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DRAFT

Cultural Resources Report for Fort Wadsworth, Staten Island, New York

North Atlantic Regional Office  
National Park Service

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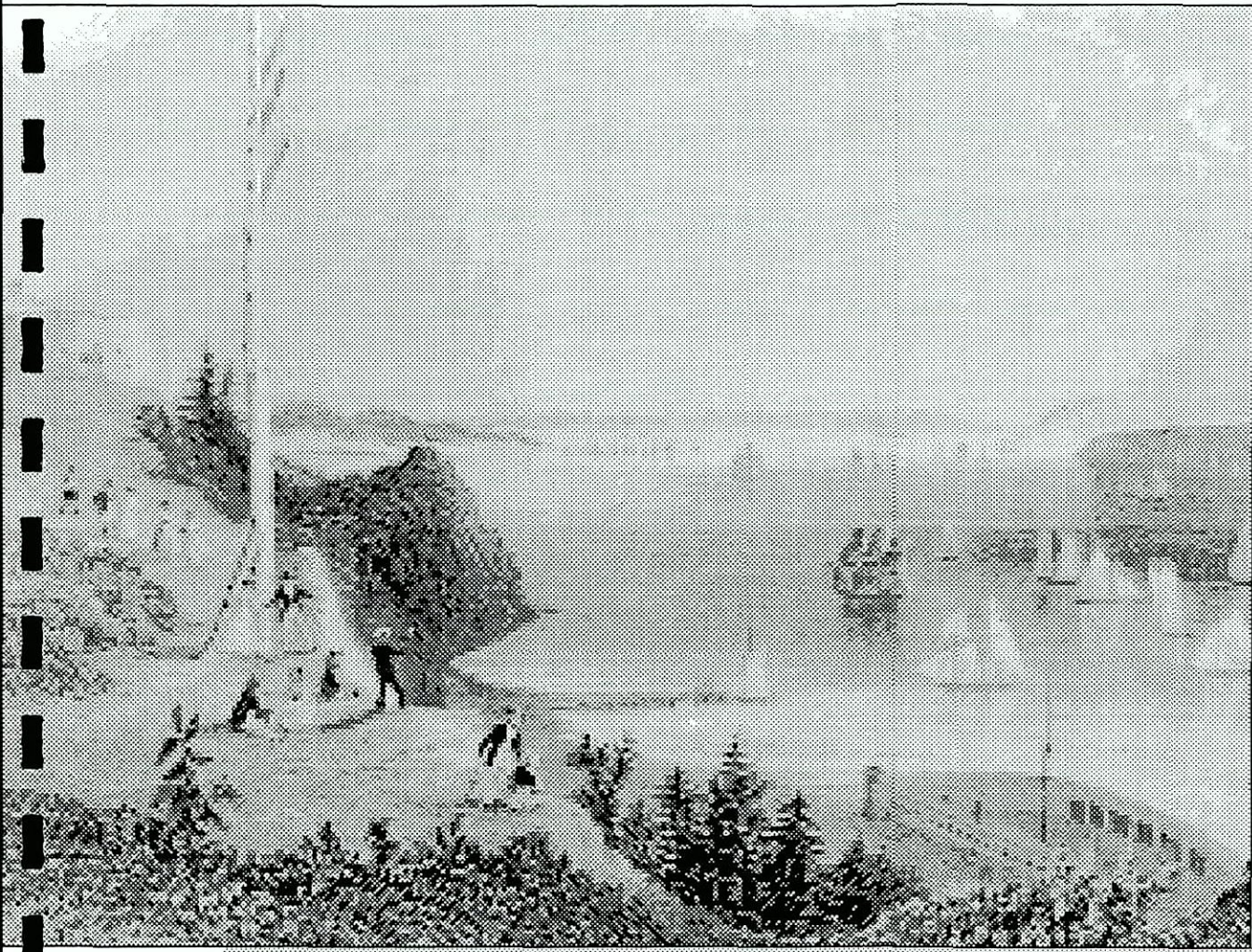
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**1.1 Introduction**

**1.2 Summary**

**1.3 Recommendations**

Archeological Recommendations

Site Related Recommendations

Building Related Recommendations

Collection Related Recommendations

Section

1

Executive Summary



## 1.1 Introduction

Fort Wadsworth is located on the northeastern shore of Staten Island on the Narrows of New York harbor. There has been a military presence at this strategic location since the first installation by the British during the Revolutionary War. The property for the military base expanded from its original 24.45 acres to its current size of 226 acres in the late 1800's through the purchase of adjacent farmland and residential estates.

The property contains two Civil War era forts that are listed on the National Register of Historic Places: Fort Tompkins and Battery Weed (formerly called Fort Richmond and later Fort Wadsworth). There are other military related structures dating from the 1850's to the 1990's. The military base saw dramatic periods of expansion- especially during the Endicott era of the late 19th and early 20th centuries. These structures include a wide variety of facilities typically found on military bases: housing, barracks, offices, maintenance/storage facilities, post exchange, chapel, theater, gymnasium, and support facilities. The site is bisected by the Verrazano Narrows Bridge constructed in the early 1960's, which caused the destruction of several of the Endicott era batteries.

The military land, originally in private ownership when occupied by the British, was purchased by the State of New York around 1800. It was later purchased by the US Department of the Army, then to the US Department of the Navy in the 1980's for the establishment of the Surface Action Group Homeport. In 1972, legislation establishing Gateway National Recreation Area (NRA) provided for the transfer of Fort Wadsworth to the park in the event that the site ceased to be used as a military base. In 1993 a recommendation of the Base Realignment and Closure Commission (BRAC) resulted in Congress approving the decommissioning of the Homeport (P.L. 101-50 BRAC Act of 1990 as amended). At the time of writing this report, approximately 2/3 of the site is pending transfer to the National Park Service. Specific areas of the remaining 1/3 will be transferred to the U.S. Army Reserve and the U.S. Coast Guard. The Navy homeport officially

closed on August 31, 1994, but until resolution of a pending lawsuit, the Navy has assumed a caretaker role.

The National Park Service is currently in the process of becoming operational at Fort Wadsworth. This report is designed to provide cultural resource data to support the initial phase of park operations and also to provide information for interim and future development.

The National Park Service proposes rehabilitation as the appropriate treatment of cultural resources at Fort Wadsworth. This treatment is consistent with the report's findings that the site meets the criteria for listing as a district on the National Register. Proposed actions include the following:

- Consolidate Staten Island Unit administrative functions and select Gateway NRA-wide functions in Building 210

- Install a Visitor Center/Exhibit in Building 120

- Construct an interpretive trail linking each Endicott era Battery

- Stabilize and reconfigure Fort Tompkins overlook for visitor safety & enjoyment

- Rehabilitate & stabilize various parts of Fort Tompkins

- Rehabilitate & stabilize various parts of Battery Weed

- Create safe environment within Tompkins & Weed for public visitors

- Establish waysides on site for visitor interpretation of the Fort and Verrazano Narrows Bridge

- Lease Building 120 to the Defense Logistics Agency

- Transfer 400 units of Milcon Housing to the Coast Guard

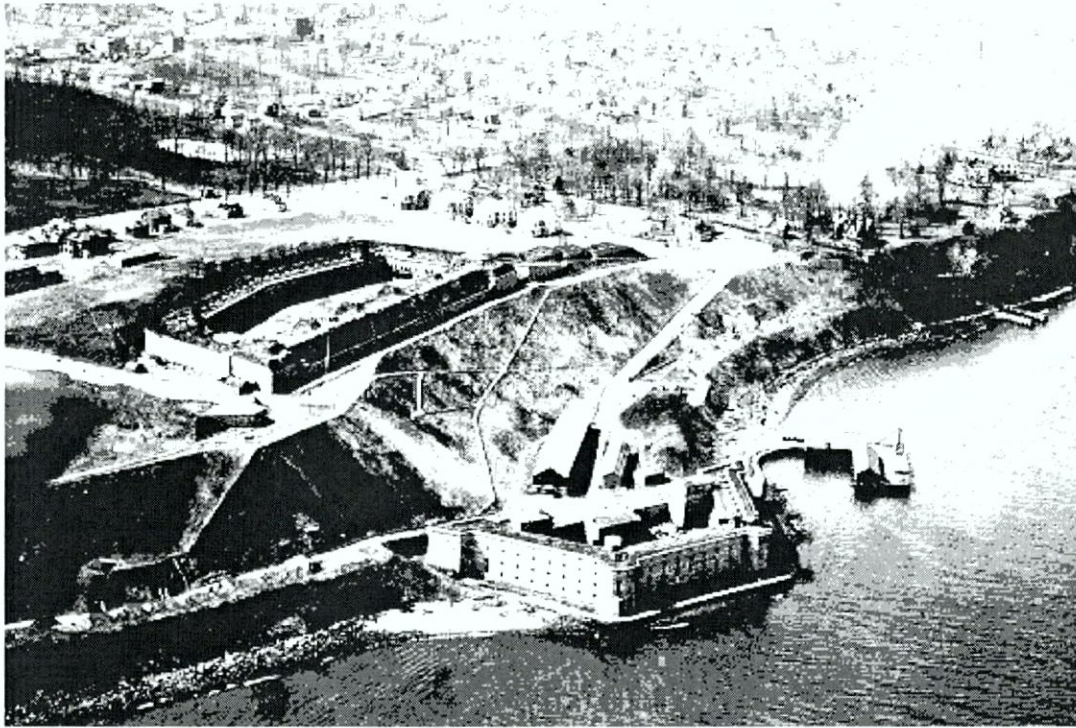
- Demolish Police Buildings 354 & 355

- Install utility meters at all buildings to facilitate cost monitoring

## Section 1:

### Executive Summary





## **1.2 Programmatic and Research Recommendations**

### **Archeology**

#### **A. Summary of Findings**

Fort Wadsworth contains pockets of prehistoric cultural strata and materials. There is no clear evidence of late 17th-century Dutch-American settlement with the Fort limits. Archeological evidence of late 17th-century Anglo-American farmsteads may have been encountered in the cultural resources survey carried out in the early 1980's. Remains of signaling beacons from the 1750's may survive. Limited archeological traces may survive of installations established by the British between 1780 and 1783. It is possible that subsurface evidence may survive from the "Second System"

military period of 1808 - 1815. Evidence of 19th-century residential properties may be partially intact below ground.

#### **B. Recommendations**

The mapping data presented as part of this study should be used as a guide for archeological action in the event of ground-disturbing actions on the Fort. Depending on whether the area is designated as having low or medium potential for archeological resources, different responses are required. Areas of high archeological potential resources should be avoided.

This preliminary assessment should be expanded to develop a refined version of the archeological potential map at a larger scale and with more precise definition of archeologically-sensitive areas.

Fort Wadsworth has the potential for being interpreted within a larger, urban context that is complex in both its military and civilian land use. The archeology of the Fort should be a component of future interpretive programs.

## **Cultural Landscape/History**

#### **A. Summary of Findings**

Fort Wadsworth as a whole appears to be eligible for listing on the National Register as a historic district, and specifically the defense of New York Harbor, for the period from 1794 to 1945. It represents much of the evolution in the philosophy and technology of American coastal defense including the two major "Third System" fortifications on the site, which are outstanding examples of military architecture.

With the construction of the Verrazano Narrows Bridge and the development of the U.S. Homeport, Fort Wadsworth has experienced a significant amount of change since 1945, resulting in a somewhat diminished level of integrity. However, approximately 1/3 of the buildings and structures date to the end of the period of significance, and the general pattern of circulation has experienced only moderate change since the 1940s.



## **B. Recommendations**

Implement rehabilitation as the recommended primary treatment for the site; select an appropriate treatment for each individual resource.

Develop an appropriate historical context for Fort Wadsworth's military residential architecture.

Conduct additional research to list *Fort Wadsworth* on the National Register as one component of a multiple property listing embracing all of the harbor defenses of New York.

Conduct additional research on the purpose and significance of construction post-dating 1919.

Investigate Fort Wadsworth's role in the NIKE program to determine whether any extant resources reflect this activity and their relative significance.

## **Historic Structures**

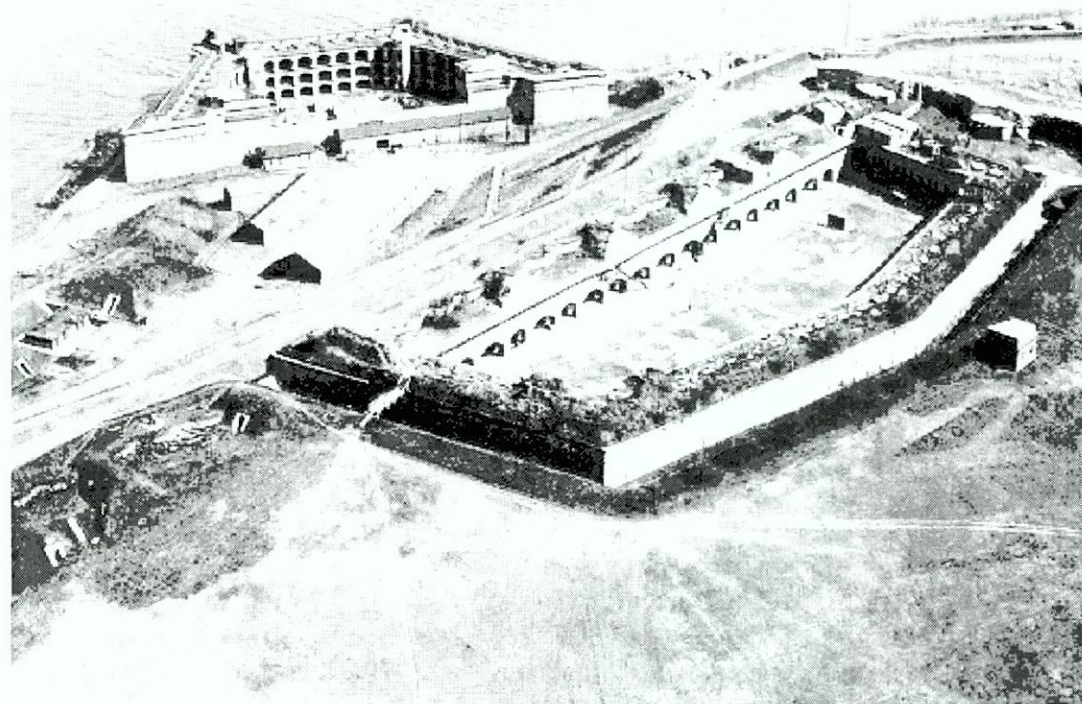
### **A. Summary of Findings**

*Rehabilitation as a treatment provides some flexibility in treatment of many different structures within one district. With structures spanning 150 years, it can be a difficult task to successfully interpret the site as a cohesive unit showing the evolution of a military base rather than specific interpretations of individual structures. Care must be taken not to remove the "patina" which has created a sense of time and place through weathering of the materials and forms.*

### **B. Recommendations**

Character-defining features should be the main force in activity that occurs.

Other options for replacement of windows should be considered unless the existing windows are out of character, inoperable or badly deteriorated.

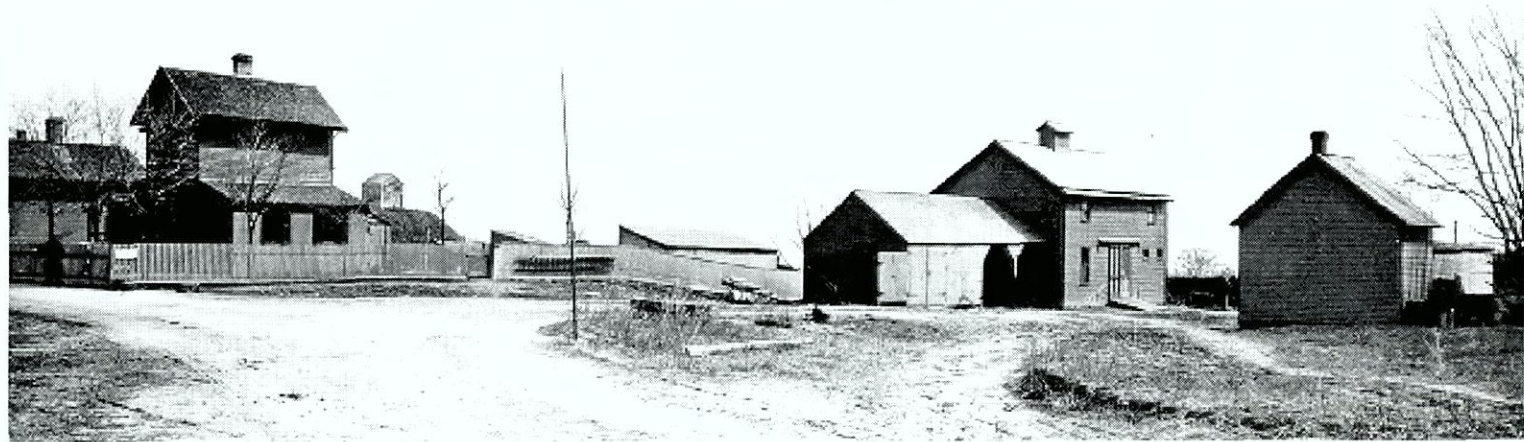


An inventory should be made of hazardous materials at the Fort, including asbestos, lead paint, undetonated ammunition, and underground tanks. If found, each area should be addressed on an individual basis, and the significance of the fabric determined prior to treatment.

Barriers should be installed to prevent public access to certain areas of structures, but should not be anchored into building fabric.

Designs for access to historic structures should either complement or not interfere with the character-defining features of the structures.





## Collection(s)

### A. Summary of Findings

Object collections from the period of significance are minimal. Archival collections are more substantial. They include drawings and maps as well as some textual materials. Building 210 has been identified as the location of the new Gateway NRA collections storage area.

### B. Recommendations

Revise the existing Scope of Collection Statement to more restrictively identify Fort Wadsworth's significance/role within Gateway NRA; to work with existing museums rather than pursuing an active collection program; to concentrate those limited collection activities on the Coastal Defense Period and collect only a small sample of symbolic objects from the Navy's Homeport period; and to include a section regarding records produced by the Army and Navy.

Identify what records remaining at the Fort should be retained.

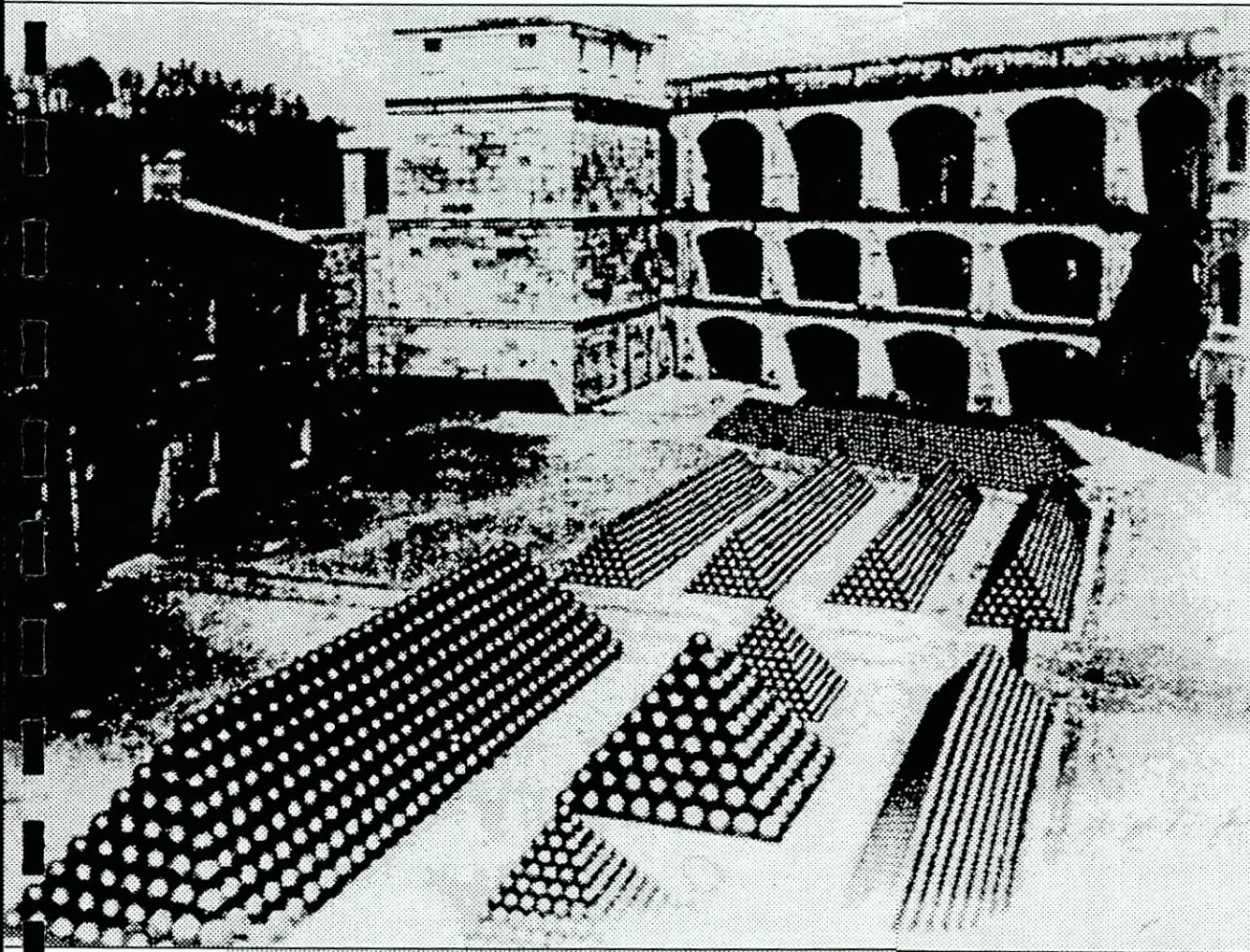
Accession drawings and maps found on site into the Museum Collection.

Continue to investigate the whereabouts of records from the Army and Navy periods of occupation of the Fort.

Upgrade and consolidate the storage of all Gateway NRA collections at Fort Wadsworth, adapting a portion of Building 210 to ensure safe, secure, climate-controlled conditions in accordance with the guidelines in Special Directive 80-1 and the NPS Museum Handbook.







2.1 Purpose

2.2 Scope

Section

2

Report Background



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## Report Background

### 2.1 Purpose

The purpose of this Cultural Resource Report is to provide research data regarding the history and significance of historic sites, structures, and collections at Fort Wadsworth. The National Park Service will use this data to guide the management and operation of the park, with particular emphasis on the initial phase of park development. This phase focuses on work necessary to provide a quality interpretive experience and safe access for visitors to the park.

The Report evaluates the significance and integrity of Fort Wadsworth's cultural resources against criteria for listing on the National Register of Historic Places. It provides an inventory of character-defining features, assesses their condition, and recommends treatment for those resources which are anticipated to be impacted by the initial development phase. The Report also assesses archeological potential and surveys artifacts and records on the site.

Research gathered for this Report is also intended to provide information to assist in the preparation of interpretive exhibits and waysides being planned for the park. All identified repositories were contacted or visited; and drawings, plans, photographs, and textual materials were collected. These materials cover the time period from the earliest maps of Staten Island through periods of major military construction and occupancy to present-day site plans and aerial photography. Copies of all research documents are archived with the curator at Fort Wadsworth.

### 2.2 Scope

This report includes the contributions of cultural resource management specialists in the following areas; history, cultural landscapes, historic architecture, and collections. OZ Architecture conducted research for the site history and the specific building studies. Section 4, Archeology was developed from "An Archaeological Assessment/Fort Wadsworth" (January 1995) sep-

arately prepared by Hunter Research. Section 7, Collections Survey is based upon a site visit conducted in October 1994. Only those buildings in which staff thought records might remain were surveyed. National Park Service staff prepared the report. Except for the building studies, which focus on the structures for which work is immediately proposed, this report deals with Ft. Wadsworth in its entirety.

Research was conducted at the following institutions known to have pertinent materials: Fort Wadsworth; Staten Island Historical Society; Staten Island Institute of Arts and Sciences; New York Historical Society; New York Public Library; Fort Hamilton; National Archives — New York Branch; National Archives — Cartographic and Still Pictures divisions, College Park, Maryland; National Archives — Motion Pictures, Division, College Park, Maryland; US Army Center for Military History; and the Museum of American History.

Additional Repositories contacted by telephone which had no or limited relevant materials included: West Point Academy; US Army Chaplain School, Fort Monmouth, New York; Coast Artillery headquarters, Ft. Monroe, Virginia; and the US Army Military History Institute, Carlisle, Pennsylvania.

The graphics assembled for this report have been reviewed by the National Park Service's Harpers Ferry Center for exhibit and waysides planning purposes.

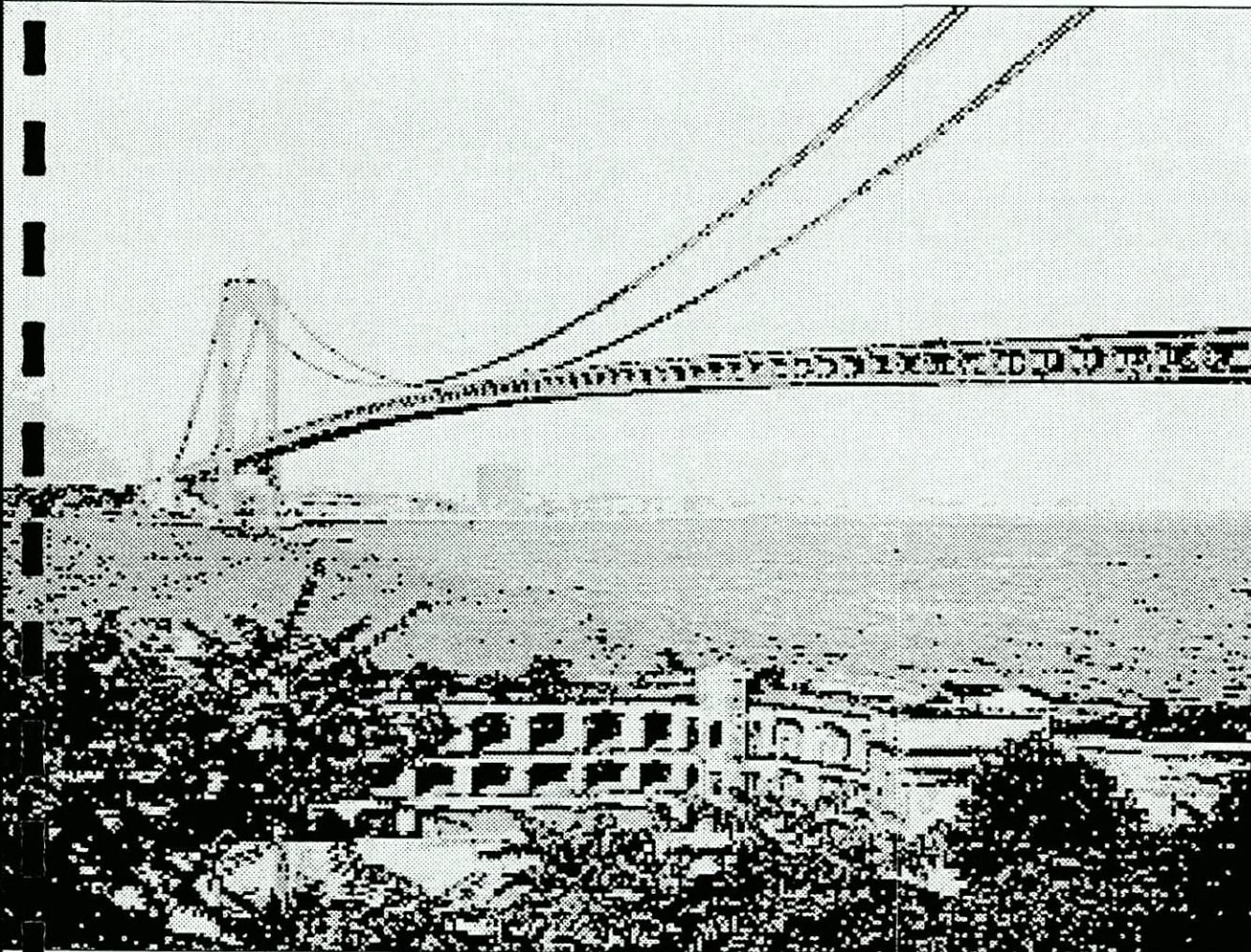
## Section 2:

### Report Background









### 3.1 Geographical Setting

### 3.2 History of Site Development

Discovery of Staten Island

Dutch Settlement of Staten Island: 1621 - 1664

Staten Island Under the English: 1664 - 1781

The Development of State Works  
at Fort Wadsworth: 1807 - 1817

Transfer of Fort. Wadsworth  
to the United States: 1817 - 1847

Development of Fort Wadsworth: 1847 - 1889

The Era of the Endicott Batteries: 1890 - 1920

Public Works and World War II  
at Fort Wadsworth: 1918 - 1945

Post-war Era at Fort Wadsworth: 1945 - 1960

Fort Wadsworth: 1960 - 1994

Section

3

Site Description /  
Site History



## Site Description / Site History

### 3.1 Geographical Setting

The 226 acre former U.S. Army facility, and most recently a Navy Homeport, Fort Wadsworth, is located on the eastern tip of Staten Island overlooking the strait known as the Narrows and the southwestern end of Brooklyn beyond. At this point, the Narrows provides a constricted passage between Staten Island and Long Island, linking by water the Upper (inner) and Lower (outer) Bays at the mouth of the Hudson River. The Narrows thus serve as a natural funnel and the principal means of access for shipping entering New York Harbor from the Atlantic Ocean.

For most of the historic period, and especially from the Revolutionary War era onwards, the Narrows has been a critical strategic location in the defense of New York Harbor. For more than two centuries, the promontory occupied by Fort Wadsworth and its companion headland across the Narrows in Brooklyn now occupied by Fort Hamilton have been key components in the various defensive systems that have been devised to protect New York Harbor and the island of Manhattan; There were also defenses on Manhattan itself. The Fort Wadsworth promontory commands fine views out to sea to the south and southeast across Lower Bay, and also supports key sight lines to the inner defenses that lay deep in the Upper Bay on Governor's Island, Liberty Island (Bedloes Island) and Ellis Island.

Staten Island lies partly within the Piedmont and Atlantic Coastal plain physiographic zones. The island is also bisected from the northeast to southwest by the so-called Cameron's Line, the boundary between the African-European and North American tectonic plates (which lie to the southeast and northwest respectively). The northwest Piedmont portion of the island is formed on early Paleozoic Ordovician-Cambrian and Ordovician bedrock associated with the two tectonic plates, of which Staten Island serpentinite of the African-European plate is the most characteristic rock type. In the westernmost portion of the island, these strata are overlaid by the mudstones and sandstones of the Brunswick

foundation, which were laid down in the Jurassic-Triassic Period, and then intruded into by the Palisades diabase sill. The southeastern Atlantic Coastal Plain portion of Staten Island, including the Fort Wadsworth promontory, is formed on the continental sand, gravels and clays of the Raritan Formation, which are the result of sedimentary deposition during the Cretaceous Period. During the advance of the continental ice sheets in the Pleistocene Epoch, the furthest southward deposition of an east-west terminal moraine across the southeastern part of the island. Glacial moraine, till and outwash deposits therefore cover most of the island masking the bedrock beneath (Isachsen et al. 1991:139-183).

Today, the vast majority of Staten Island is further masked by urban and suburban development. The Fort Wadsworth property is mostly built-up and contains a variety of 19th and 20th century military, residential and recreational facilities with supporting infrastructure such as roads and utilities. The surviving military structures of Fort Wadsworth continue as major features of the landscape, with Fort Tompkins itself occupying a knoll that rises to more than 140 feet above sea level and with Battery Weed located prominently on the waterfront. A dominant feature of the local cultural landscape is the span of the Route I-278 suspension bridge crossing the Narrows. To accommodate the approaches with their toll booths and the colossal anchorage on the Staten Island side of the bridge, a giant swath was cut through the center of Fort Wadsworth destroying historic batteries and other structures, and greatly altering the previous landscape.

### 3.2 European Discovery of Staten Island

Staten Island was occupied by Native American Indians from the Raritan and Hackensack tribes. This land appears to have had several Indian names, including Matanuck, Monacknong, and Aquehonga. In later deeds to the English it is referred to as Aquehonga-Manacknong.

In 1524, Giovanni Verrazano, an Italian explorer sailing under the French flag of King Francis I, entered the Narrows and anchored

## Section 3:

### Site Description / Site History



overnight, but was forced to leave the next day because of a violent gale.

On September 11, 1609, Henry Hudson, serving under the Dutch East Company, discovered New York Harbor. It is believed that after Hudson's departure, the local tribes of Native Americans erected towers from which signals could be sent to neighboring groups telling of ship's movements.

Henry Hudson gave the island the name Staaten Eylandt (Island of the States) in honor of the Netherlands' governing body, the States-General.

#### **Dutch Settlement Of Staten Island: 1621 - 1664**

Between 1621 and 1664 the lower Hudson area, including Staten Island, constituted part of the province of New Netherland, which was administered by the Dutch West India Company. The first three efforts at colonization of Staten Island by the Dutch failed. In 1639 David Pieterz de Vries, who claimed the entire island, started a plantation believed to be at or near the watering place in later Tompkinsville. Indians attacked and destroyed the settlement in 1641. Soon after this failed attempt at settlement, fellow Dutchman, Cornelius Melyn, attempted twice to establish settlements on the eastern end of Staten Island. However, both of these efforts were also thwarted by Native American attacks. Despite the hostilities between Indians and European settlers, a few Dutch had remained on Staten Island following the collapse of each of three efforts to start permanent communities. Apparently a small military contingent was briefly maintained on the island to protect this community, but was soon removed per order of Governor Stuyvesant, and the settlers were subsequently relocated.

In 1661 and 1662 a fourth effort to establish a permanent community on Staten Island finally succeeded. Ultimately called Oude Dorp, (Old Village) the community had its location about one mile southwest of the present Fort Wadsworth reservation. Apparently at that time the establishment of a defensive blockhouse on Staten Island was ordered by Governor Stuyvesant. In a letter to the Directors of the West India Company dated April 1664, the gover-

nor noted that:

A hamlet, not yet named, was begun on Staten Island about two years ago, and now has about 12-14 families. . . it lies about half an hours walk from the Narrows, there being no more convenient place for a village near the water. Both these places were provided with commodious blockhouses as a defense against the attacks of the savages last summer, the blockhouses are built by putting beam upon beam and for their better defenses are each provided with two or three light pieces of ordnance, of which one or two are perdroes, the hamlet on Staten Island, being the weakest and too far to be relieved in time, is garrisoned with ten soldiers for its greater safety.

The actual location of the blockhouse remains unknown, and has not been revealed through documentation or preliminary archeological investigation to have been located within the present day confines of Fort Wadsworth. Currently there is no non-archeological evidence of the Dutch period of settlement at Fort Wadsworth.

#### **Staten Island Under The English: 1664-1781**

In 1664 the English King, Charles the II, in an effort to enforce the Navigation Acts (1660 and 1663) which restricted trade with the colonies to England, made a gift of the Dutch territories in North America to his brother James, the Duke of York, effectively conquering the territory of New Netherland. The agreement reached between the Dutch and the English was that despite the exchange of power, the Dutch settlers were to remain unharmed, with individual rights and privileges to remain intact. The Dutch settlers submitted relatively peacefully to the English governors sent by the Duke, including Richard Nichols (1664-68), Francis Lovelace (1668-73), Edmund Andros (1674-81), and Thomas Dongan (1683-1688). It was not until the administration of Governor Lovelace that the deed for Staten Island was officially conveyed from the Raritan and Hackensack tribes to the English.

Through much of the period of English control, the land at Fort Wadsworth remained in the private ownership of John Van



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Deventer; indeed, some maps from this period designate the site as "Van Deventer's Point." Upon Van Deventer's death in 1759 the property passed to his children. Their families retained possession of the tract until 1794, at which time it passed out of private ownership.

Black's History of Fort Wadsworth includes an exhaustive discussion of the various opportunities missed by the English to construct fortifications at Staten Island prior to the American Revolution. According to Black, numerous documents from the period 1671 to 1774 have been consulted which might be expected to mention the presence of English defensive works at Staten Island, had such works existed. However, none of these sources refer to defenses in the area of Fort Wadsworth, or anywhere on Staten Island.

During the Revolutionary War, the area now encompassed by Fort Wadsworth was developed by the British as an artillery post, and simple defensive works were constructed. Following the British evacuation of Boston in March, 1776, American General Charles Lee prepared New York to defend itself from a British attack. However, because their efforts concentrated in the Manhattan-Brooklyn Heights area, the British were able to land on Staten Island without opposition on July 2. By the end of the summer, Manhattan, Long Island and Staten Island were all under British control—a situation which endured until the end of the war. The bulk of the British troops who landed in July 1776 soon left to participate in the battle and other engagements in the New York area. Throughout the war, a limited number of British and Hessian troops were stationed on Staten Island. Further, outlying areas of the island served as a source of forage and firewood for the British military and the greatly enlarged population of Manhattan.

Following the British seizure of the lower Hudson Valley, construction of defensive works began in the area of modern Fort Wadsworth. The nineteenth-century historian Ira Morris describes the process by which defensive works were constructed on Staten Island:

All along the shore at odd intervals the British threw up breastworks. Quite a substantial one was built on the heights of the Narrows, where Fort Wadsworth (sic - reference should be to Fort Tompkins) now stands, and another at the landing station, near the present quarantine station....

By 1779, British defenses at the Narrows on Staten Island consisted of a redoubt, a line of twenty-six gun platforms holding numerous guns, and a hot-shot furnace. By 1782 a four-bastion fort and several barbette batteries had been added. Numerous cartographic sources dating from the Revolutionary period confirm the existence of English fortifications in this area, which was known at that time as Flagstaff Hill. According to Black, historic maps suggest that the fort was a six-pointed star-shaped work with what appears to be a blockhouse located within it. Further to the south and also in front of both the star-shaped work and the flag staffs were smaller positions. Although the British had made extensive use of the west bank of the Narrows during the war, title to the site remained with the descendants of John Van Deventer.

There are currently no visible remains from the British period of occupation at Fort Wadsworth. However, portions of the British defensive works may have survived, and may have been salvaged for use in the development of Fort Wadsworth by the United States military following the Revolution, in spite of the thoroughness with which most of the physical evidence of these British fortifications were removed from Staten Island following the Revolution. Staten Island historian Ira Morris related in 1898 that he was informed by a "venerable" citizen of Staten Island that

the people who resided here immediately after the war generally desired to be considered on the Patriot side, and showed their hatred for the British by removing everything that would remind them that they once controlled this part of the country.

#### **Staten Island and The First American System: 1794-1807**

During the last decade of the eighteenth century, the United States, largely in response to the growing threat of France as a



military force, embarked on a program of coastal fortifications known as the First American System. In response to an undeclared war between the United States and the Revolutionary Government of France, President Washington made efforts to provide for the protection of American seaports. He urged a congressional committee to prepare a report in February 1794, which listed sixteen places in the United States requiring defensive works, including New York. As a part of this effort, the Secretary of War appointed the French engineer, Charles Vincent, to develop a plan for the defense of New York Harbor.

Simultaneously, New York Governor George Clinton initiated efforts to construct fortifications around New York City. In a bill passed in January 1794, a state board, entitled The Commissioners of Fortifications, was established to oversee the construction of fortifications for New York Harbor. It was granted powers to enter, survey and purchase any land regarded as required for defense. This board agreed that federal appointee Charles Vincent would advise and assist them.

