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# CULTURAL LANDSCAPE REPORT FOR UPPER FORT MASON

GOLDEN GATE NATIONAL RECREATION AREA

VOLUME II: TREATMENT STRATEGY





# CULTURAL LANDSCAPE REPORT FOR UPPER FORT MASON

## GOLDEN GATE NATIONAL RECREATION AREA

SAN FRANCISCO, CALIFORNIA

*“Situated in the northwestern portion of the city limits, this promontory commands a magnificent view in every direction from the Farallones, on a clear day, to the most eastern extremity of the bay.”*

Daily Alta California,  
July 7, 1877

### VOLUME II: TREATMENT STRATEGY

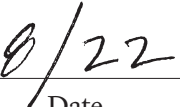
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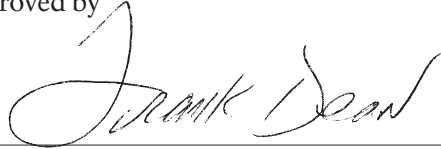
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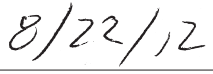
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Cover photograph: Oblique aerial of Upper Fort Mason. View looking northwest, 2005 (Robert Campbell Photography).

Title page photograph: The San Francisco Bay from Battery Burnham. View looking north, 2011 (Olmsted Center for Landscape Preservation, hereinafter OCLP).

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## INTRODUCTION

The Fort Mason Historic District is a ninety-one and one half-acre unit of Golden Gate National Recreation Area located at the northern tip for the San Francisco peninsula. The district is bordered by Van Ness Avenue to the east, Bay Street to the south, Laguna Street to the west, and by the San Francisco Bay to the north (Figure 0.1). The Fort Mason Historic District is comprised of Upper Fort Mason, the sixty-eight and one half-acre area addressed in this report, and Lower Fort Mason, which encompasses the historic thirteen-acre San Francisco Port of Embarkation. Lower Fort Mason is operated independently as the Fort Mason Center under a long-term lease agreement between the National Park Service and the Fort Mason Foundation. A separate cultural landscape report was completed for Fort Mason Center in 2009.<sup>1</sup>

Today, Upper Fort Mason is the headquarters of Golden Gate National Recreation Area and an important portal to the larger park. The site is significant for its role in United States military history and includes a collection of resources



Figure 0.1. Location diagram showing Fort Mason's strategic position along the San Francisco coastline. Plan view, 2011 (OCLP).

that trace the evolution of military landscape planning and architecture over a one hundred year period (1855–1953), inclusive of the American Civil War, the Indian Wars of the American West, the Spanish-American War, World War I, World War II, and the Korean Conflict. The prospect afforded by Upper Fort Mason’s natural topography made the site a strategic location for settlement and defense, and significantly influenced past development and use of the landscape.

The landscape reflects its historic character through the views and vistas, buildings and structures, circulation patterns, vegetation, and myriad of small-scale features related to United States military stewardship. However, since the end of the period of significance, the landscape has lost some of the military qualities due to a decline in maintenance at the end of military occupation, new accommodations for public use, and natural growth and decline of vegetation. This report establishes a plan for landscape treatment to ensure that the historic character of the site will be preserved and enhanced.

Over the past four decades, the National Park Service has cared for the Upper Fort Mason landscape, undertaking improvements consistent with National Park Service policies, guidelines, and standards, as well as park planning initiatives. However, since the property was decommissioned as a United States Army post, daily visitation has decreased from its height under active military use. This decrease has resulted in both a decline in landscape maintenance expectations, as well as a decrease in maintenance funding. Consequentially, day-to-day maintenance issues, such as trash removal and lawn mowing, are well attended to, while many larger cyclical landscape maintenance issues, such as regular tree pruning and replacement, have been deferred. Treatment recommendations included in this report are intended to help park managers address the following broad issues identified during project scoping:

- Incremental loss of historic specimen trees
- Inconsistent vegetation management
- Encroachment and closure of historical and strategic views
- Hazardous and inaccessible historic garden spaces
- Poor condition and diminished visitor experience
- Accommodating new and appropriate uses
- Opportunities for interpretation and public engagement
- Balancing natural and cultural resource values

## **PURPOSE, SCOPE, AND METHODS**

Cultural landscape reports are the primary document used by the National Park Service to guide treatment and management of cultural landscapes. As an element of a cultural landscape report, landscape treatment recommendations and plans are intended to preserve and enhance historic landscape characteristics and features. This guidance is presented within the context of the landscape's significance, existing conditions, as well as current and proposed uses.<sup>2</sup> This methodology is consistent with *A Guide to Cultural Landscape Reports: Content, Process, and Techniques*, which outlines the purpose, process, content, and format for cultural landscape reports.<sup>3</sup>

Completed in 2004, *Cultural Landscape Report for Fort Mason, Golden Gate National Recreation Area; Site History, Existing Conditions and Analysis* includes a site history, summary of existing conditions, landscape analysis and evaluation, and evaluation of landscape features.<sup>4</sup> Building upon the first volume, the primary focus of this second volume is twofold. This report defines a treatment framework for the long-term management of the Upper Fort Mason landscape that is supported by legislation, policy, and current planning. This second volume also identifies treatment tasks necessary to preserve and enhance the historic character of the landscape, while addressing contemporary site management issues.

The treatment framework and recommendations included in this report were developed in collaboration with park staff and partners during a two-day treatment workshop at Upper Fort Mason in January 2011 (Appendix C). During the treatment workshop, participants defined the critical elements of successful landscape management for the site. These aspects of treatment encompass issues ranging from budget and planning, to maintenance, to natural and cultural resource protection, to improved visitor experience. Workshop participants also identified the following seven objectives for all treatment tasks:

- Affordable
- Achievable
- Balanced
- Environmentally conscious
- Maintainable
- Preservation oriented
- Publicly accessible<sup>5</sup>

This report is organized into four chapters. The first chapter establishes a framework for treatment based on the park's enabling legislation, existing *General Management Plan*, draft *General Management Plan*, *Long Range Interpretive Plan*, and the findings of the *Cultural Landscape Report for Fort Mason, Golden Gate National Recreation Area; Site History, Existing Conditions and Analysis*. This framework articulates a treatment philosophy describing the desired character of the landscape, establishing a consistent primary treatment for the landscape, and proposing a treatment date as an objective benchmark for assessing historic character. Based on this treatment framework, the second chapter of this report describes general treatment recommendations addressing broad issues that impact the historic character of the landscape. The third chapter describes specific treatment tasks necessary to enhance the historic character of the landscape, while accommodating contemporary site management needs. The report concludes with a summary discussion of implementation considerations, including a table of treatment tasks suggesting practical priorities and considerations related to facility management.

This report recommends and describes landscape treatment at the conceptual level. Further planning, design, and compliance will be required for implementation of many of the recommendations. Additionally, this report does not address routine and cyclical maintenance tasks, such as tree pruning and lawn care, that are necessary to perpetuate the historic character of the landscape.

## **HISTORIC OVERVIEW**

Prior to the arrival of Spanish settlers, the Yelamu Ohlone appear to have lived seasonally on this truncated peninsula on San Francisco Bay. The confluence of natural resources with the geography of the peninsula made native settlement here attractive. Resources included the extensive wetlands immediately to the west, providing access to fish, shellfish, birds, and mammals. An upwelling of fresh water and the shade of native laurels growing in an otherwise windswept environment made this an attractive site. Their encampment was both isolated and protected by the bay waters to the north and a great expanse of sand dunes to the south. Those attempting to approach the site were exposed to view.

In 1776, as independence from the British Crown was boldly declared in Philadelphia, the Spanish sailed into San Francisco Bay intent on establishing on Ohlone lands both an ecclesiastical and military presence at the northern frontier of their vast New World empire. By 1787, most members of the Yelamu tribe of Ohlone living on the San Francisco peninsula were baptized, if not otherwise scattered or dead. Native peoples had ceased to represent any threat to Spanish settlement and attention was turned to the defense of the area from more distant enemies. In 1794, the Spanish governor of California requested that a secondary

battery of artillery be constructed east of the Presidio at Punta Medanos or “Point Sand Dune.” This new battery, constructed on the north shore of the San Francisco peninsula closer to the mission settlement, was built of bundled sticks and piled sand. It was intended to guard the Yerba Buena anchorage in the event that the English succeeded in evading the more formidable battery guarding the mouth of the bay.

Barely thirty years after colonists in eastern North America achieved independence from Britain, Mexico achieved independence from Spain (1821), and California became its remote northern province. The Mexican military presence at the Presidio of San Francisco, including the battery at Punta Medanos, was in an inactive status, if not quite abandoned, a little over ten years later. In 1848, Mexico ceded California to the United States as the price of military defeat. Recognizing its continued military value, Surveys of the area followed soon thereafter, intermingling the Spanish Bateria San Jose and Punta Medanos as Point San Jose on United States maps.

During the frenzied settlement accompanying the discovery of gold in northern California, an Executive Order was issued in 1850 reserving 10,000 acres of land on the San Francisco peninsula for the use of the military. Included within this enormous reservation, the former Spanish Presidio and Point San Jose first appeared as a single parcel. The boundaries of this unit were soon modified to both reduce the acreage of reserved land and to divide the Presidio and Point San Jose into two separate military properties. The boundary for the smaller of the



Figure 0.2. The northern extremity of Point San Jose featured panoramic views to Black Point Cove during the period of significance. View looking northwest, circa 1902 (NPS, San Francisco Maritime National Historical Park Archives).

two at Point San Jose was an arbitrary geometric arc of 800 yards, its radius point centered at the point's northernmost extremity. Most of the smaller reservation was comprised of constantly shifting sand dunes. Prior to the imposition of the city grid, only posts driven into the sand marked the boundary that arced as far south as the future right of way provided for Chestnut Street. Only a small fringe of land was wooded, found at the north and east sides of the point, an area sheltered from the wind and underlain by resistant rock.

The United States Army, failing to take physical possession of the reservation at Point San Jose, was later criticized as having "slumbered" on its legal rights, as the sheltered and appealing strip of land on the east side of the point was soon occupied by well-heeled Gold Rush squatters occupying summer cottages overlooking the cove (Figure 0.2). In addition to some of the city's elite citizens, industrial facilities including a slaughterhouse and smelter, a woolen mill, and water works also "squatted" within the 800-yard arc of the government reservation. By 1863, the military was awakened to the threat of Confederate vessels conducting raids along the Pacific coastline, and on the orders of General Henry Halleck, the Ninth Infantry took physical possession of the reservation, evicting residential squatters, but leaving industrial concerns alone. An earthen battery was soon constructed on the northern slope of the point, just below the topographic summit. As the Spanish battery before it, these new fortifications served as a secondary line of harbor defenses.

Never used in combat, the abandonment of Point San Jose was briefly considered at the close of the Civil War in acquiescence to the claims of prior occupants. However, the military decided to retain its holdings there, and was subsequently called upon to defend its claim to the reservation under the 1850 Executive Order. The defense of these claims proved a drawn out legal process that was ultimately decided in the government's favor by the United States Supreme Court.

While the nation's coastal defenses cycled into a period of neglect during the 1870s and early 1880s, the United States Military Reservation at Point San Jose was developed into a more durable military installation. In 1870, the size of the reservation was reduced, defined by the western, southern and eastern boundaries that survive today. In 1882, the post was renamed Fort Mason, in honor of the onetime military governor of the California territory, Colonel Richard Barnes Mason, regimental commander of the 1<sup>st</sup> United States Dragoons.

The increased attention given to Fort Mason occurred in part out of the initiative of General Irvin McDowell, who chose the site of the largest of its Gold Rush summer cottages as his personal residence. Selecting his dwelling place in part for its convenience to the downtown offices of the Department of the Pacific, McDowell moved the core of the pre-existing cottage north, and built an elegant new residence incorporating minor wings that remained from the prior building into the new plan. Where the previous cottage was oriented to face east, towards





Figure 0.3. The Commanding General's Quarters, now the Officers' Club, was characterized by manicured grounds during the period of significance. View looking north, circa 1891 (National Archives, RG92, Still Photography Division, Box 10, Series F, 92-F-37-2).

the village of Yerba Buena, McDowell oriented his new home to face west, toward the Presidio (Figure 0.3). McDowell also became the first of many commanders to undertake programs of landscape improvement. He had roads surfaced and made repeated attempts to stabilize drifting sand dunes with vegetation. The landscape became more intensively managed and maintained, consistent with increased scrutiny by the military hierarchy.

During the 1890s, United States coastal defenses were modernized in response to a new generation of powerful weapons. At San Francisco, new fortifications and long-range guns were installed further to the west, closer to the open ocean. Former primary defenses at the mouth of the bay became a second line of defense, as those to the east at Fort Mason and Alcatraz Island became less strategically significant. Fort Mason's Battery Burnham, mounting a single eight-inch breech-loading rifle, was among the last built in San Francisco and the first to be abandoned.

In response to the 1906 earthquake and fire, a new mission was identified for Fort Mason. Many of the downtown facilities leased by the Army were destroyed by the catastrophic events, which turned the southern half of Fort Mason into a tent city for earthquake refugees (Figure 0.4). Among the Army facilities destroyed by the disaster were warehouses and shipping facilities found along the downtown waterfront. In response, a new centralized Army Supply Depot was begun at Fort Mason, authorized by President Theodore Roosevelt. The new supply depot,



Figure 0.4. A refugee encampment developed in the South Expansion area in the wake of the 1906 earthquake and fire. Bay Street is visible across the center of the photograph. View looking northwest, circa 1906 (San Francisco History Center, San Francisco Public Library).

completed in 1912, was built on fill adjacent to the northwest shore of the post, consolidating shipping and logistical functions displaced by the earthquake.

In 1915, San Francisco hosted the Panama Pacific International Exposition, a large fair celebrating the completion of the Panama Canal and informally marking San Francisco's recovery from the earthquake and fire of 1906. As the United States Army played a central role in that Central American enterprise, it supported the celebration in San Francisco as well. At Fort Mason, the vacant land lying between the developed Central Cantonment area and Bay Street was offered for use by the Exposition. This area was filled with amusements, including a replica of the log Old Faithful Lodge at Yellowstone National Park and a scale model of the Grand Canyon, an indirect and perhaps coincidental reference to the role the United States Army then played in the management of national parks. The fair was an economic failure, operating for less than a year, yet it left behind significant infrastructure at Fort Mason, including an electric streetcar line and MacArthur Avenue, a primary east-west thoroughfare across the post. To the west of Fort Mason, a large area of fill placed along the bay frontage for the purposes of the exposition stood vacant, awaiting commercial and residential development into San Francisco's Marina district.

The United States involvement in World War I was marked at Fort Mason by the establishment of a temporary tent city "cantonment" in the open space formerly used as the fair's amusement zone. This area subsequently proved to be the most malleable area at Fort Mason, a useful expansion area accommodating earthquake refugees, a fair, World War I Doughboys, temporary World War II structures, and a city park. In contrast, the most stable or constant landscape area at Fort Mason remained the residential area first developed by the elite group of Gold Rush squatters.

Figure 0.5. Upper Fort Mason from the intersection of Bay Street and Van Ness Avenue prior to construction of the Quad residential area. Street trees and a trolley are visible along MacArthur Avenue. View looking northwest, circa 1942 (NPS, GGNRA Archives).



Following the conclusion of World War II in 1945, nearly every available parcel of Fort Mason was developed. Outside of the park-like surroundings containing remnant fortifications and officers' quarters at the precipice of the East Black Point slope, Fort Mason was covered by either buildings or roadways. The Parade Ground had been replaced by the Hostess House and the central cantonment was joined to the west and south by warehouses. Officers' Park was complete, although a parking lot remained in the southeast corner of the site, later to be developed as the Quad. The municipal trolley line extended along MacArthur Avenue connecting Van Ness Avenue to Laguna Street (Figure 0.5).

The dominance of air power and air transportation rendered the once state of the art shipping facilities at Lower Fort Mason obsolete. By the 1960s, Fort Mason had become a satellite facility to the more spacious Oakland Army Base. In both New York City and San Francisco, plans were made to transfer vast tracts of military real estate to the National Park Service, creating a new kind of urban national park. Before Fort Mason was transferred to the National Park Service in 1972, the Army and the General Services Administration authorized the demolition of dozens of deteriorating temporary buildings, dating to World War II and earlier, on either side of MacArthur Avenue the western side of Fort Mason. The park headquarters for the new Golden Gate National Recreation Area was established at Fort Mason that year, owing to the proximity of this property to the park's constituents and partners concentrated in the city. In advance of planning for the new park unit, the National Park Service continued the program of building demolitions begun by the Army and the General Services Administration.

By 1979, a master plan for Fort Mason was developed to address the change in use of the property from a military post to a national park (Figure 0.6). The southwest quadrant of Fort Mason, now known as the Great Meadow, was of particular

interest in the planning process, and was ultimately designed to accommodate a variety of uses. The master plan for Fort Mason was informed by the same in-depth public involvement effort leading to the park's *General Management Plan*. During the same period, the former supply depot at Lower Fort Mason was being rehabilitated through an innovative public-private partnership between the National Park Service and the Fort Mason Foundation, a non-profit partner organized in 1977 in support of the park. These vacant and deteriorating buildings and piers at the northwest quadrant of Fort Mason have become known as the Fort Mason Center. They offer valuable waterfront space to nonprofit and cultural organizations in exchange for investment in building repairs and rehabilitation.<sup>6</sup>

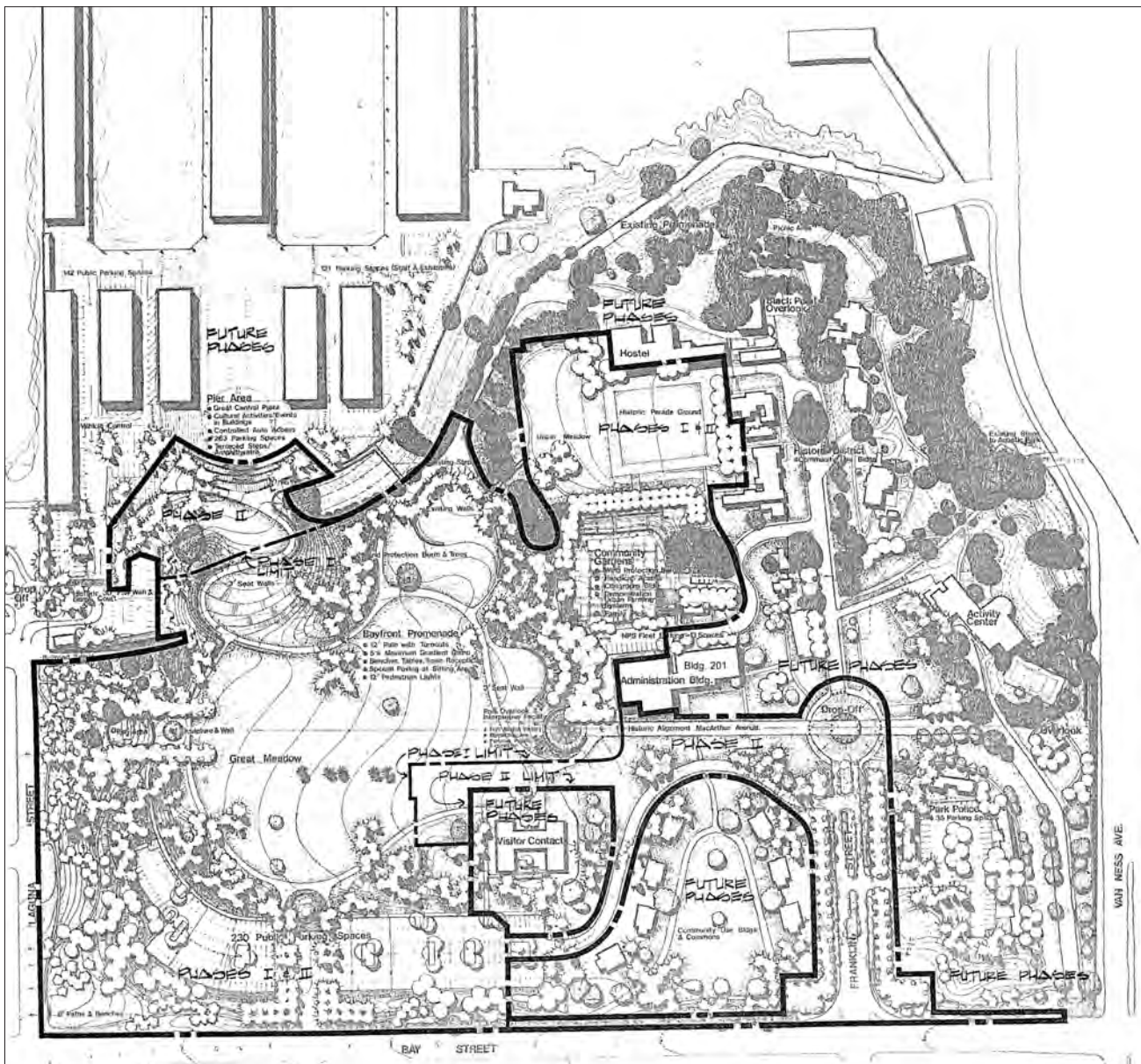


Figure 0.6. Master plan for Fort Mason prepared by Royston Hanamoto Beck & Abey, Landscape Architects and Planners. Note the proposed western terminus of MacArthur Avenue, reestablished Parade Ground, and public parking area along Bay Street. Plan view, 1978 (NPS, GGNRA Archives).

## EVALUATION SUMMARY

The Fort Mason Historic District was first listed on the National Register of Historic Places in 1972. The geographic extent of the nomination was limited to the area surrounding the historic Officers' Quarters on East Black Point, on the eastern side of the post between Franklin Street and Van Ness Avenue. In 1979, the boundary of the Fort Mason Historic District was increased to include the entire post.

The period of significance established in the 1979 nomination begins with the construction of civilian residences on the eastern hillside of Black Point in the mid-1850s and extends to the conclusion of the Korean Conflict in 1953. The nomination identifies some of Fort Mason's buildings and sites as potentially nationally significant, and resources constructed later in the post's history as locally significant.

The 1979 nomination recognizes the significance of Fort Mason under National Register Criterion A (Event), largely for its association with military history:

Commencing in 1797, and lasting through the Spanish and Mexican administrations of Alta California, Fort Mason was one of two sites in San Francisco Bay that was armed with artillery for the defense of the harbor. For over forty years under the American administration, it played a role in the coastal defenses of the bay from the Civil War to post-Spanish-American War. It also served as an important element in the first submarine mine defense of the San Francisco Bay, in the Spanish-American War. From the Spanish-American War to the Korean War, Fort Mason's role as the headquarters of the San Francisco Port of Embarkation was of national significance historically. Through it moved millions of men and millions of tons of supplies, providing evidence of the United States' expansion and growing interests in the Pacific.<sup>7</sup>

Both the 1972 and 1979 nominations recognize the significance of Fort Mason under National Register Criterion C (Design/Construction):

The collection of military structures dating from the 1850s to the Korean War illustrat[ing] the evolution of an Army post (and coastal fortifications to the lesser degree) over a period of 100 years. The contrasts and many moods of the architecture, the effect of the Army's caste system on the quarters, the charm of the earliest officers' row, the simple lines of the Endicott battery, the WPA architecture of the Great Depression, the Army's determination in landscaping – all these blend together to present a history of this place and its times.<sup>8</sup>

A draft nomination examining the significance of archeological resources at Fort Mason was also prepared in 1979. However, this nomination was never presented for entry into the National Register.<sup>9</sup> Despite its unofficial status, Upper Fort Mason is managed as an archeological district and is unofficially recognized for its probable significance under National Register Criterion D (Information Potential). Beyond the known historic archeological sites, there is a high potential for additional prehistoric archeological resources throughout Upper Fort Mason.

Of the seven aspects of integrity defined by the National Register program, Upper Fort Mason retains a high degree of integrity relative to location, setting, feeling, and association. Integrity of materials is diminished by changes to the quality, condition, and placement of materials at Upper Fort Mason. Many of the utilitarian landscape materials and small-scale features that characterized the post during World War I and World War II have been removed with changing uses of the site. For example, the western end of MacArthur Avenue was removed to accommodate the Great Meadow. Workmanship is diminished only by the reduced level of maintenance under National Park Service management as compared to that of the United States Army. Integrity of design is diminished by improvements undertaken by the General Services Administration and National Park Service in the Great Meadow and Parade Ground that altered the form, plan, circulation, and spatial organization of the site. However, integrity of materials, workmanship, and design are diminished, not missing. Taken together, Upper Fort Mason retains its integrity as a historic property.

Aside from changes associated with removal of the Parade Ground and creation of the Great Meadow in the 1980s, modifications to the Upper Fort Mason landscape since the end of the period of significance have been minor and largely reflect reduced levels of maintenance. Many of the Army-designed landscape improvements in the active, working zone of the post (to the west of Franklin Street) were utilitarian and designed for convenient maintenance. However, in residential zones of the property (to the east of Franklin Street and in Officers' Park), improvements were markedly ornamental and domestic. Since the end of Army management, the most substantial changes to the character of the landscape in the working zone have been a decrease in paved surfaces, with increased ornamental plantings and turf. Conversely, in the residential zones, ornamental planting has decreased in favor of landscape materials that require less frequent maintenance. The recommendations of this report are focused on ensuring that the historic integrity of the eastern portion of the site is perpetuated, while opportunities to reestablish lost historic patterns and accommodate new uses are evaluated for the western portion of the site.

## **OVERVIEW OF PRIOR LANDSCAPE PLANNING**

In 1972, Public Law 92-589 established Golden Gate National Recreation Area, conveying stewardship of Fort Mason to the National Park Service. The legislated mandate of the park is to preserve and encourage recreational use. Early National Park Service management focused on balancing the cultural, recreational, and natural resources present in the park.<sup>10</sup>

The area bordering the western side of Van Ness Avenue was a utilitarian part of Fort Mason during the period of significance. This area, now known as the East

Waterfront pocket park, was incorporated into San Francisco Maritime National Historical Park at the time of its establishment in 1988. However, the area remains a part of the Fort Mason National Register Historic District. In the mid-1970s, John B. Sage, landscape architect with the National Park Service Western Regional Office, prepared a new design for the East Waterfront pocket park, incorporating trees over lawn with a small brick-paved plaza on the western side of Van Ness Avenue.<sup>11</sup>

In 1978, the National Park Service contracted with Royston, Hanamoto, Beck & Abey, a landscape architecture and planning firm, to develop a master plan for Fort Mason. The master plan defined a new open green space on the western portion of the site, retained the majority of historic structures on the eastern portion of the site for adaptive reuse, modified the Franklin Street/MacArthur Avenue intersection for a drop-off, relocated the community garden to the north of Building 201, and rehabilitated the historic parade ground.

The 1978 master plan was only partially implemented. However, the twenty-five acre Great Meadow to the west of Building 201 was constructed following the recommendations of the plan. The concept for the Great Meadow, which includes many elements of a traditional city park, was derived from questionnaires completed by park constituents. Construction necessitated removal of remnant foundations and roads on the western portion of Upper Fort Mason and construction of curvilinear footpaths and rolling topography. A parking area was also added along Bay Street, although smaller than depicted in the master plan. During construction of the Great Meadow, the National Park Service elected to retain two buildings west of Building 101. As a result, the planned terminus for MacArthur Avenue was never implemented.

The 1980 *General Management Plan for Golden Gate National Recreation Area* supported many of the recommendations of the earlier master plan, recognizing that Upper Fort Mason offered unparalleled recreational opportunities for San Francisco, but also contained a significant collection of historic buildings that warranted preservation.<sup>12</sup> Key elements of the *General Management Plan* included improving park access, developing a passive park setting on the western side of the site, restoring the Parade Ground, preserving archeological resources, adaptively reusing historic buildings, and retaining the hostel and popular community garden.

Also by 1980, five historic structure reports were completed for Fort Mason. Three focused on buildings, including Building 201, Building 240, and the Civil War barracks, as well as a short report on the MacArthur Avenue streetcar station. The fifth historic structures report focused on the western grounds, specifically the Parade Ground and MacArthur Avenue. These documentation efforts reflected a pragmatic approach in documenting the resources proposed for rehabilitation in the master plan.<sup>13</sup>

In 1982, plans for a new Black Point picnic facility prompted archeological investigation of the historic battery. During the previous decade, Park Ranger John Martini had investigated the area for remnants of the Civil War battery. His discovery of a brick wall and buried magazine were recorded, but not further investigated. Excavation was initiated in 1982 to prevent further deterioration of the resource as a result of its direct contact with acidic soil.

A traffic study completed by Robert Peccia and Associates for Fort Mason in April 1999 identified three locations within the park for circulation improvements: the Franklin/Bay Street intersection, the Franklin Street/Pope Road/MacArthur Avenue intersection, and the Bay Street parking area. Recommendations for reconfiguration of the roadway at the Franklin and Bay Street intersection was a priority, since the majority of documented automobile accidents at Fort Mason occurred in this location.

In May 2003, Golden Gate National Recreation Area with the Golden Gate Parks Conservancy developed *Parkwide Site Furnishings Standards* for the park.<sup>14</sup> The standards in this document are intended to project a unified image for the recreation area, with recommended furnishings that are compatible, functional, sustainable, low-maintenance, necessary, and designed and constructed with materials, finishes, and options appropriate to the varied settings of the larger national park. A companion set of wayfinding and regulatory signage standards is complete and being implemented.

In September 2004, the Olmsted Center for Landscape Preservation with the National Park Service Pacific West Region completed a *Cultural Landscape Report for Fort Mason, Golden Gate National Recreation Area; Site History, Existing Conditions and Analysis*. This first volume of the report documented the site's history, existing conditions, and provided an analysis of the historic landscape. The *Cultural Landscape Report for Fort Mason, Golden Gate National Recreation Area; Site History, Existing Conditions and Analysis* also included a recommendation for rehabilitation as the overall treatment approach and included several preliminary treatment recommendations. Recommendations for emergency landscape stabilization included corrective and rejuvenative pruning of overgrown foundation plantings, as well as trash removal and vegetation management on the East Black Point slope. Recommendations for further research and documentation of the Upper Fort Mason landscape cited the need for a detailed plant inventory of foundation plantings and specimen vegetation, a natural resource assessment of the North Cliff area, a historic viewshed assessment and management plan, an environmental evaluation of the landscape surrounding the Transformer House, and additional research into construction dates of inadequately documented small-scale features.<sup>15</sup>

Subsequent to the *Cultural Landscape Report for Fort Mason, Golden Gate National Recreation Area; Site History, Existing Conditions and Analysis*, the



Olmsted Center for Landscape Preservation worked with Golden Gate National Recreation Area and the National Center for Accessibility to develop the *Upper Fort Mason Accessibility Case Report*.<sup>16</sup> Completed in October 2010, the report identified forty-one barriers to universal accessibility and proposed tasks to improve universal accessibility. Resolution of twenty-eight of the forty-one work items was concluded during a one day on-site workshop, with many more items resolved soon thereafter. Resolution of barriers to accessibility at Fort Mason has been ongoing since completion of the report with several planned phases of construction. Selected large and complicated work items, such as access across the steep slopes at the North Fortifications and East Black Point areas, were deferred for consideration in this treatment volume.

In preparation for this report, a comprehensive tree inventory and vegetation management plan was developed by the park with *Bartlett Tree Experts* in 2010.<sup>17</sup> Golden Gate National Recreation Area has since developed the *Upper Fort Mason Tree Treatment Action Plan* (Appendix A) to reduce hazardous trees on the property through a phased program based on the findings of the Bartlett survey.<sup>18</sup> Vegetation documentation and management in the Black Point area was also undertaken by *Terra Cognita* in 2010.<sup>19</sup> This work involved clearing and survey of the garden pathways on the East Black Point slope, as well as recordation of woody shrubs and herbaceous plantings in the East Black Point, Central Cantonment, and North Fortification areas. Additional historic and existing conditions documentation of the NCO Quarters along the west side of northern Franklin Street was completed by Robin Abad Ocubillo in 2010.<sup>20</sup>

The *Waterfront Corridor Visitor Experience Assessment*, developed in November 2010 by *Orca Consulting*, focused on the visitor experience in and between San Francisco Maritime National Historical Park and Fort Mason.<sup>21</sup> The assessment identified the need for an improved arrival experience, as well as better overall wayfinding and interpretation within the two parks. The report recommended the development of a walking path from the Golden Gate Promenade, development of suggested walking routes through Fort Mason, and new interpretive and wayfinding panels at each entrance to the park. The *Waterfront Corridor Visitor Experience Assessment* also addressed the potential relocation of the Alcatraz embarkation facility from Pier 33 to one of the three piers at Lower Fort Mason.

Care of Upper Fort Mason's physical landscape assets are managed through the National Park Service Facility Management Software System (FMSS). The majority of these assets are tracked as components of the maintained landscapes asset type. At present, Upper Fort Mason's maintained landscapes encompass nine locations. The majority of the physical assets associated with these locations, however, are not yet entered in the Facility Management Software System. This report presents a refinement of the Upper Fort Mason maintained landscapes Facility Management Software System hierarchy to reflect anticipated

changes in landscape maintenance requirements resulting from the treatment recommendations included in this report.

A revised *General Management Plan* is currently being developed by Golden Gate National Recreation Area through a wide-reaching planning initiative. The draft plan includes management zones that reflect the historical significance of the eastern portion of Upper Fort Mason, recreational opportunities in the Great Meadow, preservation of the natural coastline along the North Cliff, as well as the need to accommodate park operations in the core of the park. Within the broader context of Golden Gate National Recreation Area, Fort Mason is planned to serve as a park portal with improved visibility, access, and wayfinding.

### **TREATMENT SUMMARY**

Both general recommendations and specific tasks in this report are focused on perpetuating this historic character of the landscape and advancing the goals of the draft *General Management Plan* and other park planning documents. The “evolved cultural landscape” management strategy defined in the park’s draft *General Management Plan* accommodates both adaptive reuse and other contemporary compatible uses of the historic site. Balancing cultural, natural, and recreational resource values, along with enhancing the visitor experience is intrinsic to this strategy.

The landscape treatment framework defined in chapter one of this report recognizes that accommodating contemporary use is essential to successful landscape treatment. The framework identifies rehabilitation as the preferred treatment approach and highlights views, vegetation, and circulation as landscape characteristics that are fundamental to conveying the park’s significance. Rather than restoring the historic Army era landscape, with an active zone nearly devoid of ornamental plantings and a residential zone requiring intensive daily maintenance, treatment recommendations for the Upper Fort Mason landscape are focused on achievable tasks that meet the diverse objectives defined for Upper Fort Mason in the draft *General Management Plan*.

Treatment is intended to rehabilitate the landscape to reflect its historic character about 1953, when Upper Fort Mason was typified by a crisp, trim landscape aesthetic consistent with Army maintenance practices. This general landscape character will be most readily achieved across the Great Meadow and Central Cantonment areas, where the existing landscape is dominated by trees growing over turf. The East Black Point and North Fortifications areas pose the greatest challenges to meeting the park’s vision for a successfully maintained landscape. These areas contain some of the park’s most interesting and significant landscape features, including filtered and framed views, remnant pathways and gardens, and

defensive fortifications active under the United States Army from the Civil War through the turn of the twentieth century. However, existing conditions in these areas do not currently reflect the historic character of the landscape. Conditions that warrant particular attention are overgrown trees and shrubs that block views, eroded walks, and debris in the landscape. As the eastern and northern faces of the park, visible from San Francisco Maritime National Historical Park and the city beyond, these areas serve both as the public face of the park and as portals to attractions beyond.

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21. ORCA Consulting LLC, *San Francisco Maritime National Historic Park – Ft. Mason Historic District, Waterfront Corridor Visitor Experience Assessment* (November 2010).

# 1. TREATMENT FRAMEWORK

This chapter describes a philosophical framework that provides context for the treatment recommendations included in this report. This chapter includes an overview of applicable regulations and policies, park enabling legislation, and current planning. Based on this framework, a treatment philosophy articulates a guiding vision for the historic Upper Fort Mason landscape, including a primary treatment approach and treatment reference date.

## **NATIONAL PARK SERVICE REGULATIONS AND POLICIES**

The framework for treatment of the Upper Fort Mason landscape is guided broadly by the mission of the National Park Service, defined in the Organic Act of 1916, “to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”<sup>1</sup> The application of this mission to cultural landscapes is articulated in *The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, which in turn is interpreted within a hierarchy of regulations and policies in National Park Service management.

As a cultural resource, management of the Upper Fort Mason landscape is defined by *36 Code of Federal Regulations: Parks Forests and Public Property, Part 2: Resource Protection, Public Use and Recreation* (preservation of natural, cultural and archeological resources). The application of these regulations to cultural landscapes is contained within *National Park Service Management Policies* (2006), *Director’s Order #28: Cultural Resource Management*, and *NPS-28: Cultural Resource Management Guideline*. Several management standards outlined in *NPS-28* provide a broad philosophical base for all four treatment approaches outlined in *The Secretary of the Interior’s Standards* and are directly applicable to the Upper Fort Mason landscape:

- Land use activities, whether historic or introduced, do not impair archeological resources.
- Uses addressing programmatic needs or park facilities within a cultural landscape, such as visitor centers, parking, interpretive structures, housing, administrative facilities, maintenance yards, and storage areas, are carefully considered in the context of the

significance of the landscape.

- Use is monitored and regulated to minimize both immediate and long-term damage.
- Contemporary facilities do not adversely impact the landscape's physical and visual character. New facilities are compatible with the historic character and material of the landscape.
- Contemporary structures to facilitate access, such as ramps, railings, signs, and curb cuts, are designed and located to minimize adverse impacts on the character and features of a cultural landscape.
- Access to a cultural landscape that is vulnerable to damage from human use is limited, monitored, or controlled.
- All treatment and use decisions reflect consideration of effects on both the natural and built features of a cultural landscape and the dynamics inherent in natural processes and continued use.
- Use of destructive techniques, such as archeological excavation, is limited to providing sufficient information for research, interpretation, and management needs.
- All work that may affect cultural landscapes is evaluated by a historical landscape architect and other professionals, as appropriate.
- All modification, repair, or replacement of materials and features is preceded by sufficient study and recording to protect research and interpretive values.
- New work, materials, and replacement features are identified, documented, or permanently marked in an unobtrusive manner to distinguish them from original work, materials, and features.
- A proposed treatment project is initiated by the appropriate programming document, including a scope of work and cost estimate from a Cultural Landscape Report. Such projects include preservation maintenance as well as major treatment. No treatment is undertaken without an approved Cultural Landscape Report or work procedure specifying the work, and Section 106 compliance.
- A treatment project is directed by a historical landscape architect and performed by qualified technicians.
- Representative features salvaged from a cultural landscape are accessioned and cataloged, provided that they fall within the park's scope of collection statement.
- All changes made during treatment are graphically documented with drawings and photographs. Records of treatment are managed as archival materials by a curator or archivist within the park's museum collection.
- Work on historic structures, including modifications to improve drainage and access, does not harm the character-defining features of a cultural landscape.

## **ENABLING LEGISLATION**

As one of the earliest urban national parks in the United States, Golden Gate National Recreation Area was conceived in the early 1970s when President Nixon's administration was promoting its "Parks for the People" program. The program was aimed at open space preservation in America's large cities. The establishment of Golden Gate National Recreation Area secured a greenbelt along the coastline of San Francisco and Marin counties.

San Francisco's U.S. Congressman Philip Burton introduced legislation to the House of Representatives for the establishment of the park in 1971. The U.S. Senate reviewed a similar bill introduced by California Senator Alan Cranston later the same year. Public Law 92-589 (H.R. 16444) established Golden Gate National Recreation Area on October 27, 1972. The wording of this new law provided the philosophical basis for future management:

In order to preserve for public use and enjoyment certain areas of Marin and San Francisco Counties, California, possessing outstanding natural, historic, scenic, and recreational values, and in order to provide for the maintenance of needed recreational open space necessary to urban environment [*sic*] and planning, the Golden Gate National Recreation Area is hereby established. In the management of the recreation area, the Secretary of the Interior shall utilize the resources in a manner which will provide for recreation and educational opportunities consistent with sound principles of land use planning and management. In carrying out the provisions of this subchapter, the Secretary shall preserve the recreation area, as far as possible, in its natural setting, and protect it from development and uses which would destroy the scenic beauty and natural character of the area.<sup>2</sup>

The mandate to preserve and encourage public use is expressly stated in the enabling legislation. Preservation of the national recreation area was further emphasized in 1976 when Congress declared about fifty percent of the park a part of the National Wilderness Preservation System.

## **PARK PLANNING**

### **1980 GENERAL MANAGEMENT PLAN**

Management objectives outlined in the 1980 *General Management Plan for Golden Gate National Recreation Area* similarly called for preservation and restoration of natural and cultural resources, and to make the recreation area readily available to the broadest variety of park users. The 1980 *General Management Plan* acknowledged the many challenges associated with planning and caring for the diverse landscapes at Fort Mason: "On one hand, people have continually requested that the open space within Fort Mason be maximized; on the other hand, Fort Mason contains numerous historic buildings which need preservation."<sup>3</sup> The 1980 *General Management Plan* concluded that Fort Mason,

“will be developed and managed as an urban park setting, with special attention given to preserving the historic character of many of these areas.”<sup>4</sup> During the planning process, constituents expressed concern that Fort Mason retain its tranquil and unstructured qualities (Figure 1.1).

Key elements of the 1980 *General Management Plan* include:

- Strengthening pedestrian access along the shoreline while protecting the native vegetation and marine wildlife habitat along the northern coast,
- Developing a traditional, passive park on the western portion of Upper Fort Mason with trees, shrubs, expanses of lawn, and meandering walkways,
- Adaptively restoring the historic Parade Ground,
- Preserving prehistoric sites at Upper Fort Mason,
- Adapting existing buildings for a variety of cultural, recreational, and educational programs,
- Retaining the hostel and community gardens, and
- Limiting parking at Fort Mason to 614 spaces.

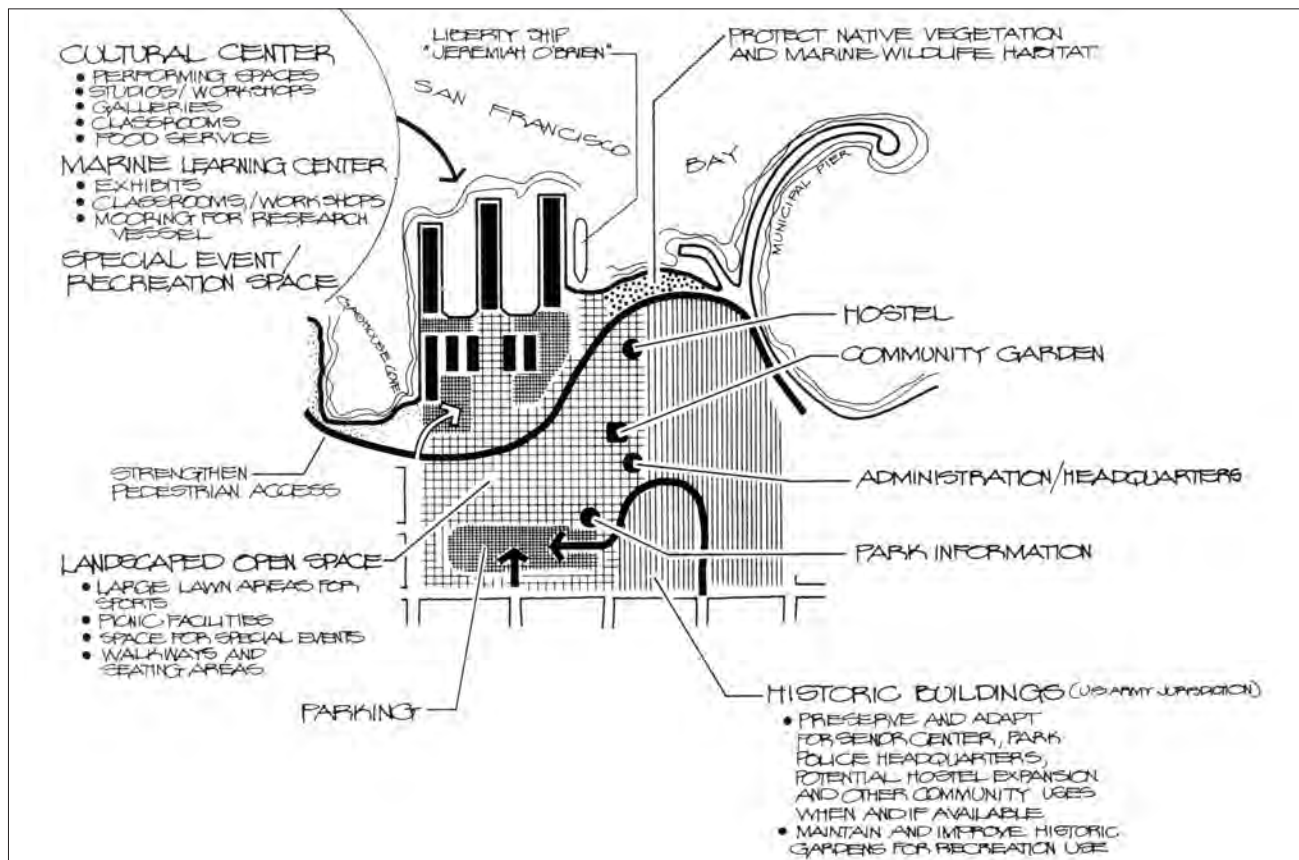


Figure 1.1. *General Management Plan* management zones diagram for Fort Mason. Plan view, 1980 (*General Management Plan for Golden Gate National Recreation Area*).



## 2011 DRAFT GENERAL MANAGEMENT PLAN

Golden Gate National Recreation Area is currently developing a revised *General Management Plan*. In draft form, this plan outlines several broad concepts related to future management of the Upper Fort Mason landscape. The preferred management zones for Upper Fort Mason include (from largest to smallest): “Evolved Cultural Landscape” across the historic landscape on the eastern side of the park, “Diverse Opportunities” in the Great Meadow, “Sensitive Resources” along the northern coastline, “Park Operations” at the maintenance facilities in Building 112, and “Historic Immersion” on Pier 4 (Figure 1.2).

The draft *General Management Plan* calls for Upper Fort Mason to serve as a portal to Golden Gate National Recreation Area, with improved visibility, access, and wayfinding to afford unified visitor welcoming and orientation. Historic structures are proposed for rehabilitation for use in orientation, information, food service, and special events, with park offices and rental properties to remain. The draft plan calls for the historic landscape to be “restored and rehabilitated,” with the overgrown gardens on east and northeast slopes improved and the community garden retained. In addition, the plan calls for visitor circulation to be improved with bus, transit, and ferry connections and piers at Lower Fort Mason to be evaluated for use as the point of departure for ferry access to Alcatraz Island.

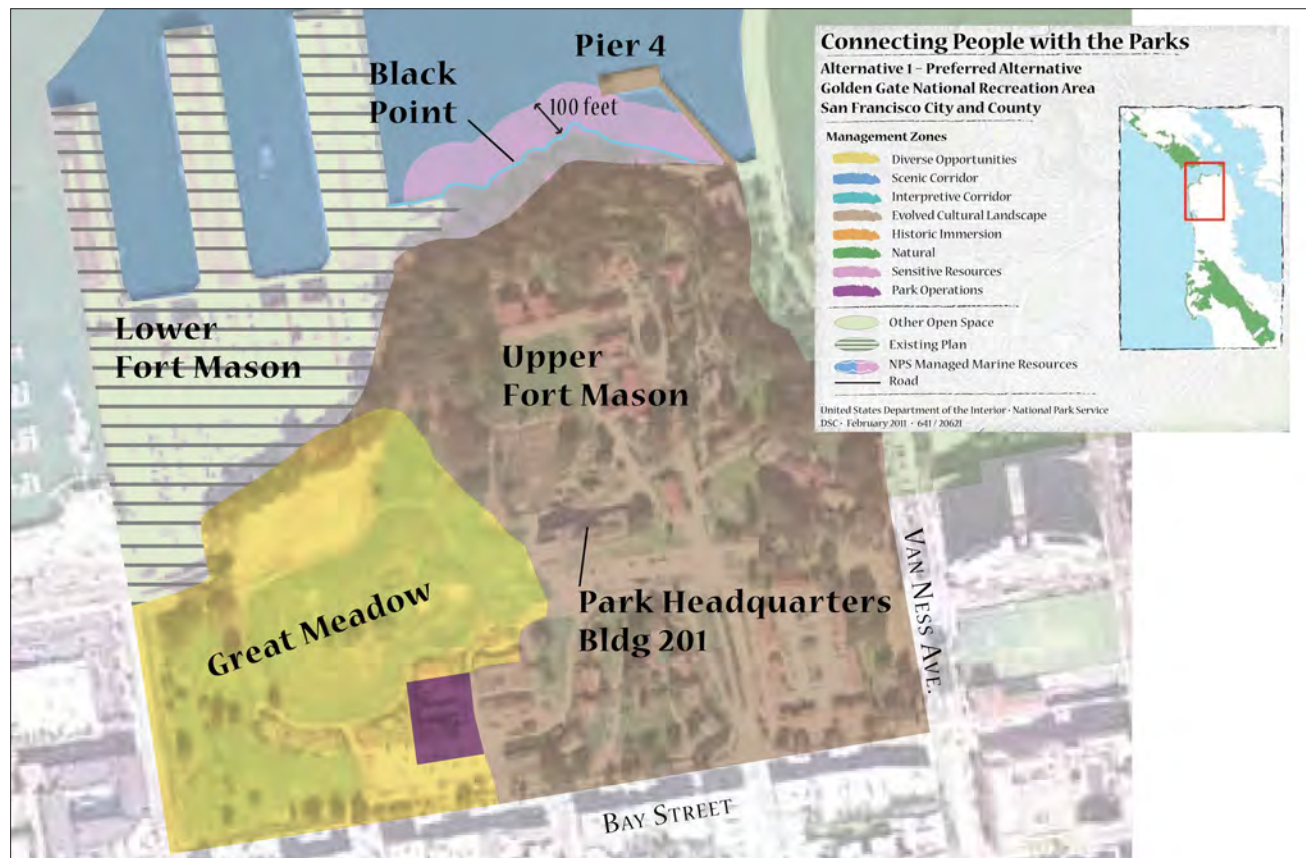


Figure 1.2. Draft *General Management Plan* management zones diagram. The area with the highest degree of integrity (on the eastern portion of the site) is within the “evolved cultural landscape” management zone. Plan view, 2011 (Draft *General Management Plan*).

