach that also requires equal access for users of all ages and abilities. As is the case with beach-level access on East Sea Level Drive, currently only residents and their guests have access to parking or drop-off spaces close enough to easily reach the overlook. Park visitors must park on Broad Beach Road and walk in the West Sea Level roadway a distance of about 725 feet. Access to the beach itself and water’s edge from the overlook is restricted to those beachgoers with the ability to use stairs and then cross the beach surface.

This section discusses the parking and transportation requirements of providing independent access to the overlook for people with disabilities. Current conditions and future opportunities for the overlook itself are described in the previous section.

The criteria for accessible parking space(s) and/or passenger loading zone that would serve this overlook are the same as discussed above for the beach access route. The closest on-street level areas to the overlook are the fire turnaround at the end of the street, the edge of the overlook closest to the street and several spots on the east side of West Sea Level Drive.

- Further study is recommended to determine areas that have the potential for becoming on-street accessible parking space(s).
- Another recommendation for further study is the establishment of a passenger loading zone (potentially in the location of the current fire turnaround at the end of West Sea Level Drive), which would provide the opportunity for increased access for persons with disabilities who are traveling with others in private or public vehicles (as described above).



FIRE TURNAROUND AT WEST SEA LEVEL DRIVE

Implementing Public Parking and/or Passenger Drop-Off at Sea Level Drive

While the pedestrian easement at Sea Level Drive is available to all park users, vehicular access will be restricted to visitors with a disabled person parking placard or license plate. Since it is expected that the number of accessible parking spaces in close proximity to the beach (at East Sea Level Drive) and the overlook (at West Sea Level Drive) will be limited, MRCA will need a system both to allocate spaces on a daily or part-day basis as well as providing a means of entry through the locked vehicular gates.

- A reservation system for assigning parking and allowing entry for parking or drop-off is recommended. Some agencies, such as the San Francisco Public Utilities Commission, use an online reservation system (www.sfwater.org) to arrange public access to “a rich wildland area with unparalleled views close to home, while protecting San Francisco’s drinking water supply” in the Peninsula Watershed. An automated help line is available to visitors without an email address who wish to hike or bike on the Fifield-Cahill Ridge Trail (part of the Bay Area Ridge Trail).
- Further study is recommended regarding an efficient and workable system of opening the vehicular gates without compromising their intended—although unpermitted—use of providing neighborhood security. If it is decided that the vehicular gates will remain, then this system should be implemented.

Pacific Coast Highway

Public parking on Pacific Coast Highway (PCH) may not be available near the potential location of new park entry (as described in the previous section on ***Pedestrian Access***). Currently, *no parking* signs are posted on both the north and south sides of PCH near the intersection of Broad Beach Road. Although there is a left turn lane onto Broad Beach Road from northbound PCH, dense plantings and a utility pole block sightlines for cars turning right onto Broad Beach Road from southbound PCH in the vicinity of the access easement that fronts PCH.

Implementing Public Parking and/or Passenger Drop-Off at Pacific Coast Highway

- Further study is recommended to determine setbacks in the right-of-way that have the potential for becoming safe on-street parking space(s) along PCH. Since it is unlikely that any parking spaces on PCH have the potential of connecting to an accessible route to Lechuza Beach, the provision of accessible parking spaces is not recommended in this location.
- The feasibility of passenger loading zones also requires further study, with the benefits of providing direct access from PCH weighed against the costs and potential for injury. Southbound PCH traffic is of particular concern given allowable driving speeds, the requirements for a deceleration lane, existing roadside plantings that may block driving sightlines, and the utility poles at the intersection (it was reported by MEHOA representatives that this was the location of a traffic fatality).

Potential Traffic Impacts

A traffic study is recommended to address neighborhood and safety concerns specifically related to the potential impacts of providing accessible parking spaces at an improved beach access route at East Sea Level Drive and the overlook at West Sea Level Drive as well as the impacts of allowing scheduled or on-demand service for visitors with disabilities at these locations and/or passenger loading zones serving a potential new park entrance at PCH for park visitors in general.

The traffic and parking study should observe existing neighborhood parking patterns, frequency and availability, and address specific safety issues that might impact public parking at existing park entrances at the intersection of Bunnie Lane and Broad Beach Road (Lot I) and the intersections of East Sea Level Drive and West Sea Level Drive at Broad Beach Road. In addition, the traffic and parking study should address issues related to the addition of reserved accessible parking spaces at the beach terminus of East Sea Level Drive and at park entrances at Broad Beach Road. The study should gather and analyze traffic flows and other appropriate data to determine the existing usage and potential for increased usage along Broad Beach Road between East Sea Level Drive and West Sea Level Drive, as well as the impacts of allowing scheduled or on-demand passenger loading zones at existing park entrances, passenger loading zones at the beach terminus of East Sea Level Drive and the terminus of West Sea Level Drive for visitors with disabilities (at these locations and into the private sections of these streets), and/or passenger loading zones serving a potential new park entrance located at Pacific Coast Highway (PCH) and Broad Beach Road for park visitors in general.

The study should include a baseline assessment of existing parking spaces along Broad Beach Road from its western intersection with Pacific Coast Highway to 200 feet east of its intersection with East Sea Level Drive. The study should also include a baseline traffic study including number of trips recorded at the three Broad Beach Road intersections noted above (at PCH, East Sea Level Drive and West Sea Level Drive) and the number of cars parked along Broad Beach Road, East Sea Level Drive, West Sea Level Drive and PCH in the immediate vicinity of its intersection with Broad Beach Road. It is recommended that studies be conducted on a weekday and weekend day in both high-use (summer) and lower-use (winter) periods.

Possible scenarios for study could include the impacts on parking and traffic resulting from:

- Identifying and substantiating the creation of a certain number of accessible parking spaces at each location;
- Providing day-long accessible parking passes at the beach terminus of East Sea Level Drive versus partial-day passes (which would allow access for more visitors with disabilities without increasing the number of accessible parking spaces provided); and
- Scheduled time slots for drop-off versus on-demand drop-off, particularly at Bunnie Lane (Lot I), PCH and both terminuses of Sea Level Drive (it is assumed that casual drop-off opportunities are available currently to all park visitors along Broad Beach Road and Pacific Coast Highway).
- If new parking spaces at Broad Beach Road are provided (rather than the expected option of reconfiguring already existing informal parking areas), their potential traffic impact should also be included in the study.

BEACH ACCESS EXISTING CONDITIONS AND OPPORTUNITIES

Of course, providing access to the beach level is just one aspect of providing an excellent and inclusive visitor experience. Improved beach-level access for all beachgoers will require the construction of at least one beach access route from accessible parking spaces at East Sea Level Drive and the pedestrian access point at Lot I.

Existing Conditions

Lechuza Beach experiences high tides during storms, some of which have been responsible for damage to roads and access structures constructed within the ocean's reach. For example, the southern connecting portion of Sea Level Drive was washed out by storm action. The stair landing at West Sea Level Drive also has evidence of storm damage. Existing beach-level access within Lechuza Beach itself is exclusively provided by stairways, including at the end of East Sea Level Drive. However, there are several at-grade access points to private beach lots on East Sea Level Drive to the east of the potential location for an improved beach access route.



LECHUZA BEACH ACCESS
AT THE END OF EAST SEA LEVEL DRIVE

Currently, there are no means for people with disabilities to travel across the sandy upper beach to reach the water so that they can play, swim or participate in other shoreline activities. According to new proposed guidelines for outdoor developed areas, the provision of a beach access route (a pathway—either permanent or temporary—over the surface of the beach itself that leads to the high tide level) is required at each linear half mile of new beach. The proposed accessibility guidelines for beach access routes require the provision of a firm and stable pathway across the beach surface. Because beaches are subject to erosion, a permanently installed beach route, such as decking, may not be suitable for some environments. For this reason, beach access routes can use temporary surfaces, such as rubber mats, recycled plastic decking, plastic mesh, lattice and other materials, so long as these surfaces are available at all times while the beach is open for public use.



TYPICAL BEACH ACCESS ROUTE

Another option for improving beach access is the provision of beach devices or beach chairs, which are mobility aids that enable a person with a mobility impairment to travel anywhere on the beach instead of being limited to a point at the end of a beach access route. For example, as part of a recent court settlement, the State of California Department of Parks and Recreation will provide—in addition to beach access routes—at least two beach wheelchairs at state beaches (unless there are no staff or facilities at the park reasonably available to store and supervise the use

of the beach wheelchairs and/or the slope conditions at the park make the use of beach wheelchairs hazardous).

