

## Statement Of Significance

Alcatraz Island was listed on the National Register of Historic Places (NRHP) in 1976 and was designated a National Historic Landmark (NHL) in 1986. The National Register nomination describes the significance of Alcatraz Island:

“Alcatraz is an island in San Francisco Bay which is of national historical significance in the categories of military history and social history (penology). During the mid-19th Century it was an impressive fortress guarding, along with Fort Point and, later, Angel Island, the entrance to San Francisco Bay. As a fortress, it was as nearly impregnable as technology of the time could make it – an “American Gibraltar” – and it was crowned with a brick/masonry “Citadel” which may have been unique in the annals of American military architecture. In later years it served as a military prison, and in more recent times became a Federal penitentiary and one of America’s most famous penal institutions, with a reputation rivaling France’s Devil’s Island. As a Federal prison, it housed some of America’s most dangerous criminals, those whom it was believed were too unmanageable for incarceration in other Federal prisons. Its location in the Bay rendered Alcatraz nearly escape-proof” (Chappell 1976).

The statement of significance included with the NHL nomination states:

“Alcatraz Island has been the site of events that have had an important impact on the nation as a whole from before the Civil War through an Indian Occupation of the 1970s. Its significance in the area of military history, social history (penology), and maritime commerce is enhanced by the integrity of the resource which follows from the fact that access to the island has been strictly limited by the U.S. Government throughout its history. Maritime commerce was aided by the first U.S. lighthouse on the Pacific Coast built here in 1854; its successor still serves. By the start of the Civil War, Alcatraz was the key fort in the center of the most important Pacific port in nineteenth century America, mounted the first permanent cannons on the West Coast of the United States, and featured a brick and masonry defensive barracks that may have been unique in the annals of American military architecture. In the areas of both military and social history, Alcatraz is noteworthy because it was the first army prison in the nation. When it became a civilian penitentiary in 1934, it quickly gained nationwide attention due to its association with many of the most infamous criminals of the gangster era and the bloody escape attempts made from there. It is representative of the far end of the penological spectrum, since it was a prison designed for punishment and incarceration only, rather than rehabilitation. It is of national importance in this regard because of its use as the repository of incorrigibles throughout the Federal prison system . . . In terms of the national Historic Landmarks program, the history of Alcatraz Island is nationally significant under Theme 5 (Political and Military Affairs), subthemes 5b (1830-1860) and 5c (1865-1941); Theme 7 (America at Work), subtheme 7j (Engineering), facet 5 (Military Fortifications); Theme 9 (Society and Social Conscience) Subtheme 9b (Social and Humanitarian Movements), facet 2 (Humanitarian Movements), subfacet c (Prison Reform)” (Haller 1986: 8-1).

At the time the property was listed on the NRHP, no National Register criteria were explicitly cited to justify the significance. However, from the narrative statements of significance quoted above, it can be surmised that Alcatraz Island is significant under National Register criterion A (association with historic events). Under criterion A, Alcatraz Island is significant for its association with maritime commerce, as the site of the first U.S. lighthouse on the Pacific coast; for its association with coastal defense, as the site of one of the first permanent U.S. defensive facility in San Francisco Bay; for its association with military penology, as the first military prison in the country; and for its association with federal penology, as the site of the Federal Bureau of Prisons maximum security detention facility.

The statement of significance narrative also implies that Alcatraz Island may be eligible for the Register under criterion B (association with a person or persons) for its association with infamous criminals Robert Stroud (“Birdman of Alcatraz”), Alphonse Capone, and George Kelly Barnes (“Machine Gun Kelly”), who were each incarcerated at Alcatraz during the federal penitentiary period, and under criterion C (characterized by distinctive construction or design) for the Citadel that housed soldiers during the military fortifications period. More research is required to ascertain the property’s significance under these criteria.

The period of significance stretches from 1847, when the island was first surveyed for the military fortifications, to 1971, when the National Park Service acquired the island. This period of significance covers the military fortifications period (1847-1907), the military prison period (1907-1933), the federal prison period (1933-1963), and the public lands period (1963-1971). The current landscape of Alcatraz Island is a collection of landscape characteristics and features that date from each of the historic periods. The significance is conveyed through the nine remaining landscape characteristics: buildings and structures, spatial organization, circulation, small-scale features, topography, vegetation, natural systems and features, archeological sites, and land use. These landscape characteristics and their associated features contribute to the overall integrity of location, design, materials, workmanship, setting, association, and feeling.

## Physical History

### PRE-EUROPEAN (Pre-1776)

Before Europeans settled in San Francisco, the area was inhabited by Native American groups including the Miwok, in the area north of San Francisco Bay (today's Marin County), and the Ohlone, in the area south of San Francisco Bay (today's San Francisco peninsula). Then, as today, Alcatraz had a harsh environment –strong winds, fog, a lack of a fresh water source (other than rain or fog), rocky terrain –and there was only sparse vegetation, mainly grasses. These conditions were not conducive to living on the island. These groups may have used the island for a fishing station or they may have visited it to gather seabird eggs since the island did provide a suitable habitat for colonies of seabirds. However, the Miwok and Ohlone do not appear to have lived on Alcatraz or to have visibly altered its landscape, and no prehistoric archeological sites have been identified on the island. (Thomson 1979: 2, Delgado et al. 1991: 8, and Hart 1996: 4).

### SPANISH AND MEXICAN PERIOD (1776-1846)

Early Spanish explorers into Alta California encountered the San Francisco Bay and its islands. (Jose Francisco Ortega saw the bay during his scouting for Gaspar de Portola's 1769 expedition, and Pedro Fages described the three major islands –Angel, Alcatraz, and Yerba Buena –in his journal from the subsequent 1772 expedition.) However, the first Europeans to record their visit to Alcatraz were aboard the Spanish ship San Carlos, commanded by Juan Manuel de Ayala that sailed through the Golden Gate and anchored off Angel Island in August 1775. The San Carlos' pilot, Jose de Canizares, surveyed and charted the bay, its shoreline, and islands. Alaya named the islands in the bay and bestowed the name "Isla de los Alcatraces" on an island that he described as "so arid and steep that there was not even a boat-harbor there; I named the island de los Alcatraces because of their [birds] being so plentiful there" (Thompson 1979: 3 and Hart 1996: 4). The map that was drawn from this survey labeled today's Yerba Buena Island as "Alcatraces." Then in 1826, a British Navy surveyor, Captain Frederick Beechey, secured permission from Mexican authorities to survey the bay. (Thompson 1979: 2-3 and Martini 1990: 11) For whatever reasons, he gave each island [Alcatraz and Yerba Buena] its present name and "thus they have been known ever since" (Thompson 1979: 5). (The name "Alcatraces" was traditionally translated as "Pelicans" but newer translations have indicated that that the word should be translated as "Cormorants" (Hart 1996: 4). The name has been spelled in a variety of ways over the years, among them Alcatraces, Alcatras, Alcatrace. The spelling of "Alcatraz" was adopted by the U.S. Coast Survey in the 1850s and by the U.S. Army in the mid-1860s. [Thompson 1979: 3])

Alcatraz was generally left unsettled and unexplored (Thompson 1979:1) –and hence unaltered –by the European population during the Spanish and Mexican periods. However, Alcatraz's strategic location, in relation to the defense and to the navigation of the bay, was recognized. The Spanish colonial government retained ownership and control of all coastal lands in California (including Alcatraz as an island in the San Francisco Bay). By the time that the Mexican government assumed control of California in 1822, "increasing seaborne trade in hide and tallow, and an expanding influx of Anglo-American settlers resulted in the territorial ambitions of the young United States becoming focused upon California" (Freeman 1999: 2-6). In 1838, "the Mexican government, fearful that foreigners might occupy some of these islands [in the bay], passed a law that authorized the governor of California to grant them to Mexican citizens" (Thompson 1979: 6).

On 30 April 1846, less than two months before the Bear Flag Revolt, Julian Workman, a naturalized

Mexican citizen, petitioned the governor for a grant to Alcatraz “which has never been inhabited by any person, nor used for any purpose” (Thompson 1979: 6). On 8 June 1846, Workman was granted the title to Alcatraz with the condition that he would establish a navigation light “as soon as possible” (Thompson 1979: 6) on the island. Workman did not do this and soon transferred the title to his brother-in-law, Francis P. Temple. John Fremont, who had appointed himself governor after the United States declared its control of California, took it upon himself to pay Temple \$5,000 for Alcatraz. (Thompson 1979: 6-7) In 1848, at the end of the war with Mexico, the United States government declared that Alcatraz was federal property and “refused to recognize both Temple’s claim to ownership of Alcatraz and Fremont’s petition for reimbursement for its purchase. The government’s explanation was that the original owner, Julian Workman, had never erected the lighthouse required of him, and that Fremont had never been empowered to make any such land purchases for the United States of America. All private claims [to Alcatraz] were null and void” (Martini 1990:13), and Alcatraz has remained the property of the federal government to the present-day.

## **U.S. MILITARY DEFENSE ERA: MASONRY FORTIFICATIONS (1847-1868)**

### Summary of History

#### 1. Initial Survey of the Island

The United States recognized the military importance that control of the San Francisco Bay and harbor would have in maintaining its control of California, and “one of the first orders of government business was to survey the harbor for potential fortification sites” (Martini 2002: 6). Alcatraz was surveyed by military engineers in May 1847. (Thompson 1979: 10) The field map that was drawn from this survey noted that:

“This Island is chiefly composed of regularly stratified sandstone covered with a thin coating of guano. The stone is full of seams in all directions which render it unfit for any building purposes & probably difficult to quarry. The island has no beach & but two or three points where boats can land” (Warner 1847).

#### 2. Gold Rush

At the time of the Army’s survey, in 1847, less than 500 people lived in the small settlement of San Francisco, and “[t]he bay –and for that matter, the entire territory of California –offered little that would put the new American possession at risk from foreign attack” (Martini 2002: 6-7). However, after the discovery of gold in the Sierra foothills in January 1848, San Francisco quickly developed into a boom town, providing supplies and services to the thousands of individuals who arrived on ships, from all over the world, seeking their fortune in the California gold fields.

The number of ships entering the harbor increased dramatically during the Gold Rush. In 1849, 775 ships passed through the Golden Gate. The increase in the area’s population, commerce, and wealth increased the strategic importance of San Francisco to the United State’s claim to California and “had an immediate impact upon the need for the protection of the city and its maritime commerce” (Haller 1985: 8-2). San Francisco went from obscurity to being the “most valuable port in the world” (Martini 2002: 7). It was now a vital possession of the United States, and, as such, funding for the protection of San Francisco became a top priority.

Alcatraz’s landscape remained untouched and unaltered during the Gold Rush period of 1848-1850.

However, the Gold Rush probably did impact the island. It is well documented that the bird nests on the Farallon Islands, located 26 miles offshore, were raided for eggs, a scarce frontier commodity. It seems likely that the nests of the birds on Alcatraz would also have been raided since the island, located within the bay, could have been easily reached. (Delgado et al. 1991: 9) This disruption of the bird's habitat would continue with the subsequent construction of the light house and fortifications on the island in the 1850s.

### 3. Alcatraz Lighthouse

Alcatraz's location and the height of its landform made it a landmark that could be used for navigation, and as such was an appropriate site for the placement of a navigation light. Alcatraz was included as one of the eight lighthouses for the Pacific Coast that Congress included in its 1850 appropriation. (The Fort Point [1855] and Farallon Islands [1856] lights were also included in this appropriation, and a separate local contractor was hired to build the Point Bonita Light [1855]. [Gibbs 1986: 18]) Construction of Alcatraz's lighthouse began on 15 December 1852, and the lighthouse was placed into operation on 1 June 1854. The Alcatraz lighthouse was the first major structure to be built on the island and was the first lighthouse on the West Coast.

The lighthouse was located on the south crest of the island. "By lining up Alcatraz's light with the one at Fort Point, [completed in 1855] pilots could bring vessels over the dangerous San Francisco Bar" (Haller 1985: 8-3). In 1856, a fog bell was installed on the edge of the bluff on the island's south side to further aid navigation. (Haller 1985: 8-5)

### 4. Development of Earthen Fortifications (1853-1859)

The Joint Board of Military Engineers and Naval Officers (Pacific Coast) was established by Congress in 1849 to review the conditions along the Pacific Coast and to make recommendations for its defense. In its final report, submitted on 1 November 1850, the commission recommended that fortifications be built at Fort Point, Lime Point, and Alcatraz to protect the Golden Gate. Five days later, and in fact before he had even read the commission's final report, President Fillmore signed an Executive Order on 6 November 1850 that reserved Alcatraz for public use. (Thompson 1979: 10-12)

Alcatraz's location was ideal from the viewpoint of contemporary military defensive strategies and capabilities. The guns of the day had an accurate range of about one and a half miles and could "direct annoying fire" (Thompson 1979: 14) at a range of up to two miles. Alcatraz was located within that distance of the Golden Gate, San Francisco, and all of the approaches by the bay into the city's port. Military engineers reported back to Washington after surveying Alcatraz in 1852 that:

"Nature seems to have provided a redoubt for this purpose in the shape of Alcatraz Island –situated abreast the entrance directly in the middle of the inner harbor, it covers with its fire the whole of the interior space lying between Angel Island to the North, San Francisco to the South, and the outer batteries to the West. It is just three miles from each of the Entrance forts [of Fort Point and Lime Point] and consequently takes up the fire dropped by them at the 1-1/2 mile range. A vessel passing directly to San Francisco must pass within a mile [of Alcatraz]; and the center of the city is about two miles distant. A vessel approaching the city from the north by the Riley channel [east of Angle Island] must pass within two miles of Alcatraz –thus the main object of preventing an anchorage in the harbor within range of the town may be accomplished from this position and Rincon Point" (Thompson 1979: 15).