As a part of the draft *General Management Plan*, park management has also identified guiding principles, or principles that are deeply rooted and distinctive at this park. These guiding principles include sustainability, community-based stewardship, civic engagement, partnerships, regional collaboration, and inclusion.<sup>5</sup>

### **LONG RANGE INTERPRETIVE PLAN**

Concurrently, Golden Gate National Recreation Area is also developing a revised interpretive plan. The *Long Range Interpretive Plan* recognizes Fort Mason as a component of one of the park's primary interpretive themes:

Centered on the entrance to one of the world's great harbors, the parklands facing the Golden Gate today stand as a 'witness landscape' to the epic stream of historic movements that flowed between its headlands. The Gold Rush and mobilization for WWII are among the many rich periods of history impacting this iconic place. The visual integrity of Fort Mason and the Marin and San Francisco Headlands plays a key role in highlighting those historic impacts.<sup>6</sup>

The park's interpretive plan highlights civilian settlement of East Black Point during the California Gold Rush and the subsequent eviction of occupants by the Army, as well as Fort Mason's role as a refugee camp in the wake of the 1906 earthquake and port of embarkation between 1910 and 1963.<sup>7</sup> As such, the Fort Mason landscape includes resources related to divergent social, political, and military themes over a long time period.

Successful interpretation is often linked to successful landscape management. As articulated in *Director's Order #6*, there is a direct and critical connection between resource interpretation and management:

Sound interpretive planning provides an organized method for making informed choices about a park's interpretive and educational program. It can provide solutions to management problems, with the goals of encouraging preservation of park resources, and fostering increased visitor understanding, appreciation, enjoyment, and stewardship. The comprehensive interpretive planning process provides an organized method to define the park story, and will be a collaborative effort, with on-going public involvement that includes subject-matter experts to incorporate new scholarship, and partners and other stakeholders as vital participants in its development.<sup>8</sup>

Enhancing park interpretation has the potential to enhance stewardship through heightened public awareness of park resources. Golden Gate National Recreation Area's *Long Range Interpretive Plan* reinforces this fact, noting that, "Interpretation and education encourage people to form deep personal connections with the meanings of park resources and provide opportunities to be actively involved in conservation and preservation."<sup>9</sup> Many of the recommendations described in the following chapters reinforce the primary interpretive themes identified for Fort Mason in the *Long Range Interpretive Plan*.

### **COMPUTER-AIDED FACILITY MANAGEMENT INITIATIVE**

For the past four decades, the National Park Service has been implementing the use of computer-aided facility management software to manage park infrastructure and to track costs associated with their care. The National Park Service Facility Management Software System (FMSS) is designed to manage National Park Service facilities. Accurate FMSS organization and timely updates enable parks to prioritize projects and create funding requests that accurately reflect asset value and condition. FMSS hierarchy consists of sites (e.g. Upper Fort Mason), asset types (e.g. maintained landscape), locations (geographic areas, e.g. Great Meadow), and assets (features, e.g. turf).

Upper Fort Mason's cultural landscape is tracked through a number of asset types, including roads, parking areas, trails, maintained landscape, buildings, housing, water systems, electrical systems, marina/waterfronts, monuments/memorials, maintained archeological sites, and/or fortifications. The majority of the assets associated with the cultural landscape at Upper Fort Mason are tracked under the maintained landscape asset type. A maintained landscape typically includes exterior park areas that have been developed and improved to support operations or visitor activities. To be classified as a maintained landscape, a landscape must require regular, recurring maintenance and contain built features.

Organization of the maintained landscape asset type varies by park and should reflect specific areas for which the park needs to track costs. At present, Upper Fort Mason's maintained landscape is tracked as a "Site" within Golden Gate National Recreation Area. The site encompasses nine "Locations," including Great Meadow; Parade Ground; Picnic Area, Black Point Battery; Black Point Landscaped Area; Headquarters Entrance Landscaped Area; Quad (3B) Landscaped Area; Colonels Row Landscaped Area; Community Garden; Officers Club Landscaped Area. The majority of assets associated with these locations, however, are not yet entered in the FMSS database.

### **LANDSCAPE TREATMENT PHILOSOPHY**

An effective landscape treatment philosophy articulates the essential qualities in the landscape that convey its significance and establishes principles intended to perpetuate those qualities. The philosophy is consistent with broad principles derived from the park's significance that help to guide decisions and provides the context for design guidelines, recommendations, and specific treatment actions.

## **UPPER FORT MASON LANDSCAPE TREATMENT PHILOSOPHY**

Upper Fort Mason is a surviving remnant of San Francisco’s topographic history used by the Ohlone, Spain, Mexico, and the United States for sustenance and protection; where the former contrast between the earliest historic landscape comprised of a rocky promontory with drifting sand dunes and the sheltered and settled landscape survives as a stark juxtaposition between the extant enclave and the enveloping city; where views to San Francisco Bay prescribed the placement of both dwellings and defenses; and where the shade cast by the dark greens of diverse vegetation once gave the promontory the name “Black Point.”

Upper Fort Mason will be rehabilitated and continuously managed to serve visitors as both a threshold and as a link to the broader resources of Golden Gate National Recreation Area. Central to this aim is the rehabilitation of distant views outward, both framed and sweeping, that served as the genesis of this cultural landscape. Rehabilitation of civic and garden plantings, including both native and cultural species, will be managed to effectively frame views and be continuously well-cared for in a sustainable manner in order to perpetuate the character of this landscape as a green haven amidst a thriving city and remain in peaceful contrast to the more bustling waterfront. Treatment will accommodate new, compatible uses in balance with enhancements to the historic character of the fort landscape.

Treatment measures will recognize that there are characteristic and features within the Upper Fort Mason landscape that warrant priority treatment. These priorities will emphasize the preservation of fundamental landscape relationships and include the preservation and restoration of key views, the replacement of moribund plantings, and planning for improved pedestrian and vehicular access and circulation to be a primary visitor portal to the broader park and so that visitors of all physical abilities might experience and understand the essential characteristics of this historic landscape.

### **PRIMARY TREATMENT**

To implement this landscape treatment philosophy, the recommended primary treatment for the Upper Fort Mason landscape is rehabilitation. Rehabilitation was selected as a primary treatment for its capacity to accommodate repair and replacement of deteriorated and missing historic features, while simultaneously accommodating compatible alterations and new additions to the historic property to facilitate its continued use as a national park.

Rehabilitation is defined as, “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural

values.”<sup>10</sup> The Secretary of the Interior defines the following ten standards under rehabilitation:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize the property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration required replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatment, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.<sup>11</sup>

Effective rehabilitation facilitates the adaptive reuse of the historic military post. While rehabilitation standards allow for such change, the emphasis of treatment should be on preservation of extant historic features and replacement of missing historic features, as defined in standards one through eight. Standards nine and ten are warranted because of the need to adapt the historic landscape to accommodate public visitation and interpretation. Rehabilitation provides the flexibility for adding such features as interpretive waysides and altering circulation to provide accessibility in a manner that is compatible with the historic character of the landscape. Rehabilitation also provides the flexibility to accommodate multiple resource objectives, including avoidance of invasive species, and to address contemporary maintenance considerations, such as altering vegetation to mitigate maintenance and disease concerns.

As interpreted in *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, the standards do not require that landscapes be maintained in a static appearance, but rather that landscapes be managed to preserve and enhance historic character. Managing for historic character means that those fundamental aspects of a landscape that convey its significance will be perpetuated. For Upper Fort Mason, this means perpetuating the park's fundamental landscape resources.

### **FUNDAMENTAL RESOURCES**

The park's draft *General Management Plan* defines fundamental resources as "those resources and values that directly contribute to the significance for which the park was established."<sup>12</sup> Among those fundamental resources, the plan identifies diverse park settings, park access, ocean and bay environment, coastal ecosystems, threatened and endangered species, water resources, fortifications and military installations, Alcatraz Island, dramatic settings, the compelling historical stage from which history can be interpreted, geologic resources, and archeological sites.

In support of these fundamental resources, treatment of the Upper Fort Mason landscape prioritizes views, plantings (vegetation), and circulation (access). Of the resources that comprise the park, the suite of historic buildings, network of existing roadways, strategic views, and the level of landscape care that reflects a military bearing are all integral to perpetuating the historic character of the post. The management and interpretation of each of these resources has significant potential to advance the park's directives and planning objectives.

### **TREATMENT DATE**

Identification of a treatment date provides an objective benchmark for managing historic landscape character. An appropriate treatment date may correspond

to a time during the historic period when the landscape reached the height of its development or a time when the property best illustrated the property's significance and interpretive themes.

For Upper Fort Mason, a treatment date of circa 1953 is consistent with the National Register documentation for the property, which defines the end of the period of significance as 1953. The early 1950s marked the end of the property's active military role and consequentially the end of a sustained high level of landscape maintenance under the United States Army. This era also corresponds to the height of the physical development of the post by the Army. Additionally, the site is well-documented around 1953, with written documentation, plans, and photographs that provide an excellent record of landscape conditions.

#### ENDNOTES

1. An Act to Establish a National Park Service, and for other purposes (National Park Service Organic Act, August 25, 1916), 39 Stat. 535.
2. Public Law 92-589, Sec. 1, October 27, 1972, 86 Stat. 1299.
3. *General Management Plan and Environmental Analysis, Golden Gate National Recreation Area and Point Reyes National Seashore* (Denver, Colorado: National Park Service, Denver Service Center and Golden Gate National Recreation Area, September 1980), 44.
4. *General Management Plan and Environmental Analysis, Golden Gate National Recreation Area and Point Reyes National Seashore* (Denver, Colorado: National Park Service, Denver Service Center and Golden Gate National Recreation Area, September 1980), 96.
5. Draft *General Management Plan/Environmental Impact Statement, Golden Gate National Recreation Area and Muir Woods National Monument* (2010), 7-8.
6. Golden Gate National Recreation Area, "Long Range Interpretive Plan" (July 2011), 36.
7. Golden Gate National Recreation Area, "Long Range Interpretive Plan" (July 2011), 37-38.
8. National Park Service, *Director's Order 6: Interpretation and Education* (2005), Sec. 5.1.
9. Golden Gate National Recreation Area, "Long Range Interpretive Plan" (July 2011), 6.
10. Charles A. Birnbaum and Christine Capella Peters, eds., *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington, D.C.: U.S. Department of the Interior, 1996), 48.
11. Charles A. Birnbaum and Christine Capella Peters, eds., *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington, D.C.: U.S. Department of the Interior, 1996), 49.
12. Draft *General Management Plan/Environmental Impact Statement, Golden Gate National Recreation Area and Muir Woods National Monument* (2010), 14.





## 2. GENERAL TREATMENT RECOMMENDATIONS

This chapter includes general treatment recommendations for the Upper Fort Mason Historic District landscape, focused on the historic portions of the grounds on the eastern side of the site. Given that park management needs will change with time, but landscape preservation objectives will remain the same, the recommendations included in this chapter are rooted in the integrity of the resources and are intended to guide treatment decisions on issues that impact the overall historic character of the landscape (Drawing 2.1). Recommendations in this chapter are based on the findings of *Cultural Landscape Report for Fort Mason, Golden Gate National Recreation Area; Site History, Existing Conditions and Analysis* and the landscape treatment philosophy defined in this report, and support park planning efforts, including the current draft *General Management Plan*. Specific treatment tasks, organized according to seven landscape treatment areas, are included in the following chapter.

### **REESTABLISH HISTORIC VIEWS**

Historic views to and from Upper Fort Mason should be reestablished to enhance the historic character of the landscape, enhance visibility both to and from the park, and improve visitor orientation to park units beyond Fort Mason. Views from the heights of Black Point to the waters of San Francisco Bay served as the original motive for the establishment of Fort Mason as a military post. Historically, the sweeping strategic and picturesque views from the site were a primary reason for its native, civilian, and military settlement (Figure 2.1). By the end of the period of significance, sweeping and picturesque views had been constrained to framed and filtered views by the growth of trees and understory vegetation. Since 1953, framed and filtered views have been obstructed by the natural maturation of historic plants and rapid growth of invasive vegetation.

Mature trees and understory vegetation should be managed to reestablish views that characterized the site prior to the end of the period of significance in 1953. Pedestrian circulation routes should afford visitors access to important vantage points. Key views related to enhancing the historic character of the landscape, enhancing visibility, and improving visitor orientation include views to Alcatraz Island and Black Point Cove from East Black Point, views to San Francisco Bay from the North Fortifications, views to the Chapel and flagpole from the Franklin



Figure 2.1. Civil-War-era Battery East showing the panoramic views that characterized the historic fortifications. View looking northwest, circa 1869 (San Francisco History Center, San Francisco Public Library).

Street entrance at Bay Street, views to the Palace of Fine Arts from MacArthur Avenue, and views to the Golden Gate from the Great Meadow. Accordingly, the two recommendations below, which address vegetation management and public access improvements, are also fundamental to the reestablishment of historic views.

### **REESTABLISH A MILITARY BEARING ON MANAGED VEGETATION**

Vegetation maintenance and management at Upper Fort Mason should once again reflect the military bearing that characterized the historic landscape under United States Army stewardship, when the landscape was defined by a crisp, trim aesthetic consistent with Army maintenance practices. The U.S. Army Field Manual, referring specifically to personal grooming, dress, and deportment, defines military bearing as, “. . .projecting a commanding presence, a professional image of authority.” Applying the concept of military bearing to landscape management, when Fort Mason was an active military post, the excellent condition of its facilities and grounds were intended to elicit respect for the United States Army and by extension, the authority and power of the United States government. Since the property was decommissioned as a United States Army post, daily visitation and staffing have decreased from their height under active military use to limited recreational uses today. This decrease has resulted in both a decline in landscape maintenance demands, as well as a decrease in maintenance staffing and funding. Consequentially, day-to-day maintenance issues, such as

trash removal and lawn mowing, are well attended to, while many larger cyclical maintenance issues, such as regular tree pruning, tree replacement, and labor-intensive care of shrubs and herbaceous vegetation, have been deferred. The following recommendations relate to the former military bearing of Upper Fort Mason's managed vegetation, including trees, shrubs, and herbaceous vegetation.

### TREES

Specimen trees and aggregate tree groupings should be rehabilitated site-wide to approximate their historic appearance around 1953, when well-pruned trees afforded framed and filtered views outward and groupings were consistent in size and scale. The palette and size of trees at Upper Fort Mason has changed since the period of significance through the onset of diseases and pests, natural growth and decline, and limits of maintenance and funding. Historic photographs illustrate trees that have been lost since 1953 (Figure 2.2). The *Fort Mason Tree Inventory and Management Plan*, prepared by Bartlett Tree Experts in 2010, documented the presence of 427 trees at Upper Fort Mason and provides a current benchmark for tree management.

Trees that obstruct historic views, pose safety threats, are in advanced decline, or pose potential for damage to other historic features should be removed. Non-historic trees added or self-sown after 1953 may be retained, provided they are compatible and do not detract from the historic character of the landscape. Several unusual eucalyptus varieties on the embankment to the west of the Parade



Figure 2.2. Aerial photograph of Upper Fort Mason showing well-pruned trees that characterized the site at the end of the period of significance. View looking north, 1956 (NPS, GGNRA Archives).

Ground are of particular note as they do not appear elsewhere at Fort Mason. These trees should be identified in the field and retained.

The *Upper Fort Mason Tree Treatment Action Plan* (Appendix A), prepared by Golden Gate National Recreation Area staff in 2010, identified 179 hazardous trees for treatment, including removal, cabling, or pruning, in three phases (Drawing 2.2). Assessment and management of hazardous trees is ongoing in response to changing conditions. Based on field investigations conducted in the preparation of this report, 230 additional trees were identified for removal to enhance the historic character of the landscape largely in the vicinity of the Northwest Embankment, North Fortifications, and East Black Point slope (Drawing 2.3).

Given the archeological sensitivity of the site, it is essential that all tree removal and replacement be coordinated with an archeologist. While removal of hazardous trees itself has the potential to disturb below-grade resources, this risk is preferable to tree failure, when an uprooted tree may uncontrollably disrupt archeological deposits or otherwise cause damage to above-ground resources. In some instances, tree removal by crane may be the most efficient and lowest risk removal technique. Remnant stumps should be cut flush or minimally ground, following approval by an archeologist.

Following removal, replacement trees are needed to reestablish historic plantings, including replacement of trees that were removed prior to this report. Site-wide, this encompasses replanting 259 trees (Drawing 2.4). Implementation of all recommendations of this report will result in a net loss of only nine trees. However, removal and replanting work is ongoing, so tree quantities noted in this report serve solely as a benchmark at time of writing. Replacement trees should be consistent with the palette that was used historically. Surviving historic trees provide a sound basis for the selection of replacement species, as trees that remain from the historic period are unquestionably hardy and well-suited for further use. Unless historically maintained for a specific size or form, or to frame important views, trees should be managed to allow for natural growth, which generally enhances historic character and provides visitors with a tangible sense of age. However, the perpetuation or reestablishment of historic views should take priority over historic trees that have grown to block those views.

The size of nursery stock specified for replacement trees should be assessed on a case by case basis, taking into consideration both aggregate groupings and prominence. Aggregate groupings, such as the windbreak along the Northwest Embankment or the allée along MacArthur Avenue, should be replaced at the same time to allow replacement trees to mature consistently. Replacement planting design should specify trees that are a minimum of two inches in diameter at breast height. In instances when a missing historic tree was a striking specimen or located prominently, replacement planting may warrant replacement with

larger nursery stock. For the majority of the park, however, arboricultural research has shown that trees transplanted at a smaller caliper size are more likely to thrive.

### SHRUBS AND HERBACEOUS PLANTINGS

Shrubs and herbaceous plantings should be rehabilitated site-wide to reflect their well-cared-for appearance under United States Army stewardship. In Officers' Park, surrounding the East Black Point Officers' Quarters, and surrounding the NCO Quarters, this character was markedly domestic, with predominately flowering plants (Figure 2.3). In the Quad, the historic character of shrubs and herbaceous plantings was more utilitarian, likely as a result of the space being dominated by private automobiles and the hasty construction of the Quad late in the post's development during the Korean Conflict. On the East Black Point slope and on the slopes of the earthen terraces of the North Fortifications, the Army maintained shrubs and herbaceous vegetation at a low height to afford views to the bay. Historic photographs provide the best documentation of shrubs and historic vegetation during the historic period. Upper Fort Mason's signature plantings include cordyline (*Cordyline australis*) and agave (*Agave americana*) that were used to mark key nodes, thresholds, and property boundaries.

Since the end of Army stewardship, changes in use and decreased levels of maintenance resulted in the deferred maintenance of nearly all shrubs and herbaceous plantings at Upper Fort Mason. In Officer's Park, many shrubs are overgrown and historic herbaceous plants are missing from the foundations of the residences. At the East Black Point Officers' Quarters, plantings include an interesting collection of unusual plants that have been maintained by the residents, although many of the historic shrubs are overgrown. Surrounding the NCO Quarters, nearly all foundation planting was removed in 2010 to accommodate extensive building rehabilitation. In the Quad, nearly all historic



Figure 2.3. Historic view of Quarters 2 showing well-tended woody and herbaceous foundation plantings. View looking southeast, 1926 (National Archives, RG 77, Office of the Quartermaster General, Records of the Construction Division - Annual Construction, Maintenance, and Repair Reports, 1924-1938, Box 135NM).

foundation plantings have been lost, with the exception of particularly hardy agapanthus, aloe, hydrangea, and jade. Photinia flanking the entrances to all of the Quad buildings remain, but are woefully overgrown. On the East Black Point slope and slopes of the North Fortifications, vigorous invasive understory vegetation has grown to obstruct views and shade-out historic plantings.

As with tree rehabilitation planting, practical rehabilitation of shrubs and herbaceous plants must focus on perpetuating the historic plant palette. Those species that survive from the historic period are unquestionably hardy and are excellent choices for replanting. Substitute plants include compatible species that will perpetuate the same characteristics as the historic plant material, but advance the environmental sustainability of the park. These include drought-tolerant and native plant species.

Rehabilitation and ongoing maintenance of Upper Fort Mason's shrubs and herbaceous vegetation are the greatest challenges in reestablishing a military bearing on Upper Fort Mason's landscape. Enhanced community-based stewardship, civic engagement, and partnership opportunities present a wide array of opportunities for public/private collaboration. Collaborative stewardship models have the potential to support levels of resource stewardship that would not be feasible under sole National Park Service care without significant changes in maintenance staffing. There is a great need for an effective process to define landscape maintenance responsibilities and practices, encourage and direct public investment, and facilitate ongoing dialogue. Following stewardship models effective at other park units, such as Alcatraz Island, Upper Fort Mason could organize a volunteer force to assist in vegetation management, including rehabilitation planting and ongoing maintenance.

The existing Upper Fort Mason community garden serves as a long-standing example of a successful public stewardship program at the park. As demand for plots in the community garden has out-grown available space, there is an opportunity to expand public stewardship to other landscape areas, including the East Black Point slope and the slopes of the North Fortifications. Unlike the community garden, however, gardening efforts in the historic landscape should be focused on a common goal of enhancing historic character to reflect a military bearing, rather than individual preferences and creative self-expression. One strategy to implement this goal is to identify thematic responsibilities, such as woody shrub maintenance, rather than geographic areas of responsibility. For example, volunteers might be assigned to prune woody shrubs to maintain a certain character rather than managing a defined plot of land, as is common practice in the community garden.

Foundation plantings at the East Black Point Officers' Quarters and at the Officers' Park residences also present opportunities to increase community-based stewardship through tenant engagement. Tenant involvement in landscape care



Figure 2.4. East Black Point tenant gardening zones indicated in red. Plan view, 2012 (OCLP).

in well-defined portions of the adjacent grounds has the potential to enhance resource stewardship while decreasing demands on park maintenance staff. One model to evaluate for the East Black Point Officers' Quarters and the Officers' Park residences is outlining appropriate planting areas and plant palettes for tenant participation, with park maintenance staff remaining responsible for larger cyclical maintenance activities such as lawn mowing, mulching, tree and woody shrub pruning, and fertilizing (Figure 2.4).

### **ENHANCE ENVIRONMENTAL SUSTAINABILITY**

The park should evaluate and capitalize on opportunities to enhance the environmental sustainability of the Upper Fort Mason landscape through management practices that increase the use of native species in landscape rehabilitation, reduce the use of irrigation, and enhance the capacity for rainwater to permeate planted areas. Although environmentally sustainable practices are not historic in and of themselves, they have the potential to support preservation objectives by reallocating resources from landscape areas with less historic integrity to portions of the site that retain a higher degree of integrity. Sustainability is a guiding principle of the draft *General Management Plan* for Golden Gate National Recreation Area, and environmental objectives figure prominently in the plan. Incorporating environmental sustainability with landscape rehabilitation tasks will further advance Golden Gate National Recreation Area's long term management goals.

Selective native species planting will enable the park to recapture a military bearing on the managed landscape while minimizing ongoing maintenance

requirements and irrigation use. Native species are well adapted to the San Francisco climate and typically require less irrigation than horticultural species and varieties. A bold environmental statement, native species plantings are proposed in this report with two prominent locations at Upper Fort Mason, including the median islands at the Franklin Street entrance and the areas bordering the entrance to the Bay Street parking area from MacArthur Avenue. Through a phased approach, low-growing native species are also proposed on the steep slopes that comprise the western, northern, and eastern faces of the park—the Northwest Embankment, North Fortifications, and East Black Point landscape treatment areas.

Other significant opportunities to offset irrigation use include the replacement of mown turf along the perimeter of the Great Meadow with native and drought-tolerant grass species. This replacement planting will require mowing on a cyclic basis, further reducing demands on maintenance staff time and resources. The proposed realignment of the MacArthur Avenue terminus and Bay Street parking area also supports water sustainability through a significant reduction in impermeable surfaces. Additionally, if the Bay Street parking area is resurfaced with permeable pavement or run-off directed to bio-infiltration swales at the western end of the lot, Upper Fort Mason’s water impermeable surfaces will be further reduced.

### **UNIFY, CLARIFY, AND EXPAND PUBLIC ACCESS**

Public access to Upper Fort Mason should be unified, clarified, and expanded to improve visitor welcoming and wayfinding, and to enable visitors to gain a better understanding of the historical significance of the site. Fort Mason was historically an “open-post,” employing numerous civilians who enjoyed generous access to common areas of the post landscape. During the historic period, access to the site was maintained from all directions by the United States Army. Today, naturally steep terrain and uncertain footing, including surface materials that date to United States Army stewardship, present the greatest obstacles to unified visitor circulation at Upper Fort Mason. For example, in the North Fortifications area, access to the Civil War era Battery East is blocked by a chain-link fence and reserved for private residential use. In other locations, access is possible yet difficult or confusing. For example, existing access to Lower Fort Mason from the Great Meadow via the steep concrete stairs is difficult. In the South Expansion area, pedestrian and vehicular access to the Bay Street parking area is circuitous and confusing. Public access to the East Black Point slope gardens is restricted for visitor safety because of deteriorated walkways and overgrown vegetation.

Landscape treatment actions to unify, clarify, and expand visitor access should focus on three key areas in the Upper Fort Mason landscape. In the Great



Meadow, a new code-compliant staircase should be constructed on the Northwest Embankment to improve the pedestrian connection to Lower Fort Mason. In the South Expansion area, pedestrian and vehicular circulation routes should be reconfigured to improve visitor access to the Bay Street parking area, including a restricted-use drive to the parking area at the intersection of Bay Street and Octavia Street. Reconfiguring the Bay Street parking area will also separate pedestrian and vehicular circulation to improve safety. In the vicinity of the four Officers' Quarters on the East Black Point slope, a reasonable residential privacy zone should be clearly defined to afford residents of the four Officers' Quarters a measure of privacy while accommodating an increased level of public access to the adjacent landscape areas (Figure 2.5).

The sites of all four Officers' Quarters at the crest of the East Black Point slope offer important historic views and possess immense interpretive potential. From the Quarters Four terrace, for example, it is possible to interpret nearly all of the important historical themes of Golden Gate National Recreation Area. The landscape setting at the northern extremity of the slope is a strategic defensive location with sweeping panoramic views of the bay, an archeological



Figure 2.5. East Black Point residential privacy zone indicated within the dashed red line. Plan view, 2012 (OCLP).

site containing the extension of the Civil War era fortifications, the site of early residential development in association with the California Gold Rush, the site of Jessie Benton Fremont’s cultural salon, and an important component of the architectural development of the Army post’s hierarchical organization. The National Park Service *Management Policies* (2006) outline stewardship guidelines for historic property leases, consistent with the broad concept that visitor use and enjoyment of park resources is to be valued over private uses.<sup>1</sup> If the continued use of the East Black Point Officers’ Quarters as privately leased residences is to restrict visitor access, the scope of the restriction should be limited to the smallest practical area and should not prevent fulfillment of the primary purpose for which the land was set aside as a unit of the national park system.

As a component of expanded site access, additional opportunities to improve universal accessibility should be explored. Universal accessibility improvements to Upper Fort Mason are underway following the recommendations of the *Upper Fort Mason Accessibility Case Study Report*. Together with the recommendations of this report, implementation will greatly enhance the extent of universally accessible routes throughout Upper Fort Mason (Drawing 2.5). Opportunities to further enhance universal accessibility at Upper Fort Mason include the development of an accessible route between McDowell Avenue and the Civil War era fortifications via Battery Road and an accessible route between the Parade Ground and the vicinity of Building 201 via Pope Road.

### **PROVIDE COMPATIBLE PARK FURNISHINGS**

Compatible park furnishings should be provided to improve site-wide visibility, access, and wayfinding. Consistency, conformity, and high levels of maintenance of Fort Mason’s landscape furnishings will also contribute to reestablishing the “military bearing” of the landscape. The following three subheadings relate to improving the visitor experience through selection and implementation of appropriate site furnishings, lighting, and signage.

#### **SITE FURNISHINGS STANDARDS**

A visitor amenities master plan should be developed to comprehensively identify and sensitively locate necessary site furnishings at Upper Fort Mason that will project a unified park image and enhance the visitor experience through consistency and quality of design. The existing site furnishings at Upper Fort Mason consist of a variety of contemporary styles, many of which are not compatible with the historic character of the landscape. Golden Gate National Recreation Area, with the Golden Gate National Parks Conservancy, have developed a unified *Parkwide Site Furnishings Standards* (2003) for each of the six

special design zones within Golden Gate National Recreation Area. (Upper Fort Mason is within the Golden Gate National Recreation Area historic post design zone.) At Upper Fort Mason, the addition of new site furnishings should follow the recommendations of the 2003 standards.

Key site furnishings that should be considered for Upper Fort Mason include benches, fixed picnic tables, bike racks, trash/recycling containers, bollards, gates, post and cable fencing, railings, and signage (Figure 2.6). For Upper Fort



Figure 2.6. Standard furnishings for the historic post design zone, 2003 (*Parkwide Site Furnishings Standards*).

Mason, standard site furnishings were selected to be compatible, functional, sustainable, low-maintenance, and designed and constructed with materials, finishes, and options that are appropriate to the setting of the park. Non-historic site furnishings should visually recede in the landscape and be sited sensitively to minimize visual clutter and avoid detracting from the site's historic character.

### LIGHTING STANDARDS

A comprehensive landscape lighting master plan should be developed to inventory and analyze existing lighting, and determine the need for additional fixtures, including type and location, to enhance park safety and the visitor experience. Existing site lighting along roadways throughout Upper Fort Mason consists of cast-concrete poles with a single luminaire reared on an S-shaped support arm (Figures 2.7 and 2.8). Within the Officers' Park, lighting consists of historic cast concrete light posts (historic) surmounted by a single plastic acorn luminaire (non-historic, Figure 2.9). Along the Northwest Embankment, several remnant historic Union Metallic Light Standard Company metal light posts with (replacement) plastic globes remain (Figure 2.10). These fixtures were installed about 1935 and at the time were used throughout the post.



Figure 2.7. Cracked cast-concrete pole light to the west of Building 231. View looking southeast, 2011 (OCLP).



Figure 2.8. Cast-concrete pole light to the south of Quarters 7. View looking east, 2012 (OCLP).

Site lighting should be restricted to where it was used historically or where it is necessary to accommodate contemporary use and visitor safety. As removal of deteriorated landscape lighting fixtures that pre-date 1953 becomes necessary, replacement in-kind is recommended. Existing historic landscape lighting should also be evaluated for retrofit with lower wattage fixtures to limit energy use and curtail light pollution. Existing cast-concrete light poles and fixtures were added slightly before or after the end of the period of significance. Their exact date of origin is not known. However, they are a benign presence in the landscape and should be retained where possible. Where removal of cast-concrete poles and new fixtures is necessary, new landscape lighting should be consistent with the *Parkwide Site Furnishings Standards*, which identify furnishings that are compatible, functional, sustainable, and low-maintenance. Fixtures that cause light diffusion should be avoided and new fixtures should support the objectives of the National Park Service dark skies initiative.

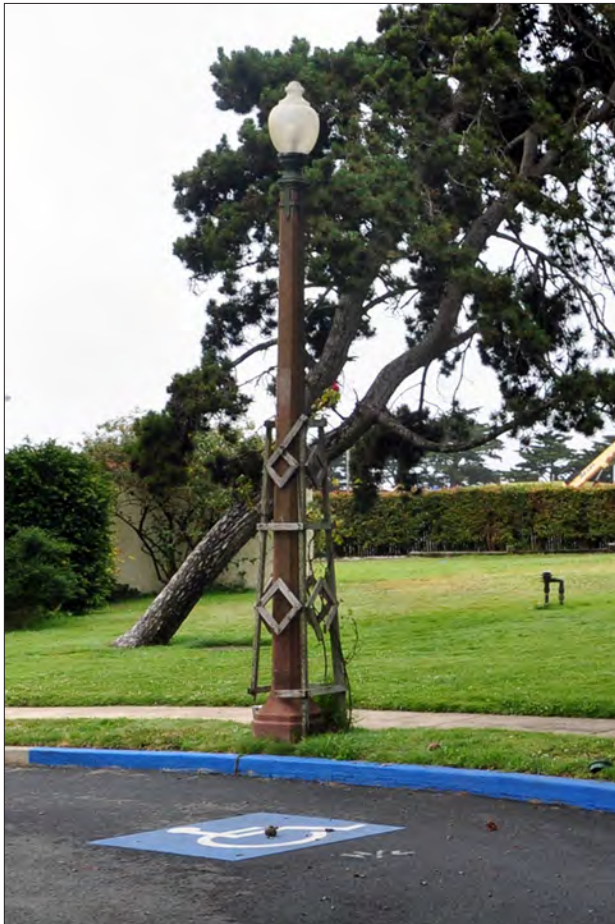


Figure 2.9. Historic pole light with acorn fixture in Officers' Park. View looking northwest, 2011 (OCLP).

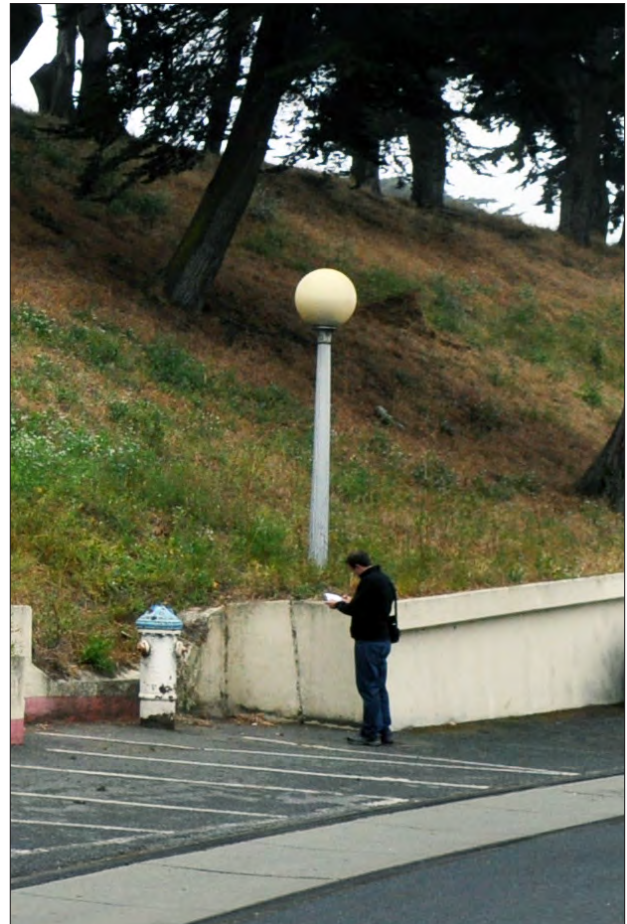


Figure 2.10. Historic pole light with plastic globe fixture on the Northwest Embankment. View looking southeast, 2011 (OCLP).

**SIGNAGE STANDARDS**

Signage needs should be assessed and new park signage should be implemented throughout the park to improve visitor welcoming, orientation, and wayfinding consistent with the *Golden Gate National Recreation Area Signage & Graphics Guidelines*, commonly referred to as the “Hunt sign package” (Appendix B).<sup>2</sup> Existing signs at Upper Fort Mason consist of a variety of styles, ranging from the historic redwood signs supported on pipe posts installed along northern Franklin Street to supplement the Works Progress Administration guidebook, to historic embossed metal street signs with raised lettering, to contemporary reflective street signs, to National Park Service interpretive panels.

Historic signage, including redwood signs and historic embossed street signs, should be retained. The historic redwood signs, which are both deteriorating and include slight historical inaccuracies, should be rehabilitated to update and correct content, while retaining as much original material as possible (Figure 2.11). Where necessary, historic signage should be supplemented with contemporary signs that meet current signage standards and are selectively integrated into the landscape. The new signs should be compatible with the historic signs, but easy to discern as contemporary additions to the historic setting.

Signs added after 1953 should be removed or replaced to conform to the *Golden Gate National Recreation Area Signage & Graphics Guidelines*, which identify appropriate entrance signs, orientation kiosks, wayside exhibits, and interpretive/regulatory signs for Upper Fort Mason. These new signs should employ a simple, functional appearance that is consistent with the character of the property under military stewardship. Like the furnishings standards, the standard signs should be restrained in scale and materials, and should be functional.

Contemporary signage is necessary to accommodate ongoing public use of the park. However, small changes to the historic landscape may seem negligible, but their cumulative impact on the integrity of the landscape can be substantial. For this reason, addition of regulatory, directional, and interpretive signage should be carefully planned to limit the number of signs and to evaluate their placement for minimal visual impact. This guideline extends to both park signage as well as partner programs with an on-site presence, including such programs as the San Francisco Conservation Corps.

**EXPAND LANDSCAPE INTERPRETATION**

Landscape interpretation should be expanded to enhance visitor understanding of the site’s history. Existing landscape interpretation is limited to a few waysides and a walking tour brochure. New interpretive media, including outdoor and indoor exhibits, websites, multi-media, and emerging technologies (such as smart

Figure 2.11. New interpretive panel along the east side of Franklin Street opposite the Chapel. View looking northeast, 2012 (OCLP).



phone applications), present opportunities for the park to expand landscape interpretation (Figure 2.11).

Since interpretation is driven both by the park's resources and its stories, interpretive themes are important in guiding landscape rehabilitation. Several key interpretive themes are identified in the *Long Range Interpretive Plan* for Upper Fort Mason. These key interpretive themes include civilian settlement of East Black Point during the California Gold Rush, Fort Mason's role as a refugee camp in the wake of the 1906 earthquake, and the park's historic function as a point of embarkation between 1910 and 1963.<sup>3</sup> Several additional themes are presented here for further consideration as the park pursues implementation of landscape treatment recommendations. These interpretive themes include pre-contact native occupation of Black Point, occupation by Spanish colonial and Mexican settlers, the park's relationship to the 1916 Panama-Pacific International Exposition, and Civilian Conservation Corps improvements to the landscape in the 1930s.

New interpretive panels should be installed at key park portals, including the base of McDowell Avenue, base of the East Black Point slope, Franklin Street entrance, MacArthur Avenue gate at Van Ness Avenue, staircase from Lower to Upper Fort Mason, entrance to the Great Meadow from Laguna Street, and Bay Street parking area. New interpretive panels are also needed at key visitor nodes and at historic resources, including the Great Meadow pedestrian plaza, Parade Ground, North Fortifications terraces, and Quarters 4 terrace. If interpretation of the architectural development of the post from the time of the California Gold Rush on and its quarters hierarchy is desired, interpretive panels should also be installed near Officers' Park, the Quad, and the NCO Quarters (see Drawing 2.1).

## COMPLETE ARCHEOLOGICAL DISTRICT SURVEY

A site-wide archeological district survey should be completed to inform landscape treatment implications and to enhance documentation of the site's archeological resources. The Upper Fort Mason landscape is a complex overlay of resources that date to native settlement of the property by the Yelamu Ohlone with later resources that relate to the property's evolution as a United States Army post. The aboriginal archeological sites at Upper Fort Mason are one of only two known extant aboriginal sites in San Francisco city and county area.<sup>4</sup>

Baseline archeological data for Upper Fort Mason is limited to the results of archeological excavations in discrete areas in the vicinity of the Franklin Street NCO Quarters, North Fortifications, Parade Ground, and Great Meadow (Figure 2.12). These investigations have yielded excellent information, including an area of undisturbed aboriginal midden, which has high research potential for understanding early settlement and use of the San Francisco peninsula. These excavations have also led to the development of a draft National Register of Historic Places nomination for "Fort Mason Multiple Resources Archeological District."<sup>5</sup> Although not formally entered into the National Register database, this nomination documents the archeological significance of know below-grade resources and the potential for additional archeological resources at Upper Fort Mason.

Prior to landscape treatment work, additional archeological investigation should be completed to better understand the potential for sub-surface resources and their distribution throughout the property. These areas should be prioritized in a comprehensive archeological survey and targeted for archeological investigation pending survey findings. Subsequent landscape rehabilitation work in these areas should proceed in response to the findings of archeological survey (Drawing 2.6).



Figure 2.12. Archeological investigation underway on the Civil-War-era Battery West. View looking northeast, 1983 (NPS, GGNRA Archives).



**ENDNOTES**

1. National Park Service, *Management Policies* (Washington, D.C.: Department of the Interior, 2006), sec. 5.3.3 Historic Property Leases and Cooperative Agreements, 66-67. See also *Director's Order #38: Real Property Leasing* and *36 CFR Part 18*.
2. Hunt Design, "Golden Gate National Recreation Area, Signage & Graphics Guidelines" (January 2009).
3. Golden Gate National Recreation Area, "Long Range Interpretive Plan" (July 2011), 37-38.
4. Suzanne Baker and Roger E. Kelly, "DRAFT National Register of Historic Places Inventory – Nomination Form for Fort Mason Multiple Resources Archeological District" (U.S. Department of the Interior, n.d.).
5. Suzanne Baker and Roger E. Kelly, "DRAFT National Register of Historic Places Inventory – Nomination Form for Fort Mason Multiple Resources Archeological District" (U.S. Department of the Interior, n.d.).





# Cultural Landscape Report

Upper Fort Mason  
Golden Gate National  
Recreation Area  
San Francisco, California

## Treatment Summary Plan



National Park Service  
Olmsted Center for Landscape Preservation  
[www.nps.gov/oclp](http://www.nps.gov/oclp)

### SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

### DRAWN BY

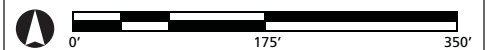
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

### LEGEND

- Two-foot topographic contour
- Roads
- Walks
- Mown lawn
- Draught-tolerant meadow grass planting
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees
- Interpretive wayside
- Key view

### NOTES

1. All features shown in approximate scale and location.
2. Tree cover, as illustrated, is a benchmark at time of writing. Removal and replacement work is ongoing.



Drawing 2.1





Cultural Landscape Report

Upper Fort Mason  
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Recreation Area  
San Francisco, California

Hazardous Tree Removal  
Plan



National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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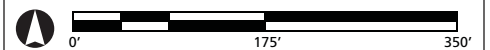
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

LEGEND

- Two-foot topographic contour
- Roads
- Walks
- Mown lawn
- Draught-tolerant meadow grass planting
- Shrubs/hedges
- Feature to remove
- Hazardous trees to remove per Tree Inventory and Management Plan (38)
- Trees to retain
- Replacement trees (259)

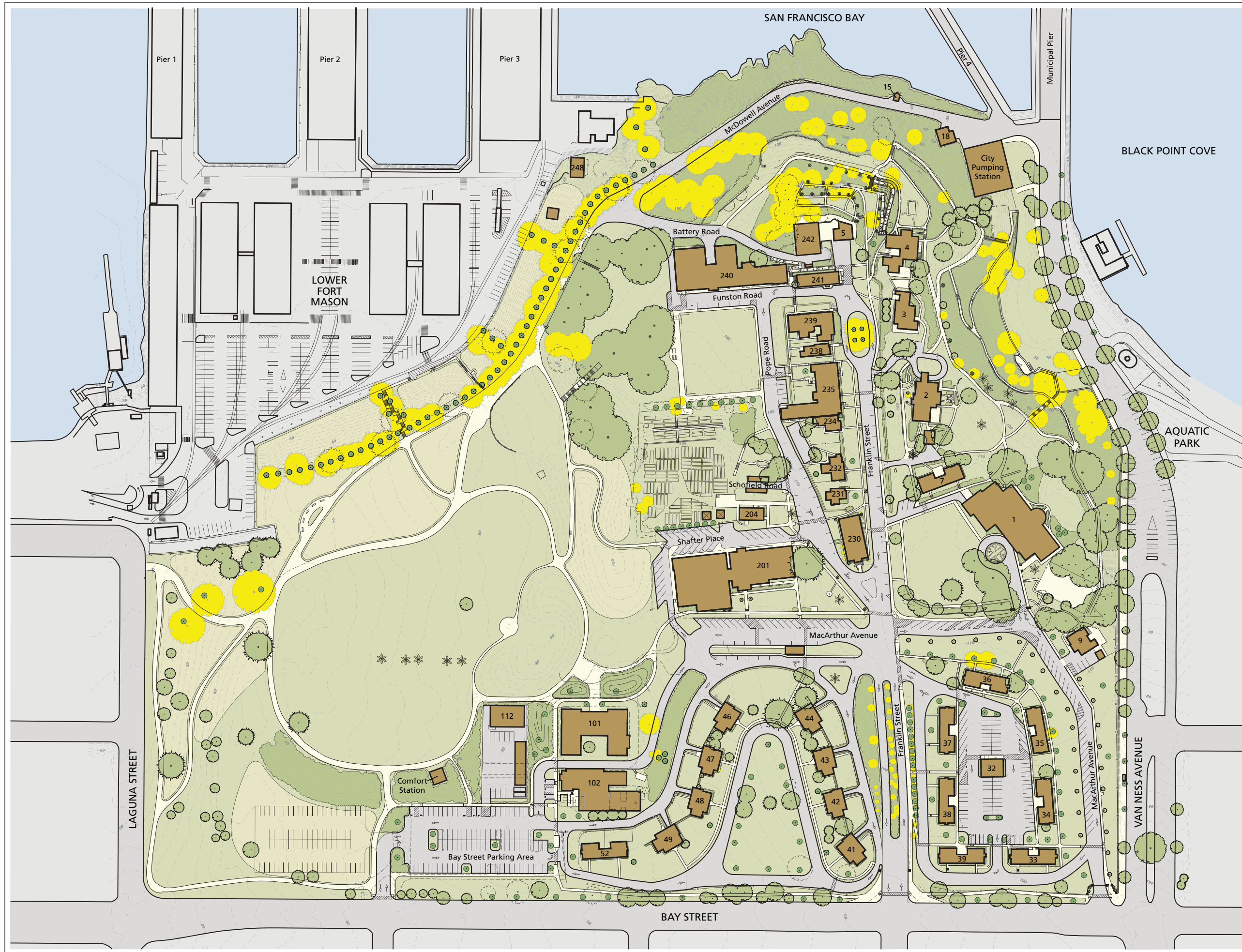
NOTES

1. All features shown in approximate scale and location.
2. Tree cover, as illustrated, is a benchmark at time of writing. Removal and replacement work is ongoing.



Drawing 2.2





Cultural Landscape Report

Upper Fort Mason  
 Golden Gate National  
 Recreation Area  
 San Francisco, California

Tree Removals to Enhance  
 Historic Character Plan



National Park Service  
 Olmsted Center for Landscape Preservation  
[www.nps.gov/oclp](http://www.nps.gov/oclp)

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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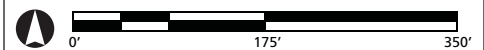
Christopher Beagan, OCLP  
 AutoCAD 2011, Illustrator CS3, 2012

LEGEND

- Two-foot topographic contour
- Roads
- Walks
- Mown lawn
- Draught-tolerant meadow grass planting
- Shrubs/hedges
- Feature to remove
- Tree removals to enhance historic character (230)
- Trees to retain
- Replacement trees (259)

NOTES

1. All features shown in approximate scale and location.
2. Tree cover, as illustrated, is a benchmark at time of writing. Removal and replacement work is ongoing.



Drawing 2.3





Tree Replacement Plan



National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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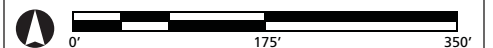
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

LEGEND

- Two-foot topographic contour
- Roads
- Walks
- Mown lawn
- Draught-tolerant meadow grass planting
- Shrubs/hedges
- Feature to remove
- Trees to remove (268)
- Trees to retain
- Replacement trees (259)

NOTES

1. All features shown in approximate scale and location.
2. Tree cover, as illustrated, is a benchmark at time of writing. Removal and replacement work is ongoing.



Drawing 2.4







# Cultural Landscape Report

Upper Fort Mason  
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San Francisco, California

## Universal Accessibility Diagram



**National Park Service**  
**Olmsted Center for Landscape Preservation**  
[www.nps.gov/oclp](http://www.nps.gov/oclp)

### SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Accessibility Case Report, 10/2010
7. Olmsted Center, Field Notes, 1/2011 and 7/2011

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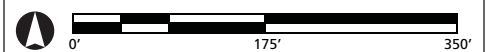
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

### LEGEND

- Two-foot topographic contour
- Roads
- Walks
- Mown lawn
- Draught-tolerant meadow grass planting
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees
- Proposed universally accessible route
- Civil War terreplein access alternatives

### NOTES

1. All features shown in approximate scale and location.
2. Tree cover, as illustrated, is a benchmark at time of writing. Removal and replacement work is ongoing.