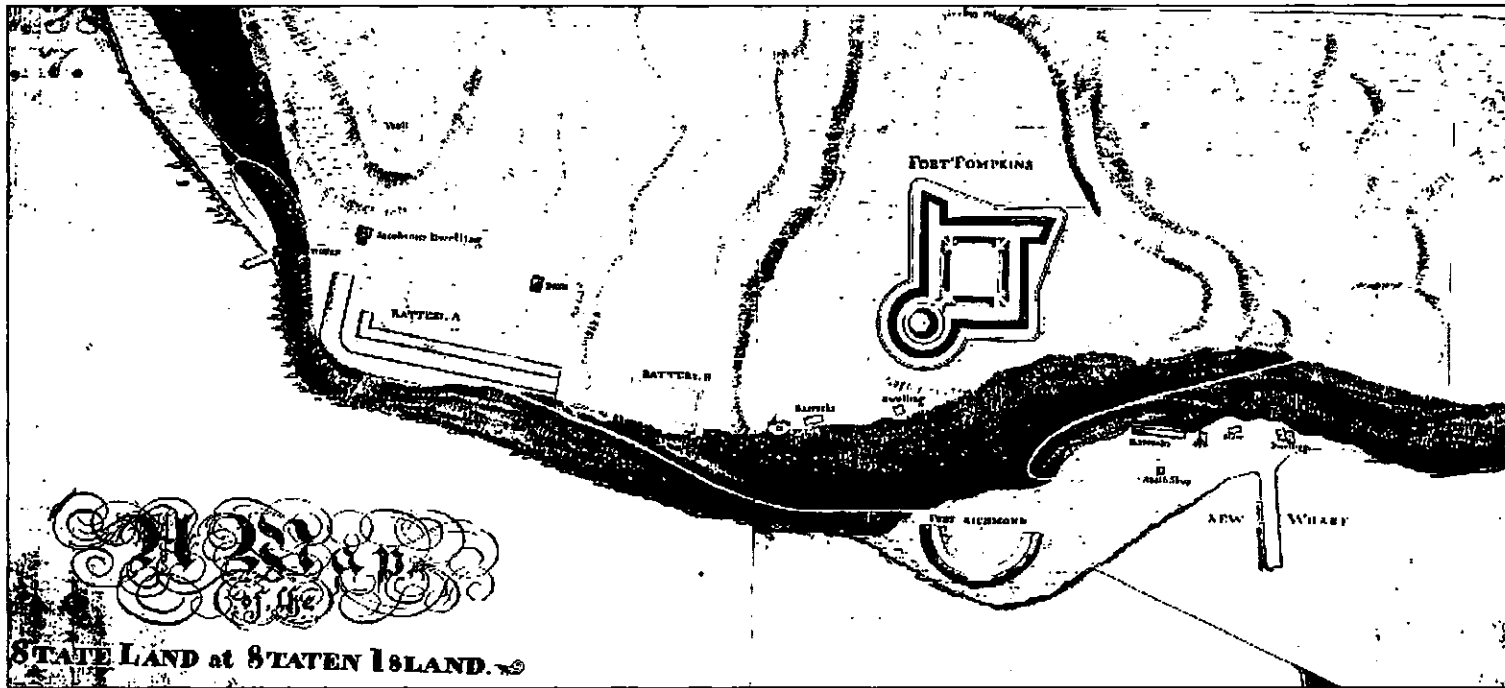
As part of the larger planning for the fortification of New York, a two man-subcommittee was appointed to make arrangements for the acquisition of a 24 acre parcel of land along the Narrows of Staten Island. In November, 1794, after lengthy negotiations between proprietors Ann Jacobson and Catherine Van Deventer, and the Commissioners of Fortifications title was granted to the State of New York. Even before the matter of the title to the land had been resolved, work on temporary defenses at the Narrows on Staten Island had begun. In accordance with the preliminary recommendations of Consulting Engineer Vincent, orders were given by the Board of Commissioners of Fortifications to employ fifty men on the site to restore what was salvageable from the British fort and to build a blockhouse. Although there is no written evidence that this work was completed, it seems likely that these orders were carried out. However, it seems clear that these somewhat temporary works remained unarmed and ungarrisoned. Although later in the year Vincent came back to the State Commission with elaborate plans for the development of fortifica-

tions at Fort Wadsworth, they were deemed too expensive, and set temporarily aside.

#### **The Development of State Works at Fort Wadsworth: 1807-1817**

In mid-1807, renewed interest in America's coastal fortifications developed in response to growing British hostility. The United States War Department prepared a new National Program of Fortifications. During the next five years Congress authorized the expenditure of three million dollars for the development of a system of fortifications known as the Second System. Staten Island was not included in the second system of fortifications. However, the State of New York insisted that extensive fortifications should be built on west bank of the Narrows at Staten Island, and ultimately decided to pay for the development of such works itself. Federal authorities ultimately agreed to work somewhat collaboratively with the State of New York. In 1807 the United States Secretary of War ordered U.S. Army Engineer, Jonathan Williams, to develop a plan for fortifications at Fort Wadsworth to be erected under the governor's direction at the expense of the state.

In October of 1808, Williams presented a plan for the fortification of the west bank of the Narrows. The plan proposed that two permanent works should be built, one at the water's edge and the other on Flagstaff Hill. In addition, he proposed a range of small batteries on sloping ground to the south. Williams' basic proposal is shown on a map titled "A Map of the State Land at Staten Island Representing the Situation of the Ground and Fortifications to be Erected," prepared by Charles Loss on March 13, 1809 (figure 3:1). Other features of interest shown on this map include a structure called "Jacobson's Dwelling," and a farmhouse and barn probably extant on the site at that time. A long road is shown passing along the shore from the northern to the southern end of the military base, following approximately the current path of Battery Weed Road. Two sets of barracks, a store, smith shop, office, observatory, dwelling and wharf are shown on the map, though it is unclear whether they existed at the time, or were sim-



**Figure 3:1**  
Shows proposed development of Fort Wadsworth by the State of New York, along with a few structures already existing in 1809. From a "Map of the State Land at Staten Island Representing Situation of the Ground and the Fortifications to be Erected," drawn by Charles Loss, March 13, 1809. (Cartographic Research Room, National Archives, Washington, Drawer 36, Sheet 17.)

ply proposed. By early in the winter of 1809 it appears that work on the fortifications had begun.

In November of 1809 the state purchased an additional 22 acres to the west of the original site, to accommodate the full extent of Williams' fortification plan. Work progressed rapidly, and by January, 1810, Governor Tompkins reported that the water battery, then named Fort Richmond, was complete, and awaited its complement of twenty-seven guns. By that time two earthen batteries, Hudson and Morton had also been completed, which together could mount ninety-two cannon.

Despite the progress on Fort Richmond, by 1810 work had not yet started on the future Fort Tompkins except for the drilling of a well within its intended confines. Black puts forth a number of reasons why the Fort Tompkins project may have been delayed. Whatever the reason, little real progress occurred until May of 1814, well into the third year of the War of 1812. Williams then submitted a new design for the fortification, which was located on

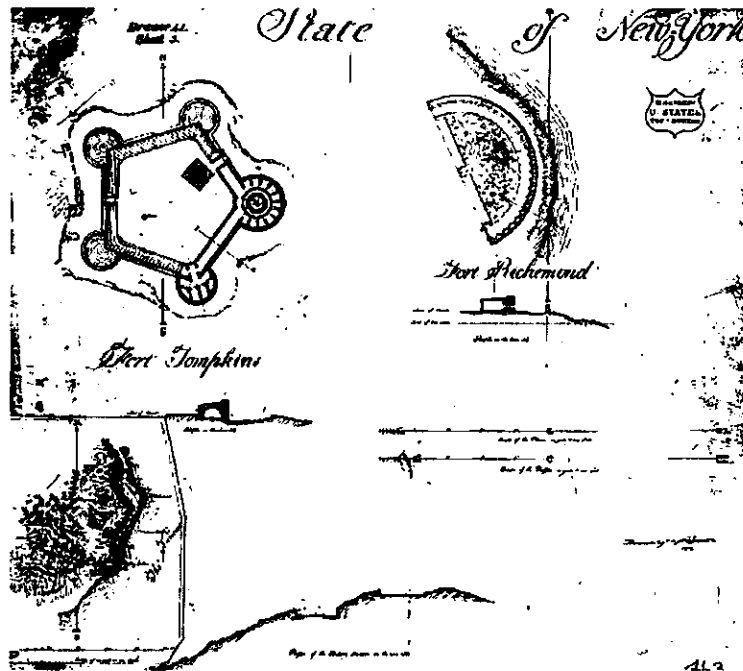
Flagstaff Hill overlooking Fort Richmond. Construction apparently began during the following summer.

The three other defenses built by the state during the years 1807-1815 were open works, made largely of earth and named Fort Smith, Fort Morton and Fort Hudson (figure 3:2). Little is known about Fort Smith, which occupied a hill outside of the state property approximately 400 yards southwest of the Narrows. Somewhere close to it was a barracks with quarters for 100 men. Fort Morton was a curved work, approximately 50 yards long and located approximately 220 yards from Fort Tompkins near the edge of the Narrows. Finally, Fort Hudson, later known as Battery Hudson, was the southernmost work on the Staten Island side of the Narrows, located 100 feet from and 52 feet above the Narrows. This fort consisted of two gun platforms, one behind the other.

Following the end of the War of 1812 in January, 1815, state and federal interest in completing the construction of Fort Tompkins



**Figure 3:2**  
 Plan and sections of the state-constructed Fort Tompkins, Fort Richmond and Battery Hudson (also shows location of Battery Smith). From "Fort Tompkins and Fort Richmond, State of New York," drawn by W. Tell Poussin, 1819. (Cartographic Research Room, National Archives, Washington, Drawer 41, Sheet 3.)



project appeared to wane. Fortunately, Governor Tompkins advised the New York legislature that the Commissioners of Fortifications urged the appropriation of necessary funds since the materials had already been purchased and the half-finished structure was vulnerable to water damage. A year later Tompkins reported that additional monies were required for grading the terrain between the various works, for the purchase of the site of Fort Smith, and for the completion of Fort Richmond. At this request, however, the legislature balked, granting only a portion of the money requested. According to Black, the site had been largely abandoned by 1817.

#### **Transfer Of Fort Wadsworth to The United States: 1817-1847**

Following the end of the War of 1812, the federal government undertook a new program of coastal defense, known as the Third American System, which lasted through the Civil War. In the development of a comprehensive harbor defense plan for this new

program, the fortification of the west bank of the Narrows was identified as vital to the security of the nation, and designated as a top priority. The history of Fort Wadsworth from 1815 to 1847 consists largely of efforts to secure the transfer of the site from the State of New York to the United States.

In February, 1818, by which time the site had been largely abandoned, the New York State legislature authorized the governor to sell the fortifications and land to the United States. However, owing to a variety of reasons, several decades passed before the sale was finalized. According to Black, during the intervening years the state allowed the site to fall into serious disrepair, and grounds around the fort were leased to Staten Island farmers for grazing land.

In March 1841, the State of New York gave its permission to the War Department of the United States to occupy part of the Staten Island site, pending final transfer of the entire property. Under the direction of Captain Robert E. Lee, who was stationed at Fort Hamilton with Army engineers, work commenced on remodeling two of the three earthen batteries, Fort Hudson and Fort Morton, so that they could accommodate the newly developed and more powerful 32 pound guns. During this interim period prior to the transfer of the Staten Island site to the federal government, plans were developed by Joseph G. Totten, the Army's Chief Engineer, for the replacement of the aging Fort Richmond. By the early 1840s Fort Richmond and Fort Tompkins were described by federal engineers as "in ruins," placing at risk the crucial defensive position at the Narrows in New York Harbor.

#### **Development of Fort Wadsworth: 1847-1889**

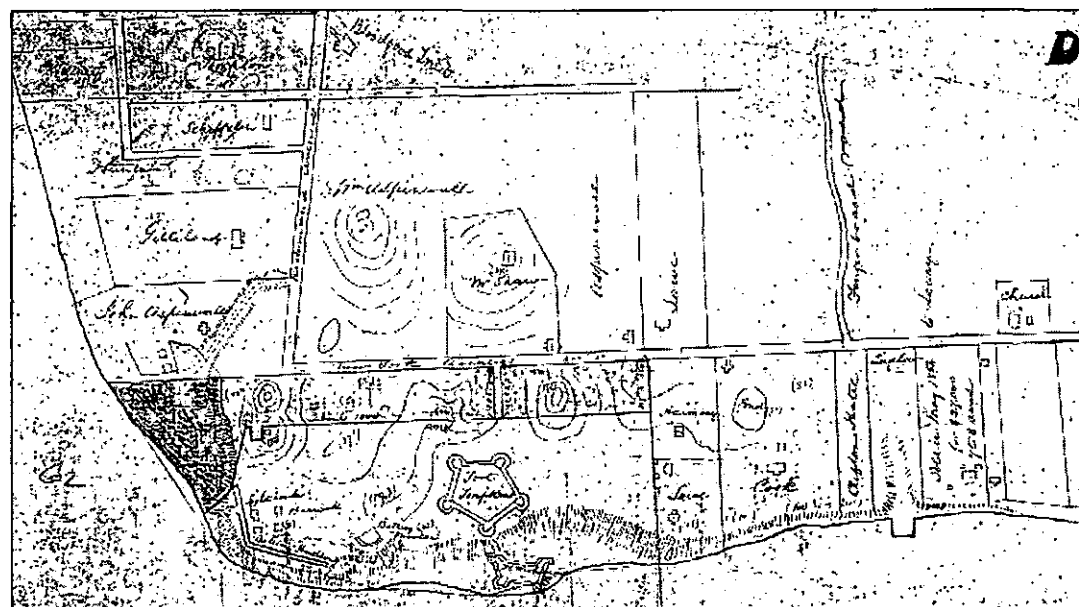
In 1846 that Congress took the final step and authorized the purchase of approximately 47 acres. The appropriation for the purchase and repair of the works and grounds at the Narrows was \$100,000. During the first years of Federal ownership, Fort Wadsworth changed dramatically in appearance. Work on the new Fort Richmond began almost immediately following conveyance of the property in February 1847. In 1854 the grounds at

Fort Wadsworth were enlarged with the purchase of a five-acre parcel on the western side of the property. In 1856 Congress granted funds for the purchase of a strip of land between the existing western boundary and the public road, now known as New York Avenue. The price of the 17-acre strip, purchased from William H. Aspinwell, was \$47,000 (figure 3:3).

Fort Richmond (to be renamed Fort Wadsworth in 1865 and later Battery Weed in 1902) was completed ca. 1864 at a cost of three-quarters of a million dollars. While retaining the same general location as the earlier, state-built fort, General Totten gave careful consideration to the positioning of the new Fort Richmond, so its field of fire included as much as possible of the shoreline to the north and south. The new structure was on the site of its predecessor, and with its east scarp almost paralleled the main channel. Immediately to the south was a steep bank, capable of masking guns on the western end of the south curtain of the fort. To the north, the shore was indented in several places, offering shelter to enemy ships making it through the Narrows.

With the construction of the new Fort Richmond, pressure to reconstruct the increasingly decrepit Fort Tompkins began to mount, and, in 1857 the United States Congress appropriated \$150,000 for this effort. As it turned out, this site presented numerous challenges for construction, as stone and other heavy material had to be moved from the wharf to the hill, a horizontal distance of seven hundred feet and a vertical lift of 125 feet. Also, because the foundation of the new structure was deeper, large quantities of dirt had to be moved. Once the site of Fort Tompkins was prepared, initial construction moved forward rapidly. However, with the outbreak of the Civil War, construction was stalled owing to a shortage of material and the diversion of attention away from this project towards the construction of other batteries. Fort Tompkins was not completed until 1876.

According to historian Black, during the decades between the transfer of the site to the United States and the outbreak of the Civil War, the Fort Wadsworth post never obtained the neat, regular appearance typically associated with military installations.



Associated with the construction of the new Fort Richmond and Fort Tompkins was the construction of shops, sheds, dormitories, storehouses, stables, hydraulic equipment, and steam engines, and dormitories for construction workers.

Construction of three other batteries began during the Civil War. Two of the new works were open barbette batteries, on the ridge behind and flanking Fort Richmond. The South Cliff Battery was constructed from 1862 to 1866 on a site between Fort Richmond and Battery Hudson, on a portion of the former site of Battery Morton, etc. The North Cliff Battery, located on the slope north of Fort Richmond, was started in 1863. The third work, which was planned to be located on a small, five acre tract south of Battery Hudson, was never completed.

With the Civil War came the permanent garrisoning of Fort Wadsworth. The first troops to arrive were members of the fifth regiment of New York Volunteers. During 1863 the garrison ranged between 108 and 678 men. By February of the following year the post was up to 1,921 men, the largest number on record at Fort Wadsworth prior to World War II. To provide quarters and

**Figure 3:3** "A Sketch of the United States Land on Staten Island Showing the Tract About to be Purchased from the Jacobson, and the Tract Now Offered to the United States by Mr. William Aspinwall, June 26, 1854." From a letter of Major R. Delafield, 28 June 1854. Courtesy of the Delafield Papers, New York Historical Society.



**Figure 3:4** Shows temporary quarters erected at Fort Wadsworth during the Civil War. From "A Sketch of Proposed Site for a Post Cemetery at Fort Wadsworth, Staten Island, N.Y." From a letter from Major Q.A. Gilmore, June 24, 1869. Cartographic research Room, National Archives, Washington, Drawer 43, Sheet 58.

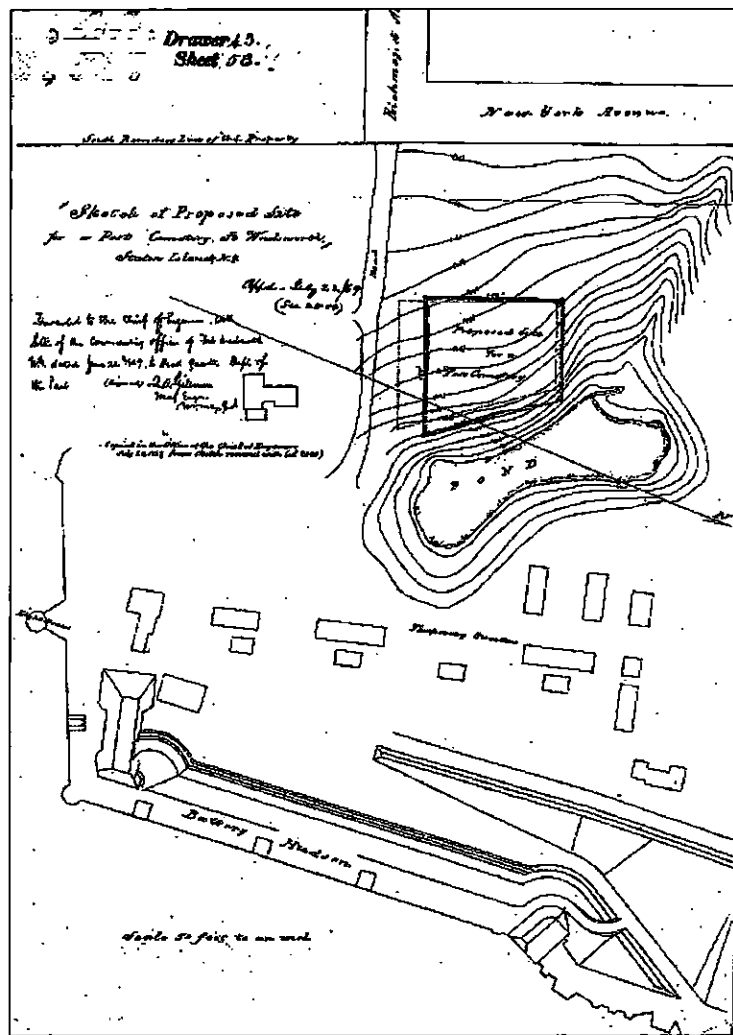
meet other needs of the wartime garrison, wooden buildings were constructed on the west bank of the Narrows, in close proximity to Battery Hudson (figure 3:4).

By July, 1864, with the Civil War drawing to a close, forces were rapidly being reduced at Fort Wadsworth. By the time that General Lee surrendered in April, 1865 all that remained at Fort Wadsworth was a small, permanent garrison of 400 men. In November, 1865, the War Department officially changed the

name of Fort Richmond to Fort Wadsworth, after New York General James S. Wadsworth, of New York, who had been mortally wounded during the Battle of the Wilderness in 1864. During the next two decades, the Fort effectively became obsolete owing to the rapid advances in the development of heavy ordnance, as the structure's casemates were simply too small to accommodate the larger guns and rifled cannon, capable of piercing stone fortifications emerging during and after the Civil War.

In 1867, eighteen months after the end of the Civil War, a commanding officer prepared a list of buildings on the site, identifying those which were no longer serviceable. As a result of this survey, many of the wooden residential and support structures constructed in the proximity of Battery Hudson during the war were demolished. At that time, some of the troops previously quartered in the temporary wooden barracks were moved into the casemates of the partially completed Fort Tompkins.

An informal plan of Fort Wadsworth prepared in 1871 provides some interesting insights into the appearance of the post immediately following the Civil War, though it is difficult to determine if all of the buildings shown were extant or proposed at the time that the map was made (figure 3:5). Fort Tompkins, Fort Wadsworth, Battery Hudson and the North and South Cliff Batteries are the dominant structures on the site, providing a full line of fortification along the coast. Access to the batteries is provided by roads in the approximate current location of Battery Weed Road and Battery Hudson Road. A row of structures, labeled Commanding Officer's Quarters, Subaltern's Quarters, Captain and Surgeon's Quarters, and Hospital line the north side of what was later named Mont Sec Avenue. It is not known precisely when these buildings were constructed, though they do not appear on earlier maps and it seems likely that they date from the 1870s. Another cluster of buildings was located in the vicinity of Battery Hudson, some of which remained from the Civil War, and include barracks, a carpenter shop, store room, and kitchen. A cemetery, post garden, and coal yard were shown to the west of Battery Hudson, in an area that would much later fall directly under the Verrazano



## Bridge.

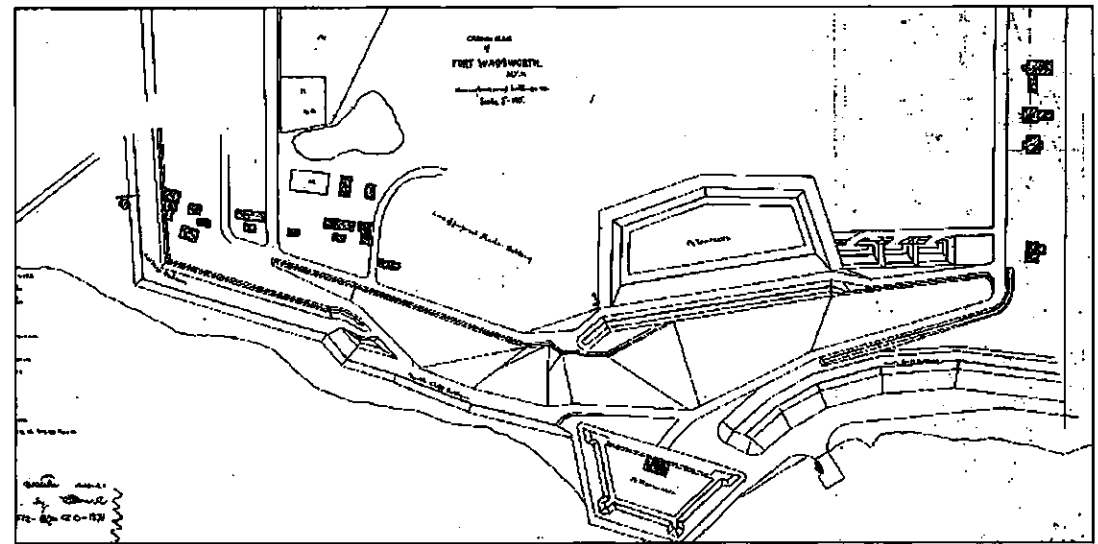
Between 1871 and 1875 South Cliff Battery, North Cliff Battery and Battery Hudson were modernized to hold fewer but larger weapons. In addition to the improvements to existing batteries, four new batteries were constructed. At the opposite end of Fort Tompkins and east of Hudson Road was a two-gun battery built in 1866. Immediately north of the Fort and west of the road was the Glacis Gun Battery completed in 1874, and south of Fort Tompkins was a glacis mortar battery, completed by 1876. A second mortar battery was initiated to the rear of Battery Hudson's extension, but was never completed. With the construction of the Battery Hudson extension, a nearly complete line of batteries was created from the western boundary of the post, stretching east to the Narrows and then north along the shoreline to Fort Wadsworth and the North Cliff Battery.

Fort Tompkins was structurally completed by 1876. As originally conceived, Fort Tompkins was intended to provide quarters, storage, and other services for the post and its garrison, and to protect Fort Wadsworth and the channel batteries from land attack. With the obsolescence of Fort Wadsworth the design for Tompkins was modified somewhat to provide for the placement of channel-bearing guns. As it turned out, however, only one gun was ever mounted at Fort Tompkins.

Despite some rather grand plans for the armament at Fort Tompkins, it appears that its role remained largely limited to providing quarters for enlisted men. In 1884, General Sheridan praised the housing arrangements for Fort Wadsworth's garrison, writing that

The casemate quarters are perfect and are in the second tier. The company occupying them are royally quartered, the hospital is in a casement and in good condition.

In the decades following the Civil War the number of men stationed at Fort Wadsworth decreased steadily from 402 at the end of the war, reaching a low of 41 in 1884. Numbers at the base increased slightly after that when, on a recommendation from



General Sheridan, the post at Fort Wadsworth was established as a regular garrisoned post (before that time it had been under the command of Fort Hamilton). It appears that some soldiers continued to live in Fort Tompkins until World War 1.

Fort Wadsworth in the 1880s acquired an attractive, park-like appearance. This change was a result, in part, of the cessation of major construction activities which had been on-going at the post since the 1840s. Additionally, because of the growth of population in the surrounding Staten Island neighborhood, local public opinion began to have an effect on the appearance of the post. In 1872, the Secretary of War and Congress received a petition signed by residents and officeholders of the village of Edgewater, Staten Island, complaining of an outbreak of malaria among the garrison and inhabitants of the neighborhood. The outbreak was attributed to the presence of irregular piles of earth and improper drainage caused by construction. A resolution to the House of Representatives directed inquiry into the matter, and the engineer and medical departments of the Army made investigations.

A report prepared by Surgeon J. Cooper M'Kee and Assistant H.R. Tilton in 1872 provides an explanation for this problem, along with some insights on the pungent edaphic conditions on the

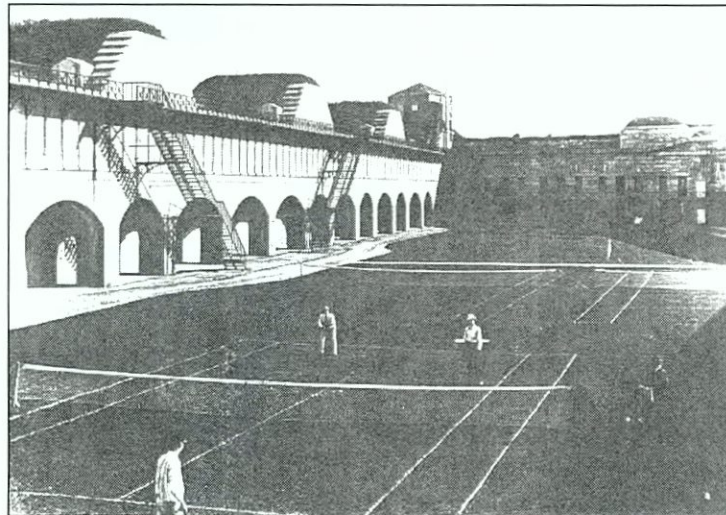
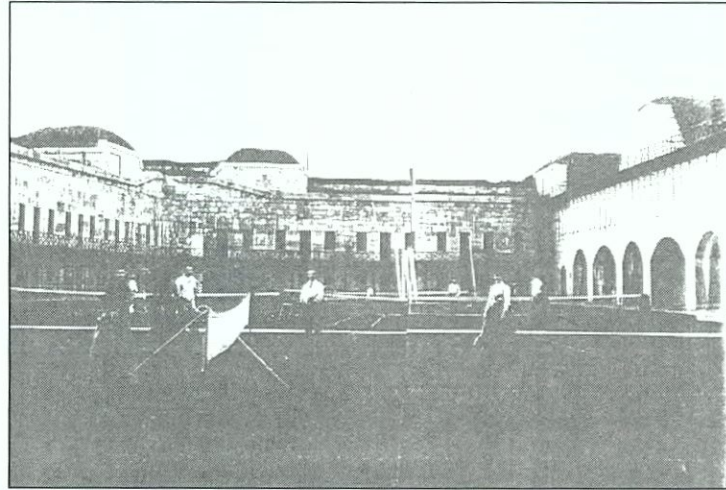
**Figure 3:5** Shows the appearance of Fort Wadsworth following the Civil War, including buildings along Mont Sec Avenue. From "Ground Plan of Fort Wadsworth Showing Location of Buildings, 1871. From Cartographic Research Room, National Archives, Washington, Miscellaneous Fortification Files, Fort Wadsworth.



site:

The hills on the island surround many deep hollows or basins, some of which are in the limits of the reservation, exercising an important influence on its hygiene. The soil is very spongy and porous and absorbs a large quantity of water. During the warm weather great atmospheric humidity is maintained from the rapid evaporation arising from the surface of the earth, which is said to be hardly ever dry, and

**Figure 3:6** Tennis courts at Fort Tompkins, November, 6, 1888. Courtesy of Staten Island Historical Society.



when exposed or denuded of vegetation, is never free from fungi. Having no outlets and receiving the drainage from the surrounding surface, the valleys already mentioned usually contain ponds or swamps, which, during the summer and autumn, emit great quantities of vapor, in connection with diffusible products of organic composition.

In response to this complaint, in 1873, the engineer in charge of the site reported grading the slopes and the glacis around Fort Tompkins, and draining and filling the swamp at the foot of the glacis next to New York Avenue. Apparently also around this time a thick cover of grass was planted on the ground and on all exposed earthen surfaces on parapets, parades, traverses, terrepleins, or elsewhere, resulting in a rolling lawn throughout much of the post. This was done apparently not only to improve the appearance of the base, but to prevent erosion due to rainfall on the post's steep slopes. As a part of this program of improvements the Fort Tompkins Quadrangle was graded, sodded and fertilized to produce a rich, healthy lawn. In addition to its use as a military drilling ground, photographs from this period indicate that it was used for lawn tennis, providing adequate space for seven courts (figure 3:6). Finally, in the 1880s, Fort Wadsworth's three miles of surfaced roadways which had been Macadamized following the end of the Civil War, received a new dressing of gravel.

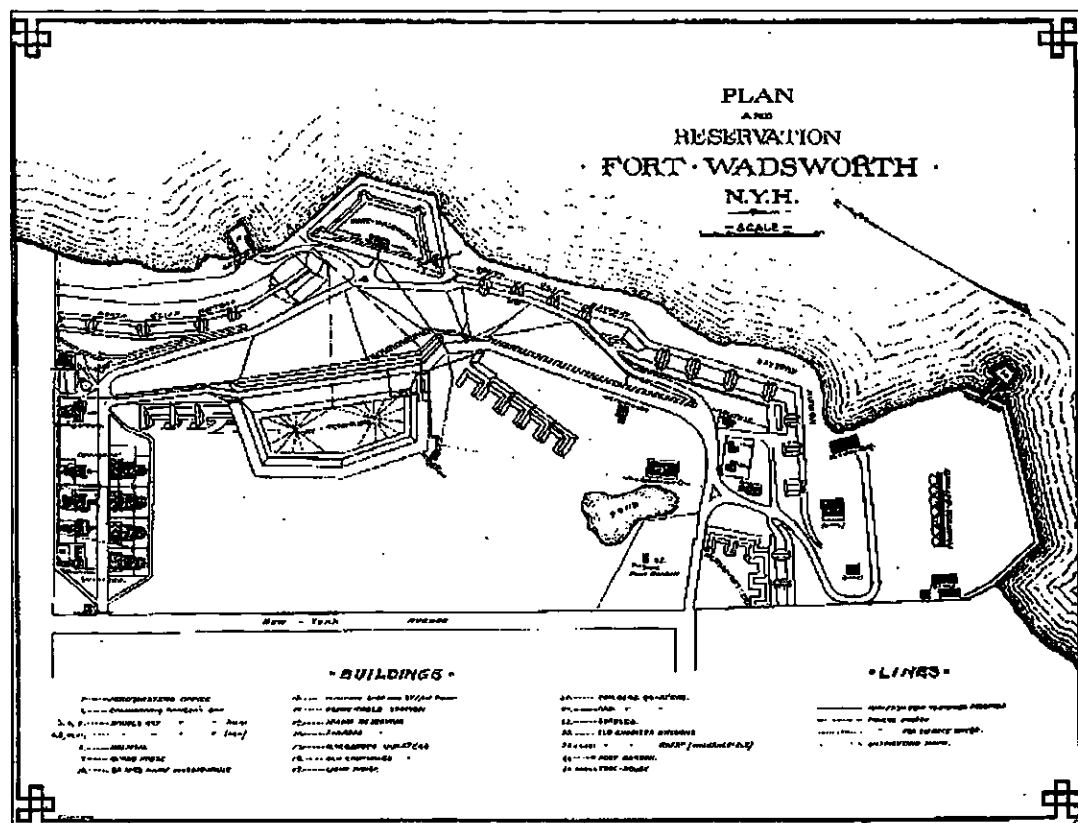
A map from 1889 shows Fort Wadsworth with a orderly, well-planned appearance (figure 3:7). In the late 1870s or 1880s, approximately ten wooden frame structures were erected in what was then the northwest corner of Fort Wadsworth. All of these buildings fronted on the road now known as Mont Sec Avenue, and constituted a traditional residential streetscape. These included the hospital, quarters for married and single officers, and a residence for post commanders. A headquarters building was constructed, overlooking the northern end of North Cliff Battery. Enlisted men continued to live in Fort Tompkins during this period. A photograph from the 1880s shows the north side of Mont Sec Avenue lined with a sidewalk, a low, wrought-iron fence, and

20-25' trees planted at regular intervals (figure 3:8). Along the south side of the street the sidewalk appears to be under construction, and the trees are significantly smaller. A low fence separated the sidewalk from the front yards of the houses, with wooden gates opening to paths and steps leading to each front door.

The 1889 map of Fort Wadsworth also shows a cluster of buildings in the vicinity of Battery Hudson. South of the battery were three buildings controlled by the post engineers, including a hostler's building, a blacksmith shop and cement shed. In the rear of Battery Hudson and south of the road leading to Richmond Avenue stood the relocated lighthouse, quarters for the ordnance sergeant, and a stables. North of the road were separate quarters for the quartermaster and commissary sergeants, and a coal shed. West of these buildings was a pond and the post garden. The cemetery is not shown on maps from this period. The large area sloping down from New York Avenue to Fort Tompkins appears undeveloped at this time.

#### The Era of The Endicott Batteries: 1890-1920

In 1885 President Grover Cleveland established a special committee to review America's coastal defenses, and make recommendations for improvements. William C. Endicott, Secretary of War, headed the group, whose recommendations provided the outline for a modern system of seacoast defense. The program called for by the Endicott Board represented an enormous national undertaking. The report identified twenty seven sites in the United States requiring new defenses, and placed New York at the top of the list. Largely as a result of these recommendations, Fort Wadsworth experienced dramatic change in the years from 1890 to 1905. During the Endicott years the United States Army had the authority to institute condemnation proceedings in the courts to require the owners of property needed for fortifications to accept reasonable payment. Consequently, between 1892 and 1901 Fort Wadsworth expanded by an additional 129 acres extending to the west and southwest of the existing grounds (3:9). This land included property formerly included in ten private residential estates (3:10). Residential structures, many of them quite



sizable, appear to have stood on most of the parcels acquired by the government.

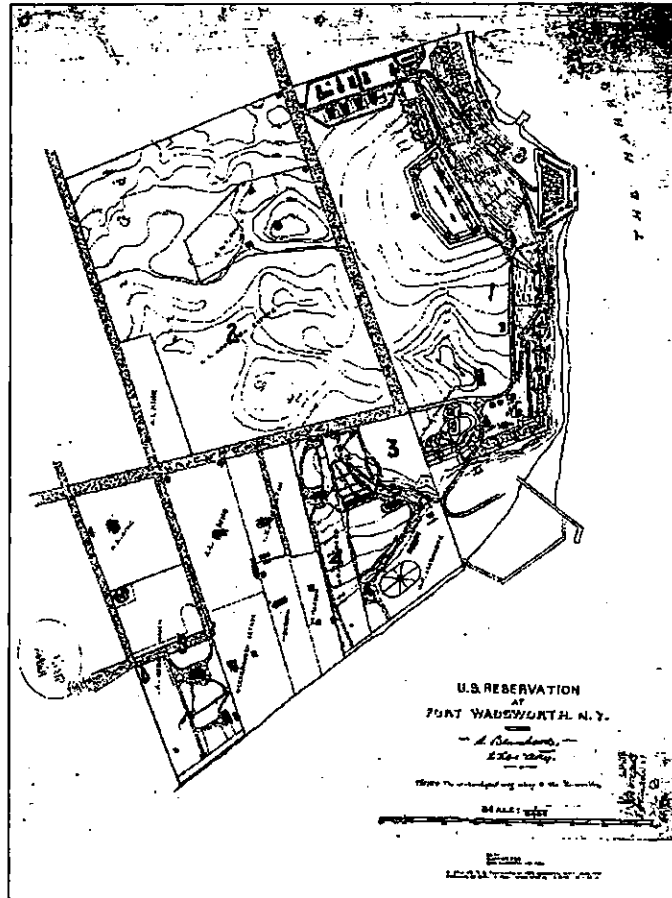
Nearly all of the residential structures and associated out buildings were later destroyed. A map from the turn of the century indicates that several of these residences were temporarily used as officer's quarters prior to their demolition for the development of new batteries (figure 3:11). A 1902 memorandum prepared by W.L. Marshall, Major, Corps of Engineers, identifies a variety of these structures as being used as quarters by staff from the Corps of Engineers at that period. The only residence to be retained at the military base for any period of time following the estate period was an imposing residence located at the eastern end of the Parade Ground. Though referred to one post history as the former Joseph Whitney Estate, it is shown on maps from this period as

Figure 3:7 Shows the appearance of Fort Wadsworth prior to its expansion to the west. From "Plan and Reservation, Fort Wadsworth, New York, 1889). (Source?, RG 92, Blueprint File.)





**Figure 3:8** Mont Sec Avenue, looking east, at some time from 1880-1892. Courtesy of the Staten Island Historical Society.



**Figure 3:9** Shows proposed expansion of Fort Wadsworth, 1894. From "United States Reservation at Fort Wadsworth," drawn by A. Blanchard. Source?, RG 92, Blueprint File, Fort Wadsworth, N.Y."

**Figure 3:10** Fort Wadsworth, Growth of Grounds, 1794-1902. Source: Walker, New York Commissioners of Fortifications: Annual Reports, Chief of Engineers, 1891-1902. (Excerpted from Black, p.109).

**TABLE 1**  
**FORT WADSWORTH, GROWTH OF GROUNDS,**  
**1794-1902**

DATE	ACREAGE	AMOUNT	SELLER
Nov. 24, 1794	25	93,062.60	Ann Jacobson & Catherine Van Deventer
Nov. 20, 1809	22	7,500.00	John Jacobson
Aug. 8, 1834	5.2	(unk)	Peter Jacobson
May 26, 1856	17	42,000.00	William Aspinwell
Mar. 4, 1892	28	100,000.00	Adolfo Hegewisch
Mar. 4, 1892			Josepha Hegewisch
Jan. 5, 1893	50	(unk)	Sarena P. Appleton
Jan. 5, 1893	7.58	(unk)	J.J. Alexandre
Jan. 5, 1893	18.797	(unk)	J.H. Alexandre
Feb. 1, 1895	6.25	53,680.00	Sarah Martin
Mar. 11, 1898	7	60,000.00	Joseph Whitney
Aug. 30, 1898	6.72	(unk)	Eliz. Ockerhauser
Oct. 18, 1900	7.725	43,266.00	Joseph Whitney
Feb. 2, 1901	5.09	30,000.00	Adeline Hautum
Oct. 2, 1901	3.9	38,000.00	Henry Mouquin

Sources: Walker; N.Y. Commissioners of Fortifications: Annual Reports, Chief of Engineers, 1891-1902

being included in the former Mayo Estate. Further, as historian Black points out, Whitney's land was located south of Richmond Avenue. This residence was used as the commanding general's residence until the beginning of World War II.

Between 1895 and 1904, six modern batteries for high powered artillery were built at Fort Wadsworth, all but one on the recently purchased land south of Richmond Avenue. Battery Duane, located south of Fort Tompkins, was completed in 1896. In early 1896 construction started on Ravenna Battery, which was renamed Battery Upton in 1902. Further to the west, Clifton Battery (renamed Battery Duane in 1902) was begun. For a period between 1896-1902, batteries Ravenna and Clifton were known together as Fort Newton. However, after the entire base was named Fort Wadsworth in 1902, the name Fort Newton disappeared from all records. Battery Richmond, constructed in 1898 and 1899, and Battery Ayres, built in 1900 and 1901, were located between Battery Barry and the new western boundary of the post. Battery Dix, located due south of Battery Upton, was the last battery to be completed in 1902. A Command Center (Building 320) was strategically located among the batteries.

In addition to the construction of new works, the Army almost completely reconstructed the existing ground level works of North and South Cliff Batteries, Battery Hudson and the extension of Battery Hudson. At that time the North Cliff Battery became Battery Catlin and South Cliff Battery, divided into three separate segments, became Batteries Bacon, Turnbull and Barbour. The extension to Battery Hudson became Battery Mills. With the Endicott Program the South Mortar Battery was dismantled. Fort Richmond and Fort Tompkins were not affected. Both the new and reconstructed gun batteries required huge amounts of earth and concrete (figure 3:12).