Alcatraz's physical characteristics only added to its desirability:

“The Island presents natural advantages for the site of a battery –The walls are already mostly scarped by nature in the solid rock. A slight degree of blasting would complete this part of the work, & the battery may at once to placed at a suitable height upon the top of the Island” (Thompson 1979: 15).

During this initial phase of development (1853-1859), the island was modified to meet the needs of the 1852 fortification plans. The 1852 plans for Alcatraz were a part of the United State’s Third System of fortifications. This system was a strategic doctrine for “building the infrastructure of a unified defense network” (Freeman 1999: 2-8) for the nation’s seacoasts and called for “large brick or stone forts with multiple tiers of gun batteries . . . built on promontories and on islands at choke points to important harbor entrances” (Freeman 1999: 2-9). The 1852 plan for Alcatraz consisted of modifying the existing topography so that it would better serve the defensive purposes of the fort; constructing batteries for guns; and building the infrastructure to support the operations of the fort: a wharf, a road to connect the wharf and batteries, a guard house to protect access to the island from the road, buildings for support facilities, and barracks to provide living quarters for soldiers.

Actual work on the fortifications at Alcatraz began in the summer of 1853, and, although the construction of the lighthouse had begun the previous winter, this marked the real beginning of the modifications to the island’s landscape. The work was directed by 1st Lieutenant Zealous Bates Tower. The construction of the fortifications continued through the end of 1859, and on 30 December 1859, the post was garrisoned, and the “first troops took up residence in the newly completed Citadel” (Thompson 1979: 203). The start of the Civil War halted any major construction on Alcatraz (Thompson 1979: 87) and ended this initial phase of the development of the military landscape at Alcatraz. The defense of San Francisco was a low priority throughout most of the Civil War (Martini 1990: 49), and the work that continued was minor. Major construction at Alcatraz did not begin again until after the end of the Civil War, when the redesign of the masonry batteries would turn into a “full-scale rebuilding” (Freeman 1999: 2-16) of the island to conform to newer military requirements.

## Changes to the Cultural Landscape (1853-1859)

### 1. Summary

Before 1853, Alcatraz could be described as follows:

“The shores were irregularly shaped, with the prominent landmarks being the point at the northern end, a small cove, later named ‘Pirates Cove,’ close to the tip but on the windward shore, and another small cove on the leeward shore, close to the southern tip of the island. Alcatraz was originally 1,705 feet long, with its widest point measuring 580 feet across. Two low, rounded peaks on the island had elevations of 134.9 and 138.4 feet respectively. The southeast end gradually sloped to the water, while at the northwest end, the cliffs climbed from 10 to 120 feet above the water in a hundred yard distance. The east and west shores were more precipitous, rising 50 feet straight up from the water on the west side before climbing another 80 feet in less than a hundred yards. The eastern side climbed 20 feet straight from the waves, and then steeply angled to a 130 foot summit within a hundred yards of the shore” (Delgado et al. 1991: 9).

The changes to the cultural landscape features on the island during this initial phase of development were directly related to modifying the island in order to construct the masonry fortifications and the army post. The Army modified the existing topography in order: to construct a roadbed; to create a large level plateau on the top of the island; to create the linear level areas or platforms that were required for the construction of the batteries; and to alter smaller areas of the island’s slopes to accommodate the construction of the support buildings and structures. Because Alcatraz was basically rock with very little

soil to grade, the only way to create these level areas was to cut or blast away the rock.

The basic features of the island during this period consisted of : a wharf on the southeast end of the island; a road system that connected the different levels (and built features) of the island; a level plateau on the summit of the island where the Alcatraz lighthouse, Citadel, parade ground, and engineer's office were located; batteries, one at each end of the island; support buildings and structures located along the east side of the island; a second cluster of support buildings and structures located on the southwest slope of the island between the top summit (above) and the south batteries (below). (Thompson 1979: 24-36)

The fortifications (batteries, guardhouse, and Citadel) were masonry (built of brick and stone). The support buildings were wood-frame and were meant to be temporary; however, most of them remained as permanent features on the island through the end of the 19th century and into the early 20th century.

During this initial period of development, Alcatraz lacked the types of vegetation features that would normally be found on an army post –native plant communities, areas used for grazing, vegetable gardens or orchard, or ornamental vegetation. The additions of garden areas and the introduction of new ornamental plants to the island –alterations that would soften the harsh environment of the island and make it more livable for residents –did not begin until the 1860s, after the basic facilities of the Army post had been constructed.

The following sections provide a more detailed description of the key cultural landscape features on the island during this period.

## 2. Topographic Modifications on the Summit and Construction of the Citadel, Lighthouse, and Engineer's Office

The two rounded peaks of the island were altered by blasting to create a large level plateau that sloped down slightly from south to north. The south peak was reduced from its original height of 138.4 feet to about 134 feet, and the north peak was reduced from its original height of 134.9 feet to about 131 feet. The shallow depression between the two peaks was filled with the rock that was removed. (Warner 1847, Ernst 1867, Thompson 1979: 69)

The company barracks, known as the Citadel, was built on the north end of this new plateau. From this height, sentries had an unobstructed view of the waters surrounding Alcatraz, and the entire perimeter of the island could be defended. The Citadel was a “solid, massive, defensible building that could withstand not only an infantry assault, but most of the naval armament of the day” (Thompson 1979: 64). The Citadel, sitting on the top of the island, became the most visible building on Alcatraz.

The Citadel was located in the center of a dry moat, an excavated pit, 150 feet by 75 feet. Martini described this feature in *Fortress Alcatraz*:

“This recess, lined with brick, formed a dry moat or ditch, and the three-story Citadel itself was erected in the middle of the ditch. The only entrance to the barracks was across two drawbridges spanning the moat, providing access to the second story. The exterior counter scarp walls of the moat were hollowed out for privies, storerooms, and water cisterns” (Martini 1990: 27).

The cisterns were located on the southeast wall and had a combined capacity of 54,000 gallons. They augmented the 23,000-gallon, wood, water tank located at the wharf area. (Delgado et al. 1991: 23) The expanse of ground to the north of the Citadel was used as a parade ground. The wood-frame engineer's office was located on the north end of the plateau. (Thompson 1979: 69)

Alcatraz's brick, Cape Cod-style lighthouse was located at the south edge of this plateau, just south of the Citadel. (The United States Lighthouse Board used one standardized plan for the construction of these first western lighthouses—a Cape Cod-style dwelling with a short tower thrusting up through the center of the roof; this arrangement allowed the keeper to service the light without venturing out into damp, foggy, and cold conditions. [Jones 1993: 6] This design was developed by Ammi B. Young, a prominent nineteenth-century architect. [Holland 1972: 155]) The Alcatraz light was a Third Order Fresnel lens with steady white light. It was used in conjunction with the light at Fort Point to guide ships into the port of San Francisco. (Thompson 1979: 459).

### 3. Topographic Modifications Related to the Construction of the Masonry Fortifications

The natural topography of the upper slopes was altered by blasting to remove rock in order to create level platforms. Sandstone and brick “scarp walls” were constructed on the outside slopes of these terraces. These high retaining walls reinforced the protection of the perimeter of the island and, more importantly, held in place the island's rock that was prone to crumble and slide. The batteries of guns were mounted on the level areas behind the scarp walls.

There was a Barbette or open battery on the north end of the island that worked in conjunction with Angel Island to protect the north passage around the island. There was another Barbette battery on the south end of the island that extended around the west side that protected the Golden Gate and the south passage around the island to the port of San Francisco. On the northeast end of the island, the north caponier, a masonry tower, rose several stories above the masonry wall of the battery and held smaller guns. On the southwest end of the island, there was a similar structure—the south caponier.

### 4. Topographic Modifications and the Construction of a Wall Along the Shore

The rocky shores that surrounded the base of the island were modified by blasting away the “gentler slopes” to create steep cliffs with a “perpendicular height of 25 feet all around” (Thompson 1979: 16). This was done to prevent enemy landings around the perimeter of the island.

### 5. Construction of the Wharf

Transportation to and from the island was solely by water, and the construction of a wharf was needed to allow boats to dock at the island. Due to the current, tide, fog, and physical layout of the island, the only real location for a wharf was on the southeast end of the island, and a wharf was built there in 1853, out of sight from the Golden Gate and protected from prevailing winds. This was the only access point on the island.

### 6. Topographic Modifications Related to the Construction of the Roads and Building Clusters

The fortifications and support facilities of the post were reached via a system of roads that began at the wharf. In order to build the roads, the existing rocky slopes were blasted to create the roadbed. The rock on the sides of the roadbed was not stable, and brick retaining walls were built along the both sides of the road (to stabilize the hill on the west side of the road and to stabilize the east side of the roadbed). Construction of the main road began in the late summer of 1853, and by October, the roadbed from the wharf to the guardhouse had been blasted. The roads that were built basically followed the alignment of the today's roads.

The main road began at the wharf and continued in a northwest direction, uphill, and through the

guardhouse. The guardhouse was built over the road, and the guardhouse had a dry moat surrounding it. The road passed through the guardhouse on a wood drawbridge that spanned the moat. In case of attack, the drawbridge could be lifted and the guardhouse closed so that access to the batteries could be controlled.

Between the wharf and the guardhouse, a row of wood-frame buildings (that housed support facilities such as the boathouse; 23,000-gallon, wood, water tank; engineer storehouse, quartermaster store; coal shed; and sutler's store) were located on the narrow strip of land between the east side of the road and the edge of the island.

Above the guardhouse, the road divided at the first of three switchbacks. Part of the road continued to the northwest, along the east side of the island, to provide access to batteries (Battery Halleck, the North Caponier, and Battery Rosecrans) that were located around the northern end of the island.

The main part of the road continued around the first switchback and up the slope.

At the second switchback of the main road, the road again divided. (A secondary road continued southwest to the south end of the island.) The main road continued up the slope. To the north of the third switchback on the main road were a row of three quarters for Noncommissioned Officers (NCO) that was located next to the hillside (today this area is referred to as the Water Tank area). The main road ended on southeast side of the uppermost level of the island where the Citadel and lighthouse were located.

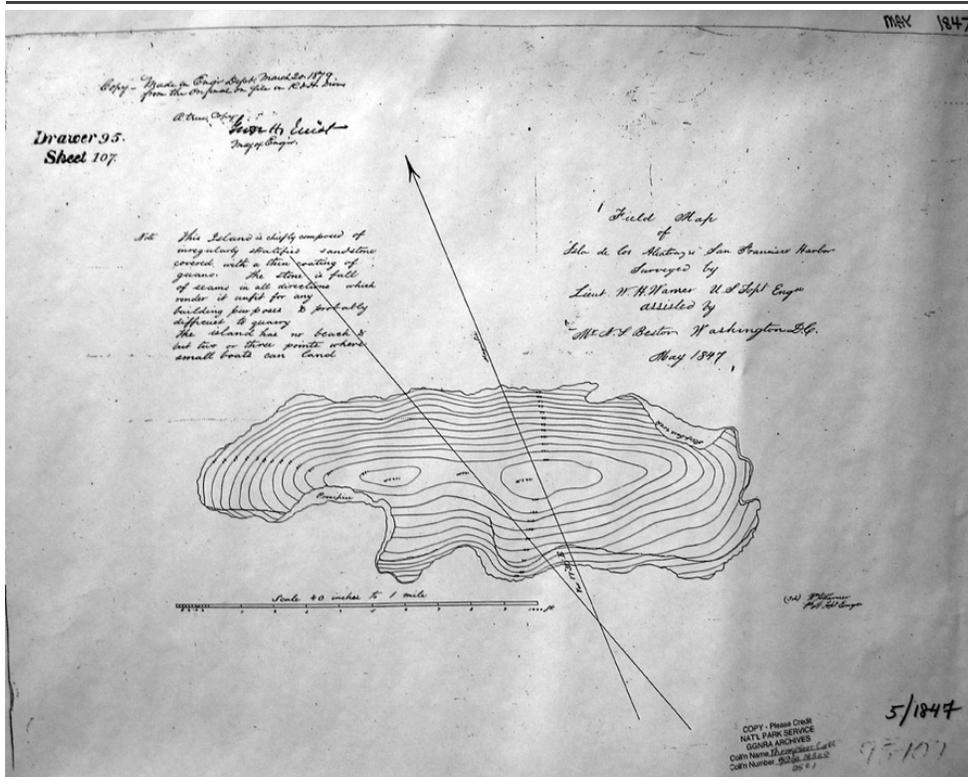
The secondary road that began at the second switchback of the main road continued around the south end of the island. This road provided access to a group of wood-frame buildings (two temporary barracks, laundry quarters, stable, engineers' quarters, commissary stores, carpenters shop, ordinance stores, and privy) located on the slope on the southwest side of the island.

