

Historic Structures Report

Fort Point US Coast Guard Station
Gulf of the Farallones National Marine Sanctuary

April 1, 2008



Prepared for
National Oceanic and Atmospheric Administration
Gulf of the Farallones National Marine Sanctuary
Project Planning & Management Division - Western Region

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CAREY & CO. INC.
ARCHITECTURE

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INTRODUCTION

STUDY SUMMARY

In the following report, Carey & Co. evaluates six structures at Crissy Field that are associated with the Gulf of the Farallones National Marine Sanctuary at the Fort Point United States Coast Guard Station. The purpose of the report is to provide the site's management and staff with the architectural information it needs to implement a long-range program to restore, rehabilitate, and/or stabilize these increasingly significant historic structures in order to achieve the Parks' mission and long-term goals.

The structures examined are primarily of wood frame construction and date approximately to 1890, 1915, and 1938. These structures include a Officer in Charge Quarters (PE1901), 1890 Boathouse (PE1902), Main Boathouse/Life Saving Station (PE1903), Buoy Shack (PE1905), Tide Gauge House (PE1906), and Shop & Garage (PE1907). At the moment, only portions of the Main Boathouse are open to the public.

While most of the structures were found to be stable, the following deteriorated conditions were noted:

- Cracked and peeling paint.
- Deteriorating wooden elements.
- Corroding ferrous metal components.
- Biological growth.
- Differential soiling on the majority of all elevations.
- Painted, cracked, inappropriate, or missing window glazing.

The second half of the report presents our recommendations. General repairs are as follows:

- Painting of concrete and wooden elements that were originally painted.
- Cleaning, patching and painting of corroded ferrous metal elements.
- Consolidating, preservative-treating and painting of wooden elements.
- Recommendation for further testing, survey and study, including paint analysis, and original building configuration analysis.

PROJECT DATA

This Historic Structure Report is intended to provide the National Oceanic and Atmospheric Association (NOAA) and the National Parks Service (NPS) with a guide for the future rehabilitation and maintenance of the Fort Point US Coast Guard Station at Crissy Field in San Francisco, California.

The following are included in this report:

- Historical Background and Context for the Fort Point US Coast Guard Station, including period of significance
- A Chronology of Development and Use
- A Physical Description
- An Evaluation of Significance
- An Assessment of Conditions
- A window survey

Since 1992 the six extant buildings of the former Fort Point United States Coast Guard Station have been designated contributing resources to the Presidio of San Francisco National Historic District. In addition, an extensive and meticulously researched Cultural Landscape Inventory of the Fort Point United State Coast Guard Station Historic District in the Golden Gate National Recreation Area established a period of significance as 1915-1964, from the year when the 1890 Boathouse and Officer in Charge's Quarters were moved to the current site until the year that the Main Boathouse ceased to function as a boathouse. Primary and secondary research conducted by Carey & Co. for this Historic Structures Report verified the research completed for these and other previously completed reports.

METHODOLOGY

Carey & Co. made several trips to the property between 2004 and 2007. During those visits, conservator, Laura Brown, and historian, Karen McNeill, Ph.D., conducted a floor-by-floor survey, recording all features on project-specific survey forms. The exterior was similarly surveyed, with features and conditions annotated and keyed with photographic documentation. Neither floor plans, except for the Main Boathouse/Life Saving Station (PE1903), Buoy House (PE1905), and Tide Gauge House (PE1906), nor elevations were available. Historical research supplemented field visits. In addition to reviewing information provided in several previous reports, including the 1993 update to the Presidio of San Francisco National Historic District records and the cultural resources inventory of the former Coast Guard Station from 2006, Carey & Co. conducted original research at repositories, including the archives of the Golden Gate National Recreation Area. As per the guidelines of "Preservation Brief 43," Carey & Co. tried to avoid overlap with previously completed research, which was both extensive and thorough.

EVALUATION SYSTEM

In evaluating the Fort Point Coast Guard Station, Carey & Co. used a four-tiered historic value rating system. Historic value entails a professional judgment of the historic significance of each component based upon research of primary documents and on-site observation. The ratings are as follows:

Very Significant: The space or components are central to the building's architectural and historic character. In addition, the space or component displays a very high level of craftsmanship, or is constructed of an intrinsically valuable material. These spaces or components shall not be altered or removed under any condition.

Significant: The space or components are associated with the qualities that make the building historically significant. They make a major contribution to the structure's historic character. In addition, they display a high level of craftsmanship. These spaces or features shall not be altered or removed

Contributing: The space or components may not be extraordinarily significant as isolated elements but contain sufficient historic character to play a role in the overall significance of the structure.

Non-Contributing: The space or components fall outside of the building's period of significance, or are historic but have been substantially modified. Little or no historic character remains. Features that are not identified as *Very Significant*, *Significant*, or *Contributing* in the following *Evaluation of Significance* have been determined *Non-Contributing*. They will have little to no impact in regards to the final treatment of the historic property, and thus will not be discussed.

PART I: DEVELOPMENTAL HISTORY

The following section includes a concise account of research and investigation findings and recommendations for treatment and use, and a record of project administrative data.

HISTORICAL BACKGROUND & CONTEXT

A Life-Saving/Coast Guard station has stood on the northeastern shores of the Presidio of San Francisco since 1890, when a small boathouse and keeper's residence were constructed on a spit of sand known as Strawberry Beach. As detailed in the "Cultural Landscape Inventory of the Fort Point United States Coast Guard Station Historic District in the Golden Gate National Recreation Area," prepared by the National Park Service, however, the period of significance of this site begins in 1915. That year, San Francisco hosted the Panama Pacific International Exposition, a fair showcasing art, architecture, technology, and world cultures. The boathouse and residence of the life saving station stood in the way of fairground plans, so they were moved 700 feet to the west to their present location. By this time the Life Saving station had also outgrown its quarters and plans had commenced to build a new boathouse. The newly formed United States Coast Guard thus constructed the three-story boathouse that now anchors the site in 1915. A two-story workshop and storage facility soon followed. Changes in technology and a growing staff resulted in several changes at the Fort Point US Coast Guard Station over the next twenty years, but the site reached its current configuration around 1942. High winds, strong tides, and fog always rendered Fort Point US Coast Guard Station a difficult site to maintain operations. With the introduction of 44-foot motor boats in 1964, boats had to be moored off the main pier. Although the site continued to serve as a Coast Guard Station until 1992, the period of significance closes in 1964, when the boathouse ceased to function according to its intended use.¹

Since 1992 the six extant buildings of the former Fort Point US Coast Guard Station have been designated contributing resources to the Presidio of San Francisco National Historic District. As summarized above, an extensive and meticulously researched Cultural Landscape Inventory of the Fort Point United State Coast Guard Station Historic District in the Golden Gate National Recreation Area established a period of significance as 1915-1964, from the year when the original boathouse and Officer in Charge's residence were moved to the current site until the year that the main boathouse ceased to function in that capacity. After conducting primary and secondary research for this Historic Structures Report, Caey & Co. has verified the research completed for these and other previously completed reports. Carey & Co. concurs with the period of significance defined in the Cultural Landscape Inventory.²

1 Timothy Babalis and Gretchen Stromberg, "Fort Point United States Coast Guard Station Historic District, Golden Gate National Recreation Area," *National Park Service Cultural Landscape Inventory* (2006) (hereafter, "Fort Point CLI").

2 National Register Programs, National Park Service, Western Regional Office, "Presidio of San Francisco National Historic Landmark District," updated National Historic Landmark documentation, October 16, 1992 (hereafter, Presidio NHL); Babalis and Stromberg, "Fort Point CLI".

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PRE-EUROPEAN CONTACT

Indigenous Californians once accounted for the densest and most linguistically and culturally diverse populations in all of the territory that now makes up the continental United States. Approximately 300,000 people who spoke between sixty-four and eighty languages lived within the boundaries of modern-day California. Before the European settlement of the San Francisco Bay Area, the region was occupied by Native Americans known today as the Ohlone, whom the Spanish referred to as Costanoans. The territory of these tribes extended along the coast from the mouth of San Francisco Bay in the north to Carmel in the south, and as far as sixty miles inland. The Ohlone are believed to have inhabited the area since 500 AD or earlier. The specific subgroup of about 160 people who inhabited numerous villages within the boundaries of modern San Francisco were the Yelamu.³

Like most California tribes, the Ohlone were a hunter-gatherer and “basket-maker” society that did not develop a written language or build permanent architecture. They lived in conical-shaped huts made with poles, woven reeds, and grass thatch and depended on acorns and seafood for sustenance. Traveling in balsas, a type of canoe made of tule reeds, the Ohlone fished the bay for their main food source: fish, mussels, oysters, and seals. Their diet also included seeds, berries, roots, land mammals, waterfowl, reptiles, and insects. The Ohlone are known to have used bows and arrows, cordage, bone tools, and twined basketry to procure and process their foodstuffs. Though not an agricultural society, the Ohlone managed the production of various plants through controlled burning (a practice that was later halted by the Spanish to the detriment of the local environment). Of the 300 or so native plant species that once occupied the area of the Presidio, indigenous peoples used about half. The most important plant to the natives was the Coast Live Oak. Acorns provided nourishment, the wood was used for bowls, utensils, and starting fires, and the bark and leaves could be used for medicinal purposes.⁴

Tidal marshlands dominated the specific area where the Fort Point US Coast Guard Station now stands and provide the most abundant evidence of human habitation. These marshlands hosted one of the “most productive ecosystems in California,” including invertebrates, sharks and fish, and so many birds that they darkened the sky. Early European settlers commented upon grizzly bears and wolves, and coyotes feasting along the bay’s shore. The Yelamu managed this ecosystem to their advantage, fostering the growth of willow trees, which provided the favored reed among basket weavers, and frequently setting fire to grasslands to promote healthy growth.⁵

SPANISH SETTLEMENT TO THE GOLD RUSH

Spanish explorers and settlers wrought dramatic changes to this natural landscape and the people who were living there. In 1765 Visitor-General José de Gálvez exploited the Spanish crown’s desire to expand its wealth in New Spain as well as the crown’s fears of the incursion into its lands of other European powers, including England, the Netherlands, and Russia, to embark on his own mission to settle California. He convinced the crown to fund an expedition that would lead to the establishment of missions, a well-established colonial institution that ostensibly served to convert the natives to Christianity and divest them of their indigenous ways, thereby rendering a region more amenable to imperial rule. Missions also included a military unit, or presidio, and essentially functioned as towns, or pueblos. Captain Gaspar de Portolá led three ships and two land contingents on this “Sacred Expedition” in 1769. A Franciscan priest

3 Richard Levy, “Costanoan,” in *California*, ed. R.F. Heizer, handbook of North American Indians, vol. 8., General ed. W.C. Sturtevant (Washington, DC, 1978), 485-495; Pete Holloran, “Seeing the Trees Through the Forest: Oaks and History in the Presidio,” in James Brook, Chris Carlsson, and Nancy J. Peters, eds., *Reclaiming San Francisco: History, Politics, Culture* (San Francisco, 1998): 233-250.

4 Levy, “Costanoan,” 485-495; Holloran, “Seeing the Trees,” 334-336.

5 Holloran, “Seeing the Trees,” 334-338.

named Junípero Serra served as the religious leader. A year later, after many disasters small and large, the Spaniards built a presidio and mission at Monterey Bay, establishing the crown's sovereignty over Alta California.⁶

In 1776, the De Anza Expedition reached present-day San Francisco. The settlers, lead by Juan Augustín Bautista de Anza, consisted of men, women, and children who had traveled from Arizona to populate the new Spanish territory in Alta (Upper) California. Spaniards comprised the minority, while mestizo and criollo (people of Spanish heritage born in Mexico) comprised the majority, and thirteen Indian servants from Monterey joined the expedition for their labor and language services. On June 29, 1776 (five days before the Declaration of Independence was signed in Philadelphia), Junípero Serra founded Mission San Francisco de Asis, popularly known as Mission Dolores.⁷

Two months earlier, De Anza had chosen to construct a fort, or presidio, on an open mesa to the northern tip of the peninsula. The site provided panoramic views from the ocean to the East Bay Hills and a plethora of wild violets and lilies thanks to the natives' careful management of the natural landscape, which inhibited the growth of maritime chaparral. The presidio consisted of two separate areas: the Presidio de San Francisco, which housed a garrison, administrative, and training facilities, and the Castillo de San Joaquin, an armed fortification located on a cliff overlooking the Golden Gate. The site of the Castillo quickly proved inhospitable for habitation. Dense fog and high winds rendered difficult both agricultural and defense operations. Extensive mud lands and salt marshes to the east of this fortification exacerbated logistical difficulties, but stretching the length of the boundary of the Presidio was a sandy peninsula that came to be known as "Strawberry Hill" or "Strawberry Island" for the abundance of wild strawberries that grew there.⁸

During fewer than fifty years of Spanish control, the cultural and natural landscape of the San Francisco peninsula sustained dramatic change. With the end of the controlled burns, the chaparral eventually returned to the mesa on which the Presidio stood. Oak trees, on the other hand, disappeared as the fast growing population cut them down for firewood. Imported cattle grazed the grasslands and settlers cleared vast areas for agriculture. Conflict broke out between natives and settlers and between natives themselves. While some natives embraced the Mission system, others were coerced into Christianity, hard labor, and sometimes abusive conditions. All of these factors, combined with the introduction of European diseases and outright violence, led to the rapid decline of the indigenous population and wildlife.⁹

The Mexican Period officially started in 1821, when Mexico declared its independence from Spain; however, the effects of this took a number of years to reach colonial California. Over the next dozen years the Mexican government created laws that secured the transfer of power. The Mexican Colonization Law of 1824 and the Reglamento of 1828, for instance, encouraged civilian settlement in California by creating guidelines for the establishment of land grants.¹⁰ The true shift in power from Spanish to Mexican rule occurred in 1833 with the Secularization Act. This act officially wrested control of mission lands from the Catholic Church and made them available for the private ownership of Mexican citizens. Although the Mexican Period brought some significant changes to the California in general, the presidio, including the marshland area where Fort Point Station stands, experienced little more than general neglect and

6 James J. Rawls and Walton Bean, *California: An Interpretive History*, 7th ed. (New York, 1998), 20-26.

7 Holloran, "Seeing the Trees," 340.

8 Ibid., 340; Presidio NHL, 7/26-7/28.

9 Holloran, "Seeing the Trees," 339-342.

10 Krell, *The California Missions*, 172.

decay.¹¹

Just twenty-five years after securing its sovereignty from Spain, Mexico found itself battling to save its territory. War erupted between the United States and Mexico in 1846, largely over the independence of Texas and its border. The United States overran Mexico with troops and won in a decided fashion. The war officially ended on February 2, 1848, with the signing of the Treaty of Guadalupe Hidalgo, which ceded California (and other territories) to the United States. In the meantime, the United States Army had taken over the presidio in 1846, inaugurating a long period of extensive change to the physical and natural landscape. Most dramatically, the army decided to build a new fort ten to fifteen feet above sea level at the northern tip of the peninsula, which required demolition of the Spanish Castillo and the 100-foot high mesa on which it once stood. This monumental project also required an infrastructure of wharves, warehouses, and quarters to be built on the adjacent marshlands.¹²

United States possession of California territory coincided with the discovery of vast quantities of gold in the foothills of the Sierra Nevada. On January 24, 1848, John Marshall, an employee of a ranch and mill owner named John Sutter, discovered gold on the American River. News of Marshall's discovery spread like wildfire and soon, as the saying goes, the world rushed in. Half of California's population descended upon the region between San Francisco and the Sierra foothills, with the former's population alone growing from fewer than 1,000 people at the opening of 1848 to more than 26,000 by year's end. Huge waves of migrants from the East Coast and immigrants from Europe, Central and South America, and Asia commenced the following year. Almost all arrived by ships that had to navigate the wind, fog, and treacherous tides of the Golden Gate.

UNITED STATES LIFE BOAT SERVICE AND THE COAST GUARD

Ship masts and poles abound in illustrations of San Francisco's harbor from the 1850s through the 1870s, but not every boat headed to San Francisco made it to dock. Congress appropriated funds for lighthouses at points around the San Francisco Bay, including Alcatraz Island (1852, though the lens did not arrive until 1854); Point Bonita at the northernmost entrance to the Bay (1855); Fort Point (built 1852, lit 1855); Lime Point directly north from Fort Point (1883); and Angel Island (bell 1885, light 1900).¹³ Still, shipwrecks occurred and light house stations had neither the man power nor equipment to respond effectively to every disaster.

San Francisco was not alone in sustaining frequent shipwrecks. Maritime routes throughout the nation posed dangerous conditions to sailing vessels, their passengers, and crews. Disastrous shipwrecks were not uncommon. Congressman William A. Newall, of New Jersey, initiated calls for the government to create an organized search and rescue system in 1848. While the first appropriation bill for \$10,000 passed that year, the system of volunteer rescuers with no formal training and insufficient funds proved inadequate. Then, in 1871, a series of deadly storms along the East Coast prompted the federal government to establish a centralized, professional organization with standardized training and rescue procedures. Sumner Increase Kimball became head the Marine Revenue Bureau and appropriated significant funds that allowed him to institute sweeping changes to America's life saving organizations, eventually resulting in the creation of the United States Life Saving Service in 1878.¹⁴

11 Ibid., 341-342; Dorothy Krell, ed., *The California Missions*, (Menlo Park, 1989), 172.

12 Rawls and Bean, *California*, 85-94; Treaty of Guadalupe Hidalgo, February 2, 1848, Article VIII, <http://www.yale.edu/lawweb/avalon>, accessed August 1, 2007; Presidio NHL, 7/32.

13 Ralph Shanks, *Lighthouses and Lifeboat Stations of San Francisco Bay* (Petaluma, 1990), 17, 19, 29-30, 46, 65-68; 106; 151-152.

14 Dennis L. Noble, *That Others Might Live: The U.S. Life-Saving Service, 1878-1915* (Annapolis, 1994), 15-32.

Soon, the United States Life Saving Service began to build three different classes of facilities along America's shores. "Complete life saving stations" were usually two-story wood frame gable structures that consisted of quarters for boats, a permanent crew of surfmen and keeper, and temporary living quarters for rescued persons. Some Southern states hosted "houses of refuge," which were large structures that could sustain up to twenty-five people for ten days. The keeper and his family maintained permanent Officer in Charge Quarters here, but the nature of shipwrecks along these shores usually resulted in easy escape and did not generally require a crew of surfmen. Most Pacific Coast and Great Lakes sites had "lifeboat stations," or one-and-a-half story structures that primarily accommodated boat and rescue equipment. At first, these stations relied upon volunteer crews culled from the local population, so they did not include living quarters for more people than the keeper and his family.¹⁵

Although the Life Saving Service eventually enlisted architects to design the stations, they varied little and followed some standardized guidelines. Indeed, builders had to follow Instructions for the Construction of a Life-Saving Station when executing plans, which was particularly important in promoting the most cost-effective methods of construction. Domestic architecture influenced the design of all life-saving stations, with Dutch Revival being the favored aesthetic. In general, life-saving station structures were wood frame buildings with horizontal board and batten or shingle cladding and wood shingle gable or gambrel roofs. The buildings were painted white or red with red roofs and often featured a widow's walk for sea monitoring as well as shutters to protect against winds and sea mist. Some sites included a separate lookout tower, and the widow's walk often evolved into more permanent tower structures. Site did affect the configuration of buildings: lifeboat houses located on piers could moor ships in the water, while those located on the shore featured ramps that reached either the beach or the water depending on the type of boat launched from that station.¹⁶

The First Session of the 49th Congress authorized the establishment of Fort Point Life Saving Station in 1886. Two years later it released funds for the construction of buildings on army land along the Strawberry Beach area of the Presidio of San Francisco. After several delays in construction – weather, labor, supplies – a boathouse and Officer in Charge Quarters was completed on Strawberry Beach, half a mile east of the Fort Point Lighthouse, in February 1890.¹⁷ A detailed construction history for these two buildings and the four other extant structures follows in the Chronology of Development and Use section of this report.

Most days were uneventful at the Life Saving Station, but within the first ten years, the crew at Fort Point Life Saving Station had established a highly acclaimed reputation for skill and expertise. The crew had plenty of time to perfect knot tying or practice life saving skills on the training grounds between the Keeper in Charge Quarters and the boathouse. Some days, crew found themselves saving local residents who found recreation along the beaches. Members of the crew also rotated shifts in the lookout tower atop the steep bluff of Fort Point where they interacted with and played cards with the lighthouse keepers at Fort Winfield Scott, the United States military fortress located about a half mile to the west, now just below the southern end of the Golden Gate Bridge. Stormy days and nights presented an entirely different scenario. Communication sometimes failed between the lighthouse and the life saving crews, making rescues impossible. Before motor boats were introduced in 1907, a crew of seven men rowed to troubled ships through fierce winds, rain, and waves. The most notorious disaster occurred in 1901 when the passenger steamship *Rio de Janeiro* crashed into rocks. Although surfmen from the Life-Saving Station rowed to the scene within

15 Ibid., 39-45.

16 Ibid., 39-45.

17 Fort Point CLI, 30-31.

minutes of learning about the wreck, they could not save 130 people aboard the sinking ship.¹⁸

The year 1915 introduced two significant changes that would affect the buildings at Fort Point Station. That year the Life-Saving Service combined with the Revenue-Cutter Service to create the United States Coast Guard. With this reorganization came many subtle changes, but one stands out in relationship to the buildings: The Life Saving Station had been designed with a volunteer crew in mind; thus, a single-family home for the keeper's residence had been built, but no official or permanent dormitories. A permanent crew of military trained personnel, however, would staff the newly renamed Fort Point US Coast Guard Station; thus, dormitories would be necessary. The Panama Pacific International Exposition (PPIE) to be held in San Francisco in 1915 also transformed the Life-Saving Station's setting. Before that point, the area surrounding Fort Point US Coast Guard Station remained largely isolated, attracting no more than local residents seeking outdoor recreation. For a brief period following the devastating earthquake of 1906, the sand spit surround Fort Point Station hosted tent camps for the newly displaced masses. In 1912, however, work crews began to fill the ancient marshlands and mudflats with sand from the ocean. By the time they had completed pumping in more than 360,000 cubic yards of sand, they had created 184 new acres of solid ground. The planning commission for PPIE also requested that the life-saving station at Fort Point move westward approximately 700 feet to make way for a race track and polo grounds. In January of 1915 the Life-Saving Station moved to its current site and was renamed the Fort Point US Coast Guard Station.¹⁹ Thus being the period of significance for the Fort Point US Coast Guard Station.