During the period 1890-1920, many structures other than batteries were built at Fort Wadsworth. Several large structures were built to store and operate torpedo mines. The Torpedo Storage Building, was constructed in 1892-1894, adjacent and to the west of Battery Weed. The following year, a cable tank and cover was

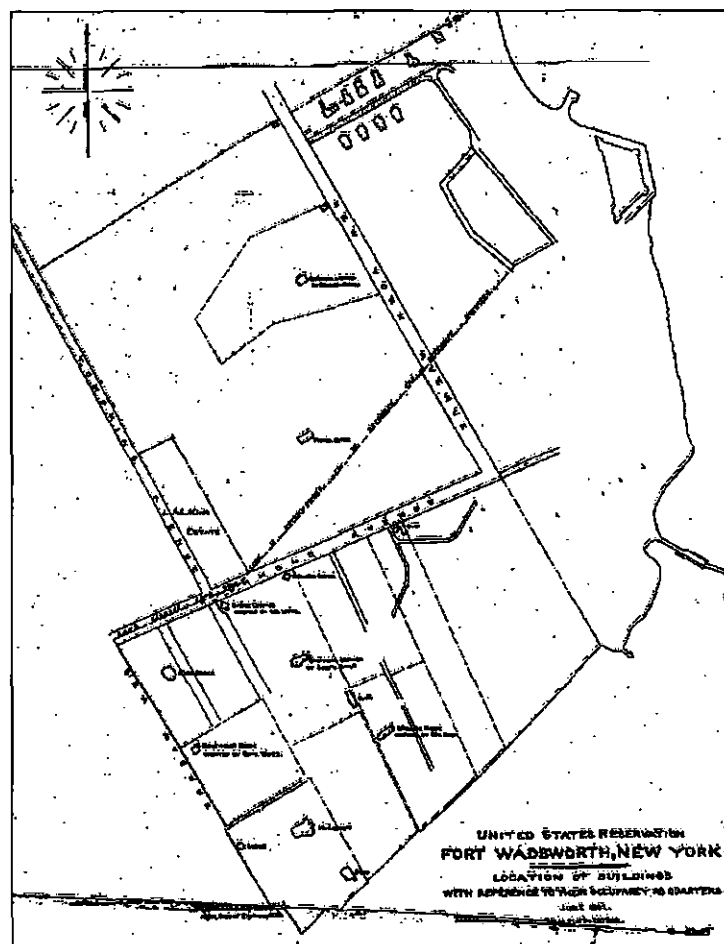


Figure 3:11 "United States Reservation, Fort Wadsworth, New York. Location of Buildings with Reference to Their Occupancy as Quarters, June 1902." National Archives, Cartographic Division, Bayonne, RG 77 Drawer 43, Sheet 85-3.

constructed across the road to the north of the Torpedo Storage Building; this building was enlarged in 1899 (figure 3:13). In 1902-1903 the Wadsworth Lighthouse was moved from its location behind Battery Hudson and a combined fog signal and lighthouse was constructed on the barbette of Battery Weed's north-east bastion. The station consisted of a light tower, bell frame and bell, and a watch room (figure 3:14).

Between 1899 and 1906 a row of structures was constructed along the east side of New York Avenue, including 4 single Officers Quarters, a bake shop, storage building, and several structures





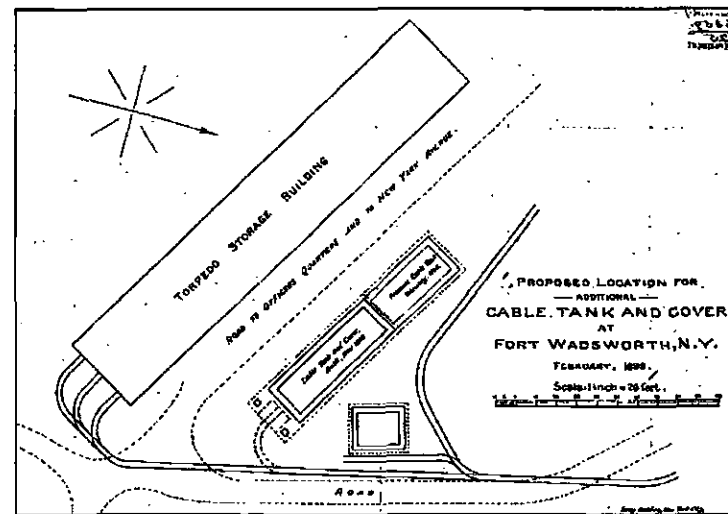
**Figure 3:12** Shows location of Endicott Batteries, and topographic conditions. From "Post and Reservation Map of Fort Wadsworth, NYH, Compiled from the Latest Information." National Archives, Bayonne, RG 77 War Department Collection.

associated with the post hospital including the hospital itself, hospital dining room, ambulance room, morgue, and hospital stewards' quarters. The former Appleton Estate, located in the northeast corner of the post, was the site of an above ground Peace Magazine for weapon's storage, and the central electric power and light plant. Maps indicate that at some point between 1906 and 1913 a post exchange and gym were constructed on the west side of New York Avenue (figure 3:15).

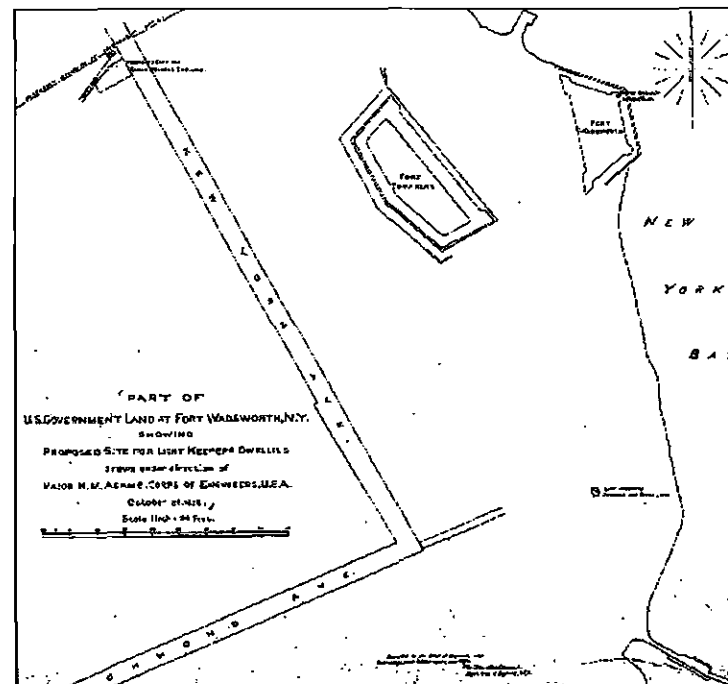
An interesting note in the history of Fort Wadsworth occurred in the years immediately before World War I, when clothier Lewis Rodman Wanamaker proposed the construction of a large memorial to the American Indian to be located, in part, on the eastern facade of Fort Tompkins (figure 3:16). Aside from his successful business interest, Wanamaker was very interested in American Indians, and financed a number of ethnographic expeditions to the American West. In conjunction with the Department of the Interior he made a movie about Indians entitled "Hiawatha."

On April 4, 1911, Congress passed a bill stating that "There may be erected, without expense to the United States Government, by Rodman Wanamaker, of New York City and others, on a United States Reservation, in the harbor of New York, upon a site to be selected by the Secretary of War and the Secretary of the Navy, a suitable memorial to the memory of the North American Indian." On February 22, 1913, a dedication and groundbreaking ceremony was held, including President Taft and his wife, Helen, along with 33 tribal chiefs. According to an article written on the 75th Anniversary of the groundbreaking ceremony, researchers have never been able to determine why the monument was not built. However, there is speculation that America's subsequent entrance into World War I used the allotted funds.

During World War I Fort Wadsworth's garrison increased sharply to 1,400 men, where it remained until 1918. A detailed map from 1918 shows the appearance of the post during World War I, though, unfortunately, the key for this map has never been located (figure 3:17). In response to the increasing numbers of soldiers on base, a limited amount of temporary housing appears to have



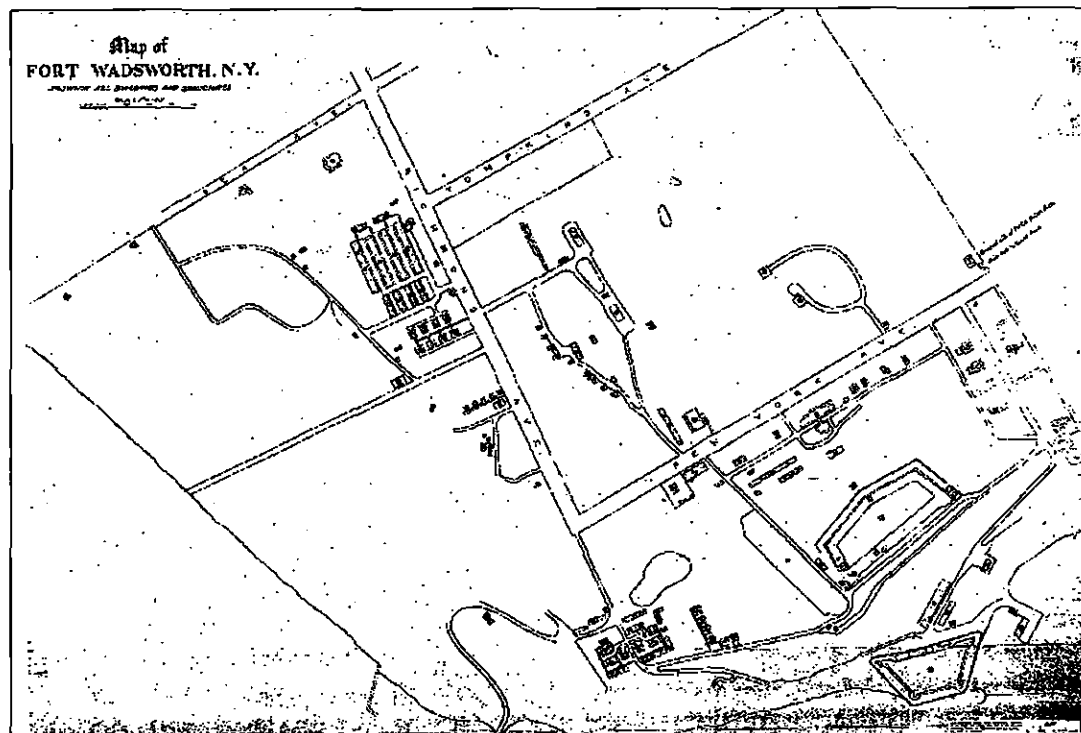
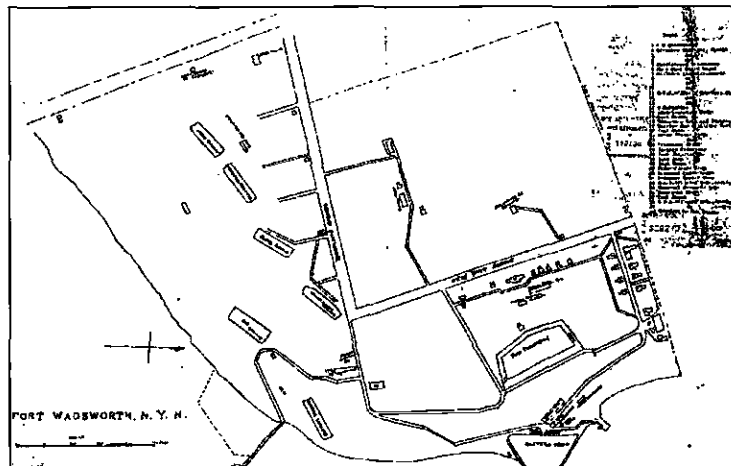
**Figure 3:13** Proposed Location for Additional Cable Tank and Cover at Fort Wadsworth, February, 1899. From Letter of Major H.W. Adams, February, 1899. National Archives, Bayonne, RG 77.



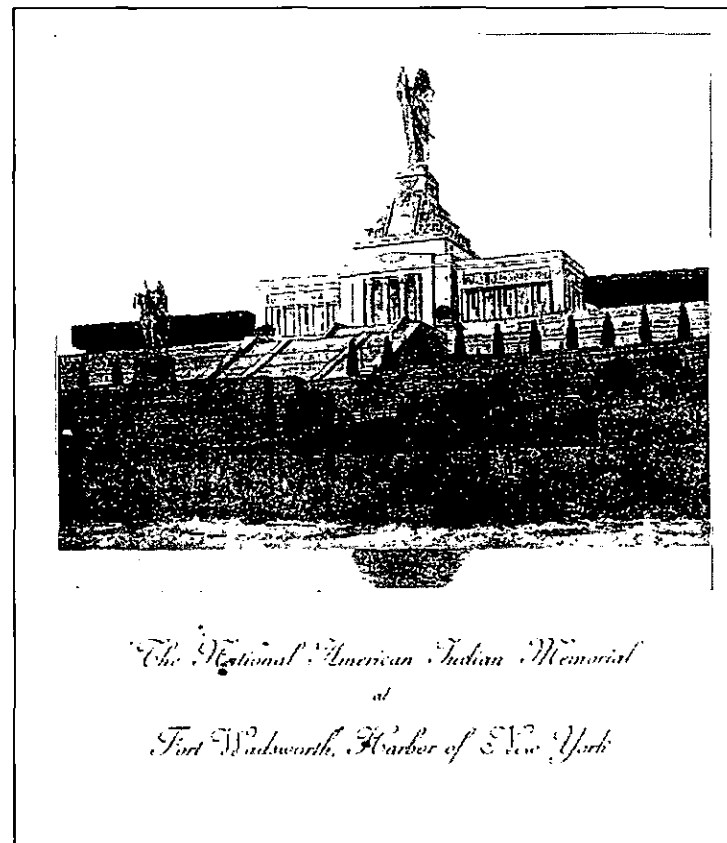
**Figure 3:14** "Part of United States Government Land at Fort Wadsworth, New York, Showing Proposed Site for Light Keepers Dwelling." Drawn by Major H.M. Adams, Corps of Engineers, October, 26, 1898. National Archives, Bayonne, RG 77.



**Figure 3:15** Shows new construction, 1900-1906. "Fort Wadsworth, N.Y.H." Source, RG 92, Blueprint File, Fort Wadsworth, New York.



**Figure 3:17** Shows all buildings and structures at Fort Wadsworth except the batteries, in 1918. Unfortunately, no key has been located. National Archives, Bayonne, RG 77.



**Figure 3:16** Shows proposed American Indian Memorial at Fort Wadsworth, Staten Island. From the program for the dedication and groundbreaking ceremony, February 22, 1913. Printed by Rodman Wannamaker, 1913.

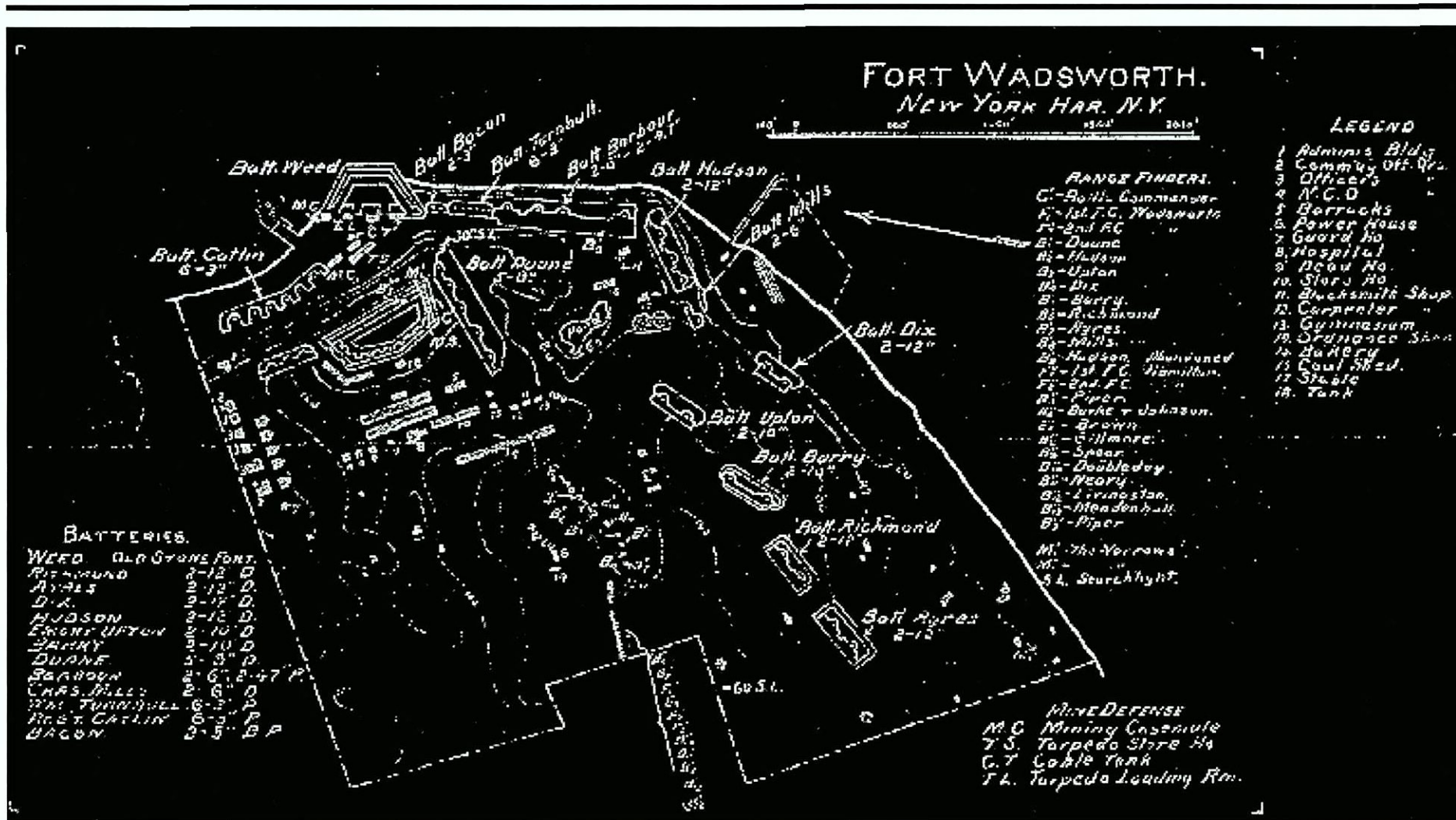
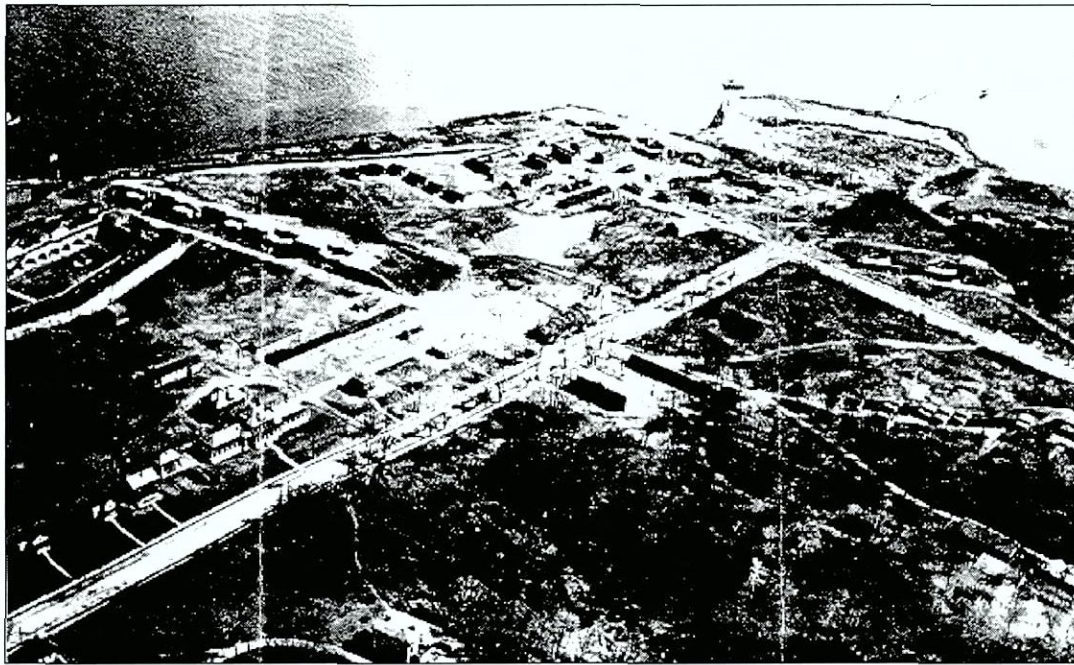


Figure 3:18 Shows weapons and range finders located at Fort Wadsworth, circa 1918. National Archives Source?





**Figure 3:19** Aerial view of Fort Wadsworth, c. 1927. Note the structures along New York Avenue, the temporary barracks at the southern end of the post, and the range-finders along Artillery Road. From *Department of the Army, United States Army Military History Institute, Carlisle, PA. RG 100.*

been set up in a quadrangle located on the south side of Richmond Avenue, as well as in the vicinity of Battery Hudson. In addition, owing to a shortage of housing, men from the post were assigned to a variety of off-site locations including the Atlantic Basin, Bush Terminal and the warehouse of the French High Commission, all in Brooklyn.

During World War I, the increasingly complex aiming and artillery fire control system required numerous small positions for range finders, battery commanders, and observers. The use of electricity to light the batteries and to power mechanisms to move ammunition required generator stations and transformer buildings. Some time prior to 1918 the road leading to the power house located on the former Appleton Estate was expanded into a loop road, providing a location for these modern functions. The northern branch named Engineer's Road, led to a complex of utilitarian structures including a power house and ordnance repair shop. The new southern branch, aptly named Artillery Road, was lined with nearly a dozen range finders and small ordnance storage units

(figure 3:18).

Following the end of World War I, the garrison at Fort Wadsworth was reduced rapidly. At that time, the command of that post was shifted from Coast Artillery Corps to Infantry. After this point, Fort Wadsworth's activity as a coastal defense facility declined. By 1920, four of Wadsworth's Endicott Batteries were unoccupied. Figure 3:19 shows the appearance of the post at the end of World War I.

#### **Public Works and World War II at Fort Wadsworth: 1918-1945**

The era between the world wars was marked by a significant amount of new construction at Fort Wadsworth (figure 3:20). Much of this work was carried out by the Works Progress Administration (WPA), a New Deal program established in 1935. Following World War I, Fort Wadsworth became an infantry post with only a small detachment of Coast Artillery men to care for the heavy armament still in commission. Infantry units from the First Division along with elements from the 16th and 18th Infantry, made up the major compliment of troops during this period. However, a detachment from the 5th Coast Artillery Regiment maintained the guns along the Narrows. Units from the Quartermaster Corps and the Medical Department were also located at Fort Wadsworth during this period.

In 1925 Post Engineers began work on the construction of a Parade Ground in what was formerly a wooded, marshy area on the west side of New York Avenue (figure 3:21). The Engineers drained the swamps, and then leveled and filled them. In order to provide for adequate drainage a pipe had to be run from the opposite side of New York Avenue connecting with the sewer system. The huge oak trees lining the field had to be cut down, and the stumps dynamited. By 1927 the parade ground was completed. As constructed, the Parade Ground was a relatively informal largely open area, crossed by curvilinear paths.

Between 1929 and 1931 concrete barracks were constructed (Buildings 210 and an adjacent barracks which is no longer



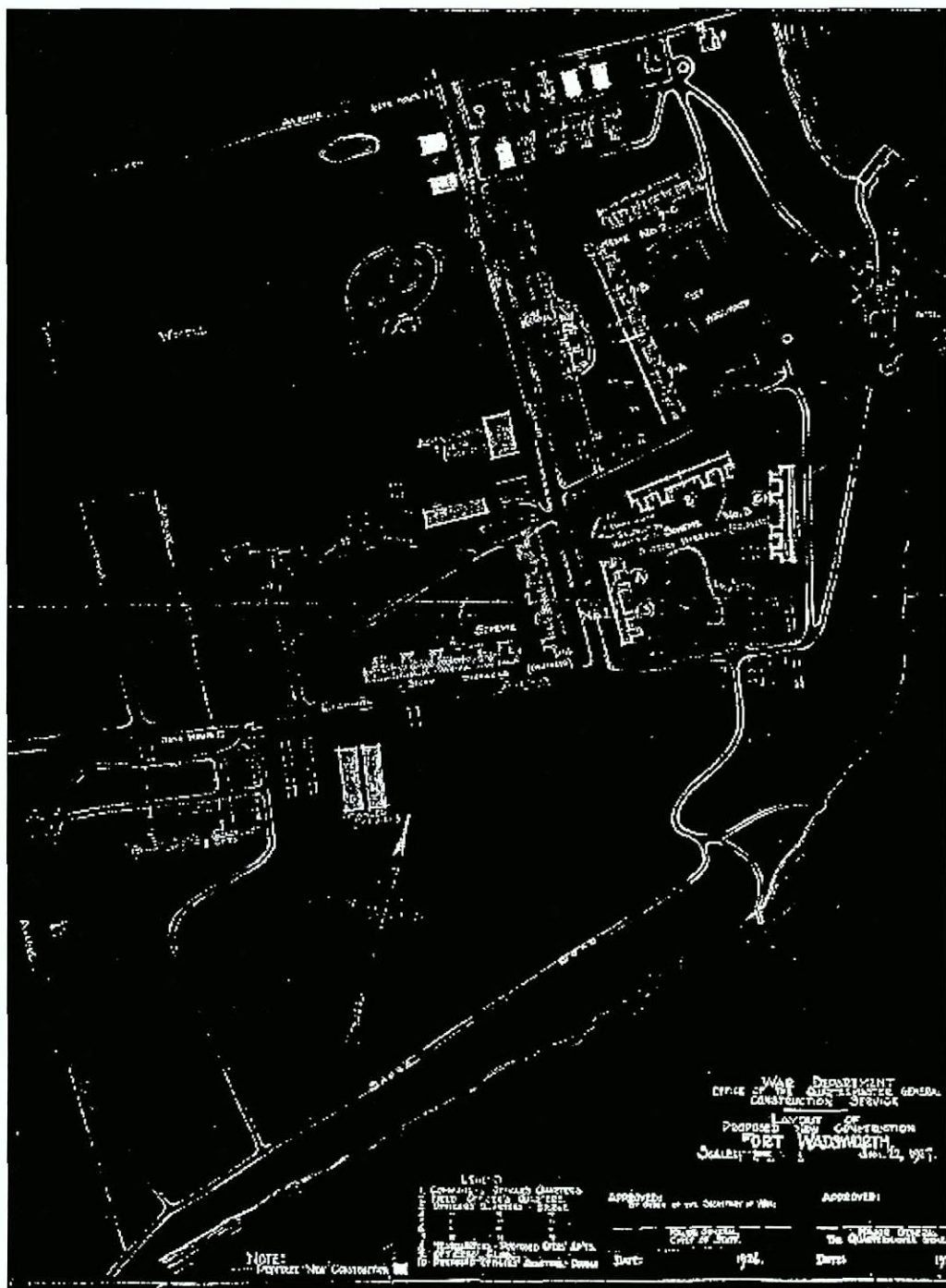


Figure 3:21 Aerial View of Fort Wadsworth, c. 1927. Note appearance of Parade area west of New York Avenue. From Department of the Army, United States Army Military History Institute, Carlisle, PA. RG 100.

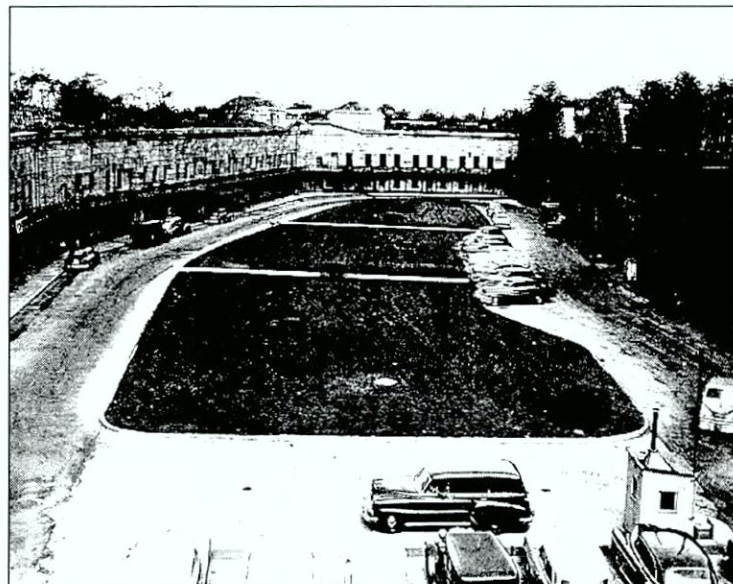
Figure 3:20 Shows proposed construction at Fort Wadsworth, 1927. "Layout of Proposed Construction, Fort Wadsworth, January 1927." Source?



**Figure 3:22** Post Theater, c. 1932-1960. Source? Negative Received from Second Coastal Artillery Division.



**Figure 3:23** Fort Tompkins Quadrangle, c. 1930s. Source, National Archives.



extant) along the western side of New York Avenue, each providing housing for approximately 602 men. Despite complaints extending back into the 19th-century, these were the first permanent barracks constructed on the site. Apparently, these barracks were a result of a new housing program developed by the War Department in response to a shortage of “proper housing facilities for the Infantry of the Army.” At Fort Wadsworth this effort marked the end of Fort Tompkins' use as a residential barracks. A post theater was constructed in 1932 by a group of federal prisoners temporarily housed in Fort Tompkins (figure 3:22).

In 1931-1932, five brick multi-family residential units were built adjacent to the pre-existing houses along Mont Sec Avenue. (Buildings 101, 110, 115, 106 and 107, along with two officer's garages (Buildings 104 and 105). Buildings 106 and 107 were sited on the location of two earlier homes which had apparently been demolished at some point in the first two decades of the twentieth century (figure 3:24). Buildings 102 and 103, along with 111-118, which dated from the late nineteenth century, appear to have been rehabilitated at this time. In 1938, a new brick post exchange was constructed at a new location on the east side of New York avenue. Photographs and maps of the base from 1938-1960 suggest that the original, c. 1910 post exchange located directly between the two barracks was maintained and used as the post headquarters.

In 1935 laborers of the Works Progress Administration and the Veterans Company of the Civilian Conservation Corps (CCC) arrived at Fort Wadsworth. Temporary barracks built of wood planks were constructed at the western end of New York Avenue to house WPA and CCC laborers. Projects worked on by the WPA included the front and back gates of Fort Wadsworth, garages, several guardhouses, the Non-Commissioned Officers Club (NCO) (Building 352), the handball court behind the infantry barracks, and several roads. In 1938 the CCC workers constructed a part of the seawall, with some limited forestry work around the reservation. In the 1930's a large brick stable was constructed to house the Army's horses and mules. A photograph from the 1930s



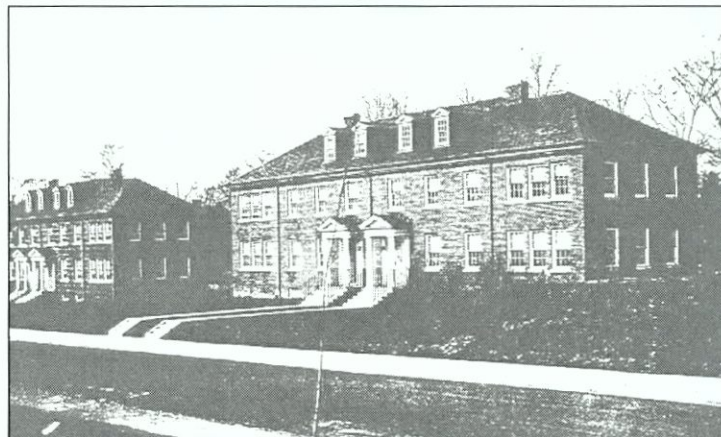
shows that by this time the Fort Tompkins Quadrangle provided a convenient location for parking (figure 3:23).

Photographs from the late 1930s indicate that as part of the public works rehabilitation program at Fort Wadsworth, the former Dead House, or Morgue, adjacent to the hospital, was rehabilitated and converted into the post library (figure 3:25). Similarly, the row of Officer's Quarter's along the east side of New York Avenue were rehabilitated (figure 3:26).

With the start of World War II, Fort Wadsworth once again resumed its historical role as a critical point in the defense of New York Harbor. All infantry units were removed from Fort Wadsworth, and the post was placed under the control of Coast Artillery corps. The 1205th Service Command Unit was organized and stationed here in December, 1940. The role of the troops included both coastal and anti-aircraft defense.

In order to defend New York Harbor, large seacoast guns were replaced by anti-aircraft land searchlight batteries. A mine planter, the "General Ord," was housed at the post's mine battery unit. By 1944 this unit had laid an extensive anti-submarine net which stretched across the Narrows. Additional protection was afforded by the establishment at the post of a Harbor Entrance Control Post, which checked all vessels entering New York Harbor. In addition to the coastal defense operation at Fort Wadsworth, the 1205th Service Command Unit was placed in charge of supplying and servicing troops that manned gun positions throughout Staten Island and shore points along the Jersey Coast. Along with its role in coastal defense, Fort Wadsworth served as a training ground for units preparing for overseas assignments. Finally, from 1944-1945, Fort Wadsworth housed an Italian Service Unit including 25 Officers and 250 enlisted men who were all prisoners of war.

Despite the renewal of military activity, few physical changes appear to have occurred at Fort Wadsworth during the war years (figure 3:27). Unlike earlier wars, when temporary barracks were erected to house an influx of soldiers, World War II enlisted men



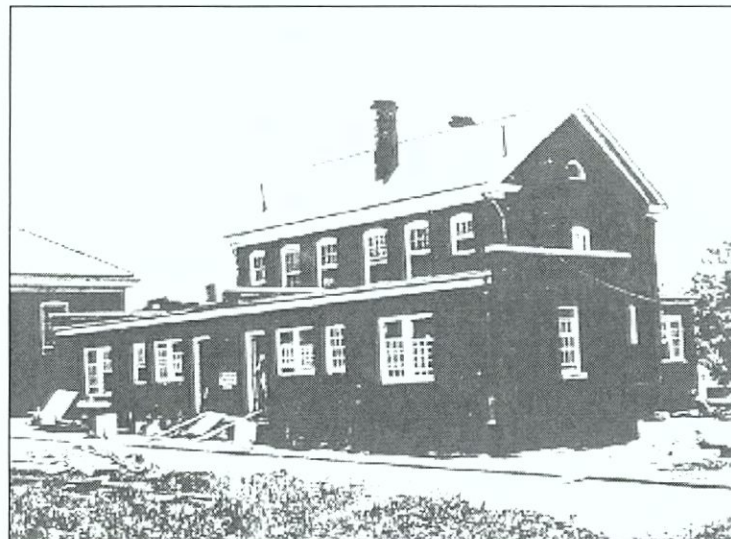
**Figure 3:24** New Officers Quarters on Mont Sec Avenue, c. 1930s. Source? Received from 2nd Coastal Artillery.



**Figure 3: 25** Post library, located in former "dead house," or morgue, c. 1937. Source? Received from 2nd Coastal Artillery.



**Figure 3:26** Rehabilitated Officers Quarters along New York Avenue, c. 1938. Source? Received from 2nd Coastal Artillery.



occupied the barracks erected in 1929. In 1940-1941 the Wharf north of Battery Weed was rehabilitated. A small structure labeled “Rod and Gun Club,” (Building 140) was built in 1940, (perhaps on the site of an earlier structure) and in 1944, a small arms range was erected in the southern corner of the site.

#### **Post-war Era at Fort Wadsworth: 1945-1960**

At the end of World War II Fort Wadsworth served briefly as a Classification and Assignment Center. By 1946, however, the post was generally quiet. Around 1948 a large trailer camp was developed at Fort Wadsworth to house military families associated with the base. The camp, the only one in New York City, appears to have been located on the northern end of Richmond Avenue included 36 trailer spaces with water and electric power outlets, and a pipe link to the Wadsworth sewage system. A chemical warfare training building, moved to the camp in its entirety from another part of the post, was used as a central heating and sanitation structure. In 1948 sidewalks were installed at various locations around the base.

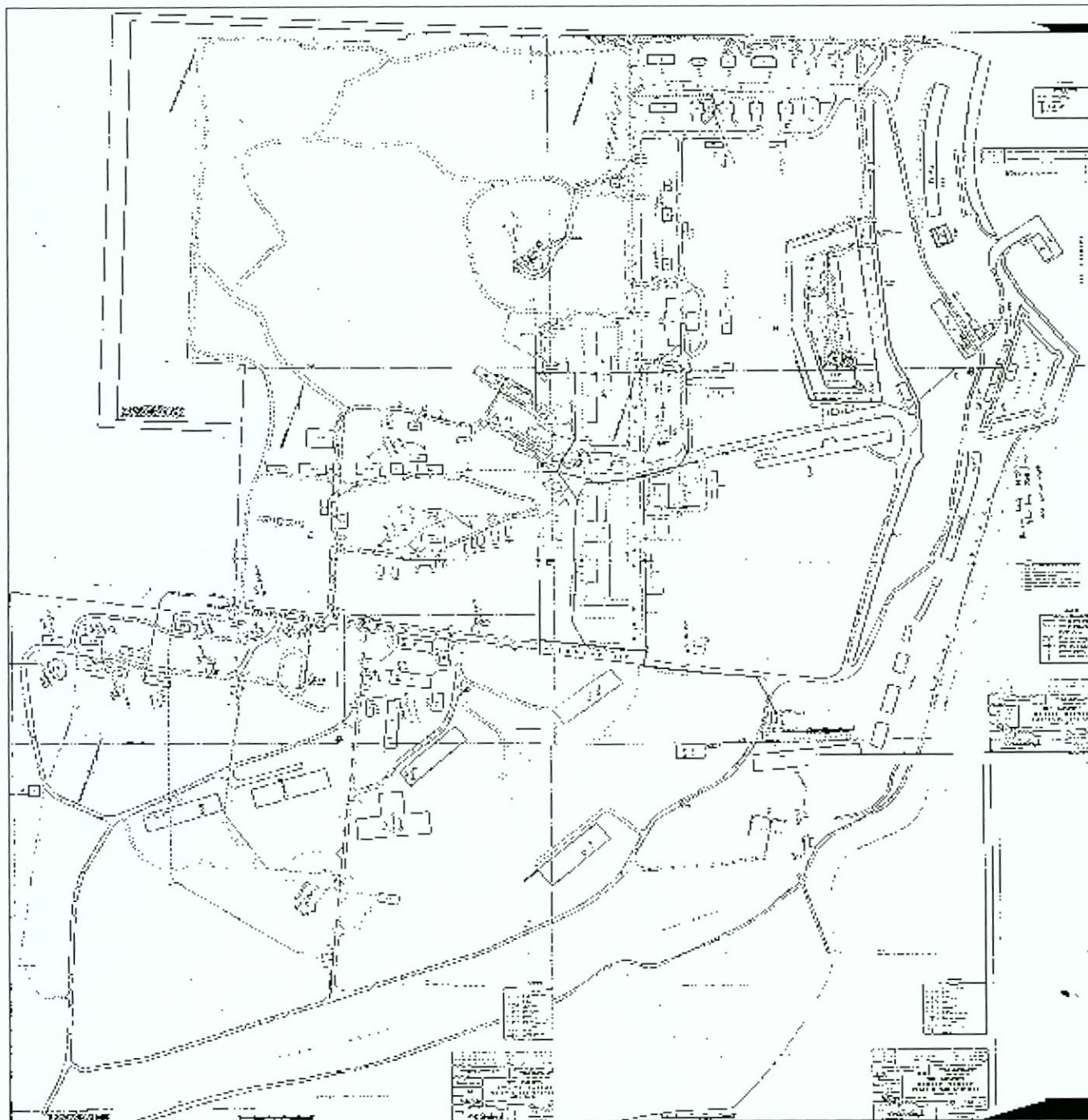
During the Korean War (1950-1954) Fort Wadsworth was briefly used as a basic training station for infantry units from the National

Guard, as well as an anti-aircraft defense site. In 1952 National Guard units were replaced by a former World War II unit, the 52nd AAA Brigade. Coincident with the use of Fort Wadsworth during the Korean War, two new barracks (Buildings 223 and 222) were built along the northern boundary of the site on a sloped area west of New York Avenue, and Officers Quarters (Building 118 and 119) were constructed across the street on the east side of New York Avenue.

Between 1953 and 1954, Brigade Officers and Army Engineers studied areas on New York, Long Island and New Jersey to be used as Nike missile launching sites under the command of the 52nd AAA Brigade. Despite the concerns of many local citizens, sites were chosen and construction began. Although no actual Nike sites were constructed at Fort Wadsworth, it did serve as the command center for Nike missiles throughout the New York area. It is unclear whether the implementation of the Nike program resulted in any new construction at Fort Wadsworth, or if the existing Command Center, built c. 1895-1900 (Building 320) provided sufficient and usable administrative space. Aerial photographs of Fort Wadsworth dating from 1954 and 1960 note the presence of “First United States Army ACAN Transmitter Station Farm,” located in the southern end of the site. However, it is not known if this transmission network had anything to do with the post’s role in the Nike Program (figure 3:28).