# Cultural Landscape Report

Upper Fort Mason  
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San Francisco, California

## Archeological Resources Diagram



**National Park Service**  
**Olmsted Center for Landscape Preservation**  
[www.nps.gov/oclp](http://www.nps.gov/oclp)

### SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011
7. Draft NR Nomination for Fort Mason Multiple Resources Archeological District, 1979
8. Leo Barker, Preliminary Draft Comments, 09/2011

### DRAWN BY

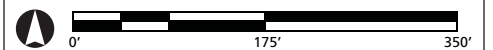
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

### LEGEND

- Two-foot topographic contour
- Roads
- Walks
- Mown lawn
- Draught-tolerant meadow grass planting
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees
- 1979 proposed archeological district boundary
- Pre-contact archeological site areas
- Point San Jose archeological site area

### NOTES

1. All features shown in approximate scale and location.
2. Tree cover, as illustrated, is a benchmark at time of writing. Removal and replacement work is ongoing.



**Drawing 2.6**



### 3. TREATMENT TASKS

This chapter includes landscape treatment tasks for the entire Upper Fort Mason landscape, organized geographically by seven landscape treatment areas. These treatment areas generally align with the landscape character areas defined in *Cultural Landscape Report for Upper Fort Mason, Golden Gate National Recreation Area; Site History, Existing Conditions and Analysis*. However, in the vicinity of Quarters 4, the garden terrace (located over buried Civil War era fortifications) is now addressed in association with the North Fortifications area and, in the vicinity of the MacArthur Avenue gate, MacArthur Avenue and Building 9 are now addressed in association with the South Expansion area (Drawing 3.1). The seven landscape treatment areas include:

- **East Black Point** – the eastern face of Upper Fort Mason, extending between San Francisco Maritime National Historic Park and Franklin Street
- **North Fortifications** – the northern-most edge of Fort Mason, including McDowell Avenue
- **Central Cantonment** – the landscape between north Franklin Street and the Great Meadow, including the NCO Quarters grounds, hostel, former Parade Ground, community garden, and Building 201 grounds
- **East Waterfront** – the lawn at the base of the East Black Point slope (property of San Francisco Maritime National Historical Park) and Pier 4
- **Northwest Embankment** – the engineered slope between the Great Meadow and Lower Fort Mason
- **Great Meadow** – the twenty-five acre open park space along the western side of Upper Fort Mason
- **South Expansion** – the landscape spaces south of MacArthur Avenue, including the MacArthur Avenue entrance, Quad, Franklin Street entrance, Officers' Park, and the Bay Street parking area, all arranged along the southern perimeter of Upper Fort Mason

For each landscape treatment area, an overview includes a brief analysis of the historic condition of the landscape to provide context for treatment tasks and overarching treatment objectives. Within each landscape treatment area, tasks are ordered by landscape characteristic and keyed to the treatment plan with a task code (V–views, BS–buildings & structures, CR–circulation, VG–vegetation, SSF–small-scale features). Each treatment task narrative includes a brief description that states the issue and desired future condition, treatment considerations, and a statement that relates the task to current park planning initiatives. Current park planning initiatives include the draft *General Management Plan* (2011), *Long Range Interpretive Plan* (2011), *Tree Inventory and Management Plan* (2010), *Upper Fort Mason Accessibility Case Report* (2010), and findings of the San Francisco Maritime National Historical Park/Golden Gate National Recreation Area Joint Waterfront Planning Workshop (2010).

Where no specific tasks are identified, preservation is recommended as the default treatment of existing features. Preservation, or “the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property,” will prevent the loss of historic materials and/or spatial relationships, and ensure that historic features are protected in place.<sup>1</sup>



# Cultural Landscape Report

Upper Fort Mason  
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## Landscape Treatment Areas Diagram



National Park Service  
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[www.nps.gov/oclp](http://www.nps.gov/oclp)

### SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Cultural Landscape Report for Fort Mason, 10/2004
5. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

### DRAWN BY

Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

### LEGEND

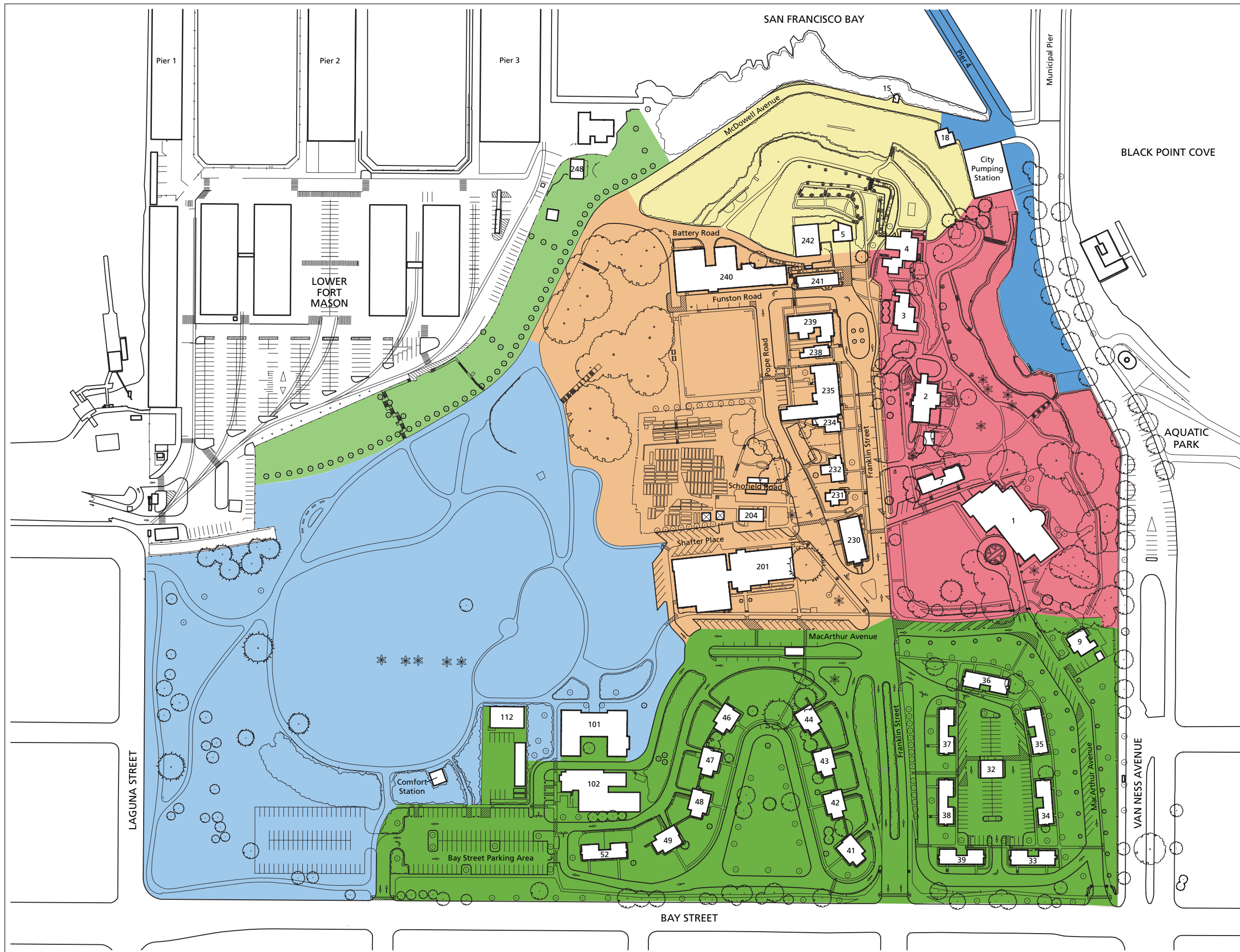
- East Black Point
- North Fortifications
- Central Cantonment
- East Waterfront
- Northwest Embankment
- Great Meadow
- South Expansion

### NOTE

All features are shown in approximate scale and location.



Drawing 3.1





## EAST BLACK POINT

### OVERVIEW

The East Black Point landscape treatment area encompasses the eastern face of Upper Fort Mason, including the four historic Officers' Quarters, the Officers' Club, and the adjacent landscape that was developed during the 1850s California Gold Rush (Figure 3.1). From the 1850s on, the landscape has been criss-crossed with walks and plantings emanating from the residences at the crest of the slope. By the end of the period of significance in 1953, East Black Point remained occupied by the Officers' Quarters and the Officers' Club, all of which enjoyed framed and filtered views of the East Black Point Cove afforded by managed vegetation on the East Black Point slope (Figure 3.2). The Officers' Quarters historic plantings were characterized by a well-maintained domestic quality and consisted of low trees and shrubs over mown lawn, with herbaceous planting in beds limited to the foundations and vicinity of the historic buildings.

Today, vegetation on the East Black Point slope is overgrown and blocks historic views both to and from the Officers' Quarters (Figure 3.3). While portions of many historic concrete walks remain in place on the slope, the majority of the walks have been closed due to deteriorated conditions and social problems resulting from limited visibility. The Officers' Quarters and their adjacent grounds are important park interpretive resources, yet they are not currently accessible to the public due to residential privacy expectations. Minimally, the Officers' Quarters and their grounds should be visually accessible to interpret their history in association with settlement of East Black Point during the California Gold Rush and subsequent occupation by the United States Army.



Figure 3.1. East Black Point landscape treatment area location diagram. Plan view, 2011 (OCLP).

**Figure 3.2.** East Black Point slope from the shore of Black Point Cove showing the historically open views between the water and Officers' Quarters, located above the slope. View looking northwest, circa 1902 (NPS, San Francisco Maritime National Historical Park Archives).



**Figure 3.3.** East Black Point slope from San Francisco Maritime National Historical Park showing mature trees that now block views to and from the Officers' Quarters. View looking west, 2011 (OCLP).



The grounds of the officer's quarters at the crest of the slope retain a relatively high degree of landscape integrity, while the landscape integrity of the slope landscape itself has been diminished by deferred maintenance and invasive species. However, the integrity of the slope is diminished, not lost. Because many historic resources in the East Black Point area remain intact, the area is best suited to accommodate historic uses. The significance of the resources in the East Black Point area also makes the area an excellent location for interpreting the Upper Fort Mason cultural landscape.

The residential grounds should be maintained consistent with the historic, domestic qualities that characterized the properties during their use by the United States Army as officer's quarters, including low flowering foundation plantings with scattered shade trees over mown lawn. The diminished integrity of the slope presents an opportunity to recapture the lost woody and herbaceous plantings and intimate winding concrete walkways that historically occupied the area, affording access to easterly views from the residences and from the slope itself.

Given the anticipated combination of public and private uses of the East Black Point area, tenant privacy is a significant concern. For those quarters that will be perpetuated as leased residences, clearly defined public and private zones should be established (see Figure 2.5). Signage is needed at key walk junctures to sensitively preserve expectations of tenant privacy while permitting visual access to the historic structures. Existing signs read “No Trespassing” and “Private Property.” Replacement signs might more appropriately read, “Please enjoy the bay view while respecting residents’ privacy” (Figures 3.4 and 3.5).

**Figure 3.4.** Overgrown vegetation adjacent to the walk at the crest of the East Black Point slope obstructs easterly views to East Black Point Cove. View looking south, 2011 (OCLP).



**Figure 3.5.** Photo simulation showing reestablished views to East Black Point Cove and the city beyond following vegetation management, with new signage to accommodate limited access along the crest of the slope. View looking south, 2011 (OCLP).

The tasks that follow are focused on reestablishing priority views from East Black Point and accommodating safe access to this area, while maintaining a reasonable degree of tenant privacy. Tasks are also focused on reestablishing the historic character of the vegetation on the slope and adjacent to the Officers' Quarters, while minimizing costs. The overall character of this area is intended to be markedly domestic, with well-tended flowering plants in the vicinity of the historic buildings and scattered trees over well-maintained shrubs and groundcovers on the East Black Point slope (Drawing 3.2).



Figure 3.6. Overgrown ornamental trees and invasive rock elm on the East Black Point slope obstruct views toward Black Point Cove from Quarters 2. View looking east, 2011 (OCLP).



Figure 3.7. Photo simulation showing the reestablished view from Quarters 2 following vegetation management and rehabilitation planting on the East Black Point slope. View looking east, 2011 (OCLP).

## TASKS

### V-1: Rehabilitate views to and from East Black Point

#### Description

Historic views from East Black Point to the waterfront are blocked by unmanaged invasive vegetation (Figure 3.6). Trees and large shrubs on the East Black Point slope should afford framed and filtered views to East Black Point Cove (Figure 3.7). Visitors to San Francisco Maritime National Historic Park, at the base of the slope, should also have visual access to the historic structures at the crest of the slope.

In order to reestablish these historic views and the open spatial character of the landscape, widespread removal of invasive and successional vegetation is necessary. Invasive plants, including blackwood acacia (*Acacia melanoxylon*), poison hemlock (*Conium maculatum*), cotoneaster (*Cotoneaster lacteus*), English ivy (*Hedera helix*), blackberry (*Rubus* spp.), poison oak (*Toxicodendron diversilobum* and *Rhus diversiloba*), and rock elm (*Ulmus thomasii*), should be removed from the slope entirely (Figure 3.8). Stabilization planting should be undertaken immediately following clearing to prevent soil erosion, as well as subsequent invasion by non-native plants. A list of proposed species for slope planting rehabilitation is provided in the table below. An alternative approach to rehabilitation planting could embrace a completely native plant palette that demonstrates characteristics suited to maintaining the historic character of the slope. Advantages of this approach include less water use and less maintenance. However, a completely native plant palette may limit replanting of species that historically characterized the landscape.

#### Treatment Considerations

Treatment should be carried out along the length of the slope, from the area to the east of the Officers' Club to the City Pumping Station. This work should be accomplished in four vertical zones, working from the center of the slope at the staircase above the railroad tunnel toward the north and south (Figure 3.9). This work will require an incremental approach, and phasing will allow the park to gain experience and to make changes as needed in subsequent phases. A new garden refuse chute should be added to the slope adjacent to the City Pumping Station to support rehabilitation and ongoing maintenance efforts (Figure 3.10).

Vegetation clearing will allow more sunlight to reach the slope and may result in rapid growth of understory vegetation. Following the removal of invasive and overgrown vegetation, additional inventory may be required to identify historic plant species. Maintenance implications related to the rehabilitation of the East Black Point slope garden plantings are significant and include sustained increased



Figure 3.8. Invasive blackberries to be removed along the East Black Point slope walk and retaining wall between Quarters 2 and 3. View looking south, 2011 (OCLP).

Figure 3.9. Proposed East Black Point slope rehabilitation project phasing diagram. Plan view, 2011 (OCLP).

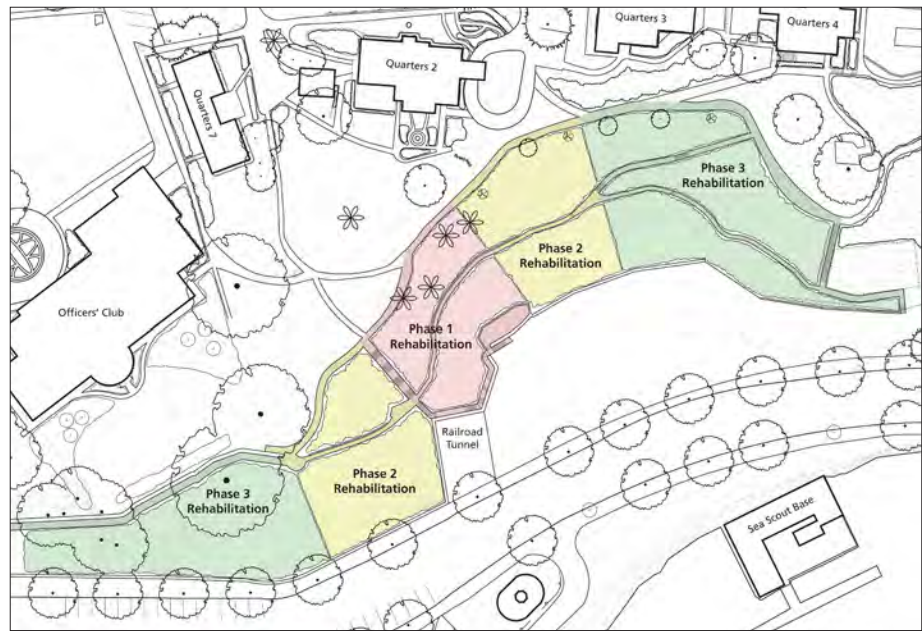
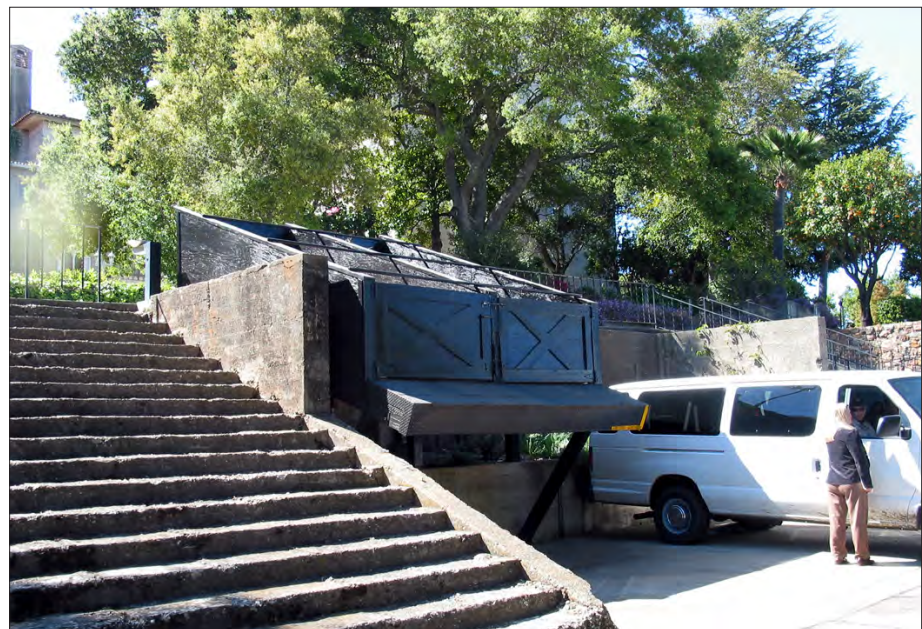


Figure 3.10. The garden refuse chute at Hearst Castle in San Simeon, California supports large landscape rehabilitation projects and is similar to that proposed for the East Black Point slope (OCLP).



levels of tree and shrub pruning, invasive plant removal, watering, and refuse removal.

These new responsibilities present opportunities for civic engagement and community-based stewardship if community gardening efforts can be focused on the common goal of enhancing the historic character of the planting. Building on the success of the Garden Conservancy’s work on Alcatraz Island and the Fort Mason Community Garden’s success near the Parade Ground, both organizations could be valuable partners in East Black Point slope rehabilitation. Landscape rehabilitation work on the East Black Point slope should be modeled on the rehabilitation successes in the gardens of Alcatraz Island.



### Relationship to Park Planning

Rehabilitation of the overgrown vegetation on the East Black Point slope is specifically addressed in the park's draft *General Management Plan*. Views to and from East Black Point are fundamental to advancing the draft plan goals of improved visibility and visitor orientation. A new civic stewardship program also has the potential to increase community investment in the Upper Fort Mason landscape. Additionally, these improvements relate closely to the findings of the San Francisco Maritime National Historical Park/Golden Gate National Recreation Area Joint Waterfront Planning Workshop, which targeted improvements to park portals along the Van Ness Avenue corridor.

**Table 3.1: Plant palette for East Black Point slope planting rehabilitation**

Scientific Name	Common Name
<b>Trees/Tall Shrubs</b>	
<i>Aesculus californica</i>	California buckeye
<i>Arbutus menziesii</i>	madrone
<i>Cordyline australis</i> <sup>*†</sup>	cordyline
<i>Heteromeles arbutifolia</i>	toyon
<i>Phoenix canariensis</i>	Canary Island date palm
<i>Quercus agrifolia</i>	coast live oak
<i>Umbellularia californica</i>	California laurel
<b>Low Shrubs</b>	
<i>Ceanothus cuneatus</i>	buckbrush
<i>Dendromecon rigida</i>	bush poppy
<i>Eriodictyon californicum</i>	yerba santa
<i>Fuchsia thymifolia</i> *	thyme-leaved fuchsia
<i>Laurus nobilis</i> *	Grecian laurel
<i>Salvia mellifera</i>	black sage
<b>Ferns</b>	
<i>Dryopteris arguta</i>	California wood fern
<i>Polypodium californicum</i>	California polypody
<i>Polypodium scolieri</i>	leather-leaf fern
<b>Groundcovers</b>	
<i>Arctostaphylos</i> 'Pacific Mist'	manzanita
<i>Baccharis pilularis</i>	coyote brush
<i>Ceanothus gloriosus</i> 'Anchor Bay'	Point Reyes ceanothus
<i>Clarkia elegans</i>	clarkia
<i>Lupinus arboreus</i>	lupine
<i>Tropaeolum majus</i> *	nasturtium
* Historically appropriate, yet non-native species	
†Although the California Invasive Plant Council classifies cordylines as limited invasive, existing cordylines at Upper Fort Mason are regularly maintained in a garden setting and have not proven to be invasive.	

**CR-1: Rehabilitate East Black Point slope walks for safe public access****Description**

Concrete walks, stairs, retaining walls, and cribbing on the East Black Point slope are severely deteriorated. Existing historic walks, stairs, retaining walls, and cribbing should be retained in place, and repaired or replaced in-kind as required to accommodate safe public access throughout the East Black Point slope. Based on a visual investigation, the existing drainage infrastructure located below the walks is also not functional. Drainage system improvements are required to support public access improvements. Repair of the staircase above the railroad tunnel that connects the East Black Point pocket park to the area below the Officers' Club is a first priority in accommodating safe public access to the slope. Ensuring that the path remains open and that vagrants are discouraged is also a high priority of park management (Figure 3.11).

**Treatment Considerations**

An evaluation of the structural integrity of the walks, stairs, walls, and cribbing should be undertaken prior to rehabilitation work. Refer also to existing conditions mapping completed in 2010.<sup>2</sup> Rehabilitation should be completed following vegetation clearing, but before replanting is complete, as structural improvements will likely result in significant ground disturbance. Consideration should be given to phasing this work (see Figure 3.9). Due to the steep terrain and often saturated soils, required improvements may include the repair or replacement of walks, stairs, and walls, as well as the addition of limited new retaining walls or cribbing and handrails as needed to meet life-safety codes. Rehabilitation of the East Black Point slope infrastructure will result in a minor



Figure 3.11. Collapsed concrete walks and drainage structures on the East Black Point slope to be rehabilitated to support visitor use. View looking south, 2011 (OCLP).

increase in ongoing maintenance requirements following treatment, including ongoing monitoring for slope subsidence.

### ***Relationship to Park Planning***

Improvements to the East Black Point slope are addressed specifically in the draft *General Management Plan*. The repair of walks, stairs, cribbing, and walls on the East Black Point slope supports park management goals of improved access and wayfinding. Pedestrian access improvements to the East Black Point slope area were targeted during the 2010 San Francisco Maritime National Historical Park/ Golden Gate National Recreation Area Joint Waterfront Planning Workshop, when participants discussed “reactivating the staircases in the gardens.”

### **CR-2: Rehabilitate walks for safe public access to the Officers’ Quarters grounds**

#### ***Description***

Existing concrete walks to the east of the East Black Point Officers’ Quarters are heaved, cracked, and present numerous tripping hazards (Figure 3.12). Concrete walks to the east of the Officers’ Quarters should be removed, regraded, equipped with a well-drained base material, and replaced in-kind to accommodate safe public access to the landscape area adjacent to the historic buildings.

The pedestrian connection between north Franklin Street and pedestrian walks at the crest of East Black Point slope should also be strengthened with improvements to pedestrian access on to the north of the Officers’ Club. This point of access is a key link between north Franklin Street and the staircase that traverses the East Black Point slope. Improvements to this access route, including regrading and widening the sidewalk, will accommodate universal access to the eastward view



Figure 3.12. Heaved and cracked concrete walks at the crest of the East Black Point slope to be replaced in-kind to accommodate safe public access. View looking north, 2011 (OCLP).

afforded from the Officers' Club and substantially improve the visual connection between Upper Fort Mason and San Francisco Maritime National Historical Park.

#### ***Treatment Considerations***

Consistent with replacement of concrete walks to the east of the Officers' Quarters, the adjacent turf requires renovation, with invasive weed removal and the addition of an automated irrigation system consistent with the scope of the *Fort Mason Water Conservation Irrigation Upgrades* project. The addition of an automated irrigation system in the lawn area will decrease demands on park maintenance staff, as well as make more efficient and sustainable use of the park's water resources. Maintenance implications related to accommodating public access to the Officers' Quarters area is negligible in relation to the existing maintenance program.

#### ***Relationship to Park Planning***

Public access to framed views from the Officers' Quarters grounds and visual access to the buildings themselves are essential to advancing the park's management goals of improved access, visitor welcoming, and orientation. Additionally, the park's *Long Range Interpretive Plan* highlights civilian settlement of East Black Point as a primary interpretive theme. Accordingly, accommodating physical and visual public access to the quarters at the crest of the East Black Point slope is integral to enhancing the park's interpretive program.

Figure 3.13. Historic view of Quarters 2 showing well-tended perennials and woody shrubs to be reestablished at the building's foundation. The rose garden is visible at bottom right. View looking southeast, 1926 (National Archives, RG 77, Officer of the Quartermaster General, Records of the Construction Division - Annual Construction, Maintenance, and Repairs Reports (1924-1938) Box 135NM).



**VG-1: Rehabilitate East Black Point Officers' Quarters grounds****Description**

The existing foundation plantings and associated infrastructure at the East Black Point Officers' Quarters do not reflect their historic character. The planting and site infrastructure should be rehabilitated to approximate its appearance around 1953, when it was characterized by domestic scale and a well-maintained military bearing (Figure 3.13).

**Treatment Considerations**

With improvements to the foundation planting at the East Black Point Officers' Quarters ongoing, treatment tasks related to reestablishing the historic character of each of the East Black Point Officers' Quarters grounds are provided in the table below. A plant palette of historically-appropriate species is provided in the accompanying table for foundation planting rehabilitation. However, maintaining a well-cared for appearance of the foundation planting is more important than the specific composition of the foundation planting.

Maintenance of the grounds adjacent to the Officers' Quarters presents a unique challenge of balancing institutional grounds-keeping practices with the domestic qualities that once characterized the historic residences. A stewardship program should be considered to maintain the rehabilitated planting, allowing lessees to care for limited and clearly defined landscape zones associated with each residence. The program could enhance the historic character of the landscape while reducing maintenance demands on park staff (see Figure 2.4). Maintenance implications for planting rehabilitation on the Officers' Quarters grounds will vary depending upon tenant involvement. Minimally, however, park staff will be required to continue lawn mowing, mulching, tree and woody shrub pruning, and fertilizing.



Figure 3.14. Overgrown yew at Quarters 2 to be replaced in-kind and junipers surrounding the rose garden to be replaced with low boxwood edging. View looking southeast, 2011 (OCLP).

**Relationship to Park Planning**

Rehabilitation of the East Black Point Officers' Quarters foundation planting supports the park's interpretive planning objectives related to illustrating the social, political, and military themes that trace settlement of East Black Point from the time of the California Gold Rush through the Korean Conflict. Tenant involvement in limited planting and landscape maintenance could increase the sustainability of these plantings and enhance the park's partnership with tenants through a community-based stewardship program.

**Table 3.2: Landscape rehabilitation tasks for the Officers' Quarters grounds**

Task ID	Task
<b>Quarters 2</b>	
Q2-1	Replace deteriorated concrete walks in-kind
Q2-2	Replace overgrown yew to the west of Quarters 2 in-kind (Figure 3.14)
Q2-3	Replace overgrown buddleia adjacent to the porte-cochère in-kind (Figure 3.15)
Q2-4	Replace junipers surrounding the rose garden with boxwood edging (Figure 3.16)
Q2-5	Retain and maintain existing roses, sheared hedges, and foundation planting; supplement as necessary to maintain a domestic character (see plant palette below, Figure 3.17)
<b>Quarters 3</b>	
Q3-1	Retain and maintain foundation planting along the south façade; supplement as necessary to maintain a domestic character (see plant palette below, Figure 3.18)
Q3-2	Repair landscape lighting between Quarters 3 and 4 (Figure 3.19)
<b>Quarters 4</b>	
Q4-1	Replace deteriorated concrete walks to the south of Quarters 4 in-kind (Figure 3.20)
Q4-2	Retain and maintain foundation plantings along the south and west façades; supplement as necessary to maintain a domestic character (see plant palette below, Figure 3.21)
Q4-3	Rehabilitate planting along the north façade consistent with public access improvements to the garden terrace (see Task CR-4, Figure 3.22)
<b>Quarters 7</b>	
Q7-1	Reset timber wall along the west façade (Figure 3.23)
Q7-2	Rehabilitate foundation planting beds along the north and east façades (see plant palette below, Figure 3.24)

**Table 3.3: Plant palette for Officers' Quarters foundation planting rehabilitation**

Scientific Name	Common Name
<b>Small Trees</b>	
<i>Cordyline australis</i> <sup>†</sup>	cordyline
<b>Shrubs/Woody Plants</b>	
<i>Artemisia arborescens</i>	wormwood
<i>Buxus</i> sp.	boxwood
<i>Brugmansia</i> x	angels' trumpets
<i>Callistemon citrinus</i>	bottlebrush
<i>Camellia japonica</i>	camellia
<i>Crassula ovata</i>	jade
<i>Escallonia rubra</i>	red escallonia
<i>Gardenia jasminoides</i>	gardenia
<i>Hydrangea macrophylla</i>	hydrangea
<i>Ilex cornuta</i>	Chinese holly
<i>Juniperus sabina</i>	savin juniper
<i>Lavandula angustifolia</i>	lavender
<i>Rhododendron</i> sp.	rhododendron
<i>Rosa</i> sp.	tea roses
<i>Rosmarinus officinalis</i>	rosemary
<i>Salvia officinalis</i>	sage
<i>Santolina chamaecyparissus</i>	santolina
<b>Herbaceous</b>	
<i>Achillea millefolium</i>	yarrow
<i>Agapanthus orientalis</i>	agapanthus
<i>Armeria maritima</i>	sea thrift
<i>Chasmanthe floribunda</i>	chasmanthe
<i>Digitalis purpurea</i>	foxglove
<i>Fuchsia thymifolia</i>	thyme-leaved fuchsia
<i>Impatiens sodenii</i>	impatiens
<i>Iris germanica</i>	Siberian iris
<i>Jasminum polyanthum</i>	pink jasmine
<i>Leucanthemum x superbum</i>	shasta daisy
<i>Pelargonium</i> sp.	geranium
<i>Phormium cookianum</i>	New Zealand flax
<i>Stachys byzantina</i>	lamb's ear
<i>Verbena bombyciferum</i>	verbena
	ferns (various)
<p><sup>†</sup> Although the California Invasive Plant Council classifies cordylines as limited invasive, existing cordylines at Upper Fort Mason are regularly maintained in a garden setting and have not proven to be invasive.</p>	

Figure 3.15. Overgrown buddelia at the front entrance to Quarters 2 to be replaced in-kind. View looking east, 2011 (OCLP).



Figure 3.16. Overgrown junipers surrounding the Quarters 2 rose garden to be replaced with low boxwood edging. View looking north, 2011 (OCLP).



Figure 3.17. Foundation plantings along the south side of Quarters 2 to be retained and maintained. View looking north, 2011 (OCLP).





Figure 3.18. Foundation plantings along the east side of Quarters 3 to be retained and maintained. View looking south, 2011 (OCLP).



Figure 3.19. Missing landscape lighting along the walk between Quarters 3 and 4 to be replaced with compatible fixtures. View looking south, 2011 (OCLP).



Figure 3.20. Deteriorated concrete walk adjacent to Quarters 4 to be leveled and replaced in-kind. View looking north, 2011 (OCLP).





Figure 3.21. Foundation plantings to the south of Quarters 4 to be retained and maintained. View looking north, 2011 (OCLP).



Figure 3.22. Foundation plantings to the north of Quarters 4 to be rehabilitated consistent with access improvements. View looking south, 2011 (OCLP).



Figure 3.23. Timber wall along west side of Quarters 7 to be reset. View looking north, 2011 (OCLP).

Figure 3.24. Foundation plantings along the south side of Quarters 7 to be rehabilitated. View looking east, 2012 (OCLP).



Figure 3.25. Black Point walk adjacent to a graffiti-covered retaining wall showing dark mid-day conditions to be remedied through vegetation management and the installation of security lighting. View looking north, 2011 (OCLP).



**SSF-1: Design and install photo-sensitive and motion detection security lighting throughout the East Black Point slope**

**Description**

The East Black Point slope walkways are dark, and low visibility presents potential safety concerns (Figure 3.25). The slope and adjoining landscape areas should be lit with a system of motion-activated path lighting to ensure safe visitor access and deter social problems on the slope during the evening hours. Installation of a motion-activated and photo-sensitive security lighting system includes repairs to existing historic lighting, replacement of missing historic lighting, and addition of new lighting as needed to ensure sufficient light levels.

***Treatment Considerations***

Replacement lights should conform to historic light designs. All new light fixtures should be selected for compatibility with the historic character of the post and for consistency with the recommendations of the *Parkwide Site Furnishing Standards*. New solar-powered LED fixtures may be a desirable choice as technology is improved. Recurring maintenance associated with site lighting relates to regular inspection and replacement of luminaires. Motion and light detection technology limit the need for daily monitoring.

***Relationship to Park Planning***

The installation of minimal lighting throughout the East Black Point slope is consistent with the draft *General Management Plan* directive to improve the overgrown East Black Point slope, while improving access and wayfinding. As identified during the San Francisco Maritime National Historical Park/Golden Gate National Recreation Area Joint Waterfront Planning Workshop, this task also presents an opportunity to enhance the eastern park portal consistent with proposed Van Ness Avenue corridor transit improvements.

East Black Point  
Treatment Plan



National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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LEGEND

- Two-foot topographic contour
- Roads
- Walks
- Lawn
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees

NOTE

All features shown in approximate scale and location.



Drawing 3.2





## NORTH FORTIFICATIONS

### OVERVIEW

The North Fortifications landscape treatment area encompasses the northernmost edge of Upper Fort Mason between Building 240 (hostel) and McDowell Avenue (Figure 3.26). Historically, this strategic location afforded panoramic views from the Golden Gate to the interior of the San Francisco Bay and played an instrumental role in the initial siting of the military installation (Figure 3.27). Fortifications within the landscape treatment area are sited on constructed terraces above the North Cliff and relate to two distinct phases of improvements undertaken during the Civil War and post-Spanish-American War eras. Extant resources include the masonry and earthen Civil War era gun battery (const. 1864), muzzle-loading rifle concrete gun platform and magazine (const. about 1898–1900), and breech-loading rifle battery and magazine (Battery Burnham, part of the Endicott system of defenses, const. 1899).

Today, the interpretive potential of the fortifications is diminished by mature trees and tall shrubs that have grown to block strategic views and a chain-link fence that restricts access to the eastern half of the (buried) Civil War era fortifications (Figure 3.28). McDowell Avenue, located above the North Cliff, is the most heavily used circulation route at Upper Fort Mason, providing a direct connection between San Francisco Maritime National Historical Park (to the east) and Lower Fort Mason (to the west). Although the Civil War era battery was buried at the landscape treatment reference date (c. 1953), this feature is an important interpretive exhibit for the park.



Figure 3.26. North Fortifications landscape treatment area location diagram. Plan view, 2011 (OCLP).



Figure 3.27. Panoramic, open views of the San Francisco Bay characterized the North Fortifications during the period of significance. View looking northwest, circa 1869 (San Francisco History Center, San Francisco Public Library).

The North Fortifications retain a relatively high degree of landscape integrity, expressed through the earthworks and masonry structures surviving from the historic period. Natural growth and decline of vegetation has diminished the integrity of materials and changes in layout of the lower terrace have diminished the design of the space. Addressing changes since the end of the period of significance presents opportunities to recapture the historically open, sweeping, and strategic views from the North Fortifications. Because the North Fortifications include resources that trace multiple generations of coastal defenses, along with striking views of the bay, the area is well-suited to accommodate visitor use for interpretation of historic resources.

During the 2010 San Francisco Maritime National Historical Park/Golden Gate National Recreation Area Joint Waterfront Planning Workshop, participants identified the northern terminus of Van Ness Avenue as a major hub of visitor activity, with anticipated increases in visitation as an F-line streetcar extension is further evaluated. A proposal to construct a water-level causeway between San Francisco Maritime National Historical Park and Lower Fort Mason was a major outcome of the workshop. The workshop also explored creating a physical connection between Piers 3 and 4 to bypass the steep slope along McDowell Avenue. Although a waterfront causeway could increase visitation to Lower Fort Mason, it would also bypass and possibly deter visitation to Upper Fort Mason. Additionally, causeway construction would occur in proximity to the only stretch of unaltered shoreline in San Francisco County, identified in the draft *General Management Plans* as a sensitive habitat. Care must be taken to ensure consistency





Figure 3.28. Mature plantings and invasive vegetation now obstruct views to the San Francisco Bay from the Civil War era fortifications. View looking west, 2011 (OCLP).

with the objectives of the draft *General Management Plan* when pursuing the waterfront causeway proposal.

Treatment tasks that follow are focused on reestablishing historic views from the North Fortifications to the bay and sites beyond, and providing universally-accessible routes to the historic fortifications. Implementation of these tasks will help to convey to visitors the landscape characteristics that served as the genesis of the cultural landscape, including topography and vantage (Drawing 3.3).

## **TASKS**

### **V-2: Reestablish views to San Francisco Bay from the historic fortifications**

#### ***Description***

The ability to understand either the purpose or function of Fort Mason's historic harbor defenses is severely limited due to mature vegetation blocking views to the water from the North Fortifications (Figure 3.29). The historic visual connections from Upper Fort Mason to the bay should be reestablished through the removal of large trees. Reestablishing the visual connection to the water through vegetation management is fundamental to successful interpretation of the coastal defenses and widespread removal large trees is needed to eliminate windthrow hazards. Following removal, rehabilitation planting should be undertaken to stabilize the steep slopes of the earthen fortifications and to replicate the character of the historic planting (Figure 3.30).

**Treatment Considerations**

Existing mature trees and tall shrubs greater than six inches in diameter at breast height should be removed from all engineered slopes of the fortifications (Figure 3.31). Provided they do not obstruct views, trees smaller than six inches in diameter at breast height may be retained on the engineered slopes of the



Figure 3.29. Mature Monterey cypresses and overgrown shrubs obstruct westward views toward the Golden Gate from the earthen terrace below Battery Burnham. View looking west, 2011 (OCLP).



Figure 3.30. Photo simulation showing reestablished framed views of the bay and Golden Gate from the North Fortifications following vegetation management on the engineered slopes of the North Fortifications. View looking west, 2011 (OCLP).

defenses. Tree removal work should be completed after thorough existing condition documentation and should be undertaken outside of bird nesting season.

Several small replacement trees should be planted on the earthworks to reestablish planting patterns that existed during the period of significance (Figure 3.32). The recommended planting consists of cordyline (*Cordyline australis*) at the crests of the upper and lower terraces and green columnar juniper (*Juniperus chinensis* 'Hetzii Columnaris') at the crest of the middle terrace. Although the California Invasive Plant Council classifies cordylines as limited invasive, cordylines at Upper Fort Mason are regularly maintained in a garden setting and have not proven to be invasive. Low growing vegetation on the slopes is proposed to be both non-

Figure 3.31. An uprooted, wind-fallen tree below Battery Burnham illustrates the potential damage to resources if mature trees are not removed from the earthen terraces. View looking east, 2011 (OCLP).



Figure 3.32. Historic aerial view of the North Fortifications showing young Monterey cypresses to be reestablished at the crest of each of the terraces. View looking southwest, circa 1927 (NPS, GGNRA Archives).



invasive and stabilizing. A list of recommended species for maintaining vegetative cover on the earthen portions of the coastal fortifications is provided below.

Earthworks management has become increasingly subject to preference for native plants to maintain vegetative cover. However, earthworks are the result of engineering manipulation of topography, and most earthworks are managed as cultural resources. While many native species are suitable to stabilize steep slopes, many non-native plants are also equally effective at quickly stabilizing soil and are a benign presence in the urban landscape. When selecting plants to stabilize slopes within Upper Fort Mason's developed areas, the focus of plant selection should be on the species' abilities to stabilize slopes while maintaining open views rather than on their status as native plants. The *Guide to Sustainable Military Earthworks Management* prepared by the National Park Service Historic Landscape Initiative provides guidance on managing vegetation on earthworks.<sup>3</sup> The *Seacoast Fortifications Preservation Manual* (1999)<sup>4</sup> and the *Historic Fortification Preservation Handbook* (2003)<sup>5</sup> also provide guidance on inventorying and treating these historic earthen structures.

Maintenance implications of rehabilitating views outward from the North Fortifications are significant during the implementation phases and include sustained increased levels of tree and shrub pruning, invasive plant removal, watering, and fertilization. However, careful selection of plants that are non-invasive and well-adapted to the coastal setting will help to minimize ongoing maintenance requirements.

### ***Relationship to Park Planning***

Views of the bay from the coastal fortifications are the single most important interpretive resource at Upper Fort Mason and relate to the park's draft *General Management Plan* goals of orienting visitors to the broader resources of the park, including Fort Point, the Presidio, Marin Headlands, and Alcatraz and Angel Islands. Treatment of Upper Fort Mason's fortifications advances the park's draft *General Management Plan* objectives of preservation of one of the largest and most complete military installations and fortifications in the country, dating from Spanish settlement through the twentieth century.

The *Long Range Interpretive Plan* recognizes Fort Mason as a component of one of the park's primary interpretive themes related to the "epic stream of historic movements that flowed between its headlands. . . The visual integrity of Fort Mason and the Marin and San Francisco Headlands plays a key role in highlighting those historic impacts."<sup>6</sup> Views from the fortifications have the potential to illustrate the strategic location of Fort Mason at the mouth of San Francisco Bay. Selective clearing within the 180-degree field of fire will also support visitor understanding to the fortifications' design and purpose. The

interpretive program at the North Fortifications might appropriately educate visitors about the strategic location of the post, the history of the fortifications, advancements in military technology, the related scientific and mathematical fundamentals of the defensive systems, the role of California in the Civil War, and the changing landscape of the San Francisco coastline.

**Table 3.4: Plant palette for fortification rehabilitation and stabilization planting**

Scientific Name	Common Name
<b>Small Trees</b>	
<i>Cordyline australis</i> <sup>*†</sup>	cordyline
<i>Heteromeles arbutifolia</i>	toyon
<i>Juniperus chinensis</i> 'Hetzii Columnaris' <sup>*</sup>	green columnar juniper
<i>Quercus agrifolia</i>	coast live oak
<i>Umbellularia californica</i>	California laurel
<b>Low Shrubs</b>	
<i>Ceanothus cuneatus</i>	buckbrush
<i>Eriodictyon californicum</i>	yerba santa
<i>Fuchsia thymifolia</i> <sup>*</sup>	thyme-leaved fuchsia
<i>Laurus nobilis</i> <sup>*</sup>	Grecian laurel
<i>Salvia mellifera</i>	black sage
<b>Groundcovers</b>	
<i>Arctostaphylos</i> 'Pacific Mist'	manzanita
<i>Baccharis pilularis</i>	coyote brush
<i>Ceanothus gloriosus</i> 'Anchor Bay'	Point Reyes ceanothus
<i>Clarkia elegans</i>	clarkia
<i>Lupinus arboreus</i>	lupine
<i>Tropaeolum majus</i> <sup>*</sup>	nasturtium
<b>Grasses</b>	
<i>Festuca californica</i>	California fescue
<i>Muhlenbergia rigens</i>	deer grass
* Historically appropriate, yet non-native species	
†Although the California Invasive Plant Council classifies cordylines as limited invasive, cordylines at Upper Fort Mason are regularly maintained in a garden setting and have not proven to be invasive.	



**Figure 3.33. Steep staircase leading from Battery Burnham to the Civil War era fortifications to be reconfigured to meet life-safety codes. Note the mature twin cordylines flanking the staircase. View looking south, 2011 (OCLP).**

### **CR-3: Provide universally-accessible route to the Civil War era fortifications**

#### **Description**

Access to the Civil War fortifications is limited by a steep staircase from the upper fortifications terrace adjacent to Battery Burnham. While historic, this staircase is non-compliant with life-safety codes and should be reconfigured (Figure 3.33). New walks and ramp(s) should also be installed to accommodate safe and universal access to the Civil War era fortifications in the slope to the north of Buildings 241 and/or on the slope to the west of Quarters 4 (Drawings 3.4 and 3.5). These improvements will necessitate removal of the timber steps, relocation of the non-historic picnic area (see Task CR-6), and the addition of new walks in the vicinity of the historic Civil War rampart (Figures 3.34 and 3.35).

#### **Treatment Considerations**

Based on detailed study, two alternative locations for Civil War era fortifications access ramps are presented here: to the north of Building 241 and to the west of Quarters 4. The new access ramp(s) should be sited, graded, and screened to minimize visual intrusion in the historic landscape (Figures 3.36–3.40). Historic maps indicate that a nineteenth century mess hall may have stood in the vicinity of the proposed Quarters 4 ramp. For this reason, the ramp to the north of Building 241 is the preferred alternative. Ramp construction will require additional design work consistent with *28 CFR Part 36: ADA Standards for Accessible Design* and should be undertaken subject to the findings of archeological investigations.

Following archeological investigation, a sub-surface drainage system is required throughout the Civil War era terreplein to reduce saturated soil conditions. Reinforced soil is proposed for the terreplein area to encourage proper drainage and provide a stable surface for pedestrians. A six-foot wide stone dust or decomposed granite path should be added at the base of the slope to the south of the rampart as the primary visitor access route.

A short walk is needed above the eastern portion of the parapet in the area of the existing social trail to connect the Quarters 4 garden terrace to the staircase on the north side of the fortifications. Maintenance equipment and bicycles should be restricted from the top of the parapet wall and redirected to the terreplein following the resolution of drainage issues.

#### **Relationship to Park Planning**

Accommodating universal access to the Civil War era fortifications supports park management goals of improved access and wayfinding to fundamental resources. Access to the fortifications supports visitor understanding of the park's physical landforms, which are defined in the draft *General Management Plan* as a primary

park interpretive theme. This task also resolves a significant outstanding issue from the *Upper Fort Mason Accessibility Case Report*.



Figure 3.34. Mature vegetation blocks views to San Francisco Bay from the terreplein of the Civil War era fortifications. View looking northeast, 2011 (OCLP).



Figure 3.35. Photo simulation showing reestablished views across the Civil War era terreplein following vegetation management. A new visitor access walk is shown at the base of the engineered slope of Battery Burnham. View looking northeast, 2011 (OCLP).

Figure 3.36. Existing view of the proposed location of the preferred alternative Civil War terreplein access ramp to the north of Building 241. Removal of invasive blackberries will reveal an embankment. View looking west, 2012 (OCLP).



Figure 3.37. Schematic computer simulation illustrating the feasibility of the proposed preferred alternative Civil War terreplein access ramp to the north of Building 241. Note that handrails (not shown) will be required along both sides of the ramp to meet universal accessibility guidelines. Further design work is needed. View looking west, 2012 (OCLP).

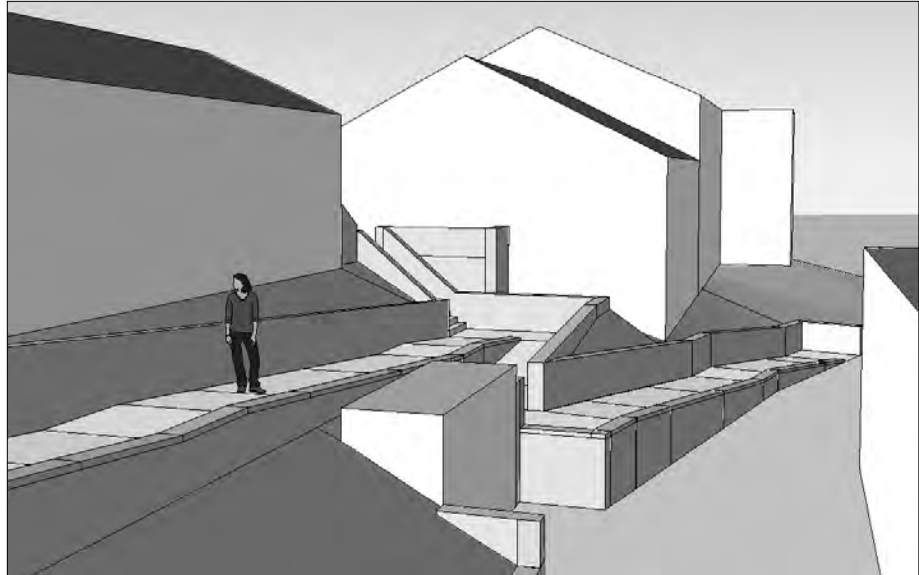




Figure 3.38. Existing view of the location of the alternative Civil War terreplein access ramp to the west of the Quarters 4 garden terrace. Note that removal of invasive rock elms will reveal an embankment. View looking northwest, 2012 (GGNRA).