These two factors, combined with the Station's deteriorated and inadequate conditions, prompted Sumner Kimball, General Superintendent of the Life-Saving Service, to authorize plans in 1914 for a modernized and expanded facility. Andre Fourchy, the district superintendent of construction, drew up new plans. At the center of Fourchy's design stood a new boathouse that could house modern motorized lifeboats and the marine railway necessary to launch them, as well as dormitory facilities for the crew. The plan called for two Shop & Garages, one of which would be used as a boat maintenance facility, and four outbuildings – a hen house, water tower, fuel house, and Shop & Garage. With dormitory facilities in the new boathouse, the Officer in Charge Quarters could be returned to its original use as a single-family residence. This transformation involved reorienting the building along a north to south axis, instead of east to west, removing the old kitchen extension at the rear, and replacing the extension with a simple shed addition that would accommodate modern bathroom facilities. A wooden bulkhead at the north end of the site allowed for training grounds, and formal landscaping of trees, plants, and pathways both unified the site and improved its aesthetic value.²⁰

The Coast Guard implemented Fourchy's plan over the next twenty years. While the buildings were relocated 700 feet to the west early in 1915, the 1890 Boathouse continued to serve in that capacity, and the newly-renamed Officer in Charge Quarters continued to double as a dormitory for the crew. By late 1915 or early 1916, however, the new life-saving station (or Main Boathouse) had been built to the east of the Officer in Charge Quarters. This new configuration included the old boathouse too, now relocated to the southwest of the Officer in Charge Quarters, turned 180 degrees, and transformed into a garage. Instead of constructing a new fuel house for the station, the Coast Guard appropriated a storage shed from the Exposition and relocated it to the west of the Officer in Charge Quarters. As planned, the station also included a water tower and hen house. A wooden bulkhead formed the northern boundary of the site. By 1921, one maintenance Shop & Garage to the northeast of the new boathouse stood at the site as well.

18 Shanks, 105-123.

19 Fort Point CLI, 37-41; Robert Erwin Johnson, *Guardians of the Sea: History of the United States Coast Guard, 1915 to the Present* (Annapolis, 1987), 18-43.

20 Fort Point CLI, 39-40.

While the water tower and hen house disappeared during the 1920s, no major changes occurred until the 1930s when a concrete bulkhead replaced the rotting wood one, Fourchy's proposed shed addition to the Officer in Charge Quarters finally replaced the rear porch and kitchen addition, and both the Buoy House and Tide Gauge house were built at the end of the pier adjacent to the marine railway.²¹

No sooner had the Fort Point US Coast Guard Station been completed than its very existence appeared to be endangered. The War Department decided to appropriate the former grounds of PPIE for a Coast Defense Air Station and feared that the Fort Point Station would stand in the way of the new Crissy Field airstrip. An unwillingness on either the part of the War Department or the Coast Guard to pay for the demolition or relocation of the Fort Point US Coast Guard Station, however, secured its place next to the dusty airfield for the next seventy-five-plus years.²²

During the 1920s and 1930s the function of the Coast Guard Station began to change. From its inception, the Coast Guard was a military organization that acted under the Treasury Department during times of peace and under the Navy during times of war. Members of the San Francisco crews had participated in some defense operations during World War I, but the advent of Prohibition proved more influential in transforming the Coast Guard into as much a coastal patrol institution as a search and rescue institution. Advancements in technology also transformed the purpose of the Coast Guard. Better navigation equipment resulted in fewer shipwrecks, so the Coast Guard increasingly focused on small party rescues and, occasionally, clean-up operations from various contaminant spills into the Bay. With fewer duties to attend to by mid-century, Coast Guard Stations began to consolidate. Fort Point US Coast Guard Station, however, remained a vital center – indeed, it became the only life-saving station in the San Francisco Bay Area south of Point Reyes – and grew in personnel as it absorbed the responsibilities of now defunct stations.²³

Wind, fog, and tide patterns had always rendered the Fort Point US Coast Guard Station a difficult site from which to launch rescue missions and maintain operations. A wave suppressor constructed to the west of the pier during the 1940s mitigated the impact of the waves to some degree, but boats had to be docked at Sausalito or Yerba Buena Island during storms. As early as 1960 the Coast Guard sought to relocate the Fort Point station to Fort Baker, on the northern shore of the Golden Gate Bridge. Sheltered by the Marin Headlands and facing east, Horseshoe Cove at Fort Baker provided greater protection from the elements that made Fort Point so difficult. The introduction of forty-four foot motor boats made this transfer all the more imperative, for the Main Boathouse could no longer protect boats inside the building when they were not in use. From 1964 forward, life saving boats had to be moored off the main pier, marking the end to the site's period of significance. Only in 1990, however, did the Coast Guard finally abandon the Fort Point Station and transfer to a new one at East Fort Baker, as had been suggested thirty years earlier.²⁴

Despite its change in function during the early 1960s, few alterations were made to the Life-Saving Station until the late 1970s. Finally, in 1978, it underwent dramatic changes. The Coast Guard removed the deteriorating marine railway, closed in all doors on the boathouse that related to seafaring vessels and beach apparatus, and transformed the interior into office spaces. The current configuration of the building dates to that period.²⁵

In 1995, the United States Army transferred the Presidio, including Crissy Field and the Fort Point US

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- 21 Ibid., 41-44; historic photos, Archives of the Golden Gate National Recreation Area, San Francisco.
 - 22 Fort Point CLI, 42-43.
 - 23 Ibid., 27-30, 36-37; Johnson, *Guardians of the Sea*, 44-56, 79-93.
 - 24 Fort Point US Coast Guard Station, Archives of GGNRA; Fort Point CLI, 46-50.
 - 25 Ibid., 50.

Coast Guard Station, to the National Park Service. Since then, the former Coast Guard Station has provided a host of services for several organizations. Park maintenance workers store their equipment in the 1890 Boathouse and multiple private organizations have rented the Officer in Charge Quarters, but the National Oceanic and Atmospheric Administration (NOAA) rents most of the space. Between 1998 and 2000, individuals, schools, corporations, and civic groups removed the landfill and planted thousands of native plants at Crissy Field in an effort to restore the ecosystem that characterized the area surrounding Strawberry Beach when the precursor to the Fort Point US Coast Guard Station first opened there in 1890.

CHRONOLOGY OF DEVELOPMENT AND USE

The following section describes each structure's location and original construction, modifications, and uses, based on historical documentation and physical evidence.

The structures are concentrated primarily northwest of Crissy Field (see figure 1). Mason Street and Coastline provide the main access routes to these structures.

The subject structures are mostly of wood frame construction with concrete floors, wood walls, and wood shingled roofs. Most of the structures are clad in wooden shingles that have been painted white.



Fig. 1: Location Map – Gulf of the Farallones National Marine Sanctuary, Fort Point Coast Guard Station
Crissy Field, San Francisco.

1890 BOATHOUSE (PE1902)

LOCATION

The 1890 Boathouse sits at the northeastern edge of Fort Point, roughly 100 feet from Crissy Promenade. The 1890 Boathouse is linked to the Officer in Charge Quarters by a wood wheel chair ramp that runs parallel to Crissy Promenade.

HISTORY

All reports indicate that the United States Congress authorized the creation of Fort Point Life-Saving Station in 1886 and that two years later it authorized permits for the construction of this boathouse and a keeper's residence on a spit of beach known as Strawberry Island, just north of coastal wetlands and lagoons at a northeast portion of the Presidio of San Francisco. This original boathouse, which opened for use along with the Keeper in Charge residence in 1890, stood 200 feet west of the keeper's quarters and measured 24 feet wide and 40 feet in depth. Red painted rough shingles clad the structure. Its hipped roof ended in a bell flare and featured decoratively carved exposed rafter tails as well as an octagonal cupola with louver vents on all sides and a witch's cap. Large barn-like doors opened both to the north and south, with the latter occupying half of the southern elevation and providing access via a concrete ramp for the beach apparatus wagon. Doors occupied almost the entire north elevation and opened onto the launchway, a 200-foot ramp built of wood planking and "creosoted yellow fir," that led to the bay. An uninterrupted wall appears to have comprised the east elevation.¹

Although the plan, cladding, roof type, and cupola all retain a high level of integrity, the function, location, orientation, and configuration of windows and doors all differ from the original design. Advances in life-saving boat technology necessitated changes. By 1895 the Life Boat station employed a two rail track system to launch boats, which required a hand-driven cargo winch that had to be protected from the elements. An addition to the southern elevation accommodated this new equipment. By 1907, the Fort Point Life-Saving Station included a thirty-six foot motor boat which was too large for the boathouse and had to be anchored in the bay. In addition, siltation buried much of the launchway under several feet of sand,

¹ Babalis and Stromberg, "Cultural Landscape Inventory," 30-34; Ralph Shanks, *Guardians of the Golden Gate*, 122-123.



Fig. 2: Presidio grounds. 1890 Boathouse in center. Looking toward Presidio and Black Point from west. University of California, Berkeley



Fig. 3: 1890 Boathouse, c. 1890 Courtesy of the Bancroft Library.



Fig. 4: Fort Point LSS, 1890, from west. Original launch ramp visible. Courtesy of the Bancroft Library.

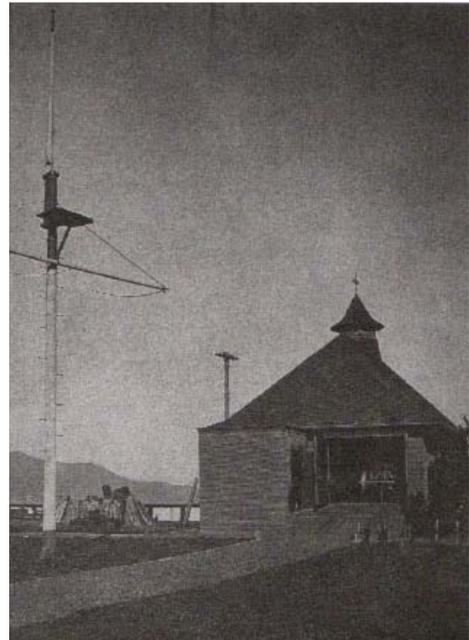


Fig. 5: South elevation of 1890 Boathouse, c. 1900, with doors to beach apparatus open at right. winch house located at left.

rendering it inoperable by about 1914.²

San Francisco won the honor of hosting the 1915 Panama Pacific International Exposition (PPIE), an event that commemorated the opening of the Panama Canal and celebrated the city's rise from the ashes and rubble of the 1906 earthquake. Although Exposition planners originally intended to locate the fair grounds in Golden Gate Park, they eventually decided to fill in the coastal wetlands and lagoons near the Presidio with sand from the San Francisco Bay and build atop the newly created 184 acres of land that today comprises a significant portion of the Marina District. Plans for the fair grounds included a race track and polo grounds at the northwestern end of the site. They found Fort Point Life-Saving Station both in the way of race track and aesthetically incompatible with the fanciful period revival architecture of PPIE, so requested that it be moved about 700 feet to the west, to its current site. The new life-saving station site included formal landscaping and an inverted relationship between the keeper's residence and the boat house, with the boat house now located to the east instead of the west of the residence. This new configuration did not last long.³

In 1915 the Coast Guard absorbed the United States Life-Saving Service and decided to construct a new, modern boat house. Over the next four years the original boathouse underwent significant changes in accordance with its new function as the garage to the keeper's residence, now renamed the Officer-in-Charge (OC) residence.⁴ It moved to the west of the OC and was reoriented so that the doors to the former launchway now faced south; the current tongue-and groove doors at the south elevation may be those original doors. The opposite elevation, now facing north, underwent more drastic changes: the tongue and groove door appears to be one of the original doors that provided access to the beach apparatus wagon, but the other door (to the east) has been removed and replaced with a solid wall. Two wood frame six-lite

² Babalis and Stromberg, "Cultural Landscape Inventory," 34-35.

³ Ibid., 37-41.

⁴ Ibid., 37-38.

awning windows now occupy the space in front of which the winch house once stood. The two sets of double-hung, eight-lite windows on the east and west elevations appear to date before 1915, but their exact date of origin remains unclear.

Apart from being moved north some time between 1938 and 1945, to be brought into alignment with the OC residence and new boat house, no more significant alterations appear to have been made to this building since its change of function around 1915.

OFFICER IN CHARGE QUARTERS (PE1901)

LOCATION

The Officer in Charge Quarters is located east of the residence garage, the same distance from Crissy Promenade. A concrete pathway provides access to the building from the central walkway of the campus.

HISTORY

The construction of the Officer in Charge Quarters coincided with that of the original boat house in 1890. It stood approximately 200 feet to the east of the boat house and the main façade originally faced north. In keeping with life-saving stations located predominantly along the Eastern Seaboard, Dutch Colonial, or Gambrel, domestic architecture informed the style of this building.⁵ Its dominant features included a gambrel roof clad with wood shingles, wood shingle-clad exterior walls that ended in a bell cast, a series of three gable dormers at the front and rear elevations, multi-lite wood windows with louvered shutters, and porches topped by balconies with balustrades at both the front and rear elevations. The porches served decorative and functional purposes. Five risers that decreased in width as well as depth led to the front porch, while two pairs of simple rounded columns supported a second-story balcony and framed the porch. A door at the central dormer opened onto this balcony, which featured a simple balustrade. These elements both lent the building a formal quality and created a lookout point. At the rear elevation an enclosed porch sheltered inhabitants from the wind blowing off the Bay. It too featured a balustrade that

5 Ibid., 28-30; Noble, *That Others Might Live*, 39-50.



Fig. 6 : Fort Point Life Saving Station, ca. 1890. Note original orientation of buildings.



Fig. 7: South (rear) elevation of Officer in Charge Quarters, c. 1900. Note the kitchen addition at left and the original configuration of the center dormer and enclosed porch.

transformed the roof into a balcony and lookout point. Two corniced brick chimneys flanked a widow's walk, which, unlike residences at most United States Life-Saving Stations, served no functional purpose.

Some alterations occurred to this building over time. Originally, it served as headquarters for the Life-Saving Station, as a dormitory for up to seven crew, and as the residence of the keeper and his family. These functional demands required the addition of a large kitchen unit by 1902. Located at the rear of the building and perpendicular to it, the kitchen addition stood one story tall and twice as deep as the rear porch. It had a flat roof and simple balustrade, which allowed the roof to function as a balcony as well. PPIE forced the relocation of the Keeper's Residence in 1915 to a site approximately 700 feet west, at which point the house was reoriented ninety degrees so that the main façade faced east instead of north and opened onto a formally landscaped plaza between it and the boathouse. With the construction of a new boat house soon after this move, the residence no longer functioned as the crew's dormitory, rendering the kitchen addition unnecessary. Exactly when the Coast Guard demolished this addition remains unclear, but some time between 1932 and 1938 the old kitchen addition and the rear porch gave way to a single-story shed addition that extended the full length of the building. At the same time, the Coast Guard extended the central dormer at the rear to be flush with the shed wall. These alterations primarily accommodated modern bathroom facilities.⁶ This building does not appear to have undergone any exterior alterations since 1938, and despite all the alterations it underwent between 1915 and 1928, the building now largely resembles its 1915 incarnation.

MAIN BOATHOUSE/LIFE SAVING STATION (PE1903)

LOCATION

The Main Boathouse stands to the east of the Officer in Charge Quarters in line with the Pier and Buoy Shack. The Main Boathouse can be accessed via Crissy Promenade or Entrance Drive.

HISTORY

Plans to build a new lifeboat station originated soon after the planning commission of PPIE requested that the unsightly life-saving be moved 700 feet west to accommodate a race track and polo grounds. By this time, the launchway for the old boat house had silted; either the sand burying it needed to be removed or a new ramp needed to be constructed. This situation, combined with the introduction of heavy motorboats had rendered the old boathouse increasingly inadequate. Moreover, the newly formed Coast Guard, which replaced the Life-Saving Service, required that its staff be trained military men who would require dedicated dormitory space. André Fourchy thus included this boathouse and its heavy marine railway, which could accommodate modern, 36-foot boats, into his plans for a new fort Point Station.

Historic elevations and photographs show that André Fourchy designed a square-in-plan, two-story-plus loft and tower structure on a concrete foundation. A shingle-clad pyramidal roof topped the tower, which itself topped a hipped roof with large shed dormers on each side. Wood shingles clad the exterior walls and formed a slight bell curve at the first floor cornice and at the base of the building. While two fixed wood windows occupied each elevation of the tower, and the dormers featured a series of four wood awning windows, one-over-one wood frame windows comprised the primary window type. Both the east and south elevations featured open porches with hipped roofs supported by plain wood posts. Three five-panel wood doors provided access to the east side of the building – one at the southern end of the porch, one at the northern end of the porch, and one near the northern edge of this elevation. One five-panel wood door provided access from the south elevation. A ramp led to a pair of wood doors with large hinges near the

6 Babalis and Stromberg, "Cultural Resources Inventory," 30-32,44.

southern end of the west elevation, and three pairs of large wood doors opened on the north elevation to create bays for boats to enter and exit the building via a steel rail launchway. Concrete piers supported the steel launchway, which extended north to the bay.⁷

The boathouse underwent a series of alterations during the late 1930s. Plans for this period do not indicate many changes for the interior; thus, they provide the best sense of how the interior was originally designed to accommodate the variety of functions it hosted. A boat room dominated the first floor of the building, which also accommodated kitchen and dining facilities, a wash room, boiler, and formal entrance hall. The northern entrance off the eastern porch led to the kitchen, and the southern entrance led to the dining room. A hallway off the southwestern corner of the dining room led to a washroom to the east and the entrance hall to the west. An open staircase in the entrance hall led to the second floor. A door at the center of the southern porch provided access to this hall, while a second door along the western wall of the southern porch provided access to the boiler room.⁸

Apart from two windows in the dining room and a small, open doorway, solid walls separated the kitchen, dining room, and entrance hall from the most important space of the first floor: the boat room. A series of regularly spaced columns divided the boat room into two bays, while a series of sliding doors suspended from the ceiling created moveable walls along the north and east sides of the room, creating the potential for a third bay. Coast Guard boats exited the building on a rail launch toward the bay via three pairs of large, hinged wooden doors, while the beach apparatus exited and entered the building via a ramp located by double wooden hinge doors near the southern end of the western elevation.⁹

7 Andre Fourchy, East elevation, U.S. Life Saving Station, 1914, National Park Service, Golden Gate NRA, Park Archives and Records Center, GOGA 2265, folder 2; "The life saving station in the Presidio of San Francisco - photo taken January 1925," *Jesse Brown Cook Scrapbooks Documenting San Francisco History and Law Enforcement*, Volume 20, The Bancroft Library, University of California, Berkeley, photograph of boathouse ca. 1919, in Ralph Shanks, *Guardians of the Golden Gate*, 121.

8 Ibid., folder 2.

9 Ibid., folder 2.



Fig. 8 : North elevation of the Main Boathouse, 1919.



Fig. 9: Lifeboat House during World War II.

The second floor of the boathouse provided common space and living quarters for members of the Coast Guard. A large sitting room ran two-thirds the width of the northern third of this floor, and a single bedroom occupied the last third. A central hallway along the north-south axis divided four dormitories, each accommodating three men, which occupied the central portion of the second floor – about half of the total space on this floor. A washroom, complete with toilet, shower, and sink, occupied the southeast corner of this floor, and the radio operator worked out of a room at the southwest corner of the second floor. Solid walls divided all of these spaces.¹⁰

Both the third floor, identified as a loft, and the lookout were both open spaces with no interior walls.¹¹

The lookout tower underwent the most extensive alterations at this time. Specifically, the Coast Guard replaced the two fixed or awning windows with a series of three double sash wood windows like those now located on the south elevation of the tower. A wood frame surrounded the 14" x 17" one-over-one windows that flanked a central 26" x 17" one-over-one window, and the three windows shared a continuous sill and water table. The new configuration also required new wood shingles cladding, and the Coast Guard installed an airplane beacon light atop of the lookout tower at this time as well.¹²

Both porches underwent extensive alterations during the 1930s and 1940s. The Coast Guard enclosed the south porch during the 1930s. In 1946 Coast Guard similarly enclosed the east porch, but retained the windows of the original exterior wall.¹³

By World War II, an emergency exit comprised of a ladder from the third floor to the second and stairs from the second to the ground forced the reconfiguration of windows at the first and second floors; uninterrupted wall replaced the first story windows, and a door replaced the central second-floor window.¹⁴

The Coast Guard discontinued the use of the boat launch system in 1963 when 44-foot steel hull motorized lifeboats came into use and could not be housed in the aging boathouse; instead, they were moored just offshore to the east of the main pier. This change in technology rendered obsolete the western two thirds of the interior and northern exterior configuration of the building. Still, the boathouse underwent no significant alterations until 1978, when the barn doors that enclosed the three large bays where boats once entered and exited the building were removed and replaced by shingle-clad walls that are interrupted by two sets of double hung windows and an access point reached via seven concrete risers. A small, hipped roof porch structure covers this entrance. Further alterations included the reconfiguration of the emergency exit stairs; where once the second-floor platform ran more than the length of the bay directly below and the posts aligned with the walls of the bay, the posts could now be closer together, resulting in a smaller second-story platform. Uninterrupted wall space also replaced the double-hung windows that flanked the second-floor entry. The changing function of the building also prompted changes to the west elevation. A door ramp for the beach apparatus occupied the southern end of this elevation until 1978. Now, two double-hung windows occupy that space. The tower now features continuous metal sliders on the east, west, and north elevations, but their date of installation remains unclear. Photographs suggest that they date to some point between 1964 and 1975. In 1984 the Coast Guard also introduced an accessibility ramp to the southern elevation. Finally, two brick chimneys once protruded from the southeastern and southwestern

10 Ibid., folder 2.

11 Ibid., folder 2.

12 Ibid., folder 2.

13 Babalis and Stromberg, "Cultural Landscape Inventory," 45.

14 Photograph of boathouse ca. WWII, in Ralph Shanks, *Guardians of the Golden Gate*, 122.

ends of the roof. Now a single metal chimney protrudes for the southwestern part of the roof.¹⁵

BUOY SHACK (PE1905)

LOCATION

The Buoy Shack is located at the end of the pier northeast of the Main Boathouse.