In the late 1950s, 66 housing units were developed at the southern end of Fort Wadsworth, in a complex known as the Capehart housing development. (Currently, Building 442 A and B are the only housing units remaining from this era.) With the construction of the new Capehart housing, temporary housing was apparently no longer necessary, and in the early 1960s Fort Wadsworth’s trailer camp was removed.

By far the most dramatic physical changes to Fort Wadsworth during the post World War II era were brought about by the construction of the Verrazano Narrows Bridge from 1959-1964 (figure 3:29, 3:30). Highway engineers had long dreamed of connecting Staten Island with Brooklyn, and in the 1920s work began on



**Figure 3:27** Fort Wadsworth Utility Survey and Electrical System, 1950. Fort Wadsworth Site Files, Staten Island, New York.





**Figure 3:28** Aerial View of First United States ACAN Transmitter Station Antenna farm at Fort Wadsworth, Staten Island. Photo by Frank Cordeiro, First United States Army Central Photo Lab, Governor Island, New York. Source, Reproduced at the National Archives.

a tunnel between the two boroughs. However, the tunnel project was soon aborted. Early in 1955, a \$220 million bridge linking Staten Island and Brooklyn was authorized by the federal government. The proposed bridge caused considerable controversy, largely because its approach lanes required the removal of 8,000 Brooklyn residents from their homes.

At Fort Wadsworth, the construction of the Verrazano Bridge resulted in the demolition of a variety of structures which were located under the span of the proposed megastructure. The first structure to be demolished, on August 18, 1959, was the Commanding General's House, which had been acquired with the enlargement of the base in the late nineteenth century. Post buildings removed at this time included the brick headquarters building of the 80th Artillery Group, the theater, post exchange, small coast guard station, and the First Army Signal Service Unit building. Artillery Road and Engineers Road, and the numerous range finders and utilitarian structures located along these two roads

were also demolished at this time. The construction of the bridge also appears to have coincided with the disappearance of the pond, post garden and cemetery.

In 1960, with the completion of the "Missile Master System" at Highland, New Jersey, the 52nd Brigade transferred all of its activities to the Highlands Air Force Base. At that time Fort Wadsworth became the headquarters for the United States Army Corps, effectively ending its primary role in coastal defense.

#### **Fort Wadsworth: 1960-1994**

As a result of the reduction in post support facilities caused by the construction of the Verrazano Bridge, replacements for the buildings demolished were erected at the far western end of the Parade Ground in the early 1960's including a gym (Building 204), theater (Buildings 205), and post exchange building (Buildings 206-207). The chapel (Building 203) and a new set of Barracks (Building 208) were also constructed at the eastern end of the Parade Ground along New York Avenue at this time. The former post hospital, built around the turn of the century, was rehabilitated to serve as the new post headquarters (3: 31).

In 1966 the Fort Wadsworth Museum was created in a portion of Fort Tompkins in an opening ceremony attended by more than 1,500 people. For several years, this museum was open to the public, including school groups, from 1-5 every afternoon.

In 1972 the Department of Defense announced plans for declaring Fort Wadsworth as surplus, placing it at risk for development. However, popular support for the preservation of the post quickly emerged, and was soon endorsed by Staten Island Borough President Robert T. Connor and U.S. Representative John Murphy. As a result of this pressure, The New York City Landmarks Commission nominated Battery Weed to the National Register of Historic Places in 1972, and Fort Tompkins was nominated in 1974. From approximately 1974 to 1979 an Army chaplain's school was operated out of the second floor of Fort Tompkins.

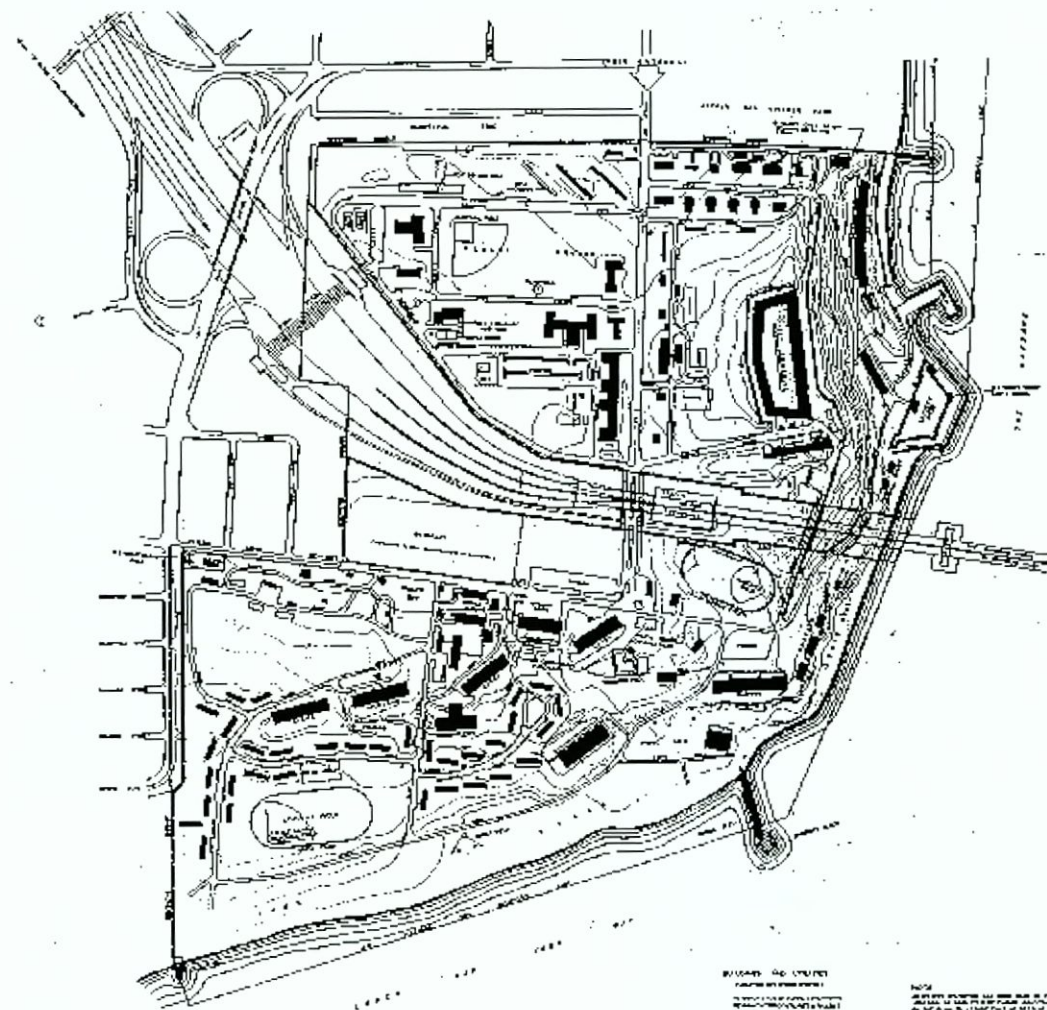


Also in 1972, Fort Wadsworth was identified as a part of the newly created Gateway National Recreation Area to be managed by the National Park Service. Under the 1972 law, the Army was to phase out and turn over all but twelve acres of Fort Wadsworth to the National Park Service. However, the Army decided instead to keep 40 acres of the site for housing Army, Navy, Marine and Coast Guard personnel and dependents. In addition, in 1980 the Navy decided to move its Resale and Services Support Office from Brooklyn to three buildings on a separate ten acre site within Fort Wadsworth. In a somewhat unexpected change of course the Department of the Interior conceded, stating that they were not interested in maintaining jurisdiction over any part of Fort Wadsworth. In response, a suit was filed by the Natural Resources Defense Council (NRDC) contending that the Army, Navy and Secretary of the Interior were "flouting the will of Congress."

Following a two year dispute between the NRDC and the Defense Department, on July 21, 1983, Federal Judge Edward R. Neaher ruled that the Interior Department must accept the remainder of the property as part of the Gateway National Recreation Area. One week after the judge's decision, however, the Navy announced its intention to select Staten Island as the home port for the seven ship Navy Surface Action Group, and noted that, in all likelihood all of the land at Fort Wadsworth would be necessary for defense purposes.

In 1985, the Navy issued a Record of Decision to construct a Surface Action Group (SAG) Homeport Facility on Staten Island. This facility was intended to provide administrative, housing, and support services for Navy personnel to be located at Fort Wadsworth. On October 1, 1987, the United States Navy officially acquired the Fort Wadsworth post. The work undertaken as part of the development of the Homeport resulted in a significant change to the appearance and character of Fort Wadsworth (figure 3:32), and totalled approximately \$200 million.

In conjunction with the development of the Navy Homeport, in 1988 an ambitious plan was developed by the firm of Russo and



Sonders, Architects, for the adaptive use of Fort Tompkins for base related military offices and an improved historical museum. However, this plan was never implemented. In 1990 the post headquarters and three other structures dating from the turn of the century and located on the east side of New York Avenue were demolished, and a large post-modern-style Headquarters (Building 120) and associated parking lot were constructed (1994). Between 1991 and 1993, 32 4-story postmodern, vinyl-clad multi-family housing units were developed in the area south

**Figure 3:29** Fort Wadsworth Master Plan for Redevelopment, General Site Plan, 1960. Fort Wadsworth Files, Staten Island New York.



**Figure 3:30** Shows Verrezano Bridge, 1964. Photo by Pvt. Forrest H. Fountain, Signal Corps Photo Lab. Source? Reproduced at the National Archives.



of Richmond Avenue on the former site of the Capehart housing. With the development of this new housing the entire hillside leading down to Sandy Beach was cleared and re-graded, and a network of new access roads installed. At the same time, a quadrangle of buildings known as the Bachelor Enlisted Quarters (BEQ) Gallery was developed at the eastern end of the Parade Ground. Several older units of housing were rehabilitated at this time as well. In 1993 a decision of the Base Closure Commission resulted in the decommissioning of the Homeport.

On August 31, 1994, the Naval Station was decommissioned and the Navy assumed a caretaker role pending completion of the surplus process. It is currently being determined how the land will be apportioned between various branches of the military and the National Park Service.



**Figure 3:31** Building 123 (Post Headquarters, formerly the Hospital), Jan. 1964. Photo by Pvt. Gerald Hass, Signal Photo Facility. Source? Reproduced at the National Archives.

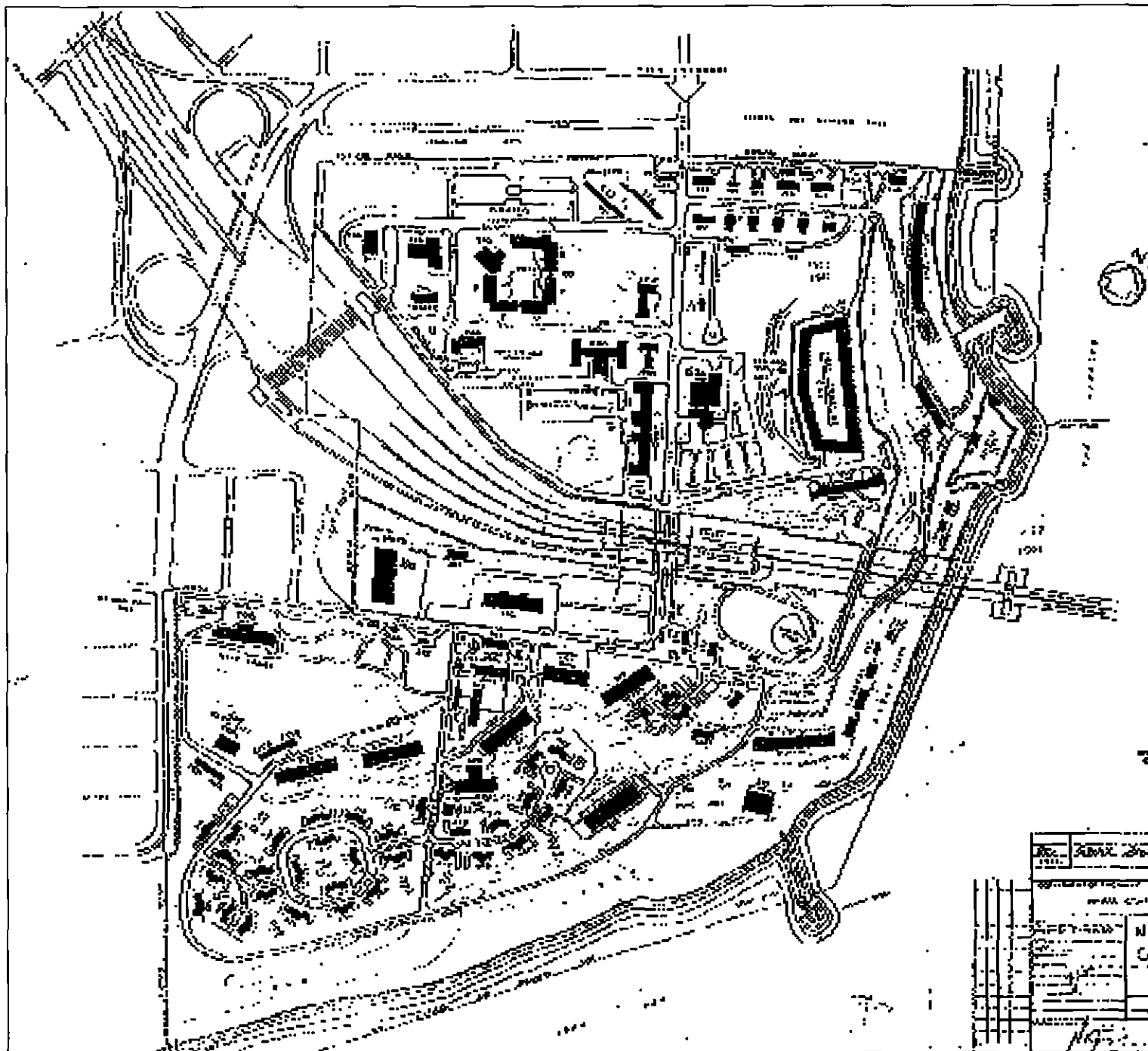


Figure 3:32 Naval Station  
 New York, Staten Island New  
 York. Site Plan, March, 1987.  
 Fort Wadsworth Site Files,  
 Staten Island, New York.



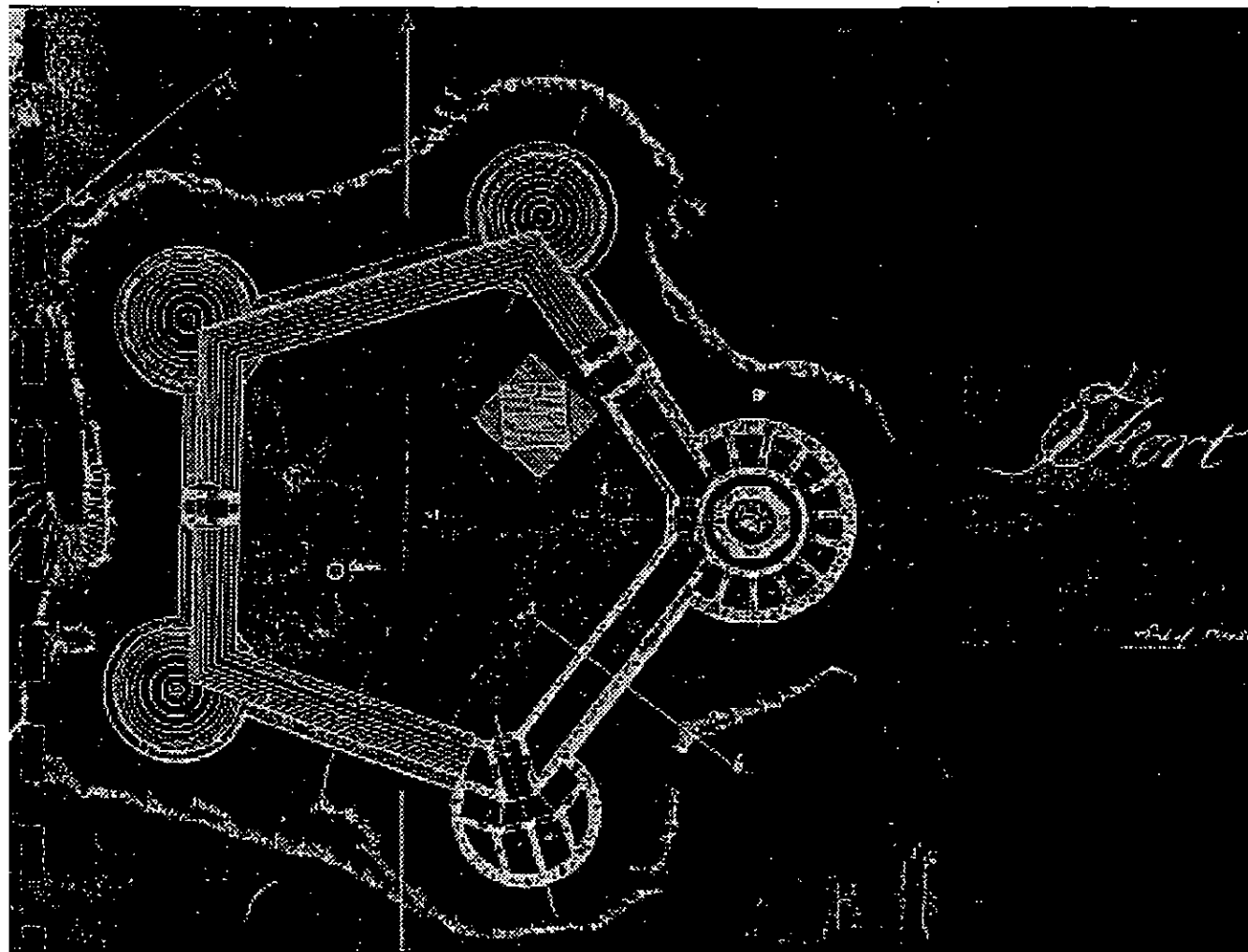
## List of Footnotes

### Section 3. Site Description/Site History

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## **4.1 Introduction**

Project Background & Scope of Work

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## **4.4 Assessment of Archeological Potential**

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Section

4

Archeological  
Overview

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## 4.1 Introduction:

### Project Background and Scope-of-Work

This chapter has been excerpted from a technical report presenting a preliminary archeological assessment, prepared by Hunter Research, Inc., of Fort Wadsworth, Staten Island, Borough of Richmond, Richmond County, New York City, New York State.

The following work tasks were performed as part of the assessment: background and documentary research; a one-day site inspection; analysis of background, documentary and field research data; and preparation of a report. In developing this archeological assessment, a strong cartographic approach has been adopted, and the key products from the standpoint of cultural resource management planning are the prehistoric and historic resource location map and the archeological sensitivity map presented.

Since a detailed military history of Fort Wadsworth was completed just over a decade ago (Black 1983), the historical research emphasis of this study has been placed primarily on: 1) the pre-history of the project site and its immediate vicinity, and 2) the pre-military and civilian history of the Fort Wadsworth property. However, to provide a balanced view of the archeological potential of Fort Wadsworth, the military era also requires consideration. Clearly, the archeological potential of the Fort includes not only prehistoric and early historic resources, but also the possibility of military-era remains associated with Fort Wadsworth itself and its predecessor military installations. A brief historical overview is extended into the military period.

### Previous Archeological Research and Principal Information Sources

In the mid-1960s, local avocational archeologists conducted excavations on the site of the Walton-Stillwell House, just west of the current fort limits, close to the edge of the bluff overlooking Lower New York Bay. These investigations produced evidence of both prehistoric and early historic activity, the latter apparently

reflecting both 17th-century Dutch-American and 17th and 18th-century Anglo-American occupation (Anderson and Sainz 1965). In the early 1980s, archeological survey work was performed within the southwestern and northwestern portions of the Fort property in connection with the preparation of an environmental impact statement for the Surface Action Group Homeport, Stapleton-Fort Wadsworth Complex. These investigations also produced evidence of prehistoric and early historic occupation, although the latter was mostly of late 18th and 19th-century date (Salwen et al. 1984). Other archeological finds have periodically been made on the Fort Wadsworth property, apparently during the course of military construction activity in the late 19th and early 20th centuries. Some of the materials recovered in this manner were gathered up and deposited with the Staten Island Institute of Arts and Sciences. These specimens were examined and briefly reported on as part of the archeological survey performed in the early 1980s (Salwen et al. 1984:C-6).

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## 4.2 Prehistoric Overview

A human presence is detectable in the Mid-Atlantic region beginning approximately 12,000 to 13,000 years ago. The chronological sequence for the Lower Hudson Valley/New Jersey section of the region is generally divided into three major cultural periods: Paleo-Indian (circa 10,500-6,000 B.C.); Archaic (circa 6,000-1,000 B.C.); and Woodland (circa 1,000 B.C.-A.D. 1600).

Evidence of Paleo-Indian occupation is sparse throughout the region, partly because of the low population density and nomadic character of the aboriginal peoples in the area.

Archaic period occupation is somewhat better represented throughout the region owing to an amelioration of the climate and gradually expanding population base. A number of camp sites and stations dating from this period are known at a series of sites in the northwestern portion of Staten Island. No major Archaic period sites have been identified in the immediate Fort Wadsworth vicinity, although some Archaic cultural materials

## Section 4:

### Archeological Overview



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have been recovered from later Woodland period contexts.

Most of the prehistoric resources identified on Staten Island date from the Woodland period occupation, again a reflection of a growing, but also an increasingly sedentary, population. Numerous Woodland sites have been noted along creeks draining into the Arthur Kill and the Kill Van Kull in the western and northern parts of the island. Other Woodland sites have been documented along the island's southeastern shore between Great Kills and Wards Island.

In the Fort Wadsworth vicinity, just southwest of the facility boundary on Richmond Avenue near Arrochar Station, one major Native American camp site was documented in the early years of this century. Known as the Arrochar site, this resource has produced "grooved axes, arrow points, etc. with an occasional bit of pottery ... and shell pits..." (Skinner 1909:16). Based on these materials, it would appear that the Arrochar site may represent an earlier Woodland manifestation than many others on Staten Island. Excavations in the 1960s at the site of the nearby Walton-Stillwell House, also just west of the current fort limits, encountered a Native American storage pit that contained more than 200 pottery shards, triangular and side-notched projectile points, netsinkers, a full-grooved axe, and a bone fish hook (Anderson and Sainz 1965). This pit appears to have been mostly in use in the Late Woodland period, but also contains earlier Woodland items. It may well be related to — if not a part of — the Arrochar site, the precise location and limits of which remain uncertain.

That the Fort Wadsworth property itself was occupied by Native American seems without question. The views of the Upper and Lower Bays afforded by the headland were excellent, and it is inconceivable that Native American peoples did not maintain a presence there.

### 4.3 History of Site Occupation

#### **Pre-Military Period (17th Century-American Revolution) Exploration and Dutch-American Settlement:**

The first Europeans to sight the narrow strait between Staten Island and Long Island were most likely sailor-explorers in the employ of the French. In 1524, Giovanni Verrazano, a Florentine navigator in a French vessel, is believed to have anchored briefly off the Narrows on the Brooklyn side of the Lower Bay. The Narrows were not actually entered by Europeans for another 85 years when Henry Hudson, in 1609, searching for a westerly route to Asia on behalf of the Dutch East India Company, discovered the Upper Bay and explored the lower section of what later came to be known as the Hudson Valley. Hudson, in fact, was responsible for naming Staten Island, giving it the appellation "Island Staatan Eylandt" (Island of the States) in honor of the States-General, the governing body of the Netherlands. In response to the newcomers, the native peoples are believed to have established signaling stations on Todt Hill in northeastern Staten Island (and at various other prominent positions) to warn neighboring groups each time European vessels entered the Upper Bay (U.S. Army Center of Military History 1963:1).

The first attempt at establishing permanent settlements on Staten Island was headed by David Peterse De Vries of Hoorne. The De Vries settlement, is believed to have been located at present-day Tompkinsville.

The second and third attempts to settle Staten Island were both headed by Cornelius Melyn to go upon the point of Staten Island, where the maize-land lay, saying he wished to let him plant it, and that he would place soldiers there, who would make a signal by displaying a flag, to make known at the fort [at New Amsterdam] whenever ships were in the bay ..." Apparently De Vries agreed and Melyn was granted all of Staten Island, excepting a portion of land that had been previously settled by De Vries.

According to Charles Leng and William Davis's History of Staten

Island and its People, if Melyn truly did establish a settlement at the point of Staten Island where the maize lands lay, and where a signal to the fort on New Netherland would be useful, this location would most likely have been in the vicinity of the Native American settlement of Arrochar just to the southwest of Fort Wadsworth. Another Indian raid or the general state of tension between the Dutch and the Indians led to the abandonment of Cornelius Melyn's settlement in 1643 (Anderson and Sainz 1965:83; Black 1983:10). Excavations by Albert J. Anderson and Donald R. Sainz at the Walton-Stillwell House in the early 1960s supply possible supporting evidence for the Leng and Davis hypothesis. Their work at this 17th-century house site, which was located just west of the present Fort Wadsworth reservation, located artifacts that belonged to a period earlier than the construction of the house.

Finally, in the early 1660s, the first truly permanent Dutch-American settlement was established on Staten Island. This comprised the small community known as Oude Dorp ("Old Town"), and was located approximately one mile southwest of the present Fort Wadsworth reservation and in the vicinity of the Native American locus known as Arrochar. The settlement took the form of a loose cluster of farms, somewhat ineffectively protected by a blockhouse manned by a detachment of soldiers supplied by the Dutch West India Company. This hamlet was still in existence in 1664 when the English take-over of New Netherland occurred (Anderson and Saintz 1965:84; Black 1983:14).

#### **Anglo-American Settlement:**

In 1664, with Anglo-Dutch commercial and colonial rivalry at a high pitch in Asia, Africa and America, King Charles II of England bestowed a grant of all the territory lying between the Connecticut and Delaware Rivers (i.e., including virtually all of the province of New Netherland) upon his brother, the Duke of York. In August of the same year, the Duke of York dispatched four frigates, manned with 450 men, to New York harbor to claim his property. In September, Governor Stuyvesant of New Netherland surrendered the province to the English commander,

Colonel Richard Nicolls, who assumed the position of new governor. Nicolls proceeded to parcel out land grants both to the original settlers and to the soldiers who served under him. Staten Island was subdivided in this manner, and Oude Dorp and the present-day Fort Wadsworth vicinity were placed within the newly created town of Dover. The area of the present Fort Wadsworth reservation was contained within three lots of land granted in 1668. Proceeding from southwest to northeast, these lots were assigned to: Henry Hedger and Thomas Walton; R. Doddman and John Kingdom; and Thomas Walton.

In 1711, the Governor of New York approved plans to maintain beacons at several locations in the Upper Bay and on both sides of the Narrows. However, it appears that this warning system was not implemented until at least the late 1750s (Black 1983:21). A map of New York and Perth Amboy harbors prepared in 1733 shows the location of all of the towns that existed on Staten Island at the time. This map does not attempt to depict individual farmsteads, although a ferry with an associated house is shown in the general vicinity of the present-day Fort Wadsworth reservation (figure 4.1).

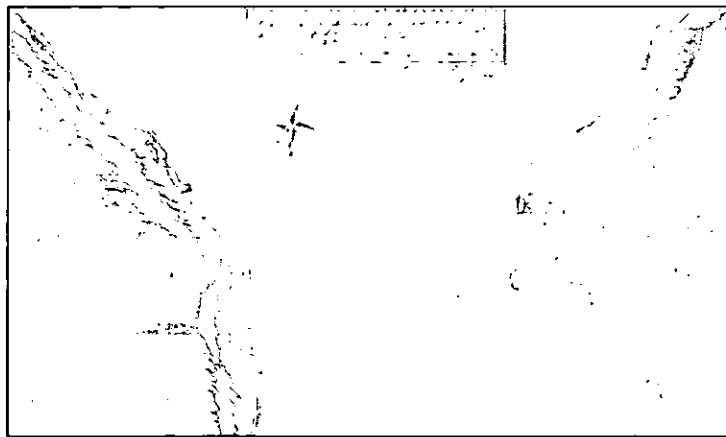
The plans for erecting beacons at the Narrows were formalized by acts of the colonial government in both 1741 and 1755. In the latter year, authorization was granted "for carrying down two great guns and landing one on Staten Island and one on Long Island, and tar barrels and posts for beacons" (Black 1983:21). Two plans of the Narrows — one drafted between 1757 and 1759 (figure 4.2); the other in 1763 (figure 4.3) — show the proposed location of several batteries that were intended to fortify the Narrows. No indication is given as to whether any of these gun emplacements were already in existence, although it has been generally assumed that none of them were. However, both of these plans show alarm beacons on Staten Island (but not in Brooklyn), which can probably be taken as an indication that they had been erected by this time. To the northwest of the point of Staten Island, a wharf and a barn are shown in the tenure of the Symosen (Symoson) family. It is likely that the Symosons were responsible



**Figure 4.1** "Map of New York and Perth Amboy Harbors." 1733. Scale as indicated. Fort Wadsworth vicinity circled.



**Figure 4.3** "Plan of the Narrows about 10 miles from New York.: 1763. Scale 1 inch:1,600 feet (approx.). Limits of Fort Wadsworth Reservation shown with dashed line.



**Figure 4.4** Bellini, S. "Bay & Port of New-York, Capital of New York." 1764. Scale 1 inch:3.5 miles (approx.). Fort Wadsworth vicinity circled.

for the operation of the ferry, using their wharf as the Staten Island docking point. Also proposed for the Staten Island side of the Narrows, as indicated on the plan of 1763 (figure 4.3), were three signal houses that were to receive signals from Sandy Hook and relay them on to the forts in New York's inner harbor. No further documentation has been found, however, to suggest that these were ever built.

The importance of the Fort Wadsworth vicinity as a transportation node and "break-in-bulk" point is amply demonstrated. Cartographic evidence (Figures 4.1-4.4) shows clearly that the colonial-era ferry (known as both the Narrows Ferry and Doyle's Ferry) and any related buildings lay outside the limits of the present-day reservation about 400 feet north of its northern boundary. As Black (1983:21) points out, the map of 1764 gives no indication of a fort being located at the Narrows, the only facility of this type being located on the southern tip of Manhattan.

By the mid-18th century, the eastern tip of Staten Island had come into the ownership of the Van Deventer family. John Van Deventer, who died in 1759, was reportedly the first member of this family to take up residence in the area, and a Revolutionary War era map (figure 4.5) depicts a Van Deventer dwelling apparently within the southwestern section of the Fort Wadsworth reservation. The bulk of the Fort Wadsworth property remained in Van Deventer ownership through the Revolutionary War era and into the 1790s when much of it was acquired by the federal government for military purposes (Black 1983:21). The Van Deventer presence in the area in the immediate pre-military period is further evidenced on a 1776 chart of the entrance to the Hudson River, which labels the area Staten Island side of the Narrows as Vandeventer's Point. B Military Period (American Revolution to circa 1850)

#### British Military Occupation:

At the outset of the Revolutionary War, apart from the beacons reportedly erected in the 1750s, there were no fortifications or military-related structures on either side of the strait leading from

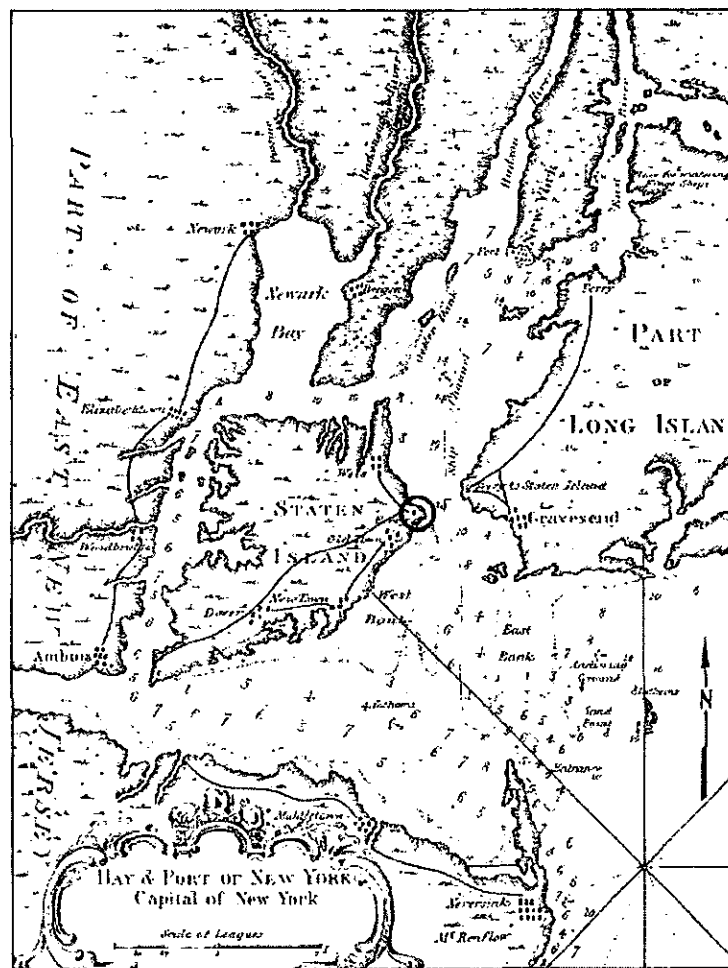


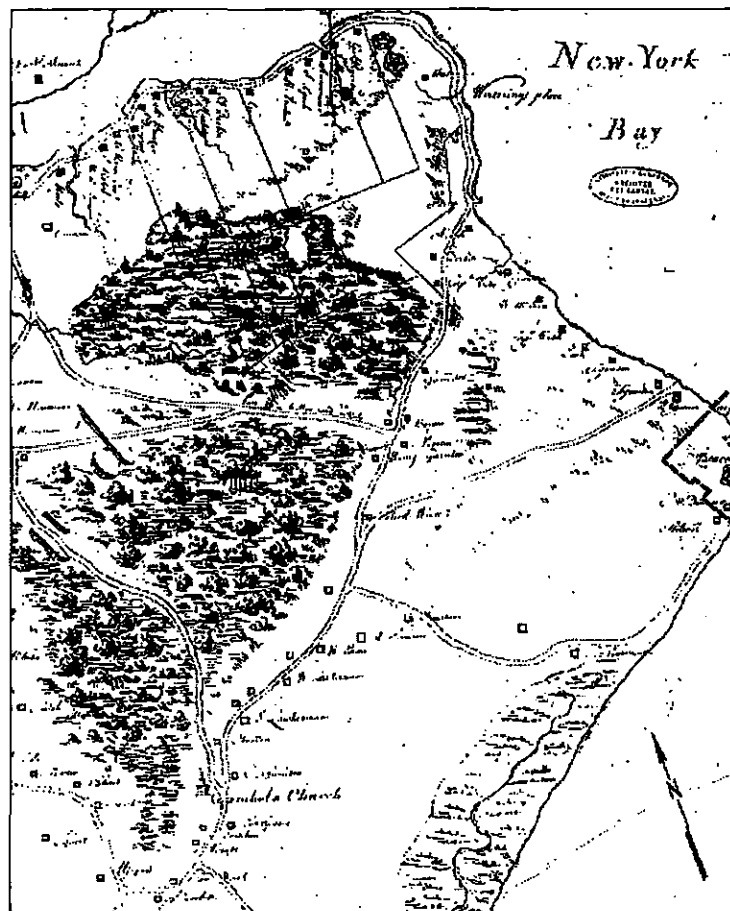
Figure 4.5 "Plan (No. 34) du Camp Anglo-Hessois dans Staten Island (Baie de New York) de 1780-1783." Scale 1 inch:5/8 miles. Limits of Fort Wadsworth Reservation shown with dashed line.

the Lower Bay to the Upper Bay.

The general consensus was that there was neither enough time or resources to adequately fortify the Narrows, although the importance of this location was clearly understood, since the committee did find "it necessary to have a proper person sent to the Narrows with a glass to look out for any fleet that may be approaching." On July 2, 1776, the British landed on Staten Island without meeting any resistance and used it as a staging area. They soon embarked on a campaign which resulted in their taking control not



**Figure 4.6** Loss, Charles. "Map of the State Land at Staten Island Representing the Situation of the Ground and the Fortifications to be Erected". 1809. Scale 1 inch:425 feet (approx.). Northern limit of Fort Wadsworth Reservation shown with dashed line. (National Archives, Record Group 77, Drawer 36, Sheet 17).



only of Staten Island, but also ultimately Manhattan, Brooklyn and New York Bay (Black 1983:21-22).

Once the British forces gained control of the harbor and its environs, they set about fortifying the Narrows. By 1779, the British defenses on the Staten Island side of the Narrows consisted of a redoubt, a shoreline battery of 26 gun platforms, six 24-pounders, four 18-pounders, and a hot shot furnace. By 1782, a fort and several barbette batteries had been added. The principal component in this defensive system was the fort, a star-shaped structure located on the site of the later Fort Tompkins, which has been variously depicted as having four, five or six bastions. During this

period the general area where these fortifications were located was referred to as "Flagstaff Hill" or just "Flagstaff" (Roberts 1980:323-324; Black 1983:23-24).

The "Plan du Camp Anglo-Hessois dans Staten Island" surveyed between 1780 and 1783, shows a five-bastion fort as well as a bank of warning beacons to the north. Two dwellings are also depicted to the southwest of the fort, the one closest to the fort being labeled "C.V. Deventer" for Cornelius Van Deventer. The other dwelling is identified as being in the hands of "Stilwell", and is probably the same structure as the Walton/Stillwell House investigated in the 1960s (figure 4.5).

Despite being manned for much of the war, the British fortifications at the Narrows participated in no major military actions during the Revolutionary period and were taken out of service in 1783 when the New York area was finally evacuated by British troops. Black (1983:25) suggests that the defenses were "simple, hastily assembled works," which was probably the case, yet the abandoned fortifications were substantial enough to survive and be rehabilitated during the early federal period.

#### **American Military Occupation**

##### *First System Defenses, 1794-1807:*

The first coordinated attempts by the fledgling United States at securing the defense of the eastern seaboard occurred in the early 1790s in response to a perceived military threat from Revolutionary France. The protection of New York harbor from naval attack was considered of vital national interest, and in part because of inadequate federal funding, New York State became the initial driving force behind the construction of the New York harbor defenses of the so-called First American System (Lewis 1979; Black 1983:26-28).

No new First System construction appears to have taken place at the Narrows, but attention was given to land purchases and refurbishment of the old British defenses on the Staten Island side of the strait. In 1794, Catherine and Ann Van Deventer sold a 24.45-acre tract, containing the core of the British fortifications (and the

later sites of Fort Tompkins, Fort Richmond and Battery Hudson), to the People of the State of New York.

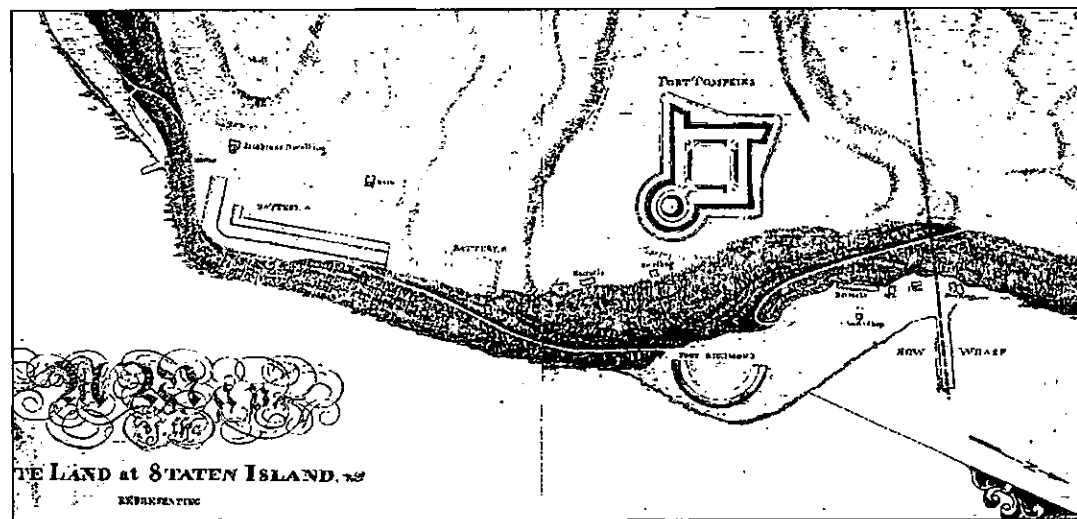
### American Military Occupation

#### *Second System Defenses, 1807-1817:*

Tensions with France eased in 1800, but growing friction with Britain over trade and economic matters caused the federal government to continue planning for the defense of New York harbor and other port cities of the United States throughout the first decade of the 19th century. These plans translated into an extensive building program, termed the Second American System, which took place for approximately a decade beginning in 1807, when American disputes with Britain began to escalate into what subsequently became the War of 1812.