On the northwest side of this group of buildings, the road split into two branches. One branch continued north along the west side of the island and provided access to the batteries along the west side (Batteries Tower, Stevens, and Mansfield). The other branch of the road provided access to a lower level of the south end of the island, where Battery McClellan, the South Caponier, and Battery Prime were located.

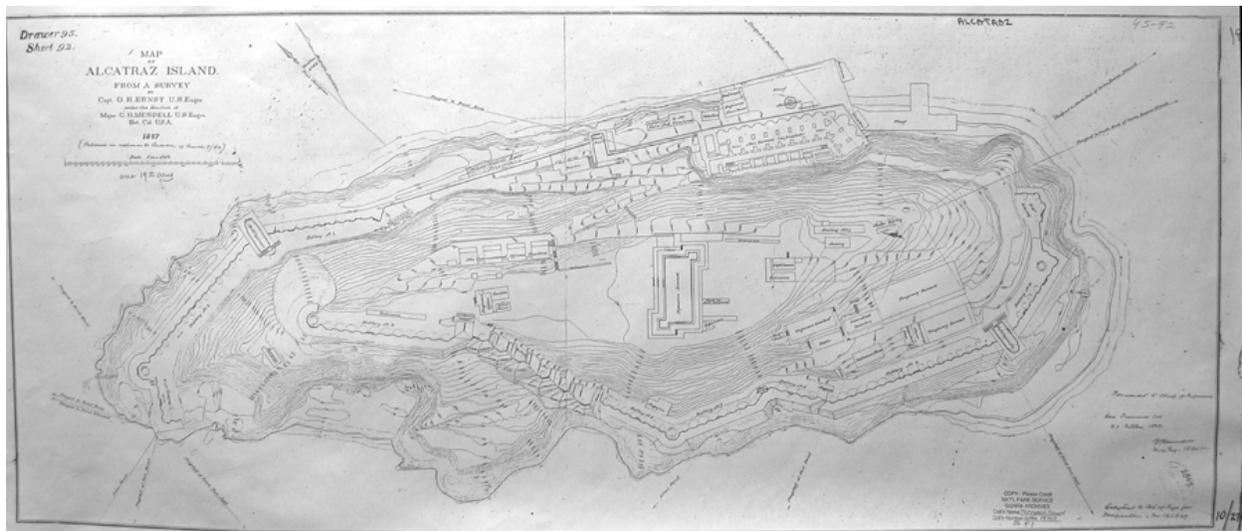
## 7. Vegetation Features

To 19th century eyes, Alcatraz was considered a "barren" island. No one lived there. The island only had a "thin deposit of native soil that supported native grasses and shrubs," (Delgado et al. 1991: 9) and the colonies of birds on the island—so numerous that the island was sometimes called the "White Island" in reference to the guano deposits that covered its slopes—were considered a nuisance. The native plant communities that did exist were probably adversely affected (and possibly eliminated) by the blasting and building during this initial phase of construction (1853-1859).

Alcatraz did not have areas that could be used for grazing animals, and it did not have the areas devoted to growing food to supplement the post's diet (such as fruit tree orchards or vegetable gardens) The terrain and growing conditions at Alcatraz were not conducive to either of these land uses. (The post's soldiers maintained a vegetable garden on Angel Island in a "sheltered valley near Pt. Blunt" [Martini 1990: 44].) The addition of garden areas and the introduction of new ornamental plants to the island—alterations that would soften the harsh environment of the island and make it more livable for residents—began in the 1860s after the basic facilities of the Army post had been built on the island.



Field Map of Isla de los Alcatrazes, San Francisco Harbor, Surveyed by Lieut. W. H. Warner U. S. Topo. Engr. Assisted by Wm. N.L. Beston, Washington D.C., May 1847 See Supplemental Information for an 11 x 17" copy.



Map of Alcatraz Island From A Survey By Capt. O.H. Ernst U.S. Engrs. under the direction of Major G.H. Mendell U.S. Engrs. Bvt. Col. USA 1867. See Supplemental Information for larger copy.

## U.S. MILITARY DEFENSE ERA: EARTHEN FORTIFICATIONS (1868-1907)

### Summary of History

#### 1. Alcatraz's Fortifications

As a result of battle experiences during the Civil War, the Board of Engineers for Fortifications concluded that:

“Only large rifles and 15-inch Rodman smoothbores were effective against armored vessels, that masonry works were vulnerable to such weaponry, and that earthwork barbette batteries were not only the most resistant to such fire but also the most cost-effective to build. As a result, major changes to the seacoast defenses of San Francisco Bay were implemented in the period immediately following the Civil War, under the scheme known as the Plan of 1870” (Freeman 1999: 2-16).

At Alcatraz, this meant that the existing stone and brick batteries were now considered obsolete. As described by John Martini in his history, *Fortress Alcatraz*:

“The most serious shortcomings in Alcatraz's [pre-Civil War] design had been dictated by the island's topography. Steep slopes of natural rock backed nearly all of the batteries, and the Army's senior engineer for the Pacific Coast concluded that any projectile hitting these cliffs would shower gun emplacements and artillerymen with a devastating hailstorm of rock splinters. He speculated officers wouldn't be able to force soldiers into these batteries during battle” (Martini 1990: 62).

“The new thinking required that guns be set in wide spaces and protected not by rigid walls but by mounds of soft, absorbent earth” (Hart 1996: 9) that would absorb the force of the incoming ordinance. Given Alcatraz's rocky terrain, the Pacific Board, of the Board of Engineers for Fortifications, noted that: “A satisfactory solution seems to found only in extending the available area by excavation” (Thompson 1979: 157).

The redesign of the fortifications on Alcatraz began in 1868 under the direction of Major George Mendell of the Corps of Engineers. “Mendell's recommendation for Alcatraz was simple and awesome: level the peaks and slopes of the island, spread the resulting spoil in front of the old scarp walls, and ring the island with Rodman guns and Parrott rifles in earthwork batteries” (Martini 1990: 62-63). According to this plan, 430,000 cubic yards of rock would need to be removed at a cost \$215,000. (Thompson 1979: 157). Mendell's plan was forwarded to the Chief of Engineers and then to the Board of Engineers for Fortifications in Washington for review in March (Thompson 1979: 158). It was approved, after discussions with Mendell in December, and reflected the new nationwide standard for battery design and armament that became known as the Plan of 1870. (Martini 1990: 66)

Mendell proposed to defray the high costs associated with the excavation and construction by using the inmates at the military prison as the workforce. (Thompson 1979: 157) A military prison had been established at Alcatraz in 1861, and in 1869, there were between 90 to 125 prisoners on the island. While he was waiting for the approval and funding from Washington for his plan, Mendell began the task of cutting back and leveling the steep slopes at the north end of the island using a work force 30 to 50 military prisoners. (Thompson 1979: 158 and Martini 1990: 64) These men used picks, shovels, and wheelbarrows to remove the rock and then dump it over the walls in front of the existing batteries. As an incentive, the sentences of prisoners who earned a “good reputation as laborers” were commuted. (Thompson 1979: 159 and Martini 1990: 64). However, the use of military prisoners proved to be less than satisfactory to Mendell who noted that after six months of work: “The men are not industrious and

they are careless and at times malicious in their treatment of public property but with all of these drawbacks there is some profit in employing them” (Thompson 1979: 159). The practice of using prison labor continued for the remaining 64 years that the Army occupied the island, and the inmates were responsible for most of the construction work that was done on the island during this time.

Work on the redesign of the batteries was suspended in 1876 due to the nationwide reduction of military spending. By 1876, “Alcatraz stood only partially complete as fortress. A mere five guns were mounted on the entire post (106 fewer than a decade before), and little more than initial excavation work had been carried out on the six earthwork batteries planned for the southern sides of the island” (Martini 1990: 76). Although, Alcatraz continued to officially be a part of San Francisco’s coastal defenses for another 30 years, by 1876, Alcatraz’s utility as a seacoast fortification was for all intents and purposes over.

In 1885, a special board, eventually known as the Endicott Board after its chairman, Secretary of War William Endicott, was established by President Cleveland to make recommendations for the future of the seacoast defense system. These recommendations were based on the advances in military technology over the past 15 years (that is since the implementation of the Plan of 1870). These modernization plans for San Francisco’s seacoast included the “great extension of the outer line of defenses to points well beyond the harbor entrance proper, in reflection of the ten- to twelve-mile range of the new artillery pieces” (Freeman 1999: 2-20). In other words, the first line of defense was now well outside the harbor, and Alcatraz, located inside the harbor, was no longer strategically placed in relation to the new defensive strategies. New high power guns were proposed for Alcatraz, as part of the inner defense of the harbor, but these were never funded. “San Francisco Harbor already had a great deal of heavy armament emplaced” (Thompson 19979: 201), and the modernization of Alcatraz’s defenses was not a high priority.

## 2. Alcatraz’s Prison

Alcatraz was designated as the official military prison for the entire Department of the Pacific on 27 August 1861. During the Civil War, the number of prisoners at Alcatraz ranged from 15 to 50 men, and although the number of prisoners on the island varied over the next forty years, the Army’s investment in and need for the prison increased while that of the defensive fortifications on the island decreased. After the funding for fortifications ended in 1876, the buildings constructed during the next 30 years related to the operations of the post or prison rather than to defense.

During the Spanish-American War, all military prisoners returning from service in the Philippines were sent to the prison at Alcatraz, and the prison population went from 25 during the summer of 1899 to 441 in April 1900. (Thompson 1979: 223) The Upper Prison, a collection of wood-frame buildings constructed on the new parade ground area on the south side of the island, was built in 1900 and expanded in 1904, to handle the exploding prison population from the Spanish-American War. However, this complex and the collection of buildings of the Lower Prison were considered “temporary” structures. The Army needed a modern, permanent military prison and by 1903 was considering sites, including Alcatraz, in the Bay Area. (Thompson 1979: 200 and Martini 1990: 90-91) “In 1907, the War Department made a final decision regarding the future of Alcatraz. No longer would the island be designated as a harbor-defense fort . . . The island was removed entirely from the control of the Department of the Pacific” (Martini 1990: 95). On 21 March 1907, Alcatraz was redesignated the Pacific Branch, U.S. Military Prison, Alcatraz Island.

## Changes to the Cultural Landscape (1868-1907)

### 1. Summary

The changes to the cultural landscape features that occurred after the Civil War and through 1907 were related to the construction of earthen fortifications based on the Plan of 1870 specifications and to the operational requirements of the army post and military prison.

The basic features and spatial organization of the island remained from the pre-Civil War landscape: a wharf on the southeast end of the island; the road system that connected the different levels (and built features) of the island; and a level plateau on the summit of the island where the Alcatraz lighthouse, Citadel, parade ground, and engineer's office were located. Major excavation projects were undertaken to widen the battery platforms and to add soil to the front of the batteries. There were batteries, on the north, south, and west sides of the island, located on terraces below the top summit. The support buildings and structures located along the east side of the island were expanded, and the Lower Prison complex expanded into this area. Most of the cluster of "temporary" wood-frame support buildings and structures, located on the southwest slope of the island between the top summit (above) and the south batteries (below) remained. A new terrace, known as the Parade Ground, was created on the south end of the island, and the wood-frame buildings of the Upper Prison were built here.

By the 1860s, the people who lived on Alcatraz had started creating small gardens. Both public and private planting beds and garden spaces were added to the landscape of Alcatraz during this era. "By 1870, Alcatraz had acquired the appearance of a settled, permanent military post" (Thompson 1979: 210), and, as John Martini pointed out in *Fortress Alcatraz*, the island resembled "a pleasant but unplanned western village" (Martini 1990: 96).

By 1890, the original topography of the island had been modified to the extent that "nearly every square yard of ancient island surface had either been cut away or buried in fill" (Hart 1996: 10), and the basic topography of the island that exists today was in place. The original rounded or humpback look of the island was gone, and the topography was taking on the blocky appearance that exists today.

The following sections provide a more detailed description of the key cultural landscape features on the island during this period (1868-1907).