Opportunities

The following recommendations for further study include proposals to provide increased visitor enjoyment in general and opportunities for independent access to Lechuza Beach for visitors with disabilities.

The requirements for accessible beach access routes, storage facilities for beach mobility devices and ramps are provided in **Appendix A**. Parking recommendations for an improved beach access route are described in the previous section of this report.



TRANSFERRING FROM A PERSONAL WHEELCHAIR TO A BEACH WHEELCHAIR

Beach Access Route

As described above, MRCA is required to provide at least one beach access route at Lechuza Beach. Options for constructing and locating one or more beach access routes (as defined by the Access Board's *Accessibility Guidelines for Outdoor Developed Areas*) at Lechuza Beach are addressed in the following recommendations. Although the location of this feature, which would provide equal access to the mean high tide line, has not been determined, it is recommended that it provide an equivalent experience to other beachgoers who visit Lechuza Beach seeking nature, beauty, solitude and reflection.

- Further study is recommended to review the mean high tide within the project area at Lechuza Beach. This information can help guide the Design Team in determining the feasibility of providing either a permanent beach access route or a temporary surface.
- It is likely that even if the option were chosen of providing a portion of the beach access route using a temporary surface, it would still be necessary to replace the decking, walkway and stairway at the end of East Sea Level Drive with a permanent accessible route such as a sloping walkway or ramp. It is recommended that geotechnical studies be performed to determine the feasibility of constructing this portion of the accessible route in the approximate location of the current construction.



PERMANENT BEACH ACCESS ROUTE AT SANTA MONICA BEACH

- It is recommended that MRCA consider the feasibility of providing beach mobility devices at Lechuza Beach to provide a more equivalent beach-going experience for all park visitors. In addition, further study is recommended regarding the location of a storage facility for one or more beach mobility devices.

DESIGN GUIDELINES AND OPPORTUNITIES

Existing Conditions

The architectural styles and finishes of residences in the Lechuza Beach neighborhood vary. However, there is considerable interest among residents regarding the style of and materials used for the construction of new architectural elements proposed in this plan such as gates and gateways, handrails at stairways, barrier railing and fences, and site furnishings.

Existing stair railings and site furnishing at the overlook are rustic and constructed of unpainted wood. However, the security gate at Broad Beach Road and East Sea Level Drive is ornamental metal that has been painted gray, and the security gate at Broad Beach Road and Bunnie Lane (Lot I) is ornamental metal and mesh that has been painted brown.

Opportunities

The following recommendations for further study include proposals to provide enhanced site furnishings and facilities that are appropriate to the character of this site and surrounding neighborhood.

- It is recommended that opportunities be explored for using materials and methods of construction that are appropriate to the natural and beach settings found in the project area. For example, the use of stone and wood may be appropriate for facilities and site furnishings at Lechuza Beach. There may be members of MEHOA who would be interested in assisting MRCA in securing funding for enhanced site amenities, and it is recommended that this topic be pursued in the future.
- New plantings in the project area should be chosen from a palette of appropriate California native plants typically found in coastal settings in the region. This planting palette should be developed with the guidance of environmental specialists on the Design Team.



EXAMPLES OF LOCAL PUBLIC
PEDESTRIAN AND VEHICULAR GATES

REFERENCES

Legal Requirements for Public Access

City of Malibu

- 2002 Local Coastal Program, Land Use Plan. Adopted by the California Coastal Commission, September 13, 2002, pursuant to the provisions of PRC Section 30166.5

State of California

- 2006 Public Resources Code, Chapter 5: Coastal Restoration Projects
2006 Public Resources Code, California Coastal Act of 1976

United States District Court, Northern District of California

- 2005 Consent Decree: Tucker, et al. v. State of California Department of Parks and Recreation, et al, Case No. C 98 04935 CRB (PJH)

Visitor Use and Experience: Accessibility

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APPENDIX A: RECREATION PROGRAM AND FACILITY ACCESSIBILITY GUIDELINES, STANDARDS AND RESOURCES

One of the goals of this project is to provide greater access to all Lechuza Beach visitors, including persons with disabilities, by incorporating the following accessibility guidelines.

Accessibility Terms

- **Accessible route** is a general term that refers to a continuous unobstructed path connecting all accessible elements and spaces of a facility. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps and lifts.
- **Outdoor recreation access route** is a more specific term that refers to a continuous unobstructed path designed for pedestrian use that connects accessible elements within a picnic area, campsite or a designated trailhead. The accessibility guidelines for outdoor recreation access routes are intended to supplement requirements for the built environment, and they address unique constraints specific to outdoor developed areas.
- **Beach access route** is a continuous unobstructed path designated for pedestrian use that crosses the surface of a beach. These specialized routes are addressed in the accessibility guidelines for outdoor recreation access routes.

Guidelines for Accessible Facilities

ADA Accessibility Guidelines (ADAAG)

Accessible routes such as walks or pathways and site features and furnishings in the Lechuza Beach Access Plan such as parking spaces, stairways, and gates would be improved or constructed under the current requirements specified in the Uniform Federal Access Standards (UFAS), Americans with Disabilities Act Design Guidelines (ADAAG), the California Code of Regulations, Title 24, Part II, California Building Code (CCR) and the California State Historical Building Code (SHBC).

Currently the accessibility guidelines associated with these regulations, the ADA Accessibility Guidelines (ADAAG) and the Uniform Federal Accessibility Standards (UFAS) are being updated and integrated into a single, consistent set of guidelines. When the final guidelines establishing new ADA Accessibility Guidelines are published, those portions of new pathways and other park facilities not already addressed in the accessibility guidelines for outdoor developed areas will be designed to the revised standards.

All new construction of and renovations to existing park features that are subject to ADAAG, ABA and Title 24 requirements for accessibility (such as drinking fountains, parking areas, restrooms, telephones and walks) will meet those requirements.

Accessibility Guidelines for Outdoor Developed Areas

Beach access routes, overlooks, picnic facilities and trail signs would be improved or constructed under the current recommendations from the U.S. Architectural and Transportation Barriers Compliance Board (*Recommendations for Accessibility Guidelines: Outdoor Developed Areas*, Federal Access Board Regulatory Negotiation Committee 1999). When these recommendations are adopted, they will become a part of the revised ADA Accessibility Guidelines (ADAAG). Since the Access Board is currently in the process of preparing a proposed rule based on the Regulatory Negotiation Committee's report, no specific regulations applying the Americans with Disabilities Act (ADA) to beach access routes (in particular) were in effect at the time this plan was prepared. However, this plan proposes to make improvements using the current Access Board recommendations.

In general, when considering the feasibility of providing accessible outdoor recreation features or constructing beach access routes, the following conditions would be considered as exceptions to these guidelines:

- Where compliance would cause substantial harm to cultural, historic religious or significant natural features or characteristics;
- Where compliance would substantially alter the nature of the setting or the purpose of the trail;
- Where compliance would require construction methods or materials that are prohibited by law; or
- Where compliance would not be feasible due to terrain or prevailing construction practices.

The intent of this plan is to provide accessible facilities. Where a particular route cannot meet all of the guidelines due to any of these exceptions, efforts will be made to improve or construct as much of the route as feasible to be accessible and to provide facilities that meet the accessibility guidelines. For example, if the construction of steps, which are a barrier to some people with mobility disabilities, is the only feasible alternative in a particular alignment, those steps will be designed to meet ADAAG and Title 24 technical requirements. The portions of the route that precede and follow the steps will be designed to meet the accessibility guidelines to the maximum extent possible. In addition, signs at entrances will provide information about actual conditions along the route to help visitors determine the expected levels of difficulty.

Accessible Facilities Covered by ADAAG

The following guidelines for drinking fountains, gates, parking, stairs, telephones and walks at Lechuza Beach are based on the technical requirements for accessibility found in ADAAG and Title 24 of the California Building Code.

Drinking Fountains

Drinking fountains should be located on an accessible route and should have a clear level space 760 mm by 1220 mm (30 by 48 inches) in front of the fountain.

Spout Position: Since two spout heights allow for greater accessibility for people who have difficulty bending over, each drinking fountain will have a high and low spout. In order to be accessible for persons who use wheelchairs, the low spout needs to be no higher than 915 mm (36 inches), measured from the ground surfaces to the spout outlet. The spouts will be located within 150 mm (6 inches) of the front of the fountain with a water flow substantially parallel to the front in a stream that is at least 100 mm (4 inches) high.