Figure 3.39. Schematic computer simulation illustrating the feasibility of the alternative Civil War terreplein access ramp from the Quarters 4 garden terrace. Note that handrails (not shown) will be required along both sides of the ramp to meet universal accessibility guidelines. Further design work is needed to refine ramp design and minimize re-grading of existing embankment. View looking northwest, 2012 (OCLP).

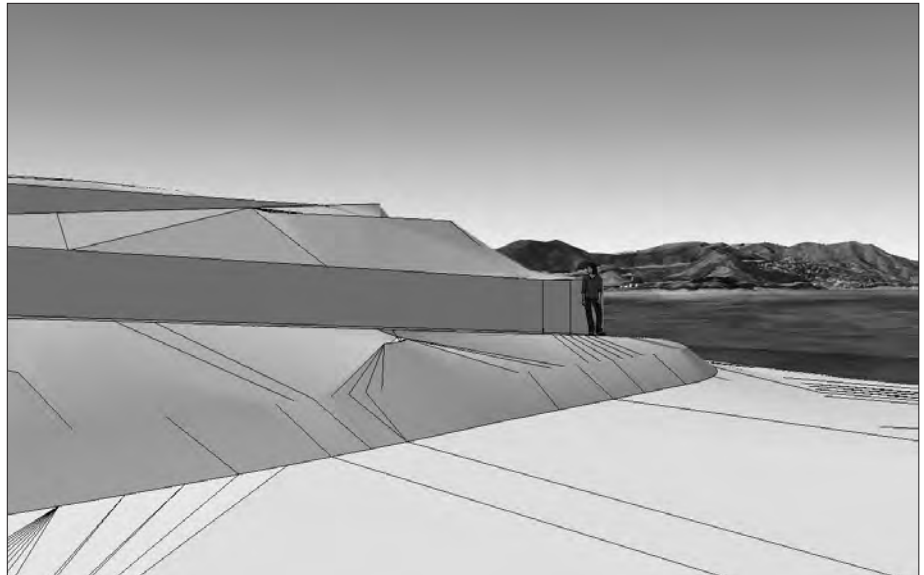


Figure 3.40. Schematic computer simulation showing the alternative Civil War terreplein access ramp to the west of the Quarters 4 garden terrace. Note that the ramp is nested into the embankment, which is to be replanted with low-growing, historically-appropriate native vegetation. Aerial view looking south, 2012 (OCLP).

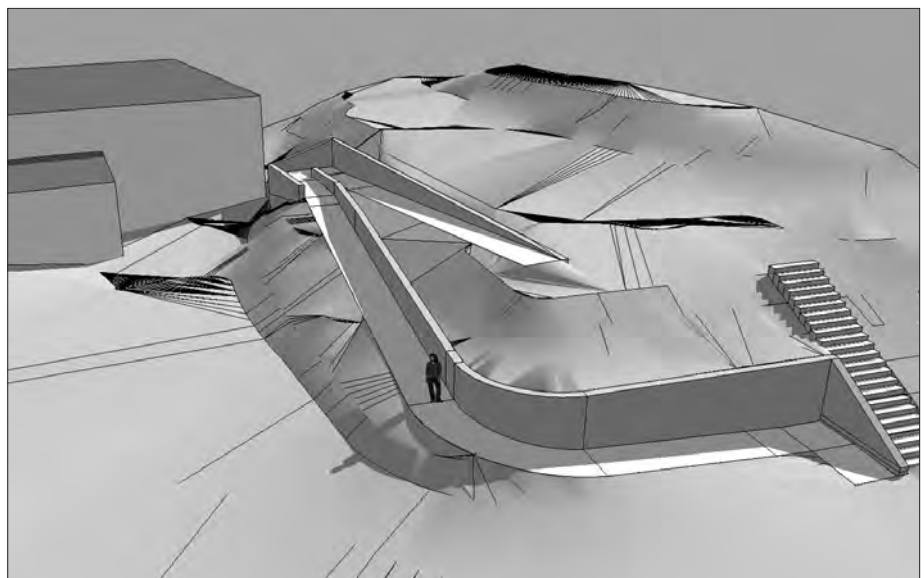


Figure 3.41. Concrete walks on the Quarters 4 garden terrace to be removed and replaced in-kind to remedy undulations and standing water due to poor sub-surface drainage and seismic activity. View looking north, 2011 (OCLP).



#### **CR-4: Rehabilitate the Quarters 4 garden terrace**

##### ***Description***

When the Army filled the former Civil War era fortifications in the twentieth century, failure to account for proper drainage and low quality fill have resulted in a basin of saturated soil that does not drain property. Combined with seismic activity, the existing condition poses a threat to resources in the area (Figure 3.41). To remedy this condition, archeological excavation and soil replacement with engineered fill and a sub-surface drainage system are required on the Quarters 4 garden terrace. To reestablish the historic spatial organization of this area and to unify, clarify and expand public access, the existing chain-link fence along the western edge of the garden terrace should be removed and lawn reestablished at the base of the Civil War era fortifications (see Drawing 3.4).

##### ***Treatment Considerations***

Although the garden terrace was present at the end of the period of significance, its existing condition does not reflect its spatial organization in 1953, when the level terrace extended to the west to connect with the area presently occupied by the picnic area and excavated Civil War era fortifications. Following rehabilitation, this area is recommended to be opened to the public to welcome park visitors to the area in support of improved access, orientation, and interpretation.

The excavation work needed to correct drainage problems will likely reveal the eastern end of the Civil War rampart, which, if left exposed with up to eighteen inches of the parapet revealed, has the potential to enhance resource interpretation by revealing the geometry of the historic fortification. Because of the documented archeological sensitivity of this area, work should be undertaken

with archeological oversight consistent with *The Secretary of the Interior's Standards for Archeological Documentation*.<sup>7</sup>

### **Relationship to Park Planning**

Rehabilitation of the Quarters 4 garden terrace supports the draft *General Management Plan* goals of improved access, visitor welcoming, and orientation. The garden terrace is also located on a critical site for interpreting the park's social, political, and military themes related to early settlement and United States Army occupation. Additionally, the Quarters 4 terrace is a site of outstanding natural, historic, and scenic beauty. Therefore, its rehabilitation is integral to upholding the legislated mandate of the national recreation area.

### **CR-5: Stabilize McDowell Avenue and rehabilitate the searchlight shelter for North Cliff overlook**

#### **Description**

The existing concrete wall along the northern side of McDowell Avenue is deteriorating and subsidence of the adjacent slope has undermined portions of the wall (Figure 3.42). Both to improve visitor safety and enhance the visitor experience, immediate repairs to the wall should be undertaken consistent with the findings of the *Title I Report, Repair of Concrete Retaining Wall along McDowell Road [sic]*.<sup>8</sup> In addition to extensive repairs, a scenic overlook might appropriately be constructed adjacent to the historic searchlight shelter along the northern side of McDowell Avenue to provide visual access to the North Cliff landscape and a resting place along the steep route, consistent with accessibility improvements.



Figure 3.42. Collapsed concrete retaining wall along McDowell Avenue to be replaced consistent with road narrowing to enhance visitor safety. View looking west, 2011 (OCLP).

### ***Treatment Considerations***

Both the concrete wall and road surface require careful evaluation for sub-surface condition and may require modest realignment and narrowing to ensure structural stability. Use by service vehicles and heavy equipment should be curtailed, and use of the rehabilitated roadway should be restricted to pedestrians and cyclists. Pavement markings might appropriately separate pedestrians from cyclists to further improve visitor safety. Following rehabilitation, ongoing monitoring is needed to ensure that the road remains stable.

Development of the searchlight shelter overlook will require careful consideration of visitor safety evaluation. Vandalism concerns may require that the shelter remain closed. However, an exterior overlook can be developed along the façade of the historic structure to provide visual access to the North Cliff. As the only stretch of unaltered bay shoreline in San Francisco, the North Cliff is the most important natural resource at Upper Fort Mason. Waysides should be considered at the shelter to interpret both the natural history of the coastline and the military history of the searchlight shelter.

### ***Relationship to Park Planning***

As an active and well-used gateway to Upper Fort Mason with views to park units beyond, McDowell Avenue is a primary part of the visitor infrastructure. In addition to improved park safety, rehabilitation of McDowell Avenue supports park planning goals of improved access and visitor welcoming at a heavily used entrance. Accommodating visual access to the North Cliff sensitive resources zone, as identified in the draft *General Management Plan*, is also an important natural resource objective for Upper Fort Mason.

North Fortifications  
Treatment Plan



National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

DRAWN BY

Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

LEGEND

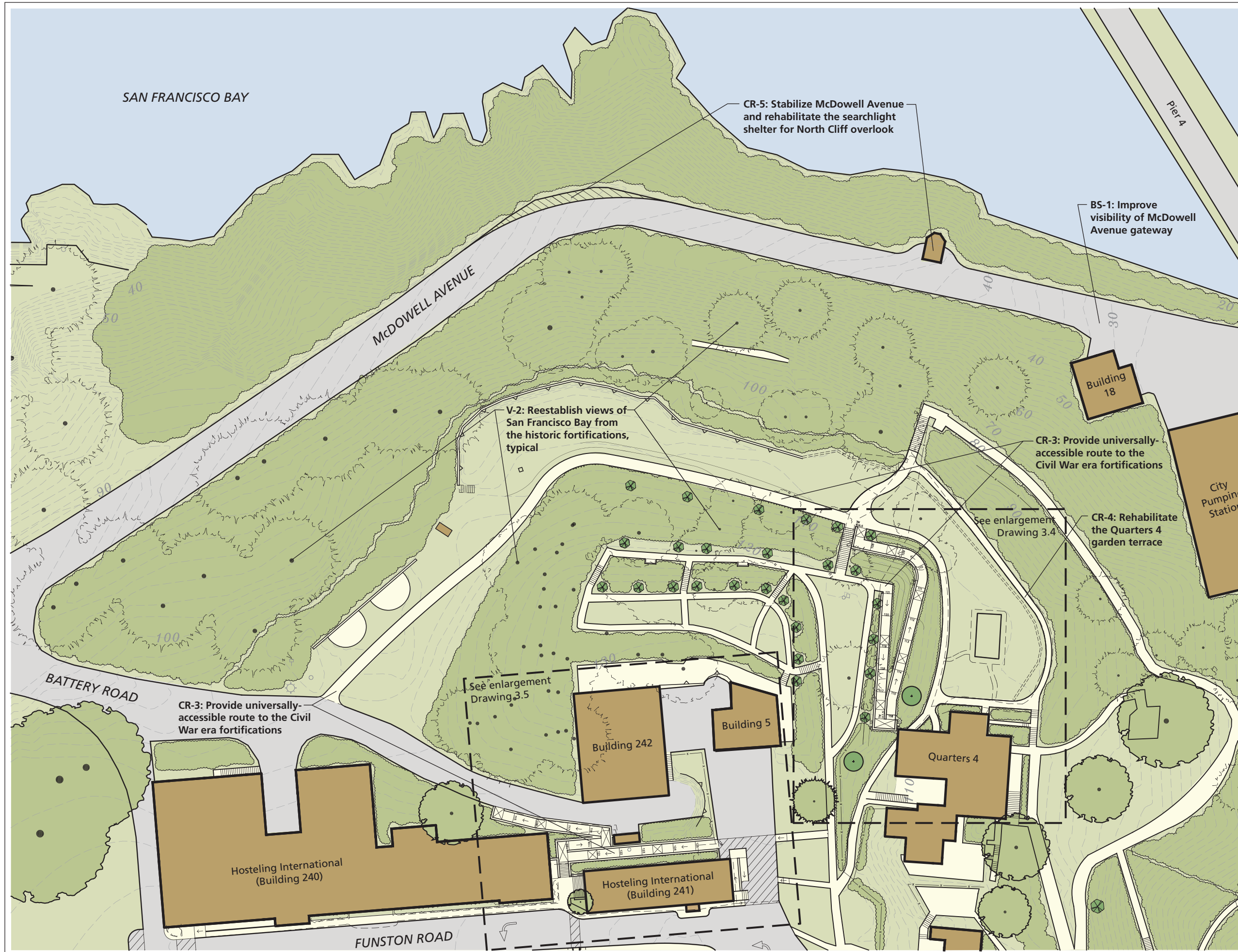
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- Roads
- Walks
- Lawn
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees

NOTE

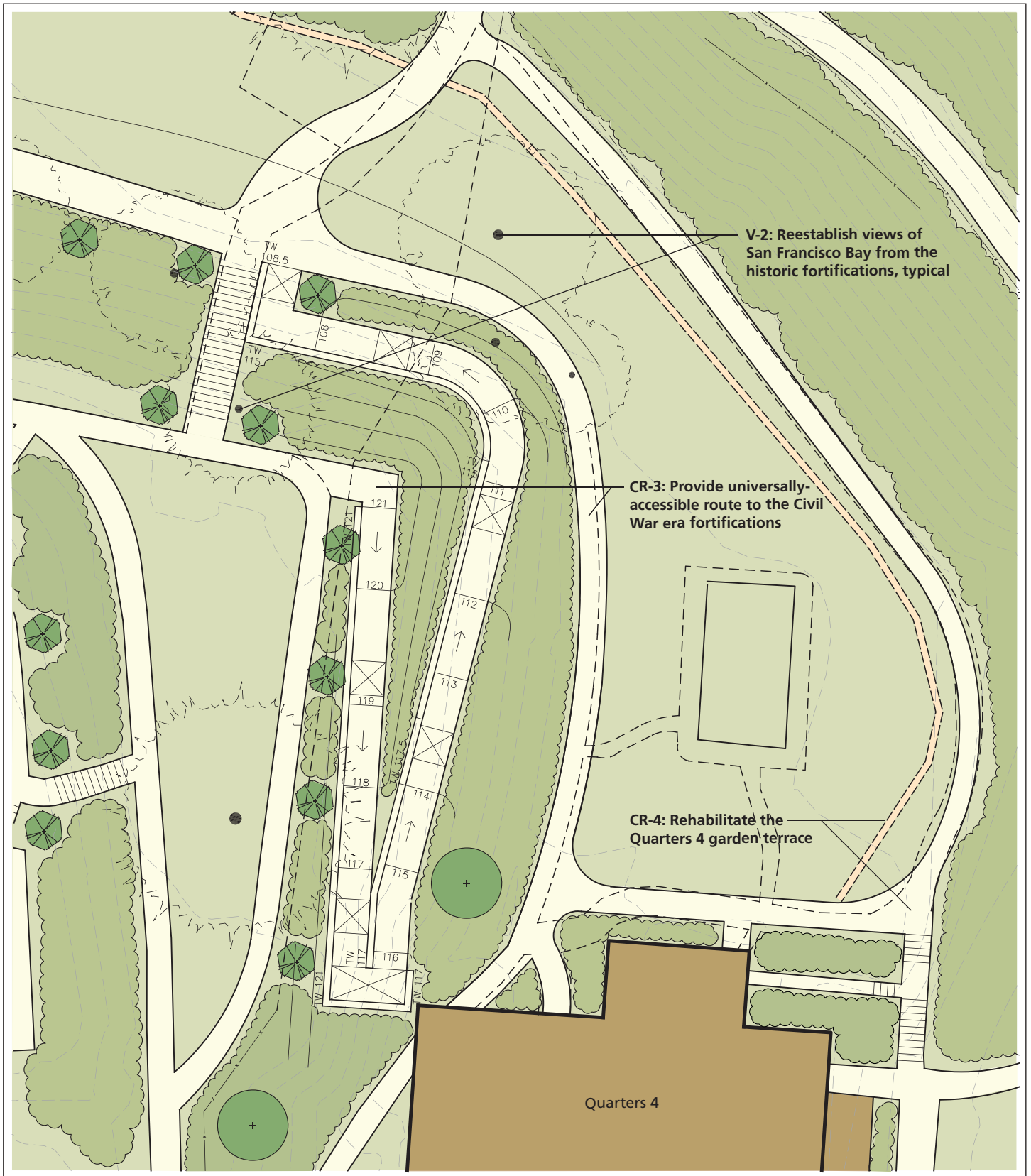
All features shown in approximate scale and location.



Drawing 3.3

















**DRAWN BY**  
 Christopher Beagan, OCLP  
 AutoCAD 2011, Illustrator CS3, 2012

**NOTE**  
 All features are shown in approximate scale and location.

- SOURCES**
1. PSOMAS, Site survey, 1998
  2. SF DPW, Orthophoto, 2001
  3. USGS, Orthophoto, 2009
  4. Bartlett, Tree Inventory, 2010
  5. OCLP, Field notes, 2011

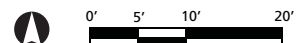
 **National Park Service**  
**Olmsted Center for Landscape Preservation**  
[www.nps.gov/oclp](http://www.nps.gov/oclp)

**LEGEND**

- |   |                              |   |                                    |
|---|------------------------------|---|------------------------------------|
|  | Two-foot topographic contour |  | Potential location of battery east |
|  | Roads                        |  | Feature to remove                  |
|  | Walks                        |  | Trees to remove                    |
|  | Lawn                         |  | Trees to retain                    |
|  | Shrubs/hedges                |  | Replacement trees                  |

Cultural Landscape Report  
 Upper Fort Mason  
 Golden Gate National Recreation Area

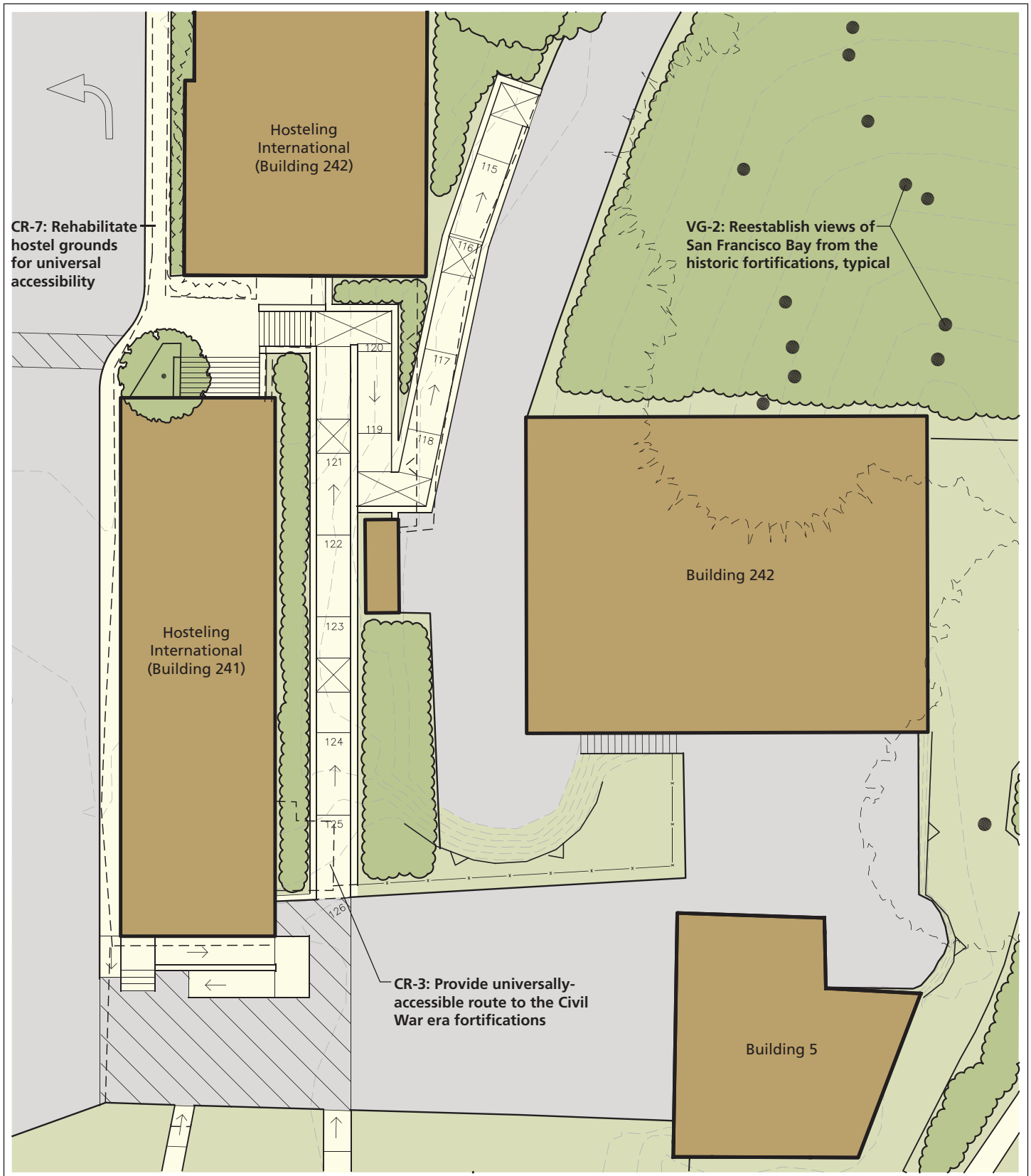
**Quarters 4 Ramp Enlargement**



**Drawing 3.4**
















**DRAWN BY**  
 Christopher Beagan, OCLP  
 AutoCAD 2011, Illustrator CS3, 2012

**NOTE**  
 All features are shown in approximate scale and location.

- SOURCES**
1. PSOMAS, Site survey, 1998
  2. SF DPW, Orthophoto, 2001
  3. USGS, Orthophoto, 2009
  4. Bartlett, Tree Inventory, 2010
  5. OCLP, Field notes, 2011

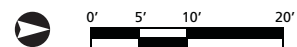
 **National Park Service**  
 Olmsted Center for Landscape Preservation  
 www.nps.gov/odlp

**LEGEND**

	Two-foot topographic contour		Feature to remove
	Roads		Trees to remove
	Walks		Trees to retain
	Lawn		Replacement trees
	Shrubs/hedges		

Cultural Landscape Report  
 Upper Fort Mason  
 Golden Gate National Recreation Area

### Building 241 Ramp Enlargement



**Drawing 3.5**



## CENTRAL CANTONMENT

### OVERVIEW

The Central Cantonment landscape treatment area is comprised of the landscape between north Franklin Street and the Great Meadow. The area includes the NCO Quarters, Chapel, Building 240 (hostel), Building 201 (park headquarters), and the community garden (Figure 3.43). Reorganization of buildings in the Central Cantonment during the last quarter of the nineteenth century established a traditional Parade Ground at Fort Mason. From the late 1800s to 1929, the Parade Ground was the most constant traditional military feature on the post. In the late 1920s, the Army required additional overnight accommodations at Fort Mason.

The Hostess House was constructed in 1928–1929 on the site of the Parade Ground. Because of this, the Parade Ground was not present at the end of the period of significance. However, the historic road alignments remained in place. The Parade Ground remains buried in the area to the south of the hostel. Around 1953, the Central Cantonment landscape was comprised of buildings and roadways constructed by the United States Army to serve the military reservation. Scattered trees planted over lawn and simple foundation plantings characterized vegetation in the area, with residential scale foundation plantings at the NCO Quarters and Chapel (Figure 3.44).

The Central Cantonment retains a relatively high degree of landscape integrity. The rectilinear organization of the buildings and roads around the Parade Ground (now buried) is a strong expression of military order. The grounds of the residential facilities and institutional buildings within the Central Cantonment



Figure 3.43. Central Cantonment landscape treatment area location diagram. Plan view, 2011 (OCLP).

**Figure 3.44.** Profuse woody and herbaceous foundation plantings characterized Building 238 during the period of significance. View looking west, 1930 (NPS, GGNRA Archives).



**Figure 3.45.** Recently reestablished foundation plantings on the grounds of Building 238, shown here shortly following architectural rehabilitation. View looking west, 2012 (GGRNA).



once demonstrated a similar military bearing on the landscape, with limited foundation plantings and shade trees over mown lawn. However, vegetation associated with the NCO Quarters has been removed for building rehabilitation and vegetation associated with the Chapel is overgrown and out-of-scale with the historic building (Figure 3.45). Rehabilitation of limited foundations plantings associated with these buildings presents opportunities to recapture the historic landscape character.

While the community garden is inconsistent with historic uses of the Central Cantonment, its role as a community resource within the park is long-standing. Rehabilitation of the community garden fence and perimeter plantings presents opportunities to better integrate this space with the surrounding historic resources. Planting improvements in the area should demonstrate a crisp and trim aesthetic, consistent with a military bearing on managed vegetation. Small-

scale features, such as fencing, should be low and constructed with materials that are compatible with extant historic materials. Similarly, new pedestrian and vehicular pavement should be compatible with extant historic materials. During rehabilitation and improvements, additional consideration should be given to environmental sustainability in this densely developed portion of the park.

Treatment of the Central Cantonment is focused on reestablishing the visual connection between Upper Fort Mason and sites to the west, rehabilitating the historic Parade Ground to reflect its historic dimensions as defined by the perimeter road alignment, rehabilitate plantings associated with the NCO Quarters to reflect their historic domestic character, and incorporate visitor access improvements to key park buildings and resources (Drawing 3.6).

## **TASKS**

### **V-3: Reestablish westward views from the Parade Ground**

#### ***Description***

On the slope to the southwest of the Parade Ground, several mature blue gum (*Eucalyptus globulus*) and Monterey cypress (*Cupressus macrocarpa*) obstruct westward views from the Parade Ground (Figure 3.46). Selected trees on the lower portion of the slope to the southwest of the historic Parade Ground should be removed to afford filtered views westward toward the Palace of Fine Arts and the Presidio and Golden Gate beyond. Tree removal and thinning will enhance the historic character of the landscape, support the park's interpretive program, and enhance visitor orientation (Figure 3.47).

#### ***Treatment Considerations***

The mature blue gum trees along the northern portion of the slope existed late in the period of significance and should be retained until they begin to decline or pose threats to adjacent resources. Rehabilitation of westward views should be undertaken in conjunction with rehabilitation of the Parade Ground (see Task CR-6).

#### ***Relationship to Park Planning***

Filtered westward views from the Parade Ground support park management goals of improved visibility and visitor orientation. Reestablishment of views to the Presidio and Golden Gate also supports the park's interpretive program, focused on the impacts of historic movements through the San Francisco and Marin Headlands.



**Figure 3.46. Mature trees obstruct westward views toward the Golden Gate and Palace of Fine Arts from the Parade Ground. View looking west, 2011 (OCLP).**



**Figure 3.47. Photo simulation showing reestablished westward views from the Parade Ground following selected pruning and removal of hazardous and non-historic trees. Unique eucalyptus specimens along the northwestern face of the slope, adjacent to McDowell Avenue, should be retained. View looking west, 2011 (OCLP).**

**CR-6: Rehabilitate the historic Parade Ground****Description**

The open expanse of lawn to the south of the hostel does not evoke its historic appearance, and the potential of this location to accommodate visitor services is under-realized. The historic spatial arrangement of the Parade Ground is defined by the perimeter road alignment as it existed in 1953 (Figure 3.48).

New ten-foot wide stonedust or decomposed granite pedestrian walks should be installed over the historic alignments of Magazine and Barry Roads that once defined the western and southern sides of the historic Parade Ground. New, well-compacted walks of crushed stone aggregate are proposed for their ability to limit disturbance to historic road remnants below. A new universally-accessible



Figure 3.48. The Parade Ground prior to the construction of the Hostess House showing the low rail fence to be reestablished at corners of the Parade Ground during rehabilitation. View looking east, circa 1926 (NPS, GGNRA Archives).



Figure 3.49. The community garden and Building 201 from the vicinity the overlook to be constructed along the southern perimeter of the Parade Ground. View looking south, 2011 (OCLP).

picnic area, a park facility relocated from the North Fortifications area, should be constructed along the western-most walk to take advantage of reestablished westward views (see Task V-3). A small overlook should be constructed along the southern side of the walk, adjacent the community garden, where a new staircase should be constructed to provide access to the garden below (Figure 3.49).

#### ***Treatment Considerations***

The demolition of the historic roads in the 1980s that once defined the Parade Ground provides the opportunity to interpret this early landscape feature. Historically, buildings on all four sides of the Parade Ground gave three-dimensional volume to the outdoor space. Although reconstruction of the buildings is neither recommended nor feasible, new plantings should be added along the southern perimeter of the Parade Ground to redefine the historic spatial character of the area. The recommended planting includes ten California laurel (*Umbellularia californica*).

Low sections of two-foot high post and single metal pipe rail fences should be constructed at the corners of the Parade Ground walks to help further define the historic space. These fence segments are intended as a visual cue to the former historic boundaries of the Parade Ground, and should be consistent with the scale and geometries of those elements shown in a historic photograph of the Parade Ground (see Figure 3.48). Alternatively, the low fence might appropriately conform to the post and cable fence identified in the Golden Gate National Recreation Area *Parkwide Site Furnishing Standards*. Maintenance implications of Parade Ground rehabilitation include regular trash removal from the picnic area, maintenance of new crushed stone walks, and a regular program of tree pruning.

#### ***Relationship to Park Planning***

Rehabilitation of the Parade Ground supports the draft *General Management Plan* directives to improve access and visitor welcoming. Rehabilitation of the Parade Ground also presents an opportunity to interpret the documented archeological resources at Upper Fort Mason, many of which are located in the vicinity of the Parade Ground.



Figure 3.50. The entrance to Building 240 showing the existing narrow sidewalk and steep curb cut to be widened to accommodate universal access. View looking northeast, 2011 (OCLP).



#### **CR-7: Rehabilitate hostel grounds for universal accessibility**

##### **Description**

The sidewalk to the south of Building 240 (hostel) is narrow and not universally accessible (Figure 3.50). The walk should be widened to accommodate a minimum forty-eight inch wide sidewalk and an eighteen inch wide planting bed adjacent to the building. The sidewalk along the south side of the hostel is anticipated to be a heavily used connection between the North Fortifications area, the hostel, and the rehabilitated Parade Ground, including the proposed accessible picnic area and community garden overlook (see Task CR-6). Consistent with pavement replacement, the existing hedge should be replaced in-kind with a smaller hedge or other compatible vegetation, such as agapanthus (*Agapanthus orientalis*).

##### **Treatment Considerations**

Maintenance implications of sidewalk widening and replanting relate only to ongoing care of the replacement plantings.

##### **Relationship to Park Planning**

Treatment of this area will improve universal accessibility to the hostel's facilities, consistent with site-wide accessibility improvements. Rehabilitation of the landscape to the south of the hostel supports park management goals of improved visitor access and wayfinding.

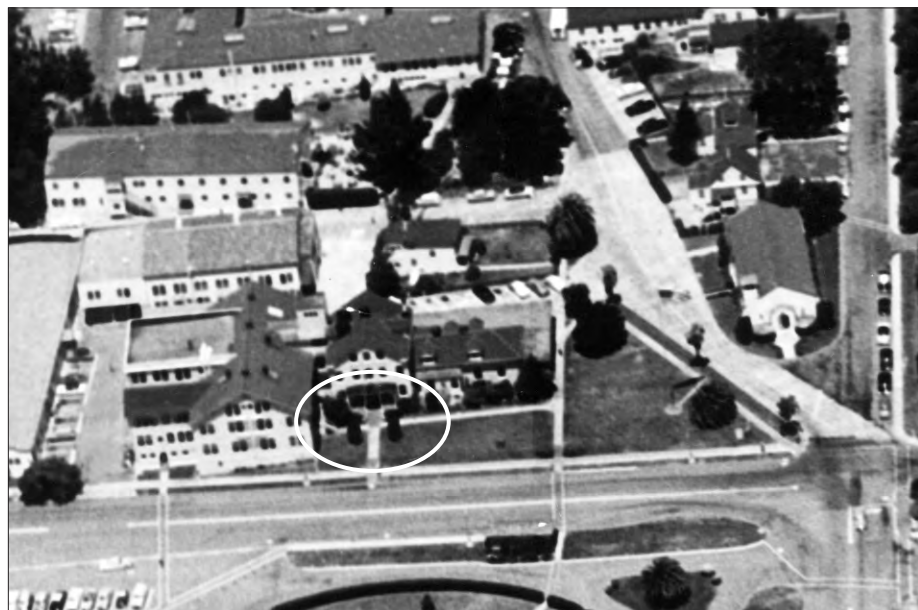
**CR-8: Reconfigure parking to the south of Building 201 to enhance universal accessibility and historic character****Description**

Universally accessible parking spaces along MacArthur Avenue should be relocated toward the eastern end of Building 201, opposite the walk leading to the rear of the building. The curb in front of Building 201 should be reset with a six-inch reveal and wheels stops added to minimize deterioration of the adjacent turf planted in the planting strip between the sidewalk and the curb. Compliant curb ramps and parking aisles are needed in association with the new spaces.

Following installation of wheel-stops, the planting strip should be treated consistent with its historic appearance (Figure 3.51). The planting strip should be rototilled, irrigated, and replanted with sod, to be replaced as required due to wear. Soil amendments such as *Axis*, a porous diatome product, will improve the air and water exchange capacity of the soil. Soil amendments, including organic matter, will also help to reduce compaction and allow the turf to better withstand wear.

If replanting lawn is not a feasible alternative, the planting strip could be paved with concrete, consistent with the adjacent sidewalk. This repaving project should include removing the existing concrete pavement patch adjacent to the historic sidewalk and paving the entire planting strip with concrete, with color and finish to match existing. Due to the absence of walkways along the southern side of MacArthur Avenue, opposite Building 201, visitors often walk in the roadway. To improve pedestrian safety, a new concrete sidewalk should be constructed on the southern side of the MacArthur Avenue median to encourage pedestrian use.

Figure 3.51. Historic aerial photograph of Upper Fort Mason at the height of its development showing two evergreen trees flanking the main entrance to Building 201 to be replaced (circled). Note also the lawn planting strip between the concrete sidewalk and MacArthur Avenue. View looking north, 1956 (NPS, GGNRA Archives).



Near the end of the historic period, an aerial photograph shows that planting to the south of Building 201 was characterized by evergreen trees flanking the building entrance walk (see Figure 3.51). The two missing evergreen trees should be replanted along the walk. Recommended species for this replanting include *Taxus stricta* or *Taxus baccata* ‘Fastigiata,’ consistent with rehabilitation planting at the entrance to the Chapel. Existing declining New Zealand tea trees (*Leptospermum scoparium*) along the south façade of the building should also be replaced in-kind.

#### **Treatment Considerations**

Mown turf in the planting strip to the south of Building 201 is subject to heavy foot traffic. Because of this, turf may require regular replacement to perpetuate its historic appearance. The existing exposed earth strip is not compatible with the historic appearance of the landscape. Should maintaining mown lawn in the planting strip prove unfeasible, the concrete sidewalk to the south of Building 201 should be widened to extend to the curb.

Construction of a new pedestrian walk along the southern edge of the MacArthur Avenue central median will require detailed design and grading to ensure that the new walk is compatible with the site’s historic character.

#### **Relationship to Park Planning**

Universal accessibility improvements to Building 201 supports park planning goals of improved access and support the visitor welcoming and orientation functions currently located in Building 201.



Figure 3.52. Parking area along MacArthur Avenue to be made accessible with new parking spaces, compliant curb ramps, and a refurbished planting strip. View looking west, 2011 (OCLP).

**CR-9: Rehabilitate community garden for improved accessibility and to better integrate with surrounding landscape**

**Description**

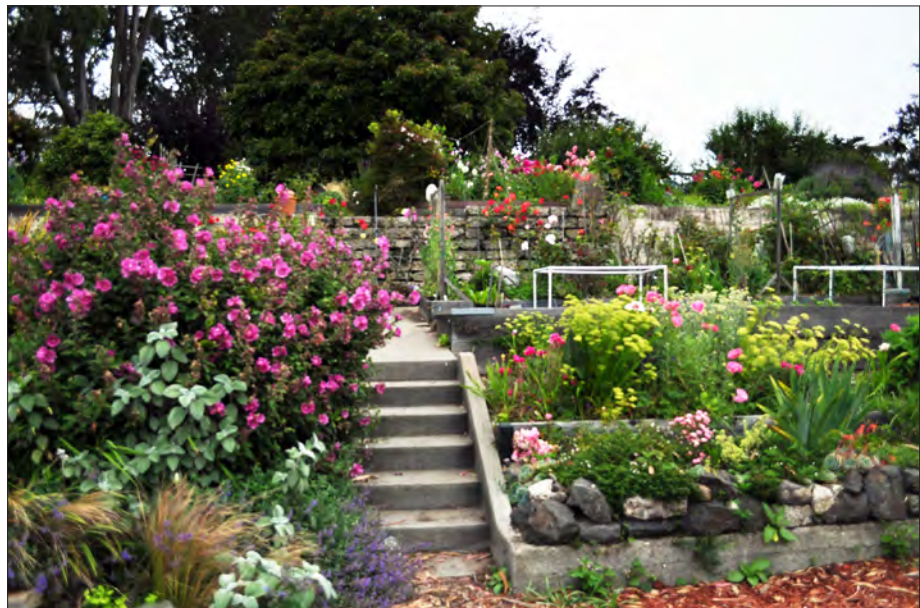
The community garden is neither universally accessible nor well-integrated with the larger park landscape (Figure 3.53). Circulation patterns within the community garden should be rehabilitated to better integrate the community garden with the larger landscape and historic circulation patterns, and to accommodate improved universal accessibility.

Modest reorganization of the community garden should be undertaken to improve connection to the landscape beyond and welcome park visitors. A

Figure 3.53. Main entrance to the community garden on the historic alignment of Schofield Road to be resurfaced to accommodate universal access. View looking north, 2011 (OCLP).



Figure 3.54. Historic concrete staircase to be extended to connect the community garden with the reestablished Parade Ground. View looking north, 2011 (OCLP).



new path and staircase should be constructed to connect the garden to the rehabilitated Parade Ground to the north (see Task CR-6, Figure 3.54). A new pedestrian walkway should be constructed along Pope Road, to connect to the existing historic concrete staircase within the community garden through a new gate in the perimeter fence. Along the interior of the perimeter fence, stonedust or decomposed granite paths are the recommended surface treatment.

The existing deteriorated perimeter fence should be replaced, with the northern portion of the fence to be relocated approximately twenty feet south of its current position to make possible the rehabilitation of the historic Parade Ground (Figure 3.55). This treatment includes removing all planting along the perimeter fence that is out of character with the military aesthetic. Along the southern perimeter of the fence, a line of small trees/hedge should be added to screen views of Schafter Place and the rear of Building 201.

#### ***Treatment Considerations***

The community garden is a non-historic addition to Upper Fort Mason that occupies a portion of the park near the former post garden, present around the turn of the twentieth century. Existing wood-frame raised beds (approximately 125) are constructed over the buried foundations of demolished twentieth century military buildings. Garden regulations restrict planting to the raised beds on account of potential archeological resources and unknown sub-soil contaminants. Planting along the perimeter fence of the community garden, however, has been undertaken in open soil and on both the inside and outside of the woven-wire mesh fence.

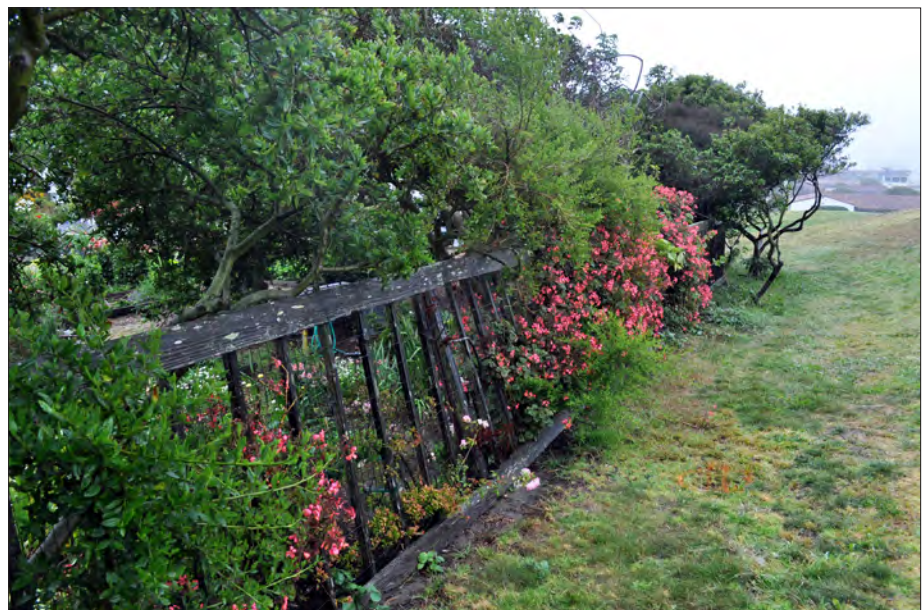


Figure 3.55. West side of the community garden showing the deteriorated wood and wire mesh perimeter fence to be relocated to accommodate reestablishment of the Parade Ground. View looking south, 2011 (OCLP).

**Relationship to Park Planning**

Rehabilitation of the non-historic community garden is recommended to support the draft *General Management Plan* goals of improved access and visitor welcoming, as well as supporting the park's guiding principles of community-based stewardship, civic engagement, partnerships, and inclusion.

**VG-2: Rehabilitate Chapel and NCO Quarters grounds****Description**

Rehabilitation of the buildings that comprise the NCO Quarters, including Buildings 235, 238, and 239 located between Pope Road and north Franklin Street, has resulted in removal of the manicured foundation plantings and some of the pedestrian paths that characterized the landscape around 1953 (Figure 3.56). Further to the south, Buildings 232, 231, and the Chapel retain some historic foundation plantings, although many are overgrown. The landscapes associated with the Chapel and NCO Quarters should be rehabilitated to approximate their historic domestic appearance in 1953.

**Treatment Considerations**

Architectural rehabilitation of the buildings between Pope Road and north Franklin Street is underway. A request for proposals for the landscape component of this rehabilitation project is forthcoming. Detailed treatment tasks for rehabilitation of Buildings 231, 232, 235, 238, 239, and the Chapel have been grouped in the table below in support of this work.

Maintenance of the NCO Quarters grounds presents a significant challenge in balancing historic character with institutional maintenance practices. Depending upon anticipated uses of the NCO Quarters, the rehabilitated buildings may present opportunities to develop tenant-based stewardship programs to ensure that the historic residential character of the landscape is perpetuated.

**Relationship to Park Planning**

Rehabilitation of the Chapel and NCO Quarters grounds advances park management goals of improved access and adaptive reuse of historic structures. A stewardship program that includes appropriate participation by tenants under National Park Service guidelines is consistent with the park's draft *General Management Plan* guiding principles to advance community-based stewardship and civic engagement.

**Table 3.5: Landscape rehabilitation tasks for the NCO Quarters**

Task ID	Task
<b>NCO Quarters General</b>	
NCO-1	Retain existing universally-accessible concrete walks where feasible and replace existing historic concrete walks in-kind where necessary to meet accessibility standards (Figure 3.57)
NCO-2	Add universally-accessible parking spaces and reconfigure parking to west of Building 235 to include an accessible van parking space (Figure 3.58).
NCO-3	Replace foundation planting beds along the east façades of Buildings 239, 238, 235, 234, 232, and 231. Recommended woody shrubs and vines include a combination of polka-dot plant ( <i>Aucuba japonica</i> ), bougainvillea ( <i>Bougainvillea glabra</i> ), choisya ( <i>Choisya ternata</i> ), fuchsia ( <i>Fuchsia</i> sp.), grevillea ( <i>Grevillea</i> sp.), hebe ( <i>Hebe imperialis</i> ), hydrangea ( <i>Hydrangea macrophylla</i> ), passionflower vine ( <i>Passiflora x belotti</i> ), mock-orange ( <i>Philadelphus</i> sp.), rose ( <i>Rosa</i> sp.), and/or nightshade ( <i>Solanaceae</i> sp.). Recommended herbaceous vegetation includes a combination of agapanthus ( <i>Agapanthus orientalis</i> ), naked ladies ( <i>Amaryllis belladonna</i> ), bergenia ( <i>Bergenia cordifolia</i> ), canna lilies ( <i>Canna</i> sp.), chasmanthe ( <i>Chasmanthe floribunda</i> ), licorice plant ( <i>Helichrysum petiolare</i> ), impatiens ( <i>Impatiens sodenii</i> ), geranium ( <i>Pelargonium</i> sp.), bird of paradise ( <i>Strelitzia reginae</i> ), and/or nasturtium ( <i>Tropaeolum majus</i> ). Requires planting design plan (Drawing 3.7, Figure 3.59).
NCO-4	Replace four out-of-scale Monterey cypresses ( <i>Cupressus macrocarpa</i> ) on the traffic island in-kind. Retain under-planting of agapanthus ( <i>Agapanthus orientalis</i> ) (Figure 3.60).
NCO-5	Retain extant historic fences or replace fences removed for construction activities in-kind (Figure 3.61).
NCO-6	Retain existing site lighting where feasible or replace site lighting removed for construction activities in-kind to perpetuate the character of the cast concrete light pole and fixture (Figure 3.62).
NCO-7	Design and install automated, water-conserving irrigation system throughout grounds between north Franklin Street and Pope Road consistent with the scope of the <i>Fort Mason Water Conservation Irrigation Upgrades</i> project.
<b>Building 230 (Chapel)</b>	
B230-1	Construct a median rumble-strip at the intersection of Pope Road and Franklin Street consistent with the geometric layout from the 1999 traffic study. Surface crowned, at-grade rumble strip with cobble or tinted concrete. Do not locate signs on median island (Figure 3.63).
B230-2	Replace out-of-scale yews ( <i>Taxus stricta</i> or <i>Taxus baccata</i> 'Fastigiata') at the four corners of the Chapel. At the entrance to the Chapel, replace low boxwood ( <i>Buxus</i> sp.) hedge bordering the entrance walk, two specimen shrubs flanking the front entrance ( <i>Choisya ternata</i> or <i>Gardenia augusta</i> ), and boxwood hedge ( <i>Buxus</i> sp.) between specimen shrubs and corner yews. Replace missing foundation planting along the east and west sides of the Chapel, including boxwood hedges ( <i>Buxus</i> sp.) against both sides of the building bordered by specimen hydrangea ( <i>Hydrangea macrophylla</i> ) (Figure 3.64).

Task ID	Task
<b>Building 231</b>	
B231-1	Replace missing blue gum ( <i>Eucalyptus globulus</i> ) to the east of Building 231 in-kind or with a compatible tree species (Figure 3.65).
B231-2	Replace missing cordyline ( <i>Cordyline australis</i> ) in the planting strip between the sidewalk and the curb to the east of Building 231 (Figure 3.66).
B231-3	Replace missing four-foot high privet hedge with nandina ( <i>Nandina domestica</i> ) or a Japanese mock orange cultivar ( <i>Pittosporum tobira</i> ) along the south side of Building 231 (see Figure 3.65).
<b>Building 232</b>	
B232-1	Replace missing blue gum ( <i>Eucalyptus globulus</i> ) to the east of Building 232 in-kind or with a compatible tree species (Figure 3.67).
B232-2	Replace missing coniferous tree to the west of Building 232. Recommended species is Japanese black pine ( <i>Pinus thunbergii</i> ). Alternative species include Monterey pine ( <i>Pinus radiata</i> ) or Monterey cypress ( <i>Cupressus macrocarpa</i> ) (Figure 3.68).
B232-3	Replace two missing agave ( <i>Agave americana</i> ) flanking the walk to Building 232 in the planting strip between the sidewalk and the curb (Figure 3.69).
B232-4	Replace foundation planting (see Drawing 3.7, Figure 3.70).
<b>Building 234</b>	
B234-1	Replace two missing agave ( <i>Agave americana</i> ) flanking the walk to Building 234 in the planting strip between the sidewalk and the curb (Figure 3.71).
<b>Building 235</b>	
B235-1	Regrade concrete walk and add stairs on north side of Building 235 as necessary to accommodate a universally-accessible building entrance (Figure 3.72).
B235-2	Replace missing historic concrete walk at the southern entrance to Building 235, including historic jog (Figure 3.73).
B235-3	Reconfigure concrete walk to the west of Building 235 to accommodate a new stairway at rear building entrance (Figure 3.74).
B235-4	Replace missing avocado ( <i>Persea americana</i> ) to the west of Building 235 (Figure 3.75).
B235-5	Replace missing juniper ( <i>Juniperus</i> sp.) on the east façade between Buildings 235 and 234 (see Figure 3.71).
B235-6	Plant agave ( <i>Agave americana</i> ) in the lawn at the jog in the southern entrance walk to Building 235.
B235-7	Install foundation planting consistent with sample planting plan (Figure 3.76).
<b>Building 238</b>	
B238-1	Install foundation planting consistent with sample planting plan (Figure 3.77).
<b>Building 239</b>	
B239-1	Replace missing two-foot high hedge with a boxwood hedge ( <i>Buxus</i> sp.) along west and north sides of the building (Figure 3.78).
B239-2	Install foundation planting consistent with sample planting plan (Figure 3.79).
Note: Improvements to the NCO Quarters and grounds are ongoing. The treatment tasks above serve as a benchmark of needs at time of writing. See accompanying photographs for existing condition at time of publication.	