## 2. Construction of the Earthen Fortifications

The pre-Civil War topography of the island was modified in order to implement Mendell's plan for the new earthen fortifications. Work included reshaping the north (for batteries 1, 2, 3, 4, 5) and south (for batteries 11, 12, 13) ends of the island; lowering the area of Battery 5 by removing 30 feet of rock; making a cut from Battery 5 (on the northwest side of the island) through to the northeast (in vicinity of the present-day morgue); constructing a 180-foot-long tunnel from the North Caponier to Battery 4. Work was undertaken on Batteries 1-5, 7, 10-12 and on the North and South Caponiers. (Thompson 1979: 163, 167, 174-176, 178, 179) Between 1879 and 1890, the south-facing slopes between the Citadel and the area of Batteries 10 and 11 was reduced from a height of 125 feet, at its summit, down to 60 feet and a large level area was created. (Martini 1990: 76-77 and Thompson 1979: 182)

The spoils from the excavations that were dumped over the sides extended and altered the island's shores. Pirates Cove, on the northwest side of the island, was partially filled. On the south end, the spoils covered the 1850s stone defensive walls and the remains of the South Caponier and filled in the small "nooks and crannies on the shoreline at the southern end" (Delgado et al. 1991: 11). This gave the south face of the island a more uniform semi-circular appearance. (Thompson 1979: 182; Martini 1990: 67, 76-77)

The other important component of the redesign of the batteries involved placing soil in front of the batteries. Large loads of soil were brought, mostly, from Angel Island, and used on Alcatraz to create artificial slopes in front of the batteries. (Hart 1996: 10)

### 3. Circulation

The basic road system from the pre-Civil War era remained in place.

### 4. Major Areas

#### Wharf Area

The wharf located on the southeast side of the island remained the main access point to the island. (A dock located on the northwest side below the quarry operations was only used for loading rock.) At the wharf area, work was undertaken during the mid-1880s to repair the wharf and add additional structures related to the operations of the wharf, such as coals sheds and a boathouse.

Work began on the construction of the Bomb Proof Barracks, located against the hillside on the west side of the wharf area, in 1865 but was suspended in 1867. In the fall of 1874, a new barracks was completed at this location. In 1905-1906, a new concrete block barracks (Building 64) was built on top of the Bomb Proof Barracks. (Martini 1990: 152)

The level area behind (to the west) of the Bomb Proof Barracks is shown as having planting beds in a 1905 map (Daly 1905).

#### Lower Prison

In 1863, a wood-frame, prison building was constructed on the hillside on the west side of the road, just north of the guardhouse. Then in 1867, this building was removed and replaced with a brick building. Over the next decade, a group of buildings were built that housed the various functions of the prison. This complex was known as the Lower Prison after the construction of the Upper Prison complex in 1900. (Martini 1990: 154)

#### New Parade Ground

At the second switchback on the main road, the section of the road that continued to the south end of the island provided access to the Parade Ground terrace. Mendell intended this area to be a parade ground and the site for permanent quarters. This area remained open from ca. 1890-1900. Then in 1900, the Upper Prison complex of buildings was built here since this provided the only large level site available for new construction. It was expanded in 1904. This complex consisted of a collection of wood-frame buildings (three cellblocks, a washhouse, a mess hall and kitchen, and a workshop) surrounded by a 12-foot-high wood stockade fence that had a raised guards' walkway attached to the outside. A guardhouse was located just outside the fence on the southeast edge of the parade ground. (Daly 1905, Turner 1909, Martini 1990: 90-91, and Martini 2002; 44)

#### Southwest Cluster

On the southwest side of the island, the group of clusters of "temporary" wood buildings, from the pre-Civil War construction period, remained in place. Three of these buildings burned (stables, laborers' quarters and laundress's quarters) in 1888. (Thompson 1979: 188)

## Hospital and NCO Quarters

At the third switchback of the main road, a hospital, built in 1882 and expanded in ca. 1900, was located on a terrace below the row of three NCO quarters (Nos. 12-14). The level area around the NCO's quarters was enlarged in the early 1870s, during the excavation work for the masonry fortifications, and by the late 1890s, a gymnasium and house for the hospital steward were located at the north end of this area. A new section of road was built, after 1867 and by 1879 that led up the hill on the west side of these buildings to the northwest corner of the Citadel. (Ernst 1867 and Presidio 1879)

## Officers' Row

During the work for the earthen fortifications, a level area had been created below and east of the Citadel. A row of three officers' quarters was built here in 1881.

## Summit

The lighthouse and Citadel remained in place on the top level of the island. During the 1860s, several small wood buildings (including a bowling alley and bakery) were built on the slope to the southeast of the lighthouse. This slope was removed during the excavation work on the south end of the island between 1870 and 1890.

## North End of Island

In addition to the topographic changes that resulted from the excavations related to Mendell's plan, rock was also quarried from the northwest side of the island. This quarrying operation seems to have been established in conjunction with the "never-ending punishments for the soldier-prisoners" of quarrying and breaking rock rather than in response to any specific plan for construction on the island. After 1876, when construction on the batteries ended, the northwest side of the island had been abandoned. The rock from the quarry was used as crushed rock for paving materials on Alcatraz and on other military posts in the area. Rock was being quarried from this area by 1902, and the operations continued until the 1930s. (Martini 2002: 32-33) (The quarrying in this area probably began after the completion of the excavations of the Parade Ground on the south end of the island when a new location was needed for the prisoners who were assigned to quarry and break up rock.) At some point a dock was built on the northwest side of the island to provide access for the boats that came to the island to be loaded with the rock. This dock is shown on the 1933 map of the island that was prepared just before the Army relinquished control of the island to the Bureau of Prisons. (U.S. Army 1933)

## 5. Garden and Vegetation Features

### General Garden and Vegetation Characteristics During This Era

Gardens and small lawns were created on the flat areas of land that were adjacent to the Citadel and to the various quarters on the island. In order to be able to plant these spaces, pits were blasted or dug out of the rock and soil was brought in. Garden areas also needed to be sheltered from the strong westerly winds, and they had to be convenient to water sources (water from the residences or by canvas hoses from the underground cisterns at the Citadel). Due to the great effort that was required to establish and maintain these gardens, and probably partly due to the prevailing Victorian garden styles, they were generally well defined spaces often delineated by wood picket fences or low walls. The gardens were subdivided by small paths into rectangular planting beds. The beds were planted with grass and with

irregular groupings of plants. Based on photographs from the era, the gardens had plants typical to the Victorian era in San Francisco. Some of these plants probably included agave, heliotrope, mirror plant, roses, and fuchsia. The gardens also had amenities typical to gardens of the era –benches or wood trellises. These were vernacular gardens, created not from a specific design or by a specific designer but in an attempt to create a more hospitable and familiar-looking place to live.

In addition to the planting beds, the garden spaces on the east and south of the Citadel and that to the east of the lighthouse also had large specimen shrubs planted at the corners or entrances. A photograph from this era (Martini 1990: 57) also shows large shrubs pruned into oval, pyramidal, and columnar shapes.

Cannon balls were ubiquitous on Alcatraz and in addition to their functional purpose, they served a decorative function on the post. They were used to define the parade ground space in front (south) of the Citadel and were stacked in long pyramidal rows. (A row of Rodman cannons are lined up behind one of these stacks in one photograph.) These rows are shown in photographs of the era, and the row on the east side of the parade ground was shown in maps from 1867-1894. (Ernst 1867, Presidio 1879, U.S. Army ca. 1870s, Rodgers 1894) The cannon balls were also placed in smaller stacked pyramids next to guns in fortifications. Photographs of the era show the cannon balls lined in rows on the tops of walls, such as in the planter that bordered the west side of the Officers' Row houses and along the low retaining wall that defined the south edge of the garden area in front (south) of the Citadel. They were set individually on the ends of steps or levels of retaining walls (used much like a pot of flowers to define the change of levels and transition from the public to private space of the house or porch). They were used as ornaments in the planting beds, stuck on top of short pipes to create something that resembled a gazing ball.

The introduction of imported soil to cover the face of the new 1870s batteries resulted in the introduction of the seeds of various plants found on Angel Island such as coyote bush, blue elderberry, blackberry, and California poppies and of various insects and rodents. (Hart 1996: 11) In order to help to control erosion, the new slopes of the 1870s fortifications were covered with sod (sod was cut from the vicinity of Fort Point and Lime Point in 1872 [Thompson 1979: 175]), or planted with various herbaceous plants such as clover (Mendell bought 25 pounds of clover seed in 1872 [Thompson 1979: 175]), alfalfa, or barley. (Hart 1996: 11 and Delgado et al. 1991: 12) It was difficult to maintain the sod and grasses on the slopes, with the limited on-site water and during the half-year-long dry season. In an inspection report from January 1887, Mendell reported that the slopes of the batteries did not have sod and that this made it "impossible . . . to maintain lines and surface [of the batteries] in their exact form . . ." (Thompson 1979: 188).

In addition to the attempt to establish grass on the slopes of the fortifications, the Army made periodic attempts to maintain grass and lawns on the island. In 1904, 50 pounds of clover and bluegrass seed was planted around the barracks and officers' quarters. (Thompson 1979: 239) However, the choice of these types of plants for the lawn would have required ongoing irrigation and was probably not very successful.

A description of the garden development on the summit and in the Officers' Row area, the two areas with gardens during this era, is provided below.

### Summit

One of the earliest planted areas on the island was a small area on the east half of the south side of the engineer's office building, that was located on the north end of the old parade ground on the island's summit. (Ernst 1867) (An addition to the engineer's office that was used as a school room was located on the west half of the building.) In a photograph from 1864, this garden area was enclosed by a waist-high

white picket fence and had large shrub (or a small tree) located in the southwest corner. (Martini 1990: 48) This garden area was probably short-lived since, by the late 1870s, the engineer's office building had been moved south closer to the Citadel.

The largest and most public of the island's garden spaces was located on the south side of the Citadel. The garden extended all the way across the south façade of the Citadel. This garden was probably first laid out in the late 1860s. It appeared in Eadweard Muybridge's 1869 photographs and was labeled on maps from the 1870s as a "garden." Thompson made a reference to the "formal flower gardens" being "laid out on top of the water cisterns on the southeast side of the building" after the remodeling of the Citadel in 1881. So it may be that the garden was remodeled or enlarged around 1881. (U.S. Army 1870s; Rodgers 1894; Daly 1905; Thompson 1979: 188)

The area along the east side of the Citadel was also an ornamental space that provided a transition between the Citadel and the row of officers' houses located across the roadway on the terrace below. Cannon balls were stacked into long pyramidal rows on the south third of this space. There were formal planting beds along the middle part of this area and a small square garden with formal planting beds located on the north end. (Rodgers 1894 and Daly 1905)

There was a tennis court located south of the garden on the south side of the Citadel. It was probably installed around the same time as the garden (ca. 1881). (Rodgers 1894 and Daly 1905) Due to the lack of level ground, this was one of the few outdoor recreational facilities on the island. (This lack of outdoor space for sports and for drilling was a concern of the post's surgeons. [Thompson 1979: 222]) When the lowering and leveling of the south end of the island was finally completed in the early 1890s, there was finally enough space for the men to play baseball. (Thompson 1979: 222)

To the southwest of the tennis court was a building that is labeled as either a greenhouse (1870s and 1879) or a conservatory (Rodgers 1894). This structure does not appear on the 1905 map of the post.

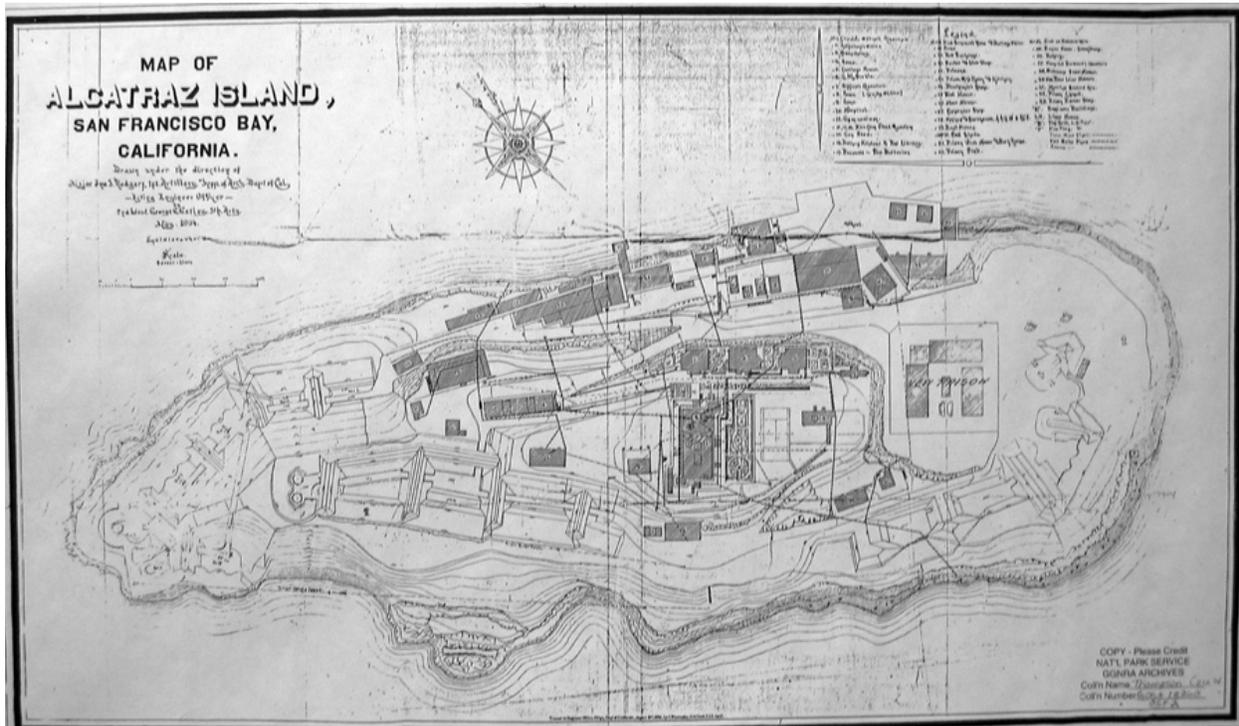
The area around the Alcatraz lighthouse was maintained by the lightkeeper. In the mid-1880s, the lighthouse at Alcatraz obtained a long-term lightkeeper, Captain Leeds. He took an interest in developing and maintaining the garden area and put up lattice fencing and planted flower beds. (Martini 1990: 32) This garden space was destroyed when the original lighthouse was torn down and the current one was built in 1909.