Controls: Operating mechanisms will be located on the front of the fountain or within 150 mm (6 inches) of the front. In order to be easily operable with one hand, the controls must not require tight grasping, pinching or twisting. The force required to activate controls will be no greater than 22.2 N (5 lbf).

Gates

Gates at park entries must be usable by people with and without disabilities.

Clear Width: Gateways should have a minimum clear opening of 815 mm (32 inches) with the door open 90 degrees, measured between the face of the door and the opposite stop.

Maneuvering Clearances at Doors and Gates: All doors and gates that are not automatic or power-assisted require level and clear maneuvering spaces, which vary in size and location depending on how the door is approached by the user. The technical requirements for accessibility found in ADAAG and Title 24 should be consulted when designing new gateways or when remodeling existing facilities.

Two Doors in a Series: The minimum space between two gates in a series should be 1220 mm (48 inches) plus the width of any door swinging into the space. Gates in series should swing either in the same direction or away from the space between the gates.

Thresholds at Gateways: Thresholds at gateways should not exceed 13 mm (1/2 inch). Raised thresholds and surface level changes at accessible gateways need to be beveled with a slope no greater than 1:2 (50 percent).

Gate Hardware: Handles, pulls, latches, locks and other operating devices on accessible doors and gates should be shaped so that they are easy to grasp with one hand and do not require tight grasping, pinching or twisting. Lever-operated mechanisms, push-type mechanisms and U-shaped handles are acceptable designs. Gate hardware should be mounted no higher than 1220 mm (48 inches) above the finished surface.

Gate Closers: If a gate has a closer, then the sweep period of the closer should be adjusted so that the gate will take at least 3 seconds to move from an open position of 70 degrees to a point 75 mm (3 inches) from the latch, measured to the leading edge of the gate.

Gate Opening Force: The maximum force for pushing or pulling open a door or gate should not exceed 22.2 N (5 lbf).

Parking

The technical requirements for accessibility found in ADAAG and Title 24 apply to designated accessible parking spaces at Lechuza Beach. Parking areas meeting the combined technical requirements for stall and van parking signs, stall markings, stall widths and lengths, access aisles, vertical clearance at van spaces, level spaces and access aisles, ramps and other parking area features should be located on an accessible route. Reserved accessible spaces should be located as near as possible to an improved beach access route at East Sea Level Drive and the overlook at West Sea Level Drive.

Ramps

In some situations, replacing stairs with a ramp and handrails may provide a fully accessible path of travel to connect park features.

Slope and Rise: The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. The maximum rise for any run shall be 30 inches.

Clear Width: The minimum clear width of a ramp shall be 36 inches.

Landings: Ramps shall have level landings at bottom and top of each ramp and each ramp run. The landing shall be at least as wide as the ramp run leading to it with a minimum length of 60 inches clear. If ramps change direction at landings, the minimum landing size shall be 60 inches by 60 inches. If a doorway is located at a landing, then maneuvering clearance in front of the doorway shall be provided.

Handrails: If a ramp run has a rise greater than 6 inches or a horizontal projection greater than 72 inches, then it shall have handrails on both sides (see **Stairs and Handrails** below).

Cross Slope and Surfaces: The cross slope of ramp surfaces shall be no greater than 1:50. Ramp surfaces shall be firm, stable and slip-resistant.

Edge Protection: Ramps and landings with drop-offs greater than 4 inches shall have curbs, walls, railings, or projecting surfaces that prevent people from slipping off the ramp. Curbs shall be a minimum of 6 inches high.

Outdoor Conditions: Outdoor ramps and their approaches shall be designed so that water will not accumulate on walking surfaces.

Stairs and Handrails

Due to site constraints, stairs may be a necessary component of a path of travel connecting park features. The requirements for stairs are intended to provide a safe and accessible experience for many people with and without disabilities. However, they may not be usable by some people with mobility and other disabilities and so are not considered to provide a fully accessible path of travel.

Treads and Risers: On any given flight of stairs, all steps shall have uniform riser heights and uniform tread widths. Stair treads shall be no less than 280 mm (11 inches) wide, measured from riser to riser. Open risers are not permitted. Outdoor stairs and their approaches shall be designed so that water will not accumulate on walking surfaces. Tread surfaces must be a slip-resistant material.

Nosings: The undersides of nosings shall not be abrupt. The radius of curvature at the leading edge of the tread shall be no greater than 13 mm (1/2 inch). Risers shall be sloped or the underside of the nosing shall have an angle not less than 60 degrees from the horizontal. Nosings shall project no more than 38 mm (1-1/2 inches).

Handrails: Stairways shall have handrails at both sides of all stairs. The handrail gripping surface should be continuous and have a diameter or width between 32 mm and 38 mm (1-1/4 and 1-1/2 inches) to be usable by adults and 24.1 mm and 39.4 mm (0.95 to 1.55 inches) to be usable by children. Handrails must extend at least 305 mm (12 inches) beyond the top riser and at least 305 mm (12 inches) plus the width of one tread beyond the bottom riser. At the top, the extension shall be parallel with the floor or ground surface. At the bottom, the handrail shall continue to slope for a distance of the width of one tread from the bottom riser; the remainder of the extension shall be horizontal. The top of handrail gripping surfaces should be between 865 mm and 965 mm (34 to 38 inches) for adults; a second handrail mounted between 510 mm to 710 mm (20 to 28 inches) above the tread surface is recommended in environments used by children. Ends of handrails shall be either rounded or returned smoothly to floor, wall or post. Handrails must be exactly 38 mm (1-1/2 inches) from any vertical service and they must not rotate within their fittings.

Indicator Stripping: There must be a 50 mm (2 inch) wide stripe of color that contrasts with the tread color on the nosing of every tread. This stripe must be flush with the tread surface and be no further than 26 mm (1 inch) from the edge of the tread.

Telephones and Text Telephones

Telephones, if they are included in this project, should be located on an accessible route and should have a clear level space 760 mm by 1220 mm (30 by 48 inches) in front of them. Care should be taken that telephones or their enclosures are not protrusion hazards on an accessible route. Although an outlet and a shelf for portable text telephones (TDDs) should be included with each pay telephone, access to permanently installed TDDs or portable units provided by the Conservancy/MRCA may not be available at this site.

Controls: The telephone cord length should be a minimum of 735 mm (29 inches) long. In general, telephones should be hearing aid compatible, with volume controls, capable of a minimum of 12 dbA and a maximum of 18 dbA above normal (phones with volume controls should be identified with the appropriate symbol of accessibility).

Touch-tone controls are accessible to many people with disabilities, so they should be provided where service for such equipment is available.

Text Telephones (TDDs): Pay telephones designed to accommodate a portable text telephone need to be equipped with a shelf (having a vertical clearance of 152 mm or 6 inches) and an electrical outlet within or adjacent to the telephone enclosure. The pay telephone handset must be capable of being placed flush on the surface of the shelf.

Walks

Walks are an integral component of an accessible path of travel, which connects key park features such as parking, entrances and visitor destination points.

Surface: In order to make walks accessible to persons with disabilities, surfaces must be firm and stable. Generally, walks described in this plan will have hard surfaces including resin-based soil stabilizers, asphalt, concrete or boardwalk (wood, recycled wood or plastic lumber).

Width: In order to be accessible for persons with disabilities, walks need to be at least 1.2 meters (4 feet) wide, although 1.5 meters (5 feet) is the preferred width since it allows passing space for wheelchair users. When walks greater than 61 meters (200 feet) have less than 1.5 meters (5 feet) of clear tread width, passing spaces would be provided at least every 61 meters (200 feet) to make them accessible.

Grade: In order to be considered accessible to persons with disabilities, the running slope of a walk would be 1:20 (5 percent) or less with a cross slope no greater than 1:50 (2 percent).

Accessible Facilities Covered by the Guidelines for Outdoor Developed Areas

The guidelines for trails, outdoor recreation access routes, beach access routes, benches, overlooks, picnic tables, storage facilities for assistive devices, telescopes, and trash containers at Lechuza Beach are based on the recommendations for accessibility found in the *Accessibility Guidelines for Outdoor Developed Areas*.