HISTORY

The history of the Buoy Shack and Tide Gauge House adjacent to it remains elusive. Historic photos indicate that a pier and dock located approximately where the pier stands today was constructed by 1935. In 1938 the Coast Guard made the pier narrower and removed a row of pilings. Records indicate that the two buildings on the dock, including the Buoy Shack, date to this period as well. Otherwise, precious little information about these buildings exists.¹⁶

The earliest known photo that clearly documents the buildings on the pier dates to 1958. Based on these images and subsequent reports, images, and visual analysis, alterations to the Buoy Shack appear to have been minimal. Most notably, a sliding glass door has replaced or been added behind the solid wood sliding door on the north side of the building. Interior alterations include the plywood paneling in the gable above the wall that separates the east and west room. A drop ceiling in the east room also obscures the original ceiling. Most alterations probably date to 1993 or later; conditions reports from that year cited and recommended repair of deteriorated paint, dry rot and decayed wood, compromised window frames, and rust.¹⁷

TIDE GAUGE HOUSE (PE1906)

LOCATION

15 Babalis and Stromberg, "Cultural Landscape Inventory," 46-50.

16 Babalis and Stromberg, "Cultural Resources Inventory," 43-44; aerial photos, 1926-1936, GOGA 3320.002-006, National Park Service, Golden Gate NRA, Park Archives and Records Center.

17 Various reports from 1993 in folder for PE 1906, PRPP Box 22, national Park Service, Golden Gate NRA, Park Archives and Records Center.



Fig. 10: Boat launch and pier with Buoy Shack and Tide Gauge House, 1958.



Fig. 11: Aerial photo, 1925.

The Tide Gauge House is located on the same pier as the Buoy Shack, approximately 5 feet south (see figure 18).

HISTORY

Like the Buoy Shack the Tide Gauge House dates to about 1938, but available documents do not provide a more precise date of origin or historic use of the building. A 1993 conditions survey indicates that this building once had a small extension with wide vertical boards cladding. Its location is unclear, however, and the addition has since been removed. In general, this building does not appear to have undergone significant alterations since it was constructed in 1938.¹⁸

SHOP & GARAGE (PE1907)

LOCATION

The Shop & Garage is located northeast of the Main Boathouse and is the easternmost structure at the site. The Shop & Garage can be accessed via Entrance Drive.

HISTORY

Construction of this utility building took place around 1915, in conjunction with the new boathouse. Built on a concrete slab foundation, this structure housed woodworking, metal working, and storage facilities. The single-gable building was rectangular in plan and featured wood shingles on both the roof and exterior walls. Primary windows were one-over-one double sash, and four pairs of barn doors provided easy access to the main elevation.

Plans from 1957 indicate that new mechanical units were installed in the northernmost corner of the first floor of this building, but no major alterations to the configuration of the space occurred at this time; thus, these plans reveal the original interior layout of the structure. Woodworking facilities occupied the east side of the first floor, while metal working and storage facilities occupied the west side. A door at the southern end of the building and a doorway at the northern end provided circulation between the two sides of the building, and an open staircase on the west side of the interior wall led to the attic. Storage space – including shelves, cabinets, closets, and a space enclosed by little more than chicken wire – occupied the entirety of the south and west walls of the west half of the attic. A hatch door in the floor created a pass through between the two levels. The southern half of the east side of the attic had virtually no floor, while the northern half provided more general storage space. Untreated wood floors and an open roof structure also mark the eastern half of the attic.¹⁹

In terms of plan, roof line, and configuration of windows and doors, this building has undergone very few alterations. The sea wall that now forms the concrete foundation of the north side of the building dates to 1935. It became the foundation for the side of the structure when the structure was reoriented in 1942 from its original north to south axis to its current east to west axis. As noted, heating units were installed in 1957. The other alterations of note are limited to the east elevation and lie well outside any period of significance. Along the southern half of the east elevation, a half-story gable extension has been added to house mechanical units. Directly to the north of this extension stands a temporary enclosure of concrete, chain link fencing, and vertical wood posts, which combine to form a protective fence around another me-

18 Bldg. 1906, PRPP Box 22, National Park Service, Golden Gate NRA, Park Archives and Records Center.

19 Fort Point Life Boat Station Floor Plans, Shop Building, National Park Service, Golden Gate NRA, Park Archives and Records Center, GOGA 2265, folder 2.

chanical. A window located on the main building and between these two units has been boarded over.²⁰

²⁰ Babalis and Stromberg, "Cultural Resources Inventory," 42-45; Bldg. 1907, various reports dating to 1993, ADPW.EMR-3, National Park Service, Golden Gate NRA, Park Archives and Records Center.

PHYSICAL DESCRIPTIONS

The following provides a description of elements, materials, and spaces of the building, including significant and non-significant features of the building.

1890 BOATHOUSE (PE1902)

Exterior

The 1890 Boathouse is a one-and-a-half story, wood frame structure that is rectangular in plan and has a witch's hat cupola with louvered vents. The wood shingle cladding is painted white and flares slightly at the base, and the roof has painted red wood shingles and flared eaves with exposed and decoratively rounded rafter tails (see figure 12, 13, & 14). There are vents at the foundation. Windows punctuate three elevations: two sets of double-hung four-over-four windows adorn the east and west elevations, and the north elevation has two fixed windows with a six-lite pattern. Both the north and south elevations have doors, all of which are vertical tongue-and-groove board with large metal hinges, painted green (see figure 7). Three risers access the one door on the north elevation. Wood signage with a painted graphic hangs above this door. Two sets of large double doors occupy almost the entire south elevation and open onto a sloped concrete driveway.

Interior

The interior of the 1890 Boathouse consists of four ground level rooms and a large half-story attic space. Some of the rooms appear to have changed configuration. Wide vertical boards form the interior walls of the ground floor, while tongue-and-groove narrow boards with bead molding form the ceiling. The floor of the northern half of the structure is wood, while the southern half has a concrete slab floor. All of the wooden elements are painted, and include the cornice, which appears to be original, five-panel doors that match those in the Officer in Charge Quarters; and casework that also match those found in the Officer in Charge Quarters. A number of newer built-ins appear throughout all of the rooms as well. An original wooden ladder provides access to the attic, which is a single room dominated by exposed redwood framing.



Fig. 12 : Northern exposure of the 1890 Boathouse.



Fig. 13 : Southern exposure of the 1890 Boathouse.



Fig. 14 : Detail of Rounded Exposed Rafter Tails.

OFFICER IN CHARGE QUARTERS (PE1901)

DESCRIPTION

Exterior

The Officer in Charge Quarters is a two-story with basement Dutch Colonial Revival, wood frame structure. The building has a rectangular foot print plan and is clad in wood shingles, painted white. The gambrel roof is clad in red painted wood shingles (see figure 16). Three gabled dormers project from each side of the roof, and a decorative widow's walk with a wooden balustrade tops it. Chimneys with an upward flared corbelled detail flank the widow's walk (see figure 15 & 17). The central dormer at the rear (west) elevation extends flush with the exterior wall of the first floor shed addition that runs the length of the building. A wood door with multiple lites and a curved transom window occupies the central dormer of the main façade. This door opens onto the balcony with wooden balustrade that tops the front portico. Wooden risers lead to the portico, which features support columns inspired by the Tuscan order. Glazed side-lites flank a paneled wooden door. Double-hung wood windows occur on all sides and have six-over-six, one-over-one, and eight-over-eight lite patterns. Several wood fixed windows adorn the building as well. A wooden wheelchair ramp provides access to the west side of the structure and connects to the 1890 Boathouse.

Interior

The interior of the Officer in Charge Quarters features an open stairwell in a central hall that opens on either side into rooms. Three office spaces occupy the north side of the first floor, while one office and a kitchen occupy the south side of this level. At the rear, to the west, lies a shed addition, which hosts a bathroom and storage space. Upstairs finds two offices on the north side, one office on the south side, and a bathroom in the central dormer. The central staircase, floor, balustrade and handrail are wooden, though the floor and stairs have been carpeted. The balustrade and handrail have been painted white.

This space has undergone a number of reconfigurations over its life span and no longer functions as a residence, but as an office. Most notably, bathrooms with tile walls and art deco fixtures were added during the 1930s when the shed addition was completed and the rear central dormer extended. The kitchen space likely dates to this period as well, though it was remodeled apparently during the 1970s. A partition that once separated the two front offices on the north side of the first floor no longer exists.

Despite these alterations, the house retains a number of nineteenth-century decorative elements. Wooden baseboards, quarter round corner and chair rail molding, and crown molding ornament the walls. On the first floor, the chair rail molding is more ornate, with corbelled detailing. It very closely resembles the crown molding throughout the interior. The fireplaces in the two front rooms appear to be original. They



Fig. 15 : The west elevation of the Officer in Charge Quarters.



Fig. 16: Detail of flared shingled base at Officer in Charge Quarters.



Fig. 17 : The east elevation of the Officer in Charge Quarters.

feature decorative wood mantles and molding patterns that echo the silhouette of built-in cabinets found throughout the interior.

BUOY SHACK (PE1903)

Exterior

The Buoy Shack is a one-story wood frame structure that follows a rectangular plan and features a gable roof with red composition shingles (see figure 18). It has V-groove rustic horizontal siding, which has been painted white with dark green trim, and corner boards at all four corners. A small storage unit with a shed lid extends from the southern half of the east elevation.

The structure has two access points: At the northern elevation, a large sliding-glass door sits behind a solid, thick wood sliding door with track and rope wrapped handle. While the glass door is not original to the structure, the wood door and track assembly appear to be. A five-paneled wood door opens into the east elevation.

Multi-lite wood windows with prominent wood surrounds and sills dominate the south and west elevations. A rectangular, two-lite awning window sits just below the roof at the eastern edge of the south elevation (see figure 19). The rest of this elevation contains a continuous series of five, four-lite fixed windows, while the west elevation has one two-over-two double hung window.

Interior

The interior is divided into two spaces: The eastern room, which occupies three quarters of the building, features vertical bead board wall finish with quarter round molding, wood floors and wood baseboards. A drop ceiling in the east room and plywood paneling in the gable above the interior wall that divides the two rooms obscure the wood ceiling framing, which is otherwise exposed. The interior wall also holds a built-in electric box that is made of wood and has undergone some modification. A kitchenette area with stainless steel counters and sink is located at the southern end of the smaller room.

TIDE GAUGE HOUSE (PE1906)

Exterior

This small, one-story square-plan structure has a pyramidal hipped roof with composition shingles. Drop siding with corner boards clads the walls. A single, four-lite awning window dominates the east and west sides of the structure, while solar panels and telemetry equipment sit atop the roof (see figure 20).

Interior



Fig. 18 : South elevation of the Buoy Shack



Fig. 19 : South elevation of the Buoy Shack and Tide Gauge House.



Fig. 20 : South elevation of the Tide Gauge House

The interior has vertical painted beadboard with wood base molding. The ceiling is wood beadboard as well. There is a wooden cabinet at the corner and wood flooring. A single panel wood door that appears to be recently installed.

MAIN BOATHOUSE/LIFE SAVING STATION (PE1903)

Exterior

The Main Boathouse is a three-and-a-half story structure and is essentially square in plan. It has a wood shingled hipped roof that ends in a slight wide eave overhang. A central square lookout tower with a pyramidal roof tops the building (see figure 21 & 22). Three double-hung, one-over-one wood windows adorn the south elevation of the tower, while metal sliders flank a large central fixed window on the east, west, and north elevations, resulting in nearly continuous walls of windows on those three sides. Wide shed dormers project from each side of the main roof. Each feature four wood awning windows (see figure 23). Multiple pairs of one-over-one wood windows dominate the second floor of each elevation. Ground floor windows vary from elevation to elevation. The west elevation features irregularly spaced one-over-one double-hung wood windows. Two pairs of one-over-one double-hung wood windows punctuate the north and south elevations. A single double-hung wood window flanks either side of the porch on the east elevation, while double-hung wood windows with a two-over-two lite pattern dominate the east and south elevations of the porch itself.

Enclosed porches with hipped roofs extend from both the east and south elevations. The east porch has three access points, each reached via three concrete risers and each comprised of single or double wood doors with a glass panel. A concrete disabled access ramp leads to an entry at the center of the south porch. The south elevation of this porch also features three pairs of double-hung windows and a vent of the same size. A door with vented panels provides access to the west end of this porch.

Two emergency exits dominate the north elevation. A metal platform extends from the shed dormer to the edge of the building, where a ladder leads to another platform that sits outside the centrally located glass paneled door of the second floor. This second-story platform leads to a split-level metal stairway and handrail that zigzags to the ground. Round metal columns support this main exit route (see figure 21).

Interior

The interior of the Main Boathouse has been reconfigured to accommodate office space. The majority of the windows are wood awning or double-hung, with a few metal slider replacements. The ceiling and walls are clad in horizontal wood V-channel tongue-and groove wall cladding with quarter round molding.



Fig. 21 : North elevation of the Main Boathouse.



Fig. 22 : Upper levels of the Main Boathouse.



Fig. 23 : East elevation of the Main Boathouse.

Drywall, asbestos, and acoustical tiles obscure most of the cladding. Each floor has an open string wood stair and balustrade with a wave motif at the steps. Acoustical tile ceiling obscures most of the exposed wood ceiling. On the fourth floor a wooden stairway with a bronze pipe rail leads to the central cupola look out.

SHOP & GARAGE (PE1907)

Exterior

This one-and-a-half story, single gable wood frame structure stands atop a concrete foundation and abuts a concrete retaining wall that runs along the entire north elevation and extends to the westernmost point of the Fort Point Coast Guard Station site. The building follows a rectangular plan oriented along an east-west axis and parallel to the shoreline. Wood shingles clad walls and composition shingles cover the roof. A single-story gable addition extends from the east elevation and measures about one third of the length and half the depth of the main building. A temporary enclosure comprised of vertical wood and chain link fencing also extends from the northern half of this elevation and protects an exterior mechanical unit (see figure 24).

Five bays of large hinged doors dominate the south elevation. They are composed of narrow tongue-and-groove vertical boards and large iron hinges (see figure 25). Above them hang three short vertical two-by-fours that serve no obvious purpose. A wood door with vents at the top and bottom provides an axis point from the west elevation.

Windows penetrate the west and north elevations. The first floor features four-lite wood awning windows – three on the west elevation and five on the north. Two-pane glass fixed windows occupy the gable on the west elevation, and a small, rectangular four-lite wood awning window sits just below the roof on the western half of the north elevation. A wood board covers what appears to be a square window opening at the east elevation, between the single-story extension and fenced-in mechanical unit. The single-story extension does not have any windows, but features a louvered vent at the center of the east elevation (see figure 26).

Interior

The Shop & Garage includes four rooms divided by wide vertical wood boards and two levels that are joined by a wooden stair. The eastern half of the building features extensive exposed wood roof framing at the second floor, where a square loft overlooks the open plan first floor. Poor lighting compromised visibility, but it appears that none of the wood at this half of the building has been coated or finished. The western half of the building follows a more complicated plan. Walls that do not appear to be original form a small



Fig. 24 : North elevation of the Shop & Garage.



Fig. 25 :South elevation of the Shop & Garage.



Fig. 26 : East elevation of the Shop & Garage.

room at the northwest corner of the first floor. Multiple storage units occupy the upstairs level, including a series of solid wood cabinets along the west wall and a wood-frame unit enclosed by chicken wire along the south wall. Each floor contains an access point to the eastern half of the building – a solid wood door at the bottom of the stairs and an open door frame at the top of the stairs.

EVALUATION OF SIGNIFICANCE

The following discussion indicates significant features, original and non-original materials and elements, and identification of the periods of significance for each structure at the site. Appendix C provides for a photographic directory of highlighted features for all structures.

As noted, the period of significance for the site is 1915-1964, from the point at which it moved to the current location till the date at which the main boathouse ceased to function in that capacity. The period of significance for individual buildings, however, varies according to the period in which any alterations or additions contribute to our understanding of that structure's history and function within the larger period of significance.

1890 BOATHOUSE (PE1902)

The primary date of significance for the 1890 Boathouse (PE1902) is 1915. Although the building was constructed in 1890, in 1915 it ceased to be used as a boathouse, was moved to this location, reoriented by 180 degrees, and the former winch house addition was removed. Although the structure has been moved to the south by several feet since 1915, it does not appear to have undergone major alterations, additions, or significant changes in use. This date thus best determines the relative significance of exterior and interior features.

Significant exterior features of the 1890 Boathouse include the wood shingled hip roof, witch's hat cupola, vertical tongue-and-groove wood garage doors with iron strap hinges, rear entry door and hardware, and the wood double-hung and awning windows.

Contributing exterior features include the wood signage with applied painted graphic, vents at the foundation, and the wood shingled siding with curved flair at the water table.

Significant interior features on the ground floor of the 1890 Boathouse include the wood casework that matches the casework found in the Officer in Charge Quarters, a horizontal tongue-and-groove bead board ceiling, and crown molding. Contributing features on the ground floor include the attic door, wood floors, wooden ladder leading to the attic, wide vertical board walls, and wood five panel doors. Significant features in the attic include the visible redwood framing and wood floors.

OFFICER IN CHARGE QUARTERS (PE1901)

The period of significance for the Officer in Charge Quarters (PE1901) is 1915-1938, from the point when the structure moved to this location and the date by which it had undergone all additions and alterations to upgrade plumbing, dining facilities, and glazing, and to render the building functional as a formal single-family residence.

Significant exterior features of the Officer in Charge Quarters include roof dormers with profiled wood trim, a wood shingled gambrel roof, wood double hung windows, a curved transom window at the central dormer over a wood door, a glazed wood door with side-lites, and wood Tuscan inspired columns and entry porch with wood balustrade and wood stairs. Contributing features include the wood shingled siding as well as a brick chimney with corbelled detailing and a widow's walk with wood balustrade. Both the chimney

and widow's walk are relatively recent, in-kind replicas of original features.

Significant features found on the interior include wood built-ins, wood fireplace and mantle, wood stair-case handrail and balustrade, glazed wood door with side-lites, original hardware, crown and chair rail molding, and corner bead molding.

Contributing interior features of the Officer in Charge Quarters include the baseboard and baseboard bead molding, wooden five panel doors, circa 1930s glazing and sash, dormer window insets, and circa 1920 bathroom additions.

BUOY SHACK (PE1905)

The Buoy Shack (PE1905) dates to approximately 1938 and has undergone few alterations that contribute to the significance of the building; thus, 1938 should be considered the primary period of significance for this individual structure. Significant exterior features of the Buoy Shack (PE1905) include the wood double-hung two-over-two lite windows, wood fixed windows, wood sliding door with rope wrapped handle, metal hardware and tracks, double bell and other painted metal equipment, wood horizontal siding, and five panel wood door. Interior significant features at the Buoy Shack include vertical beadboard with quarter round molding. Interior features that contribute to the historic understanding of the Buoy Shack include the exposed wood ceiling framing, wood baseboards, and built-in wood electric box cabinet at the wall.

TIDE GAUGE HOUSE (PE1906)

The Tide Gauge House (PE1906) dates approximately to 1938 and has undergone virtually no alterations that add to or detract from our understanding of its historical significance. Its date of origin thus serves as its primary date of significance. Exterior significant features include the wood awning four-lite windows. Exterior contributing features include the wood horizontal drop siding with cornerboards at one side of the corner. Significant interior features include the vertical painted beadboard with wood base molding and the wood ceiling. Interior contributing features include the wood built-in corner cabinet and the wood floor.

MAIN BOATHOUSE/LIFE SAVING STATION (PE1903)

The Main Boathouse (PE1903) dates to 1915. Between 1937 and 1944 the structure underwent two alterations that add to our understanding of the historical significance of the building. In 1937 the Coast Guard drew plans to install new windows in the watch tower so as to create greater visibility which were installed by World War II. Also by World War II, an emergency exit had been added to the north elevation, requiring that windows on the first and second floor be altered. This addition did directly reflect the increasing level of Fort Point U. S. Coast Guard Station's importance among San Francisco Bay stations and concomitant growth of personnel stationed at the site. The current emergency exit stairway, however, is not original to that period. The Main Boathouse did not undergo any significant alterations between 1944 and 1964; thus, the period of significance for the Main Boathouse is 1915-1944.