During this era, the location of the parade ground seems to have sifted between the areas north and south of the Citadel. In a photograph from 1864, the parade ground is on the north side (Martini 1990: 48); during the 1870s, it appears on maps on the south side (Presidio 1879, U.S. Army ca. 1870s); after the garden and tennis court were built on the north side, in ca. 1881, the north side of the plateau was again used as a parade ground (Daly 1905).

#### Officers' Row

During the work for the earthen fortifications, a level area was created below and east of the Citadel. This area was labeled as a "Garden" on an 1879 map (Presidio 1879). This garden area was removed when the row of three officers' houses (Nos. 7-9) was built in 1881. However, new garden areas were added on the north and south ends and between each of the three houses in this row. (Rodgers 1894 and Daly 1905) Additionally, these houses had window boxes. There was a wall that bordered the west side of this area and separated Officer's Row from the road. By the early 1900s, pots with flowering plants were placed on top of this wall. (Hart 1996: 10)





Map of Alcatraz Island, San Francisco Bay, California. (Rodgers 1894) (This map shows the features of the island in the mid-1890s during the latter part of the earthen fortifications era [1868—1907].) See Supplemental Information for a larger copy.

## **MILITARY PRISON ERA (1907-1933)**

### Summary of History

The first commander of the Pacific Branch, U.S. Military Prison was Major Reuben B. Turner, who was appointed “because of his abilities as a construction engineer” (Martini 1990: 96). He was charged with designing and building a “state of the art” prison since the existing facilities on the island were inadequate to meet the needs of the military prison. The two prison complexes –the Lower Prison located on the lower east side and the Upper Prison located on the Parade Ground on the southeast end of the island –were separated from each other. Security was compromised. Sanitation was inadequate. Additionally, the wood buildings –some of which dated to the Army’s earliest years at Alcatraz and had been intended to be “temporary” –were a fire hazard.

The actions required to meet the needs of the military prison complex resulted in major changes to the island’s cultural landscape. In addition to the new prison, Turner’s plans included “centralized work facilities for the convicts and an up-dated utility system for the entire island. His plans called for modernizing the island. Old wood frame residences and support buildings (including the Citadel, much of the Lower Prison complex, Upper Prison, 1854 Alcatraz Lighthouse, the carriage shed and stable) were replaced by “concrete structures of a harmonious architectural style” (Martini 1990: 96). New buildings included the new lighthouse (1909), new cellhouse (1912), Post Exchange (1910), Quartermaster Waterhouse and Powerhouse (1912), Commandant’s House (1921), Model Industry’s Building (early 1920s).

Despite the Army’s investment in the prison infrastructure at Alcatraz, “there remained considerable dissatisfaction within the army about this role for the island” (Thompson 1979: 245). The judge advocate general addressed this concern after visit he made to Alcatraz:

“[Alcatraz] lies directly in the path of commerce, and surmounted as it is with the rather conspicuous new prison building is perhaps more prominent in the view of the incoming passenger and more the subject of his inquiry and that of residents and visitors generally than any other object in the harbor. The answer they receive, that it is a prison for the confinement of our military defenders, gives an impression of the character of our enlisted personnel and of the discipline of our Army which is unfair and unjust to the service” (Thompson 1979: 245-246).

In 1913, the Army negotiated with the Department of Labor to transfer the property to the Immigration and Naturalization Service, and a bill was introduced into Congress in October 1913 to authorize this change. However, it was never acted upon, and the Army continued to operate the prison at Alcatraz for another 20 years.

By the early 1930s, the Army was seriously reevaluating its need for a prison at Alcatraz. In May 1933, the Army began negotiations to transfer Alcatraz to the Department of Justice. This transfer satisfied the Army’s desire to rid itself of the costly operations at Alcatraz and the Justice Department’s need for a new maximum security prison. (There had been “a huge increase in the population of the country’s federal penitentiaries during the previous decade, partly resulting from crackdowns on organized crime and bootleggers” [Martini 1990: 120]). On 13 October 1933, Alcatraz was transferred, in an initial five-year lease, to the Federal Bureau of Prisons.

### Changes to the Cultural Landscape (1907-1933)

## 1. Summary

The changes to the cultural landscape features during this era (1907-1933) were related to meeting the needs of the military prison and army post. Major changes included the following:

The Citadel and 1854 lighthouse were torn down to make way for the new concrete cellhouse complex (No. 68) that was built on the island's summit.

The Upper Prison complex, located on the terrace of the Parade Ground, was torn down after the new cellhouse complex was completed, and the Parade Ground remained largely open space during this period.

The north end of the island was developed, and a new powerhouse (No. 67), the quartermaster storehouse (No. 79), shops, and the model industries building (No. 82) were built in this area.

“The island's appearance changed drastically in the early 20th century when permanent concrete buildings replaced earlier [wood] structures’ (Martini 2002: 49). The square corners and high walls of the cellhouse and Recreation Yard dominated the top of the island. “The power house smokestack and lighthouse tower gave the appearance of a ship's masts flanking the ‘superstructure’ of the main prison building” (Martini 1990: 100). The island began to have a more unified look with its new buildings and the addition of amenities such as concrete light posts, (electricity was available after the powerhouse complex was completed) concrete guardrails along the paved roads, and concrete sidewalks.

The garden spaces and many of the plant materials that exist today were added during this era by inmates from Alcatraz's military prison.

The following sections provide a more detailed description of the key cultural landscape features on the island during the military prison era (1907-1933).

## 2. Circulation

The road system basically remained largely unchanged during this era. However, as part of the reconstruction efforts for the new prison, the batteries on the north end of the island were graded down and filled in. This allowed the road to be extended around the north end so that it went completely around the island. By 1909, the roads had been paved with macadam, and there were concrete sidewalks. (Turner 1909) Sometime during this era, the main roads were paved with concrete. However, the roads around the north end of the island and along the west side remained macadam. (U.S. Army 1933 and Martini 1990: 118)

The construction of paths around the lower perimeter of the island was undertaken around 1917-1918. An article in the March 1918 issue of “The Rock” noted that:

“A board walk, a few feet above the water at high tide and encircling the Island, has been in process of construction for sometime and is now nearing completion. Practically all of the lumber used in its construction has been picked up out of the Bay. Part of the walk has been cut out of the solid rock. In some places it overhangs the water and rests on timbers that have been driven deep into the rocks” (Mayer 1918).

The path from the wharf along the south edge of the island and the path up the hillside to the Parade Ground were shown on a map prepared just before the transfer of the facilities to the Bureau of Prisons in

1933 (U.S. Army 1933). The path along the east edge of the island also appears on this same map.

### 3. Major Areas

#### Summit

The changes to the summit of the island were the most dramatic and visible. The Citadel, while highly visible, had occupied only a limited portion of the south end of the summit. “The new prison was a self-contained facility with all of the necessary functions in one structure: cellblocks, kitchen, mess hall, wash areas, hospital, morgue, and recreations yard” (Delgado et al. 1991: 15), and the new building with its walled recreation yard took up most of the ground on the top level of the island. The Citadel was torn down to make way for the construction of this new Cellhouse building; although, the foundations of the Citadel and the dry moat were included in the basement of the new prison building. Work on the new prison began in 1908 and was completed by 1912. When it was completed, the building was the largest reinforced concrete building in the world.

The two 1870s batteries located below and west of the new Cellhouse were filled in to create a level area. The new Recreation or Stockade Yard was built over the foundation of these 1870s earthwork batteries. As a part of this, the traverses between the gun pits were filled and the connecting tunnels were blocked by concrete.

The northwest end of the summit was leveled, and two large, underground water cisterns were built there.

The new prison building was going to be taller than the existing 1854 lighthouse and was going to obstruct its light to the northwest. Also, the existing lighthouse would be visible in front of the new prison building in views from San Francisco, and Major Turner considered this existing complex to be unsightly. He did not want it detracting from the visual statement of the new prison building, and he proposed the relocation of the light to the top of the new prison. Instead, the Lighthouse Board demolished the existing lighthouse and built a new 84-foot-high, reinforced concrete light tower with a new attached quarters, for a lightkeeper and two assistants. The lighthouse was completed in late 1909, and the new light was lit on 1 December 1909. (Thompson 1979: 462)

#### Wharf Area

The main access to the island remained the wharf that was located on the southeast side of the island. (The dock located on the northwest side of the island was used to load rock from the quarry operations located on that side of the island.)

A new barracks was built, on the southeast side of the island, on top of the ca. 1867 Bomb Proof casemates, that had never been completed. The new barracks (Building 64) was completed in 1908. (Thompson 1979: 248)

There was a handball court located to the southeast of the wharf complex. (U.S. Army 1933 and Thompson 1979: 250)

#### Lower Prison Area

By the end of this era, the Lower Prison buildings, along the east side of the road north of guardhouse, had been removed. The Post Exchange, completed in 1912, was built on the east side of the road, across

from the first switchback. This building was constructed of reinforced concrete in the Mission Revival style.

#### East Side of the Island

The area along the east side of the island remained relatively unchanged during this era. The hospital, NCO quarters (Nos. 12-14), and Officers' Row (Nos. 7-9) remained. Between 1919 and 1921, a new house was built for the Commandant, right at the southeast edge of the summit, at the south end of the row of 1881 officers' houses.

#### Parade Ground

After the completion of the new cellhouse, the wooden buildings of Upper Prison complex were torn down. In 1929, a row of four officers' quarters (Nos. 72-75) were built along the southeast edge of the Parade Ground, and a large officer's quarters (No. 83) was built at the south edge of the Parade Ground, on top of "old Three Gun Battery (or Battery Prime and Battery 12). (Thompson 1979: 507-508)

The wall that defines the outer edge of the Parade Ground area (today know as the sea wall) was in place by the end of the era. The road located along the inside of this wall was also in place. (There had been a road here before but the alignment of the road became more distinct or defined after the Upper Prison complex was removed.) There were small lawn areas around the two groups of quarters; a tennis court in the northwest corner; and a playground, in the southwest, for the children who lived on the island. (Turner 1909, U.S. Army 1933, Thompson 1979: 250) At the very end of this period, the Parade Ground was paved. (Eley 1998: 5)

There was a tool house located at the northwest corner of the Parade Ground, at the base of the cliff. The fog signal remained located just below the Parade Ground on the south end of the island.

#### Southwest Cluster

At the beginning of this era, there were still two small clusters of wood-frame buildings on the southwest slope of the island. The corral, stables, and carriage shed (located in the West Lawn area) were present in 1909 but by 1933 had been removed (motor vehicles had replaced the mules on the island). Two buildings (Nos. 15 and 43) remained on a terrace that was below the southwest side of the summit but above the elevation of the Parade Ground; these were used for married officers' and civilian quarters and remained in place in 1933.

#### North End of the Island

The north end of the island was not as visible from San Francisco, as was the south end of the island, and during this era, a complex of industrial buildings was developed that included the Quartermaster Warehouse and Powerhouse complex, completed in 1912, and the Model Industries Building, built during the early 1920s. The new powerhouse was built on top of the 1870s earthen batteries, which had themselves been built on the scarp walls of the 1857 North Battery. (Martini 1990: 98) The Model Industry's Building was built as part of the prison's refocus on rehabilitation of the soldier incarcerated on Alcatraz.

The quarry operations, that supplied rock that was used as paving materials for the island and to other military facilities in the bay area, continued to operate on the northwest side of the island. There was a dock on this side of the island that was used to load the rock onto boats.