During this period, the sites of New York City's coastal fortifications began to be ceded to the federal government by the State of New York and, as the defensive system was expanded, further purchases of private land were made by the United States of America. The original 47-acre core site of the Staten Island fortifications, however, was slow in being passed into the hands of the federal government, this finally being accomplished in 1847 after decades of wrangling. Even so, expansionary land acquisitions were still undertaken by the federal government while the core of the site remained in State hands.

Second System fortifications on the Staten Island side of the Narrows were mostly erected in two phases, between 1808 and 1810, and between 1814 and 1817, with some minor building activity taking place in the hiatus (figure 4.6-4.8). In the former phase, a water battery known as Fort Richmond was erected at the base of the bluff along the shoreline, and two other earthen batteries, Forts Morton and Hudson, were constructed on the bluff rim to the south. Fort Richmond, the dominant work, was an earth and masonry structure, semi-circular in plan, that contained 27 or 28 iron 32-pounders mounted en barbette. This battery also contained two barrack buildings, two furnaces and one bomb-proof



magazine.

From the earliest stages of planning, the principal facility of the Staten Island Second System defenses was always intended to be a large fort, the future Fort Tompkins, that was to be erected on a knoll on the headland immediately above Fort Richmond. By 1810, however, with Forts Richmond, Morton and Hudson complete, no work had taken place on the main fort apart from the digging of a well and a ditch on the hilltop and the final design of the structure was still not decided.

No further progress was made on the main fort for almost four years, although the push to reactivate plans for its construction occurred in June of 1812 when hostilities with the British were at their peak.

A blockhouse was built as a temporary measure within the old fort in 1813, while the old fort was dismantled. This dismantling operation appears to have taken place in 1814, being followed immediately thereafter by the construction of the new fort, a task that was continued until 1817 by which time the threat of invasion from overseas had finally passed. The first Fort Tompkins occupied the prime defensive position on the Staten Island side of the Narrows and was by far the most substantial structure built up

**Figure 4.7** Williams, Jonathan. Plan View and Profile of the Defenses at the Narrows. 1810. Scale 1 inch:210 feet (approx.) In profile at top, the recently completed Fort Richmond is shown at the base of the bluff on the left and the proposed Fort Tompkins is shown at the top. In plan view at bottom, the outline of the "Picket Work" may depict the remains of the former British Fort repaired by American forces in 1794, rather than the outline of the proposed Fort Tompkins. The structure in the Narrows and the barrier of hawsers and logs slung between anchored sloops were proposed but never built.



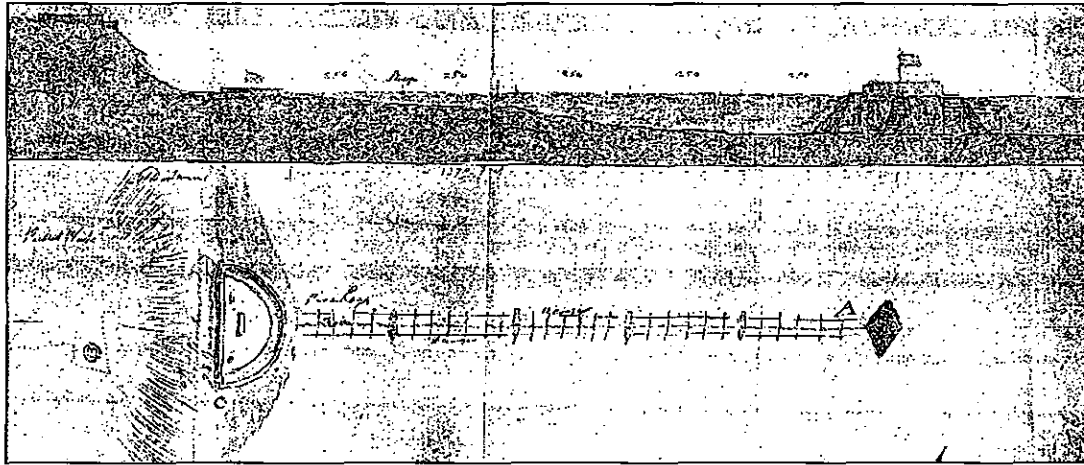


Figure 4.8 Poussin, Capt. W. Tell. "State of New York, Fort Tompkins, Fort Richmond". 1819. Scales as indicated. (National Archives, Record Group 77, Drawer 41, Sheet 3.)

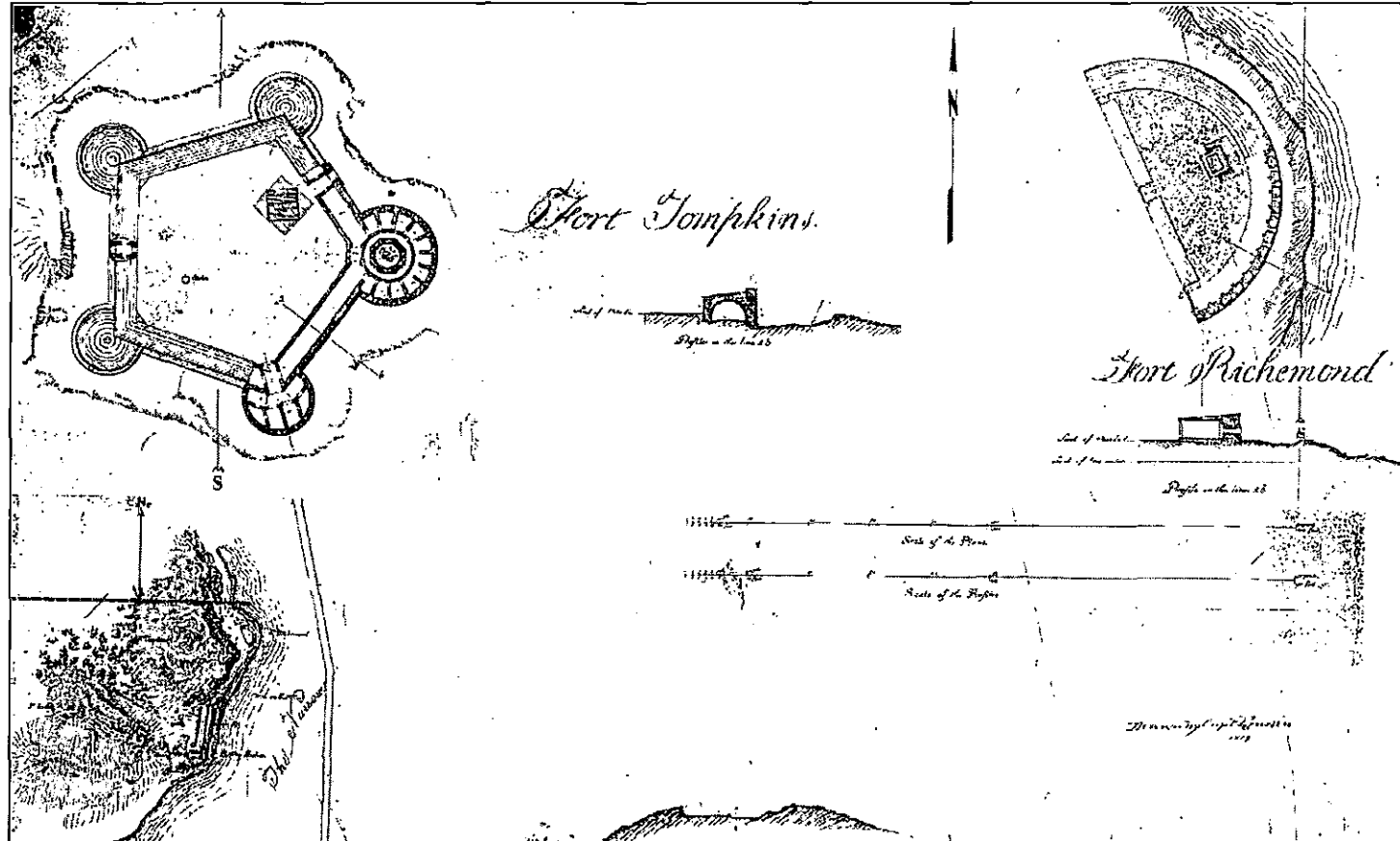


Figure 4.9 "Plan of the Grounds about Forts Tompkins and Richmond, Staten Island." 1850. Scale 1 inch:160 feet (approx.) Northern limit of Fort Wadsworth Reservation shown with dashed line. (National Archives, Record Group 77, Drawer 43, Sheet 29.)

until that time. It was a casemated fort of masonry construction with an exterior of dressed stone. Three hundred feet in diameter and 1,700 feet in circumference, the fort had a pentagonal plan with bastions at each of its five corners, the one at the eastern angle being larger than the others and containing a bombproof magazine. The interior of the fort included four furnaces, a blockhouse and a well, while the ramparts and bastions were designed to carry 76 heavy guns and 26 howitzers. However, when construction ceased in 1817, the armament had still not been mounted and the fortifications thus never realized their full potential.

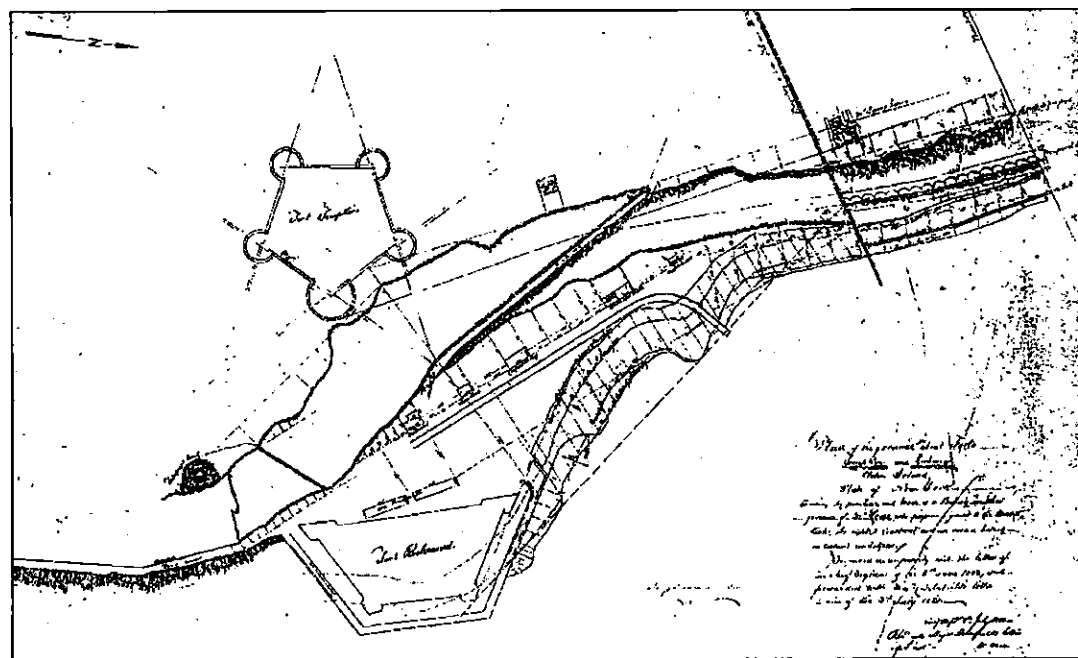
One other element in the Staten Island fortifications was added in 1814. This was the redoubt known as Fort Smith, apparently square in plan, that occupied another knoll-like landform a few hundred feet to the southwest of Fort Tompkins (figure 4.8). Various other structures were also in existence in the vicinity of the fortifications in the first two decades of the 19th century, including pre-military period dwellings and farm buildings and barracks, dwellings, shops, stores and other support structures relating to the military occupation itself (figure 4.6).

### American Military Occupation

#### *Third System Defenses, 1817-1865 and post-1850 History:*

In the period extending from 1817, when the Fort Tompkins construction was halted, to the early 1840s, when plans began to be made for repairing and upgrading the fortifications on the Staten Island side of the Narrows, the site of Fort Wadsworth “constituted an abandoned defensive position, the state-built Second System masonry fortifications being left to deteriorate” (Black 1983:62). In the 1840s, the United States government finally acquired title to the entire military facility as it then was, and began to embark on a prolonged program of upgrading, new building and expansion at the site in what is termed the Third American System.

The federal government began by modernizing Batteries Richmond and Hudson, formerly referred to as Forts Morton and Hudson. Work then began in 1847 on the new Fort Richmond (Battery Weed), a task that was not completed until 1864. The



new Fort Richmond was designed by Joseph Totten, Chief Engineer of the U.S. Army, as a replacement for the water battery on the shoreline. It consisted of a much larger trapezoidal-plan, 67-foot high, two-tiered structure capable of mounting 116 heavy channel bearing and 24 light flanking guns, and survives today as one of the most impressive examples of military engineering of its period (figure 4.9).

Since the focus of this study has been on the pre-1850 history of the Fort Wadsworth property, this historical overview is brought to a close at this point. For a detailed history of this period, the reader is referred to Frederick R. Black’s “A History of Fort Wadsworth, New York Harbor” (1983:62-137). In brief, the succeeding century saw continuing construction of the Third System defenses, notably the replacement of the first Fort Tompkins between 1859 and 1875 with a second, more compact fort on the same site.(figure 4.10) Other Third System works included the construction during the Civil War era of the North Cliff and South Cliff Batteries and the beginnings of a new unfinished casemated

**Figure 4.10** Dugan, L. “Plan and Reservation, Fort Wadsworth, N.Y.H.”. 1890. Scale 1 inch:325 feet (approx.) Northern limit of Fort Wadsworth Reservation shown with dashed line. (National Archives, Record Group 92.)

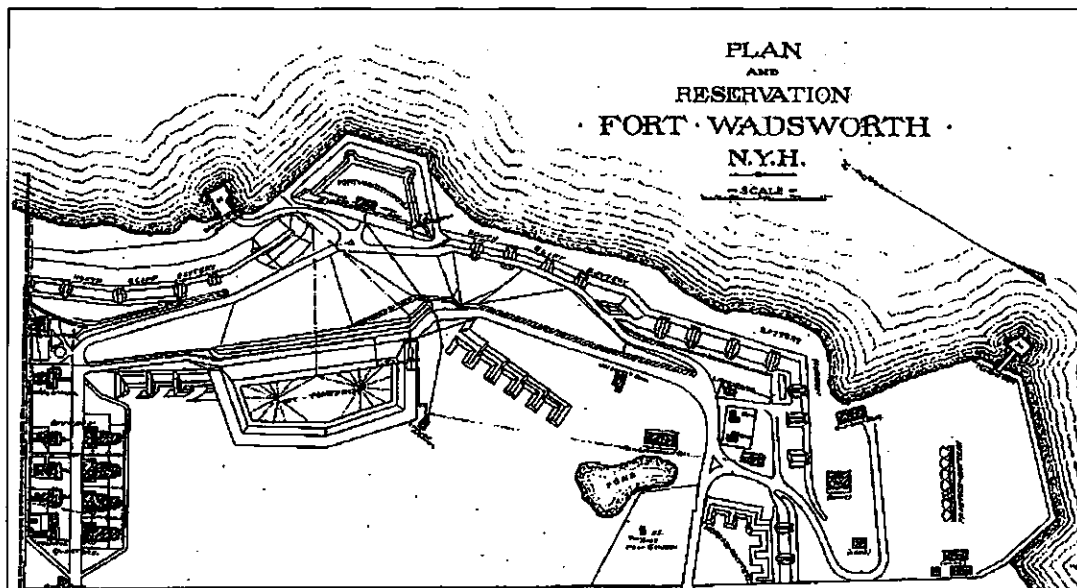
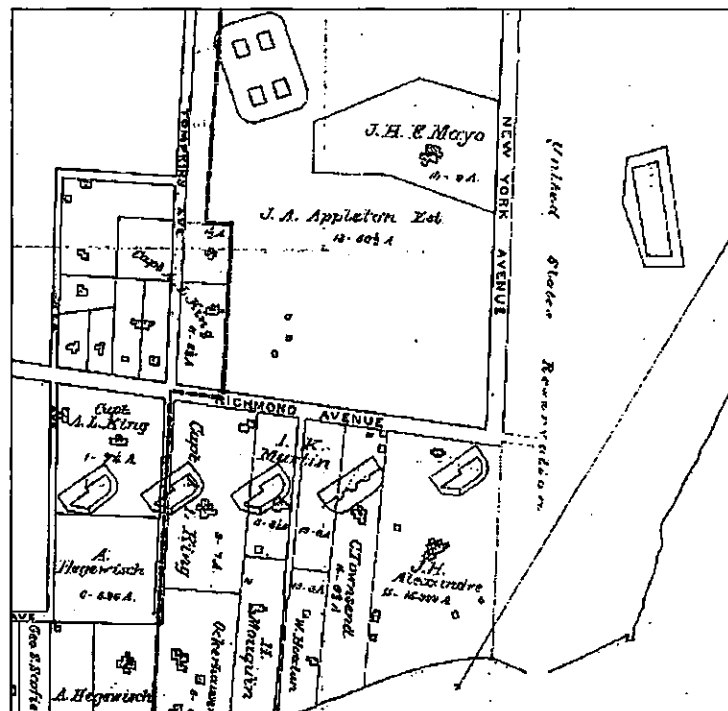


Figure 4.11 "Map of the Vicinity of Fort Wadsworth, Staten Island, N.Y." 1889. Scale as indicated. Limits of Fort Wadsworth Reservation shown with dashed line. (National Archives, Record Group 77, Drawer 43, Sheet 53.)



battery located to the south of Battery Hudson. In the post-Civil War period, the area of the reservation was enlarged through a number of land acquisitions, many of which entailed the taking of properties already developed for residential purposes (figure 4.11). On this land, most of which lay to the south and west of the core fortified area, the Army erected numerous new batteries, barracks and support facilities, culminating in the creation of the Endicott Batteries in the period 1890 through 1920. A selection of maps is included in the following pages in an effort to trace graphically the post-1850 site development.

#### 4.4 Assessment of Archeological Potential

The following presents a preliminary assessment of the archeological potential of the current Fort Wadsworth property. The study has been directed at prehistoric resources, pre-1850 historic resources, and post-1850 military fortifications. The evidence of post-1850 non-fortification military remains throughout the reservation and post-1850 domestic sites within the 1900 extension of the reservation to the west has not been examined within this study; the domestic sites were discussed in some detail by Salwen et al (1984).

Figure 4.12 "Description of the Defenses on Staten Island at the Narrows of New York Harbor." 1886. Scale 1 inch:240 feet (approx.). Northern limit of Fort Wadsworth Reservation shown with dashed line. (National Archives, Record Group 77, Drawer 41, Sheet A.)



It should also be emphasized at the outset that this assessment is based principally on a review of written and cartographic materials with limited on-site survey. Land alterations in some locations undoubtedly have removed all traces of earlier historical features; in others, it may merely have obscured archeological evidence through deposition of fill.

The documentary materials available for study are voluminous. While the military documentation pertaining to the fort has been analyzed in depth and with considerable skill within recent years (Black 1983), the same cannot be said for the primary archival materials that deal with the non-military (Dutch-American and Anglo-American) history of the fort property. Much useful data about site locations and types of agricultural and domestic land use may yet be found if a systematic effort is made to trace the history of land ownership and economic activity in the area. In contrast to the documentary data, very limited archeological information has been gathered to date from within the Fort Wadsworth property. A single professional archeological study (Salwen et al. 1984) has been conducted within the facility and this comprised only limited subsurface testing within the southwest and northwest portions of the property. While other archeological materials have been collected over the years, these are unprovenanced and without supporting contextual information, and hence are of limited value in assessing archeological potential.

Table 4.1 summarizes and assesses the archeological potential of the key known prehistoric and pre-1850 historic resources identified within the 226-acre Fort Wadsworth reservation. Figures 4.12 and 4.13 are cartographic companions to Table 4.1. This inventory of resources and the accompanying map are by no means complete. For example, only one prehistoric locus can be pinpointed; others undoubtedly still exist. For non-military resources, only the principal dwelling sites have been identified; any one of these resources may include remains of associated outbuildings and other domestic deposits. The precision with which some of the earlier historic resources are depicted also leaves something to be desired. The locations of Colonial and

Revolutionary War era resources for which there is no obvious surface trace have been extrapolated from maps that have a far greater margin of error than maps prepared during the period of American military usage. Using the data compiled in Table 4.1 and mapped on figure 4.12 and 4.13, a rudimentary analysis of current land use and the cultural landscape has been undertaken, resulting in the preparation of figure 4.14. This map aims to provide a preliminary cartographic representation of the pre-1850 historic archeological sensitivity of the Fort Wadsworth property using a three-fold (high, moderate and low) rating system.

The rating system adopted, owing to the level of study involved, is inevitably somewhat subjective. In an effort to rationalize how the sensitivity ratings have been assigned, the following explanation is offered:

**High Archeological Potential** - strong possibility of intact archeological evidence of key military structures (in this instance, the first Fort Tompkins and the first and second Fort Richmond [Battery Weed]) within, beneath and adjacent to presently standing structures.

**Moderate Archeological Potential** - reasonable possibility of intact archeological evidence of earlier military and non-military resources in areas of less intensive later land use and also within, beneath and adjacent to presently standing structures.

**Low Archeological Potential** - documented sites of pre-1850 military or non-military resources; subsequent land alteration and building is likely to have affected these sites, but there remains some possibility that archeological evidence may still be encountered.

Because of the paucity of well-documented data, no attempt is made to map areas of prehistoric sensitivity on figure 4.14. The major Native American (Woodland period) settlement in northeast Staten Island, known as "Arrochar," was located approximately half a mile to a mile southwest of the reservation. However, the recovery of prehistoric cultural materials from apparently stratified contexts in tests excavated in the southwest portion of the

**Table 4.1**

**Fort Wadsworth  
Reservation**

**Summary  
of Prehistoric,  
Pre-1850 Historic  
and Post-1850  
Military  
Fortification  
Resources**

(See Figures 4.12, 4.13,  
and 4.14)

\*Note: Earliest documented date derived from the approximate date of construction or earliest reference on a cartographic document.

Resource ID #	Resource Name	Earliest Documented Date*	Archeological Potential	Comments
1	Intact Prehistoric Cultural Strata		moderate	possibility of scattered pockets on flat, undisturbed or shallow-disturbed terrain
2?	Beacons	c. 1755	low	area graded during mid-19th century for pond
3	British Fort ?re-used as American	1780-83 Fort 1790s	low	probably destroyed by later forts
4	British Shoreline Batteries	1780-83	low shoreline	probably destroyed by later construction along
5	? British Redoubt	1780-83	low	? re-used as Fort Smith; hill elevation considerably reduced
6	Beacons	1780-83	low	area disturbed by 1874 Glacis Gun Battery
7	? Van Deventer Dwelling Fountain/Mouquin Dwelling	mid-/late 18th c mid-19th c.	moderate	archeological materials already recovered; site may still be partially intact
8	Farmhouse	1809	low	probably destroyed by later construction
9	Jacobson Dwelling	1809	low	probably destroyed by later construction
10	Barn	1809	low	area graded during mid-19th century for pond
11	Barracks	1809	low	probably destroyed by later construction
12	Dwelling	1809	low	probably destroyed by later construction
13	Barracks Stable/Barn	1809 1850	low	probably destroyed by later construction
14	Smith Shop	1809	low	probably destroyed by later construction
15	Office ? House	1809 1850	low	probably destroyed by later construction
16	Store	1809	low	probably destroyed by later construction
17	Fort Hudson (Battery Hudson)	1808-10	low	some remains may survive beneath later Batteries Hudson and Barbour
18	Fort Morton	1808-10	moderate	some remains may survive near site of Glacis Mortar

Resource ID #	Resource Name	Earliest Documented Date*	Archeological Potential	Comments
	(Battery Morton)			Battery
19	Fort Richmond	1808-10	high	remnants probably survive beneath extant Battery Weed
20	Blockhouse	1813	low	probably destroyed by construction of second Fort Tompkins
21	Fort Smith	1814	low	hill elevation reduced, probably resulting in destruction of site
22	Fort Tompkins	1814-17	high	portion of fort may survive west of ditch for second Fort Tompkins
23	Barracks	1819	low	probably destroyed by later construction
24	Headquarters	1829	low	probably destroyed by later construction
25	Second Fort Richmond (Battery Weed)	1847-64	high	extant structure
26	Smith Shop	1850	moderate	partially covered by early 20th-century torpedo warehouse
27	? Shop	1850	moderate	partially covered by early 20th-century torpedo warehouse
28	Carpenter's Shop	1850	low	probably destroyed by Battery Catlin
29	Office	1850	low	probably destroyed by Battery Catlin
30	Scheffelin Dwelling	1854	low	previously tested; no intact remains observed
31	Gilleland Dwelling	1854	moderate	subsurface remains may survive beneath and north of Battery Richmond
32	Aspinwall Dwelling 1	1854	low	probably destroyed by later construction
33	Jacobson Dwelling	1854	low	disturbed by construction of Building 338
34	Aspinwall Dwelling 2	1854	low	hill elevation reduced, probably resulting in destruction of site
35	Shaw Dwelling	1854	low	probably destroyed by later construction

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**Table 4.1****Fort Wadsworth  
Reservation****Summary  
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Resource ID #	Resource Name	Earliest Documented Date*	Archeological Potential	Comments
36	Shaw ?Tenant Dwelling	1854	low	probably destroyed by later construction
37	Aspinwall ?Tenant Dwelling	1854	low	probably destroyed by later construction
38	Second Fort Tompkins	1859-76	high	extant structure
39	North Cliff Battery	1863-67	high	remnants incorporated into Battery Catlin
40	South Cliff Battery	1862-66	high	remnants incorporated into Batteries Bacon and Turnbull
41	Two Gun Battery (site)	1866	low	removed late 19th-early 20th century
42	Glacis Mortar Battery (site)	1871-72	moderate	removed late 19th century
43	South Mortar Battery (site)	1872	moderate	abandoned after foundation completed
44	Glacis Gun Battery	1874	high	remnants visible on surface
45	Battery Duane	1895-97	high	extant structure; westernmost gun platform removed
46	Battery Upton	1896-99	high	extant structure
47	Battery Barry	1897-99	high	extant structure
48	Battery Barbour	1898	high	extant structure
49	Battery Hudson	1898-99	high	extant structure
50	Battery Richmond	1898-99	high	extant structure
51	Battery Bacon	1899	high	extant structure
52	Battery Mills	1899-1900	high	extant structure
53	Battery Ayers	1900-01	high	extant structure
54	Battery Dix	1902	high	extant structure
55	Battery Turnbull	1902-03	high	extant structure
56	Battery Catlin	1902-04	high	extant structure
57	Building 140	c.1942	high	extant structure

<b>Resource ID #</b>	<b>Resource Name</b>	<b>Earliest Documented Date*</b>	<b>Archeological Potential</b>	<b>Comments</b>
58	Communication / Fire Control	c.1942	high	extant structure
59	Communication / Fire Control	c.1942	high	extant structure
60	Observation Tower (Building 338)	c.1942	high	extant structure

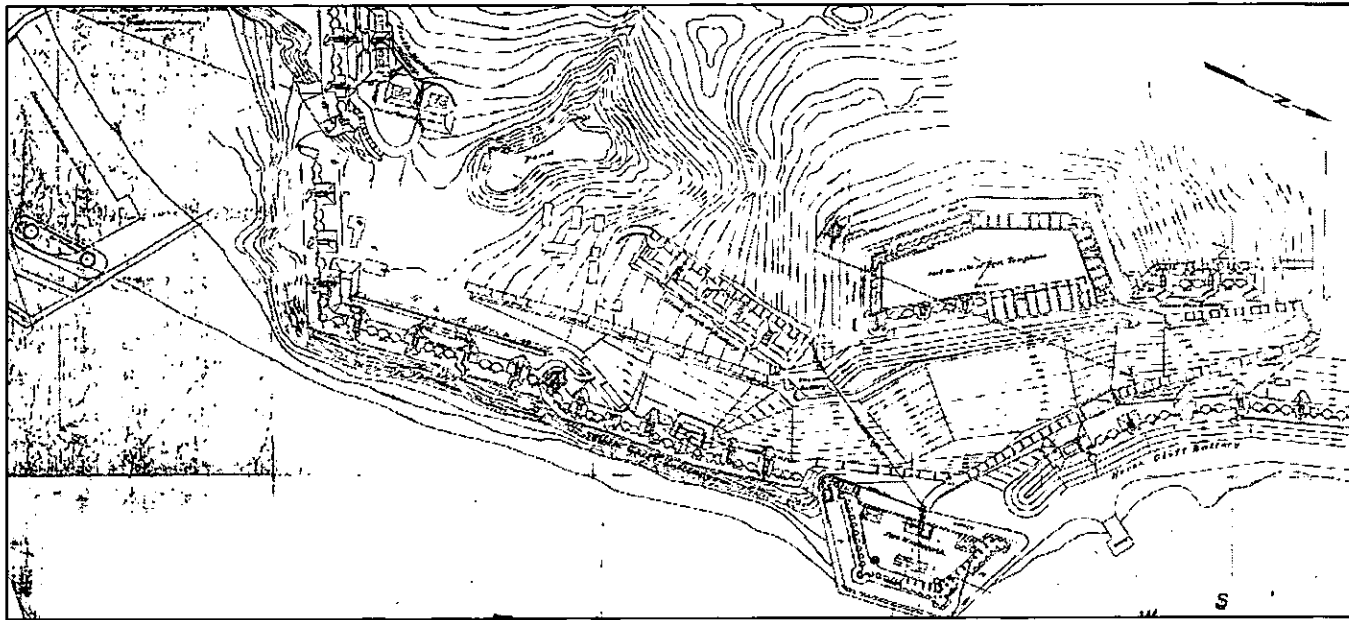
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Fort Wadsworth property [Resource 1] suggests strongly that pre-historic activity extended on to the eastern point of the island. The almost 200 specimens held by the Staten Island Institute of Arts and Sciences, and broadly provenienced as deriving from the fort, provide further confirmation of this activity.

During the period of exploration and 17th-century Dutch settlement it appears that there was only minimal activity in the immediate Fort Wadsworth vicinity. Initial colonization efforts in this section of the island appear to have been focused mostly on the area about a mile to the southwest where, in the early 1660s, the community of Oude Dorp finally took root.

In the late 1660s, following the English subjugation of New Netherland, the eastern tip of Staten Island, now placed within the Town of Dover, was subdivided into smaller tracts and made available to settlers. The present-day Fort Wadsworth property included two complete parcels (an easterly lot owned by Thomas Walton, and one adjoining to the west owned by R. Doddman and John Kingdom) and the easternmost portion of a third parcel

owned first by Henry Hedger and Thomas Walton, then held in its entirety by Walton and his son, and finally sold off in 1698 to Thomas Stillwell.

There is strong archeological and documentary evidence for a farmstead being in existence in the late 17th century on the Hedger/Walton/Stillwell parcel, the farmhouse — the so-called Walton/Stillwell house — being situated just to the southwest of the reservation (Anderson and Sainz 1965). There is no clear indication as to whether a late 17th-century farmstead was in existence on either the Doddman/Kingdom tract or the more easterly Walton parcel right at the tip of the island. It seems reasonable to presume that a farmstead would have been established on at least the Doddman/Kingdom tract, since this was of similar size to the Hedger/Walton/Stillwell parcel and contained potential agricultural land.

There is a good possibility that at least one, if not two, late 17th-century farms may have located their principal houses and agricultural buildings within the limits of the Fort Wadsworth proper-



ty. Based on the siting of the Walton/Stillwell house, the most likely location for a late 17th-century farmhouse on either the Doddman/Kingdom or easterly Walton properties would have been between 500 and 1,000 feet from the shore.

By the end of the colonial period, there is cartographic evidence for one dwelling within the limits of Fort Wadsworth, apparently located in the southwest section of the reservation [Resource 7]. This house was occupied by the Van Deventer family, which appears to have been resident in the area since at least the mid-18th century. There is strong documentary and archeological evidence for an 18th/19th-century domestic site in the southwest section of the reservation between Battery Richmond and the shore.

The interest of the British military in taking advantage of the strategic position of the eastern tip of Staten Island stems from at least the early 18th century, when plans were put forward to mount signaling beacons on the headland. The plans were apparently implemented in the late 1750s, although it is difficult from the map evidence to pinpoint their location. The beacons [Resource 2] seem to have been installed inland and slightly uphill from the future location of the early 19th century Battery Hudson. The site is currently occupied by a baseball field and apparently heavily graded landscape has probably removed traces of the post settings for the beacons and of an 1809 barn [Resource 10].

There were also British plans in existence in the 1750s to fortify the Staten Island side of the Narrows. However, it was not until the Revolutionary War that the first elements of a fortification system began to be built. In the period 1780-83, British forces installed a shoreline battery at the base of the bluff and erected a star-shaped fort on the knoll above on the site of the later Fort Tompkins [Resources 3 and 4]. A redoubt appears to have been constructed further inland [Resource 5] and additional or replacement beacons were installed on the slope to the north of the fort [Resource 6]. If such resources do survive, they are likely to be preserved beneath later American military construction. It is likely that the multiple phases of 19th-century military building

have removed most traces of the British Revolutionary War-era fortifications.

Between 1808 and 1810, three major fortifications — Fort Hudson, Fort Morton and the hemispherical-plan water battery, Fort Richmond [Resources 17-19] — were erected on the Staten Island shore. Although these works were extensively rebuilt or removed in subsequent years, there is a high probability that archeological evidence of Fort Richmond survives beneath or adjacent to the casemated Battery Weed. The chances for significant survival of Fort (Battery) Hudson are considerable lower. Fort (Battery) Hudson was rehabilitated during the 1840s and the 1870s, and ultimately was dismantled during the late 19th-century construction of Endicott Batteries Hudson and Barbour [Resources 46 and 51] (Black 1983:112, 113). Although chances for significant survival of remains from the earlier Battery Hudson are slim, some subterranean features probably survive and it is possible that some above-ground architectural remains stand in the vicinity of Battery Barbour. The 1819 Poussin Map and 1854 Aspinwall Map indicate that Battery Morton stood on the cliff top north of Battery Hudson. Black (1983:81), however, states that a portion of the Civil War South Cliff Battery encroached on the site of Morton, which was then dismantled; this placement is in variance with that indicated on the maps. The site of Battery Morton was evidently on the cliff top, probably close to or beneath the overhead Verrazano Bridge. The site was most likely impacted by construction of the Glacis Mortar Battery [Resource 42] in 1871-72, which in turn is no longer standing.

Maps and plans from this period show a number of other structures in the vicinity of these "Second System" fortifications, some of them military in nature [Resources 11 and 13-16], others civilian [Resources 8-10 and 12]. These resources have all been assigned a low rating of archeological potential, since they will not have been as substantial structures as the fortifications and they are all located in areas where there was extensive military construction activity. The Civil War North Cliff Battery [Resource 39] and subsequent Endicott Battery Catlin [Resource

48], for example, most likely removed all traces of Resources 13-16.

After a three-year hiatus, the construction of fortifications on the Staten Island side of the Narrows resumed with the establishment in 1813 of a blockhouse within the old British fort on the bluff above Fort Richmond [Resource 20]. This structure was mainly erected as a precautionary measure while the construction of Fort Tompkins [Resource 22], the landward defense element of the overall defensive system on Staten Island, was carried to completion. The latter was performed between 1814 and 1817, the resultant fort being a large, pentagonal-plan masonry structure with circular bastions appended to each corner. This fort was replaced in 1859-76 by the currently standing "Third System" Fort Tompkins [Resource 38].

The construction of the current Fort Tompkins has direct implications on the extent to which remains of earlier fortifications on site may survive. Topographic data from the 1856 Delafield Map indicates that the parade within Fort Tompkins is lower than that of the earlier fort, and conversely the grade west of the fort is approximately 20 feet higher. These data suggest that the Third System Fort Tompkins was erected within a cut at the top of the bluff, with at least some of the resulting earth redeposited as fill on the slope to the west of the fort. If this interpretation is correct, the potential for remains of earlier fortifications with the current Fort Tompkins and moat would be slight to non-existent. It would appear that the western-most bastion of the Second System Fort Tompkins may be buried beneath the redeposited fill to the west, and is so indicated on figure 4.3.

A final element of the fortifications erected in 1814 was Fort Smith [Resource 21], which was constructed some distance inland, probably in the area to the east of the present-day Public Works Building. As noted earlier, this fort may have been constructed on the site of an earlier British redoubt. The location of both features remains uncertain and it is unclear whether related archeological evidence of either feature would have survived the construction of Route I-278 and other construction activity within

the reservation.

In the period between the War of 1812 and the mid-19th century, various other military-related structures are depicted on maps and plans of the site, including a barracks to the rear of Fort Hudson [Resource 23], a headquarters building [Resource 24], and workshops Richmond [Resources 26-29]. Other features to the north have probably been removed entirely as a result of the later construction of Battery Catlin. The barracks and headquarters building are also considered low potential resources because of Endicott era construction.

The one major new military work in this period was the reconstruction and enlargement of Fort Richmond between 1847 and 1864. This massive fortification [Resource 25] — renamed Fort Wadsworth after the Civil War and Battery Weed c.1900 — is most likely of archeological as well as military architectural interest, and is assigned a high rating. Based on recent experience of finding portions of the Fort Gibson fortifications on Ellis Island preserved beneath later military and immigration station construction (Hunter Research, Inc. 1993), it is likely that parts of the original Fort Richmond (and perhaps even its British predecessor) will still survive intact beneath Battery Weed.

As the Fort Wadsworth facility expanded to the west and southwest, the U.S. Army acquired new property in the process. A number of these properties contained dwellings and outbuildings, some of which originated in the early 19th century or earlier [Resources 7 and 30-37]. Two of these properties [Resources 7 and 30] were examined in the mid-1980s, the former producing evidence of intact late 18th and 19th-century domestic deposits. The remaining 19th-century dwelling sites have not been examined. Except for two small probable tenant dwellings on the west side of New York Avenue [Resources 36 and 37], which have probably been removed by later construction, these are all considered to hold moderate potential of yielding archeological data. Two major batteries were erected during the Civil War (Figure 4.15). Construction of the North Cliff Battery [Resource 39] commenced in 1863; and 1867 ordinance report indicates the

battery held twenty-three 15-inch Rodman guns, all unmounted (Black 1983:94). Extensive remains of the North Cliff Battery survive within Battery Catlin: granite-faced arched bridges and magazines with brass-studded wooden doors. The South Cliff Battery [Resource 40], constructed between 1862 and 1866, was designed to extend from Fort Richmond to Battery Hudson; the 1867 return indicates that nine 15-inch Rodmans were in place, as well as three carriages without guns (Black 1983:94). Evidence of South Cliff Battery also survives, although much of it appears to be buried; stonework and the upper portion of a wooden magazine door currently project above ground level in the vicinity of Endicott Battery Turnbull. A small two-gun battery [Resource 41] was constructed in 1866 near the southeast corner of Fort Tompkins (figure 4.20), but was later removed.