Trails

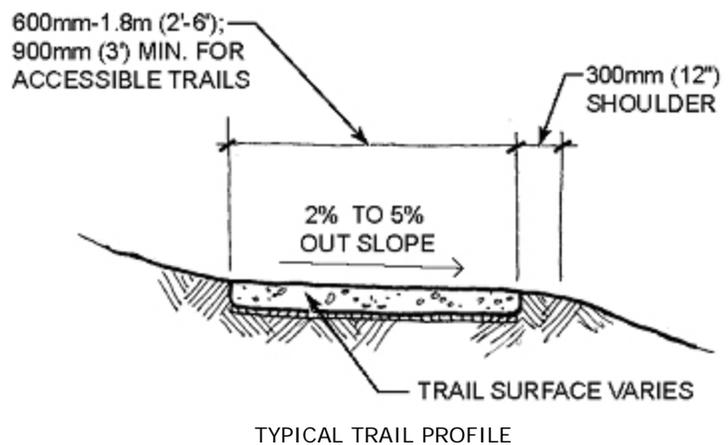
Increased trail experiences can be provided to persons with disabilities by following recommended trail construction guidelines for accessibility. The degree of accessibility, either fully or partially accessible, is usually dependent on resource, topographic or other constraints. Fully accessible trails are those that meet the minimum recommended guidelines as described below. Some trails may not be fully accessible in that they cannot meet all of the guidelines along the entire length of the trail. However, improvements could be made to any trail to expand the range of visitor use it can accommodate.



INTERNATIONAL SYMBOL
OF ACCESSIBILITY

Surface: In order to make trails accessible to persons with disabilities, trail surfaces must be firm and stable. Depending on the intended use of the trail, underlying soil and nearby resources, trail surfaces could be soft (permeable) or, in limited circumstances, hard (with varying degrees of permeability). Generally, natural or soft surfaces are preferred in this Plan. Surfaces may be stabilized to provide increased accessibility and increased trail longevity. Means of stabilizing trails include using amendments of crushed rock to strengthen and improve the natural surface, wood chips, fine granular stone (also referred to as crusher fines or decomposed granite) or recycled materials. Hard surfaces include resin-based soil stabilizers, asphalt, concrete or boardwalk (wood, recycled wood or plastic lumber).

Width: Hiking trails could vary in width. Typically, clear tread widths of trails could range from 600 mm to 1.8 meters (2 feet to 6 feet). However, the minimum width of accessible trails is generally 900 mm (3 feet) or 815 mm (32 inches) in those areas considered exceptions to the guidelines. When trails have less than 1.5 meters (5 feet) of clear tread width, passing spaces would be provided at least every 300 meters (1000 feet).



Boardwalks would have a minimum clear tread width of 1525 mm (5 feet).

Grade: Trails could be designed with a range of grades from flat to steep in order to provide trail users a variety of challenges. In general boardwalks would have easy grades. No more than 30 percent of the total length of a designated accessible trail can exceed a running slope of 1:12 (8.3 percent) or have a cross slope greater than 1:20 (5 percent). In

general, the running slope of an accessible trail would be 1:20 (5 percent). However, steeper trails could be considered accessible in the following conditions:

- Maximum running slope of 1:12 (8.3 percent) for 60 meters (200 feet) with resting intervals.
- Maximum running slope of 1:10 (10 percent) for 9 meters (30 feet) with resting intervals.
- Maximum running slope of 1:8 (12.5 percent) for 3 meters (10 feet) with resting intervals.

Resting Intervals: Trails in the coastside steep terrain often have running slopes close to the maximums for accessible trails. Resting intervals, properly spaced, provide a greater degree of accessibility for persons with disabilities. These resting areas should be at least 1.5 meters (5 feet) long and as wide as the trail with a cross slope of 1:20 (5 percent) or less in order to be accessible.

Edge Protection: Edge protection is often provided on trails to increase safety. When it is provided, it should be at least 75 mm (3 inches) high since a lower surface might not be obvious or detectable to people with limited vision who use canes.

Obstacles: The following are considered obstacles to trail users and should be minimized in trail construction. The presence of any of these obstacles would prevent a trail from being a fully accessible trail:

- **Openings in trail surfaces** that allow the passage of a 13 mm (½ inch) diameter sphere or elongated openings that are parallel to the dominant direction of travel that allow the passage of a 6.5 mm (¼ inch) diameter sphere.
- **Protruding objects** that are lower than 2030 mm (80 inches) above the trail surface. Where vertical clearance of a trail is reduced to less than 2030 mm (80 inches), a barrier to warn blind and visually impaired persons will be provided.
- **Tread obstacles** greater than 50 mm (2 inches) high. On trails with running slopes and cross slopes less than 1:20 (5 percent), tread obstacles, even those with beveled edges, should not be greater than 75 mm (3 inches) high.

Outdoor Recreation Access Routes

Outdoor recreation access routes at Lechuza Beach may be provided to connect accessible elements such as parking to the overlook at West Sea Level Drive or to other facilities that are described in this section such as:

- fixed picnic tables
- mobility device storage facilities
- fixed trash and recycling containers

In general, the recommendations for outdoor access routes are identical to those for accessible trails, with the following exceptions:

Width: When trails have less than a 1.5 meters (5 feet) clear tread width, passing spaces would be provided at least every 60 meters (200 feet).

Grade: In general the cross slopes of these routes would not exceed 1:33 (3 percent). In areas where steeper cross slopes are necessary to ensure proper drainage, cross slopes would not exceed 1:20 (5 percent). The maximum running slope of this type of trail would also be 1:20 (5 percent). However, steeper trails would be considered accessible in the following conditions:

- Maximum running slope of 1:12 (8.3 percent) for 15 meters (50 feet) with resting intervals
- Maximum running slope of 1:10 (10 percent) for 9 meters (30 feet) with resting intervals

Tread Obstacles: Obstacles on the surface of a trail that are greater than 25 mm (1 inch) high are barriers to access. However, if the edges of the obstacle are beveled, they do not create a barrier if they are 50 mm (2 inches) or less.

Beach Access Routes

A beach access route will be provided to the high-tide line at Lechuza Beach.

In general a minimum of one beach access route, which allows visitors the opportunity to play, swim or participate in other shoreline activities, should be provided at every ½-mile of linear feet of new beach. In general, the recommendations for beach access routes are identical to those for outdoor access routes, with the following exceptions:

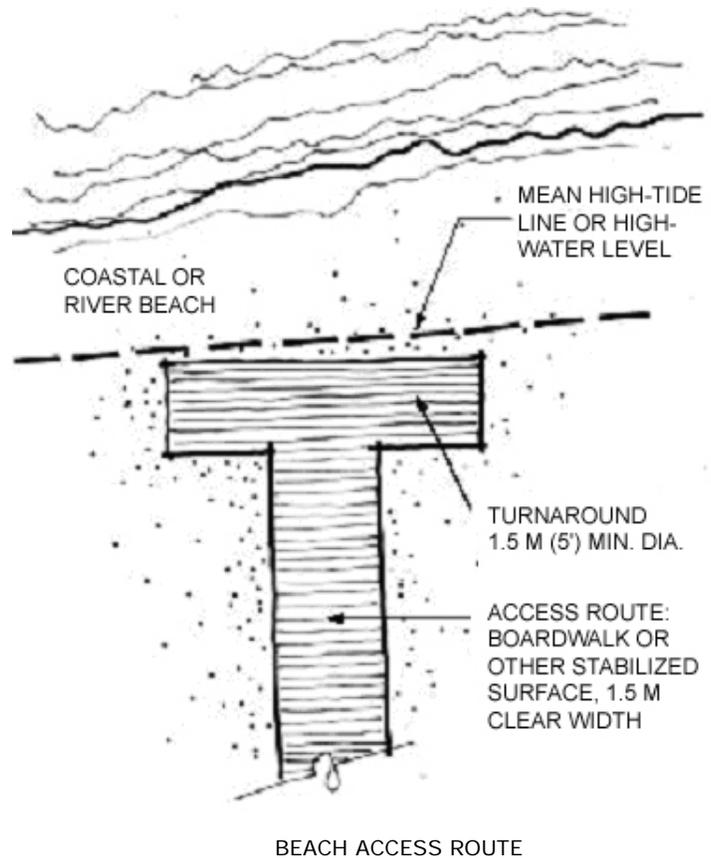
Surface: The surface of the beach access route must be firm and stable. Temporary beach routes are permitted. See *Beach Access Study Results: Surfaces* (Hamilton, Burgess, Hepfer 2002).