#### 4. Garden and Vegetation Features

San Franciscans had long been displeased with having a military prison in such a highly visible place. During the nineteenth century, Alcatraz's rocky shores, barren slopes, and collection of wood-frame buildings perched on the sides of the slopes were not pleasing to the eyes of San Franciscans. The lack of visible green vegetation (trees, green lawns, and plants that did not go dormant during half of the year) on the island contributed to Alcatraz's poor public image.

Up until this time, given the general lack of soil of any depth on the island and the limited water, ornamental plants were not widely planted on the island. The Army's earlier attempts to plant the slopes with sod or grass or clover were not very successful –mainly because these plants were not suited to the conditions on Alcatraz. There were garden spaces around the homes of residents on the island and in front of the Citadel (the most formal and public space for the post and the community on the island). However, these features were not very visible at a distance, and the public perceived the island to be rather ugly. After the construction of the new prison facilities and the modernization efforts on the island, this issue was finally addressed by the Army

The Army undertook a concerted effort to plant the slopes of the island in an attempt to both control erosion and to “beautify” the island. The plant materials used (such as agave, ivy, ice plant, eucalyptus) were better adapted to the growing conditions on Alcatraz, than the types of plants previously used (such as bluegrass), and so survived and altered the appearance of the island..

The Army was eager to promote its efforts to beauty the island and invited reporters out to see what was happening. (Hart 1996: 14) In an article in the island's newspaper, “The Rock,” the author, Edward Mayer, wrote about the Army's efforts to “improve the Rock” so that “its own beauty shall be in harmony with that of its surroundings.” He noted the roses, sweet peas, lilies, and “a large variety of other flowers” that were on the island and the efforts made to establish these plantings:

“ . . . deep holes are cut into the hard rock and filled with rich, black soil. In these the seeds are planted. In this way barren wastes are converted into garden spots, and ugliness is transformed into beauty” (Mayer 1918).

He also noted that the progress of “boardwalk” that was nearing completion around the lower perimeter of the island. Whatever the intended utility of this path, it also appears to have viewed as adding to the beauty and recreational aspects of the island. He noted that:

“Flowers and shrubbery have been planted on both sides of the walk wherever possible, and in course of time it will be as fine a ‘lovers lane’ as there is in the country” (Mayer 1918).

In 1915, Alcatraz was renamed the “Pacific Branch, United States Disciplinary Barracks” and programs was implemented that focused on providing education, training, and rehabilitation for the soldiers incarcerated in the prison. One of the 25 training programs offered was gardening. The number of men working and studying as gardeners varied, but there seems to have been about 12-15 gardeners during the early years of this program. (The Rock 1917-1918)

Another major planting effort took place in the spring of 1924, using plants donated by the California Spring Blossom and Wild Flower Association. The prisoners on the island planted 300 trees and shrubs, “100 pounds of nasturtium seeds, many pounds of Shirley poppy, three mallow and cobaea scanderis” provided by the association (San Francisco Chronicle 1924). (A picnic with entertainment by the

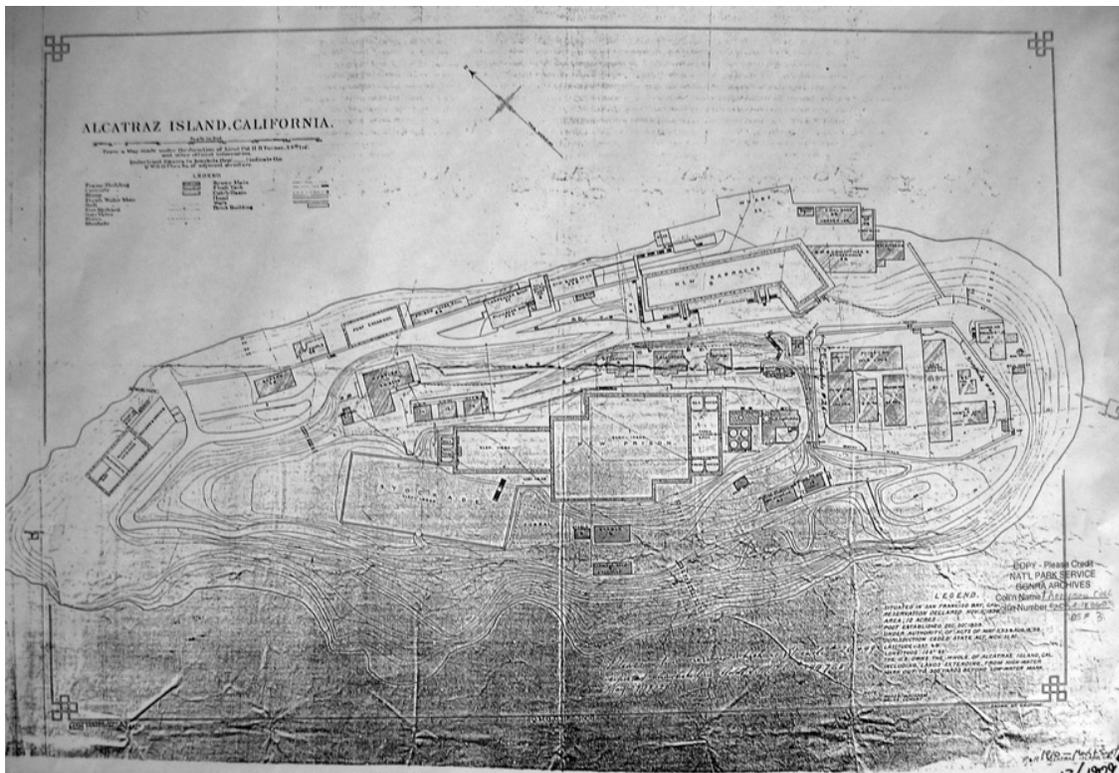
Alcatraz band was planned for later in the spring.)

There are not many details available on the continuing planting and garden work that was carried out on the island under the Army during this period, but Fred Reichel, the first secretary to the Warden, provided a description of the island in 1933 when the facilities were transferred from the Army to the Bureau of Prisons:

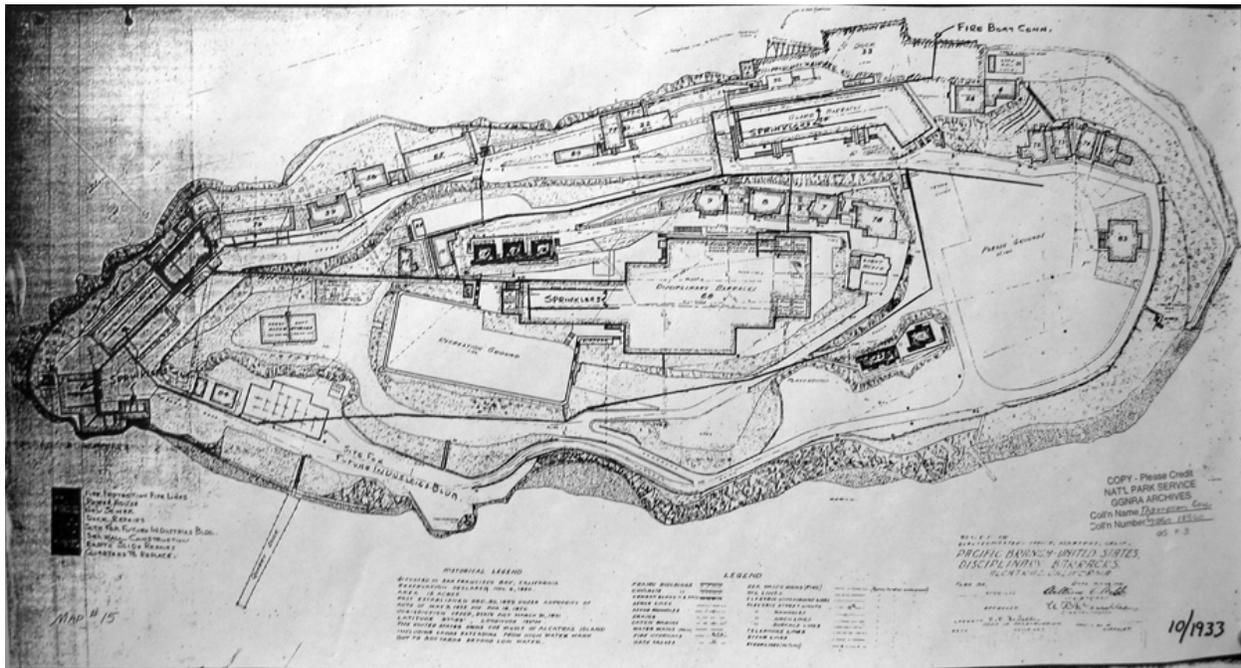
“I was very much impressed by the thousands of hours of hard labor which had gone into its beautification. True, from the mainland it appears mostly rock. However, though much trial and error many plants had become naturalized there and were quite happy. One of the banks was bristling with those inaccurate time keepers –the century plants –and there were blankets of the lavender flowered mesembryanthemum . . . There were many sturdy trees, particularly on the leeward [east] side of the island . . . But perhaps the most unexpected were the terraces which had been formed from the ever present rock and filled in with soil from the sacks carried back by the returning day laborers from Angel Island. Then these terraces had been supplied with various bedding plants which on that February day made me feel that life there would not be as bleak as I might have feared” (Reichel ca. 1974: 1)

The Army also built a simple system that used the recycled or gray water from the prison showers to irrigate the lawn areas and terraced beds on the west side of the island. The water from the showers drained down into tanks (or a pool) where it was stored until it was used. (Reichel, the source of this information, did not say how the water was applied to these areas.) (Reichel Unedited Draft Transcript: 24; Reichel ca. 1974: 2 in Lutsko 1992; Reichel ca. 1978: 1 in Lutsko 1992)

During the military prison era, there is specific documentation or reference (historical maps, historical photographs, and interviews/letters from Fred Reichel) to the following plant materials and planted areas: roses, sweet peas, lilies, nasturtium, poppies, “mallow” (a common name that could have indicated a plant from the Malva, Lavatera, or Alcea genera), “cobaea scanderis” (a misspelling of Cobaea scandens), trees on the east side of the island, and on east side of road on the road from the wharf up to the Guardhouse, between the ca.1881 officers’ quarters (the terraces, walls, and steps that exist today in this area were in place by 1933 when the Army transferred the property to the Bureau of Prisons [U.S. Army 1933]). In addition to these, Fred Reichel found the following Army-era garden spaces, when he arrived on the island in February 1934: agave and “Mesembryanteumum” (a misspelling of Mesembryanthemum that could have referred to plants in different genera including Carpobrotus, Drosanthemum, Aptenia, and Malephora –all of which were listed in a 1992 plant inventory [Lutsko 1992]) on the slopes, a “small flat garden near the Post Exchange,” a rose garden and small green house in the level area of the ca. 1859 NCO’s quarters or on the next lower level (site of the hospital), lawn in the flat areas on either side of the road on the terrace below and west of the cellhouse; and terraces on the west side of the island. (Reichel Unedited Draft Transcript, ca. 1974, and ca. 1978)



Alcatraz Island, California From a map made under the direction of Lieut. Col. R. B. Turner, 29th Inf. Drawn by C.H. Stone December 1909. (This map shows the layout of the island at the beginning of the military prison era.) See Supp. Info. For larger copy



Quartermasters Officer, Alcatraz, Calif., Pacific Branch - United States Disciplinary Barracks, Alcatraz, California, 1933 (This map shows the layout of the island at the end of the military prison era.) See Supplemental Information for a larger copy.

## FEDERAL PRISON ERA (1933-1963)

### Summary of History

Although, the Bureau of Prisons intended to utilize the existing Army-era facilities at Alcatraz, certain repairs and changes were needed to retrofit the island to meet the federal prison system's needs. In November 1933, a report was prepared by Robert Bunge, a consulting engineer who made recommendations on alterations that were needed at Alcatraz. Many of the initial alterations to the facilities at Alcatraz were made inside the prison building. However, exterior features—fences, guardhouses, guard towers, and metal detectors—were added to the landscape to accommodate the Bureau of Prisons' security requirements. (Thompson 1979: 353, 361, 368) The costs associated with this initial period of construction were provided by funds from the Public Works Administration, under the direction of the Department of the Interior. Contracts were awarded to civilian companies for the major projects, and the retrofit work began in late 1933.

The majority of the military prisoners were transferred off of Alcatraz in early 1934 (Martini 1990: 122), and the Bureau of Prisons officially took charge of the 32 military prisoners who the Army had chosen to transfer to the federal system on 1 July 1934. On 11 August 1934, the first group of federal prisoners arrived. (Thompson 1979: 380, 381)

During its 30 years at Alcatraz, the Bureau of Prisons faced the same problems and costs related to maintaining and operating Alcatraz as had the Army. The facility also faced the same hostility from the civilian community who, although fascinated by the lore of "The Rock," did not necessarily appreciate having J. Edgar Hoover's "super prison" in their midst. "In his annual report for fiscal year 1952, Dir.