Figure 3.56. Recently reestablished foundation plantings and walks to the east of Building 235. View looking northwest, 2012 (GGNRA).



Figure 3.57. Historic walks to be retained or replaced in-kind where required to meet accessibility standards, shown here along Franklin Street. View looking north, 2011 (OCLP).



Figure 3.58. Parking area to the west of Building 235 shortly following reconfiguration to accommodate universal access. View looking east, 2012 (GGNRA).



Figure 3.59. Missing foundation plantings to be reestablished along the east facades of all NCO Quarters, including Building 234, shown here at far left. View looking northwest, 2012 (GGNRA).



Figure 3.60. Overgrown Monterey cypresses on the traffic island at the northern end of Franklin Street to be replaced in-kind. View looking south, 2011 (OCLP).



Figure 3.61. Historic woven wire fence to be retained to the south of Building 231 and non-historic chain-link fence to be replaced with historic fence material. View looking northwest, 2011 (OCLP).



Figure 3.62. Cast-concrete pole light to the west of the Chapel along Pope Road to be retained. View looking southeast, 2011 (OCLP).

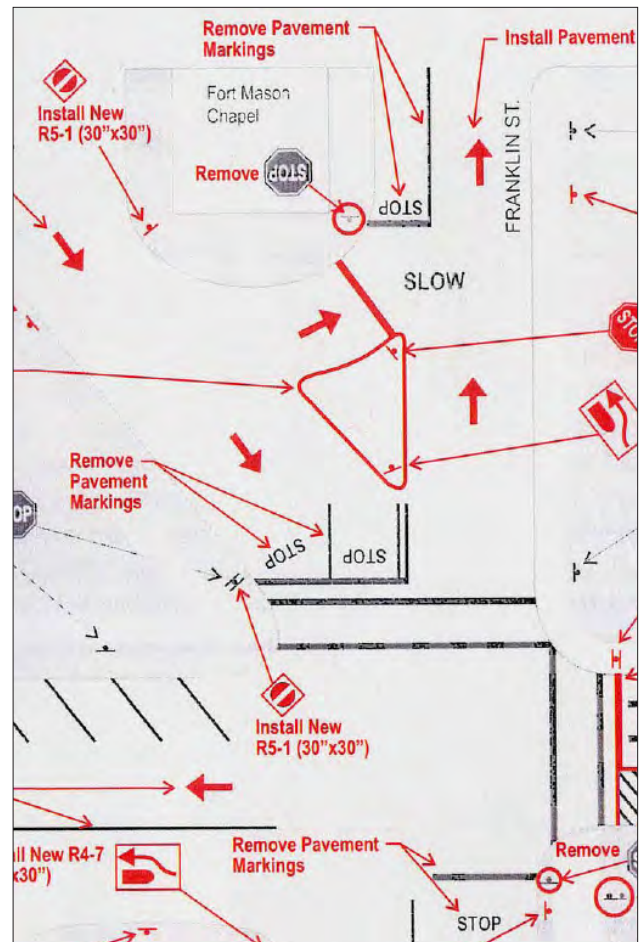


Figure 3.63. Diagram showing the location of the rumble strip to be installed at the intersection of Franklin Street and Pope Road. Plan view, 1999 (Traffic Safety Study).



Figure 3.64. Overgrown, out-of-scale yews flanking the main entrance to the Chapel to be replaced in-kind. View looking north, 2011 (OCLP).

Figure 3.65. Historic blue gum to the east of Building 231 to be replaced in-kind. View looking west, 1926 (National Archives, RG 77, Records of the Construction Division - Annual Construction, Maintenance, and Repair Reports, 1924-1938, Box 135NM).



Figure 3.66. Historic cordylines in the planting strip to the east of the NCO Quarters along Franklin Street to be retained or replaced in-kind. View looking north, 2012 (GGNRA).



Figure 3.67. Historic blue gum to the east of Building 232 to be replaced in-kind. View looking northwest, 2002 (OCLP).



Figure 3.68. Historic pine trees to west of Building 232 to be replaced in-kind. View looking northeast, 2002 (OCLP).



Figure 3.69. Historic view of Building 232 showing agave along Franklin Street to be replaced in-kind. View looking northwest, circa 1935 (NPS, GGNRA Archives).



Figure 3.70. Missing foundation plantings to the east of Building 232 (green roof at center) to be reestablished to reflect their historic appearance. View looking northwest, 2012 (OCLP).





Figure 3.71. Historic view of Building 234 showing agaves to be reestablished at key thresholds. View looking northwest, 1926 (NPS, GGNRA Archives).



Figure 3.72. Accessible walks to the north and east of Building 235 now accommodate universal building access from Pope Road. View looking northwest, 2012 (GGNRA).



Figure 3.73. Historic view of Building 235 showing the distinctive jog in the south entry walk (left side of photo) to be replaced. View looking northwest, circa 1940 (NPS, GGNRA Archives).

Figure 3.74. Rear of Building 235 shortly following installation of new walks and a new staircase at the building entrance. View looking southeast, 2012 (GGNRA).



Figure 3.75. Young avocado tree recently reestablished in the lawn to the west of Building 235. View looking northeast, 2012 (GGNRA).



Figure 3.76. Foundation plantings recently reestablished along the east side of Building 235. View looking northeast, 2012 (GGNRA).





Figure 3.77. Foundation plantings recently reestablished along the east side of Building 238 to reflect their historic appearance. View looking northwest, 2012 (GGNRA).



Figure 3.78. Missing privet hedge along north side of Building 239 to be replaced with a boxwood hedge. View looking east, 2012 (OCLP).



Figure 3.79. Historic view of Building 239 from north Franklin Street showing historic foundation plantings to be reestablished. View looking southeast, circa 1891 (National Archives RG92, Still Photography Division, Box 10, Series F, 92-F-37-7).



Figure 3.80. Dumpsters at the western end of Funston Road to be concealed with a new wooden dumpster enclosure. View looking southeast, 2011 (OCLP).



### **SSF-2: Construct dumpster enclosure at the western end of Funston Road**

#### **Description**

Existing hostel dumpsters at the western end of Funston Road are unsightly and detract from the historic character of the Central Cantonment area (Figure 3.80). To enhance the setting of the hostel, Parade Ground, and relocated picnic area, a new wooden dumpster enclosure should be constructed.

#### **Treatment Considerations**

With careful design to fully enclose the bump-out at the western terminus of Funston Road, this task will hide the dumpsters from view while permitting trash removal. The design of the dumpster enclosure should be consistent with the trash screen specified in the *Parkwide Site Furnishings Standards* for the historic post design zone.

#### **Relationship to Park Planning**

This small task will enhance the welcoming appearance of the Central Cantonment area and improve the welcoming appearance of the nearby relocated picnic area.



Central Cantonment  
Treatment Plan



National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

DRAWN BY

Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

LEGEND

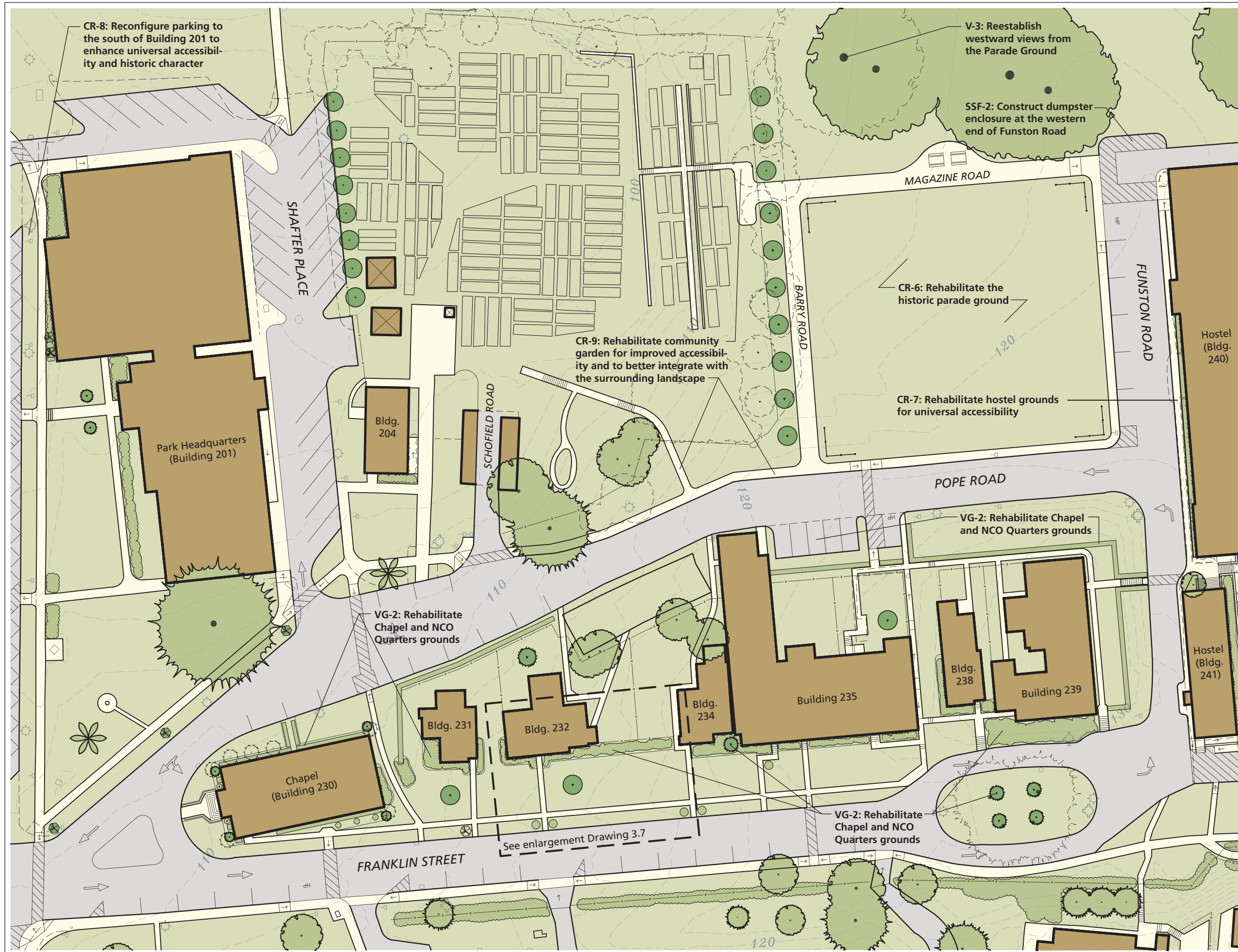
- Two-foot topographic contour
- Roads
- Walks
- Lawn
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees

NOTE

All features shown in approximate scale and location.



Drawing 3.6





NCO Quarters  
Sample Planting Plan



National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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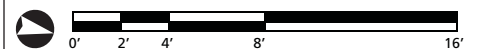
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

LEGEND

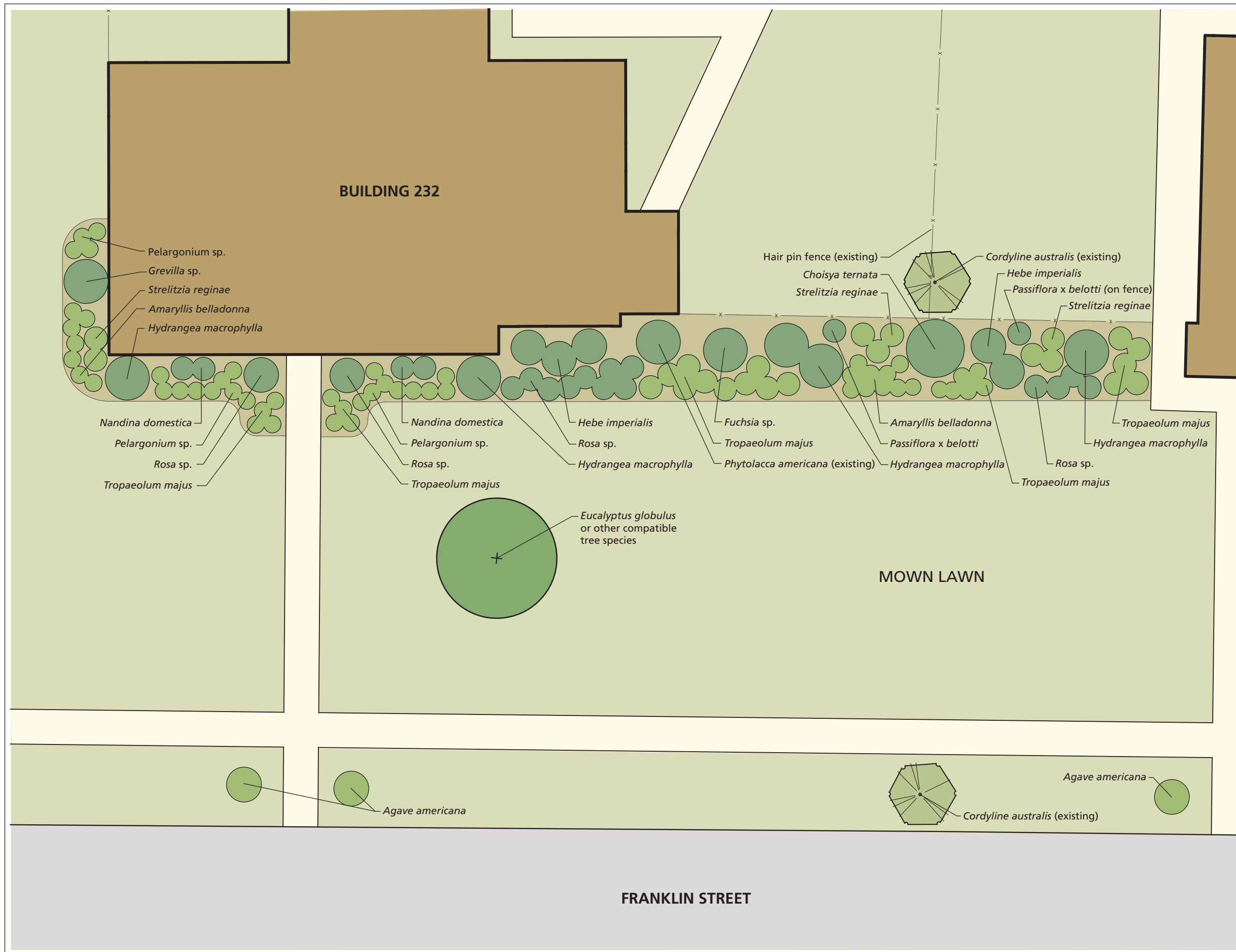
- Roads
- Walks
- Lawn
- Mulched planting bed
- Trees to retain
- Replacement trees
- Replacement woody shrubs and vines
- Replacement herbaceous vegetation

NOTE

All features shown in approximate scale and location.



Drawing 3.7





## EAST WATERFRONT

### OVERVIEW

The East Waterfront landscape treatment area encompasses the heavily used and under-developed mown lawn at the base of the East Black Point slope concrete retaining wall (Figure 3.81). Around 1953, the East Waterfront area was a utilitarian area associated with Fort Mason, with a railroad tunnel, a small garage, and mine magazine incorporated into the concrete retaining wall (Figure 3.82). Van Ness Avenue provided access to both Pier 4 and the municipal pier. The East Waterfront area retains little landscape integrity relative to its condition during the historic period. For this reason, the East Waterfront area is a well-suited to accommodate new, compatible uses.

The existing lawn area at the base of the East Black Point slope is part of San Francisco Maritime National Historical Park, but has the potential to serve as an important link between Aquatic Park and Upper Fort Mason (Figure 3.83). The area is bordered by Van Ness Avenue, which serves as a heavily-used bus route. The East Waterfront pocket park has been identified as a vital component for future program development by San Francisco Maritime National Historical Park.

Treatment of the East Waterfront north Van Ness Avenue area is focused on improving the condition and visibility of this gateway to the parks and supporting park management goals of enhanced visibility and visitor welcoming through improvements to the McDowell Avenue gateway (see Drawing 3.2).



Figure 3.81. East Waterfront landscape treatment area location diagram. Plan view, 2011 (OCLP).



Figure 3.82. The East Waterfront area served utilitarian functions during the period of significance. Here, the Black Point Cove railroad trestle carried trains along the waterfront below Upper Fort Mason. View looking west, 1918 (NPS, San Francisco Maritime National Historical Park Archives).



Figure 3.83. Shown here from the Aquatic Park promenade, the undeveloped East Waterfront area does not currently support any services. View looking northwest, 2011 (OCLP).

## **TASK**

### **BS-1: Improve visibility of McDowell Avenue gateway**

#### ***Description***

The McDowell Avenue gateway is a heavily used, yet poorly marked entrance to Upper Fort Mason at a critical connection with San Francisco Maritime National Historical Park (Figure 3.84). The area requires improvements to enhance park visibility from the east and mitigate undesirable views of the utilitarian Building 18 (City Pumping Station garage), which marks the entrance to the historic post.



Figure 3.84. Entrance to Upper Fort Mason from the base of McDowell Avenue showing the City Pumping Station garage to be rehabilitated to project a more welcoming appearance. View looking west, 2011 (OCLP).



Proposed improvements to the area include rehabilitation of the existing historic garage to minimize its visual impact. A green façade and roof are proposed to help the structure blend into the adjacent hillside, enhancing its environmental sustainability while minimizing its visual impact. Hazardous trees on the hillside should be removed consistent with Task V-2, while historic concrete cribbing should be retained along the south side of the road. The existing park entrance sign along McDowell Avenue should be retained and an additional, more prominent entrance sign located along Van Ness Avenue with Fort Mason identified on one side and San Francisco Maritime National Historical Park identified on the other.

#### ***Treatment Considerations***

An additional entrance sign will greatly increase park visibility and visitor wayfinding, but will require coordination with the city of San Francisco, which controls the City Pumping Station, or San Francisco Maritime National Historical Park, which manages the East Waterfront pocket park area.

#### ***Relationship to Park Planning***

These tasks support park draft *General Management Plan* goals of improved visitor welcoming, increased visibility, and improved wayfinding. Ultimately, these improvements are designed to encourage visitors to walk or bike up McDowell Avenue to visit Upper Fort Mason and Golden Gate National Recreation Area parklands beyond.



## NORTHWEST EMBANKMENT

### OVERVIEW

The Northwest Embankment landscape treatment area consists of the engineered slope separating Upper and Lower Fort Mason (Figure 3.85). This slope is planted with a Monterey cypress (*Cupressus macrocarpa*) windbreak along its crest, which extends perpendicularly down the slope in three locations to mitigate westerly prevailing winds. The embankment is also traversed by a set of steep, cast-in-place concrete stairs that were built in 1938 to replace a set of wooden stairs that first appear on a 1922 map of Fort Mason.

Around 1953, planting on the Northwest Embankment included Monterey cypress that stood approximately twenty feet tall and had been limbed up approximately eight feet. Historically, turf grass was used to stabilize the slope (Figure 3.86). Today, the historic Monterey cypresses have matured to block views toward the Golden Gate and some trees have begun to decline (Figure 3.87). The steep embankment is also a significant impediment to visitor circulation between Upper and Lower Fort Mason.

The Northwest Embankment retains a high degree of landscape integrity to the historic period, with all seven aspects of integrity intact. The limited resources of this area all remain from around 1953, including the engineered embankment stabilized by a massive retaining wall, concrete stairs, and the even-aged stand of Monterey cypresses. The embankment's location makes it an important connection between Upper and Lower Fort Mason. Because of the steepness of the slope, it is not particularly well-suited to other uses. However, there are



Figure 3.85. Northwest Embankment landscape treatment area location diagram. Plan view, 2011 (OCLP).

Figure 3.86. The Northwest Embankment from Lower Fort Mason showing the young Monterey cypress windbreak that characterized the slope during the period of significance. View looking south, 1922 (National Archives RG 77, Office of the Chief of Engineers, Construction Completion Reports E 393, Box 139, April 19, 1922).

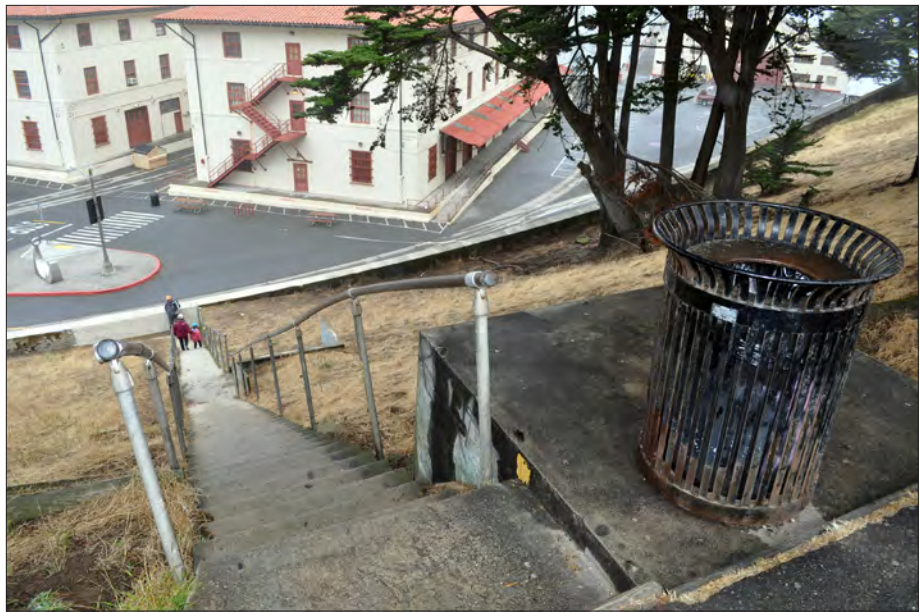


Figure 3.87. Existing mature Monterey cypresses on the Northwest Embankment have outgrown their intended scale. View looking south, 2011 (OCLP).



opportunities for understory planting that will advance the environmental sustainability of the park while helping to stabilize the slope. While planting materials are subject to change, the character of the groundcover should be consistent with the low profile of vegetation that characterized the area around 1953. The tasks that follow are focused on planting rehabilitation and improving visitor circulation between Upper and Lower Fort Mason (see Drawing 3.9).

Figure 3.88. Historic concrete staircase connecting Upper and Lower Fort Mason to be preserved and replaced with a new life-safety code compliant staircase located further west along the Northwest Embankment. View looking northwest, 2011 (OCLP).



## TASKS

### CR-10: Improve pedestrian connection to Lower Fort Mason

#### *Description*

The existing historic concrete staircase between the Great Meadow and Lower Fort Mason is steep (eighty-six risers with one landing), narrow (forty-two inches wide), and unwelcoming to park visitors (Figure 3.88). To improve the pedestrian connection between Upper and Lower Fort Mason, a second, user-friendly concrete staircase should be constructed on the slope (Drawing 3.8).

The new staircase integrates six short flights of stairs with generously-sized landings and benches. Limiting the flights of stairs to twelve risers will help to minimize fatigue for visitors, while improving safety. The new staircase should be designed and constructed with life-safety compliant handrails.

#### *Treatment Considerations*

This new staircase should be integrated with the rehabilitated windbreak, which will also provide shade on the stairs and help to stabilize the sandy soils of the slope and reduce erosion (see Task VG-3). Implementation of this recommendation will involve completion of a detailed topographic survey, design development, and construction documents, in conjunction with necessary review and permitting. This project may also involve geotechnical work to evaluate the stability of the embankment.

**Relationship to Park Planning**

The connection between Upper and Lower Fort Mason was identified as a significant challenge in the San Francisco Maritime National Historical Park/ Golden Gate National Recreation Area Joint Waterfront Planning Workshop. Construction of a new staircase will advance park management goals to improve visitor safety and enhance universal accessibility. When completed, this project will also strengthen access to proposed future transit connections at Lower Fort Mason.

**VG-3: Rehabilitate Monterey cypress windbreak and adjacent embankment****Description**

Many of the existing historic trees that comprise the Monterey cypress (*Cupressus macrocarpa*) windbreak are in decline due to advanced age and previous pruning into hedge form (Figure 3.89). To enhance the historic character of this feature and perpetuate protection from westerly prevailing winds, the existing tree grouping should be replaced in-kind.

Below the windbreak planting, historic unmown turf may be retained on the embankment or the planting could be transitioned to native coastal dune scrub with native grasses. This alternative planting has the potential to require less recurring maintenance and will improve the appearance of the hillside from Lower Fort Mason. A dune-scrub palette also supports the broader environmental sustainability goals of the park. Many understory species are compatible with the historic appearance of the slope and are suitable for use, provided these plantings effectively stabilize the erodible soils of this engineered embankment. Should instances of erosion occur, these must be re-vegetated with expedient means. Recommended species are included in the table below.

**Treatment Considerations**

Although the existing Monterey cypress windbreak is visually magnificent and tree removal will result in a dramatic short-term change to the character of the area, the entire windbreak should be removed at once, as one of the objectives of planting rehabilitation is to establish a single-aged stand with a consistent height. Selective removal is not recommended, as the potential for windfall is much greater for individual trees than trees growing in a stand. Tree removal should occur outside of bird nesting season and in conjunction with archeological oversight.

Rehabilitation planting should replicate the historic character of this feature, with new trees planted along the crest of the embankment and in three rows descending the slope. Replanting the Monterey cypress in the exact historic configuration would require removal of existing root balls, which could

Figure 3.89. Mature Monterey cypresses along the Northwest Embankment to be replaced in-kind. View looking southwest, 2011 (OCLP).



potentially be damaging and disruptive to adjacent and below-grade resources. Rather, new planting should approximate the historic arrangement of the windbreak.

#### **Relationship to Park Planning**

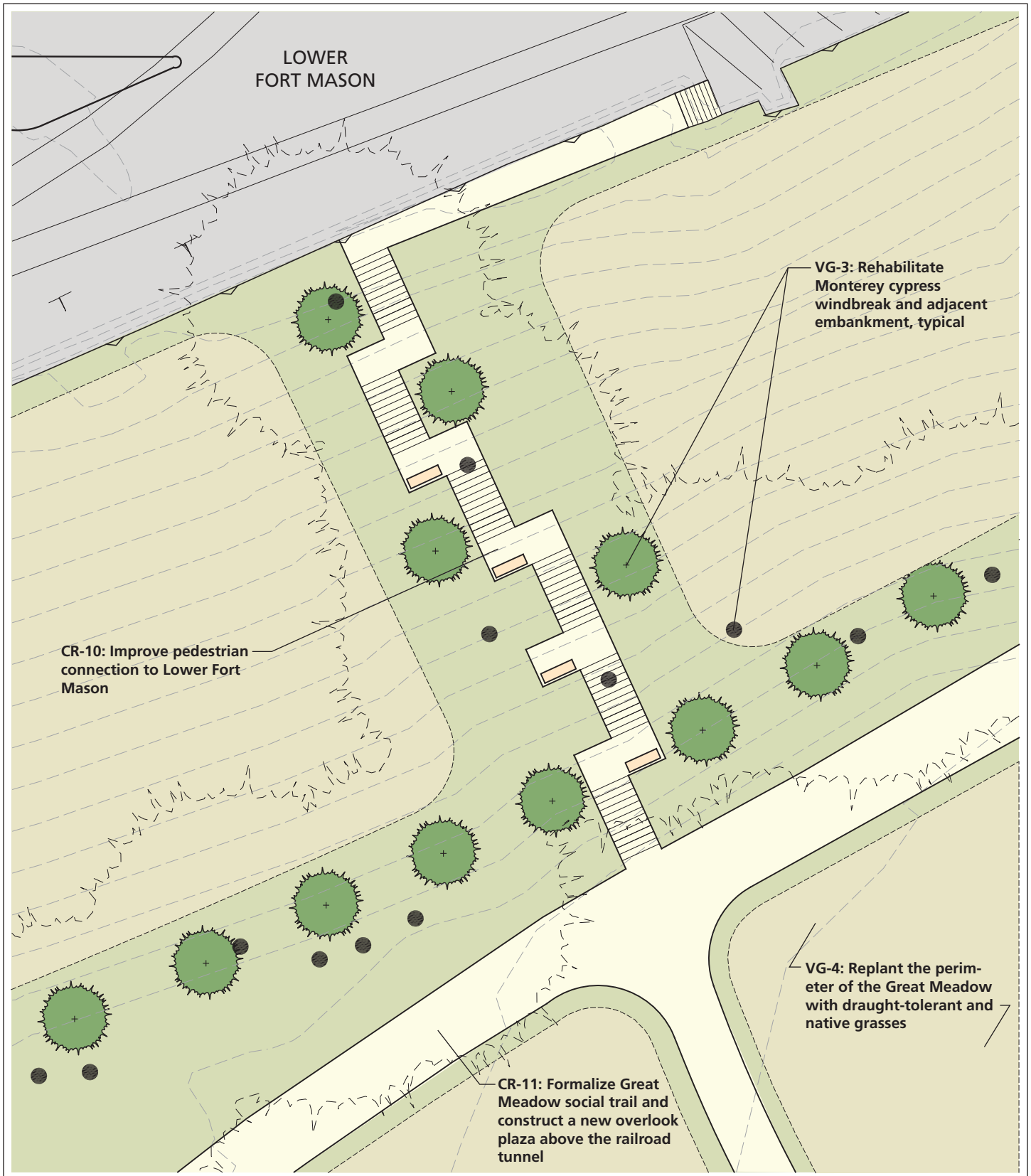
Rehabilitation of the Northwest Embankment windbreak supports park management goals of improved visibility and visitor orientation to the broader resources of Golden Gate National Recreation Area and San Francisco Maritime National Historical Park. Views afforded by the rehabilitated windbreak will also facilitate interpretation of the historic movements through the Golden Gate, one of the park's primary interpretive themes.

**Table 3.6: Plant palette for embankment stabilization planting**

Scientific Name	Common Name
<b>Native Dune-scrub Vegetation</b>	
<i>Achillea millefolium</i>	black sage
<i>Arctostaphylos hookeri</i>	Monterey manzanita
<i>Baccharis pilularis</i>	coyote brush
<i>Castilleja affinis</i> ssp. <i>affinis</i>	coast Indian paintbrush
<i>Ceanothus cuneatus</i>	buckbrush
<i>Ceanothus gloriosus</i> 'Anchor Bay'	Point Reyes ceanothus
<i>Dendromecon rigida</i>	bush poppy
<i>Ericameria ericoides</i>	Indian paintbrush
<i>Eriodictyon californicum</i>	yerba santa
<i>Fragaria chiloensis</i>	beach strawberry
<i>Lotus scoparius</i>	common deerweed
<i>Lupinus chamissonis</i>	beach blue lupine

Scientific Name	Common Name
<i>Mimulus aurantiacus</i>	sticky monkey flower
<i>Polygonum paronychia</i>	dune knotweed
<i>Rhamnus californica</i>	coffeeberry
<i>Salvia mellifera</i>	black sage
<i>Tenacetum camphoratum</i>	camphor dune tansy
California Native and Drought-tolerant Grasses	
<i>Agrostis pallens</i>	bent grass
<i>Bromus carinatus</i>	California brome
<i>Carex subbracteata</i>	smallbract sedge
<i>Danthonia californica</i>	California oatgrass
<i>Deschampsia cespitosa</i> ssp. <i>holciformis</i>	coastal tufted hair grass
<i>Festuca rubra</i>	red fescue
<i>Hordeum brachyantherum</i>	meadow barley
<i>Koeleria macrantha</i>	prairie junegrass
<i>Melica torreyana</i>	Torrey's melicgrass
<i>Nassella pulchra</i>	purple needlegrass
















**DRAWN BY**  
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

**NOTE**  
All features are shown in approximate scale and location.

- SOURCES**
1. PSOMAS, Site survey, 1998
  2. SF DPW, Orthophoto, 2001
  3. USGS, Orthophoto, 2009
  4. Bartlett, Tree Inventory, 2010
  5. OCLP, Field notes, 2011

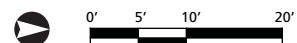
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**LEGEND**

	Two-foot topographic contour		Shrubs/hedges
	Roads		Bench
	Walks		Trees to remove
	Mown lawn		Trees to retain
	Draught-tolerant meadow grass		Replacement trees

Cultural Landscape Report  
Upper Fort Mason  
Golden Gate National Recreation Area

**Northwest Embankment  
Staircase Enlargement**



**Drawing 3.8**



## GREAT MEADOW

### OVERVIEW

The Great Meadow was constructed in 1982 on the twenty-five acres to the west of Building 201 as a traditional urban park (Figure 3.90). During United States Army management of Upper Fort Mason, MacArthur Avenue extended through the present location of the Great Meadow, an area formerly occupied by Army warehouses and workshops. The original design concept for the Great Meadow was prepared by Royston Hanamoto Beck & Abey, Landscape Architect and Planners for the 1978 Master Plan for Fort Mason (Figure 3.91). Consistent with the design plan, the western half of MacArthur Avenue and remnant building foundations were removed from the western side of Upper Fort Mason. The undulating Great Meadow landscape featuring curvilinear paths was constructed in the former location of the western end of MacArthur Avenue and military buildings that characterized the landscape around 1953.

Today, five Canary Island date palms (*Phoenix canariensis*) stand in the landscape, marking the former road alignment of MacArthur Avenue. The majority of this area consists of open lawn, while trees over lawn occupy the western portion of the Great Meadow. Constructed earthen berms planted with native vegetation screen southerly views to the Bay Street parking area. The Great Meadow is valued primarily for its active recreational uses and striking views of the Golden Gate and Palace of Fine Arts (Figure 3.92).

The Great Meadow retains a very low degree of landscape integrity relative to the rest of Upper Fort Mason. Removal of Army-era warehouses and buildings prior



Figure 3.90. Great Meadow landscape treatment area location diagram. Plan view, 2011 (OCLP).



to National Park Service stewardship diminished the historic integrity of this area. Modifications associated with the creation of the traditional park in this portion of the site resulted in changes to the design, materials, workmanship, feeling, and association of the landscape.

Because the Great Meadow is a non-contributing and bears little resemblance to its historic condition, treatment of this area may be appropriately focused on enhancing park function and improving landscape condition. The Great Meadow is the best portion of Upper Fort Mason to accommodate new, compatible uses. There are a range of transportation possibilities at Upper Fort Mason, and the Great Meadow is a suitable location to meet transportation needs. Construction of an overflow event parking area is an appropriate use of the Great Meadow, as identified through the cultural landscape report process. The 1978 Master Plan for Fort Mason recommended parking in this area, although an expanded parking area was never constructed. This and other new uses should be evaluated by the park through the park review process and the Section 106 compliance process.

At the same time, the diminished integrity of the landscape also presents opportunities to recapture some of the lost historic patterns and relationships that characterized the landscape around 1953. The treatment tasks that follow include reestablishing views to the Golden Gate and Palace of Fine Arts, improving circulation, and replacing hazardous trees along Bay Street (Drawing 3.9).

## **TASKS**

### **V-4: Reestablish westerly views across the Great Meadow**

#### **Description**

Westerly views across the Great Meadow to the Golden Gate, Palace of Fine Arts, Presidio, and Marin Headlands are currently obstructed by three blue gums (*Eucalyptus globulus*) opposite the western terminus of MacArthur Avenue and a landscape debris pile in the northwestern corner of the Great Meadow (Figure 3.93). The three blue gum should be removed and replaced with three smaller blue gum cultivars (*Eucalyptus globulus* 'Compacta,' which mature at 60-70 feet high) to approximate views that characterized MacArthur Avenue during the historic period (Figure 3.94). In addition, the existing landscape debris pile should be removed from the Great Meadow and the area replaced with unmown turf (see Task VG-4, Figure 3.95).

#### **Treatment Considerations**

Following removal of the debris pile, landscape materials should be regularly collected in a thirty cubic yard dumpster, to be located in the expanded maintenance yard (see Task BS-2).

**Relationship to Park Planning**

Rehabilitation of views from the Great Meadow supports park management goals of improved visitor welcoming and orientation, as well as enhancing the park’s interpretive program related to the historic use and relationship of Upper Fort Mason to the surrounding historic sites, including the Golden Gate, Palace of Fine Arts, and Presidio.



Figure 3.93. Obstructed views toward the Palace of Fine Arts and Golden Gate from the western terminus of MacArthur Avenue. View looking west, 2011 (OCLP).



Figure 3.94. Photo simulation showing reestablished views to the Palace of Fine Arts and Golden Gate from the western terminus of MacArthur Avenue following removal of mature blue gums from the Great Meadow. View looking west, 2011 (OCLP).

**CR-11: Formalize Great Meadow social trail and construct a new overlook plaza above the railroad tunnel**

**Description**

A social trail has developed in the northwest corner of the Great Meadow since construction of the landscape area in 1982 (Figure 3.96). Presently, the area is surfaced with wood chips and used by maintenance staff to access the landscape debris pile (see Task V-4). The social trail should be formalized with bituminous concrete pavement, consistent with other paths in the Great Meadow, to provide access to the proposed staircase on the Northwest Embankment and a new overlook plaza above the railroad tunnel. The new path should be approximately seven feet wide and laid-out with gentle, sinuous curves and radial path intersections consistent with existing paths in the Great Meadow. The new overlook plaza should be designed to take advantage of magnificent westward views toward the Golden Gate.

**Treatment Considerations**

Construction of the new Great Meadow path and overlook will require lawn replanting in the vicinity. The existing area is sparsely vegetated because it is beyond the range of the existing irrigation system (Figure 3.97). Irrigation upgrades in this area are outside the scope of the current *Fort Mason Water Conservation Irrigation Upgrades* project. Native and drought-tolerant grass should be replanted in this area consistent with Task VG-4.

**Relationship to Park Planning**

Formalizing the social trail above the Northwest Embankment supports park management goals to improve visitor access and wayfinding. Landscape



Figure 3.95. The landscape debris pile to be removed from the northwest corner of the Great Meadow, with future debris to be collected in the expanded maintenance yard. View looking northwest, 2011 (OCLP).

**Figure 3.96. Social trail at the western edge of the Great Meadow to be formalized and planted with drought-tolerant and native grasses. View looking east, 2011 (OCLP).**



improvements in this area also support the Upper/Lower Fort Mason connectivity goals identified in the Golden Gate National Recreation Area/San Francisco Maritime National Historical Park Joint Waterfront Planning Workshop.

#### **CR-12: Expand Great Meadow pedestrian plaza opposite Building 101**

##### ***Description***

The existing pedestrian plaza opposite Building 101 was constructed in 1982, includes limited visitor amenities (benches and an interpretive panel), and is accessed by a single path (Figure 3.98). A key node between the historic cantonment (to the east) and the Great Meadow (to the west) with magnificent views toward the Golden Gate and Presidio, the existing plaza should be expanded to include additional seating, shade trees, and interpretive panels to enhance visitor orientation. The plaza should also be regraded for multiple points of access.

##### ***Treatment Considerations***

The 1978 Master Plan for Fort Mason envisioned this area as a primary point of visitor contact. The small plaza's central location with respect to visitor parking, the Great Meadow, and the historic core of the park make this a superior location to orient visitors to the wider resources of Golden Gate National Recreation Area.

##### ***Relationship to Park Planning***

This small plaza presents an opportunity to interpret Upper Fort Mason's military history, as well as its twentieth century ties to the Panama Pacific International Exposition. Expansion of the pedestrian plaza also supports park management



Figure 3.97. Non-irrigated lawn area along the western side of the Great Meadow to be replanted with drought-tolerant grasses. Note the landscape debris pile to be removed beyond. View looking west, 2011 (OCLP).



Figure 3.98. Entrance to the Great Meadow pedestrian plaza to be reconfigured consistent with the resolution of the western terminus of MacArthur Avenue. View looking northwest, 2012 (OCLP).



goals of improved access, wayfinding, as well as unified visitor welcoming and orientation.

**VG-4: Replant the perimeter of the Great Meadow with drought-tolerant and native grasses**

***Description***

The perimeter of the Great Meadow is planted with a combination of irrigated and un-irrigated lawn. These lawn areas resource-intensive and are mown regularly by park maintenance staff. Selected portions of the perimeter of the Great Meadow should be replanted with drought-tolerant or native grasses to reduce irrigation use. Reduced water use in the Great Meadow area will allow a

reallocation of water resources from the western portion of Upper Fort Mason to the eastern portion of the site, which has greater integrity and warrants a higher degree of horticultural care.

**Treatment Considerations**

Replanting portions of the Great Meadow will require a reevaluation of maintenance schedules for the area, with reduced irrigation and mowing requirements. The park should also evaluate the feasibility of capturing run-off from paved surfaces at Upper Fort Mason. It has also been suggested that Upper Fort Mason’s irrigation system be tied into the recycled water system at the Presidio sewage treatment plant. This action would capitalize on existing and proposed infrastructure that enhances environmental sustainability, including ‘purple pipes’ for recycled water.

**Relationship to Park Planning**

Replanting selected portions of the perimeter of the Great Meadow with drought-tolerant and native grass species supports the draft *General Management Plan* directive to improve the environmental sustainability of the Upper Fort Mason landscape.

**Table 3.7: Native and drought-tolerant plant palette for Great Meadow perimeter**

Scientific Name	Common Name
<i>Agrostis pallens</i>	bent grass
<i>Bromus carinatus</i>	California brome
<i>Carex subbracteata</i>	smallbract sedge
<i>Danthonia californica</i>	California oatgrass
<i>Deschampsia cespitosa</i> ssp. <i>holciformis</i>	coastal tufted hair grass
<i>Festuca rubra</i>	red fescue
<i>Hordeum brachyantherum</i>	meadow barley
<i>Koeleria macrantha</i>	prairie junegrass
<i>Melica torreyana</i>	Torrey’s melicgrass
<i>Nassella pulchra</i>	purple needlegrass

**VG-5: Replace hazardous street trees along Bay Street**

**Description**

Several of the existing red flowering gum (*Corymbia ficifolia*) and blue gum (*Eucalyptus globulus*) along the southern border of the Great Meadow and the Bay Street parking area have reached maturity and were identified for removal in the 2010 *Fort Mason Tree Inventory and Management Plan*. The four hazardous trees along Bay Street should be removed and replaced with trees that mature at a lower height (Figure 3.99).

### **Treatment Considerations**

Historic photographs show that the street tree planting along Bay Street was always irregular due to the adjacency of large industrial buildings, so it is not critical to replace all street trees at once. Rather, as trees require replacement due to decline, threats to safety, or obstruction of historic views, street trees should be removed and species evaluated for suitability as replacement planting. A preliminary list of suitable replacement street trees that mature at a relatively low height is provided in the table below.

### **Relationship to Park Planning**

Tree replacement planting along Bay Street supports park management goals to maintain the landscape in a good condition. Replanting with trees that mature at a lower height will ensure that planting does not obstruct views, while maintaining a green perimeter to the park.

**Table 3.8: Low street trees for Bay Street planting rehabilitation**

Scientific Name	Common Name
<i>Arbusus unedo</i>	strawberry tree
<i>Eucalyptus campaspe</i>	silver-topped gimlet
<i>Eucalyptus ficifolia</i>	red flowering gum
<i>Laurus nobilis</i>	Grecian laurel



**Figure 3.99. Hazardous street trees and missing street trees to be replaced along Bay Street. View looking east, 2011 (OCLP).**

Figure 3.100. Chain-link fence above the railroad tunnel at the western edge of the Great Meadow to be raised to meet life-safety codes and replaced with vinyl coated black chain-link. View looking west, 2011 (OCLP).



### **SSF-3: Rehabilitate chain-link fences throughout the Great Meadow**

#### ***Description***

Chain-link fences along the western edge of the Great Meadow above the Lower Fort Mason retaining wall are damaged, rusted, and do not convey a welcoming appearance (Figure 3.100). The existing galvanized metal chain-link fence material should be replaced with black vinyl coated chain-link and raised in height in the vicinity of the railroad tunnel to a minimum height of forty-eight inches to ensure visitor safety.

#### ***Treatment Considerations***

The galvanized fence dates to the period of significance, so its design and materials are contributing. However, rehabilitation accommodates some latitude to consider contemporary use. The existing material projects an unwelcoming and unkempt appearance. Black vinyl coated chain-link is compatible with the historic material, but will visually recede into the landscape and require less recurring maintenance. Fence support posts should be retained and rehabilitated as required to receive the new, more durable fence material.

#### ***Relationship to Park Planning***

Fence rehabilitation supports improvements to visitor safety and will enhance the welcoming appearance of this heavily-used section of the park from the Great Meadow, Lower Fort Mason, and Laguna Street.

Figure 3.101. Deteriorated exercise equipment in the Great Meadow to be replaced with contemporary fixtures. The landscape debris pile is visible beyond. View looking north, 2011 (OCLP).



#### **SSF-4: Evaluate exercise equipment circuit for replacement or removal**

##### **Description**

Existing non-historic exercise equipment throughout the Great Meadow is deteriorated or otherwise non-functional (Figure 3.101). The equipment dates to the 1980s and should be evaluated through the Section 106 process for possible replacement or removal, as should any non-historic landscape features throughout the park.

##### **Treatment Considerations**

Should the fixtures be identified for replacement, numerous site furnishings manufacturers and vendors carry fitness trail equipment designed for outdoor use that is suitable for use in the Great Meadow. Although exercise equipment is not specifically addressed in Golden Gate National Recreation Area's *Sitewide Furnishing Standards*, replacement exercise equipment should be consistent with the intent of the standards, to be compatible, functional, sustainable, low-maintenance, and reinforce a unified park image. If necessary, a cyclical evaluation could be undertaken to assess extent, use, and condition of non-historic landscape features throughout the park.

##### **Relationship to Park Planning**

Removal or replacement of existing deteriorated exercise equipment is consistent with the diverse opportunities management zone defined in the park's draft *General Management Plan* for the Great Meadow and replacement would support park goals related to modest improvements in the Great Meadow to welcome diverse park user groups.





National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

**SOURCES**

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

**DRAWN BY**

Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

**LEGEND**

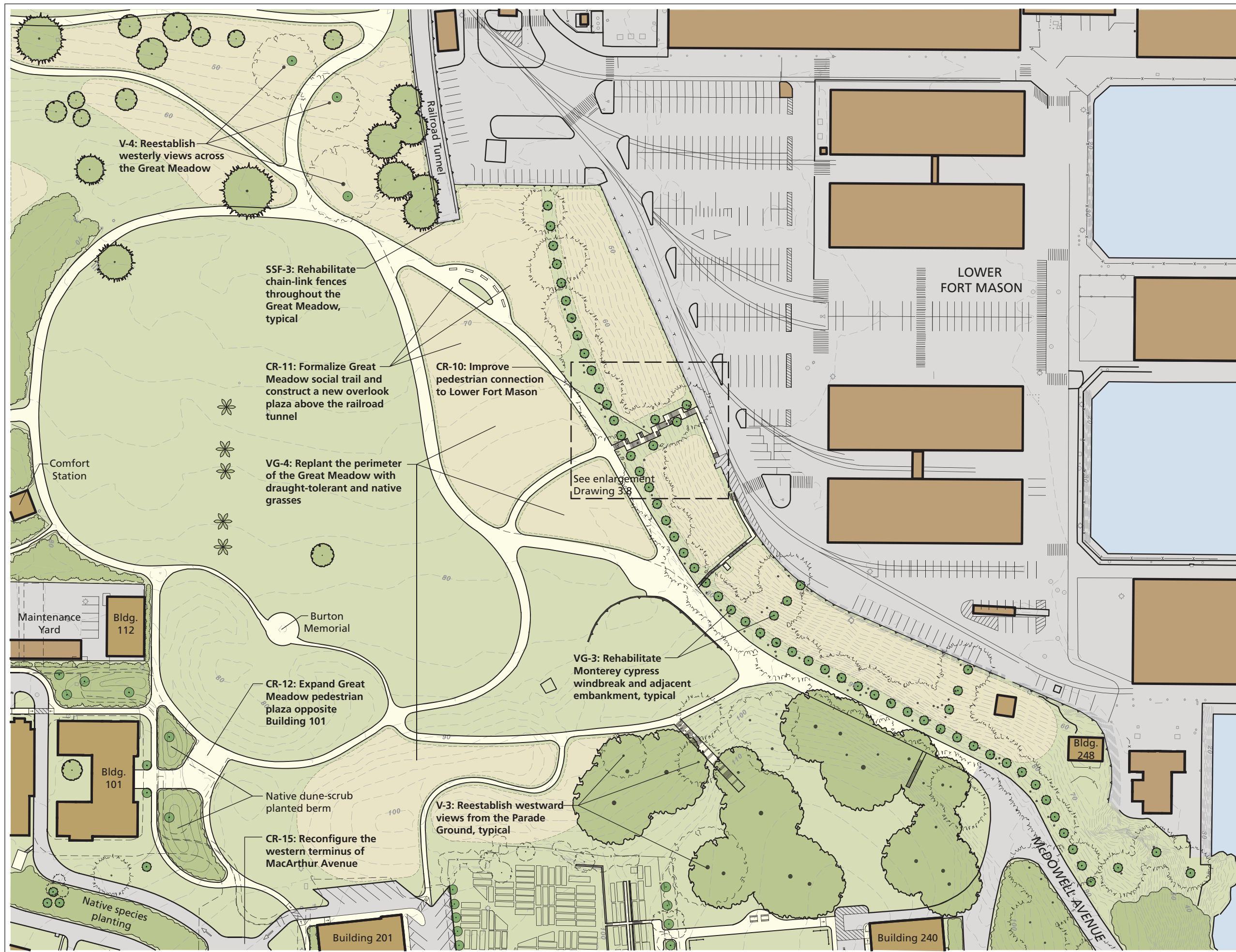
- Two-foot topographic contour
- Roads
- Walks
- Mown lawn
- Draught-tolerant meadow grass planting
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees

**NOTE**

All features shown in approximate scale and location.