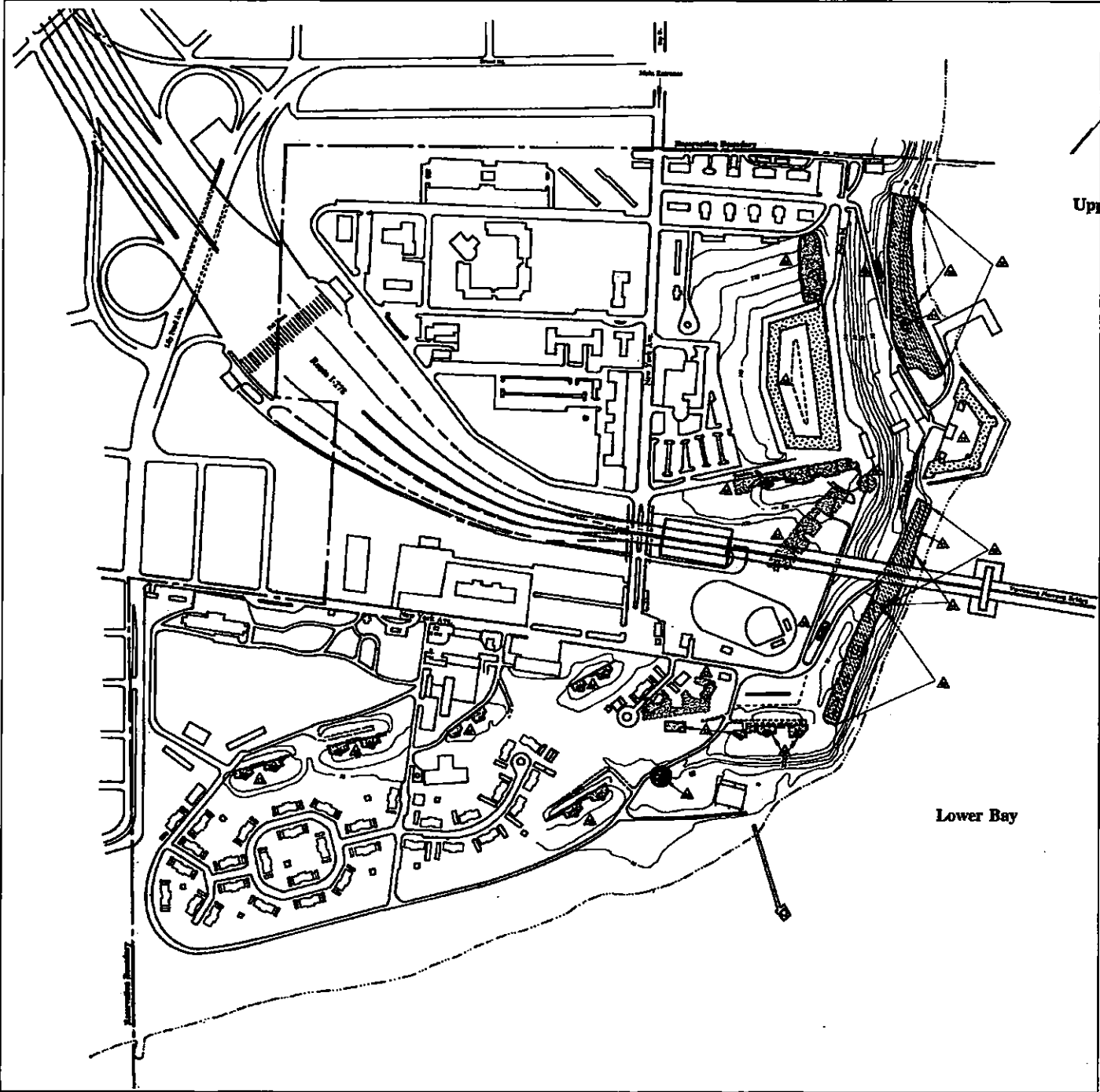
The post-Civil War period witnessed the construction of three batteries (figure 4.20); remains of only one — the Glacis Gun Battery of 1874 [Resource 44] — survive on the surface at present. The Glacis Mortar Battery [Resource 42] was constructed 1871-72, probably on or near the site of the early 19th-century Battery Morton. The mortar battery contained ten 13-inch sea-coast mortars in 1876, but was in turn partially removed by construction of the Endicott Battery Duane. The foundations for the South Mortar Battery [Resource 43] were laid in 1872 but no further work was undertaken (Black 1983:96,97). The site is located to the rear of Endicott Battery Mills [Resource 47], in the vicinity of modern housing units.

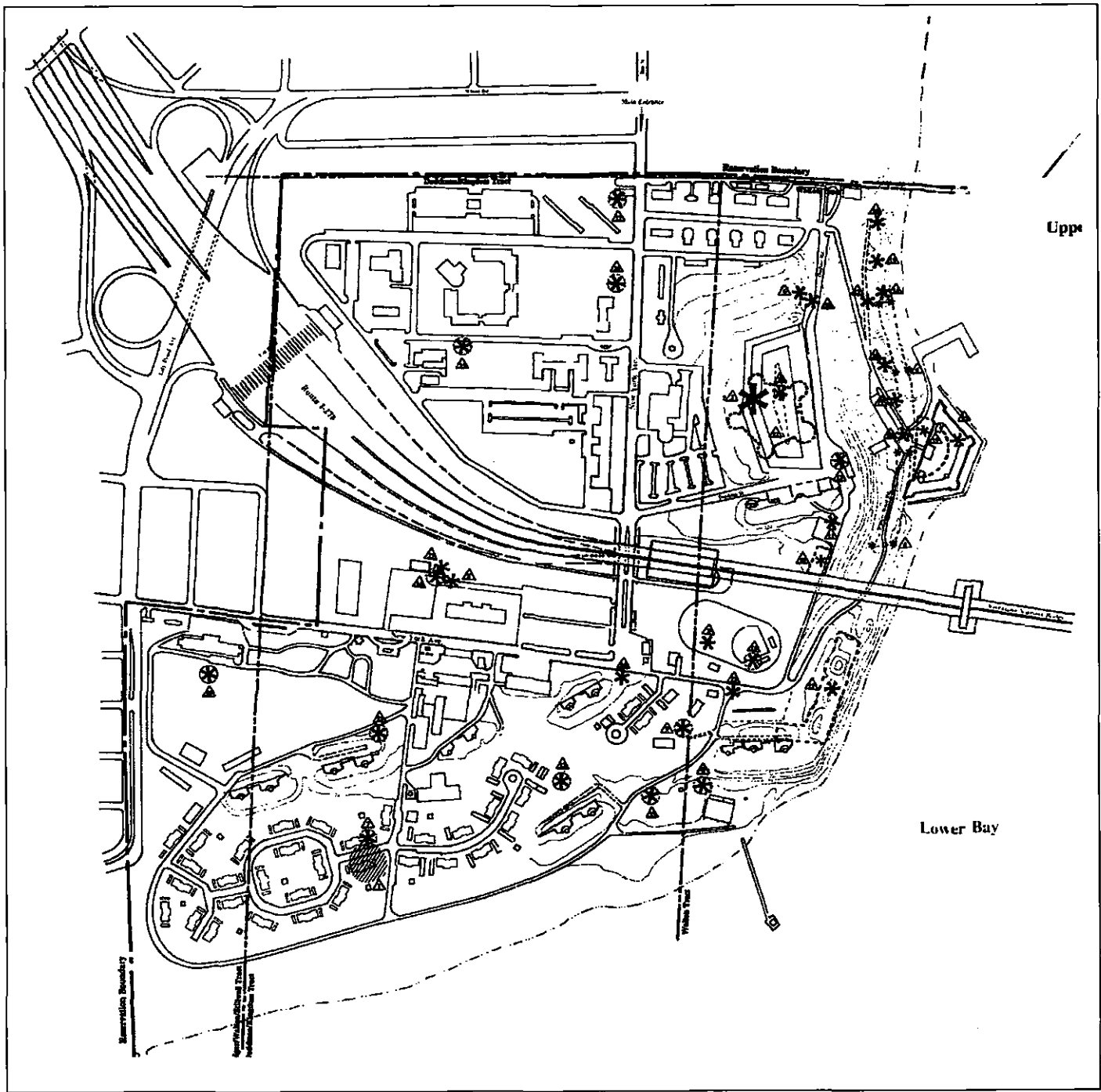
The concrete Endicott-period batteries [Resources 43-56] were constructed 1895 and 1904 (figure 4.14), although an 1889 map indicates that some of these batteries were planned by that date. These batteries were placed along the shoreline, overlying the North Cliff, South Cliff and the earlier Hudson batteries, and within the post-1900 property extension to the west. Most were designed to hold two breech-loading rifles or rapid-fire guns, although others — Duane [Resource 45], Hudson [Resource 46], Catlin [Resource 48] and Turnbull [Resource 50] — were larger (Black 1983:111). All of these batteries remain substantially

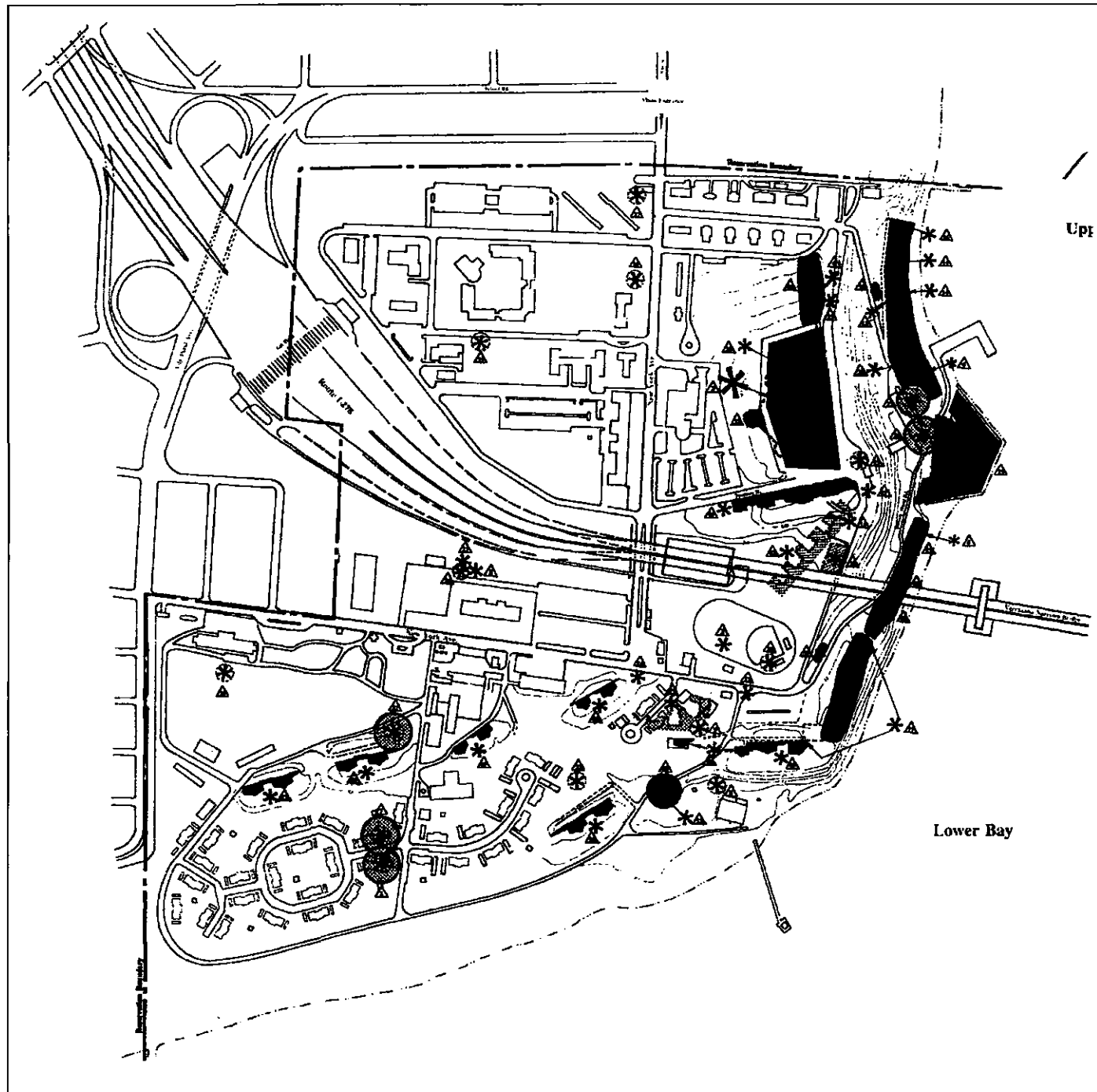
intact and in varying stages of deterioration, although those beneath and near the overhead span of the Verrazano Bridge (Turnbull and Bacon) are covered with considerable amounts of fill.

Military records (Black 1983:111) indicate that seven of the Endicott batteries (Ayers, Richmond, Dix, Millis, Hudson Turnbull, and Catlin) remained in service during World War II. Later modifications are evident at least at Catlin; concrete World War II communication/fire control stations [Resources 58 and 59] stand behind Batteries Catlin and Turnbull. A small concrete tower (Building 338) [Resource 60] stands near the shoreline east of Battery Dix. A brick structure (Building 140) [Resource 57] stands within Battery Catlin near the entrance to a North Cliff Battery magazine.











## Conclusions and Recommendations

Despite the intensive redevelopment of the Fort Wadsworth reservation over the past century, much of which has entailed radical alteration of the landscape, the property still has the potential to yield archeological information. Cultural deposits of prehistoric and historic interest are naturally most likely to survive in areas that have seen little activity during this century, but the potential for archeological data within, beneath and immediately around currently standing structures should not be ignored, especially since much of the military construction has involved re-use of previously developed sites. Redevelopment of this sort is evident, for instance, in the vicinity of Fort Tompkins, Battery Weed and Battery Hudson.

Briefly summarized, Fort Wadsworth has been demonstrated as containing "pockets" of prehistoric cultural strata and materials, notably in the southwestern section of the reservation, and these may be anticipated elsewhere on the property, especially on minimally disturbed flat terrain within 1,000 feet or so of the southeast shoreline. There is no clear evidence for 17th-century Dutch-American settlement within the fort limits, but the possibility exists that one — or possibly two — late 17th-century Anglo-American farmsteads were established on, respectively, the Doddman/Kingdom and Walton land parcels as defined in the late 1660s. One later colonial farmstead, in the hands of the Van Deventer family in the mid- to late 18th century, was apparently focused in the southwest part of the fort and may coincide with the earlier Doddman/Kingdom and later Fountain/Mouquin properties. Archeological evidence of this occupation may have been encountered in the cultural resources survey carried out in the early 1980s. Remains of a series of signaling beacons, reportedly installed in the mid-1750s, may survive inland from Battery Hudson.

Within the military period (for the purposes of this study, regarded as extending from just before the American Revolution through World War II), limited archeological traces may survive of the

fort, shoreline batteries, more beacons, a possible redoubt and other installations established by the British between 1780 and 1783. The integrity of such resources is likely to have been compromised by later military construction, but their total removal should not necessarily be assumed. No substantive new construction was conducted on Staten Island as part of the American "First System" seacoast fortification program and military archeological data from this period are unlikely to be identifiable. "Second System" evidence, however, may survive in the form of buried remains of the fortifications of the first Forts Richmond and Tompkins, Battery Hudson, Battery Morton, and other related support structures, all of which emerged through a building program that extended from 1808 to at least 1817. Later redevelopment of the site has resulted in the reconstruction or removal of these features (as for instance with the creation of Battery Weed on the site of Fort Richmond), but subsurface remains are still very likely to be found. Portions of the Civil War North Cliff and South Cliff Batteries have been incorporated into later Endicott Fortifications. These Endicott Batteries are substantially intact, and some reflect World War II era modifications.

Numerous 19th-century residential properties were formerly in existence in the southwest and west sections of the present-day fort that were acquired by the U.S. Army during later expansions of the reservation. While some of these have certainly been entirely removed, others may be partially intact below ground. Finally, although outside the scope of the current study, it should be noted that post-1850 military and non-military archeological resources are also likely to survive in various locations, including in direct association with currently standing structures.

At this preliminary stage of assessment, three recommendations are offered for future identification and management of archeological resources on the Fort Wadsworth property:

**Recommendation 1:** In the short term, until more specific information becomes available, it is suggested that the mapping data presented in this study be used as a guide for archeological action in the event of ground-disturbing actions at the fort. It is suggest-

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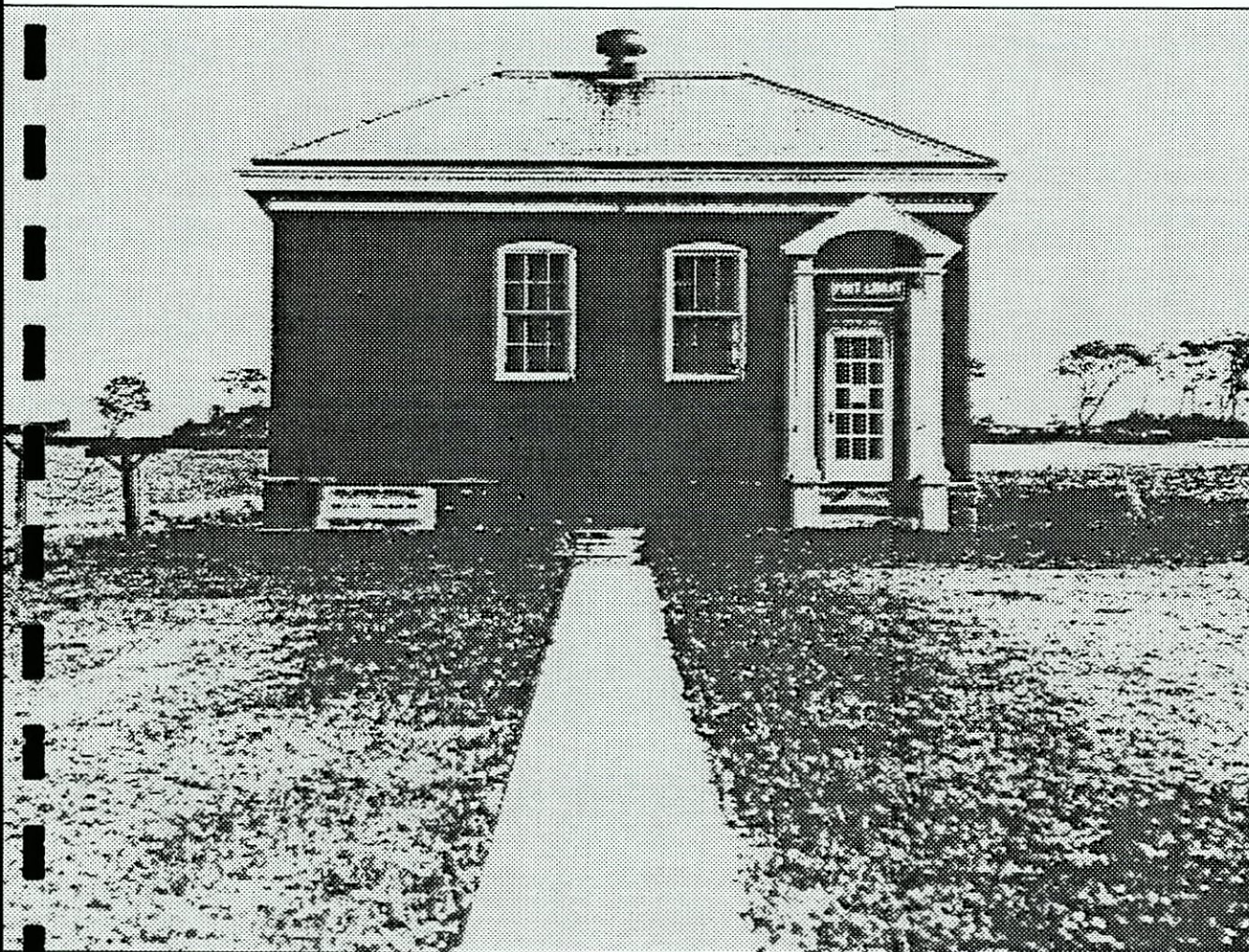
ed that land alteration in the area of low potential resources be reviewed in detail, and if necessary monitored, by a qualified archeologist. Actions likely to affect moderate potential resources should be reviewed and, if necessary, a program of subsurface testing should be implemented to determine whether any further archeological action or mitigation is required. Ideally, impacts on resources with high potential should be avoided, although it is recognized that the definition of such resources on the ground could bear considerable refinement. Consequently, programs of detailed documentary review, site inspection and subsurface testing could again be implemented until more precise archeological data becomes available.

**Recommendation 2:** Consideration should be given to expanding and refining this preliminary assessment as an initial step towards formulating an effective archeological resource management plan for Fort Wadsworth. Further useful archival research into late 17th-century through late 19th-century land ownership could be undertaken in an effort to trace land use and pinpoint locations of likely archeological survivals. Likewise, this study has not had the benefit of a detailed site inspection and cultural landscape assessment, which could help identify areas where archeological potential has been entirely removed. Without doubt, a far more refined version of the map showing archeological potential could be generated at a larger scale and with more precise definition of archeologically sensitive areas, as has been recently accomplished for parts of Central Park and the African Burial Ground and Commons Historic District in Manhattan (Hunter Research, Inc. 1990, 1993). Such a product, however, would be contingent on suitable topographic base mapping.

**Recommendation 3:** Fort Wadsworth has a complex history both in terms of its military and civilian land use, most of which is not currently visible. Positioned on one side of the Narrows, it also expresses a tremendous sense of place as one of a pair of prominent gateposts to America. With its system of narrow straits, adjoining headlands, immense bridge and military fortifications, the Narrows has the potential for becoming a larger, urban version

of one of the best-interpreted and most cherished historic locations in the eastern United States, the Crown Point/Chimney Point National Landmark in the Champlain Valley. In this context, Fort Wadsworth itself holds great opportunities for a program of historic interpretation for the benefit of the visiting public (e.g., through tours, waysides, publication of maps and brochures). The archeology of the Fort should form a significant component in future interpretive programs developed for the site.





## **5.1 Evaluation of National Register Significance**

National Register Criteria

Current National Register Status of Fort Wadsworth

Statement of Significance

Proposed Amendments to Current national Register Significance

Recommendations

## **5.2 Analysis of Site Integrity and Identification of Character Defining Features**

Mont Sec Area

Fort Tompkins and Battery Weed area

New York Avenue

Parade Ground

Richmond Avenue

South of Richmond Avenue

Summary of Assessment of Integrity at Fort Wadsworth

## **5.3 Preliminary Treatment Guidelines**

Section

**5**

National Register Significance /

Site Integrity and Character



## 5.1 Evaluation of National Register Significance

### National Register Criteria

The significance of a property in American history is determined through a process of identification and evaluation defined by the National Register Program. Historic Significance may be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, materials, workmanship, feeling and association, and which meet at least one of the following National Register criteria:

- A: That are associated with events that have made a significant contribution to the broad patterns of history; or
- B: That are associated with the lives of persons significant in our past; or
- C: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- D: That have yielded or may be likely to yield information in pre-history or history.

### Current National Register Status of Fort Wadsworth

Two individual properties on Fort Wadsworth were listed on the National Register in the early 1970s, when the continued existence of the base seemed to be threatened. Battery Weed (Fort Richmond) was listed in 1972 and Fort Tompkins in 1974. Both are listed as structures, with their boundaries, though not described, apparently limited to the exterior of the structures themselves. For both the period of significance is given as 19th Century only, in the areas of "military" and "architecture". While these nominations achieved the purpose of listing the most conspicuous properties at Fort Wadsworth, they are inadequate to describe properly the importance of the military base and to define its contributing resources. Nor do they provide a degree of

protection to any resources beyond the two main structures. The nominations perpetuate some notable inaccuracies and fail to provide an appropriate context. The descriptive portions are minimal by present standards.

In 1996, the National Register determined that the twelve Endicott era batteries and the command post were eligible as a thematic group. In conjunction with proposed establishment of a Homeport for its Surface Action Group, the US Navy, in 1984, surveyed all structures at Fort Wadsworth (see Draft Environmental Impact Statement (DEIS), Appendix C: Cultural Resources Survey) and subsequently sought determinations of eligibility for the following resources: Endicott-Era Batteries (as a thematic group); Duncan Estate Western Gatehouse; Duncan Estate Eastern Gatehouse; Officer's Row Historic District (Buildings 111, 112, 113, and 114 Mont Sec Avenue), and the Fountain-Mouquin Archeological site. The keeper of the National Register determined that the Endicott-Era Batteries and the Fountain-Moquin Archeological Site were eligible, but that the other properties were not. (E.O. 11593 Determination of Eligibility Notification, January 9, 1986). Officer's Row was determined not eligible because of the lack of an appropriately developed historic context. The New York State Historic Preservation Officer concurred in these determinations.

The Navy initially considered a district including non-defensive structures bounded by New York Avenue on the West and the Verrazano Bridge on the South, but found upon examination that "most of the buildings within the boundaries of a potential district did not seem to be as old as had been supposed". At that time buildings erected in the 1930s were less than 50 years old and had to be extraordinarily significant to be eligible for listing on the National Register (see DEIS, Appendix C, C-26-27)

### Statement of Significance

This study is the first attempt to re-examine the issue of National Register eligibility of Fort Wadsworth since the 1986 National Register eligibility determinations and the 1984 Navy survey.

## Section 5:

### Evaluation of National Register Significance

Due to the passage of time, the buildings erected since the 1930s merit reconsideration as does the issue of the boundary. The study team concurs in the findings of the Navy survey that Fort Wadsworth's main significance lies in its use as a coastal defense installation.

This significance is evidenced by the listing of Battery Weed and Fort Tompkins and by the determination of eligibility for the Endicott-Era Batteries. We believe that whether the base as a whole retains integrity requires an analysis of the property that takes into account features of the cultural landscape other than structures. The architectural significance of base structures and complexes, particularly the residential area of Mont Sec Avenue, still require the development of an appropriate historic context as noted in the 1986 Determination of Eligibility. That context, however, has not been developed in the present report.

Coastal defense, or more accurately the defense of vital harbors, has been one of the most persistent and powerful themes of American military history by any measure of effort, expenditure and emphasis. A noted historian of the U.S. Army, Russell F. Weigley, finds the interest in coastal defense during the late 19th Century "almost obsessive." Physically, the focus on coastal defense has left what Emanuel R. Lewis terms "an enduring heritage of military architecture". The development of Fort Wadsworth closely parallels broad trends in the history of our nation's coastal defense.

While on many occasions advocates of defensive measures have played on unwarranted fears to achieve selfish ends, the enduring emphasis on this subject derives from profound convictions about the nature of American government and America's place in the world. It testifies to the basically defensive, passive posture of the United States in world affairs during much of its history. The stress on fortifications is a product of several patterns of thought that pervade American history: suspicion of a permanent military establishment, resistance to large federal expenditures except during emergencies, and faith in engineering or technical fixes to avoid excessive commitments and losses of military manpower.

In keeping with the importance placed on it, coastal defense has been one of the most intensively studied and analyzed topics in American military history. High-level boards and committees, both civilian and military, have repeatedly addressed the issue, with profound and direct consequences. As a result, United States coastal defense has from its beginnings manifested itself as a series of systematic national programs. For this reason there are close parallels and strong relationships among fortifications throughout the country, including Fort Wadsworth.

Emanuel Raymond Lewis, the most influential scholar of the subject, has identified eight generations of fortifications, divided into two groups of four each. The first four were mostly constructed of earth, earth and stone, stone or brick, and armed with smooth-bore cast-iron muzzle-loading cannon; the last four were based on rifled steel breech-loading guns mounted in battery structures built primarily of reinforced concrete. Lewis's scheme of classification has been generally adopted by other scholars and is useful in understanding the history of particular fortified places such as Fort Wadsworth.

As with other aspects of American military history, the development of coastal defense has been by no means a smooth progression. Periods of vigorous, often emergency, activity have been followed by dormant intervals sometimes lasting many years. Fort Wadsworth has exemplified this erratic pattern. Except perhaps for limited work in the 1790s, the site was largely deserted between the War for Independence and 1808. From 1816 to 1847 it was not garrisoned and probably not maintained to any significant extent. For 15 years beginning in 1875, a time of great consternation in the coast defense establishment, coastal defenses throughout the nation were neglected and nearly inactive. Another lull occurred between the two world wars.

New York City has always occupied a prominent position within the national defensive campaigns. It was one of 16 sites selected for defensive works under the "First System" (1794) and one of four population centers to be protected by an improved NIKE missile system in 1958. In the interim, the defense of the city was

given first priority by the Endicott Board in 1886, and New York was one of four cities that received initial funding under the recommendations of this board. In a period of heightened awareness that preceded the convening of this board, an artillery officer, Lt.G.N. Whistler wrote, "Concerning the question of expense, I submit, as a mere business proposition, that the people of the United States cannot afford to have the city of New York destroyed by a bombardment once in a century,—no, nor once in two centuries."

Lewis has demonstrated how the number of fortified places decreased in response to economic concentration resulting in part from the development of larger vessels. The number of defended localities along the Atlantic coast stood at 35 early in the 19th Century but declined to 20 by 1850 and only 10 by 1940. No matter what the total, New York was always given highest priority.

Lewis also describes how fortifications moved steadily farther out from the cities they were defending, in response to improved capability of both offensive and defensive weaponry—resulting in what he terms "horizontal stratification". This long-term trend is important in understanding the development of Fort Wadsworth. Under the First System, commencing in 1794, emphasis was placed on "inner harbor" fortifications at and immediately adjacent to New York City. Although the importance of Staten Island was recognized, little work was done there; the main effort was devoted to Governor's Island. During the Second System, beginning in 1807, attention shifted outward without abandoning concern for close-in defense. A major fort was constructed at present Fort Wadsworth, while on Governor's Island Castle Williams, considered to be the outstanding example of this system, was erected.

Under the Third System, initiated in 1816 following the recommendations of the Bernard Board, the forts on both sides of the Narrows attained probably their greatest relative importance in the defense of New York harbor. This program is also known as the Permanent System, and the underlying philosophy is evident in the structures it produced. With their innate conservatism rein-

forced by French influence, Army engineers sought to create a defensive system that would endure almost indefinitely. In his 1820 message to Congress President Monroe spoke of defenses that would "last for ages," and two years later he expressed the grandiose goal of making the coast "so far as it might be practicable, impregnable."

The two most conspicuous individual structures on Fort Wadsworth are products of the later stages of this period and its attitudes. The planning and construction of these works are described in detail in Black's Historic Resource Study, and there is no need here for more than a brief summary. Present Battery Weed was begun in 1847 and essentially completed in 1864, while Fort Tompkins was started in 1859 and finished in 1876. These works are outstanding examples of Third System fortifications and would be noteworthy for their architecture and as examples of the stonemason's art even apart from their lacking in military importance. Their extended period of construction is not unusual, given the inherent difficulty of the work and the fluctuating and often parsimonious appropriations.

Not for the first time in the history of coastal defense, these forts were virtually obsolete by the time they were completed. Rapid changes in technology, notably iron-clad and steam-powered ships; and breech-loading and rifled artillery using improved propellants made a mockery of the Army engineers' illusions of permanence. The speed and magnitude of the technological upheaval were so great that the engineers were thrown into a quandary and for a number of years were unable to agree on a course of action. By 1875 the nation's coastal defenses were virtually moribund.

In the absence of a credible foreign threat, the United States was granted the opportunity for a leisurely examination of its defensive system. This period of reconsideration prevented the adoption of another system that would become prematurely outdated. By 1884 President Arthur observed that "The time has now come when such defenses can be prepared with confidence that they will not prove abortive." Less than two years later the Endicott Board brought forth its recommendations, which resulted in an



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extended program of constructing an entirely new type of fortification.

By 1904, 12 new "Endicott" batteries and a command post had been constructed at Fort Wadsworth (some of which consisted of adapting existing old-style batteries). The defensive perimeter of the city had been moved outward again, to embrace Fort Tilden and Fort Hancock. However it is clear that the Staten Island fort still comprised a vital element of New York's harbor defense.

Numerical comparisons of weaponry have the potential to be misleading because of the difficulty of comparing different types of guns with differing capabilities and functions. Any comparisons risk distorting the vital concept that the placement of guns around a harbor was part of a unified scheme. With these precautions in mind, raw statistical analysis shows that, in terms of planned number of batteries, number of guns and cumulative firepower, Fort Wadsworth was similar to Fort Hamilton. Both were considerably outgunned by Fort Hancock, the most heavily armed of the New York harbor forts. New York's total defensive armament was the heaviest in the nation, with San Francisco second, though the difference between the two—on the order of 15 to 30% depending on the criterion used—is not categorical.

The Endicott period works, as improved by the Taft Board early in the 20th Century, remained in service through World War I. Like their predecessors, they were never tested in combat. The traditional interest in coastal defense did not end with World War I, and subsequent years saw the development of a new generation of coast artillery. It does not appear that these longer-range guns were emplaced at Fort Wadsworth—with Forts Tilden and Hancock in existence, it would have made little sense to do so. As a result, the relative importance of Fort Wadsworth within the New York harbor defense system declined, and this impression is strengthened by the fact that the fort was transferred from the command of the Coast Artillery Corps to the infantry in 1919. Periodically during the next two decades other elements of the Army, and in the 1930s the WPA, undertook considerable new construction on the post.

Army correspondence in the 1920s indicates that even though only a skeleton contingent of coast artillerymen remained at Fort Wadsworth, the coastal defense mission remained primary, and no construction was undertaken that might interfere with that function. Nor did the national concern for coastal defense come to an end. Another harbor defense board was convened in 1940, and between that year and 1950 about \$250 million was spent on harbor defenses. Fort Wadsworth, where only a caretaker detachment of coast artillerymen struggled to maintain the remaining guns, was typical. This pattern, however, is characteristic of American military history, with its frequent alternation between periods of intense activity and sudden retrenchment. The lull between the World Wars does not differ categorically from the many earlier phases of decline.

After World War I the emphasis in coastal defense shifted to anti-aircraft, and by World War II the anti-aircraft function overshadowed traditional concern with defense against surface ships. Both missions were entrusted to the Coast Artillery Corps, and the change was more one of technology than philosophy. Fort Wadsworth was returned to the control of the Coast Artillery Corps in March 1941, and during World War II the post commanders belonged to this branch. None of the latest anti-ship guns were emplaced there, but anti-aircraft weapons and mines were deployed. The fort, perhaps to a diminished degree, remained part of the New York coastal defense system. Although additional research is required, it appears that the post housed a sizable contingent of coast artillerymen and also performed service functions for troops manning guns elsewhere on Staten Island and in New Jersey.

In the years immediately following World War II the rapid advancement of military technology led to the abrupt abandonment of traditional concepts of coastal defense at Fort Wadsworth and throughout the United States. According to historian Emmanuel Lewis, the technology of amphibious invasion, and increasing reliance on aircraft for both defense and attack reduced the strategic importance of port facilities. Heavy ships guns, if

used at all, would be used in connection with such open beach landings and not in bombarding coastal cities or naval bases, which could be more safely and easily attacked from the air. In 1949 the practice of defending U.S. harbors by long-range, ground-based artillery was officially ended. In 1950, the remaining harbor defense commands were disbanded. That same year, the Coast Artillery was abolished as a separate branch of the military and combined with the Field Artillery into a single Artillery branch with primarily an anti-aircraft function.

Following the abolition of the Coast Artillery, Fort Wadsworth was used briefly as a training station for the National Guard, as well as a anti-aircraft defense site during the Korean War. Between 1954 and 1960, Fort Wadsworth served as the headquarters for the 52nd Anti-aircraft Artillery Brigade, which was responsible for the development of the first generation of NIKE anti-aircraft missiles in the New York City area. According to Lewis, the NIKE missiles, along with other new anti-aircraft guns and missiles can be seen as "the functional descendants of sea-coast defenses." However, it does not appear that any missiles were actually emplaced on the grounds of Fort Wadsworth. At this point, more research is needed to determine the specific role and significance of Fort Wadsworth in the NIKE program.

#### **Proposed Amendments to Current National Register Status**

Based on this evaluation, Fort Wadsworth as a whole appears to be eligible for listing on the National Register as a historic district for its significance under criterion A for its role in coastal defense coastal defense, and specifically, the defense of New York Harbor, for the period from 1794 to 1945. In addition, the two major "Third System" fortifications on the site, present Battery Weed and Fort Tompkins, have significance under National Register criterion C as outstanding examples of military architecture.

The district boundaries should encompass all of the land within the present boundaries of the base. The base has been managed as a single entity within these boundaries since the turn of the twen-

tieth century. Any efforts to exclude portions of the present base create arbitrary distinctions.

The recommended period of significance 1794 to 1945. While the NIKE period represents in principle a legitimate extension of the coastal defense theme, at this point, not enough is known about the later history of Fort Wadsworth to determine whether its resources are of sufficient importance to justify applying Criteria Consideration G for properties that have achieved significance within the last 50 years. Adopting 1945 encompasses the period of intense activity during World War II. Individual resources within the base are contributing if they existed in 1945.

#### **Recommendations**

The most effective and accurate method of expressing the role of Fort Wadsworth and other coastal defense installations around New York City within their appropriate context is through a multiple property National Historic Landmark (NHL) nomination embracing all of the harbor defenses of New York. This parallels the approach being taken for San Francisco, the city most closely comparable to New York in terms of harbor defense. The period of significance for this comprehensive nomination would likely extend from the earliest extant fortifications through the NIKE period ending in the early 1970s. However, individual districts and sites such as Fort Wadsworth could have shorter periods of significance. Within the comprehensive nomination, Fort Wadsworth would comprise a district, with some contributing resources already known and others to be determined by further research.

The additional research that is required to support an NHL includes:

1. Examine more fully the command relationships of the forts around New York City (as recommended by Black).
2. Provide a fuller description of how overall planning for the defense of NEW YORK CITY was conducted.
3. Assess the relative role and importance of the various

forts and coast defense installations around New York City by comparing their armament during different periods.

4. Compare layout and appearance of other defense installations, especially in the New York area, to determine if there is consistency of design.

Additional site-specific research that is required includes:

1. Develop an appropriate historical context for Fort Wadsworth's military residential architecture.
2. Determine whether any construction at Fort Wadsworth after WWI had a primarily coast defense purpose.
3. Determine whether Army activities in the period after 1919 unrelated to coastal defense are significant, and examine why considerable new construction took place during a peacetime period of fiscal retrenchment.
4. Investigate location of anti-air and other coast artillery functions during WWII, especially whether new construction required.
5. Investigate Fort Wadsworth's role in the NIKE program to determine whether any extant resources reflect this activity and their relative significance.
6. Conduct further study of certain particular buildings such as the Mine/Torpedo Storage building and the "stables" to determine whether traditional assumptions about their use are correct and to make comparisons with similar structures on other bases. For example, mine storage buildings in the San Francisco area may be analogous.

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## **5.2 Preliminary Analysis of Integrity and Identification of Landscape Character Defining Features**

As discussed in the Statement of Significance, the period of National Register Significance for the proposed historic district

extends from 1794 to 1950. However, as would be expected for an important, active military base, Fort Wadsworth has continued to evolve and change over the past fifty years. Indeed, with the development of the Navy Homeport starting in 1987, the past seven years have witnessed some of the most dramatic changes in the base's history. This section of the report is intended to summarize, in the broadest fashion, how the cultural landscape at Fort Wadsworth has changed since 1945. This assessment draws on the information included in the Site History portion of this Cultural Resources Report, along with the numerous historic maps and photographs collected in the course of this project. Assessments of the potential historic significance of woody vegetation at Fort Wadsworth were drawn from the draft "Woody Plant Inventory at Fort Wadsworth," prepared by Margie Coffin, Olmsted Center for Landscape Preservation, January 1994.

Overall, Fort Wadsworth has experienced a significant amount of change since 1945, resulting in a somewhat diminished level of integrity. However, this site represents a large and complex district, where, owing to its distinct pattern of development, the level of integrity varies greatly from area to area within the base. Consequently, while it is customary to assess the integrity of a proposed historic district as a whole, the following analysis will discuss major changes and identify contributing resources and character defining features of specific areas within the base. This will be followed by a summary assessment of the integrity of the proposed Fort Wadsworth district as a whole. It is hoped that this approach will prove useful for the future interpretation and management of this unique site.

### **Mont Sec Area**

The Mont Sec area, including the eleven residential structures lining Mont Sec Avenue and the Officers Club (Building 109) at the eastern terminus, has experienced relatively little change since the end of the period of significance. Indeed, this area retains many characteristics of its appearance when first developed in the late 19th century, and into the 1930s. Contributing resources and character defining features include:



Buildings 101, 102, 103, 104, 105, 106, 107, 109, 110, 111, 112, 113, 114, and 115, 116, 117 and all associated landscape features including driveways, lawns, steps, fences, foundation plantings, ornamental trees, and shrubs;

Mont Sec Avenue with its associated sidewalks; the London plant trees lining the street; the remaining light standards; and the Pine tree at the eastern terminus of Mont Sec Avenue;

The open hillside south of Buildings 110-115, including the Oak, Maple, Elm, Sassafras and Cherry trees located on this hillside;

#### **Fort Tompkins and Battery Weed Area**

For the purposes of this assessment, the Fort Tompkins and Battery Weed area includes the area extending from Fort Tompkins east to the Narrows, and from approximately the Verrazano Bridge to the reservation boundary with Arthur Von Briesen Park in the north. This area, which could be seen as the "historic core" of Fort Wadsworth, retains a high level of integrity to 1945, and maintains many characteristics from the end of the Endicott period (1920) and even further back to the post-Civil War period. A major change to the overall character of this area has been the dramatic growth in scrub vegetation on the hillside below Fort Tompkins, and around Battery Caitlin and the Torpedo Storage Building. As recently as 1950, undeveloped land around the two historic batteries were planted only with low grass, giving the area a much more open feel.

Based on this preliminary evaluation, contributing resources and character defining features in the Fort Tompkins and Battery Weed area include, but are not limited to:

Fort Tompkins and Battery Weed, including the open space in each of their courtyards

Battery Duane, Battery Catlin, Battery Turnbull, Battery Bacon, Building 125, Building 138, Building 139, Building 140, Building 141 (the dock), Building 144, Building 147

(Torpedo Storage Building), Building 148

Tompkins Street, Battery Weed Road, Hudson Road, Dock Road

The wall in front of Fort Tompkins

The dock and seawall around Battery Weed

The undeveloped hillside between Fort Tompkins and Battery Weed

Unobstructed views of New York Harbor from Hudson Road and Fort Tompkins

The row of four American Elm trees on top of Battery Caitlin.