The exterior significant features of the Main Boathouse include the wood shingled hip roof, cupola outlook, shed-roof dormers with wood windows, and wood double-hung windows. The exterior contributing features are the wood shingled siding with molded course at the second floor level. Significant features found on the interior on the first floor include the wood windows and hardware, the horizontal wood v-channel tongue-and-groove wall cladding with quarter round molding, wood stair and balustrade, double hung windows in the interior (west) wall of the eastern porch, the exposed wood frame ceiling, and wood structural posts in original boat storage area. Wood baseboards and trim comprise the contributing features on the first floor.

On the second floor the significant features include the horizontal wood v-channel tongue-and groove wall cladding and wood stair and balustrade. Contributing features found on this floor include the wood baseboard.

Significant features on the third floor include the wood stair and balustrade, sloped ceiling, and wood stair and metal pipe handrail to the lookout level. Contributing features found on this floor include the wood baseboard and attic access doors and hardware.

On the fourth floor, the significant features include the stair with pipe handrail and the wood double hung windows.

SHOP & GARAGE (PE1907)

The period of significance for the Shop & Garage (PE1907) is 1915-1942, from its date of origin to the year it was reoriented by 90 degrees to its current position. No additions or alterations outside of this period enhance our understanding of the historical significance of the building.

Exterior significant features of the Shop & Garage include five bays of wood paneled double doors with vertical aligned tongue-and-groove with iron strap hinges, four-lite casement windows at the first floor, and awning style pivot windows at the second floor. Contributing features found on the exterior include the gable roof with wood shingles and the wood shingle siding. Significant interior features include the wood stair, hatch door, and wood tool locker built-in. Interior contributing features include the concrete floor, exposed wood posts and beams, wood door trim, pendant lights, and the horizontal and vertical wood siding at the walls.

CONDITIONS ASSESSMENT

The following provides a description of the condition of the building materials, elements, and systems and causes of deterioration, and discussion of materials testing and analysis.

1890 BOATHOUSE (PE1902)

Exterior

The exterior condition of the 1890 Boathouse is generally good. Biological growth has formed on the southern and western exposures of the roof, which could be encouraged to proliferate at the southern portion by a large tree that currently overhangs this area. Otherwise, the red painted shingles appear to be in excellent condition. The shingles cladding the exterior walls appear to be intact; however, the shingles at the flared base are missing. The entire exterior envelope is soiled and miscellaneous ferrous metal attachments are embedded throughout the structure. Most of the hardware suffers from corrosion. Some of the windows appear to no longer function and have been painted shut. The garage doors are deteriorating. The vertical tongue and groove boards suffer from mechanical and moisture related deterioration. Direct contact with the coarse aggregate finished concrete slab driveway, which is often damp, contributes to this problem. The doors do not have enough clearance when they are opened and shut; therefore, the cross-grain dragging of the boards with the concrete surface of the driveway is stressing and in some cases splintering the vertical board. Continual contact with the cement has removed the coating, which results in a capillary absorption of the water through the grain of the wood. Water is then trapped within the wood, under the surface of the remaining sound impermeable paint layer.

Conditions noted on the Exterior include:

- Biological Growth
- Windows in need of repair
- Missing shingles
- Differential soiling
- Corroded ferrous metal attachments
- Wood deterioration
- Deteriorated paint

Interior

The interior condition of the 1890 Boathouse is fair to good. This structure has undergone a significant number of reconfigurations over its lifetime. Originally, it appears to have been one large room with a small addition projecting from the west end of the current north elevation. A small trap door in the northwest corner may be related to the winch mechanism housed in the former addition. Currently, the space is divided into four rooms on the ground level; however, ghosts of the original configuration remain, causing some confusion of interpretation. A large attic occupies the entire upper level. Differential soiling occurs throughout the structure and all elements need refinishing. The attic, with the exclusion of the water or oil stained floors appears to be in excellent condition. The framing members remain intact and appear to have resisted moisture infiltration.

On the eastern side of the center dividing framework the floor boards are stained with water that appears to have dried. The ceiling below shows signs of staining and deterioration. It does not appear that a leak afflicts this portion of the building, but it is apparent that at one time something leaked through the floorboards: The underside ceiling is stained and hardware corroded inside the paint layer and has bled to the surface. A dark stain that may indicate either a chemical spill or water that has not yet dried appears on the western side of the dividing members. The staining is prominent and evidence of salt crystallization or efflorescence indicates that either the floor was exposed to salt water at some point in time or a chemical may have been spilled in that location.

Conditions noted on the interior include:

- Ghosts of building reconfiguration
- Differential soiling
- Possible wood deterioration
- Salt crystallization
- Deteriorated paint finishes

OFFICER IN CHARGE QUARTERS (PE1901)

Exterior

The exterior of the Officer in Charge Quarters appears to be in stable condition. The red shingled roof appears to be sound; however, biological growth in the form of lichen is present. The paint at the decorative wooden elements appears to be in poor condition, whereas the painted shingles seem to be in slightly better condition. The majority of the structure is soiled and shows some evidence of paint failure. The wooden porch and wheelchair ramp are experiencing an excessive amount of water infiltration, resulting in very poor condition of the finishes, which will require a more severe approach to paint removal and reapplication. The wood of the porch, balcony, and wheelchair ramp has deteriorated and will likely need extensive repair or replacement. The majority of the embedded hardware has corroded and bled into the finished



Fig. 27 : Clogged drain at the 1890 Boathouse.



Fig. 28 : Biological growth on the roof at the Main Boathouse.

surface, indicating a problem with water infiltration, but the condition of the paint suggests that the water infiltration is not yet severe. In general the windows appear to need only mild repair for full functionality. Mud swallows are nesting in the entryway porch.

Conditions noted on the exterior include:

- Biological growth
- Windows in need of repair
- Missing shingles
- Differential soiling
- Corroded hardware
- Deteriorated paint finishes
- Wood deterioration

Interior

The interior of the Officer in Charge Quarters is in good condition. Historic fabric appears to be stable, other than in locations where it has been removed for remodeling. There is some minor finish failure and differential soiling. Some of the pocket doors seem to have been filled in and the flooring is covered in carpet, so it is difficult to know the condition of the wood floors. In general, most remaining elements will need only mild repair and cleaning.

Apart from the entry porch, the residence appears to be in stable condition. The wooden elements that are in direct contact with the ground level are all badly deteriorated. Measures will have to be taken to solve the issue of ground contact if any actions are taken to replace or restore these elements, as the replacements will continue along the same path of deterioration if exposed to the same conditions. At this point, the front entry porch, wheelchair ramp, and balcony are all unstable and possibly hazardous. The ramp and balcony are extensively deteriorated and no longer in use.

Conditions noted on the interior include:



Fig. 29 : Disconnected drain spout at the Officer in Charge Quarters.



Fig. 30 : Mud Swallows nesting in the eaves of the porch at the Officer in Charge Quarters.

- Differential soiling
- Deteriorated paint finishes

BUOY SHACK (PE1905)

Exterior

In general this structure appears to be in good condition. The roof was inaccessible, as it has been covered with plywood paneling, but corrosion staining patterns indicate problems with moisture infiltration, which should be investigated immediately to prevent further deterioration. The wood sliding door is in good condition; however, there is evidence of water damage and biological growth at the base. All of the miscellaneous metal attachments have corroded in most cases the rust has bled through the exterior finish layer. The rope wrapped wooden handle needs repair, as earlier consolidation attempts have been foiled by the corrosion of the iron pin.

Conditions noted on the exterior include:

- Biological growth
- Differential soiling
- Corroded hardware
- Deteriorated paint finishes
- Mechanical damage to wooden elements

Interior

The interior also appears to be in good condition. Other than some finish failures, the interior vertical bead board is in good condition. Corrosion stained water runoff patterns on the interior framing system indicate that the roof may not be properly resisting water infiltration. The flooring, baseboards, and windows are in good condition. The interior of the structure appears to have been reconfigured at some point.

Conditions noted on the interior include:



Fig. 31 : Corroded ferrous metal hardware at the Buoy Shack.

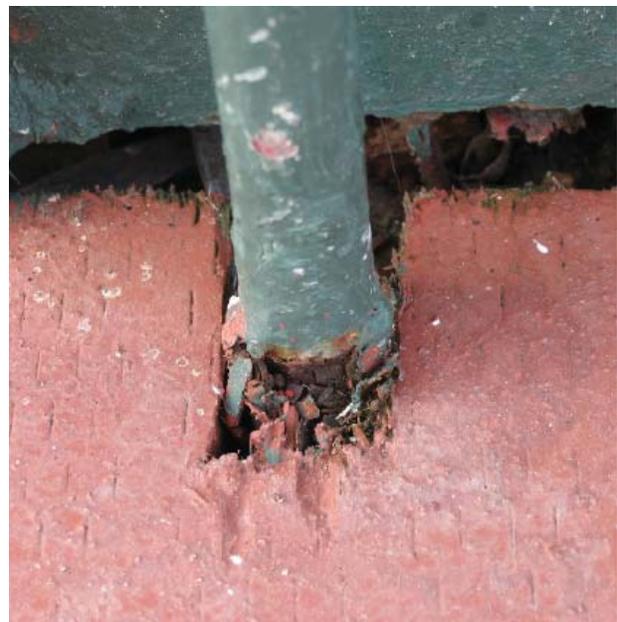


Fig. 32 :Substrate underneath deteriorated paint is deteriorating from rot.

- Corroded hardware
- Deteriorated paint finishes

TIDE GAUGE HOUSE (PE1906)

Exterior

The exterior condition of the structure is good. The finishes are in relatively good condition.

Conditions noted on the exterior include:

- Biological growth
- Corroded hardware
- Deteriorated paint finishes
- Mechanical damage to wooden elements

Interior

The interior of the Tide Gauge House was inaccessible and was surveyed through the windows. It appeared to be sound; however, there was differential soiling and some paint failure.

Conditions noted on the interior include:

- Differential soiling
- Corroded hardware
- Deteriorated paint finishes

MAIN BOATHOUSE/LIFE SAVING STATION (PE1903)

Exterior



Fig. 33 : The exterior paint is deteriorating on the windows, as is the glazing compound.



Fig. 34: Improper drainage at grade has lead to shingle deterioration.

This structure is in fair condition. The exterior shingle cladding appears sound but has biological growth and severe painted finish failure. It is possible that some of the shingles will require consolidation or replacement; however, the majority of the singles will simply need to be repainted. All of the hardware has corroded and is staining the finish of the structure, in some cases causing mechanical damage to the wooden elements. The hip roof appears to be in good condition; however, it hosts some biological growth that should be addressed. The wooden windows vary in condition. The windows on the lower level of the eastern exposure appear to be in the poorest condition. Most of the remaining windows are protected with aluminum exterior storms and are in fair to good condition. The windows on the fourth floor are not protected by exterior storm windows. The windows of the south and west exposures are in fair to poor condition and are exhibiting evidence of salt efflorescence. Much of the poured concrete appears to be in generally good shape, though some cracking has occurred, possibly due to settling or seismic activity. All of the hardware is corroded and there is evidence of biological growth on the painted concrete and the painted steel emergency stair.

Conditions noted on the Exterior include:

- Biological growth
- Differential soiling
- Corroded hardware
- Deteriorated paint finishes
- Mechanically damaged wooden elements
- Salt Efflorescence
- Non-functioning windows

Interior

The interior is in good condition, though it has been reconfigured substantially. Many of the interior finishes have been obscured with suspended acoustical ceilings and new walls, but most of the significant features behind the obscuring walls have sustained barely any damage and appear to be in good condition. The windows appear to have suffered the most damage at the third and fourth floors. The majority of the fourth-floor lookout tower windows have been replaced with aluminum sliders that are not in keeping with



Fig. 35 : Biological growth has developed in moist, shaded areas



Fig. 36 : Much of the paint has detached from the shingle siding.

the character of the structure. On the fourth floor, the west and south windows have been stabilized with metal railings along the frame, and on the north and east exposures the windows are severely deteriorated and are showing evidence of salt efflorescence.

Conditions noted on the Interior include:

- Differential soiling
- Corroded hardware
- Deteriorated paint finishes
- Mechanically damaged wooden elements
- Salt efflorescence

SHOP & GARAGE (PE1907)

Exterior

The exterior of this structure is in fair condition. The majority of the window glazing has been painted, broken or boarded up. Based on a strictly visual observation, it appears that the windows are not functional. The cladding is exhibiting severe finish failure and the hardware is corroded. The doors of the Shop & Garage have sustained mechanical damage from a combination of constant exposure to moisture and the cross-grain dragging of the vertical tongue and groove door across coarse grain exposed aggregate concrete.

Conditions noted on the Exterior include:

- Differential soiling
- Biological growth
- Corroded hardware
- Deteriorated paint finishes
- Mechanical damage to wooden elements
- Non-functioning and deteriorated windows
- Deteriorated wooden elements

Interior

The painted concrete floor exhibits severe finish failure and the interior wooden elements are exhibiting mild, moderate and severe finish failures. There appears to have been a substantial reconfiguration of the interior of the Original Garage, the wall and framing treatments are varied from vertical, horizontal to diagonal board. Extensive mechanical damage from various built-in campaigns are in evidence. The interior is in fair condition; however, objects being stored in the building obstructed much of the interior for survey. Re-evaluation following removal of these stored items is advised.

Conditions noted on the Interior include:

- Differential soiling
- Corroded hardware
- Deteriorated paint finishes
- Mechanical damage to wooden elements
- Deteriorated wooden elements

MAIN BOATHOUSE/LIFE SAVING STATION (PE1903) WINDOW SURVEY

An intensive window survey was conducted at the Life Safety Station to determine the condition of the existing windows. Refer to *Appendix B*.

PART II: TREATMENT AND WORK RECOMMENDATIONS

The following section presents the historic preservation objectives and selected treatments for each structure, requirements for work, and recommended work that corresponds with the defined treatment goal.

HISTORIC PRESERVATION OBJECTIVES

The following provides a description and rationale for the recommended treatment and how it meets the project goals for use of the building.

GULF OF THE FARALLONES NATIONAL MARINE SANCTUARY, FORT POINT COAST GUARD STATION REHABILITATION OF THE MAIN BOATHOUSE/LIFE SAVING STATION (PE1903)

INTRODUCTION

The purpose of this document is to offer a programmatic vision for cultural interpretation of the Main Boathouse (PE1903) after rehabilitation/restoration. The life-saving station campus is a historic setting where the interrelationship of the buildings creates a whole that is greater than the sum of its parts. Therefore, cultural interpretation of the site should include the entire campus.

The interiors of the Officer in Charge Quarters (PE1901), 1890 Boathouse (PE1902), Shop & Garage (PE1907), Buoy Shack (PE1905) and Tide Gauge House (PE1906) have been altered little since their original construction, but the interior of the Main Boathouse/Life Saving Station (PE1903) has been substantially reconfigured. Since the ground floor of the Main Boathouse is envisioned as the primary interior space that is accessible to the public, the Sanctuary Visitor Center space on the first floor plays an important role in interpreting the cultural significance of the site as well as the interpretation of the Gulf of the Farallones National Marine Sanctuary.

NON-STRUCTURAL CULTURAL INTERPRETATION

Cultural interpretation at the site should be a multi-pronged approach that capitalizes on the extensive foot traffic along the promenade as well as the accessibility of the exterior features of the site. Elements of cultural interpretation that do not affect the historic fabric of the building could include exterior signage on each of the buildings, self-guided audio tours of the site (beginning and ending in the Sanctuary Visitor Center), and formal interpretive walking tours of the site.

STRUCTURAL CULTURAL INTERPRETATION

As noted in the historic report, many of the historically significant features on the first floor of the Main Boathouse (such as horizontal wood V-channel tongue-and-groove wall cladding and exposed wood frame ceiling) are obscured behind drywall, asbestos, and acoustical tiles. Similarly, partitioning of the original boat storage area has eliminated the historic openness and obscured the contextual significance of the structural wooden posts - significant features of the building's historic fabric. Removal of non-contributing drywall, asbestos, and acoustical tiles and removal of non-contributing partition walls that subdivide the boat storage are important steps in reclaiming the historic space for cultural interpretation.

RESTORING BAYS TO THE NORTH ELEVATION AND EXHIBITING A LIFE SAVING BOAT

The plan for the Sanctuary Visitor Center is to occupy the same space as the original boat storage area, which creates an opportunity to highlight the historic use of that space. The end of the established period of historical significance is 1964 - the year that the Main Boathouse ceased to function as a boathouse. Respecting the guiding conservation principle of irreversibility - i.e., any changes should be reversible without damaging the structure - restoring bays/windows on the north elevation of the Main Boathouse

and exhibiting a full size life saving boat in front of the building could be a core element of cultural interpretation (see figures 37 & 38).

REQUIREMENTS FOR WORK

The following outlines the laws, regulations, and functional requirements that are applicable to the recommended work areas.

SUSTAINABLE BUILDING STRATEGIES

Buildings in the United States consume more than 30% of energy produced and over 60% of electricity produced annually. The U.S. Green Building Council (USGBC) was formed in 1993 to promote environmentally responsible building. Shortly after the council formed, its members saw the need for a way to measure and define “Green Buildings,” and developed LEED, Leadership in Energy and Environmental Design. The LEED Green Building Rating System is the nationally accepted standard for the design, construction, and operation of green buildings. The primary reference for sustainable building in the Presidio is *Green Building Guidelines for the Rehabilitation of Historic and Non-historic Buildings* issued by the Presidio Trust in 2002. This document adheres to the basic tenets of the LEED system, and would be used for the proposed rehabilitation project at the GFNMS.

There are currently five environmental categories under which a project can earn points toward LEED certification: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. An additional category, Innovation and Design Process, awards points for environmental benefits achieved beyond those listed in the five other categories. If a building earns 26-32 points within these categories, it is awarded LEED Certification; LEED Silver is awarded to a building earning 33-38 points, Gold to a building earning 39-51 points, and Platinum to a building earning 52-69 points.

While preservation is inherently sustainable it is currently difficult to achieve high LEED ratings for historic buildings. As the SGBC refines its ratings, historic preservation will become more integrated into the process. With reference to the GFNMS rehabilitation project, LEED Silver would likely be the



Fig. 37 : North elevation, the original window configuration of the Life Safety Station, 1919.



Fig. 38 :North elevation, the current window configuration of the Life Safety Station.

maximum achievable goal. Any project undertaken for the GFNMS that seeks to achieve a LEED rating must be re-evaluated based on the most current LEED requirements.

All LEED improvements should protect the historic integrity of the building and meet the Secretary of the Interior's Standards for the Treatment of Historic Properties. In addition, sustainable project elements should be carefully considered, not only relative to individual structures, but to broader cultural landscape. The GFNMS campus is particularly sensitive in the regard, because the strong spatial relationships between the buildings are character defining, and the ensemble is sited on open terrain with no other adjacent structure. Additive elements such as wind powered generators or solar panel arrays have the potential to compromise the historic character of the site.

Possible ways for the GFNMS proposed rehabilitation project to earn credits by category include:

Sustainable Sites

- Locate near public transportation
- Provide ample bicycle storage and changing rooms
- Designate preferred parking for carpools, and add no new parking
- Shielding all outdoor light fixtures

The Water Efficiency

- Use captured rainwater or treated wastewater for irrigation
- Install low-flow or high efficiency fixtures
- Install automatic sensors on restroom fixtures

Under Energy and Atmosphere

- Install improved glazing where historically appropriate
- Install heating and ventilating, refrigeration, and fire suppression systems that contain neither CFCs, HCFCs, or Halon, and that have increased equipment life (note that air conditioning is not necessary at this site)
- Install metering equipment to monitor energy use over time

The Materials and Resources

- Maintain the existing building structure and envelope
- Use existing interior non-structural elements such as walls, doors, etc.
- Recycle and salvage construction debris and redirect reusable materials to appropriate sites
- Reincorporate salvaged materials, including furniture, decorative components, cabinetry, and doors and frames into the design
- Use materials that have been extracted, harvested, or manufactured within 500 miles of the project site
- Use certified wood

The Indoor Environmental Quality

- Install permanent monitoring systems to provide information on ventilation system

- performance
- Protect heating and ventilating systems and absorptive materials during construction
- Use low VOC sealants, adhesives, paints, coatings, carpet and composite wood
- Install entryway grilles, grates or mats
- Install improved ventilation system if required
- Install high-level filtration systems in air handling systems
- Provide individual lighting controls in multiple-occupant spaces, and providing task light at individual desks

The GFNMS can possibly earn points in the Innovation and Design Process category using strategies beyond those listed. The possibilities for points listed here represent only a preliminary evaluation, and the project should be evaluated further to ensure a comprehensive environmental approach.

SEISMIC IMPROVEMENTS

All seismic improvements must meet the Secretary of the Interior's Standards for the Treatment of Historic Properties. Fortunately the structure comprising the GFNMS campus are wood frame and are good candidates for successful seismic retrofitting. Generally, in historic buildings, the first task is to determine the seismic value of the structure itself and design for seismic resistance based on an augmentation of the existing conditions. This approach inherently supports the retention of historic fabric.

The work should generally be additive and, at a minimum include the insertion of tie downs, straps, plates, or fixtures at wood to wood or wood to concrete/masonry intersections - often at locations that are accessible without demolition. A more invasive treatment includes opening walls to add shear strength by mounting plywood panels at engineered locations. In this instance, historic finishes such as wood trim, baseboards, casing, or wainscot should be carefully removed, catalogued, and stored for reinstallation. Shear paneling, if done correctly adds resistance to lateral forces without apparent change to historic material. Similarly, if wood roof shingles are to be replaced, depending on the type of existing roof sheathing, this could be an opportunity to create a shear diaphragm with plywood at the roof plane. Again, when the replacement shingles are installed, there would be no apparent compromise to the historic character.