**Drawing 3.9**







## SOUTH EXPANSION

### OVERVIEW

The South Expansion landscape treatment area includes buildings and facilities constructed during the twentieth century on the southern perimeter of Upper Fort Mason along Bay Street, including the MacArthur Avenue entrance, the Quad, the Franklin Street entrance, MacArthur Avenue, Officers' Park, the park maintenance facility, and the Bay Street parking area (Figure 3.102). This large and diverse landscape treatment area includes an expansive collection of historic buildings, as well as the park's primary vehicular entrance (Figure 3.103).

MacArthur Avenue was constructed in 1914 by the proprietors of the Panama Pacific International Exhibition. The road led from Upper Fort Mason, where the exhibition's amusements were hosted, to the core of the exhibition to the west. A streetcar line ran down MacArthur Avenue until the late 1940s. As it exists today, the western terminus of MacArthur Avenue was created with construction of the Great Meadow in 1982. Although a more effective design was proposed in the 1978 Master Plan for Fort Mason, the existing road fragment remains unresolved.

The Franklin Street entrance was realigned with the city grid between 1944 and 1947 to accommodate the large number of employees entering and leaving the post at work shift changes during World War II. Historic photographs of the Franklin Street entrance prior to realignment of the road show that vegetation was comprised of a variety of native scrub vegetation (Figures 3.104 and 3.105).



Figure 3.102. South Expansion landscape treatment area location diagram. Plan view, 2011 (OCLP).

**Figure 3.103. The Franklin Street entrance to Upper Fort Mason from Bay Street, shown here during universal access improvements. View looking north, 2011 (OCLP).**



The South Expansion area retains a relatively high degree of landscape integrity. The historic character of the area is reflected in the intact layout of the two residential complexes, along with the roads and walks that remain from United States Army stewardship. Vegetation associated with the South Expansion area's residential properties was historically well-tended and domestic in scale, with shade trees over mown lawn on the Officers' Park green. However, existing foundation plantings within the Quad and Officers' Park, as well as plantings along the Franklin Street entrance, do not reflect their historic conditions. Despite natural growth and decline of historic vegetation, the area maintains integrity, and there are opportunities to recapture the historic domestic character through rehabilitation planting and continued preservation maintenance.

Construction of the Bay Street parking area and modification of the area surrounding Building 112 for use as the maintenance yard are the most significant changes to the South Expansion area since the end of the period of significance. Both, however, were necessary to accommodate contemporary use of Upper Fort Mason as a national park. Because changes to the western portion of the South Expansion area significantly altered the historic layout of this area, the western portion of the South Expansion area is well-suited to continue to support park functions. There are also opportunities within the area to improve vehicular and pedestrian access. Improvement should be consistent with the overall domestic character and scale of the area, which is characterized by low structures, low fencing, and residential-like hardscape materials and plantings.

The treatment tasks that follow are focused on rehabilitation of the historic plantings to better reflect the domestic qualities that characterized this residential area during Army stewardship. Circulation improvements are focused on

Figure 3.104. Women's Army Corps enlisting at Fort Mason during World War II showing naturalized planting in the Franklin Street entrance area to be reestablished (center left). View looking south, 1943 (San Francisco History Center, San Francisco Public Library).



Figure 3.105. Returning heroes of Bataan (now Philippines) showing a more manicured Franklin Street entrance area planting following World War II (upper right). View looking east, 1945 (Hamilton and Bolce, *Gateway to Victory*, 1946).



improving visitor access and wayfinding to the Bay Street parking area and in the Quad, while improving the capacity of the non-historic maintenance yard to accommodate existing and projected maintenance demands (Drawings 3.10, 3.12, and 3.14).

Figure 3.106. Franklin Street entrance from Bay Street showing views to the Chapel obstructed by non-historic purple leaf plum trees. View looking north, 2011 (OCLP).



Figure 3.107. Photo simulation showing reestablished views to the Chapel and flagpole from the Franklin Street entrance following removal of purple leaf plum trees and replanting with low native dune-scrub vegetation. View looking north, 2011 (OCLP).

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## TASKS

### V-5: Rehabilitate views of the Chapel from the Franklin Street entrance

#### **Description**

The addition of the central traffic median and associated plantings to Franklin Street in 1974 obstructed once prominent views of the post Chapel and flagpole from the Franklin Street entrance (Figure 3.106). Existing trees should be replaced with low-growing vegetation to reestablish the visual connection to the Chapel and from the park's main entrance (Figure 3.107). Several treatment alternatives are provided below.

#### **Treatment Considerations**

The post Chapel has been a prominent civic fixture of the Upper Fort Mason landscape since the World War II era, and a United States flag characterizes nearly every Federal property from military bases to post offices and national parks. While existing purple leaf plums along the east side of the entrance drive (adjacent to the Quad) do not block views, these plantings have reached maturity and are in decline. The existing trees along the east side of the road should be replaced with a new a single-species planting of small ornamental trees. This planting will perpetuate a privacy screen for the Quad buildings. A list of alternative species is provided in the table below.

Reestablishment of views from the Franklin Street entrance includes removal of purple leaf plum (*Prunus cerasifera* 'Pisardi') planted in the median islands in 1974. Since the traffic medians post-date the period of significance, but are practical for continued function of the entrance area, replanting strategies accommodate some flexibility to advance other goals identified in the draft *General Management Plan*. Replanting alternatives include:

- **Mown lawn** is consistent with the historic crisp military aesthetic and ensures that views to the Chapel remain unobstructed. Regular maintenance includes mowing.
- **Native dune-scrub vegetation** is consistent with the appearance of the post entrance prior to the realignment of Franklin Street. This planting has the potential to advance the park's environmental sustainability goals. A list of recommended species is provided in the table below. Vegetation should be maintained at a low height to ensure that views of the Chapel remain unobstructed. Maintenance during the establishment period will likely require intensive labor.

- **Bioswales** to manage run-off from impervious surfaces at the entrance to the park will advance the environmental sustainability of the landscape and other goals of the draft *General Management Plan*. Locating bioswales at the main entrance to the property is a bold statement about the park’s environmental vision and has high interpretive value. However, bioswales will require extensive reconfiguration of the storm water catchment system and are the least compatible with the historic crisp military aesthetic.

**Relationship to Park Planning**

Rehabilitation of views to the Chapel and flagpole from the Franklin Street entrance support park management objectives of improved visibility, wayfinding, and visitor welcoming. Rehabilitated views of the Chapel and flagpole also reinforce park interpretive themes related to its former function as a United States Army post.

**Table 3.9: Plant palette for entrance median planting rehabilitation**

Scientific Name	Common Name
<b>Native Ornamental Trees for East Side of Franklin Street*</b>	
<i>Cercis canadensis</i> *	redbud
<i>Chilopsis linearis</i> *	desert willow
<i>Laurus nobilis</i> *	Grecian laurel
<i>Quercus agrifolia</i> *	coast live oak
<i>Umbellularia californica</i> *	California laurel
<b>Native Dune-scrub Vegetation</b>	
<i>Achillea millefolium</i>	black sage
<i>Arctostaphylos hookeri</i>	Monterey manzanita
<i>Baccharis pilularis</i>	coyote brush
<i>Castilleja affinis</i> ssp. <i>affinis</i>	Wright’s Indian paintbrush
<i>Ceanothus cuneatus</i>	buckbrush
<i>Ceanothus gloriosus</i> ‘Anchor Bay’	Point Reyes ceanothus
<i>Dendromecon rigida</i>	bush poppy
<i>Ericameria ericoides</i>	Indian paintbrush
<i>Eriodictyon californicum</i>	yerba santa
<i>Fragaria chiloensis</i>	beach strawberry
<i>Lotus scoparius</i>	common deerweed
<i>Lupinus chamissonis</i>	beach blue lupine
<i>Mimulus aurantiacus</i>	sticky monkey flower
<i>Polygonum paronychia</i>	dune knotweed
<i>Rhamnus californica</i>	coffeeberry
<i>Salvia mellifera</i>	black sage
<i>Tenacetum camphoratum</i>	camphor dune tansy
* Quad frontage only. Not recommended in central traffic median due to height.	

Figure 3.108. The entrance to the maintenance yard opposite Buildings 101 and 102 to be reconfigured to minimize its visibility and accommodate two landscape debris dumpsters. View looking southwest, 2011 (OCLP).



## **BS-2: Redesign and expand existing maintenance yard**

### ***Description***

The existing maintenance yard is too small to accommodate existing park maintenance demands and it is highly visible from the visitor parking area entrance drive (Figure 3.108). The maintenance yard should be expanded to the south to enhance the maintenance capacity of the park (see Drawing 3.14). Expansion of the maintenance yard will necessitate relocation of the entrance to the southwest corner. This will also minimize visibility of the yard from the Bay Street parking area entrance drive (consistent with Task CR-13). The purpose of the expansion is not to provide additional space to park vehicles and equipment, but rather to locate landscape debris dumpsters that will eliminate the need for the landscape debris pile in the Great Meadow.

### ***Treatment Considerations***

During the landscape treatment workshop, alternative locations for the maintenance yard were evaluated, including Lower Fort Mason adjacent to the Northwest Embankment retaining wall and elsewhere at Upper Fort Mason. No suitable alternative location could be identified for the maintenance yard. Expansion and modification of the existing maintenance yard was identified as the best way to meet growing maintenance needs at present.

To accommodate the expansion, the existing lean-to structure should be relocated to the eastern side of the yard, with space at the southeast corner of the maintenance yard for two thirty cubic yard dumpsters. These dumpsters will

eliminate the need for the existing debris pile at the northwestern corner of the Great Meadow (see Task V-4). Redesign of the maintenance yard should also incorporate bins for other common landscape materials, such as topsoil, mulch, and crushed stone.

The existing maintenance yard chain-link perimeter fence with wood slats should be replaced with a more attractive board fence and planted along its perimeter to screen the yard from adjacent walks. A planted berm should be added to the east of the yard, adjacent to Building 101, to continue the native dune-scrub planting present on the western side of the yard.

#### ***Relationship to Park Planning***

Improved facilities will enhance the maintenance capacity of the park in support of park management goals of maintaining the landscape in good condition. Expansion of the maintenance yard will also improve the visitor experience by minimizing the visibility of park maintenance functions from the parking area entrance drive.

#### **CR-13: Reconfigure Bay Street parking area and associated walks**

##### ***Description***

Existing vehicular circulation in the visitor parking area is circuitous and unclear, with large expanses of impermeable surfaces (Figure 3.109). Treatment of the existing parking area is intended to reduce the area of impermeable surface, improve and clarify vehicular and pedestrian circulation, and enhance universal accessibility.

Treatment of the parking area includes reconfiguration of the entrance drive between Buildings 101 and 103 to meet the proposed terminus of MacArthur Avenue (see Drawing 3.15), the removal of the drive to the north of Building 101, and the addition of planted median islands in the parking area to improve traffic flow. At the eastern end of the lot, reconfiguration of the parking area will necessitate the removal of the chain-link fence adjacent to Building 52 and extension to the curblineline to provide additional landscape space. At the western end of the parking area, a new entrance/exit from Bay Street opposite Octavia Street should be added to improve vehicular circulation and access during special events.

##### ***Treatment Considerations***

Reconfiguration on the parking area will increase parking capacity by one space (from ninety-one to ninety-two spaces), while reducing the overall area of impervious paved surface. Resurfacing with permeable pavement could further



reduce water run-off. Construction of bio-infiltration swales at the western end of the parking area should be evaluated for feasibility. Small shade trees should be added to traffic median islands throughout the parking area. A list of shade tree species that mature at a low height and grasses suitable for bioswale planting is provided below.

#### **Relationship to Park Planning**

Reconfiguration of the Bay Street parking area and associated pedestrian walks supports park management goals to improve visitor access, wayfinding, welcoming, and orientation, as well as universal accessibility. Because the parking area was constructed after the period of significance, this non-contributing feature provides the latitude to fulfill other park goals identified in the draft *General Management Plan*, including advancing the environmental sustainability goals of the park. Coupled with native species or bioswale planting on the Franklin Street entrance median, the bioswales at the western end of the parking area gives visitors entering the park by car two opportunities to observe the park's commitment to environmentally-sustainable landscape management.

**Table 3.10: Plant palettes for Bay Street parking area planting**

Scientific Name	Common Name
<b>Small Shade Trees</b>	
<i>Arbutus unedo</i>	strawberry tree
<i>Crataegus lacrigata</i>	English hawthorn
<i>Crataegus phaenopyrum</i>	Washington thorn
<i>Laurus nobilis</i>	Grecian laurel

Figure 3.109. The eastern end of the Bay Street parking area, where circuitous pedestrian and vehicular circulation is to be reconfigured to improve wayfinding. View looking southeast, 2011 (OCLP).



Scientific Name	Common Name
<b>Bioswale Grasses</b>	
<i>Calamagrostis foliosa</i>	leafy reed grass
<i>Carex texensis</i>	Catlin sedge
<i>Chondropetalum tectorum</i>	Cape rush
<i>Festuca californica</i>	California fescue
<i>Helictotrichum sempervirens</i>	blue oat grass
<i>Miscanthus sinensis</i>	Japanese silver grass
<i>Sesleria autumnalis</i>	autumn moor grass
<i>Sporobolus heterolepis</i>	prairie dropseed

**CR-14: Construct reinforced turf overflow event parking area to the west of the Bay Street parking area**

**Description**

During major events in the Great Meadow, Upper Fort Mason’s parking capacity is greatly reduced as a result of use of the Bay Street parking area for event staging. To lessen parking stress within the park and on adjacent city streets during special events, a reinforced turf parking area should be constructed in the open lawn to the west of the existing parking area (Figure 3.110).

**Treatment Considerations**

An expanded visitor parking area was proposed in the 1978 Master Plan for Fort Mason, but ultimately never constructed due to its potential visual impact. The proposed new overflow event parking area will increase event parking capacity by eighty spaces, but will not diminish the permeability or open appearance of the existing lawn area. Many reinforced turf products are commercially available, including GrassPave2, a proprietary product manufactured by Invisible Structures,



Figure 3.1110 Site of the proposed reinforced turf overflow event parking area to be constructed to the west of the existing Bay Street parking area. View looking west, 2011 (OCLP).

Inc. that has high load-bearing strength and is ideally suited to low speed, low use parking areas. Ongoing maintenance implications will be minimal beyond the reestablishment of mown turf.

#### ***Relationship to Park Planning***

Construction of a reinforced turf overflow event parking area will support ongoing special events at Upper Fort Mason, which are important in enhancing park visibility and fostering civic engagement and partnerships, two guiding principles of the draft *General Management Plan*.

#### **CR-15: Reconfigure the western terminus of MacArthur Avenue**

##### ***Description***

The western terminus of MacArthur Avenue consists of a large and confusing expanse of pavement at the entrance to the Bay Street parking area (Figure 3.111). The median island opposite Building 201 should be extended and a consistent forty-five foot outside turning radius defined at the western terminus of MacArthur Avenue. Both the Bay Street parking area entrance drive and Building 201 parking area exit drive are should be realigned to meet the reconfigured terminus (see Drawing 3.15). Designing an appropriate terminus to the truncated MacArthur Avenue remains an unmet goal of the 1978 master plan.

##### ***Treatment Considerations***

Including the realigned parking area and entrance drive (see Task CR-13), reconfiguration of vehicular circulation will result in a net decrease in paved surfaces by approximately 16,000 square feet (over one third of an acre) in the



Figure 3.111. Unresolved western end of MacArthur Avenue to be reconfigured with a semi-circular terminus overlooking the Great Meadow. View looking west, 2011 (OCLP).

vicinity of the MacArthur Avenue terminus. The exit drive from the parking area on the western side of Building 201 should meet MacArthur Avenue from the northwest and the entrance drive to the Bay Street parking area should meet the terminus in its southwestern quadrant. This arrangement will accommodate unobstructed views across the Great Meadow from the end of MacArthur Avenue.

### ***Relationship to Park Planning***

Reconfiguration of the western terminus of MacArthur Avenue supports park management goals for improved visitor access, wayfinding, and orientation. Unobstructed views across the Great Meadow to the Palace of Fine Arts, Golden Gate, and Presidio also support the park's interpretive program objectives.

### **CR-16: Re-open MacArthur Avenue vehicular gate to pedestrians and bicycles**

#### ***Description***

Access to Upper Fort Mason from the intersection of MacArthur Avenue and Bay Street is controlled by a pedestrian gate and a double-hinged vehicular gate. The pedestrian gate remains open, while the vehicular gate is closed to prevent vehicular circulation (Figure 3.112). To project a more welcoming image and accommodate improved bicycle and pedestrian flow, the vehicular gate should be fixed in an open position and bollards added to prevent vehicular use.

#### ***Treatment Considerations***

The MacArthur Avenue gate has been closed to vehicular traffic since the 1940s. Exclusion of vehicular traffic is consistent with both historic and existing



**Figure 3.112. MacArthur Avenue vehicular gate to be opened to accommodate bicycle and pedestrian access while preventing vehicular access. View looking north, 2011 (OCLP).**

conditions. New bollards at the MacArthur Avenue entrance should be consistent with the recommendations of the *Parkwide Site Furnishings Standards* for the historic post design zone. The standard bollards consist of thirty-six inch high, four and a half inch diameter black steel pipes with dome caps. If set in a sleeve, they can be easily removed for service access.

#### **Relationship to Park Planning**

The MacArthur Avenue/Bay Street intersection is a key park entrance. The route from Aquatic Park to Upper Fort Mason via Van Ness Avenue to Bay Street is a more bicycle-friendly route than McDowell Avenue. Consistent with the addition of signage along the waterfront corridor, this minor task will improve access to Upper Fort Mason and support park management objectives to make the park more welcoming and accessible.

#### **CR-17: Reconfigure the Quad parking area and associated walks**

##### **Description**

The existing Quad parking area consists of a stark, approximate 34,200 square foot expanse of bituminous concrete pavement between the seven buildings that comprise the perimeter of the Quad (Figure 3.113). Treatment of the Quad parking area is focused on enhancing the setting of the buildings by reducing the amount of impermeable surface and improving universal accessibility.

Existing non-compliant pedestrian walks in the vicinity of the Quad should be replaced with compliant concrete walks to provide access to each of the eight Quad buildings, consistent with the recommendations of the 2010 *Upper Fort Mason Accessibility Case Report*. To the north of the Quad, along MacArthur



Figure 3.113. The stark interior of the Quad from the parking area exit (between Buildings 33 and 39) to be improved with the addition of planted medians and foundation plantings. View looking north, 2011 (OCLP).

Avenue, cyclical re-paving of the street has reduced the height of the adjacent curb, necessitating resetting the curb. Future repaving projects, including reconfiguration of the Quad, should include milling prior to repaving to maintain a consistent height relationship between the road surface and adjacent curbing. In new traffic median islands, shade trees should be added to mitigate the stark appearance of the interior of the space. Appropriate species for shade tree planting in the Quad are provided in the table below.

**Treatment Considerations**

Prior to construction of the Quad, the southeast corner of Upper Fort Mason consisted of an unpaved parking area. The addition of the Quad buildings between 1947 and 1953 eliminated this parking area, but perpetuated the barren character on the interior of the Quad. Reconfiguration of the parking area will result in a net decrease in paved vehicular surfaces by approximately 3,600 square feet with the reduction of parking by only three spaces (from eighty-three to eighty-one spaces).

**Relationship to Park Planning**

Reconfiguring the Quad parking area will support the park’s commitment to improved access and wayfinding. Improvements to the Quad interior will also enhance the welcoming appearance of this otherwise stark park area.

**Table 3.11: Low trees for Quad traffic island planting**

Scientific Name	Common Name
<i>Corymbia ficifolia</i>	red flowering gum
<i>Magnolia grandiflora</i>	southern magnolia



Figure 3.114. Typical foundation planting on the interior of the Quad (adjacent to Building 36) to be supplemented during planting rehabilitation. View looking west, 2011 (OCLP).



Figure 3.115. Positive drainage away from the Quad buildings is to be provided to prevent further facade damage, shown here at Building 38. View looking north, 2011 (OCLP).

## VG-6: Rehabilitate foundation plantings in the Quad

### Description

Existing foundation plantings at the seven buildings surrounding the Quad are overgrown and out of character with the historic appearance of the landscape (Figure 3.114). Planting rehabilitation should be undertaken to reestablish the historic character of the planting and improve the overall appearance of the Quad.

Rehabilitation of foundation planting in the Quad consists of removal and pruning of existing overgrown woody shrubs and replacement with compatible woody and herbaceous plant material. The emphasis of this work is on reestablishing the historic character of the planting as it existed around the end of the period of significance and perpetuating a well-cared-for appearance that is consistent with Army maintenance practices. Appropriate species are identified in the table below. Japanese photinia (*Photinia glabra*) appears consistently at the entrances to the dwelling units. (For a sample typical planting plan for Building 37, see Drawing 3.11.)

Tree planting should also be undertaken in select locations throughout the Quad to provide shade and enhance the overall appearance of the area. Tree planting along the western perimeter of the Quad is proposed to mitigate undesirable views of the entrance area, consistent with Task V-5. (For tree planting along the northern and eastern perimeters of the Quad see Task VG-8).

### Treatment Considerations

Existing drainage patterns are negatively impacting the stucco façades of the Quad buildings (Figures 3.115 and 3.116). During foundation planting rehabilitation, grading is required to ensure positive drainage away from buildings with a



Figure 3.116. Typical foundation planting at Building 33 to be supplemented during rehabilitation planting. View looking west, 2011 (OCLP).

minimum slope of two percent, consistent with the recommendations of the *Preservation Guidelines for the Quad District at Fort Mason*. Consistent with the guidelines, planting should not occur within eighteen inches of building foundations to reduce the potential for water damage to the façades.<sup>9</sup>

**Relationship to Park Planning**

Quad foundation planting rehabilitation supports the park’s interpretive planning objectives of illustrating the social, political, and military themes related to the settlement and development of Fort Mason by the United States Army through the Korean Conflict. Rehabilitation of foundation plantings throughout the Quad also has the potential to enhance the park’s relationship with lessees.

**Table 3.12: Plant palette for Quad foundation planting rehabilitation**

Scientific Name	Common Name
<i>Agapanthus orientalis</i>	lily-of-the-Nile
<i>Aloe arborescens</i>	tree aloe
<i>Chasmanthe floribunda</i>	chasmanthe
<i>Choisya ternata</i>	Mexican orange blossom
<i>Escallonia 'Jubilee'</i>	escallonia
<i>Hebe imperialis</i>	hebe
<i>Hydrangea macrophylla</i>	bigleaf hydrangea
<i>Juniperus chinensis 'Pfitzeriana'</i>	Pfitzer juniper
<i>Juniperus chinensis 'Tortuosa'</i>	Hollywood juniper
<i>Pelargonium sp.</i>	geranium
<i>Photinia glabra</i>	Japanese photinia
<i>Rosmarinus officinalis</i>	rosemary
<i>Yucca whipplei</i>	our lord’s candle

**VG-7: Rehabilitate plantings in Officers’ Park**

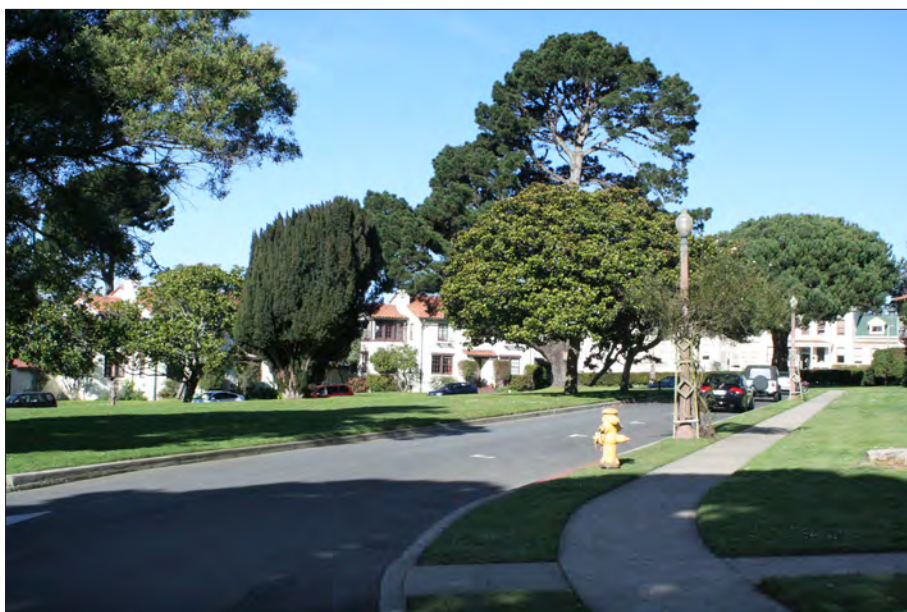
**Description**

Plantings at the nine Officers’ Quarters in Officers’ Park have outgrown their design intent. Plantings throughout Officers’ Park should be rehabilitated to reflect their appearance in 1953.

Officers’ Park planting rehabilitation includes removal of existing overgrown woody shrubs and replacement in-kind or with compatible plant material. Much of the existing herbaceous plant material in the foundation beds has thinned and should be supplemented with additional planting. A list of appropriate species for planting rehabilitation is provided below. (For a sample typical planting plan for Building 48, see Drawing 3.13.) This work is focused on perpetuating a well-cared-for appearance, consistent with Army maintenance practices. Evoking the



Figure 3.117. Mature trees on the central green in Officers' Park to be maintained and supplemented with additional planting. View looking northwest, 2011 (OCLP).



appearance of the planting during Army stewardship is more important than perpetuating a specific planting composition.

Beyond foundation planting, several of the historic evergreen and deciduous shade trees surrounding the quarters and in the central green have been removed or are proposed for removal and require replacement in-kind. These include seven magnolias (*Magnolia grandiflora*) along the east and west sides of the green and four Swiss stone pines (*Pinus cembra*) in front of Buildings 41, 42, 48, and 50. Three blackwood acacia (*Acacia melanoxylon*) were also removed along the southern edge of the green. However, because this species can be invasive, these trees should be replaced with a compatible substitute. Red flowering gum (*Corymbia ficifolia*) or coast live oak (*Quercus agrifolia*) are examples of trees that are consistent in form and scale with blackwood acacia. Other trees within the green and surrounding the quarters are near the end of their typical lifespan and will shortly require replacement in-kind. For example, the Irish yew (*Taxus stricta*) at the center of the green is out-of-scale with the planting, but appears healthy (Figure 3.117).

#### **Treatment Considerations**

Foundation planting maintenance at the Officers' Park residences presents an opportunity for the park to partner with tenants in a tenant-based stewardship program. With the development of a successful community-based stewardship program, maintenance implications related to planting rehabilitation in Officers' Park are minimal beyond continued lawn mowing, mulching, tree and woody shrub pruning, and fertilizing.

**Relationship to Park Planning**

Planting rehabilitation within Officers’ Park supports the park’s interpretive planning objectives of illustrating the social, political, and military themes related to the settlement and development of Fort Mason by the United States Army. Rehabilitation of foundation plantings throughout Officers’ Park also has the potential to enhance the park’s commitment to community-based stewardship through a tenant-based landscape maintenance program.

**Table 3.13: Plant palette for Officers’ Park foundation planting rehabilitation**

Scientific Name	Common Name
<b>Small Trees/Woody Shrubs</b>	
<i>Escallonia 'Jubilee'</i>	escallonia
<i>Eucalyptus nicholii</i>	willowleaf peppermint
<i>Heteromeles arbutifolia</i>	toyon
<i>Hydrangea macrophylla</i>	bigleaf hydrangea
<i>Juniperus communis</i>	common juniper
<i>Leptospermum scoparium</i>	tea tree
<i>Olea europea</i>	olive
<i>Photinia glabra</i>	Japanese photinia
<i>Pinus pinea</i>	Italian stone pine
<i>Platycladus orientalis</i>	Oriental arborvitae
<i>Potentilla recta 'Warrenii'</i>	cinquefoil
<i>Rosa sp.</i>	rose
<i>Rosmarinus officinalis</i>	rosemary
<i>Syringa vulgaris</i>	common lilac

**Figure 3.118. Prominent view of the Fontana condominium building from MacArthur Avenue following removal of historic blue gums, to be replaced in-kind. View looking southeast, 2011 (OCLP).**



Scientific Name	Common Name
<b>Herbaceous Vegetation</b>	
<i>Agapanthus orientalis</i>	lily-of-the-Nile
<i>Chasmanthe floribunda</i>	chasmanthe
<i>Euryops pectinatus</i>	golden daisy brush
<i>Impatiens wallerana</i>	touch-me-not
<i>Iris germanica</i>	bearded iris
<i>Pelargonium</i> sp.	geranium

#### **VG-8: Reestablish missing trees along MacArthur Avenue**

##### **Description**

Historic mature trees along the western side of MacArthur Avenue, adjacent to the Quad, are out-of-scale with the replanted allée of trees along MacArthur Avenue and do not reflect their historic design intent. Two specimen blue gums (*Eucalyptus globulus*) are also missing from the eastern side of the road above the Van Ness Avenue retaining wall (Figure 3.118). A uniform height and scale allée is desired along the length of MacArthur Avenue to reflect the historic condition of this planting around 1953 (Figures 3.119 and 3.120). Two replacement blue gums are also needed along the eastern side of the road to reestablish screened views of the Fontana condominium building.

##### **Treatment Considerations**

In 2010, blackwood acacia (*Acacia melanoxylon*) lining MacArthur Avenue were replaced in-kind. The remaining historic mature trees adjacent to the Quad are out-of-scale with the replanted allée. Red flowering gum (*Corymbia ficifolia*) along Quad façades should be removed and replaced in-kind to match the existing replanting along MacArthur Avenue in caliper size. Replacement trees should be planted five feet to the east of the edge of the adjacent sidewalk to prevent root system interference.

Additionally, two blue gums (*Eucalyptus globulus*) should be planted between MacArthur Avenue and the Van Ness Avenue retaining wall, replacing trees that formerly grew at this location and screened views of the Fontana condominium building. Maintenance implications of rehabilitation planting are minimal, as trees require pruning on a cyclical basis and spot watering only during the establishment period.

##### **Relationship to Park Planning**

Planting rehabilitation along the west side of MacArthur Avenue is highly visible from the MacArthur Avenue entrance near Van Ness Avenue. Well-cared-for

planting at this primary entrance is necessary to project a welcoming appearance. Planting that accurately reflects the historic character of the landscape is also essential to supporting the park's interpretative program.



**Figure 3.119. Missing street tree planting along MacArthur Avenue adjacent to the Quad buildings. View looking north, 2011 (OCLP).**



**Figure 3.120. Photo simulation showing reestablished planting in the lawn bordering MacArthur Avenue and the Quad, as well as replacement foundation planting along the east side of Building 34. View looking north, 2011 (OCLP).**

**VG-9: Rehabilitate plantings at MacArthur Avenue gate****Description**

Plantings at the MacArthur Avenue gate near the intersection of Van Ness Avenue and Bay Street do not reflect their historic design intent (Figure 3.121). The planting should be rehabilitated to conform in scale and materials to its historic condition, and project a welcoming appearance at this prominent entrance to Upper Fort Mason.

Four existing large cryptomeria (*Cryptomeria* sp.) should be removed and replaced with four dwarf specimens. This planting should also be supplemented with agapanthus (*Agapanthus orientalis*) and chasmanthe (*Chasmanthe floribunda*) as needed to fill-out the planting beds to the south of the gate's wing walls.

**Treatment Considerations**

Aside from watering and regular debris clean-up, planting rehabilitation will not require additional maintenance.

**Relationship to Park Planning**

Although minor in scope, together with Task CR-16, this rehabilitation planting supports Upper Fort Mason's management goals of improved welcoming and visibility at a prominent entrance to the park. This task also supports the Van Ness Avenue portal redesign, which was identified as a primary park entrance point in the 2010 San Francisco Maritime National Historical Park/Golden Gate National Recreation Area Joint Waterfront Planning Workshop.



Figure 3.121. Overgrown cryptomeria at the Van Ness Avenue gate to be replaced with draft specimens to better reflect the historic condition. View looking northwest, 2011 (OCLP).

**SSF-5: Rehabilitate chain-link fence above the Van Ness Avenue retaining wall****Description**

The chain-link fence above the Van Ness Avenue retaining wall is rusted and dangerous, and does not convey a welcoming appearance (Figure 3.122). The existing chain-link fence should be replaced with new black vinyl coated chain-link.

**Treatment Considerations**

The galvanized fence dates to the period of significance, so its design and materials are contributing. However, rehabilitation accommodates some latitude to consider contemporary use. The existing material projects an unwelcoming and unkempt appearance. Black vinyl coated chain-link is compatible with the historic material, but will visually recede into the landscape and require less recurring maintenance. Fence support posts that are mounted to the retaining wall should be retained and rehabilitated as required to receive the new, more durable fence material. Barbed wire along the top of the fence should be retained for safety purposes.

**Relationship to Park Planning**

Pending city transit improvements, the entrance to Upper Fort Mason at the intersection of Van Ness Avenue and Bay Street is likely to become one of the most heavily used entrances to the park. Rehabilitation of the fence supports park management goals of making the landscape more welcoming to visitors.

Figure 3.122. Rusted chain-link fence above the Van Ness Avenue retaining wall to be replaced with black vinyl coated chain-link. Traces of two missing blue gums, to be replaced, are also visible. View looking south, 2011 (OCLP).



**SSF-6: Rehabilitate chain-link fence along Bay Street****Description**

The existing condition of the historic chain-link fence along Bay Street projects an unwelcoming appearance at the city-side of the park (Figure 3.123). To enhance the appearance of the park, the portions of the fence flanking the Franklin Street entrance should be removed. To the east of Franklin Street, an eighty-foot segment of fence should be removed. To the west of Franklin Street, a one hundred thirty-foot segment of fence should be removed to the curb-cut opposite Building 41. Remaining fencing adjacent to Officers' Park and the Quad should be replaced with new black vinyl coated chain-link to minimize its visibility. Remaining barbed wire fixtures may appropriately be removed from the Bay Street fence. Additional agapanthus (*Agapanthus orientalis*) should be planted in the vicinity of the fence opposite Officers' Park residences to enhance the residential setting of Officers' Park and the park image from Bay Street.

**Treatment Considerations**

The galvanized fence dates to the period of significance, so its design and materials are contributing. However, rehabilitation accommodates some latitude to consider contemporary use. The existing material projects an unwelcoming and unkempt appearance. Black vinyl coated chain-link is compatible with the historic material, but will visually recede into the landscape and require less recurring maintenance. Fence support posts should be retained as required to receive the new, more durable fence material. This includes righting posts that have shifted.



Figure 3.123. Bay Street sidewalk showing the galvanized chain-link fence between Officers' Park and Bay Street to be removed. View looking west, 2011 (OCLP).

**Relationship to Park Planning**

Although minor, fence rehabilitation along Bay Street will significantly enhance the welcoming appearance of the park at the city edge in support of park planning directives.

**SSF-7: Design and install refuse enclosures for Officers' Park residences**

**Description**

Refuse containers at the rear of the Officers' Park residences are unattractive, obstruct vehicular circulation, and detract from the historic appearance of the park landscape (Figure 3.124). To enhance the appearance of the parking area exit drive and improve circulation, trash receptacles should be housed on new concrete pads or in new enclosures along the walks leading into the back yards of the residences. Alternatively, refuse containers could be housed within new curbs-cuts surrounded by low fencing.

**Treatment Considerations**

The refuse container enclosures should be consistent with the trash screen design specified in the *Parkwide Site Furnishings Standards* for the historic post design zone, and designed for easy trash removal. The enclosures should be sited to minimize visual intrusion and screened from view, where feasible.

**Relationship to Park Planning**

This small task will enhance the welcoming appearance of the South Expansion area consistent with the draft *General Management Plan* directive.



Figure 3.124. Refuse containers in the road to the north of Officers' Park to be concealed with new enclosures to hide the containers from view seven days a week. View looking north, 2011 (OCLP).



**ENDNOTES**

1. Charles A. Birnbaum and Christine Capella Peters, eds., *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington, D.C.: U.S. Department of the Interior, 1996), 18-19.
2. Janet Gracyk, Terra Cognita Design and Consulting, *Fort Mason Plant Inventory* (August 2010).
3. National Park Service, Historic Landscape Initiative. "05 Cultural Landscapes Currents: Sustainable Earthworks Management," <<http://www.nps.gov/hps/hli/currents/earthworks/index.htm>>
4. Pacific Northwest Preservation Partnership: National Park Service, University of Oregon, and Washington State Parks and Recreation Commission, *Historic Fortification Preservation Handbook* (Olympia, Washington: Washington State Parks and Recreation Commission, 2003).
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8. Kennedy/Jenkins Consultants, *Title I Report Repair of Concrete Retaining Wall along McDowell Road [sic]* (November 2008).
9. National Park Service, Golden Gate National Recreation Area, *Preservation Guidelines for the 'Quad' District at Fort Mason, San Francisco, California* (Final Draft, January 2010), 18.



South Expansion –  
Quad Treatment Plan



National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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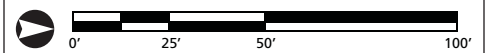
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

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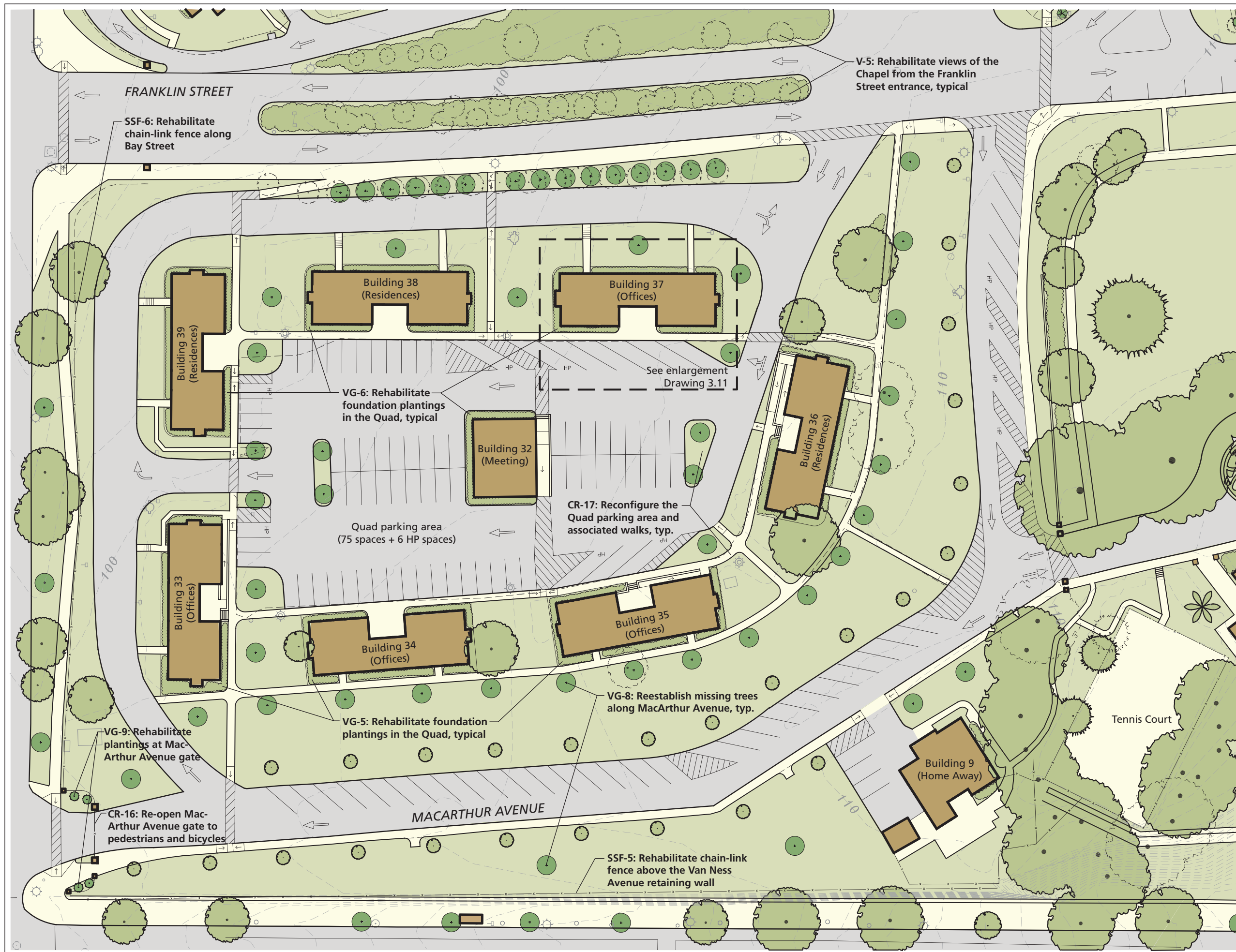
- Two-foot topographic contour
- Roads
- Walks
- Lawn
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees

NOTE

All features shown in approximate scale and location.



Drawing 3.10





Quad Sample Planting  
Plan



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SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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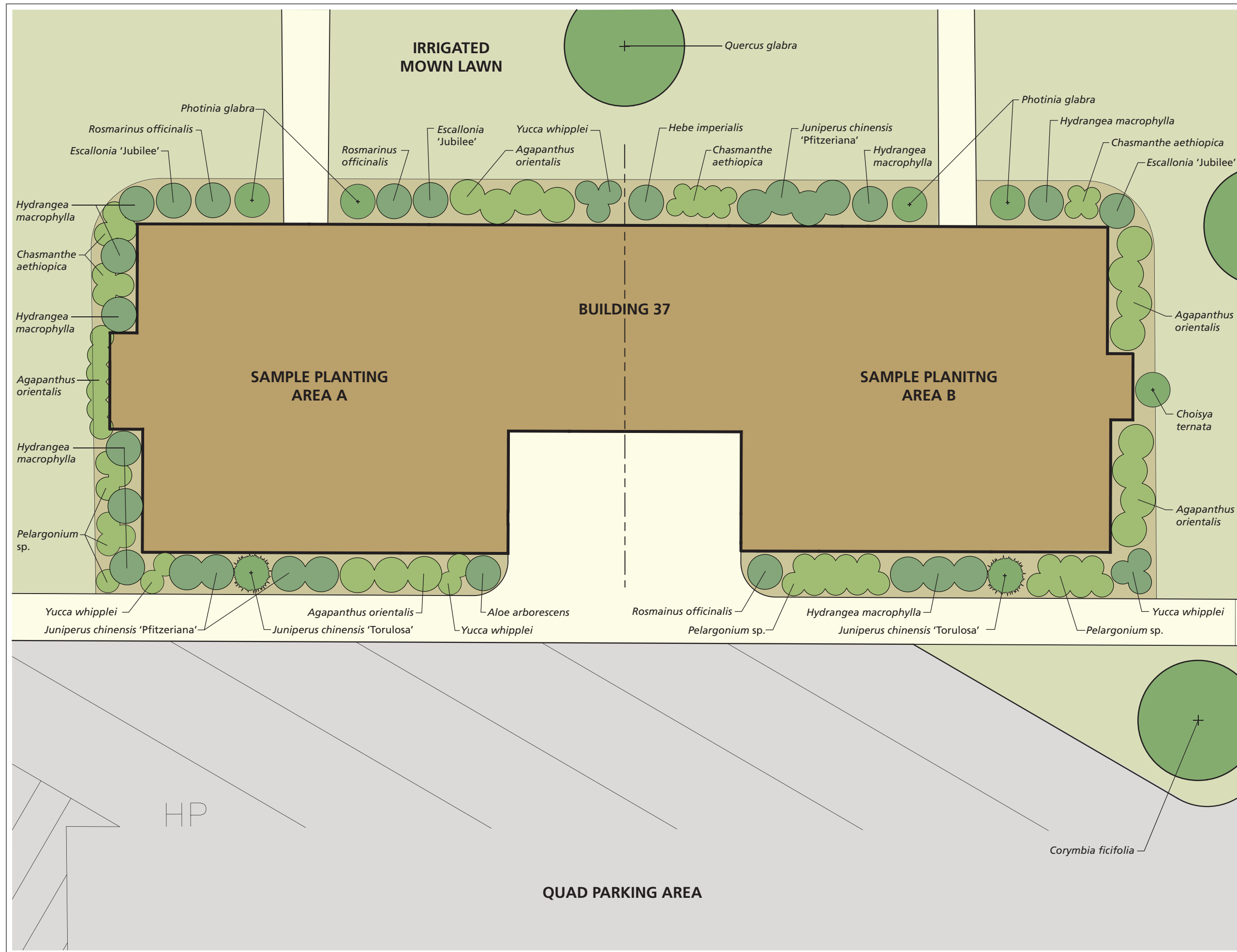
- Roads
- Walks
- Lawn
- Mulched planting bed
- Trees to retain
- Replacement trees
- Replacement woody shrubs and vines
- Replacement herbaceous vegetation

NOTE

All features shown in approximate scale and location.



Drawing 3.11







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**SOURCES**

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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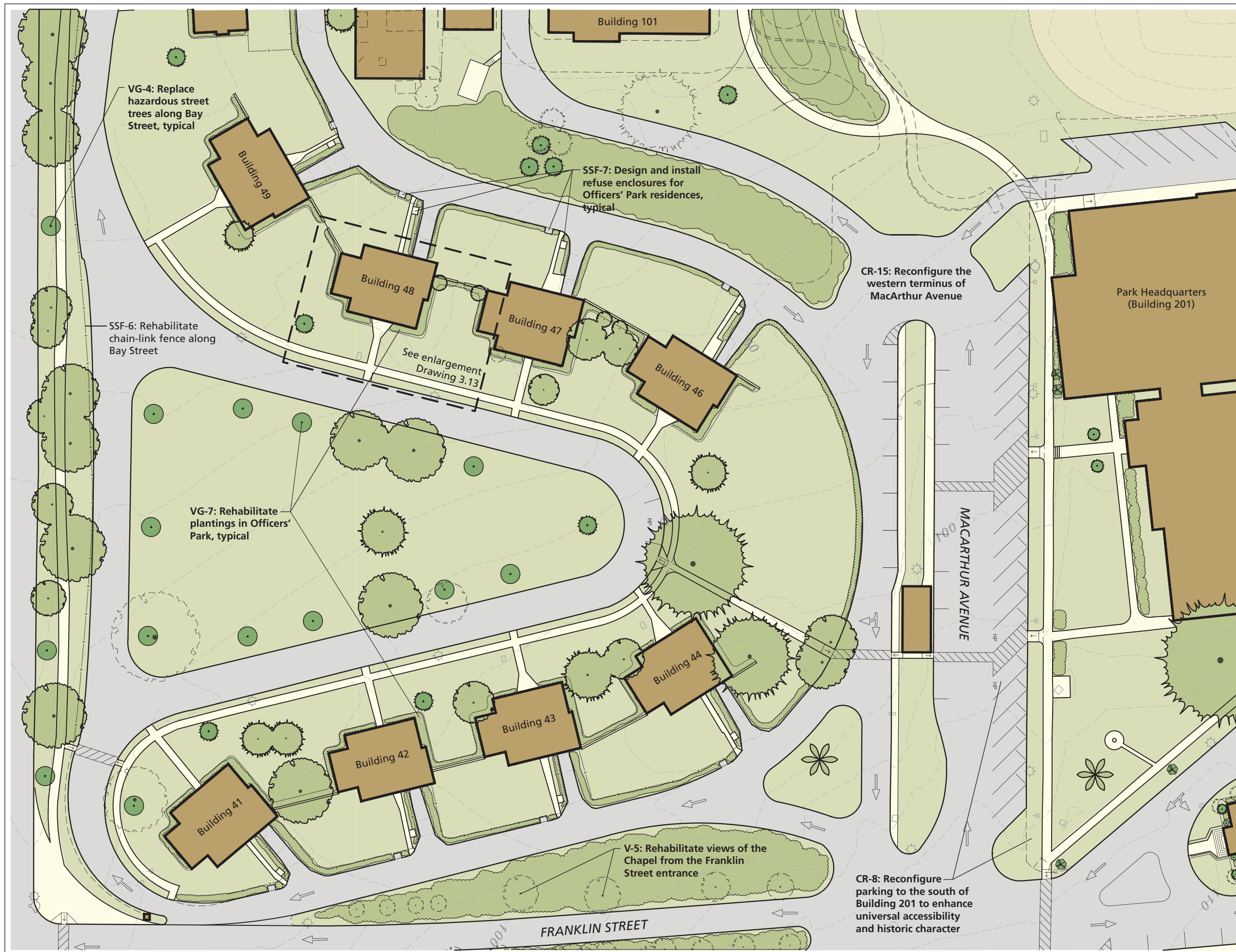
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**LEGEND**

- Two-foot topographic contour
- Roads
- Walks
- Mown lawn
- Draught-tolerant meadow grass planting
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees

**NOTE**

All features shown in approximate scale and location.