#### **New York Avenue**

New York Avenue area has experienced steady and significant physical change since 1945. Until the mid-1950s, New York Avenue served as the true "Main Street" of Fort Wadsworth. As today, New York Avenue provided the main point of access to the base. On its western side it was lined by the two large barracks, built in 1929, and the post headquarters building, which appears to have dated from around 1910. On its eastern side was a row of buildings dating from the turn of the century, including officers' quarters, the former hospital (which later served as the post headquarters), library, and telegraph office. The overall appearance was a fairly dense, cohesive streetscape of small to moderate scale, 1-4 story, brick structures.

With the construction of the Verrazano Bridge in 1964, and the development of new facilities for the Navy Homeport after 1987, many of the older buildings located along New York Avenue in 1950 were demolished. Further, several new structures have been added since 1950. Buildings 222, 223, 203, 209, and the new Gatehouse (220) were all constructed during the 1960s. Most recently, New York Avenue's streetscape was dramatically altered in 1994 through the construction of Building 120 and its massive parking lot.

Based on this preliminary evaluation, contributing or character defining features included in the New York Avenue area include, but are not limited to:

The entry gate and gate house (Building 201) at the northern end of New York Avenue

New York Avenue itself, including the London plane trees lining the road.

Building 119 and Building 210

The brick residence (Building 119) and the Barracks (Building 210) along New York Avenue.

### **Parade Ground**

The Parade Ground has significantly diminished integrity since the end of the period of significance. As noted in Section 3: Site Description/Site History, the Parade Ground had been cleared and graded by the end of the 1920s. Until the 1960s it remained a largely open area, crossed with curvilinear paths. Boundary Road wound around the northern and western edges of the Parade Ground, leading onwards to Richmond Avenue. The Commanding Officer's House, the only major structure to have remained from the estate period prior to the expansion of Fort Wadsworth around the turn of the century, sat on a slight knoll on the eastern end of the Parade Ground.

In the 1960s, with the demolition of structures resulting from the construction of the Verrazano Bridge, a small complex of buildings and facilities were built at the western end of the Parade Ground (Buildings 204, 205, 206, and the handball court). Two residential quarters, Buildings 223 and 222, were built in the northern corner of the Parade Ground, and Building 203, 209 and 208 were built in the southern corner. It appears that around this time, Pershing Drive, Truman Avenue and Liggett Road were constructed around the Parade Ground, forming a regular rectangle with New York Avenue. More recently, in 1990 a quadrangle of buildings known as the BEQ complex were erected at the western end of the Parade ground as part of the Navy's Homeport

Development. This complex occupies approximately half of the former Parade area. An interesting note is that a portion of the Parade Ground is used as the starting point/staging area for the annual New York City Marathon.

Based on this preliminary evaluation, contributing or character defining features associated with the Parade Ground include:

The Horse Memorial

The remaining open space east of the BEQ complex and including the Father Capodanno Monument

The stand of mixed hardwoods, predominately oaks, in the northwest corner of the Parade Ground.

### **Richmond Avenue**

The Richmond Avenue strip has moderately diminished integrity to 1945. Interestingly, however, throughout the history of Fort Wadsworth this area experienced physical change on a fairly regular basis, as the site for temporary buildings associated with various wars, public works campaigns, and, during the 1950s, a large trailer court. In addition, from around the 1930s or 1940s, the southern side of Richmond Avenue has been the site of a small complex of utilitarian structures including three motor pool buildings, flammable materials storage, and an ammunition bunker. A recent addition to the Richmond Avenue area was the Navy Lodge, built at the western end of Richmond Avenue near the entrance to the post. A feature of interest in this area is the Gate House (Building 404), which apparently dates from 1855 and represents the only remaining feature on the site from the estate period prior to the expansion of the base at the turn of the twentieth century.

Based on this preliminary evaluation, contributing or character defining features in the Richmond Avenue Area include:

Buildings 301, 302, 304, 305, 309, 310 (identified in a group as the Seebee Complex), 307, 357, 404.

Richmond Avenue itself

The informal stand of trees (oak, maple, locust) in the open area south and east of the Navy Lodge, and in particular, the European beech and the tulip tree southeast of the Navy Lodge, which probably represent the oldest trees at the base (see figure 8 of the "Woody Plant Inventory").

#### **South of Richmond Avenue**

The area sloping down from Richmond Avenue to the sand beach at the southern end of Fort Wadsworth has experienced fairly dramatic change since 1950, though a large number of contributing features are located in this area. As noted in the site history, the row of shore-facing batteries in this area, including batteries Barbour, Mills, Upton, Barry, Dix, Richmond, and Ayers, and the Command Center, were all built in the Endicott period between 1895-1905. Accordingly, several of the winding roads leading to these defensive structures also date from this period. However, throughout the period in which these batteries were in active use (1900-1950), the hillside below was undeveloped, and largely cleared of vegetation for obvious reasons. After 1945, with the batteries no longer in use, the Capehart housing complex was developed on the hillside to the south to provide housing for military families. As the batteries sat in disuse, many were obscured by encroaching vegetation. Around 1990, with the development of the Navy Homeport at Fort Wadsworth, this hillside was cleared and a massive new complex of 32 post-modern, multi-unit buildings were constructed. The density, scale and appearance of this new housing complex is dramatically different from development in other parts of the base. Because of the steeply sloping topography in this area, however, these new structures do not completely obscure the dramatic view of New York Harbor from the batteries above.

Based on this preliminary evaluation, contributing resources and character defining features in the area south of Richmond Avenue include but are not limited to:

Battery Barbour, Battery Upton, Battery Dix, Battery Barry, Battery Richmond, Battery Ayers and the Command Post

Buildings 314, 339, 337, and possibly 312, 367, and 338 (dates of construction unknown)

Portions of Ayers Road and Loop Road

Stone Jetty

The cluster of cottonwood trees between USS North Carolina Road, and Florida Court, which are probably descendants of trees from the Estate period.

#### **Summary Assessment of Integrity at Fort Wadsworth**

The proposed Fort Wadsworth Historic District has experienced a significant amount of change since 1945, resulting in a somewhat diminished overall level of integrity.

By far the most dramatic change to the overall design at Fort Wadsworth since 1945 was brought about by the construction of the six-lane Verrazano Bridge (1955-1964) which crosses directly over the middle of the site. With the construction of the bridge numerous buildings and structures, including the headquarters, theater, post exchange, and a large barracks located in the path of construction were demolished. An entire complex of utilitarian structures, weapons storage units and range finders located along the former Engineers Road and Artillery Road were removed at this time to make way for the bridge's massive pilings. Following the construction of the bridge, a variety of new buildings were constructed around the Parade Ground to replace those which had been demolished, including a gym, theater, post exchange, chapel and a new barracks. In plan view, the construction of the Verrazano Bridge dramatically altered the entire spatial organization of the site. In plan view and on the ground the bridge serves to physically and visually divide the site in half. The looming, dramatic presence of the bridge dominates views to, from and within the site, and has undoubtedly had a significant impact on the overall setting and character of Fort Wadsworth. The development of new facilities associated with the Navy Homeport in the late 1980s and 1990s also had a dramatic effect on the overall appearance of the base, especially along New York Avenue, on



the Parade Ground, and the area south of Richmond Avenue.

Though seemingly obvious, the feeling at Fort Wadsworth will change with its eventual transformation from a busy, working military base to a park. There have been similar periods in the past when Fort Wadsworth was characteristically less active during times of peace than times of war. The regeneration of a tangled mass of woody vegetation on most of the hillsides at Fort Wadsworth has given the base a slightly neglected appearance, which also contributes to a change in its general feeling (see figure 3 in "Woody Plant Inventory of Fort Wadsworth," 1994).

Despite the dramatic change brought about by the construction of the bridge, certain contributing resources and base-wide characteristics remain on the base from 1945. Currently, approximately 1/3 of the buildings and structures at Fort Wadsworth date from the proposed period of significance. The boundaries of Fort Wadsworth, as well as the specific points of entry at New York and Richmond Avenue have been the same since around 1901. Likewise, despite some changes to the overall circulation network at the site since 1960 (including the development of roads around the Parade Ground, and the new roads developed to provide housing to the Homeport housing in the southern portion of the site) the general pattern of circulation has experienced only moderate change since 1945, with Richmond and New York Avenues still serving as points of entry in to the base and as the main roads through the site.

Another, more ephemeral but important characteristic of Fort Wadsworth is the base's open, park-like character, which was commented on and documented as early as the 1880s, at which time Staten Island residents used the base much like a park. Currently, the relative spaciousness of Fort Wadsworth when compared to the surrounding Staten Island setting, along with an abundance of lawn and large trees, has allowed Fort Wadsworth to maintain its park-like appearance. The dramatic views of New York Harbor which brought visitors to the base in the nineteenth century remain an important feature at Fort Wadsworth, as does the varied and steep topography.

Character defining or contributing features of Fort Wadsworth as a whole include:

Approximately 1/3 of the buildings at the post

The historic boundary

The circulation system, including entrances at New York and Richmond Avenue

The open, park-like feeling throughout much of the base, including the older trees, both native and planted

The varied and, at times, dramatic topography throughout the base

The dramatic views of New York Harbor from several points within the military base

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### 5.3 Preliminary Treatment Guidelines

In accord with the evaluation of Fort Wadsworth meeting the criteria for listing on the National Register, a treatment should be selected. Four approaches are currently recognized by the Secretary of the Interior for the treatment of historic resources: preservation, rehabilitation, reconstruction and restoration. The process for making treatment decisions is the same for landscapes as it is for other historic resources. As outlined in the draft Guidelines for the Treatment of Historic Landscapes, though the exact process of preserving a historic landscape may vary from individual site to site, it generally involves four major steps: 1) undertaking historical research; 2) inventorying the landscape's features and recording their existing condition; 3) conducting a site analysis to ascertain the landscape's evolution and 4) selecting an appropriate treatment. Although the treatments are interrelated, usually one primary treatment is selected for a property. A "primary" or property wide preservation treatment is one that provides a broad philosophical framework within which preservation treatment decisions for individual features are made.

Based on the current management and interpretive goals for this area, along with the research and analysis conducted for this report, the recommended primary treatment for Fort Wadsworth is rehabilitation. As described in NPS 28, rehabilitation improves the utility or function of a cultural landscape, through repair or alteration, to make possible an efficient compatible use while preserving those portions or features that are important in defining its significance. In the case of Fort Wadsworth, the new use is, of course, its role as a park. Rehabilitation is recommended as the appropriate primary treatment for this site because it allows for new uses, such as improved parking, visitor and restroom facilities, while preserving the property's historic character. More importantly, it is hoped that rehabilitation will allow for the improved interpretation of the property as it existed during the period of significance. It should be emphasized that while rehabilitation is the recommended primary treatment for Fort Wadsworth, it may not be the appropriate treatment for each individual structure or landscape feature in the district. Preservation of existing historic features and, in the case of the historic structures located on the site, the replacement of missing historic features may also be appropriate for this particular property. However, the sum of treatments applied to all of the landscape features will result in the rehabilitation of the property as a whole.

It is not within the scope of this brief effort to develop a detailed rehabilitation treatment plan for Fort Wadsworth. However, it is recommended that planning for Fort Wadsworth be developed in accordance with the standards set forth in the Secretary of the Interior's Standards for Rehabilitation as adapted for cultural landscapes in NPS 28: Cultural Resource Management Guidelines. In particular:

Historic materials, features, spaces and spatial relationships should be maintained.

The historic character of the cultural landscape at Fort Wadsworth should be retained and preserved. The replacement or removal of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that

characterize Fort Wadsworth should be avoided.

Changes that create a false sense of historical development, such as adding conjectural features from other landscapes, should be avoided. Work needed to stabilize, consolidate and conserve historic materials and features should be visually compatible, identifiable upon close inspection and properly documented for future research.

Historic materials, features, finishes and construction techniques or examples of craftsmanship that characterize the landscape at Fort Wadsworth should be preserved.

Deteriorated historic features should be repaired rather than replaced. Where the severity of deterioration requires repair or replacement of a historic feature, the new feature should match the old in design, color, texture and, where possible, materials. Repair or replacement of missing features should be substantiated by archeological, documentary or physical evidence.

Chemical or physical treatments the cause damage to historic materials should not be used.

Archeological and structural resources should be protected and preserved in place. If such resources must be disturbed, mitigation measures are undertaken including recovery, curation and documentation.

Additions, alterations or related new construction should not destroy historic materials, features, and spatial relationships that characterize the cultural landscape. New work should be differentiated from the old and be compatible with the historic materials, features, size, scale, proportion and massing of the landscape.

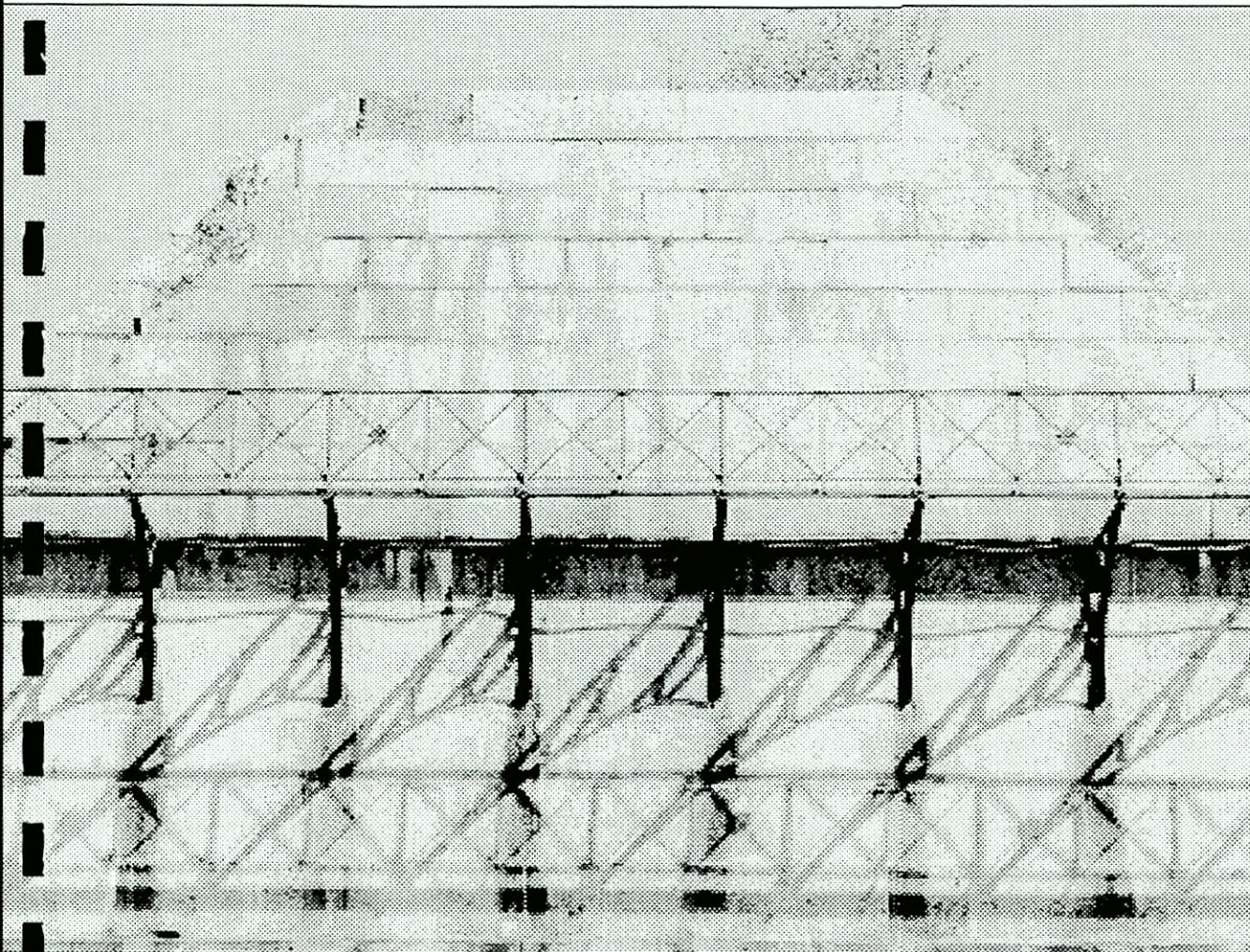
Additions and adjacent or related new construction are undertaken in such a manner that if removed in the future, the essential form and integrity of the cultural landscape would be unimpaired.











Section

6

Specific Building  
Studies

## 6.1 Introduction

## 6.2 Building Description / Character Defining Features / Condition Assessment / Recommendations

Battery Weed (Building 151)

North Dock and Seawall

Torpedo Storage Building (Building 147)

Fort Tompkins (Building 137)

Battery Duane (Building 133)

Flagpole Area

Mont Sec Avenue (Officers' Row)

Headquarter's Office (Building 109)

Officers' Quarters (Buildings 111 - 114)

Infantry Battalion Barracks (Building 210)

Police Station (Building 354)

Ammo Storage (Building 355)

Carriage House (Building 352)

Warehouse (Building 306)

Seebee Complex

Building 301

Building 302

Building 303/304

Building 305

Building 309

Building 310

House (Building 406)

Chapel (Building 203)

Theater (Building 205)

Post Exchange (Building 206)

## 6.3 Recommendations

General

General Safety Concern

Research

Specific Area of Potential Impact



## 6.1 Introduction

The "Historic Structures" section of this report documents the architectural development, character-defining features, and current conditions of selected structures at Fort Wadsworth. The structures included in this study are only those that may be initially impacted by the plans to open the site as a national park area. These structures include Battery Weed, the North Dock and Seawall, the Torpedo Storage Building, Fort Tompkins, the Flagpole Area, Battery Duane, Building 109 (Officers' Club), Buildings 111 through 114 (Officers' Housing), Building 210, Building 354 (Police Station), Building 355 (Ammo Storage), Building 352 (Carriage House), Building 306 (Warehouse), the Seebee Complex (Buildings 301, 302, 303/304, 305, 309, and 310), Building 203 (Chapel), Building 205 (Theater), Building 206 (PX/Commissary) and Building 406.

The structures located in Fort Wadsworth present a sizable task to document as a group, not only for their numbers, but in several cases for their individual significance. It was hoped that this section of the Cultural Resources Report would suffice for Historic Structures Reports for these buildings. As more information was attained regarding all of the structures, it became clear that many of the structures warranted more thorough documentation than this study could provide, based on their individual significance and their contribution to the Fort as a whole. All of the studied structures have been treated as "Limited Investigation" HSRs as defined by NPS 28. This level of HSR requires the least amount of documentation. Clearly Battery Weed and Fort Tompkins are more significant than other structures at the site and merit further study and documentation before any major funding is expended to treat them in their entirety. Therefore this study will hopefully present enough information to stabilize the structures that will first be available for public access, and additional research, both archival and physical, will continue as Fort Wadsworth matures as a national park site.

A team of four researchers from the Building Conservation Branch/Cultural Resources Center of the North Atlantic Region

conducted the investigation for the "Historic Structures" section of the report. They are Peggy A. Albee and Judith M. Jacob, both architectural conservators, and David Anthon and Chandler McCoy, both historical architects. This section of the report includes a description and development of each structure based on the available documentation, a list of character-defining features (authored by the former two researchers), and a condition assessment with stabilization recommendations (authored by Mr. Anthon). All three authors contributed to the final recommendations for the "Historic Structures" section.

The project began with an October 1994, three-day site visit to Fort Wadsworth, where each structure was investigated. Evidence of alterations, individual character-defining features, physical conditions and building pathologies were noted. All of the structures were inspected for imminent safety concerns. Field investigation included both exterior and interior deteriorated conditions. Color photographic documentation was conducted for each resource using a 35mm camera.

The site investigation was followed by a review of existing secondary sources. The majority of secondary source information relating to the history of the site was gleaned from a Cultural Resources Management Study (No. 7) by Frederick Black, entitled "A History of Fort Wadsworth, New York Harbor." For purposes of this study, Black's research, which dealt with the development of the fort prior to ca. 1920, was summarized when necessary in order to provide a fuller understanding of individual structures. A search for primary research materials was conducted by the firm of OZ Architecture, and the materials, including military correspondence, historical photographs, and copies of historic maps and architectural drawings were forwarded to the authors as they became available. The documentation was analyzed and, when pertinent, the information garnered from it was incorporated into the text.

Due to a limited time factor, all structures were ranked according to initially-assessed merit in order to devote more attention to the more important resources. The Condition Survey concentrated on

## Section 6:

### Specific Building Studies

existing physical conditions with references to historical photographs, architectural drawings, and written documentation.

Specific recommendations related to character-defining features and needed repairs are included with individual structures. General recommendations are presented in the last subsection of this report (6.18) and include excerpts from the Secretary of the Interior's Standards for Rehabilitation, general safety concerns, future research recommendations, and responses to a list of areas of potential impact compiled by OZ Architecture.

## **6.2 Building Descriptions**

### **Battery Weed (Building 151)**

#### **Description and Development**

Situated on a small piece of land jutting out into the water at the Verrazano Narrows, Battery Weed shared duty with Fort Hamilton (on the other side of the Narrows) in ensuring the protection of New York Harbor. The battery follows a symmetrical plan of a half hexagon, each segment of the hexagon measuring 286 feet in length and 67 feet in height. The fort is constructed of four tiers: three tiers of casemates and a top barbette tier with gun emplacements. A 450-foot wall connects the two ends of the structure, forming two salients and a landward front.

The fortified half-hexagon structure and the connecting west wall surround a parade, an open area covered with grass. There are essentially three sides to the fort: the water side, the land side, and the parade side.

The plan of the fort is the same for each casemated tier. Tiers are open from one end to the other with short walls situated on either side of each casemate. Two bastions are located at the junctions of the east wall and northeast and southeast walls. Three-sided protruding stairtowers articulate the bastions on the parade side. The barbette tier is covered with sod, round gun emplacements, and a knee wall; a lighthouse is positioned on the north bastion.

Four-tier magazines, with rectangular plans, are situated against

the west wall adjacent to each salient. A two-story guardhouse (3504 square feet) is situated against (and integral to) the west wall and the entrance to the fort passes through this building.

The parade side of the fort is marked by three tiers of open segmental arches supported by piers. Third tier vaults are double arches, visible from the parade. The magazines have no windows on the first three tiers and windows on the fourth tier. An iron railing runs along the open barbette for the entire length of the parade side.

Exterior embrasures are horizontal rectangles with rounded corners and covered by iron shutters. Thin vertical openings provide a protected view to the outside on the land side of the fort and western ends of the northeast and southeast walls. The west wall is void of openings with the exception of a pedimented entry with a wooden gate.

Battery Weed is built of granite blocks. There are at least two different types of granite giving walls a subtle pattern of color. Blocks are finished with a picked face and tooth-chiseled edge. Joints are narrow and made with a light-colored mortar. Magazine interiors are constructed with brick vaults.

Floors are made of a dense sedimentary stone (i.e. slate, blue-stone), dark in color. Iron gun tracks are bolted to the floor. Some magazine floors are made of wood.

The guardhouse is a simple rectangular-plan building with a gable roof. Entry to the parade from outside the fort is through the guardhouse. The building is comprised of four rooms on the first floor, two to either side of the entry passage, and one large room on the second floor. Each front room on the first floor is entered through a door in the east wall; the second floor is accessed by a set of stairs in the rear southern room.

Three additions to the fort are located along the exterior walls. The first, abutting the northeast wall just east of the salient, is a windowless structure of granite, two tiers high. The second two additions are situated along the west wall just south of the north



salient. One is constructed into the corner of the west wall and the salient and is a two-tiered windowless structure of poured concrete; the cement is a light gray color and the aggregate is a combination of granite gravel and beach stone. There is no interior access to either of these additions. A small brick structure with a chimney stack rising above the west wall is situated just to the south of the concrete structure.

The architectural development of Battery Weed is based on information found in Black's report and photocopies of archival materials (drawings, photographs, plans). Architectural development is also based on physical evidence of construction phases and changes visible in the structure. Mechanical, electrical, and plumbing systems, if ever extant, were not examined. Unless otherwise noted, the material in this section is from Black's report.

The present Battery Weed is located on the site of the former Fort Richmond. The eastern-most piece of land at the Verrazano Narrows was considered a strategic location for the defense of New York Harbor and engineers considered it "deserving of the most competent fortifications." By 1845, plans for replacing the dilapidated earlier structure had been completed by Joseph G. Totten, Chief Engineer for the Army. Totten's plan enabled the best use of the strategic location of the Narrows.

Battery Weed is actually the third name of the water battery. Originally, it was called Fort Richmond, the same name as the structure it replaced. In 1865 it was renamed Fort Wadsworth, after the late Maj. Gen. James S. Wadsworth of New York, killed in the Civil War. In 1902, Fort Wadsworth became Battery Weed, in honor of Captain Stephen H. Weed, killed in the battle of Gettysburg.

A plan of 1850 delineates the footprint of Fort Richmond and the surrounding moat (figure 6.1). The most interesting part of this drawing is the configuration of the moat wall. On both the northeast and southeast sides a double line indicates a structure of some sort, or at the least, a different arrangement of stone blocks. Because the wall is in a deteriorated condition at the north end,

signs of a former structure in this location are difficult to find. However, along the southeast side of the fort, outside the perimeter of the moat wall, granite blocks form a kind of ramp or track. This may have been used for the transport of construction materials and artillery from boat to shore. While the structure delineated in the drawing is directly on the moat wall and the structure visible today is outside the wall, it is certainly possible that the two may not have anything to do with each other. However, it is also possible that the two structures are related in some way, even if they are not located in exactly the same place.

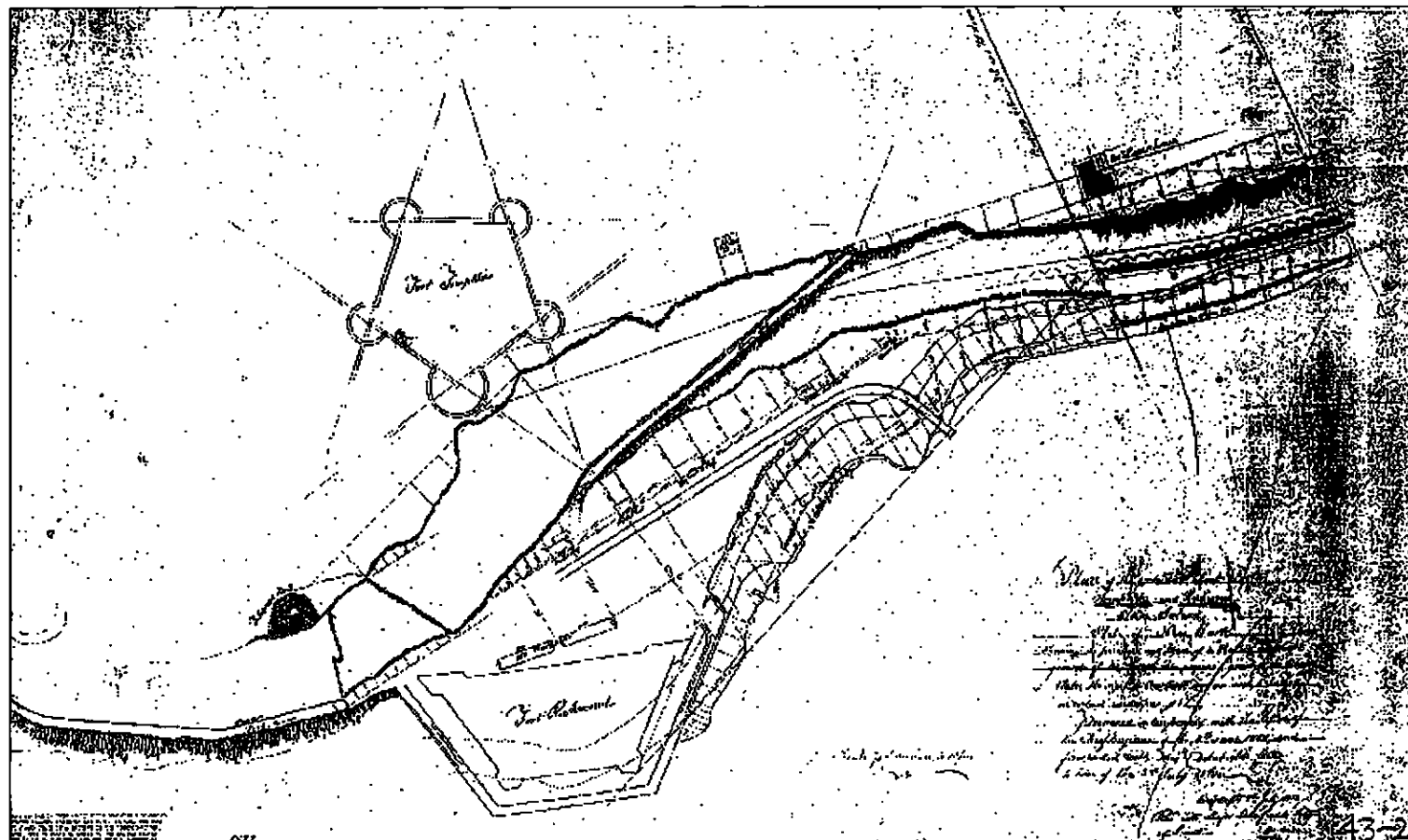
Three drawings, one with Totten's name on it, depict the fort as it was planned. One drawing is a plan of a salient and bastion dating to 1847. The second two drawings, from 1850, depict plans, sections, and elevations, and include the plan of the earlier drawing. The moat and surrounding wall are not shown. The original plan of the fort is extant today with only a few differences (figure 6.2). The guardhouse was not part of the original plan and the two magazines adjacent to the salients are different in plan and elevation. There may be other differences in the interior plans of casemates, bastions, and salients as well. A section of the front wall and knee wall on the barbette tier, and a plan of a roof indicated that brick was used for structure. It is not known how much brick was actually used.

Construction of Battery Weed began in 1847, following transfer of the site from the State of New York to the federal government. Construction lasted for five years; in 1852 funds had run out and the project was halted. The partially-built structure was covered with concrete, mastic, and boards.

An engraving from 1852 shows Battery Weed under construction (figure 6.3). The first tier appears to have been completed on the northeast and east portions and is still under construction on the southeast portion. The west wall has almost been completed.

There is no moat and the entrance is without a pediment. Another engraving, published in 1862 but illustrating an earlier date, also shows the fort under construction (figure 6.4).

Figure 6.1 Fort Richmond (Battery Weed), surrounding moat, seawall, and dock, 1850



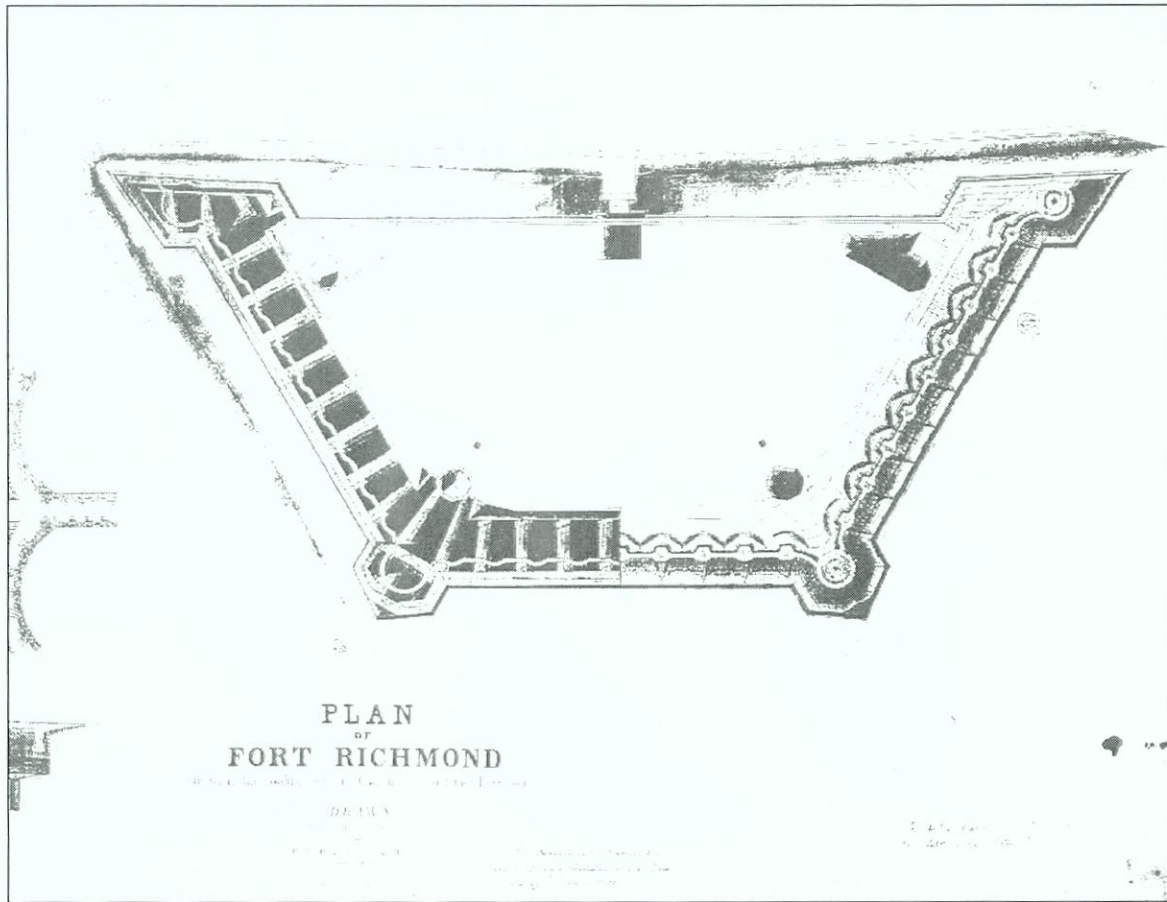
By the late summer of 1854, funds were appropriated to continue construction. By 1857, the engineer in charge reported that the fort was half finished.

... Channel-bearing scarps had been carried to a height of between forty-one and forty-six feet, the full height being sixty-seven feet. In the second tier, gun case-mates, communications arches, and embrasures had been finished, and work started on the sills and irons of the third tier embrasures. ...

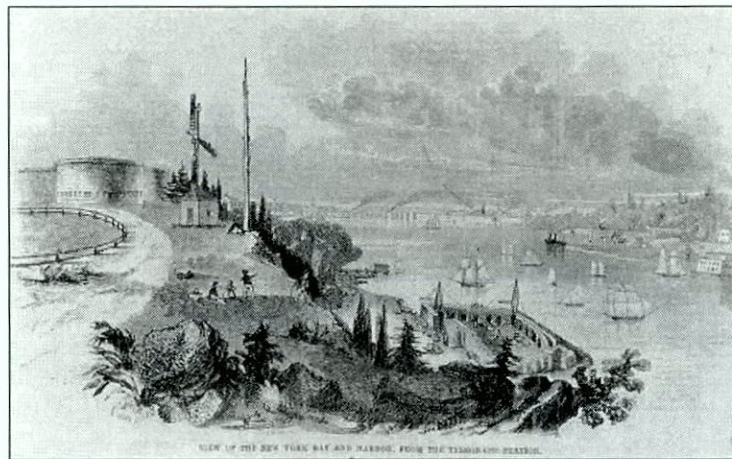
A plan and section of the fort, dated 1857, show the state of construction at that date (figure 6.5). The section depicts two tiers of casemates, the footings, and the unfinished third tier. The plan

shows no guardhouse or magazines adjacent to north and south salients. The moat wall is depicted, along with another wall surrounding the water-side of the moat. At the north bastion, the moat wall cuts in to follow the perimeter of the bastion; in this location the plan is marked "Coffer Dam arranged for temporary Wharf." This structure is not visible today.

Because Battery Weed was built out into the water, the entire moat area was probably built up to support fort-construction activities and then opened up only when the fort had been completed. The 1852 engraving indicates solid ground around the Fort. However, the presence of the moat wall in the 1857 drawing indicates otherwise. Perhaps the wall was constructed simultaneously



**Figure 6.2** Plan of Fort Richmond (Battery Weed), 1850



**Figure 6.3** Fort Richmond (Battery Weed) under construction, dock may be present in near background, 1852

**Figure 6.4** Fort Richmond (Battery Weed) under construction, published 1862





with the fort but the moat itself not opened up for water until later.

In 1858, the first and second tiers were reported ready to receive their armament. By the next year, the fort was reported ready for three-quarters of the planned-for armament. By the end of 1860, iron gun platforms had been constructed. Maj. John G. Barnard, the engineer in charge, wrote: "the work can . . . mount its entire armament consisting of 116 heavy channel bearing and twenty-four light flanking guns, and can store ammunition therefore."

The guardhouse was constructed in the late 1860s. A drawing of

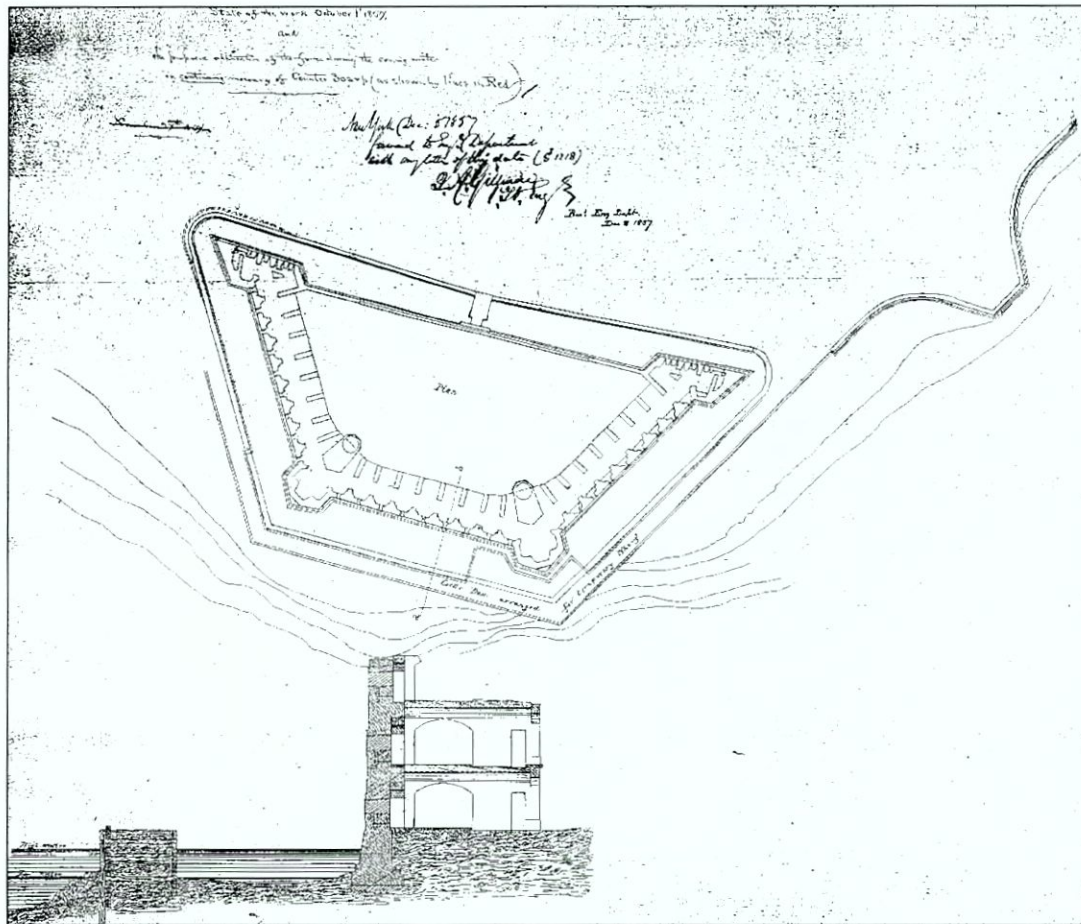
a section of the roof dates to 1866 and a drawing of the interior south elevation dates to 1867. Construction details shown in the drawings are those visible today, with only a few later alterations. The interior south elevation has a west door and two fireplaces on the first floor and one fireplace on the second floor. This same arrangement is found on the interior north elevation. A plan from 1871 describes the building as "Guard House and Q.M. Store Room."

Two "seams" in the brick of the back (west) guardhouse wall are aligned with the side pilasters of the pedimented entry, indicating that the entry was reconstructed when the guardhouse was built. This would account for the difference in appearance from the entry of the 1852 engraving (although this is somewhat of a rough illustration) to that of today.