Maneuvering/Resting Space: Spaces for viewing, resting or changing direction would be provided at the high-tide level, normal recreation water level or at the end of each beach access route. These spaces would be at least 1.5 meters by 1.5 meters (5 feet by 5 feet) and would not overlap with the route.

Changes in Level: Obstacles in the beach access route would be no higher than 25 mm (1 inch).

Edge Protection: If the drop-off from the route to the beach is greater than 150 mm (6 inches), curbs, walls or railings at least 50 mm (2 inches) high would be provided to prevent people from falling off the route. If the drop-off is less than 150 mm (6 inches), but greater than 25 mm (1 inch), the edge must be beveled.

Storage Facilities for Beach Assistive Devices: Beach assistive devices, such as all-terrain or aquatic wheelchairs, can often provide the most integrated and independent experience for people with mobility disabilities. Storage facilities for assistive devices provided by the Conservancy/MRCA should be located along an accessible outdoor recreation or beach access route and should meet the technical requirements for storage facilities described in ADAAG and the accessibility recommendations described for storage facilities in this section.



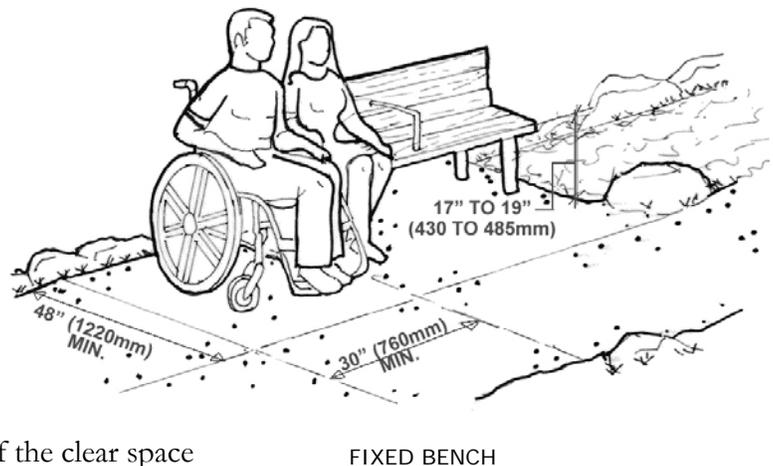
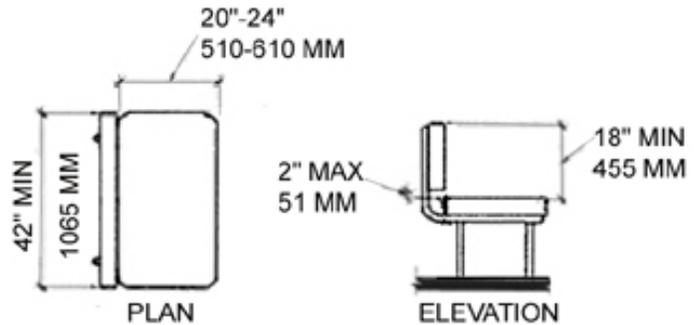
Benches

Where only one fixed bench is provided in an area, the bench will comply with the recommendations for accessibility. At trails or picnic areas that are not considered fully accessible, accessible benches are recommended but not required. Where there are multiple benches provided, at least 50 percent will comply with the following recommendations.

Seat Height: Bench seats will be 430 to 485 mm (17 to 19 inches) above the ground.

Back Support: Benches will have back support that is 1065 mm (42 inches) minimum in length and that extends from a point 51 mm (2 inches) maximum above the seat to a point 455 mm (18 inches) minimum above the seat. At least one armrest should be provided on accessible benches to assist people who have difficulty moving between a seated and standing position.

Clear Ground Space: At least one clear ground space that is at least 760 mm by 1220 mm (30 by 48 inches) will be provided at one end of the bench and positioned to allow wheelchair users to be seated shoulder-to-shoulder with an individual seated on the bench. The surface of the clear space will be firm and stable.



Overlooks

Overlooks provide opportunities for park visitors to pause and enjoy spectacular scenery, observe wildlife or special natural features.

Since overlooks are important visitor destinations, they should be accessible to persons with disabilities. This plan would consider, where feasible, renovating the existing overlook at West Sea Level Drive to meet current Access Board recommendations (Regulatory Negotiation Committee 1999).

Clear Ground Space: Where viewing areas are provided on designated overlooks, each viewing area will have at least one wheelchair maneuvering space with a firm and stable surface with a minimum dimension of a 1.5 meters (5 feet) diameter and maximum 1:50 (2 percent) slope in any direction. In areas where a steeper slope is necessary to ensure proper drainage, a 1:33 or 3 percent slope would be permissible.

Viewing Opportunities: Each location providing viewing opportunities for distinct points of interest would provide at least one unrestricted viewing opportunity for each distinct point of interest at eye levels between 815 mm (32 inches) and 1295 mm (51 inches).

Picnic Tables

Picnic tables may be provided at Lechuza Beach. Where two or more fixed picnic tables are provided in a picnic area, at least 50 percent, but never less than two, will meet the accessibility recommendations. In addition, at least 40 percent, but never less than two, of the accessible picnic tables will be connected to an outdoor recreation access route. Table 2 summarizes recommendations for the minimum number of accessible picnic tables that should be provided based on the overall number of available tables at each site as well as the number of accessible tables that should be connected to an outdoor recreation access route (ORAR).

TABLE 2
NUMBER OF ACCESSIBLE TABLES

Fixed Table Total	Number of Accessible Tables	Number of Accessible Tables Connected to an ORAR
1	1	1
2-4	2	1
5-6	3	2
7-8	4	2
9-10	5	3

Dispersal of Accessible Tables: It is recommended that some accessible picnic tables be located in the shade for persons who may be photosensitive.

Wheelchair Seating Spaces: Accessible picnic tables will have at least one wheelchair seating space, although it is recommended that some tables have space for more than one wheelchair to offer a choice of where each person may sit. Large tables with a tabletop perimeter exceeding 24 linear feet should provide the number of wheelchair seating spaces described in Table 3. Accessible picnic tables need not be rectangular. Round tables, for example, allow the center of the table

TABLE 3
WHEELCHAIR SPACES AT FIXED PICNIC TABLES

Table Top Linear Fee	Number of Wheelchair Spaces
25 lf - 44 lf	2 spaces
45 lf - 64 lf	3 spaces
65 lf - 84 lf	4 spaces
85 lf - 104 lf	5 spaces

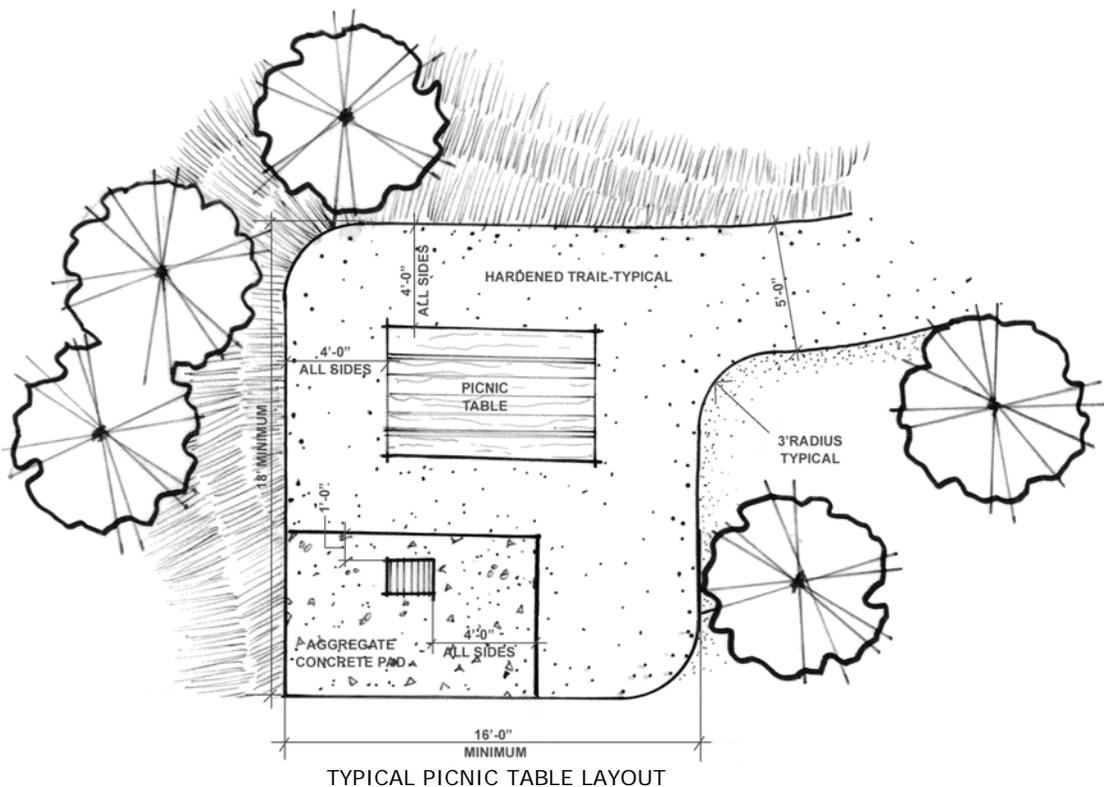
to be within reach range of everyone seated at the table. Placing wheelchair seating spaces in the middle of picnic tables provides for a more integrated experience and increased opportunities for social interaction.