James V. Bennett said that Alcatraz should be replaced with an institution that was more centrally located and less difficult to operate administratively” (Thompson 1979: 413). Then in 1961, an engineering survey of the island’s facilities found that the buildings “were dangerously deteriorated and that \$ 5,000,000 would be required to repair and rebuild them” (Thomson 1979: 413). The federal prison operations at Alcatraz were closed on 21 March 1963. (Thompson 1979: 414)

After the closure of the federal prison in March 1963, the General Services Administration (GSA) screened other federal agencies to determine if any had an interest in the island, and none did. Alcatraz became surplus federal government, and GSA assumed custody of Alcatraz in July 1964. (Thompson 1979: 466)

## Changes to the Cultural Landscape During the Federal Prison Era (1933-1963)

### 1. Summary

The changes to the cultural landscape features between 1933 and 1963 were related to meeting the needs of operating a high security federal prison on the island, and the Bureau of Prisons added new fences, guardhouses, guard towers, and metal detectors.

The infrastructure of the road system basically remained largely unchanged during this era. However, the circulation patterns on the island were altered and movement was restricted by the fences erected on the island.

The Bureau of Prisons concentrated the housing for the corrections officers and their families on the south end of the island. Three reinforced concrete apartment complexes (Nos. A, B, C) were built on the Parade Ground. The Bureau then demolished a number of 19th century quarters: the ca. 1859 quarters (Nos. 12-14) that were located in the Water Tank area; two of the three ca. 1881 quarters (Nos. 8 and 9) in Officers’ Row; and two wood-frame buildings (Nos. 15 and 43) located on the southwest side of the island. On the north end of the island, the New Industries Building (No. 84) was built, and older shop buildings, located between the Model Industries Building and the Powerhouse complex, were removed.

The people who lived on Alcatraz during the federal prison era –prisoners, employees of the prison, and the families of the employees –continued the tradition of gardening and utilized the garden spaces that had been developed by the Army. Although many individuals gardened on the island, several people, in particular, contributed to the garden areas during this period. One was Fred Reichel, secretary to the Warden between 1934-1941, who took a personal interest in the gardens and plantings at Alcatraz. He maintained gardens; obtained, cultivated and planted new species of plants; convinced the Warden to allow inmates to work as gardeners; provided plants and horticultural advice to inmate gardeners; and helped to expand the extent of the island that was maintained as gardens. The gardens on the west side of the island were expanded through the efforts of a number of inmate gardeners, in particular that of Elliott Michener, who work there from 1941-1948.

The following sections provide a more detailed description of the key cultural landscape features on the island during the federal prison era (1933-1963).

### 2. Changes Related to Security Requirements of the Prison

Under the Army, there had been few restrictions on the movement of the inmates. Under the Bureau of Prisons, parts of the island were designated as restricted to the prison operations and other parts to the administrative and residential functions. These changes were made based on the recommendations from

the Bunge report:

“In contrast to the army regime, prisoners are now to be restricted to only the area containing the prison, the utility building at the northwest of the island, and the laundry shops adjacent to the power plant. The entire eastern side of the island from the powerhouse to and including the southeastern end of the island would be off-limits to the convicts” (Thompson 1979: 354).

The north end of the island was enclosed with new fencing (metal “cyclone type with barbed wire protectors at the top” [Thompson 1979: 361]). The fencing began on the west side at the incinerator, went along the west edge of the island, to the Model Industries Building (No. 82), along the north edge enclosing the fog siren station, along the edge of the shops area (that was between the Model Industries Building and the Powerhouse), and then back of the Powerhouse. (Thompson 1979: 361-362 and Towill 1961). “Where it passes the shops building, which was built on the high scarp wall of the original fortifications, a steel walk was provided to get around the building, so that dogs patrolling the area might pass between the fence and the building” (Thompson 1979: 362).

A guardhouse was installed on the dock and the dock was fenced off “to allow for a receiving station at which all persons going or coming were identified” (Thompson 1979: 371).

The tunnel that ran from the powerhouse complex west to the old quarry area (location of Building 84), powder magazines, and underground storage rooms, left over the 19th century fortifications, were sealed to prevent them from being used as hiding places in the event of escape by prisoners. (Thompson 1979: 354)

Guard towers were built at key locations including: at the wharf; on the north end of the top level of the island, on the Recreation Yard walls; on top of the old North Caponier (fuel storage area); and on the Model Industries Building. (Thompson 1979: 405 and Towill 1961)

There were two metal detectors located outside: one on the wharf where the prisoners arrived to the island via boat and one at the rear entrance to the prison (at the base of the stairs leading up to the Recreation Yard) where the prisoners passed through on their way to jobs at the shops area. (Thompson 1979: 367)

Large signs were posted at the perimeter of the island –on the northwest side of the Model Industries, west side of the island on the wall between the upper and lower roads, southeast end of the island, and at the registration office on the dock –proclaiming a series of warnings, announcing the limits of access to the waters off the island, and emphasizing the Bureau of Prison’s control and authority over the island. (The “ALCATRAZ” that was painted on the slopes of the roof on the Quartermaster Storehouse may have been painted earlier by the Army as a landmark for early planes flying into Crissy Field.) (Thompson 1979: 378-379)

### 3. Circulation

The infrastructure of the road system basically remained largely unchanged during this era. However, the circulation patterns on the island were altered and restricted by the fences erected on the island.

### 4. Changes to the Major Areas

On the east side of the island, the Bureau of Prisons demolished: the hospital, the row of three ca. 1859 NCO’s quarters (Nos. 12-14) (located at the Water Tank area); two of the three ca. 1881 officers’ houses

(Nos. 8 and 9) in Officers' Row. The hospital functions were now located inside the Cellhouse building, and after the construction of the new apartment buildings, there was no longer any need for the quarters and their removal opened up the views in these areas (which was desirable due to security concerns).

On the Parade Ground area, three concrete apartment buildings (Apartments A, B, and C) were built in 1940. The Army-era handball court, that had been located at the south end of the wharf, was relocated to the Parade Ground. A recreation building was located on the northern edge of the Parade Ground, and the handball court was on one side of the building and a children's play area on the other. The paved area, that under the Army had had a tennis court, was used for baseball. (Thompson 1979: 403, 406)

On the southwest side of the island, the two wood-frame buildings (Nos. 15 and 43), on the terrace that was located slightly above the Parade Ground, were removed after the construction of the three apartment buildings on the Parade Ground. (Thompson 1979: 402-403, 411 and Delgado et al. 1991: 17)

On the north industrial end of the island, the New Industries was built around 1940. The quarry dock was in place, but not in use in 1937 (Thompson 1979: 407). By the end of the federal prison era, it had been torn down or had simply disappeared, although the steps down to the dock still appeared on a map from 1961. (Towill 1961) Riprap was added to the seawall on west side around 1935. (Thompson 1979: 407) During this period a seawall around the north end of the island (from pump house to quarry dock and then 300 feet south of quarry dock) was proposed in 1937. (Thompson 1979: 408)

Work was done throughout the island to shore up the sides of hills to prevent earth slides. By 1937, the following work had been completed: concrete buttresses on the cliff on east side of wharf and in the industrial area using concrete blocks manufactured by the inmates; 200 feet of retaining wall south of the Cellhouse; retaining wall north of Quarters No. 9 and small pilasters between Quarters Nos. 7 and 8; and two large pilasters southeast of the lighthouse. (Thompson 1979: 408)

## 5. Garden and Vegetation Features

The people who lived on Alcatraz during the federal prison era –prisoners, employees of the prison, and the families of the employees –continued the tradition of gardening that had existed on Alcatraz since the military fortifications era in the 1860s. (Oral histories and photographs from this era provide more details about the garden and vegetation features than is available from earlier eras.)

### Freddie Reichel

Freddie Reichel lived on Alcatraz and worked as the secretary to the Warden from January 1934 to August 1941. During his seven and a half years on the island, he took a personal interest in the garden areas and plants on Alcatraz and served as their unofficial overseer. He maintained gardens; obtained, cultivated and planted new species of plants; convinced the Warden to allow inmates to work as gardeners; provided plants and horticultural advice to inmate gardeners; and helped to expand the extent of the island that was maintained as gardens. Through his horticultural activities, Reichel helped to foster the garden community that existed on Alcatraz during the federal prison years. As the secretary to the Warden, he was one of the few people on the island who had access to the entire island. He was able to see all of the garden spaces on Alcatraz and to have an impact on the landscape in a way that guards' families, whose access was limited to the public part of the island, and the various inmate gardeners, whose access was limited to particular parts of the prison, could not. (Reichel undated oral history; ca. 1974; and ca. 1978)

When Reichel arrived on the island in January 1934, he was "very much impressed by the thousands of

hours of hard labor which had gone into its beatification” (Reichel ca. 1974: 1). Soon after his arrival on the island, he began maintaining several of the existing garden spaces: the rose garden and greenhouse (located in the Water Tank area), the “terraced garden behind my quarters and extending down to the bay” (Reichel ca. 1978: 1) (he is referring to the Lower Terraces and/or Tool Shed Terraces), and a garden near the Post Exchange. (Reichel ca. 1974: 2)

He first activities on the island were growing and then planting annuals and perennials for planting beds, but he was very aware that these types of plants were not necessarily the best suited to the conditions on the island. There was a limit to the amount of labor that was available to water, weed, and care for plants; there were limits on the areas that inmate gardeners were allowed into due to security concerns; and there was a limit to where plants that relied on irrigation could be planted due to the limited availability of water. He wanted to use plant that could “tough it out with the poor soil and the weeds on the slopes” and ones that did not require a lot of water. Succulents were one of the first types of plants that he grew; he started these in boxes of sand and then transplanted them.

He experimented through his years on the island to see which plants survived and thrived:

“I kept no records of my failures, for I had many –the main thing was to assure some success by trying many things and holding on to those plants which had learned that life is worth holding on to even at its bitterest” (Reichel ca. 1974: 3).

Among the plants that he noted as surviving were white-flowered poppy (*Carpenteria californica*), flannel bush (*Fremontodendron californicum*), Pride of Madeira (*Echium fastuosum*), New Zealand Christmas tree, aeonium, aloe, sedum, ice plant, agave, and bulbs including gladiolus, narcissus, and watsonia. (Beatty 1996: 34-35 and Reichel undated oral history; ca. 1974; and ca. 1978) (The white-flowered poppy and flannel bush were not found during the 1992 plant inventory [Lutsko 1992] and so it is not clear how long these plants survived on the island.)

He corresponded with various people he knew through his involvement with the California Horticultural Society, seeking advice and receiving cuttings from them to try out on Alcatraz. In his reminiscences of his time on the island, Reichel mentioned receiving cuttings of succulents, “a wide range of mesembryanthemums” (ice plant), and possibly other plants from Kate Sessions, a well-known and influential horticulturist in San Diego; one plant of *Echium fastuosum* (Pride of Madera) from Hugh Evans, a nurseryman in Los Angeles, in the late 1940s from which all of the echium that have naturalized the island have descended; and seeds of “*Carpobrotus circinaciformis*” from Bloem Erf Gardens of Stellenbosch, located outside of Cape Town, South Africa. (Reichel undated oral history; ca. 1974; and ca. 1978)

Reichel left Alcatraz in August 1941 to go to work in Montevideo, Uruguay.

### Inmate Gardeners

There was no official civilian gardener at Alcatraz, and the use of prisoners to maintain the gardens grew out of the practical need to “keep prisoners occupied” (Reichel ca. 1978: 2). (Although Reichel admitted that he “thought it would be prudent to try to turn a pleasant face toward San Francisco and as we had a really capable and dedicated gardener [Elliott Michener] available for the west lawn, a great deal of attention was given to that area” [Reichel ca. 1978: 2].) The security practices at the prison limited the location of gardens that could be maintained and the horticultural practices of the inmate gardeners.

At the beginning of the federal prison era, no inmates were assigned the job of gardener, and “. . . the

authorities were fearful of allowing any ‘resident’ loose on the island, even though under the custody of a gun tower officer” (Reichel ca. 1974: 1 in Lutsko 1992). So a limited amount of work was done by the inmate crew assigned to garbage collection and cleanup. Fred Reichel, the Warden’s secretary who had a personal interest in horticulture, provided them with “young plants” that he grew in the greenhouse on the east side of the island (Lower Water Tank area). After the prison was up and running, Reichel succeeded in getting an inmate “assigned to the west lawn.” This person was assigned “not on the basis of his horticultural ability but rather because the other residents would have nothing to do with him” (Reichel ca. 1974: 4).

Inmate gardeners are known to have worked in the gardens or planting beds at the dock area (Reichel oral history: 21); greenhouse and rose garden on the terrace(s) known today as the “Water Tank” garden area (Reichel oral history: 24 and Michener 1995b: 1); the garden and greenhouse at the Warden’s house (Michener 1995a: 2, Beatty 1995: 2-3); the West Lawn area; the Tool Shed terraces; the Recreation Yard slope and Greenhouse area; and the Lower Terraces. During this period, the garden areas on the west side of the prison were expanded through the efforts of individual inmate gardeners, in particular that of Elliott Michener (1941-1950).