At the Main Boathouse/Life Saving Station (PE1903), in particular, the proposed rehabilitation project will open the northern wall at the first floor to its original three bay configuration. While reversing changes that diminished the Main Boathouse's relationship to the waters edge, it creates a weak or "soft" story condition for lack of shear bracing. The interior space of the boat storage bays is also part of the building's historic character and should be preserved. This may be accomplished by adding steel plates to existing wooden posts, and the new opening could have a steel shear framed mounted on the interior, which could be cased to be less obtrusive.

We feel that the GFNMS building presents good opportunities for successful seismic modifications while rigorously adhering to the Secretary of the Interior's Standards.

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

The restoration/rehabilitation of the Main Boathouse and associated Officer in Charge Quarters, 1890 Boathouse, Shop & Garage, Buoy Shack and Tide Gauge House should have a minimal impact on the building's historic fabric. Deficiencies that threaten life and safety, or that are causing deterioration must be corrected. The value of any other improvements should be weighed against the value of the building's integrity. The historic fabric and character-defining features of the buildings have been described in the evaluation sections of this report. Since the Main Boathouse is to accommodate exhibit spaces on its ground floor, work on these spaces, and on the building exterior if

feasible, should follow the Secretary of the Interior's Standards for Restoration, included in the appendix. All work on the remaining structures must comply with the Secretary of the Interior's Standards for Rehabilitation, below.

- A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
- The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
- Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
- Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
- Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
- Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
- Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
- Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
- New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
- New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

As with any historic building, the State Historical Building Code (SHBC) and Uniform Code for Building Conservation (UCBC) should be used as the prevailing codes. This allows a sensitive, performance-based means for achieving a safe, improved structure.

All work shall also comply with accessibility requirements within the SHBC, and with the standard of Section 1134B - Accessibility for Existing Buildings, in the California Building Code. This section covers historic as well as non-historic structures. The Americans with Disabilities Act (ADA) also mandates, under Title II, that the State's programs and services will be accessible.

WORK RECOMMENDATIONS & ALTERNATIVES

The following is a presentation of tasks recommended to realize the proposed treatment approach; evaluation of proposed solutions; and description of specific recommendations for work, including alternated solutions.

PORCHES

Rating: Significant

Condition: Poor to Fair

Description: The Residence features an open porch and the Main Boathouse features originally open porches that have been enclosed, at both the south and east sides of the buildings. The Officer in Charge Quarters porch has a balustrade roof supported by Tuscan-inspired columns. The wood steps leading up to the porch are severely deteriorated. The south porch of the Main Boathouse was reconfigured on the interior when it was enclosed. It now contains four rooms: an entry vestibule, a conference room, a mechanical unit on the westernmost side, and a toilet room at the easternmost side. A concrete wheelchair ramp has been added to the front of the enclosed porch. The original windows from this porch have been removed and were replaced with newer windows in the 1930s. The eastern porch was enclosed in 1946 and now serves as exhibit space (see figure 42). The original windows and exterior cladding are still intact. Hopper windows were installed on the exterior wall. A door replaced the northernmost window of this area to provide access into the adjacent room.

Condition: At the Main Boathouse, the enclosed area of the south porch has been completely reconfigured. The enclosed area of the eastern porch is in fair condition; however, the exterior windows are in relatively poor condition. Water has infiltrated the interiors, around the window sash and on the floors. The open front porch of the Officer in Charge Quarters is in poor condition, the platforms and stairs are deteriorated and unsafe, mud swallows are nesting in the eaves, and the painted finishes are severely deteriorated.

Recommendations: Reopen the eastern porch at the Main Boathouse. Repair wooden elements at the Officer in Charge Quarters porch. Refinish all porches with historically appropriate colors.

ADDITIONS

Rating: Non-contributing & Contributing

Condition: Fair

Description: The Officer in Charge Quarters is the only structure that features additions. In 1902, a large kitchen was added to the rear of the building. The kitchen addition stood one story tall and twice as deep as the rear porch. It had a flat roof and simple balustrade, which allowed the roof to function as a balcony as well. In the 1930s, the structure was converted into an office building. At that time, bathrooms, tile walls and art deco features were added and a shed addition was completed. Also, the rear central dormer was extended. The kitchen underwent another remodel in the 1970s.

Condition: The additions are in fair condition overall. The exterior conditions are typical of the buildings as a whole, displaying peeling paint, rust and biological growth. On the interiors, water infiltration was noted at windows.

Recommendations: Since all additions fall within the period of significance, a restoration would not necessarily warrant their removal or restoration to their pre-renovation condition. While it would be possible to restore the structures at the site to the pre-addition condition, these 60-80 year old additions

have acquired significance over time, and may help to tell the full story of the buildings. Finally, their removal may constitute intrusions to the historic fabric that would actually result in a net loss of historic fabric from the building. Therefore, careful consideration of all of these factors is recommended prior to a decisions regarding the dispensation of these features.

EXTERIOR CONDITIONS AND RECOMMENDATIONS

The exteriors of the Fort Point Coast Guard Station Main Boathouse, Officer in Charge Quarters, 1890 Boathouse, Shop & Garage, Buoy Shack, and Tide Gauge House retain a high degree of integrity. The impact of any exterior alterations must be carefully analyzed and weighed in terms of cumulative effect on the historic resource. Long-term preservation depends upon a sound building envelope. Exterior recommendations are provided to guide long-term maintenance efforts.

Survey all exterior materials at close range to identify and locate all deterioration and deficiencies. Stabilize and repair existing historically significant materials. Replace missing components in kind where required. Minimize the impact of visible modifications to the exterior facades.

ROOF CLADDING

Rating: Contributing

Condition: Good to Fair

Description: The existing roof cladding on four of the six structures consists of painted wood shingles. The roof cladding on the other two structures, Buoy Shack and Tide Gauge House, has been replaced with asphalt shingles. Historic photographs verify that wood shingles are the appropriate cladding for the buildings.

Condition: The roofs appear to be in good to fair condition. Evidence of water intrusion was observed within the Buoy Shack, which suggests that prior to the application of asphalt shingles, there was extensive shingle deterioration. The wood shingles on the Shop & Garage roof appear to have been recently replaced. The paint is moderately deteriorated but, in general, the existing shingles appear intact. Prolonged exposure



Fig. 39 : Rust stains are evident in the shingled areas.



Fig. 40 : Corroded ferrous metal hardware is embedded in the shingles

to moisture, most noticeably on the north and west elevations, has allowed the growth of moss and fungus (see figure 28). This growth further holds moisture and can promote the growth of rot. Dry rot was noted on the Officer in Charge Quarters porch and wheelchair ramp and interiors of the garages.

Recommendations: The roof is a highly vulnerable element of a structure and also the first line of defense against water intrusion. Wood shingles have a finite life span, approximately 15-30 years, and will inevitably fail, because of normal organic decay and wear. According to Preservation Brief 19: The Repair and Replacement of Historic Wooden Shingle Roofs, “contributing factors to deterioration include the thinness of the shingle, the durability of the wood species used, the exposure to the sun, the slope of the roof, the presence of lichens or moss growing on the shingle, poor ventilation levels under the shingle or in the roof, the presence of overhanging tree limbs, pollutants in the air, the original installation method, and the history of the roof maintenance.”² Preservation Brief 19: The Repair and Replacement of Historic Wooden Shingle Roofs and Preservation Brief 4: Roofing for Historic Buildings, published by the National Park Service, describe how to evaluate and replace a roofing system in detail.³ The following are general recommendations:

- Perform a complete internal and external inspection of the roof, roofing system and related features twice a year, identifying changes and areas of failure. Flashing—a major cause of deterioration—should be carefully inspected for poor workmanship, thermal stress and metal deterioration. If the roof structure appears sound, the substrate should be closely examined, particularly around the roof plates, under any exterior patches, at intersections of roof planes, and at vertical surfaces such as dormers. Water penetration should be readily apparent, usually as a damp spot or stain.
- If 20% or more of shingles on any one surface appear eroded, cracked, cupped or split, replacement should be considered. Replacement should also be considered if evidence of pervasive moisture damage is found in the attic.
- Replace damaged shingles with fire-retardant shingles to match size and exposure of original.
- Should shingles require replacement, careful research, design, specifications and selection of a skilled roofer are necessary.
- Avoid sparse shingle coverage and heavy building papers.
- Avoid staples and inferior flashing. Use stainless steel nails instead. Stainless steel and copper



Fig. 41 : South elevation, enclosed porch of the Main Boat-house



Fig. 42 : East elevation, enclosed porch of the Main Boat-house

- flashing is recommended.
- Avoid patching deteriorated roof lath or sheathing with plywood or composite materials.
 - Avoid spray painting raw shingles after installation. Shingles should be coated prior to installation to prevent warping.
 - Clean and maintain gutters and leaders on a regular basis. Clogs in these systems will cause water to back up and seep into roofing units.
 - Implement a regular maintenance plan to extend the life of the roof. Maintenance would include regular visual inspections and re-coating when needed.

For the Main Boathouse, Officer in Charge Quarters, Shop & Garage, and 1890 Boathouse, given the good condition of many of the shingles we recommend that the roof be repaired where necessary, particularly to remove lichen and moss growth. For the Buoy Shack and Tide Gauge House, given the poor condition of the roof and inappropriate replacement of the shingles, we recommend replacement. This would also permit a plywood diaphragm to be installed beneath the shingles, should that be recommended by the structural engineer, and the thorough examination, and replacement if necessary, of the flashing. While the original shingles were redwood and replacement in kind is the preferred treatment, red cedar would be an appropriate, ecological, and less expensive replacement material. In addition, consult with the Fire Marshal to verify the required level of fire retardance; most likely, a minimum rating of Class C will be required. This rating may not be available in redwood.

The original finish treatment should be replicated using currently available materials. Pre-treat with a high-quality wood preservative. The shingles should then be finished with an appropriate paint system - such as an industrial latex - that matches the color and gloss of the early 20th century red paint used. An appropriate primer will most likely be necessary to both adequately protect the wood, and to provide good adhesion of the finish coats.

DRAINAGE

Rating: *Original components - contributing*
Replacement components - non-contributing



Fig. 43: Corrosion staining from embedded hardware at the Buoy Shack



Fig. 44: Inappropriate patching on clapboard wall at the Buoy Shack..

Condition: Poor

Description: A wood and metal gutter system runs around the perimeter of the roofs, connecting in places to modern plastic and metal downspouts.

Condition: The existing gutter system is deteriorating and contributing to moisture problems on the exterior of the buildings (see figure 27). The gutters are filled with debris in some areas (see figure 29). The downspouts are detached, falling off or missing in some areas, contributing to the staining and biological growth on the wood siding and eaves. Drainage on the site is poor, and standing water is a problem.

Recommendations: The gutters appear to be in repairable condition. They should be repaired as follows:

- Survey the gutters for deterioration.
- Repair deteriorated wood gutter sections with wood Dutchman or epoxy consolidant and fill. Consider lining the entire system with a brush-on epoxy consolidant prior to painting to create a watertight membrane.
- Replace badly deteriorated or missing gutter sections to match original.
- Replace damaged rainwater leaders with new galvanized metal units.
- Survey entire gutter system annually, noting leaks and poor conditions, and repair as needed.
- Clean gutters at least twice annually, as part of the building's regular maintenance.

Site drainage problems must be corrected so that water flows away from the structures. This may be done by reviving the original French drain system. French drains would be embedded in gravel, around the building perimeter. The water would then be diverted away from the buildings, possibly into a sanitary sewer system. Regrading may also be utilized to divert water from the structures. As with any proposed ground disturbance, conduct archeological testing prior to any excavation.

BIOLOGICAL GROWTH

Description/Condition: Biological growth includes algae, lichen and fungi. The beginnings of these problems are evident in the staining visible at the damp, shaded areas of the exteriors, particularly the



Fig. 45: Mechanical deterioration of doors of the Shop & Garage associated with cross-grain dragging.



Fig. 46: Paint failure on the doors of the Shop & Garage.

north and west elevations of all five structures. Various types of fungi are present, evident as orange, red and black staining, as well as lichen or moss growing on all four wood shingled roofs. Biological organisms are not only unsightly but can, especially in the case of dry rot, cause serious damage.

Recommendations: Survey all exterior siding and woodwork, both to locate active infestations and to identify and locate sources of moisture ingress. Treat active infestations as follows:

- Identify and locate areas of biological growth, as well as the source of the growth.
- Growths other than dry rot may be treated with a fungicide prior to painting or other finish treatment. Fungicide may be included in the paint to discourage future infestations.
- Active dry rot infestations may be treated as follows:
 1. Replace severely deteriorated members in kind. Pretreat new wood with wood preservative, and back-prime prior to installation.
 2. Treat minor deterioration with repeated applications of liquid wood preservative. Then apply epoxy consolidant and epoxy paste filler prior to painting.
- Prevent future infestations by correcting drainage problems and keeping all wood well-painted.

WOOD CLAPBOARDS

Rating: Contributing

Condition: Fair

Description: The Buoy Shack and the Tide Gauge House are clad with wood clapboard siding. All wood is painted.

Condition: The cladding is in fair condition. Deterioration includes delamination and general deterioration of the paint, water damage, dirt build-up, and biological growth. Rust staining occurs at metal attachments (see figure 43).

Recommendations: Perform a detailed cladding survey to identify conditions such as breaks, cracks, loose boards, insect damage and biological growth. If structural repairs require removal of this material, it should



Fig. 47: Sliding wooden door at the Buoy Shack



Fig. 48: Vertical tongue-and-groove wood doors at the Shop & Garage.

be carefully salvaged, catalogued, and returned to its original location. General recommendations are as follows:

- Remove dirt, debris and miscellaneous nonfunctional attachments.
- Replace any broken or badly deteriorated boards in kind. Pretreat with wood preservative, and back-prime all surfaces prior to installation.
- Reattach any loose elements with stainless steel fasteners.
- Patch holes with wood Dutchman plugs.
- Treat with a fungicide if required, then prime and paint. Include fungicide in the paint to discourage future biological growth.
- Repaint using historically appropriate paint colors. If clapboards are removed, prime backs and edges prior to reinstallation.

SHINGLES

Rating: Contributing

Condition: Good to Fair

Description: The Main Boathouse, Officer in Charge Quarters, 1890 Boathouse, and Shop & Garage exterior walls are clad in painted shingles.

Condition: The wall shingles are in good to fair condition. Deterioration includes delamination and general deterioration of the paint, water damage, warping and splitting, dirt build-up, and biological growth. Some missing shingles were noted. Rust staining is visible at the intersection of metal elements (see figure 31).

Recommendation: The existing wall shingles are not severely deteriorated; however, there some are missing and should be replaced. These appear to be holding up well, however shingles have a finite life span, and will someday need to be replaced.



Fig. 49: Loss of shingles at the sloped corner of the Main Boathouse



Fig. 50: Shingle soiling and deterioration at the Main Boathouse.

PAINT*Rating: Contributing**Condition: Fair to Poor*

Description: Cladding, windows, doors and all woodwork is painted. The paint is white, green, and red.

Condition: The paint has deteriorated, and is alligatored, peeling, or missing over the majority of all five structures primarily on the window elements (see figure 52).

Recommendations: Paint the structures. In its current state, the deteriorating paint finish is only beginning to cause substrate breakdown. Paint is designed to be a sacrificial protective coating, and is necessary to prolong the life of the wood cladding. Should this work be deferred for long, substrate deterioration will accelerate, and the repairs will be correspondingly more extensive.

Following thorough preparation, including the removal of loose, flaking or chalking paint, prime the building using a high-quality primer. Follow with two coats of quality acrylic paint. Perform paint analysis to determine historic paint colors and lead content. If lead is found, follow appropriate, legal procedures for removal or encapsulation, and for disposing of debris.

DOORS*Rating: Significant**Condition: Fair to Poor*

Description: There are various types of doors at each structure at Fort Point US Coast Guard Station.

Main Boathouse: Doors have all been replaced. The majority of the doors at the Main Boathouse are now metal with central glazed lites.

Officer in Charge Quarters: There are two types of historic doors: solid, five panel; and glazed-upper-over solid lower two panel doors.

1890 Boathouse: There are vertical tongue-and-groove wood garage doors with ferrous metal strap hinges, and a vertical board wood door with ferrous metal strap hinges.



Fig. 51: Four-over-four lite windows at the Main Boathouse.



Fig. 52: Four-lite awning window at the Shop & Garage.

Buoy Shack: Has a sliding wood door with a wood rope-wrapped handle that covers a modern sliding glass door. There is also a solid five panel wood door.

Tide Gauge House: Has one solid wood door that may have been a recent replacement.

Shop & Garage: Has vertical tongue-and-groove wood garage doors with ferrous metal strap hinges and metal doors with central upper vents. The ancillary buildings feature original as well as replacement, non-contributing doors. Many of the original doors feature diagonal bracing and tongue-and-groove wood, are glazed-upper-over solid lower two panels, or are wood with five panels. Non-contributing doors include metal doors and wood solid doors.

Condition: The doors are in fair condition. The wood doors have been altered slightly by the removal of the original locks and addition of modern dead bolts. Several do not close properly. Many of the thresholds are worn as well. The garage doors are in poor condition due to improper clearance between the doors and the concrete driveways. The vertical boards drag across coarse aggregate concrete driveways, resulting in mechanical damage. In addition they are regularly exposed to standing water.

Recommendations: Replace non-contributing doors with replicas of the originals. Repair existing doors as follows:

- Perform a detailed survey/inspection of all doors to identify specific repair locations.
- Remove all dirt, debris and miscellaneous attachments.
- Remove finish if necessary to perform repairs.
- Repair splits and separations with waterproof glue as required.
- Consolidate deteriorated with wood epoxy or perform Dutchman repairs. Replace extensively deteriorated components in kind.
- Install weather stripping.
- Recondition extant original hardware. Install new hardware, where missing, to match original.
- Ensure the smooth operation of the doors.
- Finish doors to appropriate interpretive period.
- Inspect doors regularly for deficiencies of finish and operation.



Fig. 53: Aluminum sliding window at the Main Boathouse



Fig. 54: Double-hung window at the Main Boathouse

WINDOWS

Rating: Original wood windows: Significant

Replacement wood double hung windows: Non-contributing/compatible

Aluminum windows: Non-contributing/incompatible

Condition: Fair

Description: A wide variety of windows have been installed in the six structures. Original windows include: eight-over-eight wood double hung, six-over-six wood double hung; one-over-one wood double hung; four-over-four wood double hung; eight-lite fixed wood side lites; single lite wood awning, and four-lite wood awning. Replacement windows include: two-over-two wood hopper, two-lite aluminum sliding; two-lite aluminum fixed; and one-over-one wood double hung. Many of the windows, particularly those at the second levels, have had protective aluminum storm windows installed.

Condition: The windows are in fair condition. Many have been altered over time, or have been replaced altogether with either inappropriate wood sash or with aluminum sash (see figures 22 & 33). Water intrusion was noted at south elevations, particularly where the windows have been altered or replaced. Several windows have been fixed in place, or are stuck. The exterior paint is deteriorating on many of the windows, and joint separation is occurring in some wood windows. Much of the glazing compound is dried, cracked or missing. Most hardware is intact.

Recommendations: Replace non-contributing windows, particular aluminum sliders, with replica wood windows to match those shown in early drawings and photographs. A number of replacement windows fall within the period of significance, therefore restoration would not necessarily warrant their removal or restoration to their pre-renovation condition. While it would be possible to restore the windows to the pre-renovation/replacement condition, it may be argued that these 60 year old replacements have acquired significance over time, and that they may help to tell the full story of the buildings. Finally, their removal may constitute intrusions to the historic fabric that would result in a net loss of historic fabric. Therefore, careful consideration of all of these factors is recommended prior to a decisions regarding the dispensation



Fig. 55: Vegetation at the south wall of the Main Boathouse.



Fig. 56: Overhanging tree limb at the 1890 Boathouse.

of these features.

Repair existing wood windows as follows:

- Survey and examine in detail the existing condition of all wood windows.
- Remove all dirt, debris and miscellaneous attachments.
- Remove paint to obtain clean surface where repairs are required.
- Remove existing glazing putty. If the existing putty contains asbestos, follow legal means for handling, removal, and disposal of contaminated material.
- Consolidate, repair or replace deteriorated wood elements in kind, where necessary.
- Restore window to proper operation.
- Install new hardware, where missing, to match original.
- Install new glazing, where cracked or missing.
- Prepare wood surfaces, prime and paint. Match historic finishes.
- Replace non-contributing wood and aluminum windows with new replica windows to match historic window types.

It is essential that all wood elements be painted, and that painted areas be rigorously maintained. Paint is designed as a sacrificial coating to protect the wood underneath from insects, fungi and ultraviolet light, and will be instrumental in avoiding future problems.

VEGETATION

Description: Little landscaped vegetation exists on the site. Small planting beds partially surround the residences, and several trees are in proximity to the buildings.

Condition: Generally, the vegetation is well-kept. The trees could potentially cause damage in the event of strong winds. The trees to the west of the 1890 Boathouse and south of the Officer in Charge Quarters are close enough to hold moisture against the buildings and support biological growth (see figure 56).



Fig. 57: Mud Swallow nests at the front porch of the Officer in Charge Quarters.



Fig. 58: Surrounding vegetation at the 1890 Boathouse.