Each wheelchair seating space should provide:

- **knee clearance** that is at least 685 mm (27 inches) high, 760 mm (30 inches) wide and 485 mm (19 inches) deep;
- **toe clearance** that is at least 230 mm (9 inches) minimum high and that extends an additional 5 inches minimum from the knee clearance; and
- **a clear ground space** that is at least 760 mm by 1220 mm (30 by 48 inches) wide.

These clearances are minimums that accommodate an average size wheelchair. It is recommended that additional leg space and knee clearance be provided to meet the needs of a wider range of people who use wheelchairs.

Table Clearance: To provide accessibility for people with mobility disabilities, picnic should have at least 915 mm (36 inches) minimum clearance around the useable portion of the table, measured from the seat. The preferred layout for picnic tables includes a 1220 mm (48 inches) minimum clearance around the table and a 915 mm (36 inches) minimum radius at all the corners of the hardened ground surface under the table. The surface of the clear ground space should be firm and stable with a slope that does not exceed 1:50 (2 percent) in any direction.



Storage Facilities for Assistive Devices

Storage for assistive devices should be provided when park visitors who use wheelchairs or other assistive devices must transfer to another device or vehicle to participate in the services or programs offered at a recreation area (for example, beach or all-terrain wheelchairs). Storage facilities should be located on an outdoor recreation access route or beach access route.

Size: Storage facilities designed for mobility devices should be a minimum of 965 mm (38 inches) high, 710 mm (28 inches) wide and 1015 mm (40 inches) long.

Controls: In order to be easily operable with one hand, controls and operating mechanisms must not require tight grasping, pinching or twisting.

Clear Ground Space: At clear ground space that is at least 760 mm by 1220 mm (30 by 48 inches) will be provided in front of each accessible storage facility. The surface of the clear space will be firm and stable with a slope that does not exceed 1:50 (2 percent) in any direction. In areas where steeper cross slopes are necessary to ensure proper drainage, cross slopes should not exceed 1:33 (3 percent).

Telescopes and Periscopes

A telescope may be provided at the overlook at West Sea Level Drive. Where only one telescope or periscope is provided in an area, it will comply with the recommendations for accessibility and be usable also from a standing position. When this equipment is not connected to an outdoor recreation access route, accessible equipment is recommended but not required. In areas where multiple units are provided, at least 20 percent will comply with the following recommendations:

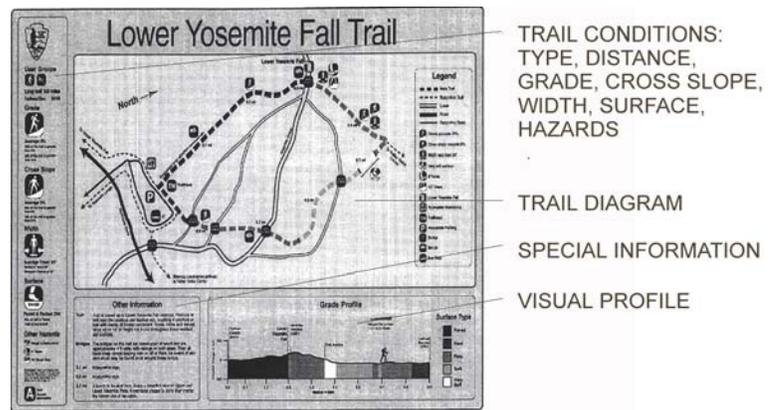
Controls: In order to be easily operable with one hand, controls must not require tight grasping, pinching or twisting.

Eye Piece: Eye pieces need to be usable from a seated position for viewing each point of interest.

Clear Ground Space: A clear ground space that is at least 760 mm by 1220 mm (30 by 48 inches) will be provided in front of the equipment. A turning space at least 1525 mm (60 inches) in diameter should also be provided at all accessible telescopes and periscopes so that someone using a wheelchair or other assistive device can approach and move around them. The surface of the clear space and turning space will be firm and stable with a slope that does not exceed 1:50 (2 percent) in any direction. In areas where steeper cross slopes are necessary to ensure proper drainage, cross slopes should not exceed 1:33 (3 percent).

Trail Signs

Accessible signs will be located at the entry points to Lechuza Beach. The Access Board recommends that objective information about actual trail conditions be provided on signs for all trails, whether they meet the guidelines for accessible trails or not (Regulatory Negotiation Committee 1999). Such objective information would assist trail users to determine whether the trail meets their own abilities.



TYPICAL ACCESSIBLE TRAIL SIGN

Examples of the types of useful information on standard trails signs include:

- running slope
- cross slope
- clear tread width
- trail surface characteristics
- distance to points of interest
- change in elevation on the trail

In addition to this information, signs for designated accessible trails would also display an accessible trail symbol. The Access Board is currently considering specific designs for a standard symbol of trail accessibility.

Trash and Recycling Containers

Trash and recycling containers should be located on an outdoor recreation access route.

Controls: In order to be easily operable with one hand, controls must not require tight grasping, pinching or twisting. This does not apply to hinged lids and controls that are designed to keep out large animals such as bears.

Clear Ground Space: At clear ground space that is at least 760 mm by 1220 mm (30 by 48 inches) will be provided in front of the containers. The surface of the clear space will be firm and stable with a slope that does not exceed 1:50 (2 percent) in any direction.

Federal Accessibility Standards and Regulations

U.S. Department of Justice

The U.S. Department of Justice provides many free ADA materials including the Americans with Disability Act (ADA) text. Printed materials may be ordered by calling the ADA Information Line [1.800.514.0301 (Voice) or 1.800.514.0383 (TDD)]. Publications are available in standard print as well as large print, audiotape, Braille and computer disk for people with disabilities. Documents, including the following publications, can also be downloaded from the Department of Justice website (www.ada.gov).

- *ADA Regulation for Title II*: This publication describes Title II of the Americans with Disabilities Act, Pub. L. 101-336, which prohibits discrimination by public entities on the basis of disability. Title II of the ADA protects qualified individuals with disabilities from discrimination on the basis of disability in the services, programs or activities of all state and local governments. This rule adopts the general prohibitions of discrimination established under section 504, as well as the requirements for making programs accessible to individuals with disabilities and for providing equally effective communications. It also sets forth standards for what constitutes discrimination on the basis of mental or physical disability, provides a definition of disability and qualified individual with a disability and establishes a complaint mechanism for resolving allegations of discrimination.
- *Title II Technical Assistance Manual (1993) and Yearly Supplements*. This 56-page manual explains in lay terms what state and local governments must do to ensure that their services, programs and activities are provided to the public in a nondiscriminatory manner. Many examples are provided for practical guidance.
- *Accessibility of State and Local Government Websites to People with Disabilities*. A five-page publication providing guidance on making state and local government websites accessible.

U.S. Access Board

The full texts of federal laws and regulations that provide the guidelines for the design of accessible facilities and programs are available from the U.S. Access Board. Single copies of publications are available free and can be downloaded or ordered by completing a form available on the Access Board's website (www.access-board.gov). In addition to regular print, publications are available in large print, disk, audiocassette and Braille. Multiple copies of publications can be ordered by sending a request to pubs@access-board.gov. In addition to the guidelines, guidance material is also available to assist staff in understanding and implementing federal accessibility guidelines.