While the names of all of the inmates who worked as gardeners are not known, information is available on these three: Dick Franseen (prisoner no. 387; at Alcatraz from 1937-1948), Elliott Michener (prisoner no. 578; at Alcatraz from 1941-1950), and Jack Giles (prisoner no.250; at Alcatraz from 1935-?). These three gardeners knew each other and were friends before they were “reunited” at Alcatraz. It seems that Franseen was the first to work as a gardener, and it may have been that he was able to suggest one or both of his friends as gardeners, when a position came open. They shared information, seed catalogs, and plants while working as gardeners on the island. Michener described himself and his two friends as “accomplices in all we did” (Michener 1995c: 2).

Franseen seems to have started out working on the west side of the island and was later “promoted” to the small garden area and greenhouse in the Water Tank area on the east side of the island. (He may have also worked in the gardens in Officers’ Row). He also helped Reichel with the practice of cutting flowers that were placed out on the dock area for the island’s families to pick up on Sundays (Michener 1995c: 1). Franseen was the inmate who had direct contact with Fred Reichel and received plants, seed catalogs, and valuable horticultural advice from him. Franseen, in turn, provided Elliott Michener, a lifelong friend who he first met as an adolescent at “reform school,” with seed catalogs and plants.

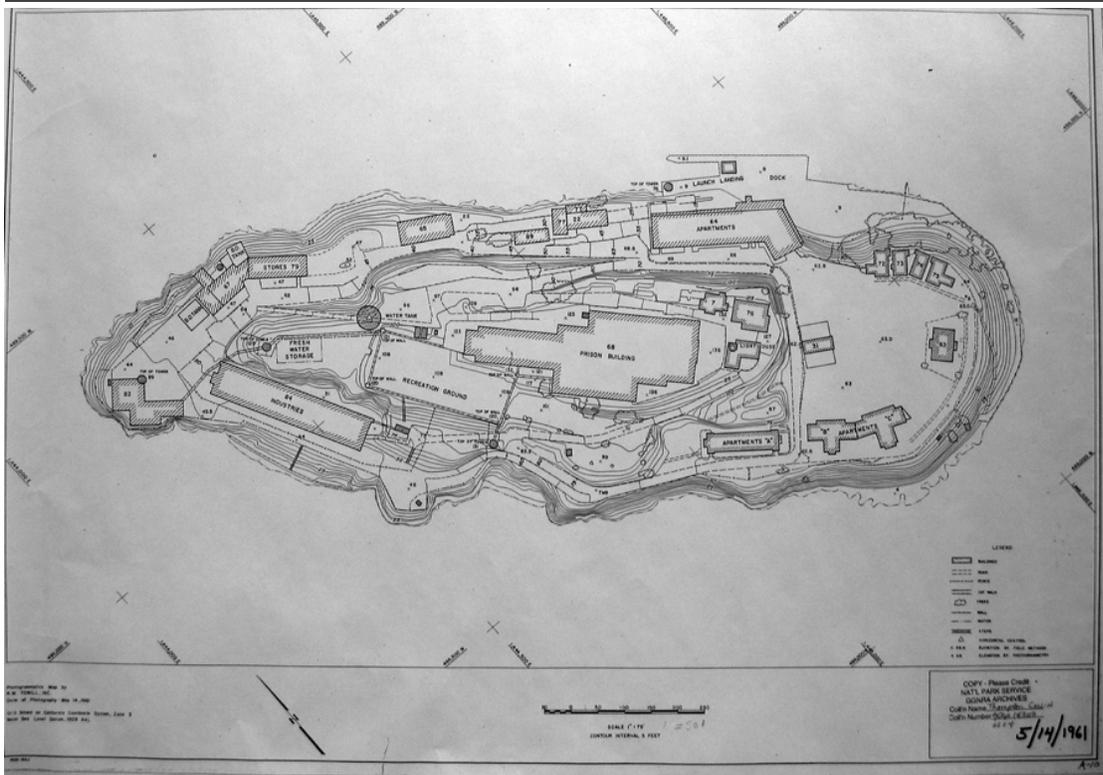
Elliott Michener worked as a gardener on the west side of the island for seven years (from 1941-ca. 1949) and then cared for the gardens and greenhouse at the Wardens house for his last two years (from ca. 1949-1951) at Alcatraz. He arrived at Alcatraz in the summer of 1941 and was assigned to work on the weekends “to retrieve softballs hit over the exercise yard wall to the slope below” (Beatty 1995: 1). A few months later, he “was assigned to be gardener on the east side of the fence on a full time basis, seven days a week” (Beatty 1995: 1). At some point, the areas under his care expanded, and he was responsible for the West Lawn, Tool Shed terraces, Recreation Slope and Greenhouse area, and Lower Terraces.

After receiving the permission of one of the corrections officers, Captain Weinhold, Michener undertook a two-year-long project of improving the beds on the Recreation Slope and Greenhouse area. When he began caring for these spaces on the west side, the soil was only four to five inches deep. He broke up the underlying “solid yellow hardpan” to a depth of two and a half feet, shifted it through a home-made screen, and then added “thousands upon thousands of five-gallon pails of garbage” that he “lugged up from the incinerator and disposal area” to create a suitable medium for planting. He planted the area with “Iceland poppies, stock, and snapdragon” that he got from Dick Franseen. He also planted “picture-beds

of delphinium, chrysanthemum, dahlias, and iris” after he received permission from the Warden to “send out for seeds and plants.” (Michener 1995a: 1-2)

Michener described working on the hillside as providing “a refuge from the disturbances of the prison.” The work was a “release;” it became an “obsession” with him; and provided him with a “lasting interest in creativity” (Michener 1995a: 1). The gardening position provided Michener with a relative amount of autonomy: he seems to have chosen the plants and laid out the planting beds; he planned and implemented the expansion of the beds in the areas under his care. However, given the restrictions of the prison regulations, he had to get permission just to begin his arduous expansion project on the Recreation Yard slope, and he also had to receive special permission from the Warden to order seeds and bulbs from catalogs. (Michener 1995a: 2) (There was no mention on who paid for these plant materials.) Working in the garden probably also helped to ease some of the isolation inherent in the Alcatraz prisoners’ lives. He was a part of an informal community of people on Alcatraz whose interactions aided his gardening efforts: other prisoners, guards, the Warden, the Warden’s wife, and indirectly Fred Reichel. He relied on his friendship with the prisoner assigned to the incinerator detail to get the pails of organic garbage he used for compost in his planting beds. He received plants, seed catalogs, and valuable information from his friend Dick Franseen. He was able to build a small potting shed, located on the south edge of the upper west side terrace area from old windows that were salvaged by Captain Weinhold. (Beatty 1995: 1) Weinhold also bought him a pair of gloves after noticing that his hands were blistered from digging. (Beatty 1995: 1) Other guards (and possibly Weinhold) would buy him seeds and plants on their trips into the city. Mrs. Swope, the Warden’s wife, provided him with plants and seeds. (Michener 1995a: 2)

After Michener was transferred to the Warden’s house, Jack Giles took over the responsibilities of caring for the west side garden areas. (Although, Michener was allowed to visit the west side gardens and Giles on Saturdays [Beatty 1995: 2], he never saw Franseen’s garden area since it was on the east side of the prison and Michener did not have access to this area. [Michener 1995a: 1]) Jack Giles was probably recommended for the west side gardening position by Michener. Giles met Franseen and Michener in 1926, when they were all in the Oregon State Penitentiary. Giles, who was the boss of the print shop there, got the two jobs in the print shop after their failed escape attempt. After Franseen and Michener had served their sentences, they “came back and helped Jack escape” (Michener 1995b: 2) in 1934. (Giles was famous for his 1945 escape attempt. He worked as a stevedore at the dock and stole an Army Staff Sergeant’s uniform as he unloaded laundry that came to the island to be cleaned. On 31 July 1945, he put on the uniform and boarded the Army boat leaving the island; he was captured 20 minutes later.)



*Photogrammetric Map of Alcatraz Island, R.M. Towill Inc., 1961 (This map shows the built features of the island at the end of the federal prison era.) See Supplemental Information for a larger copy.*

## **PUBLIC LANDS ERA (1963 to Present)**

### Summary of History

For the five years following the closure of the federal prison on Alcatraz in March 1963, the island was vacant except for the presence of GSA security personnel.

There was ongoing public debate about what to do with the island. Included in this debate were ideas to develop housing, a resort, or a casino on the island. There was also a growing constituency to use the island for outdoor recreation or to create some type of commemoration related to the island's history. San Francisco's city council voted to accept Lamar Hunt's proposal to totally redevelopment Alcatraz in July 1969, and by doing this, inadvertently energized the efforts for preserve the island. A campaign to "Save Alcatraz" was started by a local citizen, Alvin Duskin, when he took out one-page advertisements in two local newspapers, and the Department of Interior became involved in the issue and began to formally explore the options of using the island for recreation. (Thompson 1979: 467)

Also during this period, a group of Native Americans were pursuing claims to the island that would evolve into the 19-month Indian Occupation. A group of five Sioux Indians briefly occupied the island on 8 March 1964 for four hours. "This short occupation is significant because the demands for the use of the island for a cultural center and an Indian university would resurface almost word for word in the larger, much longer occupation of 1969" (Johnson). In September 1965, a claim was filed in the U.S. District Court of Northern California that tried to establish the Indian's right to the island and sought to prevent the federal government from selling the land or to award the Indians \$2,500,000 in settlement for loss of the land. The suit was dismissed in July 1968.

Then, during the night and early morning of 9-10 November 1969, a group of four Native Americans arrived on Alcatraz via a rented boat to “symbolically claim the island for the Indian people” (Johnson). That morning, the GSA regional administrator came to the island and asked them to leave. They did but returned on 20 November as the “Indians of All Tribes” and issued a press release stating their intention to stay and occupy the island. While the Indians’ claims during the previous five years had attracted little public attention, this action became national news. The Indians continued to occupy the island until 11 June 1971, when the last of the group, now only 10 adults and 5 children, were removed from the island by federal marshals. “The underlying goals of the Indians on Alcatraz were to awaken the American public to the reality of the plight of the first Americans and to assert the need for Indian self-determination. As a result of the occupation, either directly or indirectly, the official government policy of termination of Indian tribes was ended and a policy of Indian self-determination became the official US government policy” (Johnson).

In May 1971, GSA announced that it planned to transfer Alcatraz to the Department of the Interior. (Thompson 1979: 471) In 1972, Golden Gate National Recreation Area (GGNRA) was created, and Alcatraz was added to the properties included in the park. The island was opened by the National Park Service (NPS) for public tours beginning in October 1973.

#### Changes to the Cultural Landscape During the Public Lands-Era (1963-present)

Alcatraz was basically uninhabited and vacant from the end of March 1963, when the last prisoners were removed from the island, through November 1969, at the beginning of the 19-month-long Indian Occupation. The government’s main investment on the island during this period was to provide security, and the main impacts to the cultural landscape were ones related to inaction rather than action. The lack of maintenance combined with harsh environmental conditions adversely impacted the condition of the island’s buildings. The lack of maintenance on the island also meant that plants and gardens on the island received no care or water; garden areas on Alcatraz naturalized; plants that could survive the conditions on Alcatraz remained and those that could not disappeared.

Birds began to return to Alcatraz to nest during these years, and this pattern has continued to the present. Western gulls re-colonized the island around 1973. Black-crowned night herons were there in 1975. Pigeon guillemots have been on the island since 1982; pelagic cormorants since 1986; Brandt’s cormorants since 1991; snowy egrets since 1997; and one pair of black oystercatchers since 1997. (Hellwig 2005)

During the Indian Occupation, the quarters for the Lighthouse, the Warden’s house, and the Post Exchange burned. After the Indians left the island in June 1971, GSA demolished all of the quarters on the Parade Ground. A brick arch in the Sallyport was damaged by a bulldozer during this demolition. (Thompson 1979: 474) GSA also installed metal fences along the east and west shores.

Under NPS management, two new restroom buildings have been constructed (one at the wharf and one on Officers’ Row). The deterioration of historic buildings and structures continued, and in 2001, a multi-year Historic Preservation and Safety Construction Program was begun. Work that has been completed, to date, under this program has included the dock repair, cell house seismic strengthening, and Building 64 balcony repair projects. (Lehman 2005) The naturalization of the garden areas and the reclamation of portions of these areas by nesting birds have continued.

In late 2003, Golden Gate National Park Conservancy staff and volunteers began clearing out plant debris from a number of garden areas (Sallyport bed, Electric Shop bed, Officers’ Row, Tool Shed Terraces, portion of the West Lawn along the east side of the road, and portions of the Greenhouse area).