Officers' Park Sample  
Planting Plan



National Park Service  
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www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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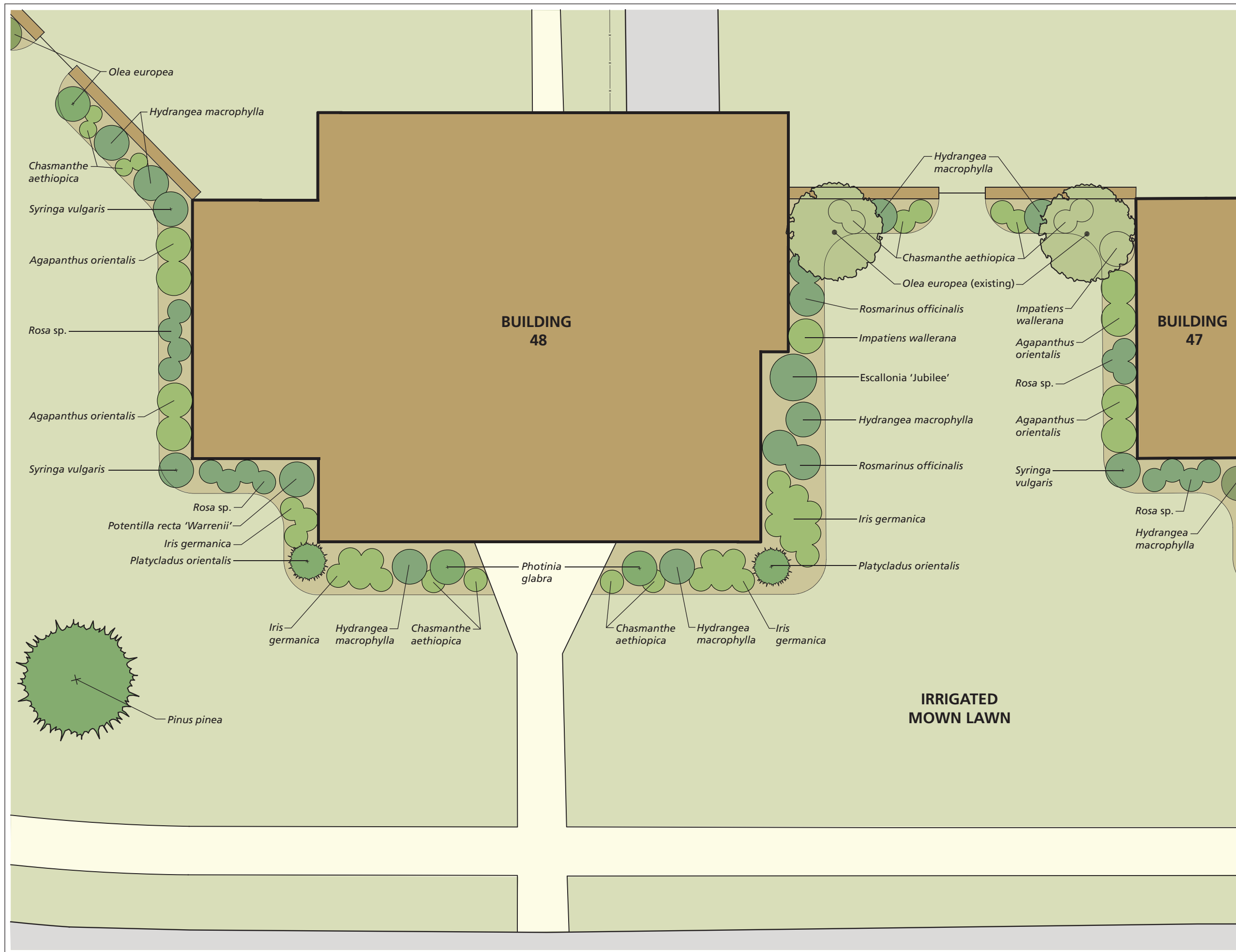
- Roads
- Walks
- Lawn
- Mulched planting bed
- Trees to retain
- Replacement trees
- Replacement woody shrubs and vines
- Replacement herbaceous vegetation

NOTE

All features shown in approximate scale and location.



Drawing 3.13





South Expansion –  
Service Treatment Plan



National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
5. Bartlett, Tree Inventory & Management Plan, 2010
6. Olmsted Center, Field Notes, 1/2011 and 7/2011

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LEGEND

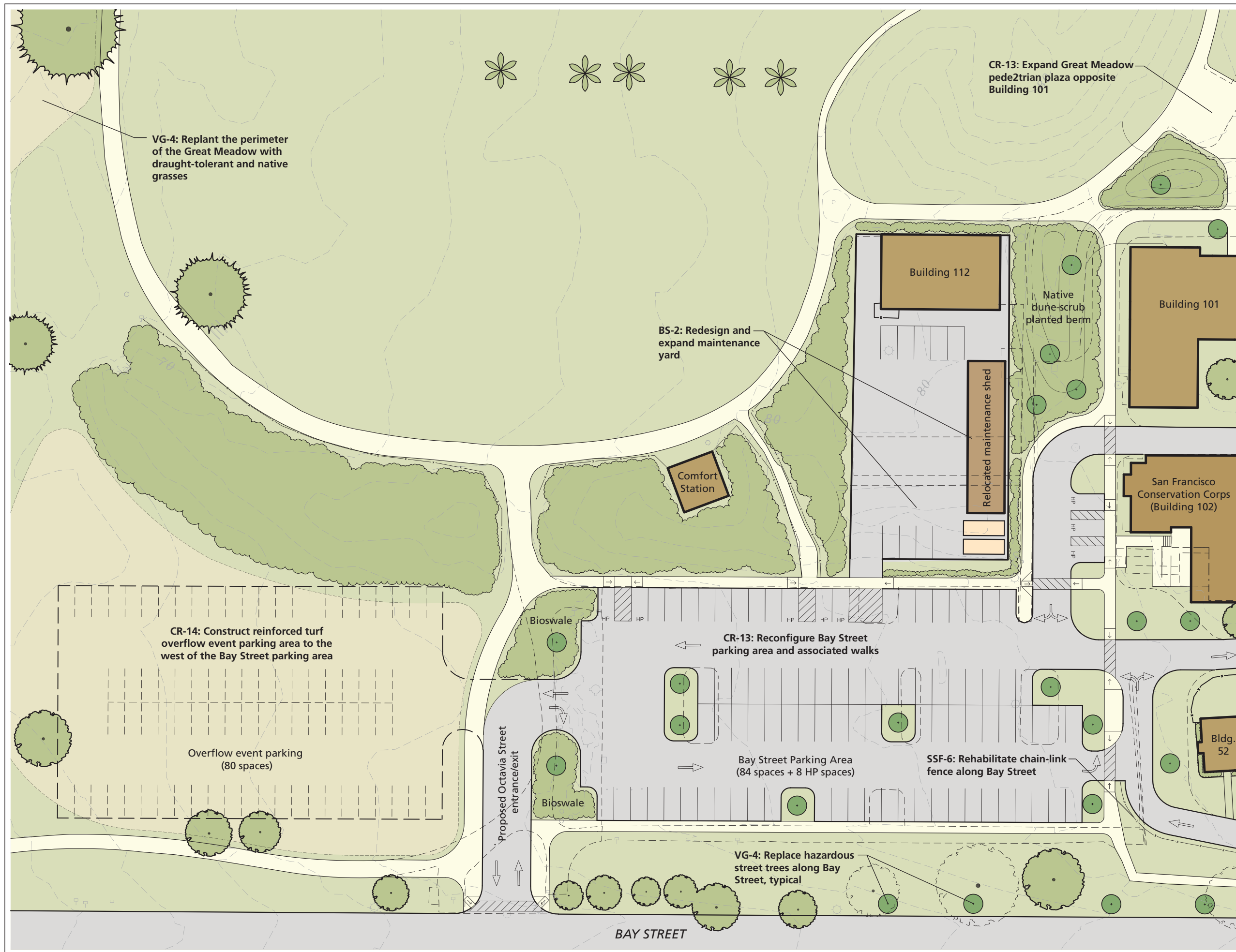
- Two-foot topographic contour
- Roads
- Walks
- Mown lawn
- Draught-tolerant meadow grass planting
- Shrubs/hedges
- Feature to remove
- Trees to remove
- Trees to retain
- Replacement trees
- Proposed 30 C.Y. landscape debris dumpster

NOTE

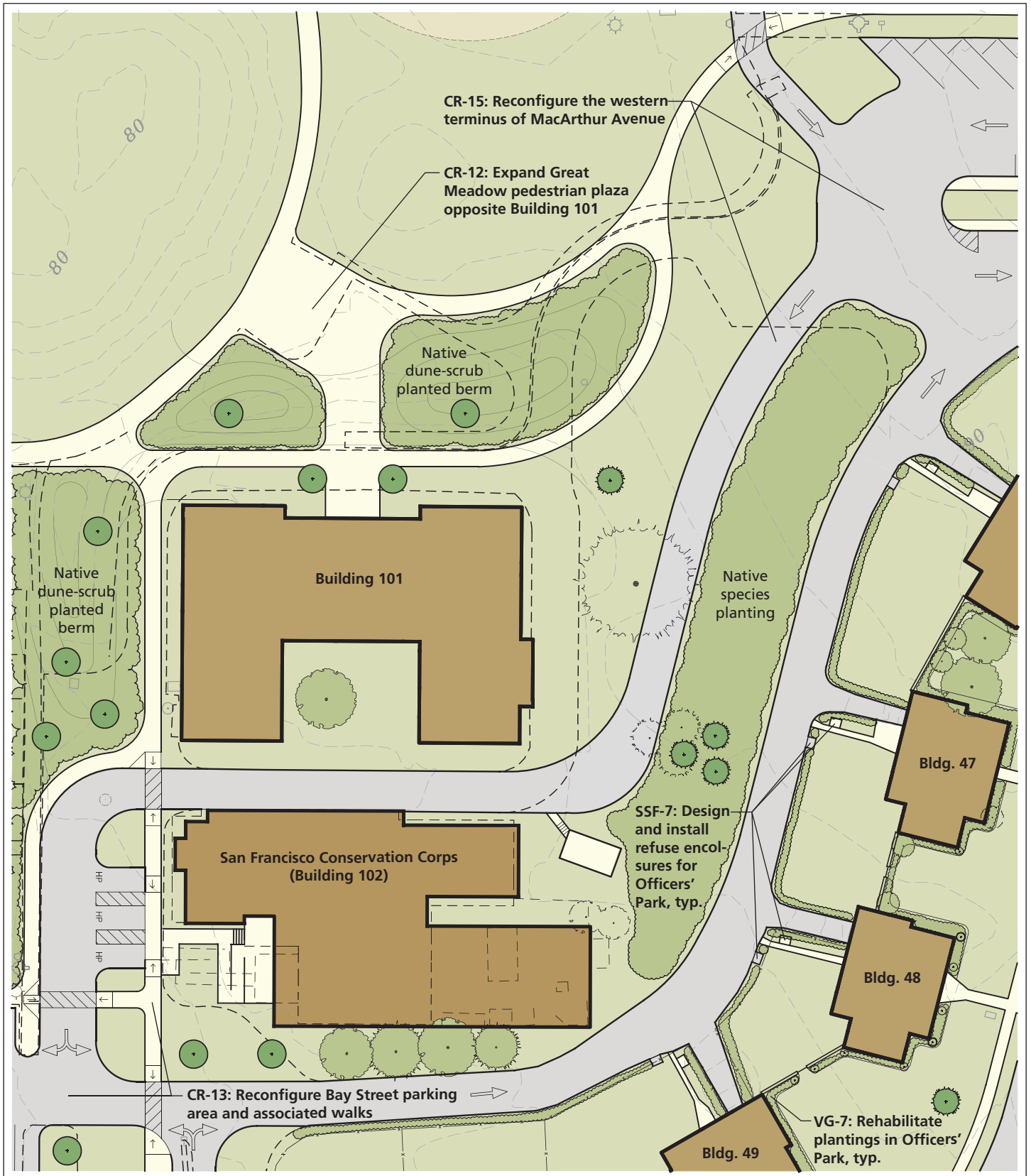
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Drawing 3.14
















**DRAWN BY**  
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

**NOTE**  
All features are shown in approximate scale and location.

- SOURCES**
1. PSOMAS, Site survey, 1998
  2. SF DPW, Orthophoto, 2001
  3. USGS, Orthophoto, 2009
  4. Bartlett, Tree Inventory, 2010
  5. OCLP, Field notes, 2011

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**LEGEND**

- |   |                              |   |                   |
|---|------------------------------|---|-------------------|
|  | Two-foot topographic contour |  | Feature to remove |
|  | Roads                        |  | Trees to remove   |
|  | Walks                        |  | Trees to retain   |
|  | Lawn                         |  | Replacement trees |
|  | Shrubs/hedges                |   |                   |

Cultural Landscape Report  
Upper Fort Mason  
Golden Gate National Recreation Area

**MacArthur Avenue Terminus  
Enlargement**



**Drawing 3.15**



## 4. IMPLEMENTATION

### IMPLEMENTATION PRIORITIES

Treatment tasks in the preceding chapter are summarized in the tables below and have been categorized into essential and desirable tasks. This prioritization recognizes that opportunities for collaboration, funding availability, interpretive and programmatic goals, project review and compliance, and other factors may impact the ultimate implementation sequence.

**Essential tasks** are defined as those that:

- address life-safety issues,
- substantially improve universal accessibility,
- address fundamental, character-defining features of the historic landscape, and/or
- considerably enhance the visitor experience with new interpretive potential.

**Desirable tasks** are defined as those that:

- address features that, while contributing the historic character of the landscape, are not character-defining and/or
- improve the overall landscape condition with only minimal enhancements to the visitor experience.

**Table 4.1: Essential landscape treatment tasks**

Landscape Treatment Area	Task ID	Task
East Black Point	V-1	Rehabilitate views to and from East Black Point
East Black Point	CR-1	Rehabilitate East Black Point slope walks for safe public access
East Black Point	CR-2	Rehabilitate walks for safe public access to the Officers' Quarters grounds
East Black Point	SSF-1	Design and install photo-sensitive and motion detection security lighting throughout the East Black Point slope
North Fortifications	V-2	Reestablish views to San Francisco Bay from the historic fortifications
North Fortifications	CR-3	Provide universally-accessible route to the Civil-War-era fortifications
North Fortifications	CR-4	Rehabilitate the Quarters 4 garden terrace
North Fortifications	CR-5	Stabilize McDowell Avenue and rehabilitate the searchlight shelter for North Cliff overlook
Central Cantonment	CR-6	Rehabilitate the historic Parade Ground
Central Cantonment	CR-7	Rehabilitate hostel grounds for universal accessibility

Landscape Treatment Area	Task ID	Task
Central Cantonment	CR-8	Reconfigure parking to the south of Building 201 to enhance universal accessibility and historic character
Central Cantonment	VG-2	Rehabilitate Chapel and NCO Quarters grounds
Northwest Embankment	CR-10	Improve pedestrian connection to Lower Fort Mason
Northwest Embankment	VG-3	Rehabilitate Monterey cypress windbreak and adjacent embankment
Great Meadow	V-4	Reestablish westerly views across the Great Meadow
Great Meadow	VG-4	Replant the perimeter of the Great Meadow with drought-tolerant and native grasses
Great Meadow	VG-5	Replace hazardous street trees along Bay Street
Great Meadow	SSF-3	Rehabilitate chain-link fences throughout the Great Meadow
Great Meadow	SSF-4	Evaluate exercise equipment circuit for replacement or removal
South Expansion	V-5	Rehabilitate views of the Chapel from the Franklin Street entrance
South Expansion	BS-2	Redesign and expand existing maintenance yard
South Expansion	CR-13	Reconfigure Bay Street parking area and associated walks
South Expansion	CR-15	Reconfigure the western terminus of MacArthur Avenue
South Expansion	CR-16	Re-open MacArthur Avenue vehicular gate to pedestrians and bicycles
South Expansion	VG-8	Reestablish missing trees along MacArthur Avenue
South Expansion	VG-9	Rehabilitate plantings at MacArthur Avenue gate

**Table 4.2: Desirable landscape treatment tasks**

Landscape Treatment Area	Task ID	Task
East Black Point	VG-1	Rehabilitate East Black Point Officers' Quarters grounds
Central Cantonment	V-3	Reestablish westward views from the Parade Ground
Central Cantonment	CR-9	Rehabilitate community garden for improved accessibility and to better integrate with the surrounding landscape
Central Cantonment	SSF-2	Construct dumpster enclosure at the western end of Funston Road
East Waterfront	BS-1	Improve visibility of McDowell Avenue gateway
Great Meadow	CR-11	Formalize Great Meadow social trail and construct a new overlook plaza above the railroad tunnel
Great Meadow	CR-12	Expand Great Meadow pedestrian plaza opposite Building 101
South Expansion	CR-14	Construct reinforced turf overflow event parking area to the west of the Bay Street parking area
South Expansion	CR-17	Reconfigure the Quad parking area and associated walks
South Expansion	VG-6	Rehabilitate foundation plantings in the Quad
South Expansion	VG-7	Rehabilitate plantings in Officers' Park
South Expansion	SSF-5	Rehabilitate chain-link fence above the Van Ness Avenue retaining wall
South Expansion	SSF-6	Rehabilitate chain-link fence along Bay Street
South Expansion	SSF-7	Design and install refuse enclosures for Officers' Park residences



## INTEGRATING TREATMENT RECOMMENDATIONS WITH FMSS

Upper Fort Mason’s cultural landscape is managed through the National Park Service Facility Management Software System (FMSS). This system is structured to track costs associated with asset management, as well as asset condition. FMSS is also fundamental in generating funding requests for capital improvement projects. Integration with FMSS is essential to implementing the landscape treatment recommendations of this report.

Physical features, or “assets,” of the cultural landscape are tracked in FMSS through a variety of “asset types,” including roads, parking areas, trails, maintained landscapes, buildings, waste water systems, electrical systems, and/or fortifications. The majority of Upper Fort Mason’s landscape-related assets, however, are tracked under the maintained landscape asset type.

The existing organization of Upper Fort Mason’s maintained landscape asset type reflects the geographic landscape areas, or “locations,” that are currently maintained by park maintenance staff. Existing locations encompass nearly the entire Upper Fort Mason site, with the exception of four areas: the Bay Street frontage, the Northwest Embankment, the NCO Quarters grounds, and the East Black Point Officers’ Quarters grounds, which are proposed additions to the Upper Fort Mason FMSS hierarchy (Drawing 4.1).

The table below reorganizes the landscape treatment tasks included in this report according to FMSS Asset Type and Location as a first step in translating landscape treatment recommendations into project funding requests. Potential FMSS work types and sub-types, along with materials are provided to facilitate cost estimating.

Notes:

1. Bold items in the table below indicate recommended additions or changes to the existing Upper Fort Mason FMSS hierarchy.
2. See treatment task narratives in chapter 3 for work descriptions.
3. FMSS Work Types and Sub-types:

### **Facility Maintenance (FM)**

CM	Corrective Maintenance
CR	Component Renewal
DEM	Demolition
DM	Deferred Maintenance
EM	Emergency
LMAC	Legis Mandate Accessibility

### **Facility Operations (FO)**

GC	Grounds Care
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### **Capital Improvements (CI)**

LMAC	Legis Mandate Accessibility
NC	New Construction

**Table 4.3: Landscape treatment and the Upper Fort Mason FMSS hierarchy (38036)**

FMSS Asset Types	FMSS Locations	CLR Treatment Tasks/FMSS Work Orders	CLR Treatment Task Components/ FMSS Tasks	FMSS Work Type/ Sub-type	Units of Material	Unit of Measure
<b>Road (1100)</b>	McDowell Avenue (RN-405, FM-325, 38334)	CR-5: Stabilize McDowell Avenue and rehabilitate the searchlight shelter for North Cliff overlook	Refer to structural evaluation for McDowell Avenue repairs	FM / EM or DM	field check	n/a
	Road, MacArthur Avenue Loop West (RN-600, 79913)	CR-8: Reconfigure parking to the south of Building 201 to enhance universal accessibility and historic character	1. Reset curb	FM / DM	400	LF
			2. Install curb ramps	CI / LMAC	2	EA
			3. Install wheel stops	CI / NC	20	EA
		4. Construct sidewalk along south side of MacArthur Avenue median	CI / NC	1,100	SF	
	Franklin Street (RN-606)	VG-2: Rehabilitate Chapel and NCO Quarters grounds	Construct a median rumble-strip at the intersection of Pope Road and Franklin Street	CI / NC	680	SF
<b>Parking Area (1300)</b>	Pope Road Parking Area B (RN-912B, 103908)	VG-2: Rehabilitate Chapel and NCO Quarters grounds	Construct universally-accessible parking spaces to the west of Building 235	CI / LMAC	1,220	SF
	Building 112 Fort Mason Parking Lot (RN-0985, 108264)	BS-2: Redesign and expand existing maintenance yard	1. Relocate maintenance yard entrance and expand paving to the south	CI / NC	3530	SF
			2. Replace the perimeter fence with a board fence	FM / DM	460	LF
			3. Install thirty cubic yard landscape debris dumpsters	CI / NC	2	EA
			4. Construct an earthen berm to the east of the yard	CI / NC	5,500	SF
			5. Plant the berm with native dune-scrub vegetation	CI / NC	5,500	SF
			6. Plant new low shade trees	CI / NC	4	EA
	Parking Lot, Upper Fort Mason (RN-P916, 38292)	CR-13: Reconfigure Bay Street parking area and associated walks	1. Reconfigure the entrance drive between Buildings 101 and 103	CI / NC	4,000 pavement	SF
				CI / NC	500 curbing	LF
			2. Remove the entrance drive to the north, east, and west of Building 101	FM / DEM	10,700	SF
			3. Construct a new Octavia Street entrance	CI / NC	5,500	SF
			4. Remove the chain-link fence along the eastern side of the parking area	FM / DEM	100	LF
			5. Realign curb adjacent to Buildings 102 and 52	CI / NC	500	LF
6. Construct new planted medians in the parking area			CI / NC	3,400	SF	
7. Install new pedestrian walks			CI / LMAC	3,550	SF	
8. Resurface the lot with permeable pavement and restrripe			FM / DM	35,200	SF	
9. Plant new islands and parking area perimeter with low shade trees			CI / NC	12	EA	
10. Construct bio-retention swales at the western end of the lot	CI / NC	3,200	SF			

FMSS Asset Types	FMSS Locations	CLR Treatment Tasks/FMSS Work Orders	CLR Treatment Task Components/FMSS Tasks	FMSS Work Type/Sub-type	Units of Material	Unit of Measure
<b>Parking Area (cont.)</b>	Parking Lot, Upper Fort Mason (cont.)	CR-14: Construct reinforced turf overflow event parking area to the west of the Bay Street parking area	1. Excavate the area of overflow parking lot	CI / NC	27,300	SF
			2. Construct a structurally stable base	CI / NC	27,300	SF
			3. Resurface with topsoil and establish native and drought-tolerant grass planting	CI / NC	27,300	SF
	<b>Parking Lot, Quad (proposed)</b>	CR-17: Reconfigure the Quad parking area and associated walks	1. Reconfigure the parking area perimeter and add two planting islands	FM / DM	30,600	SF
			2. Construct sidewalks along the perimeter of the parking area	CI / NC	3,800	SF
			3. Resurface and restripe the lot	FM / DM	30,600	SF
			4. Plant small shade trees on new median islands	FM / DM	4	EA
<b>Trail (2100)</b>	Great Meadow Paths (38342)	CR-11: Formalize Great Meadow social trail and construct a new overlook plaza above the railroad tunnel	1. Surface the social trail with bituminous concrete	CI / NC	7,700	SF
			2. Design and construct a pedestrian overlook plaza above the railroad tunnel	CI / NC	1,450	SF
			3. Install new benches	CI / NC	5	EA
		CR-12: Expand Great Meadow pedestrian plaza opposite Building 101	1. Reconfigure and expand pedestrian plaza and associated walks	CI / NC	6,900	SF
			2. Construct new berms	CI / NC	6,900	SF
			3. Plant new shade trees on berms	CI / NC	5	EA
	4. Plant new berms with native dune-scrub vegetation		CI / NC	6,900	SF	
	5. Install new benches	CI / NC	4	EA		
	Black Point Battery Trail (45597)	CR-1: Rehabilitate East Black Point slope walks for safe public access	1. Repair/replace concrete walks and stairs	FM / LMLS	field check	n/a
			2. Repair/replace concrete retaining walls and cribbing	FM / DM	field check	n/a
			3. Install handrails as needed to meet life-safety codes	FM / LMLS	field check	n/a
	<b>East Black Point Officers' Quarters Trails (proposed)</b>	CR-2: Rehabilitate walks for safe public access to the Officers' Quarters grounds	Replace heaved and cracked concrete walks in-kind	FM / DM	5,200	SF
	<b>Civil War-era Fortifications Trail (proposed)</b>	CR-3: Provide universally-accessible route to the Civil War-era fortifications	1. Remove picnic area	FM / DEM	550	SF
			2. Remove timber steps	FM / DEM	1	LS
			3. Replace concrete stairs in-kind	FM / LMLS	140	SF
			4. Design and construct new permeable pedestrian walks on the Civil War-era terreplein	CI / LMAC	3,700	SF
			5. Install low fencing and safety barriers as needed	CI / LMAC	field check	n/a
6. Design and construct a universally-accessible ramp to the west of Quarters 4			CI / LMAC	1,300	SF	
7. Design and construct a universally-accessible ramp to the north of Building 241			CI / LMAC	1,300	SF	

FMSS Asset Types	FMSS Locations	CLR Treatment Tasks/FMSS Work Orders	CLR Treatment Task Components/ FMSS Tasks	FMSS Work Type/ Sub-type	Units of Material	Unit of Measure
<b>Maintained Landscape (3100)</b>	Community Garden (38268)	CR-9: Rehabilitate community garden for improved access and to better integrate with surrounding landscape	1. Replace deteriorated perimeter fence	FM / DM	810	LF
			2. Install new gate at northeast corner of perimeter fence to accommodate pedestrian connection	FM / DM	1	EA
			3. Construct new pedestrian walkway along Pope Road	CI / LMAC	1,000	SF
			4. Resurface paths within the community garden with stonedust or decomposed granite	FM / LMAC	field check	n/a
			5. Add vegetative screen planting to southern side of community garden	FM / DM	8	EA
	Great Meadow (38278)	V-4: Reestablish westerly views across the Great Meadow	1. Remove blue gums that block views to the Palace of Fine Arts	FM / DM	3	EA
			2. Plant three replacement blue gum cultivars that mature at a lower height	FM / DM	3	EA
			3. Remove landscape debris pile from the northwest corner of the Great Meadow	FM / DM	1	EA
		VG-4: Replant the perimeter of the Great Meadow with drought-tolerant and native grasses	FO / GC	173,000	SF	
		SSF-4: Replace exercise equipment circuit with new fixtures	FM / DM	field check	n/a	
	Parade Ground (FM-323, 38290)	V-3: Reestablish westward views from the Parade Ground	1. Limb up eucalyptus to open westward views	FM / DM	field check	n/a
			2. Remove selected eucalyptus and Monterey cypress from lower portions of the embankment	FM / DM	5	EA
		CR-6: Rehabilitate the historic Parade Ground	1. Relocate fence along the northern side of the community garden	FM / CR	225	LF
			2. Install new paths along the perimeter of the Parade Ground	FM / CR	5,200	SF
			3. Install new picnic facility (tables and trash receptacle)	CI / NC	3	EA
			4. Construct community garden overlook and staircase	CI / NC	610	SF
			5. Plant new trees along the southern edge of the Parade Ground	FM / CR	10	SF
			6. Construct post and rail fence segments	FM / CR	120	LF
			7. Complete fine grading and seeding of central lawn	FM / CR	22,300	SF
		SSF-2: Construct dumpster enclosure at the western end of Funston Road	CI / NC	1	EA	

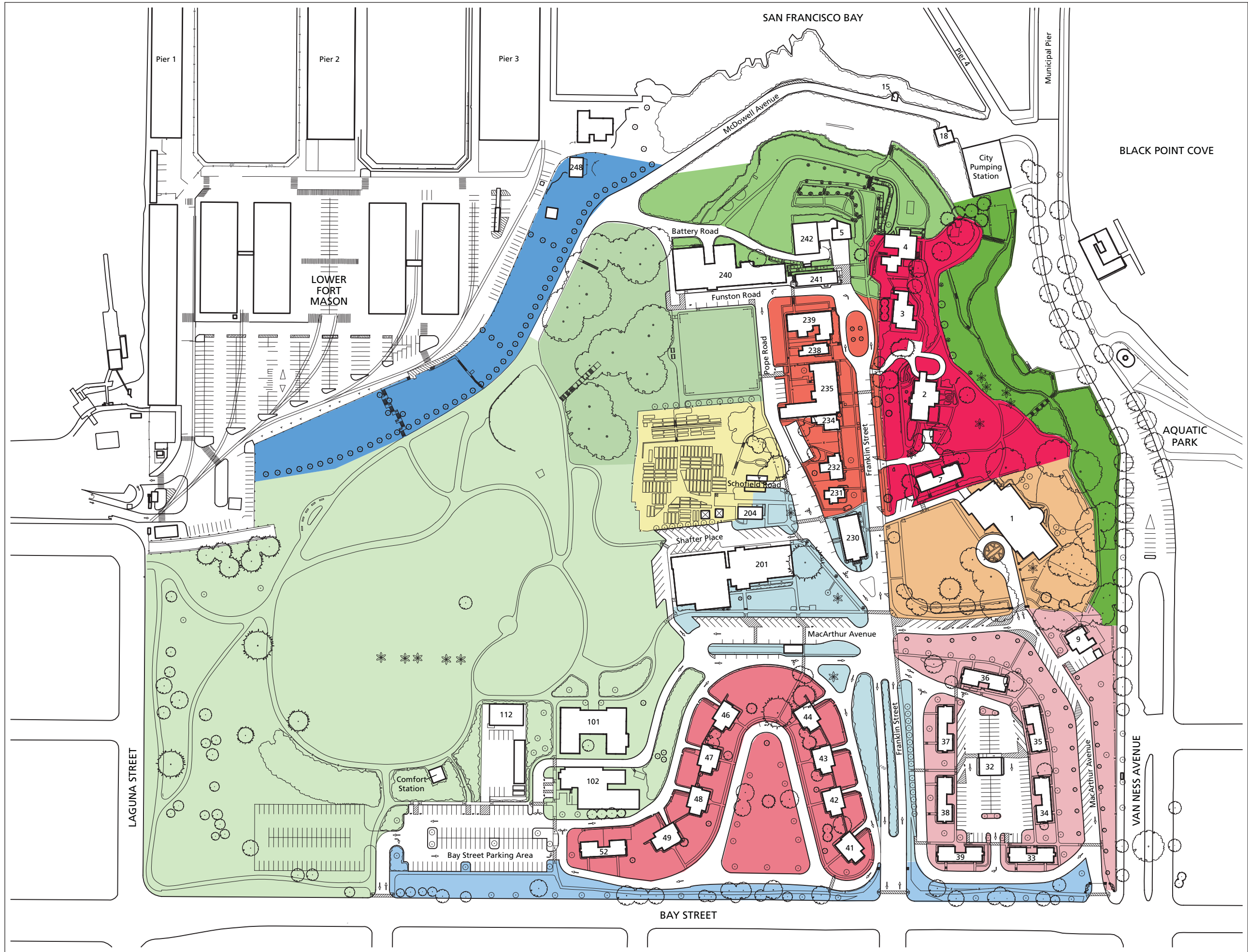
FMSS Asset Types	FMSS Locations	CLR Treatment Tasks/FMSS Work Orders	CLR Treatment Task Components/FMSS Tasks	FMSS Work Type/Sub-type	Units of Material	Unit of Measure	
<b>Maintained Landscape (cont.)</b>	Picnic Area, Black Point Battery Landscaped Area (40790)	V-2: Reestablish views to San Francisco Bay from the historic fortifications	1. Remove overgrown trees from the historic fortifications	FM / DM	65	EA	
			2. Remove invasive shrubs and groundcovers that obstruct views	FM / DM	12,000	SF	
			3. Reestablish cordyline marking the crest of the slope	FM / DM	26	EA	
			4. Undertake slope stabilization planting	FM / DM	25,000	SF	
	Colonels Row Landscaped Area (85968)	VG-7: Rehabilitate foundation plantings in Officers' Park	1. Remove/prune existing overgrown foundation plantings	FM / DM	3,900	SF	
			2. Reestablish woody and herbaceous foundation plantings at all nine Officers' Park residences	FM / DM	3,900	SF	
			3. Replace missing trees in Officers' Park residences' lawns	FM / DM	5	EA	
			4. Replace missing trees along the perimeter of the Officers' Park green	FM / DM	11	EA	
	Quad (3B) Landscaped Area (85969)	VG-6: Rehabilitate plantings in the Quad	Construct permanent wooden trash screens consistent with the <i>Parkwide Site Furnishings Standards</i> along the outer loop road adjacent to Officers' Park	CI / NC	9	EA	
			1. Remove/prune existing overgrown foundation plantings	FM / DM	field check	n/a	
			2. Reestablish woody and herbaceous foundation plantings at all eight Quad buildings	FM / DM	5,700	SF	
		VG-8: Reestablish missing trees along MacArthur Avenue	3. Plant shade trees in the Quad area	FM / DM	12	EA	
			Reestablish missing shade trees	FM / DM	22	EA	
	Headquarters Entrance Landscaped Area (85970)	CR-8: Reconfigure parking to the south of Building 201 to enhance universal accessibility and historic character	SSF-5: Rehabilitate chain-link fence above the Van Ness Avenue retaining wall	FM / DM	500	LF	
			1. Replace missing evergreen trees flanking entrance walk	FM / DM	2	EA	
	Black Point Slope Landscaped Area (85972)	V-1: Rehabilitate views to and from East Black Point	2. Resurface tree lawn (sod or pavement)	FM / DM	4,000	SF	
			1. Remove invasive trees, including blackwood acacia and rock elm	FM / DM	24 trees	EA	
				5,000 saplings	SF		
				2. Remove invasive shrubs and groundcovers, including poison hemlock, cotoneaster, English ivy, blackberry, and poison oak	FM / DM	52,000	SF
				3. Reestablish cordyline marking the crest of the slope	FM / DM	4	EA
4. Undertake slope stabilization planting	FM / DM	52,000	SF				

FMSS Asset Types	FMSS Locations	CLR Treatment Tasks/FMSS Work Orders	CLR Treatment Task Components/FMSS Tasks	FMSS Work Type/Sub-type	Units of Material	Unit of Measure
Maintained Landscape (cont.)	Officers' Quarters Landscaped Area (proposed)	VG-1: Rehabilitate East Black Point Officers' Quarters grounds	1. Reset timber wall along the west façade of Quarters 7	FM / DM	1	EA
			2. Rehabilitate foundation planting beds along the north and east facades of Quarters 7	FM / DM	240	SF
			3. Replace deteriorated concrete walks along the north side of Quarters 2 in-kind	FM / DM	800	SF
			4. Replace overgrown yew to the west of Quarters 2 in-kind	FM / DM	1	EA
			5. Replace overgrown buddleia adjacent to the Quarters 2 port-cochère in-kind	FM / DM	1	EA
			6. Replace junipers surrounding the Quarters 2 rose garden with boxwood edging	FM / DM	100	LF
			7. Retain and maintain existing roses, sheared hedges, and foundation plantings at Quarters 2	FO / GC	n/a	n/a
			8. Retain and maintain foundation plantings along the south façade of Quarters 3	FO / GC	n/a	n/a
			9. Replace deteriorated concrete walks to the east of Quarters 4 in-kind	FM / DM	700	SF
			10. Retain and maintain foundation plantings along the south and west facades of Quarters 4	FO / GC	n/a	n/a
			11. Rehabilitate plantings along the north façade of Quarters 4 consistent with public access improvements to the garden terrace	FM / CR	275	SF
	NCO Quarters Landscaped Area (proposed)	VG-2: Rehabilitate Chapel and NCO Quarters grounds	1. Reestablish foundation planting beds on the east façades of Buildings 239, 238, 235, 234, 232, and 231.	FM / DM	2,500	SF
			2. Replace out-of-scale Monterey cypresses on the Franklin Street traffic island in-kind	FM / DM	4	EA
			3. Install automated, water-conserving irrigation system throughout the NCO Quarters grounds consistent with the <i>Fort Mason Water Conservation Irrigation Upgrades Project</i>	CI / NC	38,500	SF
			4. Replace out-of-scale yews at the four corners of the Chapel	FM / DM	4	EA
			5. Replace shrubs bordering all four side of the Chapel	FM / DM	950	SF
			6. Replace missing blue gum to the east of Building 231	FM / DM	1	EA
			7. Replace missing cordyline in the tree lawn to the east of Building 231	FM / DM	2	EA
			8. Replace missing four-foot high privet hedge along the south side of Building 231	FM / DM	40	LF
			9. Replace missing blue gum to the east of Building 232	FM / DM	1	EA
			10. Replace missing pine tree to the west of Building 232	FM / DM	1	EA

FMSS Asset Types	FMSS Locations	CLR Treatment Tasks/FMSS Work Orders	CLR Treatment Task Components/FMSS Tasks	FMSS Work Type/Sub-type	Units of Material	Unit of Measure
<b>Maintained Landscape (cont.)</b>	<b>NCO Quarters Landscaped Area (cont.)</b>	VG-2: Rehabilitate Chapel and NCO Quarters grounds (cont.)	11. Replace agave in the tree lawn flanking the walk to Building 232	FM / DM	2	EA
			12. Replace missing agave in the tree lawn flanking the walk to building 234	FM / DM	2	EA
			13. Regrade concrete walk and add stairs on the north side of Building 235 to accommodate universal accessibility	FM / LMAC	280	SF
			14. Replace missing concrete walk at the southern-most entrance to Building 235	FM / DM	100	SF
			15. Reconfigure concrete walk to the west of Building 235 to accommodate a new stairway at the rear building entrance	FM / DM	260	SF
			15. Replace missing avocado to the west of Building 253	FM / DM	1	EA
			16. Replace missing juniper on the east façade between Buildings 235 and 234	FM / DM	1	EA
			17. Replace missing two-foot high boxwood hedge along the west and north sides of Building 239	FM / DM	275	LF
	<b>Northwest Embankment Landscaped Area (proposed)</b>	CR-11: Improve pedestrian connection to Lower Fort Mason	1. Construct new concrete staircase on the Northwest Embankment leading from the Great Meadow to Lower Fort Mason	CI / NC	1,000	SF
			2. Install new benches on landings	CI / NC	4	EA
		VG-3: Rehabilitate Monterey cypress windbreak and adjacent embankment	1. Remove existing mature Monterey cypress windbreak	FM / DM	88	EA
			2. Plant replacement Monterey cypress windbreak	FM / DM	63	EA
			3. Plant native grasses or native coastal dune scrub to stabilize slope	FM / DM	51,200	SF
	<b>Bay Street Landscaped Area (proposed)</b>	VG-5: Replace hazardous street trees along Bay Street	1. Remove existing hazardous trees	FM / DM	3	EA
			2. Replace missing trees	FM / DM	11	EA
		VG-9: Rehabilitate plantings at McArthur Avenue gate	1. Remove existing overgrown cryptomeria	FM / DM	4	EA
			2. Replant dwarf cryptomeria	FM / DM	4	EA
			3. Plant herbaceous perennials within the gate's wing walls	FM / CR	250	SF
		SSF-6: Rehabilitate chain-link fence along Bay Street	1. Replace existing galvanized chain-link with black vinyl coated chain-link for one hundred feet along Bay Street on either side of Franklin Street entrance	FM / DM	200	LF
			2. Remove all other chain-link bordering Bay Street (adjacent to the Quad and Officers' Park)	FM / DEM	740	LF

FMSS Asset Types	FMSS Locations	CLR Treatment Tasks/FMSS Work Orders	CLR Treatment Task Components/FMSS Tasks	FMSS Work Type/Sub-type	Units of Material	Unit of Measure	
<b>Maintained Landscape (cont.)</b>	<b>Headquarters Entrance Landscaped Area (proposed)</b>	V-5: Rehabilitate views of the Chapel from the Franklin Street entrance	1. Remove non-historic purple leaf plum trees from the entrance area	FM / DM	42	EA	
			2. Plant low-growing vegetation on the median islands	FM / DM	13,200	SF	
			3. Replant small flowering trees along the east side of the street, adjacent to the Quad	FM / DM	15	EA	
<b>Building (4100)</b>	American Youth Hostel (AYH) Dormitory (FM-240, 38234)	CR-7: Rehabilitate hostel grounds for universal accessibility	1. Reset curb along the north side of Funston Road	FM / LMAC	300	LF	
			2. Widen sidewalk to 48" width minimum	FM / LMAC	1,300	SF	
			3. Replace hedge with planting strip	FM / CR	130	LF	
<b>Waste Water System (5200)</b>	Waste Water System, Fort Mason (87895)	CR-1: Rehabilitate East Black Point slope walks for safe public access	Repair drainage infrastructure on East Black Point slope	FM / DM	field check	n/a	
<b>Electrical System (5400)</b>	Electrical Distribution System, Fort Mason (38269)	VG-1: Rehabilitate East Black Point Officers' Quarters grounds	Repair landscape lighting between Quarters 3 and 4	FM / DM	field check	n/a	
			SSF-1: Design and install photo-sensitive and motion detection security lighting throughout the East Black Point slope	1. Repair/retrofit existing landscape lighting	FM / DM	field check	n/a
				2. Supplement existing landscape lighting with compatible lighting as needed	CI / NC	field check	n/a
<b>Fortification (3700)</b>	Batteries East and West (FM-0329, 38242)	CR-4: Rehabilitate the Quarters 4 garden terrace	1. Remove chain-link fence along the western side of the terrace	FM / DEM	150	LF	
			2. Excavate saturated soil to the south/west of the rampart	FM / CM	4,500	SF	
			3. Install drainage	FM / CM	4,500	SF	
			4. Install new paths	FM / CM	1,600	SF	
			5. Complete fine grading and seeding	FM / CM	4,500	SF	
	Searchlight Shelter (FM-15, 38339)	CR-5: Stabilize McDowell Avenue and rehabilitate the searchlight shelter for North Cliff overlook	Design North Cliff overlook to be integrated with the historic searchlight shelter	CI / NC	1	EA	
<b>No Asset Code Available (9999)</b>	<b>MacArthur Avenue Entrance Gate and Piers (proposed)</b>	CR-17: Re-open MacArthur Avenue entrance gate to pedestrians and bicycles	1. Fix gate in an open position	CI / NC	1	n/a	
			2. Install new removable bollards at gate	CI / NC	4	EA	
<b>Outside of Upper Fort Mason</b>	<b>Building 18 (City Pumping Station Garage)</b>	BS-1: Improve visibility of McDowell Avenue gateway	1. Rehabilitate Building 18 with a green façade and roof	CI / NC	1	EA	
			2. Construct an additional park entrance sign at the entrance to McDowell Avenue in a high visibility location	CI / NC	1	EA	





Cultural Landscape Report

Upper Fort Mason  
Golden Gate National  
Recreation Area

San Francisco, California

FMSS Maintained  
Landscape Location  
Diagram



National Park Service  
Olmsted Center for Landscape Preservation  
www.nps.gov/oclp

SOURCES

1. PSOMAS, Site Survey, 11/24/1998
2. San Francisco Dept. of Public Works, Orthophotograph - San Francisco - 1 Foot Resolution, 2001
3. USGS, Orthophotograph, 2009
4. Terra Cognita, Fort Mason Plant Inventory, 8/2/2010
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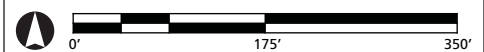
Christopher Beagan, OCLP  
AutoCAD 2011, Illustrator CS3, 2012

LEGEND

- Great Meadow (38278)
- Parade Ground (38290)
- Black Point Battery Landscaped Area (40790)
- Black Point Landscaped Area (85972)
- Headquarters Entrance Landscaped Area (85970)
- Bay Street Landscaped Area (PROPOSED)
- Northwest Embankment (PROPOSED)
- Quad (3B) Landscaped Area (85969)
- Colonel's Row Landscaped Area (85968)
- NCO Quarters Landscaped Area (PROPOSED)
- Officer's Quarters Landscaped Area (PROPOSED)
- Community Garden (38268)
- Officer's Club Landscape Area (85967)

NOTE

All features are shown in approximate scale and location.



Drawing 4.1



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# APPENDIX A: UPPER FORT MASON TREE TREATMENT ACTION PLAN –PRIORITY 1 TREES

Prepared by Andrea Lucas and Sarah Dominsky based on the July 2010 “Fort Mason Tree Inventory and Management Plan 2010” Bartlett Tree Experts, revision #2 (November 17, 2010).

## **PROJECT GOAL**

The project goal is to reduce hazards on the Upper Fort Mason property via a phased treatment plan for hazard trees. There will be removal, cabling, and pruning as described to manage public safety. Replacement will be determined in the 2011 CLR.

## **FORT MASON CULTURAL LANDSCAPE (2011 CLR)**

The project will align with the upcoming report to develop an overall treatment strategy for improving and restoring the historic landscape at Fort Mason, based upon the concept of “evolved cultural landscape.” In 2011, NPS’s Olmsted Center for Landscape Preservation will create a Cultural Landscape Report directing treatment, replacement, and management strategies for the Upper Fort Mason landscape.

## **HAZARD TREE REPLACEMENT**

A recent arborist’s report reviewed 427 trees for health and safety. The report determined the trees that are high risk for falling or dropping limbs and injuring people or property. These are Priority 1 for being removed, pruned, or to have cables added. The trees will be replaced per the recommendations of the upcoming Olmsted Center for Landscape Preservation Cultural Landscape Report. Priority 1 actions will take place starting this winter in 3 phases:

<b>PRIORITY 1</b>	<b>Phase 1.1</b>	<b>Phase 1.2</b>	<b>Phase 1.3</b>	<b>TOTAL</b>
<b>Remove</b>	28	13	5	<b>46</b>
<b>Cable</b>	15	19	4	<b>38</b>
<b>Prune</b>	9	67	19	<b>95</b>
<b>Total</b>	<b>52</b>	<b>99</b>	<b>28</b>	<b>179</b>

## **PROJECT BACKGROUND**

An arborist's survey, analysis and report of tree condition in Upper Fort Mason were prepared July, 2010. 427 trees (54 different species) were surveyed. The report is titled: "Fort Mason Tree Inventory Management Plan 2010," inventoried and prepared by Bartlett Inventory Solutions/Bartlett Tree Experts; Patrick Anderson, ISA Board-Certified Master Arborist & Municipal Specialist, RCA #475, dated July 2010. The purpose of the report included to preserve as many trees as possible as well as reduce hazard specimens. Attributes that were surveyed included the physical location (with GPS), visual assessments for health and hazard, and estimation of age.

The report included an analysis for failure of each tree and the potential danger to person or property. This "Failure Rating" was based on three attributes; the potential to fall or drop limbs, the size of the tree or limb, and the potential target such as a busy trail, house, street or forested area. The most likely to fail with the largest and heaviest limbs or trunk, over the busiest areas were rated to pose the most risk - a "4". All "4's" and many "3's" are the first priority as described below. Per the Bartlett report Priority 1 Trees are classified using the **Visual Tree Structure Analysis System**. Priority class recommendations take into consideration tree species, location value, age, and hazard rating.

The Hazard Rating is based on Failure Potential, Size of Defective Part, and Target Rating; 4 being the most likely to fail, the largest size and the highest occupancy of the target, and 1 being the lowest.

- Failure Potential 1-4; rates and that the structural defects will result in failure.
- Size of the Defective Part 1-4; the greater part that fails will result in larger damages.
- Target Rating 1-4; use and occupancy of the area that would be struck by the defective part.

The arborists provided recommendations for maintenance, stabilization or removal. They prioritized the trees for year 1, 2, and 3 (Priority 1, 2 and 3) by their likelihood to fail, weight, and the potential target.



## **COURSE OF ACTION**

- Treat all Priority 1 (high risk) trees by removal, pruning, or adding support (cables) without delay.
- Procure analysis of 15 trees determined in the report to need further understanding of potential failure; some of these are large and potentially very dangerous.
- Method:
  - Field Review: Billy Vogel & Andrea Lucas
  - Compliance
  - Bidding
  - Notification – public and staff
  - Signage and traffic control
  - Action and disposal
  - Cultural Landscape Workshop; CLR Part II for recommendations for replanting
  - Replant as determined; provide continued maintenance
  - Ongoing: continue with all phases of tree treatment per Bartlett report.

## **FIELD REVIEW**

NPS team Billy Voge, Ruben Limon, Steve Haller, Andrea Lucas, and Sarah Dominsky surveyed the grounds of Upper Fort Mason in order to review the trees listed by Bartlett Inventory Solutions as Priority 1 for treatment. The NPS team's phasing below was based on the visual review of the trees as well as the findings of Bartlett.