The following publications are currently available from the U.S. Access Board:

Guidelines and Standards for Facilities

- *ADA Accessibility Guidelines (ADAAG)*: This document contains scoping and technical requirements for accessibility to buildings and facilities by individuals with disabilities under the Americans with Disabilities Act (ADA) of 1990. These

scoping and technical requirements are to be applied during the design, construction and alteration of buildings and facilities covered by Titles II and III of the ADA to the extent required by regulations issued by federal agencies, including the Department of Justice and the Department of Transportation, under the ADA. This document must be used in conjunction with Title 24 of the California Building Code (see *State of California Accessibility Standards and Regulations*).

- *State and Local Government Facilities: ADAAG Amendments:* The Access Board is issuing final guidelines to provide additional guidance to the Department of Justice and the Department of Transportation in establishing accessibility standards for new construction and alterations of State and local government facilities covered by Title II of the Americans with Disabilities Act (ADA) of 1990. The guidelines will ensure that newly constructed and altered State and local government facilities are readily accessible to and usable by individuals with disabilities in terms of architecture, design and communication.

Guidance Material and Advisory Reports for Facilities

The following publications provide additional information on specific aspects of the above guidelines and standards for facilities. Staff members are encouraged to refer to these publications to obtain more detailed and up-to-date information when evaluating and implementing accessibility improvements to facilities.

- *Using ADAAG Technical Bulletin:* This bulletin was developed to serve the specific needs of architects and other design professionals who must apply the ADA Accessibility Guidelines (ADAAG) to new construction and alterations projects covered by Titles II and III of the ADA. It is also intended to clarify accessibility regulations generally, including those that apply to existing facilities covered by the ADA.
- *Text Telephones Technical Bulletin:* Text telephones are machinery or equipment that employs interactive graphic (i.e., typed) communications through the transmission of coded signals across the standard telephone network. Text telephones can include, for example, devices known as TDDs (telecommunications display devices or telecommunications devices for deaf persons) or computers. This bulletin was developed to provide more technical information about the types of text telephones available and how and where their use is required.
- *Ground and Floor Surfaces Technical Bulletin:* Over twenty-seven million Americans report some difficulty in walking. Of these, eight million have a severe limitation and one-fifth of this population is elderly. Ambulatory persons with mobility impairments—especially those who use walking aids—are particularly at risk of slipping and falling, even on level surfaces. The information in this bulletin is intended to provide designers with an understanding of the variables that affect the measurement and performance of materials specified for use on walking surfaces and to better describe the requirements of an accessible route.

- *Parking Technical Bulletin:* Accessible parking requires that sufficient space be provided alongside the vehicle so that persons using mobility aids, including wheelchairs, can transfer and maneuver to and from the vehicle. Accessible parking also involves the appropriate designation and location of spaces and their connection to an accessible route. This bulletin was developed to provide more detailed information about the requirements for accessible parking including the configuration, location and quantities of accessible parking spaces.
- *Detectable Warnings Update (March 2003):* Currently, the Access Board is in the process of developing guidelines on public rights-of-ways that, once finalized, will supplement the new ADAAG. While ADAAG covers various features common to public streets and sidewalks, such as curb ramps and crosswalks, further guidance is necessary to address conditions unique to public rights-of-way. Constraints posed by space limitations at sidewalks, roadway design practices, slope and terrain raise valid questions on how and to what extent access can be achieved. Guidance on providing access for blind pedestrians at street crossings is also considered essential. This bulletin outlines the requirements of detectable warnings, a distinctive surface pattern of domes detectable by cane or underfoot, which are used to alert people with vision impairments of their approach to streets and hazardous drop-offs. The ADA Accessibility Guidelines (ADAAG) require these warnings on the surface of curb ramps, which remove a tactile cue otherwise provided by curb faces and at other areas where pedestrian ways blend with vehicular ways. They are also required along the edges of boarding platforms in transit facilities and the perimeter of reflecting pools.
- *Accessibility Guidelines for Outdoor Developed Areas:* The Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Areas was established in June 1997. The accessibility guidelines proposed by the Committee include consideration of the latest information, design and construction practices in existence. Proposed Section 16 of ADAAG requires all areas of newly designed or newly constructed and altered portions of existing trails connecting to designated trailheads or accessible trails to comply with this section. This proposed section also provides design guidelines for all newly constructed and altered camping facilities, picnic areas and beach access routes. It is recognized that compliance with this section will not always result in facilities that will be accessible to all persons with disabilities. These guidelines recognize that often the natural environment will prevent full compliance with certain technical provisions, which are outlined in this publication.

Federal guidelines and standards are subject to periodic revision based on research findings and guidance from advisory committees. The Conservancy/MRCA should have a regular practice of reviewing research materials posted to the U.S. Access Board's website and updating local guidelines and practices as new standards are adopted or existing standards are revised.

State of California Accessibility Standards and Regulations

Title 24, California Building Code

The State of California has also adopted a set of design guidelines for accessible facilities, which can be found in the California Code of Regulations, Title 24, Part II, California Building Code (CCR). CCR contains general building design and construction requirements relating to fire and life safety, structural safety and access compliance. CCR provisions provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures and certain equipment. Although California has adopted most of the ADAAG requirements, there are some differences. In general, the more restrictive requirement (whether federal or state) should be applied when designing accessible facilities. The complete Title 24 or any of its parts is available for purchase from the International Conference of Building Officials (ICBO), 5360 South Workman Mill Road, Whittier, CA 90601, 1.800.423.6587, (website: www.icbo.org) or at various bookstores that carry technical books.

Since the CCR is updated every three years, the Conservancy/MRCA should have an ongoing program of regularly reviewing these changes and updating policies and procedures related to accessibility to keep them current.

Division of State Architect

The Division of State Architect (DSA) also provides information and resources for accessible or universal design. Publications available for downloading at DSA's website (www.dsa.ca.gov) include:

- *DSA's 2003 California Access Compliance Reference Manual*: The purpose of this book of regulations and statutes is to clarify the obligations for architectural accessibility in California.
- *2001 California Historical Building Code, California Code of Regulations, Title 24, Part 8*: The purpose of the State Historical Building Code (SHBC) is to provide regulations for the preservation, restoration, rehabilitation, relocation or reconstruction of buildings or structures designated as qualified historical buildings or properties. These regulations are intended to provide alternative solutions for the preservation of qualified historical buildings or properties, to provide access for persons with disabilities, to provide a cost-effective approach to preservation and to provide for the reasonable safety of the occupants or users.

For further technical assistance contact DSA's Access Compliance Program at 1130 K Street, Suite 101, Sacramento, California 95814 (916.322.4700).

Resources for Providing Accessible Programs and Facilities

- *ADA Document Portal:* This website (www.adaportal.org) provides links to an ADA Collection consisting of more than 7,400 documents on a wide range of topics. The ADA Document Portal is supported by the ten ADA & IT Technical Assistance Centers
- *American Association of Museums:* Accessible exhibit design publications are available for purchase from AAM's website (www.aam-us.org), including *Everyone's Welcome* (available in a variety of formats), which addresses museum programs and the ADA, *The Accessible Museum*, which offers model programs of accessibility for older people and people with disabilities and *What Museum Guides Need to Know* to provide access to blind and visually impaired visitors.
- *Beneficial Design:* Beneficial Designs works toward universal access through research, design and education. Beneficial Designs develops assistive and adaptive technology, performs rehabilitation research, contract design, legal consultation, standards development and serves as a rehabilitation information resource. Contact Beneficial Designs, Inc. at 2240 Meridian Blvd, Suite C, Minden, NV 89423-8628, (775.783.8822), by email at mail@beneficialdesigns.com or online at (www.beneficialdesigns.com).
- *California State Parks Accessibility Guidelines:* This set of guidelines presents principles for providing accessibility in park settings. It is intended for practical use in the field and as a reference manual that can accommodate many situations and settings. The guidelines cover all of the "building blocks of an accessible park" including accessible programs such as guided and self-guided programs and tours, audiovisual programs, campfire centers and assembly areas, exhibits, historic sites, trails, visitor information and special events. This publication is available for download from the California State Parks website (www.parks.ca.gov). Further information is available from the Accessibility Section by phone (916.4458949) or by email at access@parks.ca.gov.
- *National Center on Accessibility:* The Center (www.ncaonline.org) is a cooperative project between the National Park Service and Indiana University to provide information and technical assistance, primarily on recreation access. An example of the research activities of the NCA is the National Trails Surface Study. This study is primarily the result of questions that NCA has received for many years and continues to receive from organizations, agencies and individuals who desire to make their trails accessible; are interested in an unobtrusive surface that blends and is friendly to the environment; and provides a quality trail experience for people with and without disabilities. NCA also publishes *What is an Accessible Trail?*, which summarizes the federal guidelines for outdoor developed areas and is available for downloading from its website. The NCA website also has information on campground accessibility, accessible picnic tables, access to beaches and inclusion of people with disabilities in aquatic venues.
- *National Park Service:* NPS has many programs that address the issue of providing accessible recreation services to people with disabilities. These include *Wilderness Accessibility for People with Disabilities* (available for downloading at