Recommendations: Cut back trees and bushes in contact with the buildings. Swinging tree branches could cause impact damage. Roots can damage building foundations, underground building services and drainage systems. Additionally, vegetation can hold moisture against the buildings, providing an ideal climate for biological growth. Proposed landscape plans should use historic landscaping as a guide.

It is not necessary to completely clear the site of plantings to avoid damage. Through judicious maintenance, a balance may be struck between building preservation and historic landscape interpretation. Minimize damage as follows:

- Do not pile or store wood or other materials against the walls.
- Keep trees and perimeter plantings well pruned to minimize the risk of impact damage from wayward branches, of root damage to foundations, and of moisture retention at the base of the buildings.
- Do not allow leaves and other debris to pile up on roofs or in gutters; this can impede drainage.

To assist in site master planning, a Cultural Landscape Report was prepared in 2006 by the National Park Service. That document analyzes the cultural landscape in terms of spatial organization, topography, circulation, buildings/structures/objects, water-related features, and vegetation. The document includes treatment recommendations based upon rehabilitation standards included in *The Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes* (NPS 1996). Therefore, all work related to vegetation, landscape, and site features should follow recommendations included in the Cultural Landscape Report.

PEST CONTROL

Description: Other than a few mud swallow nests on the Residence porch, the buildings do not appear to be home to either general or wood destroying pests; however, they should be monitored regularly to avoid future problems. General pests include mice and mud swallows. Wood destroying pests include powder post beetles and fungi.



Fig. 59 :Flat plaster wall and corner bead at the interior of the Officer in Charge Quarters.



Fig. 60 :Flat plaster wall and corner bead at the interior of the Officer in Charge Quarters.

Recommendations: For general pests, determine how the pests are accessing the structures and then, once they are removed, block the access points in an architecturally acceptable manner. Follow legal and ethical procedures for the removal of these pests.

Once infestations are de-activated, determine whether damaged wood retains sufficient structural integrity. While we do not recommend wholesale removal of all cladding, it may be advisable to remove cladding from representative areas to assess conditions within the walls. These sample areas may be places where cladding is sufficiently deteriorated to require replacement anyway, or where it needs to be removed to add structural plywood. Based upon conclusions from these sample removals, determine whether all cladding should be removed.

GENERAL INTERIOR RECOMMENDATIONS

The following elements and features are of historic significance and are described in the Interior Evaluation section. The following recommended approaches for rehabilitating historic interiors is excerpted from Preservation Brief 18: Rehabilitating Interiors in Historic Buildings—Identifying and Preserving Character-Defining Elements:

- Retain and preserve floor plans and interior spaces that are important in defining the overall historic character of the building.
- Avoid making new cuts in floors and ceilings where such cuts would change character-defining spaces and the historic configuration of such spaces.
- Retain and preserve interior features and finishes that are important in defining the overall historic character of the building.
- Retain and preserve visible features of early mechanical systems that are important in defining the overall historic character of the building, such as radiators, vents, fans, grilles, plumbing fixtures, switch plates and lights. If new heating, air conditioning, lighting and plumbing systems are installed, they should be done in a way that does not destroy character-defining spaces, features and finishes. Ducts, pipes and wiring should be installed as inconspicuously as possible: in secondary



Fig. 61 : Beadboard wall cladding in the Buoy Shack.



Fig. 62 : Diagonal board walls at the Shop & Garage.

- spaces, in the attic or basement if possible, or in closets.
- Avoid “furring out” perimeter walls for insulation purposes. This requires unnecessary removal of window trim and can change a room’s proportions. Consider alternative means of improving thermal performance, such as installing insulation in attics and basements.
- Avoid removing paint and plaster from traditionally finished surfaces, to expose masonry and wood. Conversely, avoid painting previously unpainted mill work. Repairing deteriorated plaster work is encouraged. The use of paint colors appropriate to the period of the building’s construction is encouraged.
- Avoid using destructive methods—propane and butane torches or sandblasting—to remove paint or other coatings from historic features. Avoid harsh cleaning agents that can change the appearance of wood.

The interiors of the Officer in Charge Quarters, 1890 Boathouse, Shop & Garage, Buoy Shack, and Tide Gauge House have been altered little since their original construction. The interior of the Main Boathouse has been substantially reconfigured; however, significant historic fabric remains intact behind drop ceilings, under carpet and behind gypsum board walls. Every effort should be made to preserve remaining historic fabric. Where modifications must occur, relegate them to non-contributing areas wherever possible. Stabilize and repair existing historically significant finishes and components. Replace missing components in kind when replacement is required. Stabilize and repair existing original materials, components, finishes and spaces.

INTERIOR CONDITIONS AND RECOMMENDATIONS

PLASTER

Rating: Contributing

Condition: Good to fair.

Description: All of the first floor walls and most second floor perimeter walls of the Officer in Charge Quarters are flat plaster over wood lath. The lower areas of walls in some spaces, such as hallways and kitchens, have wood wainscots. All plaster is painted.



Fig. 63 :Painted wood fireplace,mantle,and wooden elements at the Officer in Charge Quarters.



Fig. 64 :Painted wood stair, balustrade, and door at the Officer in Charge Quarters.

Condition: The conditions of the plaster walls is generally good. Some areas have been damaged by water infiltration.

Recommendation: Replace missing or debonded flat plaster. Refer to Preservation Brief 21: Repairing Historic Flat Plaster.¹⁰ Where plaster is damaged due to natural, structural or any other occurrence, repair as follows:

- Repair hairline cracks with no debonded material with commercial patching material.
- Cut plaster back in larger cracks and around debonded areas to sound material.
- Install new three-coat plaster over expanded galvanized metal lath.
- Finish plaster to match existing adjacent surfaces.
- Prepare and paint to match adjacent surfaces or historic condition. See Paint Analysis report in the appendix for color recommendations.

BEADBOARD/BOARD WALLS

Rating: *Significant*

Condition: *Good to Fair*

Description: The walls of the Buoy Shack, the Tide Gauge House, and the Main Boathouse are vertical beadboard (see figure 61). The walls of the Shop & Garage, and the 1890 Boathouse are board (see figure 62). All of the walls are painted.

Condition: The conditions of the wood walls are generally good. Some are marked by ghosts of earlier building configurations, and/or have miscellaneous inappropriate attachments.

Recommendations: Repair wood wall cladding as follows:

- Conduct a detailed, wall survey to document condition of each elevation and determine, on an individual basis, required repairs.



Fig. 65 : Wood baseboard, bead molding, and carpet at the Officer in Charge Quarters.



Fig. 66 : Original wood flooring at the Shop & Garage.

- Remove paint and refinish to match original where necessary. Carefully remove, salvage, label and appropriately store any boards, hardware and trim that must be removed.
- Restore missing boards which have been removed during alterations. Match original with respect to profile, wood type and finish.

INTERIOR PAINT/FINISHES

Rating: Contributing

Condition: Fair

Description: All interior plaster and woodwork is currently painted (see figures 63 & 64).

Condition: The interior finishes are in fair condition, showing signs of normal wear and tear such as chipping and scratching.

Recommendations: Following thorough preparation, including the removal of loose, flaking or chalking paint, prime the walls using a high-quality primer. Follow with two coats of quality acrylic paint. If the existing paint contains lead, follow all regulations for worker protection and material disposal. In most cases, well-adhered lead paint may be left in place and encapsulated, rather than completely abated.

Strip paint from originally clear-finished woodwork. Refinish with varnish to match color and gloss of historic material. This will involve preparing samples of available stains and varnishes on substrates similar to the woodwork, and comparing them to historic varnishes prior to stripping.

FLOORS

Rating: Modern finish flooring (carpeting and vinyl) - non-contributing

Wood flooring beneath modern finish flooring - contributing

Condition of wood flooring - Good-unknown

Description: Extant finish flooring of the Main Boathouse and Officer in Charge Quarters currently includes wall-to-wall carpet over an unknown substrate (see figure 65). The flooring in the 1890 Boathouse, Shop



Fig. 67 : Most of the doors appear to be in good condition, with only minor repairs needed.



Fig. 68 : The doors at the Shop & Garage appear to be in fair condition.

& Garage, Buoy Shack, and Tide Gauge House are clear finished wood. The clear finished wood floors are in generally good condition; however, the floors in the 1890 Boathouse, Shop & Garage, and Tide Gauge House are in need of refinishing. Presumably, original wood flooring survives beneath the later carpeted finishes of the Officer in Charge Quarters and Main Boathouse. Wall-to-wall carpeting protects the floors; however, it makes it very difficult to verify the original flooring material and assess its condition.

Condition: The non-contributing finish flooring is in fair condition. The historic wood floors beneath the carpet are in unknown condition. The historic wood clear finished floors are in good to fair condition. It is likely that the wood flooring beneath the carpeting, reasonably protected from wear, is in good condition.

Recommendation: Remove non-contributing carpet and vinyl floor finishes. Repair wood flooring as follows:

- Survey floors in detail for damage. Conduct finish analysis on wood floors to determine historic finishes.
- Use the gentlest means possible to remove adhesives from areas beneath finishes. Use all legal means in handling and disposal of asbestos-containing materials.
- Repair wood floors. Patch damaged areas in kind. Clean existing finish if possible, or refinish to match historic treatment. Refinishing should be limited to severely worn areas, since excessive refinishing shortens the lifespan of the flooring.
- If wood floors must be removed for the structural upgrade, carefully salvage boards for reuse in the same locations.

WOOD DOORS

Rating: Significant

Condition: Good

Description: In general, nearly all doors appear to be original, and hardware also is, for the most part, intact and original. The historic doors are five-panel wood (see figure 67) and tongue-and-groove with diagonal battens and iron hinges (see figure 68). All of the doors have been painted.



Fig. 69 : Original hardware at the Officer in Charge Quarters.



Fig. 70 : Original hardware at the Officer in Charge Quarters.

Condition: Most interior doors appear to be in good condition, with normal wear and tear such as finish abrasion in evidence, and only minor repairs needed. Hardware is also in good condition, although in most cases in need of reconditioning (see below).

Recommendation: Preserve, repair and re-use existing wood doors.

- Reuse existing doors in situ wherever possible. Avoid relocating doors and openings.
- Conduct a detailed, door-by-door survey to document condition of each door and determine, on an individual basis, required repairs and hardware upgrades.
- Remove paint and refinish to match original where necessary. Carefully remove, salvage, label and appropriately store any doors, hardware and trim that must be removed.
- Fully utilize alternative door width standards available under the Americans with Disabilities Act and the State Historical Building Code.

WOOD TRIM

Rating: *Significant*

Condition: *Good*

Description: Original interior wood baseboards, picture rails, door and window surrounds are important, character-defining features of the Officer in Charge Quarters, Main Boathouse, 1890 Boathouse, Buoy Shack, and Tide Gauge House. Original trim is mostly profiled, with some flat baseboards. All of the woodwork has been painted.

Condition: Interior wood elements appear to be in good condition with only minor repairs needed.

Recommendation: Investigate beneath gypsum board at the Main Boathouse to determine the disposition of the panelling beneath. Retain, repair and re-use original wood trim and paneling components. Restore deteriorated or disturbed wood elements as follows:

- Remove paint and refinish woodwork to match original.



Fig. 71 : Historic pendant light fixture at the Shop & Garage.



Fig. 72 :Electrical box at the Buoy Shack.

- Carefully remove, salvage, label and store any components that must be removed for other work. Return these elements to their original locations when work is finished.
- Restore missing trim which has been removed during alterations. Match original with respect to profile, wood type and finish.

HARDWARE

Rating: Contributing

Condition: Good to Fair

Description: The majority of the hardware is original and intact. It consists of bronze doorknobs, bronze faceplates and hinges, and bronze window catches (see figures 69 & 70). Several locks on the exterior doors have been replaced with modern dead bolt locks.

Condition: The hardware is in good to fair condition. Most of the windows and doors retain all of their hardware. All of it is in need of reconditioning.

Recommendation: Preserve and recondition extant historic hardware.

- Preserve, repair and re-use these components in situ.
- Carefully remove, salvage, label and store any components that must be removed.
- Use alternative standards available under the Americans with Disabilities Act to preserve historic hardware which does not meet current disabled-access requirements. This may include modifications such as installing lever adapters.

LIGHT FIXTURES

Rating: Historic fixtures - contributing

Replacement fixtures - non-contributing

Condition: Fair

Description: Interior light quality directly affects the perception of both space and material finishes. Existing light fixtures include historic exposed single-bulb hanging pendant fixtures in the Shop & Garage;



Fig. 73 :Heater vents at the Officer in Charge Quarters.

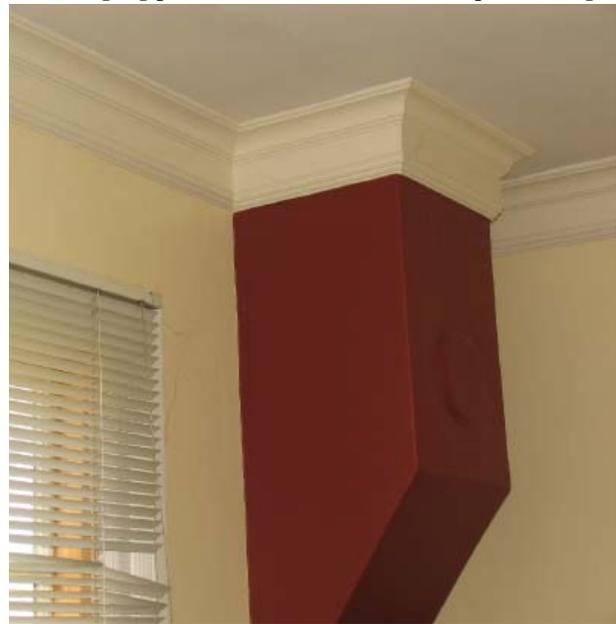


Fig. 74 : Flue and flue cover at the Officer in Charge Quarters, remnant of earlier stove heating system.

and later, non-historic exposed single-bulb hanging pendant fixtures and ceiling-mounted fluorescent light fixtures, in the other buildings (see figure 71).

Condition: The light fixtures are in fair condition.

Recommendation: Preserve, repair and re-use original light fixtures. Replace inappropriate fixtures with well-researched replica fixtures where possible.

- Retain and repair all extant historic fixtures. Provide appropriate new globes and shades as required.
- Remove non-contributing fluorescent fixtures.
- Select new fixtures based upon surviving, extant historic fixtures and upon research, including historic photographs and other documentation. Custom fixtures may be required in areas to be restored. In areas to be rehabilitated, compatible fixtures are acceptable.
- Balance energy conservation with building conservation and the sympathetic treatment of interior spaces. Utilize the State Historical Building Code exemption from Title 24 energy requirements.

ELECTRICAL

Rating: Non-contributing

Condition: Fair

Description: It appears that in 1915, when the Main Boathouse was built, it included electricity. At that time, the Officer in Charge Quarters was moved and it is documented that during this move plumbing was installed. It is likely that electricity was also installed at this point; however, it is unknown. It is also unknown at which point, the Buoy Shack, Tide Gauge House, 1890 Boathouse and Shop & Garage got electricity. Existing wiring runs within walls in the Main Boathouse and the Officer in Charge Quarters. It is surface mounted in conduit in the 1890 Boathouse, the Shop & Garage, Buoy Shack, and Tide Gauge House. Generally, switchplates have been installed to avoid trim. Outlets are placed in baseboards (see figure 58).

Condition: The existing electrical service is most likely inadequate for the anticipated uses.

Recommendation: Have existing electrical system inspected by an electrical engineer experienced with historic buildings. Upgrade service and wiring as required. Use provisions in the State Historical Building Code. Where possible, bury currently exposed wiring within walls. Avoid excessive impact to intact historic walls where possible by installing wiring in non-historic walls, previously disturbed walls, or walls that will require disturbance for repair or other systems upgrades.

PLUMBING

Rating: Non-contributing

Condition: Fair

Description: The Main Boathouse was built with indoor plumbing. At the same time that the Main Boathouse received indoor plumbing, so did the Officer in Charge Quarters. The 1890 Boathouse, Tide Gauge House and Shop & Garage do not have plumbing. It is unknown when the Buoy Shack received plumbing. The second floor bathrooms of the Officer in Charge Quarters were heavily modified to accommodate modern fixtures in the 1930s as was the kitchen during later renovations. The bathrooms on the first floor are less altered, but contain new fixtures. Kitchen sinks are non-original, and in non-historic locations.

Condition: The plumbing is in fair condition. A detailed plumbing evaluation was outside of the scope of this study.

Recommendation: The fixtures present in the Officer in Charge Quarters, Main Boathouse, and Buoy Shack post-date the period of significance. Functional, new fixtures are appropriate, unless a restored original restroom treatment is desired for interpretation.

MECHANICAL EQUIPMENT

Description: The Officer in Charge Quarters was originally heated by stoves. Flue holes, covered over by plates, survive in many rooms, as do fireplaces in the parlors and dining rooms (see figure 74). A propane-fueled forced air system has been installed in the house, and grates are visible in the majority of the rooms. It is unknown whether or not any of the other structures were heated. The Officer in Charge Quarters appears to be heated by a propane-fueled forced air system.

Condition: No stoves survive. The forced-air system is functional. However, there are safety concerns with the existing propane furnaces.

Recommendation: While the forced-air system falls outside the period of significance, it is fairly unobtrusive. A detailed mechanical evaluation was outside of the scope of this study.

ENDNOTES

²Sharon C. Park, AIA, "The Repair and Replacement of Historic Wooden Shingle Roofs, Preservation Brief 19, U.S. Department of the Interior, National Park Service, 1989.

³ Sarah M. Sweetser, "Roofing for Historic Buildings," Preservation Brief 4, U.S. Department of the Interior, National Park Service, 1978.

¹⁰ Marylee MacDonald, "Repairing Historic Flat Plaster—Walls and Ceilings," Preservation Brief 21, U.S. Department of the Interior, National Park Service, 1989.

ULTIMATE TREATMENTS

DEFINITIONS

The National Park Service will assign each structure a proposed ultimate treatment. These include Preservation, Restoration, Rehabilitation, and Stabilization. The National Park Service has defined these treatments as follows. Also see the Appendix for the *Secretary of the Interior's Standards for Preservation, Rehabilitation, and Restoration*.

Reconstruction: Depicting, by means of new construction, the form, features, and detailing of a non-surviving structure to replicate its appearance at a specific period of time and in its historic location. Features within the period of significance are preserved and deteriorated features are repaired, or replicated.

Restoration accurately presents the form, features, and character of a historic structure as it appeared at a specific period. It may involve the replication of missing historic features and removal of later features, some having cultural value in themselves.

Rehabilitation

Defined as the act or process of making possible a compatible use for a property through repair, alteration, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Preservation

Applying measures necessary to sustain the existing form, integrity, and material of a historic property. Deterioration caused by natural forces and normal use are arrested and retarded. Maintenance and stabilization of the material are meant to preserve the structure.

Stabilization

Acting to render an unsafe, damaged or deteriorated property stable while retaining its present form.

BUILDING RECOMMENDATIONS

The following recommended treatments are included to help park staff accomplish the ultimate treatment for each structure at the Fort Point US Coast Guard Station. In addition to the specific recommendations that follow for each structure, all projects must be documented before, during, and after work takes place. Minimally, such documentation should include clearly labeled before, during, and after photography: a project description including date, scope and cost; and any drawings or other construction documentation used to guide the project. This information should all be stored in one central archive location.

Cyclical maintenance is also recommended for all structures. This includes: periodic inspections; removal of debris, invasive vegetation and ground infill; and verification that structures closed to the public remain securely locked to prevent vandalism. The seaside location demands especially that routine maintenance include monitoring of metals and concrete, and routine repainting of wood, all materials especially prone to deterioration in a marine environment.

Painting with approved historic colors is recommended for many of the structures. Paint schemes for each structure are to be based upon building-specific paint analysis and research. As described in the preceding Conditions and Recommendations section, paint analysis should be conducted prior to paint removal to avoid destroying historical evidence. Final color selection should be approved by an historical architect or conservator.

BIBLIOGRAPHY

- Ethington, Philip J., *The Public City: The Political Construction of Urban Life in San Francisco, 1850-1900* (Berkeley: University of California Press, 1994).
- “Fort Point United States Coast Guard Station Historic District, Golden Gate National Recreation Area,” National Park Service Cultural Landscape Inventory (2006).
- Holloran, Pete, “Seeing the Trees Through the Forest: Oaks and History in the Presidio,” in James Brook, Chris Carlsson, and Nancy J. Peters, eds., *Reclaiming San Francisco: History, Politics, Culture* (San Francisco: City Lights Books, 1998): 233-250.
- Johnson, Robert Erwin, *Guardians of the Sea: History of the United States Coast Guard, 1915 to the Present* (Annapolis, Md.: Naval Institute Press, 1987).
- Krell, Dorothy, ed., *The California Missions* (Menlo Park, CA: Lane Publishing Company, 1989).
- National Register Programs, National Park Service, Western Regional Office, “Presidio of San Francisco National Historic Landmark District,” updated National Historic Landmark documentation, October 16, 1992.
- Noble, Dennis L., *That Others Might Live: The U. S. Life-Saving Service, 1878-1915* (Annapolis, Md.: Naval Institute Press, 1994).
- Rawls, James J. and Walton Bean, *California: An Interpretive History*, 7th edition (New York: McGraw-Hill, 1998).
- Rice, Richard B., William Bullough, and Richard Orsi, *The Elusive Eden: A New History of California* (Boston: McGraw-Hill, 2002).
- Ryan, Mary P., *Civic Wars: Democracy and Public Life in the American City during the Nineteenth Century* (Berkeley: University of California Press, 1997).
- Shanks, Ralph, *Guardians of the Golden Gate: Lighthouses and Lifeboat Stations of San Francisco Bay* (Petaluma, Ca.: Costafano Books, 1990).
- Shanks, Ralph, and Janetta Thompson Shanks, *Lighthouses of San Francisco Bay* (San Anselmo, Ca.: Costafano Books, 1976).
- Slaton, Deborah, “Preservation Brief 43: The Preparation and Use of Historic Structures Reports,” (Washington, D. C.: National Park Service, U. S. Department of the Interior), <http://www.nps.gov/history/hps/tps/brief43.htm>, accessed September 13, 2007.
- Thompson, Erwin N., and Sally B. Woodbridge, *Special History Study: Presidio of San Francisco, An Outline of Its Evolution as a U. S. Army Post, 1847-1990* (Denver, Co.: National Park Service, United States Department of the Interior, 1992).