## **SCOPE OF THIS DOCUMENT**

The Priority 1 trees from the Bartlett report have been divided into two phases to spread out the expense of tree removal, pruning and cabling. The phasing in general prioritized those trees first that were over Bay Street or over structures and occupied areas at Fort Mason. The phasing recommendation was done by a maintenance supervisor and a landscape architect who are not arborists. The splitting into phases is the team's guess at which trees should come first for removal pruning or cabling. However, note that we cannot predict which tree

might fail before another, or what it might hit, and we are not trying to “second guess” the arborists. All Priority 1 trees need urgent treatment.

We noted that the trees listed in the tables in the Bartlett report did not perfectly match the map graphics in that document. This is one reason for the field visit(s) that we made, however this recommendation relies on the tables in the Bartlett report. Refer to the Bartlett report for hazard classification and recommendations.

**SCOPE OF WORK**

Note: Tree #402 is bid to be removed in the Fort Mason Entry Bay and Franklin Street Pedestrian Safety Upgrades in the fall of 2010.

Trees marked with asterisk(s) are for NPS action prior to work.

**1. PHASE 1 TREATMENT**

**1.1 Survey Trees and Provide Treatment Recommendations**

Trees to be surveyed; 15 count:

Tree(s)	Course of Action
7, 34, 43, 93, 206, 225, 226, 227, 258, 308, 312, 402 (not in contract), 403	Survey and provide recommendations

**1.2 Remove Target Rating 4 Trees**

Trees to be removed; 4 count; no stump grinding:

Tree(s)	Course of Action
28, 30, 417, 419	Removal

**1.3 Cable Target Rating 4 Trees**

Trees to be cabled; 4 count:

Tree(s)	Course of Action
25, 192, 193, 194	Cable

#### 1.4 Prune Target Rating 4 Trees

Trees to be pruned; 19 count:

Tree(s)	Course of Action
24	Prune
27	Prune
397	Prune over walkway/fence, thin towards Bay St.
398	Thin branches towards Bay St.
400	Prune over Bay St./walkway
401	Prune over Bay St./walkway
402	Prune
403	Prune
406	Prune over Bay St./walkway Prune over Bay St. Branches in street
408	Light
410	Prune over Bay St./walkway
414	Prune over fence
415	Prune over Bay St. Health check: Sap.
416	Prune ½ od large branches over Bay St.
417	Prune
419	Prune
422	Prune
424	Prune
425	Prune

#### 1.5 Remove Target Rating 3 Trees

Trees to be removed; 23 count:

Tree(s)	Course of Action
4, 10, 14, 36, 41, 42?, 43?**, 58, 140, 141, 167, 168, 171, 172, 202*, 210, 224, 249, 251, 312, 315, 316, 330, 348?*	Remove

\*Re-review in the field, 202 is listed both for removal and cabling.

\*\*Re-review in the field, OK for Phase 2 or 3?

#### 1.6 Cable Target Rating 3 Trees

Trees to be cabled; 11 count:

Tree(s)	Course of Action
29, 31, 33, 117, 118, 191, 193, 201, 202*, 246, 291	Cable

\*Re-review in the field, 202 is listed both for removal and cabling.

**1.7 Prune Target Rating 3 Trees**

Trees to be pruned; 60 count: See table

- Prune 60 trees per Bartlett report- focus on McDowell (San Francisco Bay Trail), and over occupied dwellings and office space.
- Include trees 58 – prune over walk and 184 – major pruning, include over walk
- Arborist to list the 60 trees to be pruned based on the Priority 1 list in the Bartlett report.

**2. PHASE 2 TREATMENT**

**2.1 Remove Target Rating 4 Trees**

Trees to be removed; 1 count; no stump grinding:

Tree(s)	Course of Action
421	Removal

**2.2 Cable Target Rating 4 Trees**

Trees to be cabled: none

**2.3 Prune Target Rating 4 Trees**

Trees to be pruned; 14 count:

Tree(s)	Course of Action
399	No work Phase 1
404	Prune
405	Prune
407	Prune
409	Prune
411	Prune
412	Phase 2 prune over Bay St.
413	Phase 2 prune to shape
418	Low priority. Prune and eventual removal
420	Prune
421	Prune
423	Prune
426	Prune
427	Low priority. Light pruning

### 2.4 Remove Target Rating 3 Trees

Trees to be removed; 12 count:

Tree(s)	Course of Action
15, 36, 125, 132, 200, 246, 260, 301, 302, 307, 346**, 362**, 366**	Remove

\*\*Re-review in the field: OK for Phase 2?

### 2.5 Cable Target Rating 3 Trees

Trees to be cabled; 19 count:

Tree(s)	Course of Action
73, 166, 170, 201, 204, 223, 224, 225, 228, 230, 239, 241, 247, 253, 292	Cable

### 2.6 Prune Target Rating 3 Trees

Trees to be pruned; 53 count: See table

Prune 53 trees; prune the 53 that remain on the Priority 1 list in the Bartlett report. Include tree 199.

### 2.7 Prune Target Rating 2 Trees per Bartlett Report

## 3. PHASE 3 TREATMENT

### 3.1 Remove Target Rating 3 Trees

Trees to be removed; 5 count; no stump grinding:

Tree(s)	Course of Action
36, 37, 167, 168, 200	Removal

### 3.2 Cable Target Rating 3 Trees

Trees to be cabled; 4 count:

Tree(s)	Course of Action
166, 196	Cable branches

### 3.3 Prune Target Rating 3 Trees

Trees to be pruned; 19 count:

Tree(s)	Course of Action
183, 185, 187, 188, 190, 191, 389, 390, 391	Prune

Not in contract:

- Do not include tree 376-385 (Coordinate later with SAFR)
- Check trees 153, 147, and 133: Determine if SAFR or GOGA

## **ATTACHMENT A**

### **FROM DIRECTIVE PW-062 2007-8 "MANAGING HAZARD TREES" (EXCERPTED A. LUCAS 9.20.10)**

- Requirement: The park needs to have a hazard tree management program for developed areas
- Funding: Typically funded through base funding. "In exceptional circumstances parks may seek project funding from NR or other sources."
- Safety: Visitor/employee safety; training, protective garb, signage, exclusion, etc.
- Prevention and Avoidance of Tree Hazards: Maintenance, abatement, mitigation, planning for relocation of facilities if necessary.
- Surveillance/Examination: Survey of trees and recommendations
- Documentation: Training, reporting, mapping, surveying and treatments performed
- Rating Systems: Objective rating system is required; potential for failure, for damage, for target impact and target value.
- Monitoring: Follow-up on previously surveyed trees and on abatement/mitigation actions
- Abatement/mitigation: High Hazard trees: consider immediate temporary closure.
  - Prior to action consider the environmental laws and resources impacted.
  - Actions include but not limited to:
    - Remove the target
    - Perm Site closure
    - Temp site closure
    - Prune the defective parts
    - Support the tree-brace or cable

- Reduce height below striking distance
- Tree removal
- Trees contributing to a historic property: understand the value, take a conservative approach, have a replacement strategy if necessary.
- Disposition of wood: See options
- Public Information: Provide reasonable public information (via interpretive media, safety messages. . .) to make public aware of known risks.
- Training: Required
- Exceptions: N/A
- Compliance: Usually a Cat Ex (lists typical cat ex's)
- Approval Authority: Supt. approves Action Plan. If EA - by the Regional Director.
- Responsibility:
  - Park Superintendent: Park hazard tree management program.
  - Regional Director: Ensures each park has a hazard tree program.

## **ATTACHMENT B**

### **COMPLIANCE: NHPS SECTION 106 QUINTEX**

#### **Project Description**

GOGA-10-079 (PEPC 32753) Prune or Remove Hazard Trees, Fort Mason  
 A July 2010 arborist report surveyed and provided condition assessments for most of the upper Fort Mason trees. The project will affect approximately 63 (of the 427 trees surveyed) that were identified as “Priority One” and a few trees needing “further review,” some of which were identified as having failure potential and were recommended for removal. For many other trees the recommendation was for pruning. Andrea Lucas provided an overview of this document and requested that Billy Vogele be allowed to proceed with removal of the hazardous trees. The tree survey can be viewed at S:\Fort Mason\Fort Mason CLR\Fort Mason CLR Part 2\Fort Mason Comprehensive Tree Survey 2010\Fort Mason Tree Inventory and Management Plan 2010.pdf c(9.25.2010)

### **List of Stipulations**

- 1.) Project Manager will in this phase (prune, or remove only when necessary) those trees that were surveyed as being Priority One in the Bartlett Tree Experts Fort Mason Tree Inventory and Management Plan 2010 as well as those that were surveyed as needing further review
- 2.) Trees will be cut as low to the ground as possible with no additional stump grinding at this time
- 3.) Removed trees will be disposed of off-site
- 4.) Completion of the Fort Mason Cultural Landscape Report Part II (anticipated completion in early 2011) will identify recommended treatments for Fort Mason trees, including which of the removed trees will need to be re-planted and which will need stump grinding etc.
- 5.) Project Manager will keep a record identifying treatment performed to each of the current project trees.
- 6.) Project Manager will receive from Contractor an access plan for any locations where Contractor intends to use heavy equipment outside of paved areas, and will notify Park Archeologist (Leo Barker, 561-2836) of these locations.

### **SENIOR STAFF MEETING: AUGUST 16, 2010**

Steve Haller and Andrea Lucas presented the results of the tree and the vegetation surveys for Upper Fort Mason to Senior Staff. They notified Senior Staff of the results of the surveys and outlined the process for phasing removal and or treatment of Priority 1 trees.

Steve Haller and Billy Vogeles will work with Business Management Division to identify funding.

### **NEPA PROJECT REVIEW: SEPTEMBER 15, 2010 – PROJECT REVIEW DISCUSSION**

The Committee asked about when the lower priority treatments in the 2010 Plan would be implemented. It was anticipated that lower risk trees be addressed in second and third year treatment plans guided by the pending Phase 2 CLR and associated environmental compliance.

The Committee referenced the 5X recommendations. In approving the 2010 Plan treatment recommendations, the 5X committee stipulated that a tree replacement program be instituted.



They will apply a multidisciplinary approach which may not necessarily result in one to one replacement. Essentially there would be a time lag between the tree removals and the prescribed replacements, from the approved Phase 2 CLR.

The Committee suggested that someone be on site during the tree and limb removal process to explain what was being performed and why to park visitors.

NEPA staff expressed concern that there is no suitable Categorical Exclusion that covers the large scale removal of multiple trees and limbs. They pointed out that the CE that allows the removal of a few individual hazard trees requires an accompanying approved resource management plan. They further noted the cumulative loss of mature trees from the action authorized in the preceding Project Review meeting, PEPC 32698.

The Executive Committee recommended that the proposed removal of highest priority hazardous trees be approved, and found that it meets the terms of a Categorical Exclusion with the inclusion of the following conditions.

#### **PROJECT REVIEW CONDITIONS**

1.) The project managers, Andrea Lucas and Billy Voge, will complete and implement a Phase 1 Action Plan that follows the PWR-062 Directive. The Action Plan will be uploaded into PEPC and include the following: a description of the assessment method and rating procedure used to identify the high priority hazard trees that will be either removed or pruned; a list all the trees that will be treated, what treatment they will receive, their rating, and their location, or identification number on a map; the additional high priority trees that are recommended for treatment after coring by a specialist (as advised in the 2010 Plan); a summary of how the PWR-062 Directive has been applied with respect to treatment abatement/mitigation; a biomass disposal plan that identifies how the cut plant material will be processed and disposed. Project managers will consult with Bruce Badzik, IPM specialist, to ensure that appropriate precautionary measures and practices are incorporated into the Action Plan to minimize the risk of spreading plant pathogens and harmful insects to otherwise healthy trees and wooden structures. Disposal should be consistent with the Department of the Interior policies for removal or use of woody biomass in the PWR-062 Directive; site plans showing proposed safety fencing, staging areas, safety signage, and pathways for equipment access to trees and limbs needing treatment. All staging areas will be restored to pre-project conditions following project completion.

2.) All vegetative clearing and cabling will be done outside of the nesting season, January 1 through July 31. If circumstances necessitate tree or limb removal inside of this window to address a newly discovered hazard, nest surveys will be

performed in advance of the tree treatment, under the oversight of Bill Merkle, wildlife biologist. Results will be documented in PEPC for the record.

3.) As per the PWR-062 Directive, the project managers will work with the NPS Public Affairs office to provide reasonable public information (via interpretive media, safety messages, and other suitable communications) about the known potential for risk of exposure in the park to hazard tree conditions. The intent is to make the public aware of potential tree hazards that are known to exist in developed areas within the park or sections of the park. Neighbors of Fort Mason may also need to be contacted as per NPS protocol of proposed tree removal and treatments, especially those along Bay Street.

4.) The project managers will make arrangements to have a specialist on site while the tree removal activities are taking place to greet the public and inform them about the project.

The NPS Project Manager, **Andrea Lucas and Billy Voge**, will document and note the completion dates of the above required actions in PEPC, and upload any related pertinent documentation. With completion of the above conditions, this project would not have an adverse impact on the environment and would be categorically excluded from further NEPA review {D.O. 12, Section 3.4} in conformance with the following NPS category:

**E.3** Removal of park resident individuals of non-threatened/endangered species which pose a danger to visitors, threaten park resources or become a nuisance in areas surrounding a park, when such removal is included in an approved resource management plan.

## APPENDIX B: GOLDEN GATE NATIONAL RECREATION AREA SIGNAGE & GRAPHICS GUIDELINES

The following is an excerpt from the final four-chapter design guidelines prepared by Hunt Design for Golden Gate National Recreation Area (January 5, 2009).

**Why Signage & Graphics Guidelines?**



The Golden Gate National Recreation Area is comprised of nineteen individual parks, recreation and historical destinations and serves a regional population of over 7,000,000. Each year more than thirteen million people visit GGNRA parks to walk, hike, bike, swim, surf, nature-watch and learn about local history and natural resources. And each visitor in each park is guided and instructed by information in the form of signs and interpretive displays. These thousands of signs and displays play major roles in not only the understanding and enjoyment of the parks, but in the public image of GGNRA.

While signs are necessary, they can also occasionally be disruptive to the visitor experience. Mismatched and confusing signs do little to promote good visitor behavior. Too many signs in different designs and sizes tend to result in a condition of sign clutter. Poorly maintained signs reflect a sense of operational neglect. Most importantly, each and every sign in a GGNRA park is a message from GGNRA, and as such each sign is an opportunity to speak in a uniform and positive voice. Well-designed and properly placed signs add to the visitor experience, stimulate use of trails and facilities and promote good visitor behavior.

These guidelines have been developed to improve and strengthen signage in the park. This is the first attempt in GGNRA's thirty-year history to organize and consolidate all kinds of park and trail signs into consistent and attractive formats. The guidelines have standards for the design and content of roadway and pedestrian signs of all types including directional, regulatory, safety, accessibility, resource protection, information, interpretation, building and facility identification.

A result of close cooperation and effort between GGNRA, National Park Service and the Presidio Trust, this park-wide sign plan is part of a larger ongoing effort to improve the trails, trail system, park resources (such as sensitive habitats and native species) and the visitor experience in general.

**The primary purposes of the Signage and Graphics Guidelines are to:**

- Improve enjoyment and understanding of the parks
- Improve safety and accessibility for all visitors
- Attract new visitors
- Encourage existing visitors to experience more areas in the park
- Forge a stronger link between the visual identities of the individual parks and the parks' "experiences"
- Foster improved stewardship of the land and historic sites

**This signage plan has been designed to:**

- Organize trail and related signage into a logical system of components
- Establish guidelines for location of signs
- Establish official colors for all signs
- Set official typography styles and guidelines
- Unify sign wording
- Establish guidelines for use of pictographs (icons)
- Describe standard installation details
- Ensure that posted park information is accessible to all park visitors
- Meet or exceed state-of-the-art accessibility guidelines for mobility and sight-impaired visitors
- Reflect the spirit and intent of federal MUTCD signage guidelines

**Through the development of the Signage and Graphics Guidelines, additional benefits have been realized including:**

- The display of more maps on certain trail signs
- The enriching of trail and destination information
- The systematic display of trail names
- The opportunity to display logos or names of trails that share alignments with GGNPC trails

**For further information reference the following:**

- Manual on Uniform Traffic Control Devices (MUTCD), Millennium Edition, U.S. Department of Transportation, December 2000 as listed in the NPS Uniguide.
- Most current version of the NPS Uniguide Standards.



**SHEET TITLE**  
 Signage Guidelines Overview

**DATE**  
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  - 2-1.0 Off-site Road Guide
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**Note\***  
The specifications in Chapter 5 / Specifications & Bracketry have been published as of 11/1/08, and are to be updated and evaluated over time to make sure they are current and consistent with the most up-to-date materials and processes. This signage master plan is aimed at choosing materials and processes which are locally sourced, sustainable and recyclable when possible. Integrate green standards for all fabricators to promote long lasting signage, but at the same, keeping a heightened awareness for the environment.

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**PRODUCT**  
Golden Gate National Parks  
Signage & Graphics Guidelines

**SHEET TITLE**  
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Sign Panel Colors	Panel and Post Colors	Design Rationale	Graphics Standards
<p>1 Black: Pantone® Black C Background Panel Color</p>	<p>11 Cultural Resources / Facility ID Corten Brown: Pantone® 478 C</p>	<p>2 Trail or Location Name Band</p> <p>4 Directional Arrow Placement 1. Left 2. Right 3. Straight</p> <p>Regulatory Band</p>	<p><b>Official Colors</b></p> <p>The consistent use of color is important on GGNRA signs and interpretive elements. Color provides not only aesthetic interest, but helps organize information and reinforces or "codes" certain important messages such as red for danger.</p> <p>Two basic color palettes have been selected - one set of colors for directional/regulatory signage elements and a relating set for interpretive signs. These colors have been selected to work together, while providing appropriate backgrounds for messages, pictograms and logos.</p> <p>Do not use any other colors for GGNRA signs.</p>
<p>2 White: 3M Scotchlite reflective vinyl. All text, arrows and icons</p>	<p>12 Natural Resources Background: Pantone® 5743</p>	<p>2 Fort Cronkite 3.4 miles</p> <p>1 Fort Barry 2.3 miles</p>	
<p>3 Red: Pantone® 74 C Regulatory Band</p>	<p>13 COLOR DELETED</p>	<p>3 Phenolic Resin Panel (digital graphics)</p>	
<p>4 Olive Green: Pantone® 5615 C Trail Name Band</p>	<p>14 Powder-coated Bracket Hardware RAL 9017_38/8007</p>	<p>4 Trail or Location Name Band</p>	
<p>5 Gray Blue: Pantone® 5473 C Terrain Information Band</p>	<p>15 Pantone® 553 NPS Logo (tree, foreground)</p>	<p>16 Mapping Information Field (height of map may vary)</p>	
<p>6 Bright Green: Pantone® 7496 C Signposting Interpretive Information Band</p>	<p>16 Pantone® White NPS Logo (mountains, type)</p>	<p>3 Regulatory Band</p> <p>5 Terrain Info Band</p>	
<p>7 FHWA Recreation Brown Highway Guide Signs</p>	<p>17 Pantone® 1605 NPS Logo (logo background)</p>	<p>6 Sightseeing Info Band</p>	
<p>8 FHWA Red Regulatory Stop, No Entry, Danger</p>	<p>18 Pantone® 1615 NPS Logo (mountain, outline, single color logo)</p>		
<p>9 FHWA Yellow Warning Signs</p>			
<p>10 FHWA Blue Disabled Access</p>			

**NOTE:** On phenolic resin panels which are created with a CMYK digital print process, it is the fabricator's responsibility to match all specified paint and PMS colors with a CMYK equivalent from their specific printer. Each time panels are printed, the fabricator should recalibrate that CMYK equivalent to make sure the colors within the system stay consistent. Proper testing is required for consistency.



**Vehicular Sign Types Summary**



**Vehicular Sign Types**  
This page shows the set of vehicular signs for use on roads outside of but near to GGNRA parks as well as those for implementation on streets and roads within the parks.

Signs for vehicles have been organized into logical groups of sign types. Each sign type has a specific purpose or category of communication and each is a unique physical design. That is, exact size, materials and fabrication details are set for every sign type.

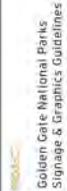
However, the range of messages for any one sign type may vary. For example, in a series of V410 In-Park guide signs, each sign is always the same size, but the wording on each will likely be different.

Refer to the pages in this section for layout and design guidelines and to Chapter 4 for fabrication details.

**VEHICULAR SIGNAGE / POST OPTIONS**

Choose the appropriate post type for the park or environment. Post options are to be used on the following sign types only: V210, V230, V250, V310, V320, V410, V420, V510, V610, V620.

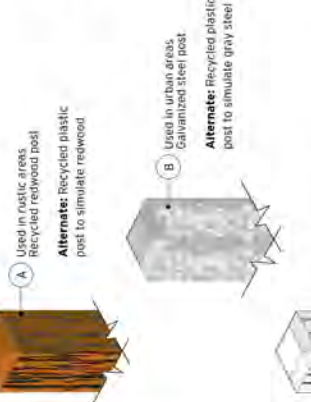
<p>V200 OFF-SITE ROAD GUIDE SIGNS</p>	<p>Off-site Road Guide Signs / For vehicular directional and informational signs on public roads outside of GGNRA park entrances, refer to the National Park Service Uniforms.</p>	
<p>V200 PARK IDENTIFICATION</p>	<p>V210A Park Identification (Rustic) V230B Park Identification (Urban) V250C Park Identification (Historic)</p>	
<p>V300 FACILITY IDENTIFICATION</p>	<p>V310 Primary Facility Identification V320 Secondary Facility Identification V330 Tertiary Facility Identification</p>	
<p>V400 IN-PARK GUIDE SIGNS</p>	<p>V410 Primary In-Park Guide V420 Secondary In-Park Guide V430 Tertiary In-Park Guide</p>	
<p>V500 TRAFFIC CONTROL SIGNS</p>	<p>V510 Primary Traffic Control</p>	
<p>V600 PARKING / REGULATORY</p>	<p>V610 Primary Parking Regulation Sign V620 Accessible Parking Regulation Sign</p>	





**Pedestrian Sign Types Summary**

<p><b>P100 ORIENTATION</b></p> <p>P110 Primary Orientation Kiosk P120 Secondary Orientation Kiosk P130 Tertiary Orientation Map</p>	<p><b>P200 DIRECTIONAL</b></p> <p>P210 Finger-type Directional P220 Intersection Directional P230 Trail Directional P240 Restroom Directional</p>	<p><b>P300 FACILITY IDENTIFICATION</b></p> <p>P310 Restroom Identification P320 Restroom Title 19 P330 Restroom Plaque</p>	<p><b>P400 REGULATORY</b></p> <p>P410 Wall-mounted Regulatory Sign P412 Rail-mounted Regulatory Sign P420, P421, P422, P423 Post-mounted Regulatory Sign</p>	<p><b>P500 INFORMATION</b></p> <p>P510 Primary Information P520 Secondary Information P530 Tertiary Information P540, P541 Natural / Cultural Resources P550, P551, P552, P553 Temporary Information P560, P561, P562 Participating Entity P570 Interpretive Markers</p>	<p><b>P600 INTERPRETIVE</b></p> <p>P610 Upright Interpretive P620 Tabletop Interpretive P630 Rail-mounted Interpretive P640 Post / Wall-mounted Interpretive P650 Walk-mounted Interpretive</p>
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**Pedestrian Sign Types**  
This page shows the set of pedestrian signs and interpretive elements for use on trails, walkways and buildings within GGNRA parks.

Signs and interpretive elements for pedestrians have been organized into logical groups of sign types. Each sign type has a specific purpose or category of communication and each is a unique physical design. That is, exact size, materials and fabrication details are set for every sign type.

However, the range of messages for any one sign type may vary. For example, in a series of P220 Intersection Directional signs, each is always the same size, but the wording on each will likely be different.

Refer to the pages in this section for layout and design guidelines and to Chapter 4 for fabrication details.

**PEDESTRIAN SIGNAGE / POST OPTIONS**  
Choose the appropriate post type for the park or environment. Post options are to be used on the following signtypes only: P110, P120, P130, P210, P420.



## APPENDIX C: UPPER FORT MASON LANDSCAPE TREATMENT WORKSHOP NOTES

The following tables were developed to capture comments provided during the Upper Fort Mason Landscape Treatment Workshop held on January 18–19, 2011 in Building 201. The initial “discussion items” were addressed by the entire group, while “action items” were addressed in two break-out sessions that focused on accessibility and circulation, and views and vegetation.

Workshop participants included: Brian Aviles, Leo Barker, Chris Beagan, Dan Collman, Joe Costa, Richard Delao, Sarah Dominsky, Abby Sue Fisher, Lynn Fonfa, Eliot Foulds, Jason Hagin, Stephen Haller, Amy Hoke, Robbyn Jackson, Pat Kilduff, Ruben Limon, Andrea Lucas, Robin Abad Ocubillo, Bob Page, Catherine Robles, Aaron Roth, Billy Vogle, and Tamara Williams.

**DISCUSSION ITEMS**

Item #	Discussion Item	Pre-meeting Notes	Meeting Notes
D1	What is the desired future condition of the cultural landscape at Fort Mason?	Indiscernible character; Hazards; Missing/ Fractured Landscape Vegetation	BV - Crisp, trimmed aesthetic of the Army area pruning practices. LB - the district spans several significant eras - each area should represent their respective significant eras. Archaeologically, this is the densest presence of prehistoric archaeology. CR - A Fully Irrigated Landscape - around the Quad yards and NCO quarters yards along Franklin. AL - restore historic viewsheds. PK - incorporating successful signage, wayfinding that does not conflict with the historic landscape. Refer to Diane Ochi in Conservancy for the kiosk / wayfinding / interp. signs. BA - regulate parking. AL - Land Use Planning - Park Operations, staging of ground tree debris. JH - presumption from environmental office that all sites are dirty, or automatically assume we require mitigation, "Clean" soil; The relationship btw tenants - should maintenance be responsible for grooming tenant's yards?
D2	Define factors which lead to successful management	Achievable, Affordable, Balanced, Create a sense of stewardship; specifically Tree Management, eco-friendly approach to management of landscape, Management of Tenant Expectations, Investment focused on other signature Park places, waterfront corridor/ Alcatraz departure point, connection to MUNI,	SH - Per Frank Dean: focus on waterfront corridor / Golden Gate Promenade; visitor opportunity is perhaps more heavily weighted than Natural Resource concerns.
D3	Clarify relationship of proposal/feasibility of at-grade connection from SF Maritime to Lower Fort Mason (either path along coastline or pier-like structure) to CLR II Treatment Plan	Refer to Waterfront Corridor Visitor Experience Assessment (ORCA); treatment in Lower FOMA CLR p. 92	BA - some proposals being floated may not pose as much damage to natural resources. AL - We should definitely evaluate its potential impact to cultural resources. MS - feasibility studies this year will look at Pier 4 and Alcatraz embarcation.
D4	Confirm end of period of significance (1953)	Revisit to conform to closure of SFPOE (1963)	EF - 1953 is the best choice because it is closer to actual military conflict; the closer we get to decommissioning, the more disinvestment and deterioration may be included, the landscape loses it's 'military bearing' BA - are there any many changes btw 1953 and 1963? EF - a rose garden existed in front of Qtrs 1; although the treatment plan does not call for restoration. BP - the register nomination ends at 1953. PK - were there significant changes in the numbers of people that occupied/ worked in the site in 1953 vs. 1963? EF - fewer people used the landscape after 1953.
D5	Clarify relationship of plan and feasibility of Alcatraz embarkation facility to CLR II Treatment Plan	Pedestrian traffic; cross-visitation impact; refer to Waterfront Corridor Visitor Experience Assessment (ORCA)	MS - can provide feasibility report to Olmsted Team. BA - the pump station and pocket park are not very well understood. PK - what are the impacts of the streetcar coming through Fort Mason. Access between Van Ness and City BRT, up East Waterfront into upper Fort Mason.
D6	Confirm desires to link treatment recommendations with FMSS hierarchy		DC - this would help us tremendously in funding requests; PMIS write-ups; if the landscape around a specific building should be linked to the building, giving landscape rehabilitation the same priority as the building itself. ASF - infrastructure needs are especially important, including lighting, electrical meters, historic landscape infrastructure feature. BP - the Center is making FMSS translatability more of an emphasis in their reports, will do so here. JC - utility features are part of the buildings, we should identify the ones that are historic; CLR should address utility features, BP - these can be addressed in the CLR small scale features line. SH - guidelines for dealing with above-ground landscape features which are historic infrastructure. LB - more and more we are dealing with buried things; for instance when rehabilitation work can sometimes result in loss.

D7	Clarify extent to which budgetary limitations should drive CLR recommendations		BP - should budgetary issues be a filter for including ideas. DC - the funding should not be the driver. We should understand the priorities and opportunities. ASF - this may help us pursue funding opportunities through . DC - increased improvement draws people and attention to the Park, which could lead to increased funding sources. BP - we should put all good ideas in the mix. EF - some very necessary things could be quite expensive, for example the failing portion of MacDowell Avenue. DC - if there are items identified requiring immediate attention, we can put those into FMSS now.
D8	What natural resource assessment work is needed in order to implement CLR II treatment recommendations? (Clarify relationship to CLR II Treatment Plan)		TW - How was this item placed on the Agenda? BP - is there additional nat. resource assessments that need to be completed before CLR implementation work moves forward? TW - The main sensitive resources are at the shoreline, rocky intertidal area. Assemble all the information available of the rocky intertidal zone. Resource protection to minimize active disturbance in that area. Opportunity of sandy weedy area (NW Embankment) opportunity for dune vegetation establishment. High habitat value in the slope above East Waterfront. SH - Fuschia has been identified as a key characteristic plant - which provides hummingbird habitat. TW - in East Black point, natives are not necessarily prioritized over managing escaped. Rich habitat for songbirds and night herons and owls - the main thing is how we manage that going forward - we don't want to do any major habitat changes within nesting season. An overlay to the historic landscape restoration plan would be. AL - are there goals from NR to provide a varied habitat? TW - there is a general goal, without looking a specific area, in general there is value, but according to Sue and Bill there's not anything saying "you must preserve these trees or stands of shrubbery." We can tweak the treatment plan to provide better structure and habitat value. A great opportunity to address the lighting, esp. flagpole up-lighting is a huge spotlight (implement dark night skies initiative for park service). BP - how can this plan advance the reduction of fugitive lighting. TW - what reflects the historic lightscape?
D9	What are the opportunities for Community-Based Stewardship in implementation of CLR II Treatment Plan?		SH- there is a great range of public involvement. BV - where does it make sense for volunteers to do brush clearance. BA - there are lots of youth groups who work in the Park who could be tapped to work.
D10	What is the desired relationship between the Tenants and Landscape Maintenance?		CR - define roles and responsibilities. Lease agreement should design the roles of tenant vs. Park. DC - we should be cautious about giving tenants responsibility to care for historic landscape. We should educate tenants better about the intentions and trajectory of CLR. We should empower them too much, which may destroy the landscape. RA - refer to Fort Baker for a model of tenant interaction. LF - is it worth addressing the level of detail we do if we just make allowances for variations which evidence modern tenants.

**ACTION ITEMS**

**ACCESSIBILITY & CIRCULATION-RELATED**

Item #	Ranking (H,M,L)	Issue	Pre-Meeting Notes	1. Relevance to GMP	2. Impact to Historic Character	3. Other Factors
AC1	H	Parking		1980 GMP sets limits: 614 spaces; DC - 50% or more parked cars are not park visitors; new uses from GMP will require parking - reallocating existing spaces to accommodate these (not adding new parking by changing land use); there should be a strong focus on park visitors; balance with public transportation	existing parking configuration largely reflects historic configuration and character; concerns about adding/crowding; existing condition degrades character - exp. small-scale features; parking on the basketball court;	Law Enforcement - ticketing for permits; enforcement @ singular vehicular point of entry; focus on managing what exists - not adding parking; tenants' concern that their parking is being encroached upon.
AC1	H	Wholesale changes to parking and circulation at Upper Fort Mason have the potential to make the site more pedestrian friendly.	Walking routes; way finding; portal visibility; refer to Waterfront Corridor Visitor Experience Assessment (ORCA)	Major element in GMP - orientation, wayfinding, access... signage, pathways, oral tour, smartphone app/podcast; when you arrive, what are the opportunities for interpretation?	opportunity to enhance and interpret historic character; is there a contemporary layer on the landscape - through contemporary fixtures which are compatible? TW - simplify the modern layer. SH - should we emphasize historic circulation routes.	TW - the arrival experience is very important. PK - the use of technology. LF - the relationship btw Upper, Lower FoMa SAFR; an enhanced circulatory connection btw three campuses; AH - is there a threshold of signage? When is there too much?
AC2	H	Comprehensive, campus-wide circulation, access, and wayfinding plan is needed.				
		Stairway / Ramps between Lower and Upper Fort Mason		Direct connection to GMP	historic stair exists no good for access - safety; need new design - new stair?; new access route via great meadow.	Phase II Accessibility Implementation will provide accessible circulation at Fort Mason Squeeze; both stairs and new accessible route need to be marked by wayfinding.

Item #	Ranking (H,M,L)	Issue	Pre-Meeting Notes	1. Relevance to GMP	2. Impact to Historic Character	3. Other Factors
AC3	H	North Fortifications are not universally accessible.		Rehabilitation would transform east and northeast slopes - direct connection to GMP; resource preservation; visitor access and understanding of historic landscape and use; highest concentration of military remnants; the best viewsheds;	significant enhancement to historic character - improve condition; tree and vegetation management required; site-specific visitor management plan; design to address circulation, visitor use; viewshed management;	connection to waterfront corridor planning (ORCA) MacDowell St; revisit current use/ programming of picnic area in current location - possibly relocate to escarpment above; determining appropriate picnic areas throughout; archaeological considerations
AC4	H	East Battery is not universally accessible.	Define appropriate strategy for treating pedestrian-accessed surfaces;			
AC5	H	1970s picnic facility at Civil War fortification is difficult to make accessible	Remove existing picnic facility and relocate new facility to near Battery Burnham, above the difficult slope;			
AC6	H	Circulation atop Civil War fortification is damaging to the resource.	Relocate a park-use service-way on inland side of Civil War fortification;			
AC7	H	Franklin St. entrance to Fort Mason poses safety concerns.	A Contract is already in place to implement			
AC8	M/L	Design of terminus for MacArthur Ave. is unresolved.		Welcome/ inviting for visitor	new design element as related to connection of historic to non-historic landscape	Visitor access and orientation to Great Meadow; Aesthetic; Direction and wayfinding; outlook opportunity
AC9	M	Comprehensive evaluation of site lighting needed.	Define strategy for replacement; spec. styles and typologies; incorporate "Dark Night Skies Initiative" into treatment plan; Re: Transformer house, transitioning infrastructure to PG+E; see Fort Baker for precedent; see YOSE Exterior Lighting Guidelines	indirect but related to broad NPS goals - lightscape management; relationship to cultural resources; sustainability	historic lighting fixtures could be enhanced; need for new additions to landscape - resource impacts; survey of historic placement, conditions, scope; Contemporary issues: architectural lighting, path lighting, flag up-lighting?	perceived security; it would help to have the same bulbs/ lamps from a maintenance standpoint; energy sustainability and lamp efficiency; nighttime wayfinding visibility; Dark Night Skies Initiative; Will be addressed when comprehensive pedestrian circulation is designed; interfaces with safety plan
AC10	L	Many recommendations of the Accessibility Case Study have not yet been implemented.	Per Accessibility Case Study (Olmsted Center 2010)			Funding applications are already in place to implementation

Item #	Ranking (H,M,L)	Issue	Pre-Meeting Notes	1. Relevance to GMP	2. Impact to Historic Character	3. Other Factors
AC11	L	Access is not provided to ramp at Bldg. 241.				Funding applications are already in place to implementation
AC12	L	No path to new basement exit at Officer's Club.	Add pathway to new basement exit at O-Club; Per Jason Hagin email of 9/22/10			RDO - A plan is in development
AC13	M	An exposed earthen strip is present between the sidewalk and parking area in front of Bldg. 201.	Install wheel stops to prevent engine heat and oil from destroying grass cover;			DC - grass and wheel stops should be installed
AC14	L	Additional bicycle racks needed throughout park.	Bob Holloway for pertinent admin. Quintex stipulations			DC - this will occur
AC15	H	Potential impact of at-grade connection from SF Maritime to Lower Fort Mason (either path along coastline or pier-like structure).	Refer to Waterfront Corridor Visitor Experience Assessment (ORCA); treatment in Lower FOMA CLR p. 92	Enhances connection of people to parks; provides new physical link at grade between WCBEA; clear relationship to Pier 4;	Direct enhancement - new viewsheds, could compromise historic character,	resource impacts - cultural, natural, archaeological; SH - a big ticket item, has a great potential to impact resources. PK - the viewsheds are altered/ augmented.
AC16	H	Potential impact of reusing pedestrian path through East Black Point gardens over the train tunnel.	Increase pedestrian connectivity, including connection to North Fortifications; refer to Waterfront Corridor Visitor Experience Assessment (ORCA)	Rehabilitation of East and Northeast Slope - direct statement from GMP goals; improves pedestrian circulation, provides more visitor opportunity; preserves structures; rehab;	Will enhance historic character and experience of landscape; historic structures preserved/ enhanced; Damage to Existing Resources - through lack of use/nonuse	Slope stability; safety, lighting, law enforcement; day-use only? Interface btw public and private (tenants); vegetation management, community-based stewardship, relationship to F-Line and Van Ness Transit Corridor, Alcatraz Point of Departure
Misc. 1	M	Random assortment of non-historic park fixtures does not convey consistent NPS identity GGNRA park-wide.	Impose a GGNRA-wide palette of appropriate non-historic park furnishing to include: signage, benches, waste cans, drinking fountains, bike racks, bollards, tree grates, and safety railings.	Unified visitor welcoming and orientation; design consistency; update site furnishings guidelines sustainability considerations; trash bin system;	compatibility issues; impact to character; include picnic tables also	Site Furnishing Guidelines, currently being revised with regard to sustainability and accessibility;
Misc. 2	L/M	Construction dates of some small-scale landscape features are unknown.	Research construction dates of light poles, cribbing, street name signs, and chain-link fence;	retention of historic character; visitor experience	provides historic character at detail level; a historic inventory/ survey of existing features; new additions need to be compatible in design	voluntary mandates by Park Service to have commercial sprinklers introduce small-scale features: pumps and valves in landscape



Item #	Ranking (H,M,L)	Issue	Pre-Meeting Notes	1. Relevance to GMP	2. Impact to Historic Character	3. Other Factors
Misc. 3	M	Army-era information signs are missing or deteriorated.	Retain and/or replace in-kind;	Part of cultural resource management	part of landscape character - army layer; original content is inaccurate	possibly confusing to visitor; interpretation required; possibly reproduce the sign and identify it as reproduction

### IEWS & VEGETATION-RELATED

Item #	Ranking (H,M,L)	Issue	Pre-Meeting Notes	Meeting Notes
VV1	H,H	Historic views from the North Fortifications are obstructed by mature vegetation.	Establish priority vantage points/lookouts.	Consider historic gun positions and field of fire; safety concerns with homeless encampments - both concerns for homeless and for safety of laborers; assess historic plantings; animal, bird nesting- parrots; work outside of nesting season; need to define boundaries of the north fortification; wind implications; are species responsive to pruning or topping or is removal required?; erosion once trees are removed; what is an appropriate revegetation species to limit erosion-groundcover?; appropriate pallet for parapet, gun pits, etc.- SEE WORK AT EAST BATTERY (Fort Point, but located in Presidio); Area A of the Presidio; Endicott (coastal bluffs); treatment may relate to planting on Western Embankment-possible native palette (talk to Steve for fortifications plant palettes at Presidio); horticultural varieties of CA native plants on slope near Safeway;
VV2	H,H	Easterly views from Officer's Quarters are partially obstructed by mature vegetation.	Create a rehabilitation plan/strategy/approach for slope.	framed and filtered view, not a completely unobstructed view; major viewshed from FOMA looking out and SAFR looking in, invasive elms need to be addressed; wind implications (blowing W to E); encompassing Officer's Club?; incremental approach to removal of vegetation; concerns with birds, nesting, erosion (see above); creating an attractive nuisance by welcoming people to the area; tenant leases- including landscape? or just building?; signage in area- reasonable wording on signage; need to designate reasonable public/private zone; additional visitation would create greater vigilance in that area with regard to social problems; increased maintenance/staffing (budget/sustainability); need for additional research/analysis of specific area?; remnant historic plants identified (Gracyk); potential for seed analysis (archaeology); follow-up survey of successional plants that have emerged after clearing (may indicate historic vegetation?);
VV3	H,H	Site-wide viewshed assessment is needed. (Discussion focused on Bay St. residences and street tree planting.)	Develop viewshed assessment.	review of historic photos; intentional, managed views v. serendipitous views; views across FOMA- neighbors who complain that views are lost due to growth of vegetation; value \$\$ of views; relates to period of significance; intent of planting (e.g. cypress holding soil on western embankment v. plantings along Bay St. added for a streetscape effect, which at the time had a wall of buildings at the corner- butify an industrial landscape); species choice- appropriate replacement and rate of growth; strawberry trees an appropriate replacement along Bay St.?; neighbors spiking trees along Bay Street, poison; pros and cons depending upon where neighbors live;
VV4	H,H	Identify a phased approach for East Black Point vegetation management.	Develop maintenance program; in coordination with SAFR; ensure wildlife monitoring.	SEE VV2, VV16

Item #	Ranking (H,M,L)	Issue	Pre-Meeting Notes	Meeting Notes
VV5	H,H	Historic tree cover, mature specimen trees, and some rare plant species are being incrementally lost.	Develop a tree replacement program.	Per Tree Survey (Bartlett Labs 2010), Historic Plant Survey (Gracyk 2010); Which are specimens? How are they identified? Prioritization or rating?; Identify and rate plant values as specimens (e.g 3 trees in front of O-Club that warrant cabling or bracing vs. something that was planted as a group (e.g. windbreak)); identify specimen features vs. group features; magnolia planted at corner of each residence at the quad in the 1950s; cordyline along Franklin St, at tops of stairs as markers, at path intersections (date to WWII); identify types of uses of trees: gardenesque, windbreaks, specimens, markers, etc.; identify which are volunteer vegetation, spacing, heaving sidewalks; when do you replace a tree?- when it gets too tall?, when it dies? before it dies? sick? not thriving? damage to other resources?; larger trees shading out smaller trees; approach to tree treatment on earthworks; implications for archaeological resources; see Presidio coastal trail reports; see FORTIFICATIONS PLAN;
VV6	L,M?	Plum trees in Franklin St. median are non-historic and unhealthy.	Removal (no replacement in-kind)	Identify FOMA from far up city street; what do you plant in the median?; added value of view from gate into FOMA; are they providing slight unintentional wind break?; strawberry trees an appropriate replacement? Lawn? Cherry blossoms?; What would Army do?; drainage considerations- bioswales?- opportunity for environmental engagement at prominent entrance to FOMA; stormwater planning; latitude to fulfill other GMP goals at - locations; see East Fort Miley parking lot; view in to flagpole- marks federal facility; opportunity for critical view into FOMA, flagpole
VV7	H,M	Eucalyptus roots have resulted in heaving sidewalks around Quad.	Remove at least seven trees to repair heaving sidewalks; replace in kind.	Should all related trees be removed to re-establish the grouping?; implications for nesting; compliance complete for this project, but for similar scenarios in future- better spacing tree to tree? and from edge of walk; improve, amend soil conditions
VV8	H,(short term -, long term +)	Hazardous trees identified in the 2010 Tree Survey require treatment.	Follow recommendations of tree survey for treatment; evaluate options for replacement, etc.	Per Tree Survey (Bartlett Labs 2010); see example of pine that fell on cars on Franklin St. at New Year's (GET PHOTOS); phased approach underway; priorities for removal identified in report; important not to stop treatment at removal; political considerations of removals; communication; outreach before and during project; public meetings; communicate the long-term plan and the why; forest plan may identify removal of trees v. pruning; archaeological implications of stump removal (impact or opportunity for exploration- monitoring?); contaminated soil considerations during grinding particularly along Franklin St.
VV9	H,H	Accessibility improvements and building rehabilitation have compromised historic plantings at O-Club and NCO Quarters.	Inventory resource prior to work; rehabilitate landscape; develop planting plan.	Dug 4' down due to contaminated soil; review historic documentation for plant palette; selected specimens have been removed and salvaged (next to maintenance shop); should historic structure reports address surrounding cultural landscapes?- custom scoping; manage vegetation and turf to retain historic military appearance; relationship of occupants to landscape; can have plants in pots, but park staff responsible for tending gardens; language in lease agreement; follow up on offenses; how do you retain historic residential character that is difficult to achieve with institutional maintenance; tie-in with stewardship program?; special use permits for planting areas?;
VV10	H,H	Slope near steps from Upper to Lower FOMA presents an opportunity for native planting and interpretation.	Establish compatible planting of native herbaceous dune vegetation; replacement in kind of windbreak trees.	Opportunity for achieving alternative goals of GMP; interpret a different era of FOMA history; connect with fortifications and sensitive resources along coast; lead to establishment of precinct that incorporates archaeological areas; does not preclude replacement in kind of wind break; reach into area of large eucalyptus; ethno botany, prehistoric district that can be interpreted as such; achieving goals of GMP; fencing considerations?; drainage improvements; erosion control; maintenance implications (upper and lower FOMA cooperative stewardship); crossover between natural and cultural resource stewardship with tribes; opportunities for collaboration; RECOMMENDATIONS SYNC WITH FOMA CENTER CLR

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VV11	M,M	Remnant cordyline specimens suggest more extensive missing plantings and intentional pattern of placement.	Identify historic appearance and perpetuate where possible.	Per Historic Plant Survey (Gracyk 2010); look for it on planting plans; look at placement in Presidio as well; magnolia planting pattern as well;
VV12	H,H	Invasive plant species, including English ivy, invasive elms, blackberry, cotoneaster, acacias are overgrown and taking over specimen trees and remnant shrubs on the East Black Point slope.	Stabilize vegetation by prioritizing invasive control to ensure health of mature trees.	Review historic evidence of ivy planting; destructive element; erosion control mechanism; immediate response needed upon removal; phased removal in coordination with garden planning; monitoring (see East Black Point slope garden planning); component of entire approach to restoring historic plantings on E. Black Point slope
VV13	H,H	Poison-oak on slope facing SAFR is bordering pedestrian routes.	Control poison oak away from paths on slope down to SAFR.	IPM plan; herbicide; immediate follow-up replacement; elimination is high priority; impacts of herbicides on remnant seeds in soil (emergent v. pre-emergent); negligible habitat considerations
VV14	H,H	Remnant fuchsia specimens are found throughout the Historic District and should be considered a potential 'signature plant' for Fort Mason; offspring have colonized E. Black Point slope.	Preserve existing specimens.	Per Historic Plant Survey (Gracyk 2010); needs propagation?;
VV15	H, uneval.	Two podocarpus trees and an avocado were removed from behind Bldg. 235 in October for gas line repair.	Evaluate historic documentation of Bldg. 235; replace two podocarpus and avocado trees in-kind if they fall within period of significance.	25' podocarpus trees, 12-16" dbh; date to historic period; similar in size to yews in front of chapel; determine if trees were contributing;
VV16	H,H	East Black Point Vegetation Management Plan is needed.	Develop phased planting plans; develop maintenance program.	Some consideration required of East Battery to discover what's left of fortifications; EXAMINE BOUNDARIES OF FORTIFICATIONS AREA- that half of the battery is not yet managed, buried, could be unearthed; in coordination with SAFR; ensure appropriate wildlife monitoring; see VV2, VV4, VV12
VV17	H,L	Trees in community gardens pose concerns.	Review existing guidelines; develop appropriate planting guidelines; soil testing (re: raised beds)	No trees; no invasive plants; raised beds only? or use of open terrain; no planting outside of designated plots; what is current legal agreement; retain views of historic building foundations; contaminated soil; archaeological resources?; significance as community garden
VV18		Eucalyptus blocking view to Palace of Fine Arts along MacArthur Ave.		NOT ADDRESSED; Chris added
Misc. 4		Increasing subsidence of slope between Officer's Club and Van Ness may indicate failure of retaining structures, structural instability.	Civil engineering assessment may be required.	NOT ADDRESSED

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Misc. 5		Infrastructure: lighting, electrical, plumbing, fire hydrants (general discussion points).		Assessment of hazmat. needed at Transformer House (FM-248); not metered; electrical, water, sewer systems are old (40+ yrs) and fail at times; comprehensive approach needed for systems; meters, hydrants; pending FMSS, sewer in place, finding request for electrical in place; hold on project requests; greater communication needed between maintenance and historical architect
Misc. 6	L,L	The location of maintenance and service facilities in building 112 is awkward in relation to the Great Meadow and the historic district.	Consider relocation of maintenance and service functions to a new building at the base of the Western Embankment at Lower Fort Mason.	See treatment in Lower FOMA CLR, p. E-15; access considerations- less convenient than current location; conflict with F-line; would create a congested area; increase conflict at "the squeeze", would unsafe conditions
Misc. 7	H,H	Location of maintenance storage, windrow of organic matter		Potential relocation? alternatives; along south side of great meadow; does NPS need a larger maintenance space; will space needs change or increase; interface with transportation proposals; will redesign of maintenance yard be needed?



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