- www.planning.nps.gov/wilderness/toolbox3.cfm) and *Director's Order #42, Accessibility*, which establishes the purpose and role of the NPS Accessibility Program, lists applicable laws, standards and authorities, implementation strategies, roles and responsibilities. It also addresses NPS policies and provides links to additional information sources (available for download at www.nps.gov/access/resources_online.htm). The Technical Preservation Services of NPS publishes a series of Preservation Briefs, including *Making Historic Properties Accessible* (Technical Brief 32) by Thomas C. Jester and Sharon C. Park, AIA, and *Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes* (Technical Brief 36) by Charles A. Birnbaum, ASLA, which are available for download from the NPS website (www.cr.nps.gov/hps/tps/briefs).
- *National Recreation and Park Association*: NRPA (www.nrpa.org) is a national, non-profit service organization dedicated to advancing parks, recreation and environmental efforts that enhance the quality of life for all people.
 - *Santa Monica Mountains National Recreation Area Interagency Trail Management Plan (TMP)*: The National Park Service, California State Parks and the Santa Monica Mountains Conservancy are preparing an interagency regional trail management plan that will establish the overall direction of future development and completion of the SMMNRA trail network over the next ten to fifteen years. Based on natural, cultural and recreational resources and the public need, the TMP will prescribe policies for the maintenance of existing trails and development of new trails throughout the Santa Monica Mountains National Recreation Area. The TMP will include a trail policy map depicting the planned trail network and proposals for locations of trails and trailheads; trail construction, management and operation guidelines; and allowable uses. For more information on the planning process, contact National Park Service, Santa Monica Mountains National Recreation Area at (805.370.2331).
 - *Smithsonian Institution*: The Accessibility Program has developed the *Smithsonian Guidelines for Accessible Exhibition Design* (1996), which are available for download at their website (www.si.edu/opa/accessibility/exdesign/start.htm). Further information is available from the Smithsonian Accessibility Program at the Arts and Industries Building, Room 1239 MRC 426, Washington, DC 20560 (202.786.2942).
 - *USDA Forest Service*. Forest Service outdoor recreation accessibility guidelines are currently being developed to provide guidance for the agency to maximize accessibility while at the same time recognizing and protecting the unique characteristics of the natural setting of outdoor developed recreation areas and pedestrian trails managed by the Forest Service. These guidelines include the *Forest Service Outdoor Recreation Accessibility Guidelines* and the *Forest Service Trail Accessibility Guidelines* and are available online at www.fs.fed.us/recreation/programs/accessibility. When the Access Board finalizes its accessibility guidelines for outdoor developed areas, the Forest Service will revise the *Forest Service Outdoor Recreation Accessibility Guidelines* and the *Forest Service Trail Accessibility Guidelines* to incorporate the Access Board's standards, where those provisions are a higher standard, as supplemented by the

Forest Service. The supplementation will ensure the agency's application of equivalent or higher guidelines and universal design.

- *Wilderness Inquiry*: Wilderness Inquiry (www.wildernessinquiry.org) is a non-profit organization that focuses on getting people from all walks of life to personally experience the natural world. Wilderness Inquiry conducted a study for the Departments of Agriculture and Interior on ways to improve access for persons with disabilities to outdoor recreational opportunities made available to the public.

Resources for Assistive Technologies (General)

The Conservancy/MRCA should utilize the many disability-related resources available through the Internet.

ABLEDATA

The National Institute on Disability and Rehabilitation Research of the U.S. Department of Education maintains a national web-based service (www.abledata.com), which provides up-to-date links to assistive technologies and disability-related resources. ABLEDATA's mission is to provide objective information on such assistive products as:

- *Architectural elements:* Products that make the built environment more accessible, including indoor and outdoor architectural elements, vertical lifts, lighting and signs.
- *Blind and low vision:* Products for people with visual disabilities, including computers, educational aids, information storage, kitchen aids, labeling, magnification, office equipment, orientation and mobility, reading, recreation, sensors, telephones, tools, travel, typing and writing (Braille).
- *Communication:* Products to help people with disabilities related to speech, writing and other methods of communication, including alternative and augmentative communication, signal systems, telephones, typing and writing.
- *Computers:* Products to allow people with disabilities to use desktop and laptop computers and other kinds of information technology including software, hardware and computer accessories.
- *Controls:* Products that provide people with disabilities with the ability to start, stop or adjust electric or electronic devices including environmental controls and control switches.
- *Deaf and hard-of-hearing:* Products for people with hearing disabilities, including amplification, recreational electronics, signal switches and telephones.
- *Deaf Blind:* Products for people who are both deaf and blind.
- *Education:* Products to provide people with disabilities with access to educational materials and instruction in school and in other learning environments including classroom and instructional materials.
- *Recreation:* Products to assist people with disabilities with their leisure and athletic activities including crafts, electronics, gardening, music, photography and sports.
- *Seating:* Products that assist people to sit comfortably and safely including seating systems and therapeutic seats.
- *Transportation:* Products to enable people with disabilities to drive or ride in cars, vans, trucks and buses, including mass transit vehicles, facilities and vehicle accessories.

- *Wheeled mobility:* Products and accessories that enable people with mobility disabilities to move freely indoors and outdoors including wheelchairs (manual, sport and powered), wheelchair alternatives (scooters), wheelchair accessories and carts.
- *Workplace:* Products to aid people with disabilities at work including agricultural equipment, office equipment, tools and work stations.

Alternative Format Communications

Resources to produce standardized publications such as applications and registration forms in Braille, audiotape, large-print text and accessible electronic media will be assembled.

- *American Council of the Blind:* ACB (www.acb.org) is a national organization advocating on behalf of persons who are blind or have low vision. ACB also publishes *A Guide to Making Documents Accessible to People Who Are Blind or Visually Impaired*, which is available online, in regular print, large print, Braille or on cassette tape. ACB is located at 1155 15th St. NW, Suite 1004, Washington, DC 20005 (800.424.8666) or by email at info@acb.org.
- *National Center on Accessibility:* NCA publishes *What are Alternative Formats? How Do They Apply to Programs and Services?*, which is available for download from their website (www.ncaonline.org).
- *National Center for Accessible Media:* NCAM is a research and development facility dedicated to the issues of media and information technology for people with disabilities in their homes, schools, workplaces and communities. Developers of Web- and CD-ROM-based multimedia need an authoring tool for making their materials accessible to persons with disabilities. NCAM has developed two such tools, version 1.0 and 2.01 of the Media Access Generator (MAGpie), for creating captions and audio descriptions for rich media. Media Access Generator (MAGpie) is available for downloading from NCAM's website (www.ncam.wgbh.org).

Text Telephone (TDD)

To the extent necessary, park facilities should have access to a text telephone or have access to a telephone transfer service as required by the law and offered by public telephone companies.

- *TDI:* TDI's online resources (www.tdi-online.org) also include information about telecommunications access such a TTY, pagers, telephony, VoIP and more.
- See the *Text Telephones Technical Bulletin* available on the U.S. Access Board's website (www.access-board.gov).

Guide to Disabilities and Disability Etiquette

A guide to disabilities and disability etiquette should be assembled and distributed to staff. The guide will ensure that staff members are familiar with a variety of types of disabilities and that they are sensitive to the abilities and needs of people with disabilities in order not to offend or demean them. The guide should be periodically updated to ensure that it includes current acceptable language for talking about disabilities.

- *Disability Etiquette: Interacting with People with Disabilities* is available online at the City of Long Beach's website (www.ci.long-beach.ca.us/hr/employees/ada/etiquette.htm).

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APPENDIX B:
CONSENT DECREE: *TUCKER, ET AL V. STATE OF CALIFORNIA*
DEPARTMENT OF PARKS AND RECREATION, ET AL