APRIL 1, 2008

FORT POINT US COAST GUARD STATION

TranSystems Corporation, et al., "A Master Plan for the Gulf of Farallones National Marine Sanctuary," October 2005.

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APPENDIX A

MATERIAL MATRIX

MATERIAL MATRIX

STRUCTURE NAME	WOOD												METAL					CONCRETE			MISCELLANEOUS					
	Wood Frame Construction	Wood Shingle Cladding	Wood Board Cladding	Wood Windows	Wood Doors	Wood Built-Ins	Wood Roof Shingles	Wood Stairs	Trim	Wood Porch	Wood Ornament	Painted Wood	Historically Significant or Contributing Hardware	Structural Hardware	Random Embedded Hardware	Pipe Railing and/or Stairs	Metal Door	Painted Metal	Smooth Finish, no visible formwork lines	Exposed Aggregate Finish	Painted Concrete	Painted Exterior	Painted Interior	Exterior Aluminum Storm Windows	Composite Roof Shingles	Biological Growth Issues
Officer in Charge Quarters (PE1901)	X	X		X	X	X	X	X	X	X	X	X	X	X				X	X			X	X			X
1890 Boathouse (PE1902)	X	X		X	X	X	X	X		X	X	X	X	X				X	X	X		X	X			X
Buoy Shack (PE1905)	X		X	X	X	X		X			X	X	X	X				X				X	X		X	X
Tide Gauge House (PE1906)	X		X	X	X	X		X			X	X	X	X				X				X	X		X	X
Shop & Garage (1907)	X	X		X	X	X		X			X	X	X	X		X	X	X	X	X	X	X	X		X	X
Main Boathouse (1903)	X	X		X	X		X	X	X		X	X	X	X	X	X		X	X			X	X	X		X

APPENDIX B

MAIN BOATHOUSE/LIFE SAVING STATION WINDOW SURVEY

APPENDIX B-1

DESCRIPTION AND DETERIORATION PATTERNS

MAIN BOATHOUSE/LIFE SAVING STATION (PE1903) WINDOW SURVEY**DESCRIPTION**

The following summarizes our observations and recommendations based upon a complete window survey of the Main Boathouse at the Fort Point US Coast Guard Station, Crissy Field. Overall, the windows are in fair to good condition, despite obvious deficiencies relative to deferred maintenance and functionality. The attached survey sheets outline existing conditions and recommended repairs for each window.

The windows at the Main Boathouse include a range of types: awning, double-hung, and sliding. A number of the original windows have been replaced or removed during successive alterations. The majority of the first and second floor windows are protected by exterior storm windows; therefore, these windows are in better condition than the windows on the third and fourth floor. Common deficiencies include missing sash cords, missing/non-original hardware, improper sash function, missing and/or non-functional weather-stripping, cracked, brittle or missing glazing compound, and varying degrees of deterioration due to moisture. In some instances there are signs of moisture damage on the interior face of the window sashes and sills. In most instances this is due to poor weatherization and deferred maintenance. It is our belief that in the majority of openings, the sashes, glazing and frames are sound and should be retained.

DETERIORATION PATTERNS:

Each elevation has endured unique weathering conditions and alteration histories. Window sash and exterior trim components exhibit relatively consistent patterns of deterioration for the given exposure. It should be noted that the building sits approximately 45 degrees off true north; the coastline points roughly true north. This does impact the relative weathering of each elevation. However, for the purpose of simplicity, the coastline shall be referred to as "north", Crissy Promenade as "south," etc. The following is a brief description of what can be expected for each elevation.

Northern Exposure (coastline):

Much of the window configurations have undergone major alterations. This is particularly true for the northern exposure. Eight of the original 1914 windows remain extant on this elevation. After 1938 and by the end of World War II, an emergency exit comprising a ladder from the second to the third floors and stairs that reach from the second floor to the first floor was installed. The addition of these stairs forced the reconfiguration of the windows on the first and second floor. Uninterrupted wall replaced the first story windows and an emergency exit door replaced the central second-floor window. Due to changes in technology and the obsolescence of the boat launch system, the barn doors that enclosed the three large bays where boats once entered were removed and replaced with a wall and two double hung windows matching the material, style, and configuration of the original windows in 1978. Further alterations included the reconfiguration of the emergency exit stairs; where once the second-floor platform ran more than the length of the bay directly below and the posts aligned with walls of the bay, the posts could now be closer together, resulting in a smaller second story platform. Uninterrupted wall space also replaced the double-hung windows that flanked the second floor entry. By 1975 the windows on the lookout tower underwent another dramatic reconfiguration, transforming the windows of the North, West and East elevations from sets of three wooden double-hung windows to one large continuous aluminum slider. The purpose of this transformation is not documented, but was likely related to deterioration due to exposure and/or panoramic visibility.

The existing windows on the northern exposure are in good to fair condition. The windows on the first floor date from 1978 and are in keeping with the historic character of the original windows. These windows and the remaining four windows on the second floor that appear to date from the building's original construction have been protected by exterior storm windows and are in good condition. The windows on the third floor also appear to be original to the structure. They are all in fair condition. The sills are showing signs of deterioration related to moisture infiltration and have been reinforced by aluminum strip seals along the parting bead. The exterior of the frame and sill is exhibiting finish failure and deterioration. The windows of the fourth floor northern exposure have been replaced by a continuous aluminum slider. The slider appears to be in good condition with slight finish failure and poor operability.

Eastern Exposure (toward Marina):

The Eastern elevation windows appear to have undergone substantial alterations as well. Fifteen of the windows on the eastern exposure appear to be original. One window has been removed on the first floor to accommodate a doorway. This likely occurred in 1946 when the eastern porch was enclosed to provide more interior space. The six wooden double-hung windows of the porch enclosure have severely deteriorated due to the marine climate conditions. Some of the glazing has cracked and the majority of the wooden sills and frames have rotted. The cracking of the glass seems to be associated with the poor operability of the windows. The two windows that are not obscured by the enclosed porch are protected by exterior storm windows. The frame is not protected by the exterior storm and is showing signs of deterioration due to moisture infiltration. They appear to be in fair condition, however; they should be evaluated for stability. The second story windows appear to all be original. They are protected by exterior storm windows; however the exterior frame is exhibiting severe failure of finishes. The windows on the third floor are all original and in good condition. An aluminum seal has been installed at the parting bead to assist in weatherization. The windows on the fourth floor have been replaced with a continuous aluminum sliding window.

Southern Exposure (Crissy Promenade)

The south elevation windows on the first floor were removed in the 1930s when the south entry porch was enclosed. Since then, access to the mechanical unit at the western end of this area, has been reconfigured, resulting in the creation of a new access point at the west elevation and the replacement of a window unit with a louvered vent at the west end of the south elevation. The windows of the second and third floor are original. In 1939 the lookout tower was completely reconfigured from twin awning windows at each elevation to one large double-hung window flanked by smaller double-hung windows at each elevation. The windows of the south elevation on the lookout tower are the only remaining from this vintage.

The windows all appear to be in good to fair condition. The glazing of the windows on the first floor in some cases has been coated and the frames are experiencing a moderate degree of deterioration due to moisture infiltration. The windows on the first floor are all in good condition. On the third floor, the westernmost window is severely deteriorated and some parts of it may require replacement or consolidation. The windows on the fourth floor are in relatively good condition with the exception of a cracked window pane.

Western Exposure (toward the Golden Gate Bridge):

West-facing windows located above the adjacent building roof have conditions similar to those on the south. Historic photographs indicate that the window configuration of the first floor has

changed slightly, however; the majority of the windows are in their original locations. The windows on the second and third floor remain the same and the original windows of the western elevation of the lookout tower were replaced in 1939, with three double hung windows and in 1978 with an aluminum sliding window.

The windows on the western exposure are in fairly good condition and are generally experiencing only mild deterioration due to water infiltration with the exception of the third floor windows. These windows have salt efflorescence on the interior bottom rail, a sign that moisture has migrated from the outside in through the wooden elements. Although the windows appear stable, they should be further evaluated for moisture related deterioration.

APPENDIX B-2

CHART OF WINDOW TYPES AND CONDITIONS



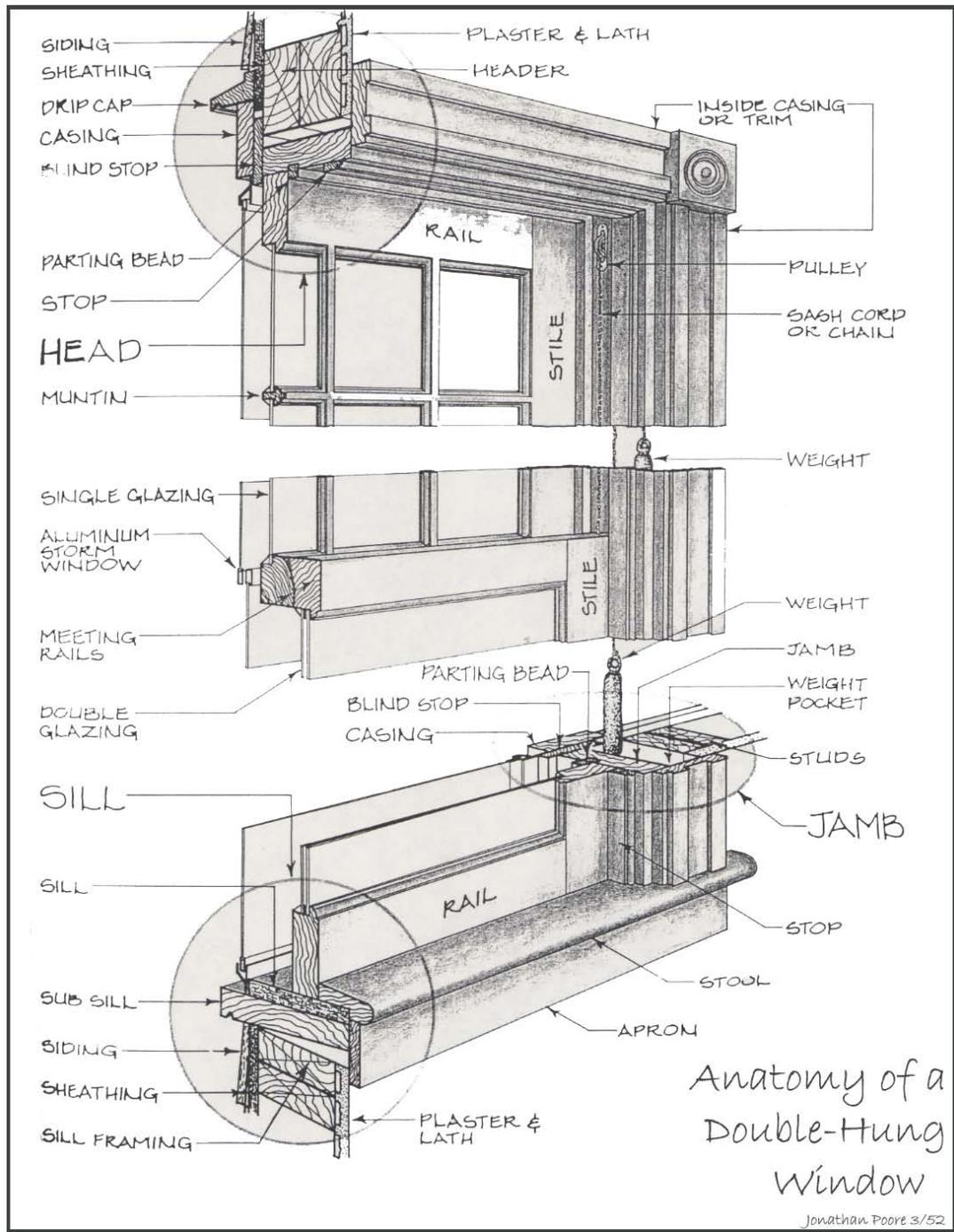
<p>Window Type: Wood Awning Detail: Hardware (not original)</p>		
<p>Window Type: Wood Double-Hung Details: (Top Left) Hardware on meeting rail (Bottom Left) Hardware on bottom rail (Top Right) Sash (Bottom Right) Crack in the far bottom right window pane)</p>		
<p>Window Type: Aluminum Slider Detail: Aluminum slider hardware</p>		
<p>Window Type: Wood Awning Detail: Severe water damage; window pane is barely held in</p>		
<p>Window Type: Wood awning modified into a fire escape Detail: Metal seal along stop</p>		



<p>Window Type: Wood Awning Detail: Ghost of hardware in upper stop</p>		
<p>Window Type: Wood Double-Hung Detail: Lower rail window hardware</p>		
<p>Window Type: Wood Hopper Details: (<i>Upper Left</i>) Corrosion due to water damage and rust; severe paint deterioration (<i>Lower Right</i>) Crack in window pane</p>		
<p>Window Type: Wood Hopper Details: Severe paint deterioration</p>		
<p>Window Type: Wood Hopper Detail: Water damage and severe paint deterioration</p>		

APPENDIX B-3

WINDOW DIAGRAM

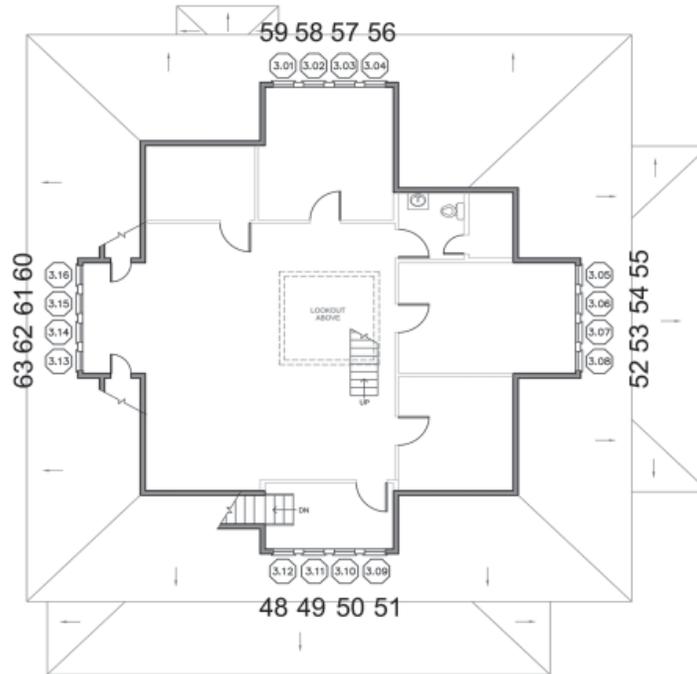


Anatomy of a Double-Hung Window

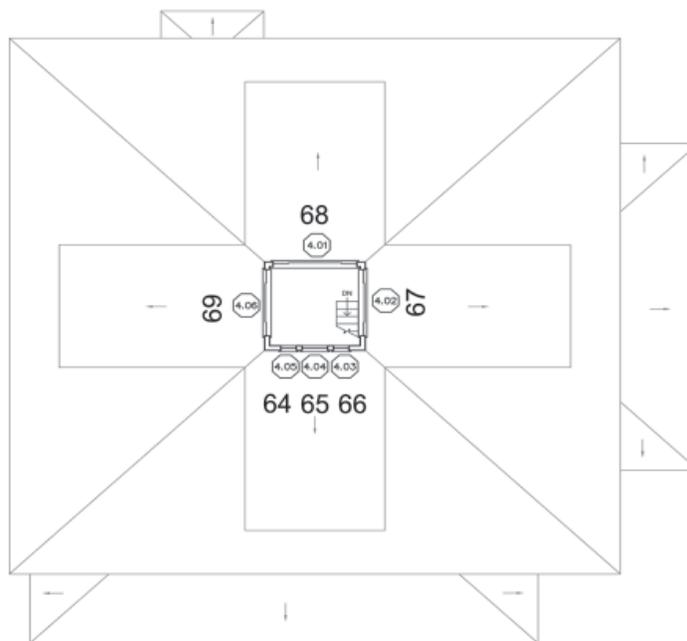
Jonathan Poore 3/52

APPENDIX B-4

WINDOW SCHEDULE



LIFE SAVING STATION BUILDING - THIRD FLOOR PLAN
NOT TO SCALE



LIFE SAVING STATION BUILDING - FOURTH FLOOR PLAN
NOT TO SCALE



APPENDIX C

DIRECTORY OF FEATURES

OFFICER IN CHARGE QUARTERS -PE1901

Significant Features:

Exterior

Detail: Eastern Elevation of Residence

- Roof Dormers with profiled wood trim
- Wood Shingled gambrel roof
- Wood double hung windows
- Curved transom window at central dormer over wood door
- Glazed wood door with side-lites
- Brick chimney with corbelled detailing
- Widow's walk with wood balustrade



Contributing Features:

Exterior

- Wood, Tuscan-inspired columns and entry porch with wood balustrade and wood stairs
- Wood shingled siding

Non-Contributing Features:

Exterior

- Handicap access ramp

Significant Features:

Interior

- Wood built-ins



- Wood fireplace and mantle



OFFICER IN CHARGE QUARTERS - PE1901

Cont. Significant Features:
Interior

-Wood Stairs, handrail,
& balustrade



-Glazed Wood Door with Side-lites



-Original frame, sash, & glazing



-Original Hardware



-Crown Molding



-Chair Rail Molding



OFFICER IN CHARGE QUARTERS - PE1901

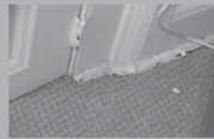
Cont. Significant Features:
Interior

-Corner Bead Molding



Contributing Features:
Interior

-Baseboard & Bead Molding



-Wood Five Panel Doors



-Early Replacement Frame, Sash & Glazing



-Dormer Window Insets



-Circa 1930s Bathroom Additions



1890 BOATHOUSE - PE1902

Significant Features:

Exterior

Detail: Southern Exposure of the Original Boathouse

-Wood Shingled Hip Roof

-Witch's Hat Cupola

-Vertical Tongue-and-Groove wood Garage Doors with Iron Strap Hinges

-Rear Entry Door and Hardware

-Wood Double-hung and Fixed Windows



Contributing Features:

Exterior

-Wood Signage with Applied Painted Graphic

-Vents at Foundation

-Wood Shingled Siding with Curved Flair at Water Table

Non-Contributing Features:

Exterior

-Light Fixture

Significant Features:

Interior

First Floor

-Vertical Tongue-and-Groove Wood Garage Doors with Cross Bracing and Iron Hardware

-Wood Built-ins



-Wood Double-hung and Awning Windows



1890 BOATHOUSE - PE1902

Cont. Significant Features:

Interior
First Floor

-Horizontal Tongue-and-Groove Board
with Bead Molding
Ceiling



-Crown Molding



Contributing Features:

Interior
First Floor

-Attic Door & Wooden Ladder



-Wood Floors



-Wide Vertical Board Walls



-Wood Five-panel Doors



Non-Contributing Features:
Interior

-Modern Built-ins

1890 BOATHOUSE - PE1902

Significant Features:

Interior
Second Floor

-Visible Redwood Framing



Contributing Features:

Interior
Second Floor

-Wood Floors



BUOY HOUSE - PE1905

Significant Features:

Exterior

- Wood Double-hung Window
- Wood Fixed Window
- Wood Sliding Door with Rope-wrapped Handle, Metal Hardware, & Tracks



Contributing Features:

Exterior

- Double Bell and other Painted Metal Equipment
- Wood Horizontal Sliding Door
- Five-panel Wood Door

Non-Contributing Features:

Exterior

- Composite Shingle Roofing Material
- Exterior Lighting and Conduit

Significant Features:

Interior

- Vertical Beadboard with Quarter Round Molding



Contributing Features:

Interior

- Exposed Wood Ceiling Framing



- Wood Baseboard



- Built-in Wood Electric Box Cabinet



TIDE GAUGE HOUSE - PE1906

Significant Features:

Exterior

-Wood Awning Four-lite Window



Contributing Features:

Exterior

-Wood Horizontal Drop Siding with Cornerboards on one side of corner

Non-Contributing Features:

Exterior

-Composition Shingle Roofing Material

-Telemetry Equipment at Roof

Significant Features:

Interior

-Vertical Painted Beadboard with Wood Base Molding



-Wood Ceiling



Contributing Features:

Interior

-Built-in Wood Corner Cabinet



-Wood Floor



SHOP & GARAGE - PE1907

Significant Features:

Exterior

-Five Bays of Wood-panelled Double Doors with Vertical Aligned Tongue-and-Groove with Iron Strap Hinges

-Four-lite Wood Casement Windows at First Floor and Awning Style Pivot Window at Second Floor



Contributing Features:

Exterior

-Gable Roof with Wood Shingles

-Wood Single Siding

Non-Contributing Features:

Exterior

-Lighting

-Small Addition built to the East Side of Main Building

Significant Features:

Interior

First Floor

-Wood Doors



-Wood Stair



Contributing Features:

Interior

-Concrete Floor



-Exposed Wood Posts & Beams



SHOP & GARAGE - PE1907

Cont. Contributing Features:
Interior
First Floor

-Wood Door Trim



-Wood Tool Locker Built-in



-Pendant Lights



-Wood Sided Walls, Horizontal & Vertical



Significant Features:
Interior
Second Floor

-Wood & Wire Doors



-Wood Windows



-Wood Stair



SHOP & GARAGE - PE1907

Contributing Features:

Interior
Second Floor

-Wood Floor



-Exposed Wood Posts, Beams &
Exposed Wood Framed
Ceiling



-Wood Built-ins



MAIN BOATHOUSE - PE1903

Significant Features:

Exterior

-Wood Shingled Hip Roof

-Cupola Outlook

-Shed-roof Dormers with Wood Windows

-Wood Double-hung Windows



Contributing Features:

Exterior

-Enclosed Porches

-Wood Shingled Siding with Molded Course at Second Floor Level

Non-Contributing Features:

Exterior

-Handicap Accessible Ramp

-Metal Storm Windows

-Metal Doors

-Metal Egress Stair

Significant Features:

Interior

First Floor

-Wood Windows and Hardware



-Horizontal Wood V-Channel Tongue-and-Groove Wall Cladding with Quarter Round Molding



-Wood Stair and Balustrade



MAIN BOATHOUSE 1903

Contributing Features:

Interior
First Floor

-Wood Structural Posts in
Original Boat Storage Area



-Wood Baseboard and Wood Door Trim



Significant Features:

Interior
Second Floor

-Wood Windows & Hardware



-Horizontal Wood V-Channel Tongue-and-Groove Wall Cladding



-Wood Stair & Balustrade



-Wood Tongue-and-Groove Ceiling



Contributing Features:

Interior
Second Floor

-Wood Baseboard

See Above Example

Significant Features:

Interior
Third Floor

-Wood Windows and Hardware



MAIN BOATHOUSE - PE1903

Cont. Significant Features:

Interior
Third Floor

-Wood Stair & Balustrade



-Sloped Ceiling



-Wood Stair and Metal Pipe Handrail to Lookout Level



Contributing Features:

Interior
Third Floor

Wood Baseboards, Attic Access Doors,
& Hardware



Significant Features:

Interior
Fourth Floor

-Stair with Pipe Handrail



-Wood Double-hung Windows & Hardware

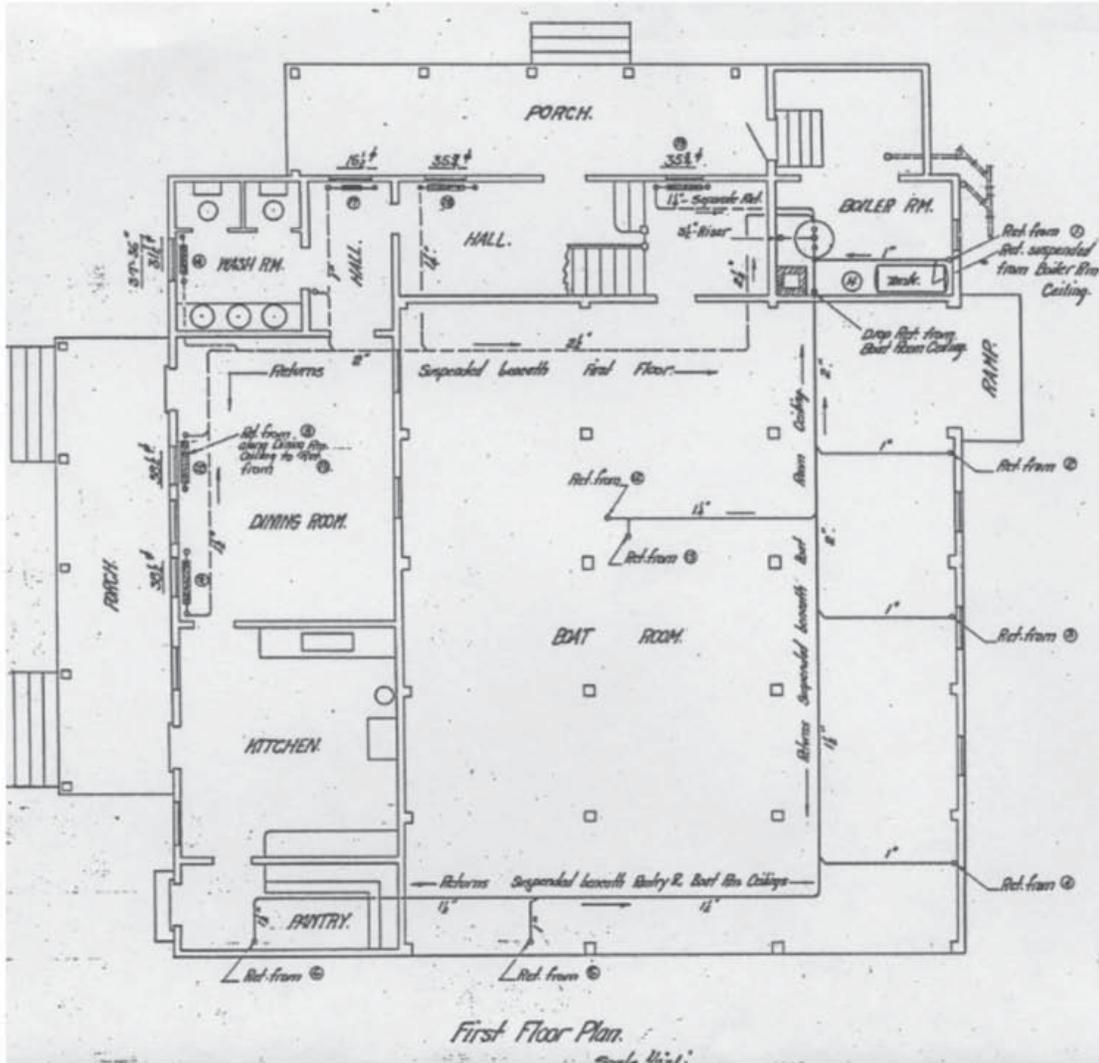


APPENDIX D

MAIN BOATHOUSE/LIFE SAVING STATION (PE1903) PLANS

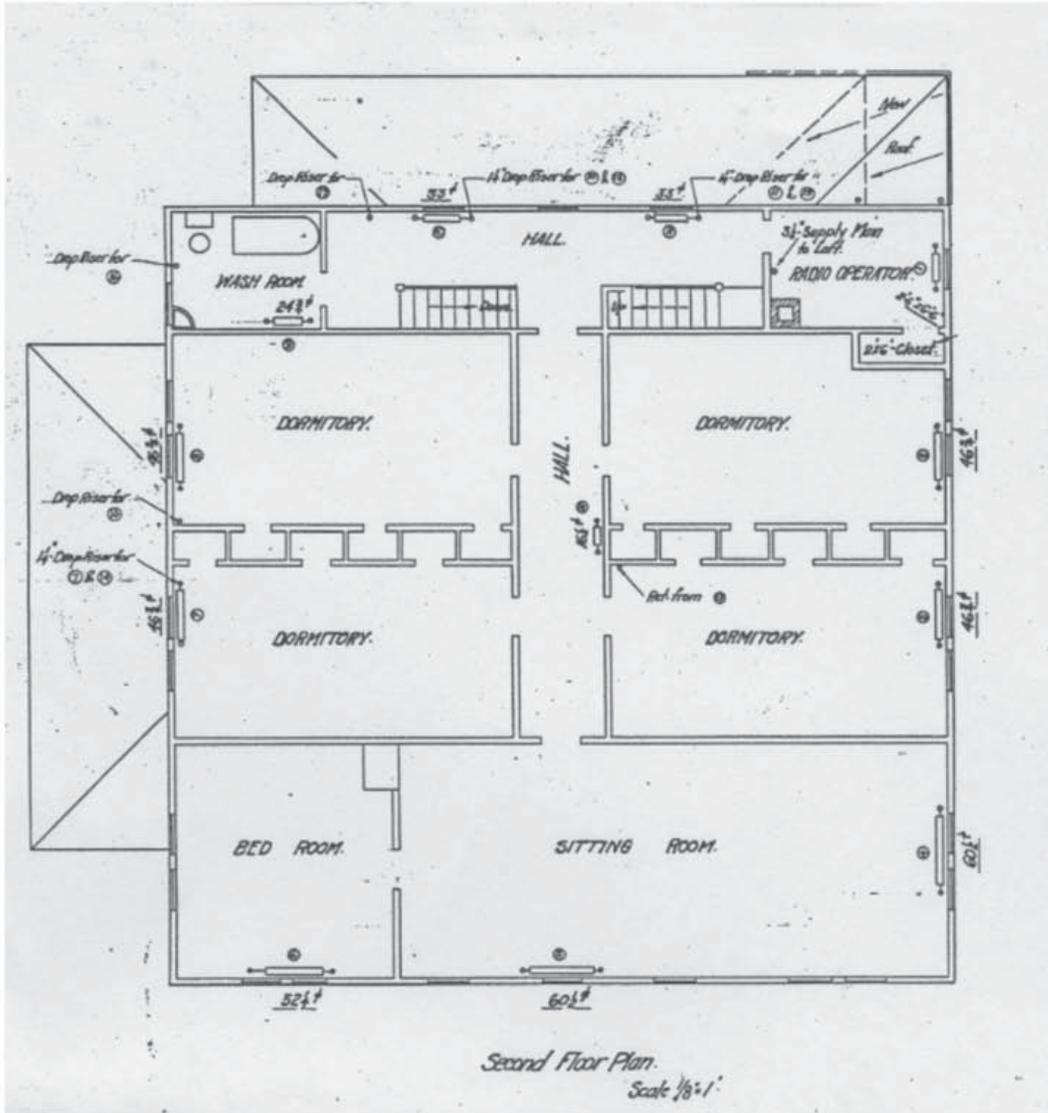
APPENDIX D-1

MAIN BOATHOUSE/LIFE SAVING STATION (PE1903) 1936 PLANS



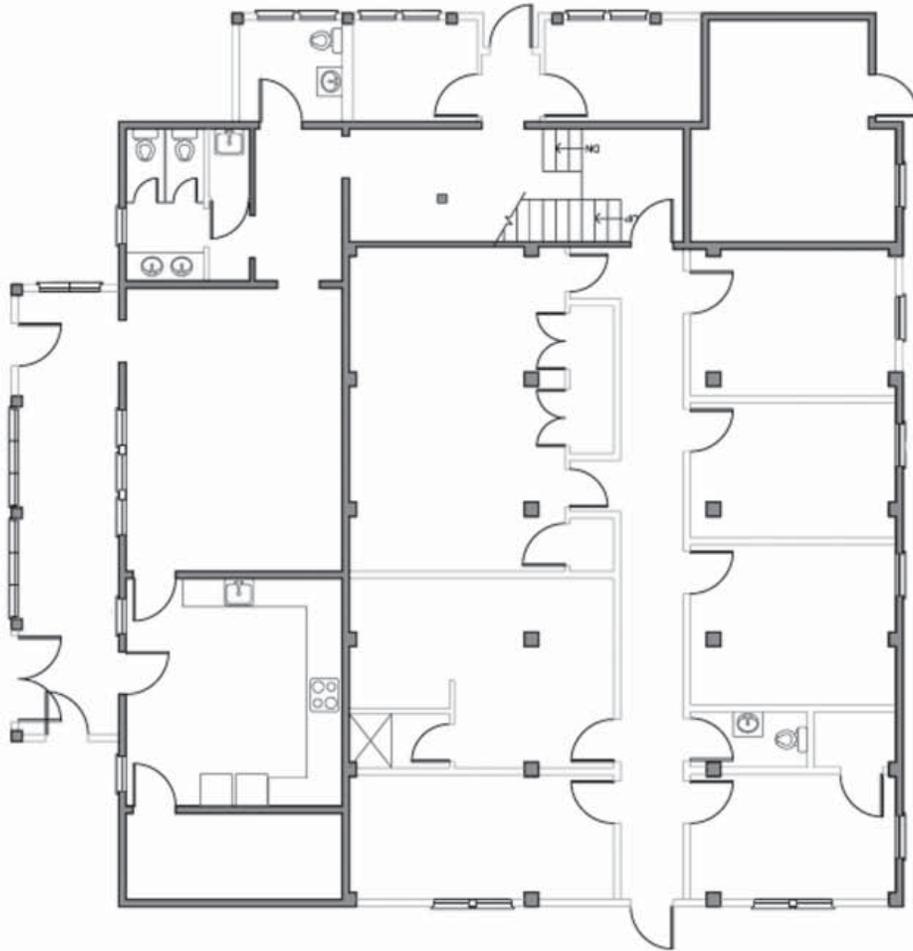
* The earliest available historic plans date from 1936





APPENDIX D-2

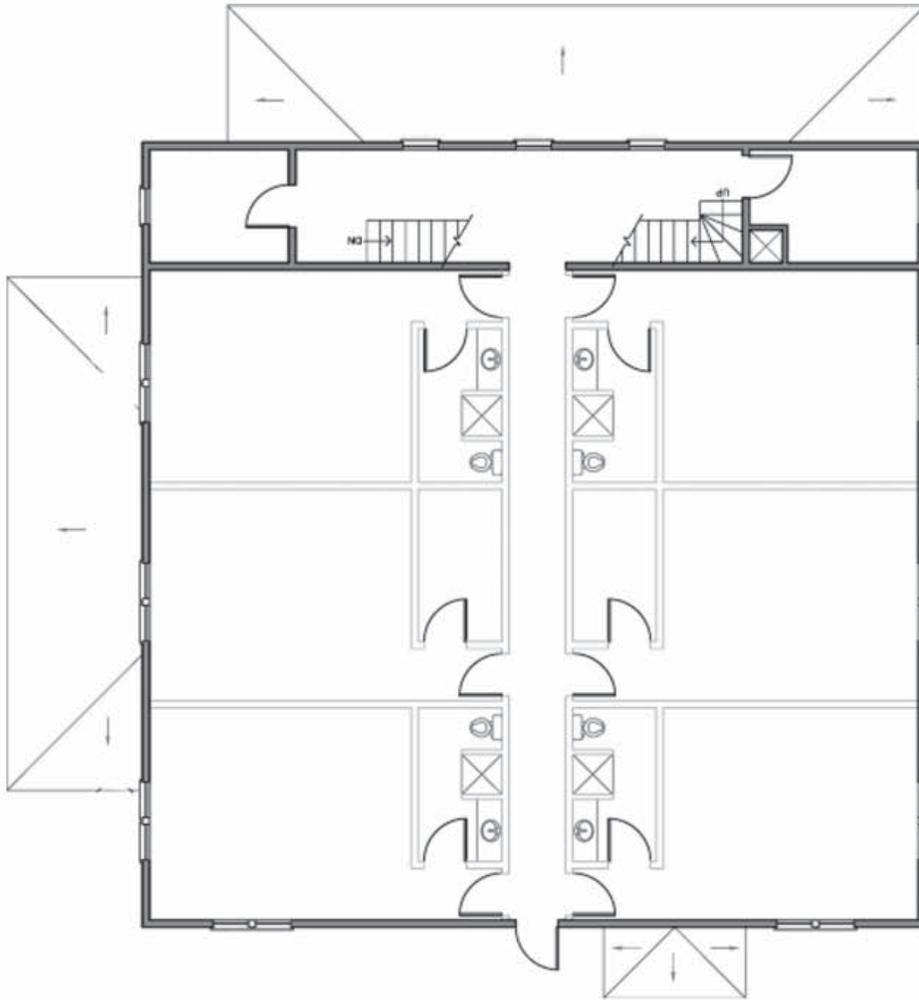
MAIN BOATHOUSE/LIFE SAVING STATION (PE1903) 2008 PLANS



LIFE SAVING STATION BUILDING - FIRST FLOOR PLAN
NOT TO SCALE

■ Extant Historic Walls

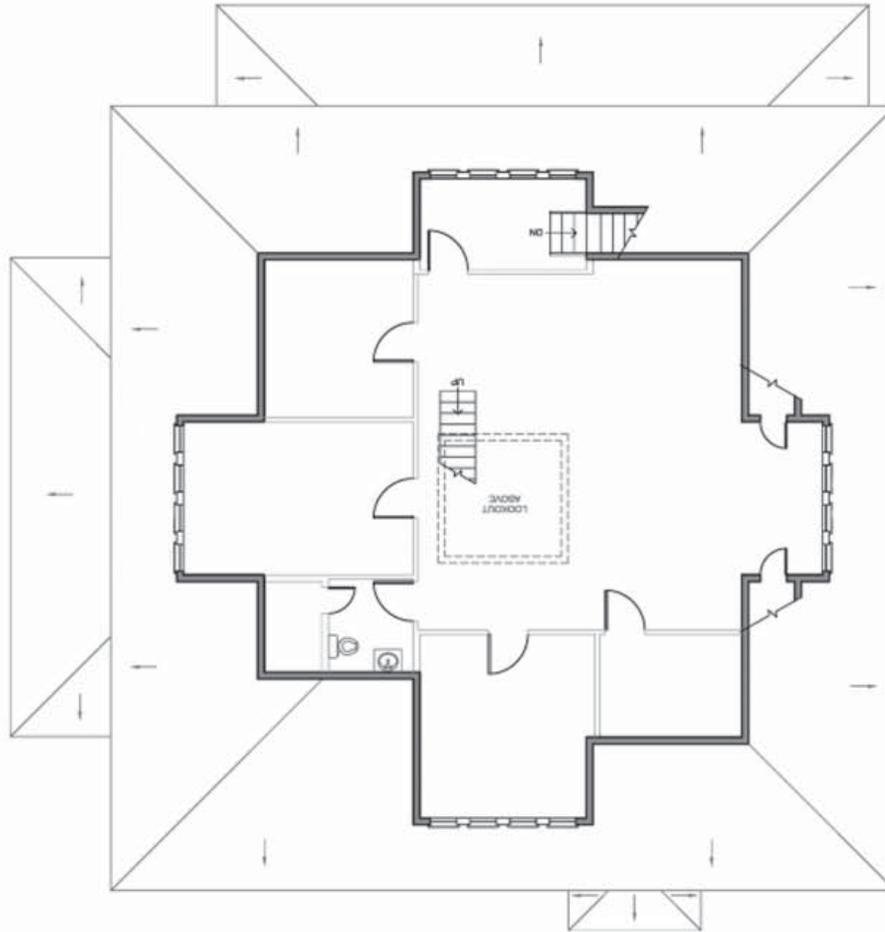




LIFE SAVING STATION BUILDING – SECOND FLOOR PLAN
NOT TO SCALE

■ Extant Historic Walls

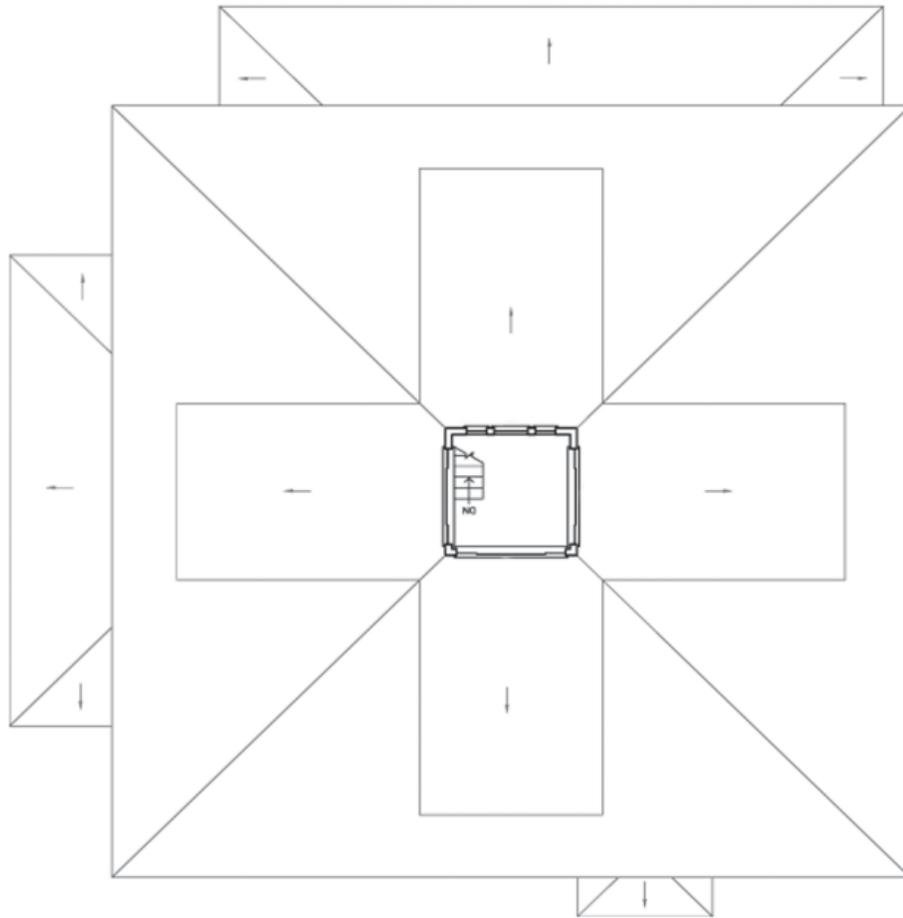




LIFE SAVING STATION BUILDING - THIRD FLOOR PLAN
NOT TO SCALE

■ Extant Historic Walls





LIFE SAVING STATION BUILDING - FOURTH FLOOR PLAN
NOT TO SCALE

■ Extant Historic Walls