Adjacent to the parade side of the west wall and integral to the salients are two magazines, rising the full height of the Fort. Although magazines were part of the original plan, neither of the two appear on the 1857 plan (seemingly well detailed) nor on the 1871 plan (outlining the fort and depicting the guardhouse, figure 6.41 in the North Dock section). The first time magazines are depicted (with their present plan) is in a drawing from 1886. It is unlikely with the practical obsolescence of the fort in the late 1860s that two new and large structures would have been built after this date; perhaps they were built earlier and not delineated on the 1857 or 1871 plans. Both the guardhouse and the magazines are shown with hipped roofs; the magazines had shallow hipped roofs (now gone) but the guardhouse was constructed with a gable roof. A postcard from the early twentieth century shows two shallow-hipped roofs on the magazines, joined to the adjacent staintower roofs (figure 6.6). A photograph from ca. 1900 depicts the North magazine with the top tier and narrow infill wall (figure 6.7). The photograph also shows the open parade, filled with the piles of cannon balls.

Situated in the narrow space between the north magazine and the west wall is an infill wall. Both this wall and the parapets of both magazines are constructed of granite blocks of slightly different

**Figure 6.5** Plan and section of Fort Richmond (Battery Weed), plan of dock, seawall, and moat wall, 1857





color than the rest of the walls. The blocks are similar in appearance to those used for the guardhouse and the addition on the northeast wall. The infill wall and addition date to 1887 modifications. It is not known when the parapets were constructed.

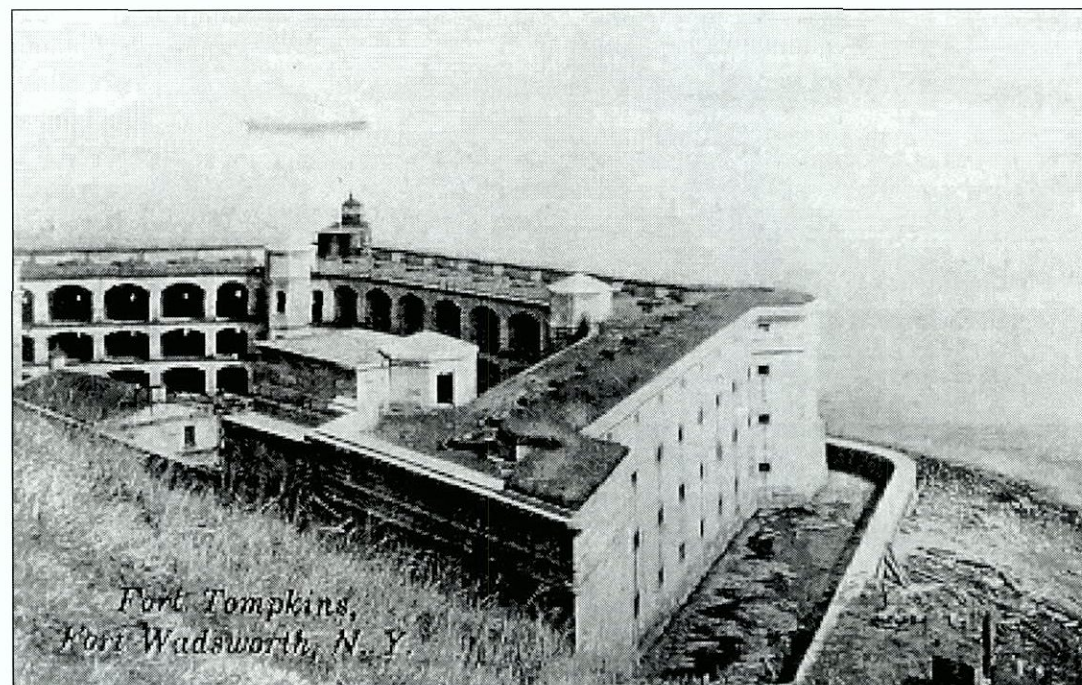
An engraving from 1860 shows Battery Weed with a wall running along the southeast side of the fort, separating the moat and the sea (figure 6.8). The illustration also shows no parapet or gun emplacements on the barbette and no roofs on the stairtowers. It is interesting that the present roofs on the stairtowers are concrete and not dissimilar to the late-nineteenth century concrete of other structures at Fort Wadsworth. These roofs may post-date 1860, but were most likely installed soon thereafter. The present roofs may be later alterations or repairs.

Two detailed drawings, with plans, sections, and elevations, depict Battery Weed as it appeared when completed, or close to its completed appearance. The guardhouse has a hipped roof in plan and gable roof in section. (A seemingly odd manner of depicting any structure.) The magazines are covered with hipped roofs and stairtowers are roofed with conical caps as well. A moat completely surrounds the fort and is crossed with a drawbridge.

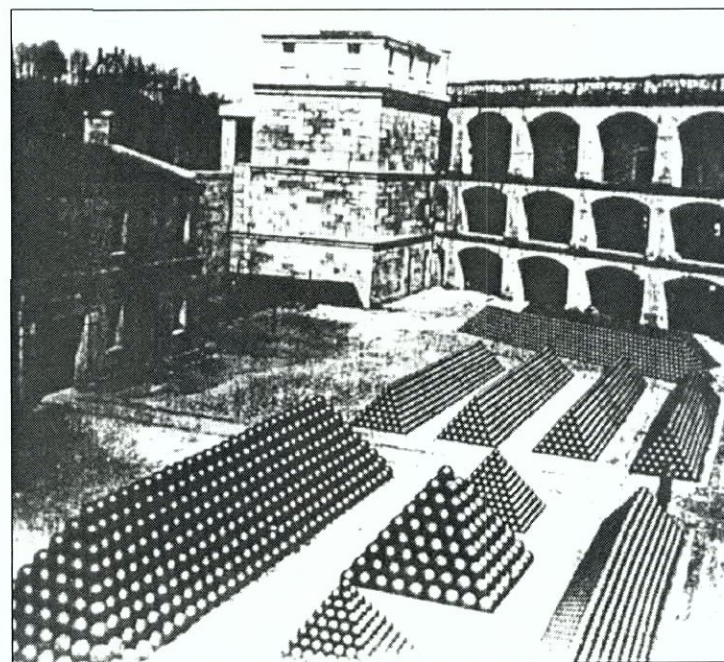
No sooner had the fort been completed and outfitted with weapons than the recent developments in artillery and battleship construction rendered it obsolete. When walls were no longer safe from the fire of newly-developed enemy weapons, consideration of Battery Weed as an important structure of defense quickly ceased. In time, weapons were removed from the Fort. By the turn of the century, only fifteen weapons remained in place, one tenth of the fort's total capacity. A detailed account of the arming and disarming of Battery Weed can be found in Black's report.

While the strategic necessity of the fort had been all but eliminated soon after its construction, some modifications were made to enable the installation of new weaponry. Six of the barbette emplacements were modified. It is possible that there were other modifications at this time as well.

In the mid-1880s, alterations to the fort occurred when torpedoes

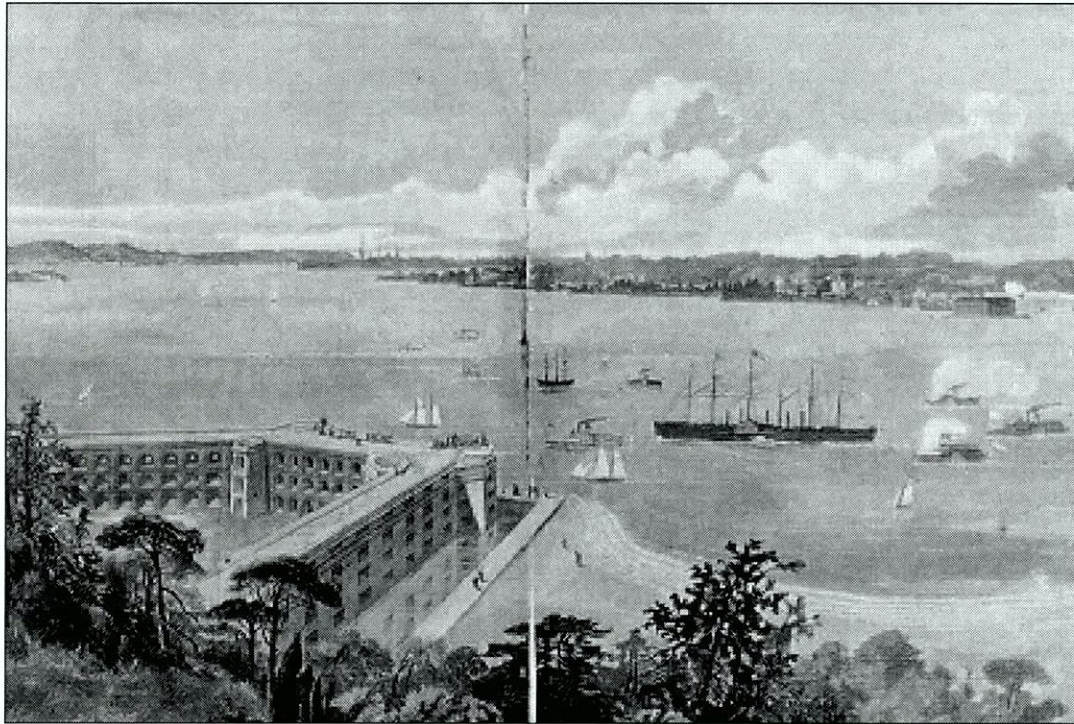


**Figure 6.6** Battery Weed (misabeled Fort Tompkins), early twentieth century



**Figure 6.7** Parade of Battery Weed, c.1900





**Figure 6.8** Battery Weed and moat, 1860

were employed in the defense strategy of the site. A proposed plan and section from 1887 show alterations to the north salient (figures 6.9a and 6.9b). On the first tier, an area within the salient, the casemate adjacent to the salient, and an area within the magazine appear to have been filled in with masonry (part of the magazine is filled with sand). The full interior space in the second tier of the salient is filled with masonry as well. These areas are inaccessible today. The narrow infill wall, between the magazine and the west wall, is also depicted in the plan. Two structures of solid masonry were built to either side of the salient, one to the south and integral to the northeast exterior wall and the other to the south and integral to the west face of the west wall. Both structures are extant, the former constructed of granite and the latter of poured concrete (maybe Rosendale cement, a natural cement that was used in the construction of some of the batteries). This mass of masonry completely surrounds the open space in the salient's first tier, and may have functioned as a buffer for acci-

dental explosions of material stored within the space. A newspaper article from 1965 reports on the impossibility of gaining access to one of these additions.

. . . workers . . . have tried to penetrate the fort's thick walls.

Although they hit granite after burrowing seven feet through concrete, they have not given up. . . An odd event occurred sometime between 1872 and 1900 when two additional rooms were built onto the outside corners of the northern tower, and the inner rooms of the first and second levels were walled in with cement, both at the passageways and behind the already several feet thick granite walls. Engineers have puzzled over problems of the original construction—lifting immense granite blocks without the aid of power winches or motorized cranes and the placement of the hand-shaped stones themselves. The reason for the extravagantly expensive and time-consuming job of sealing off the large area by gargantuan methods remains the big puzzle.

One theory is that gun powder or ammunition is stored in the rooms, a practice used during World War II in Europe. . . .

What were considered two additional rooms were actually solid masonry blocks and concrete.

By the mid-1890s, the moat along the west wall had been filled in. Frame structures were built outside the battery adjacent to the west wall and held the cable tanks for torpedo operations. A plan shows two cable tanks situated to the south of the entrance, between the entrance and the salient, and one tank situated just to the north of the entrance (figure 6.57 in Torpedo Storage Building section). A photograph shows a long one-story gabled structure situated almost along the entire length of the wall (presumably housing the two tanks); a smaller gabled structure is situated at the north end of the wall (figure 6.10). A photograph from the same date shows the water side of the fort (figure 6.11)

The small brick structure located just to the north of the entrance on the west wall may have functioned in union with torpedo operations. It is not known when it was built or for exactly what pur-

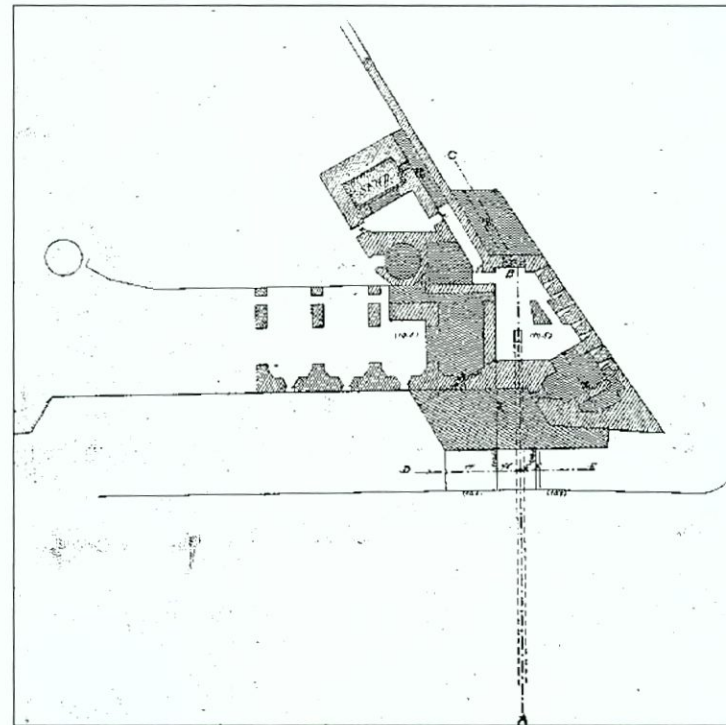


pose. The chimney indicates a possible furnace use.

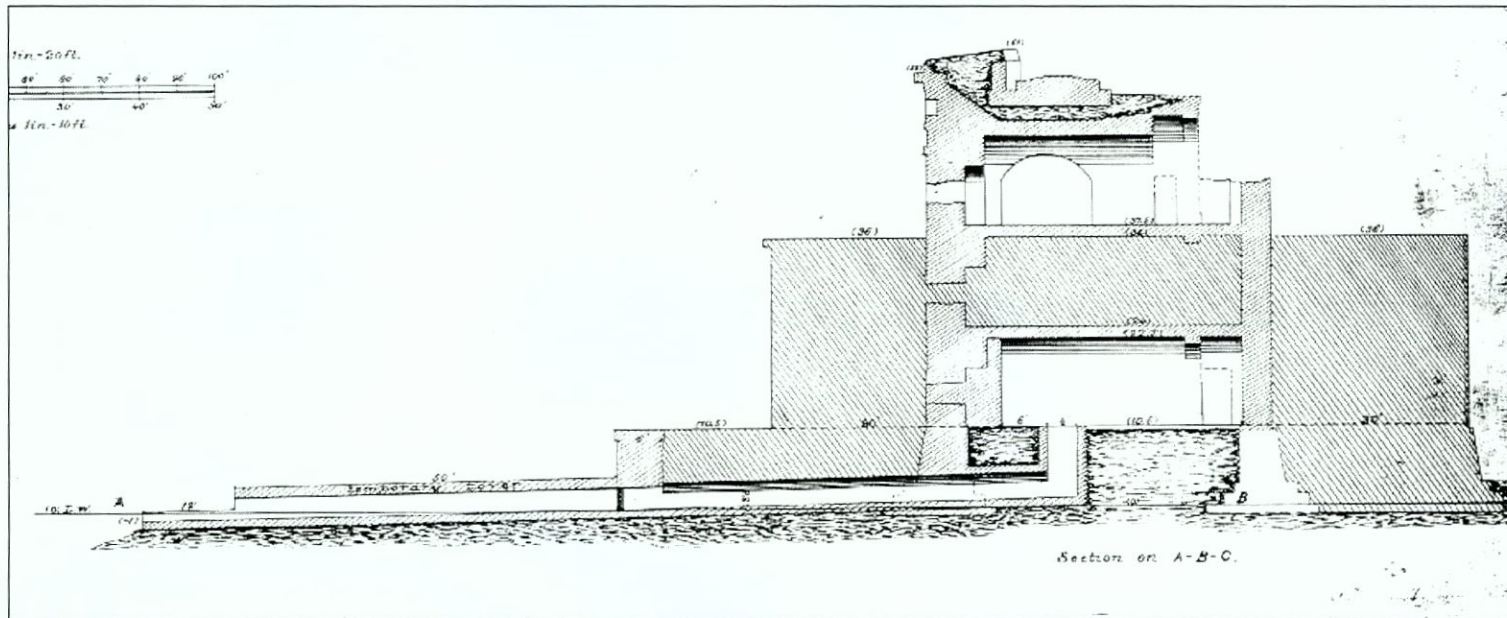
In 1902 and 1903, a light and signal station was constructed on the barbette of the northeast bastion. Early twentieth-century photographs show the lighthouse with the metal cap painted a dark color (Figs. 6.6 and 6.10). The station was composed of a light tower, bell frame and bell, and a watch room. A decade later, a 36-inch searchlight station was constructed on the barbette of the southeast bastion. Black writes: "The searchlight may have constituted Battery Weed's only connection with the Endicott-Taft defenses at Fort Wadsworth."

From the 1880s on, Battery Weed served as a storage facility. It is not known what modifications, if any, were carried out for this purpose. Possibly the alterations made to the guardhouse were the result of a storage need. Fireplaces were bricked up, two doors were converted to windows, another door was bricked up, and air vents were filled.

Removal of the structures associated with the torpedo operation was one of the last major alterations to Battery Weed. At some

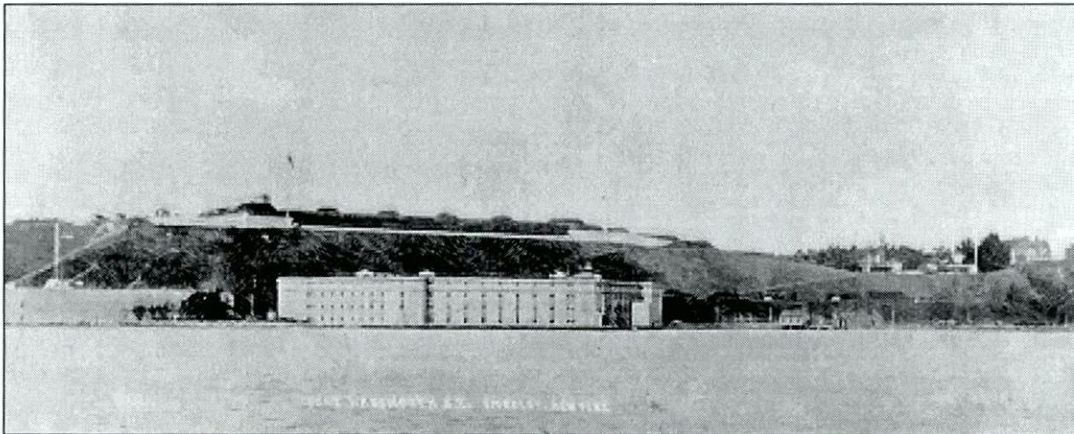
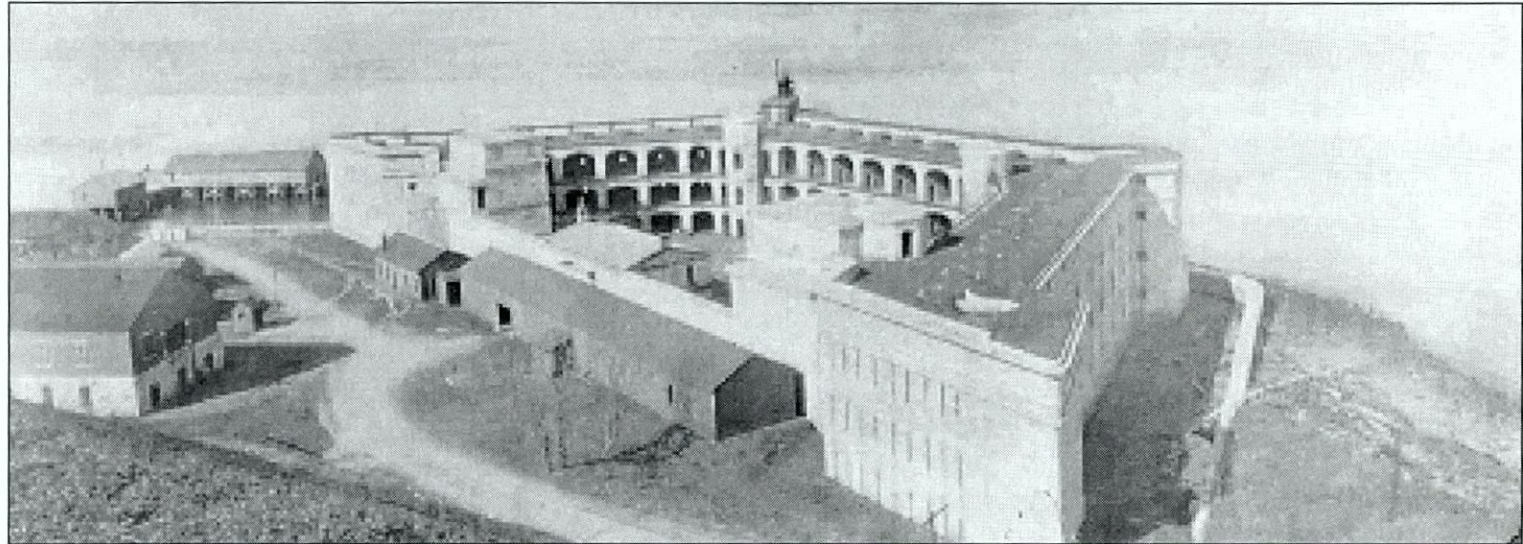


**Figure 6.9a** Plan of north salient, Battery Weed, 1887





**Figure 6.10** Battery Weed, Torpedo Storage Building, dock, and cable tanks, early-twentieth century



**Figure 6.11** Battery Weed, early-twentieth century

point the roofs were removed from the two magazines. More recent alterations include the in-filling of many embrasures and air vents with brick, the painting of the cap on the lighthouse white, and the fabrication and installation of a wooden gate to the Fort.

#### **Character-defining Features**

The primary character-defining features of Battery Weed are the setting, plan, massing, and stonework.

The setting of the dock and seawall, the former jutting out into the water and the latter hugging the shoreline (and artificial shoreline created by the fort), define both the boundary between water and the edge of the military installation. At the same time, the dock maintains a functional link between land and water.

The massing of the dock and seawall augments the setting in defining character. The use of granite is also a character-defining feature. Large granite blocks comprise the seawall and the structure of the dock. Small granite pavers (rectangular blocks) are placed in geometric patterns on the top face of the dock, with the larger blocks articulating the edges. The concrete portion of the dock is also character-defining.

Secondary character-defining features include the piers at the end, the two stanchions, and rail tracks.

Both dock and seawall are in a deteriorated condition, with the rail tracks suspended over former pilings that have rotted or been swept away and seawall blocks that have been displaced from their settings. While these poor conditions contribute a certain character to both structures, they do not detract from each respective structure as a sense of a whole, and in this case do not define

nor lessen the definition of each individual structure. Therefore their semi-ruinous conditions are character-defining features in that they represent the fort as a whole, which was abandoned piecemeal as technology advanced and eventually rendered the entire fort as obsolete. Restoration or rehabilitation of the dock or seawall would not detract from the architectural integrity of either structure.

### **Condition Assessment**

#### *Building Exterior*

Massive ashlar granite blocks used for the exterior of Battery Weed are in good condition showing no signs of material defect or imminent structural failure. A variety of staining on the masonry does give tell-tale signs of more serious deterioration in other components of the structure.

White staining, seeping from the masonry joints, is the physical symptom of a much larger problem of water infiltration into the walls of the Fort. As the water percolates through walls leaching out certain minerals from the mortar it finally escapes from the joint it deposits the minerals, primarily calcite on the outside of the masonry facade where they form a hard crust. This situation not only disfigures exterior elevations but, more importantly, leads to the physical deterioration and ultimate failure of the joints and masonry wall system.

Another type of staining evident on the exterior of the battery can be characterized by large black streaking occurring under the Totten shutters. Corrosion of the cast-iron shutters is the cause of such staining and though it is only a cosmetic problem where the granite facades are concerned, the staining signals deterioration and loss of material in the ferrous metal shutters. If staining continues, ferrous material will continue to be washed away from the cast-iron shutters leading to a material breakdown and failure.

Another area of concern is the deterioration and loss of mortar from wall and copingstone joints and the subsequent introduction of vegetation in these locations. Weeds and ivy have established

their root systems in many of the vulnerable joints. The embedded root systems lead to the physical deterioration of the mortar and can force the joints to widen and blocks to shift.

The above conditions all result from natural occurrences when a building is not maintained; there are, however, two prime examples of situations that have led to the alteration of the fort's historic appearance as a result of human intent. Isolated areas of graffiti, executed with spray paint, occur on the southeast corner and north wall of the Fort. A more serious alteration is the in-fill of many of the Totten embrasures with bricks or concrete blocks.

#### *Parade Facades*

Parade facades are in very good condition exhibiting no signs of shifting, cracking or dislodging. An even layer of pollution has darkened the granite band courses. Except for the unknown removal of a ledgerstone block, located on the third tier of the north interior wall, all stone blocks in the casemate remain intact with sound mortar joints.

At the magazine stringcourses, a complete loss of mortar has occurred at all vertical joints, caused by rainwater.

Isolated areas of staining occur at the corner locations where the fort wall meets with the guardhouse walls. This orange and black colored staining is a result of a faulty drainage system on the guardhouse roof directing water and particulate onto the masonry wall. There is also an isolated area of green biological growth occurring north of the guardhouse's north gutter.

Minor damage has occurred to the southeast corner of the north magazine caused by impact, the source of which is unknown.

Windows in the two magazines exhibit total failure with frames in deteriorated condition and sashes missing.

#### *Barbette and Magazine Roofs*

The major concern on the barbette is volunteer growth consisting of ivy and saplings which can lead to the destruction of masonry elements and the substructure if the root systems are allowed to

flourish.

All four conical caps of the stairtowers, are cracking and crumbling. Deterioration is due to the vulnerable nature of early cements when exposed to the effects of rainwater.

There is severe ferrous corrosion and wind erosion of the wrought-iron balustrade and the few remaining gates. Many of the decorative rosettes no longer exist. Numerous pinned connections have corroded making the balustrade system unable to perform its intended function as a safety rail. Three sets of centrally located gates (the original use of which is unknown) are no longer present thus increasing the unsafe condition of the balustrade.

Historic photographs confirm that the two magazine roofs have been missing for many years. As a result of the missing roofs, the upper floors have been exposed to the elements and now exhibit extensive cracking of their concrete decking and the presence of vegetation.

#### *Battery Interior*

The main cause of deterioration is the presence of water infiltration entering at the barbette level, traveling through the soil topping and through the masonry vaults. Calcite minerals travel through the masonry joints and are deposited on the interior granite of the casemates. The deposition of calcite is in the form of streaking, stalactites and stalagmites and occurs through the granite interior of the battery. Where brick vaulting occurs the deposition is in the form of efflorescence. Salt crystallization forming under the surface of masonry, known as subflorescence, is also evident in the interior casemates of Battery Weed. Subflorescence culminates in the flaking and spalling of the stone surface due to freeze-thaw conditions. Other stone deterioration is the delamination or exfoliation of the stone floors in the casemates.

All wood floor systems including joists and decking are either in a dangerous state of decay or have been partially dismantled making these areas unsafe to access.

Isolated areas of graffiti, executed with spray paint, can be found

throughout the casemates.

Safety chains across the windows in the stairwells are missing.

#### *Guardhouse Exterior and Roof*

The north and south facades gently bow away from the core of the rectangular guardhouse as do both end chimneys resulting in a two-inch gap between the asphalt shingle roof and the granite gable. Future study should be conducted in order to establish whether this movement is active and, if so, at what rate. There are no major vertical cracks that correspond with the bowing of the gables. Windows and doors are either missing, damaged or lack historic integrity.

Graffiti, caused by spray paint, occurs on the south and east facades.

The asphalt shingle roof and underlying wood decking are in poor condition and require replacement. Asphalt mastic has been used to temporarily seal the gaps present between the roof and the end gables. Mastic has been inappropriately used in copingstone joints.

Both half-round gutters need lining repair. Conductor heads have been damaged beyond repair; corresponding downspouts are no longer in place.

#### *Guardhouse Interior*

Rising damp in the brick masonry walls and failure of the roof are the main concerns regarding the interior of the guardhouse. Secondary priorities concern painting, lighting, and finish treatments which, with further research, can be reestablished.

#### *Lighthouse*

Many deteriorated conditions in the lighthouse have lead to the inoperability of the structure and the unsafe conditions in the interior rooms. Major concerns include the exposure of the interior to the elements resulting in the failure of the wood floor system and corrosion of the ferrous metal light. Windows and doors are in



need of total replacement. The sheet metal roof and drainage system are in need of repair.

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### Condition Assessment Inventory and Recommendations

#### *Battery Exterior*

1. Problem: Deterioration and loss of mortar from coping stone mortar joints due to water infiltration and weathering.  
Solution: Clean out and repoint joints with historically-appropriate mortar.
2. Problem: Black ferrous staining caused by corrosion of cast-iron Totten shutters.  
Solution: Chemically treat cast iron to retard rusting using an approved method.
3. Problem: Isolated graffiti on granite facades.  
Solution: Remove using approved testing and removal procedures.
4. Problem: Unwanted vegetation, i.e. weeds and ivy, growing out of cracks and mortar joints in the facades  
Solution: Mechanically remove vegetation and root systems from cracks and joints. Repoint joints and maintain a vegetation-free condition.
5. Problem: White leaching and crust deposits on granite facades, caused by water percolation through the structure.  
Solution: Reduce water infiltration through the barbette and vaults by introducing subsurface waterproofing and alternative drainage.
6. Problem: Intrusive in-fill of Totten windows with brick.  
Solution: Remove brick in-fills and restore openings.

#### *Barbette*

1. Problem: Roofs missing from corner magazine buildings; volunteer vegetation and deterioration of walls, floors and window units.  
Solution: Remove vegetation and maintain exposed magazine floors in present condition.
2. Problem: Degradation of concrete caps at the four stairtowers caused by water infiltration, freeze-thaw, and general weathering.  
Solution: Remove crumbling concrete, prepare surface, and patch with appropriate patching material which matches in performance, water-vapor permeability, color, and texture. Investigate water-proof coatings.
3. Problem: Volunteer vegetation, i.e. trees and ivy, growing on barbette soil originally planted with grasses.  
Solution: Mechanical removal of all unwanted vegetation and the restoration of the barbette with grasses. Repair any damage to physical fabric caused by excess vegetation.
4. Problem: Severe weathering and corrosion of wrought iron balustrade; missing rosettes, sections, and gates.  
Solution: Repair corroded sections, using approved restoration methods, in order to restore integrity to the entire balustrade and to increase its safety performance.

#### *Lighthouse*

1. Problem: Door and window deterioration and failure.  
Solution: Replace units with historically-appropriate windows and doors.
2. Problem: Ferrous corrosion of metal framework around the lamp enclosure.  
Solution: Conduct paint analysis to determine paint finish chromochronology. Scrape, prime and paint metal surfaces with rust-inhibitor paint following analysis report.

3. **Problem:** Sheet metal roof and drainage system deterioration and failure.  
**Solution:** Repair roof and treat with an approved liquid membrane. Replace gutter and downspouts with historically-appropriate units.
4. **Problem:** Deterioration of frame floor making interior unsafe to enter.  
**Solution:** Stabilize floor.
5. **Problem:** Graffiti on the interior walls.  
**Solution:** Since area will be inaccessible to the general public this graffiti is of no immediate concern.
6. **Problem:** Missing glass and lamp from lighthouse.  
**Solution:** Investigate alternatives for the restoration of lamp and replacement of glass. Generate cost estimate for restoration work and operation costs.

#### *Parade Facades*

1. **Problem:** Deterioration and loss of mortar from stringcourse joints on magazines.  
**Solution:** Clean out and repoint joints using a mortar which matches the performance, texture, and color of the existing.
2. **Problem:** Isolated occurrences of green biological growth on the west wall.  
**Solution:** Follow conservator's approved method for the removal of biological growth from wall.
3. **Problem:** Ledge stone missing from central casemate on level three.  
**Solution:** Since the upper casemates will be off limits to the general public the missing ledge stone causes no safety concern.

#### *Battery Interior*

1. **Problem:** White leaching, stalactites/stalagmite and crust deposits on granite walls. Caused by water percolation through the structure.  
**Solution:** Reduce water infiltration through the barbette and vaults by introducing subsurface waterproofing and alternative drainage.
2. **Problem:** Isolated spalling of granite due to water infiltration and freeze-thaw.  
**Solution:** Reduce water infiltration through the barbette and vaults by introducing subsurface waterproofing and alternative drainage.
3. **Problem:** Deteriorated and failed wood frame flooring at upper levels near magazines. Partial dismantling of the floors has rendered them unsafe. Isolated advanced stages of wood rot present in beams.  
**Solution:** Remove debris and scattered decking. Rope off doors in order to reduce the chance of accidents to staff. Since these areas are off limits to the general public the safety concerns have been minimized.
4. **Problem:** Exfoliation or delamination of paving in casemates.  
**Solution:** Routine inspection of loose paving and the collection of such pieces in those areas open to public visitation and on the upper levels where the potential for falling pieces may cause injury.
5. **Problem:** Graffiti on granite walls.  
**Solution:** Remove using approved testing and removal procedures.
6. **Problem:** Lack of safety restraints at upper level casemate openings and at stairtower windows.

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Solution: Prohibit access to upper levels until a sensitive solution is formulated that would serve all safety issues and not change the character-defining features of the open casemates.

7. Problem: Lack of ADA acceptable path through courtyard.

Solution: Introduce a paving system, such as vented paving block that would accommodate handicap access without destroying the historically significant grassy common.

#### *Guardhouse Exterior & Roof*

1. Problem: Gentle bowing out of north and south gable end facades.

Solution: Implement monitoring system to establish if the walls are actively moving and, if so, at what rate.

2. Problem: Deterioration and failure of window and door units.

Solution: Replace all doors and windows with historically-appropriate units, only if they cannot be repaired.

3. Problem: Graffiti on exterior granite.

Solution: Since this graffiti is in a high visibility location, its removal is imperative in conjunction with public visitation. Follow conservator's recommendations for removal and treatment.

4. Problem: Deterioration of asphalt shingles, rotting sheathing and separation of roof from gable end walls.

Solution: Remove asphalt shingles. Replace necessary sheathing and reroof with historically-appropriate material.

5. Problem: Shifting of chimneys and copingstones resulting in the expansion of mortar joints and weakening of masonry work. Subsequent faulty repair with bitu-mastic material.

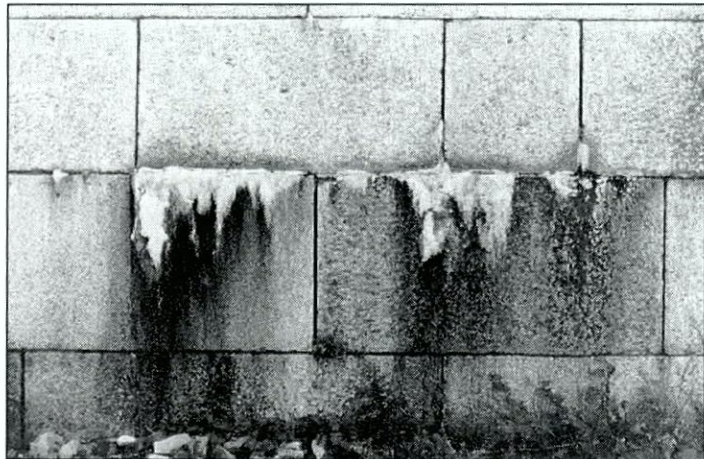
Solution: Clean bitu-mastic from masonry, rake joint, install pointing mortar and/or sealant following approved restoration techniques.

6. Problem: Deterioration and failure of drainage system.

Solution: Repair and replace components of the copper gutters, conductor heads and downspouts with historically appropriate units.



**Figure 6.12** General view of Battery Weed

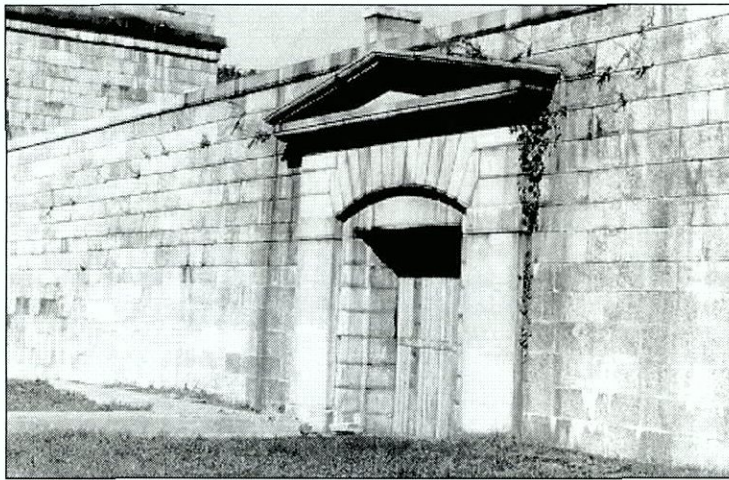


**Figure 6.13** White leaching caused by water-born migration of calcite. Black staining caused by rusting of iron cramps

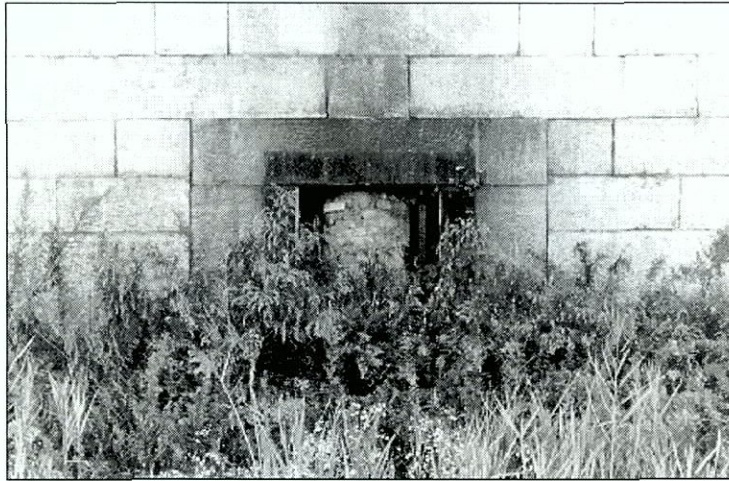


**Figure 6.14** Spray-paint graffiti at southeast corner of Battery Weed

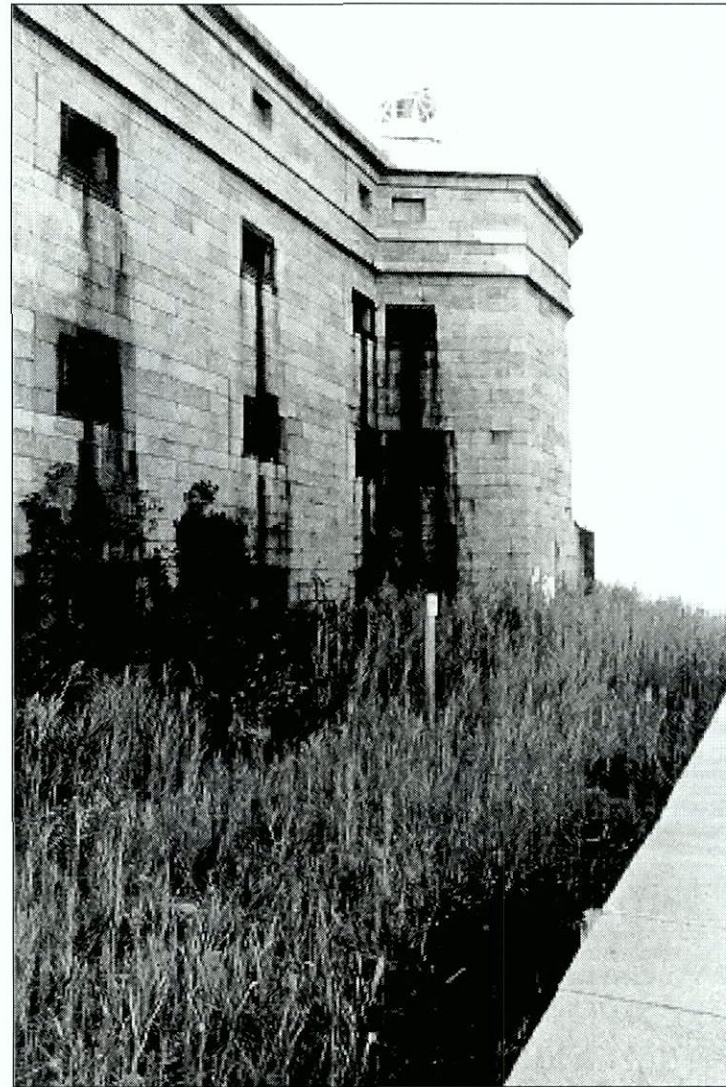




**Figure 6.15** Front wall showing weeds growing out of deteriorated mortar joints. Volunteer ivy working its way into open joints.

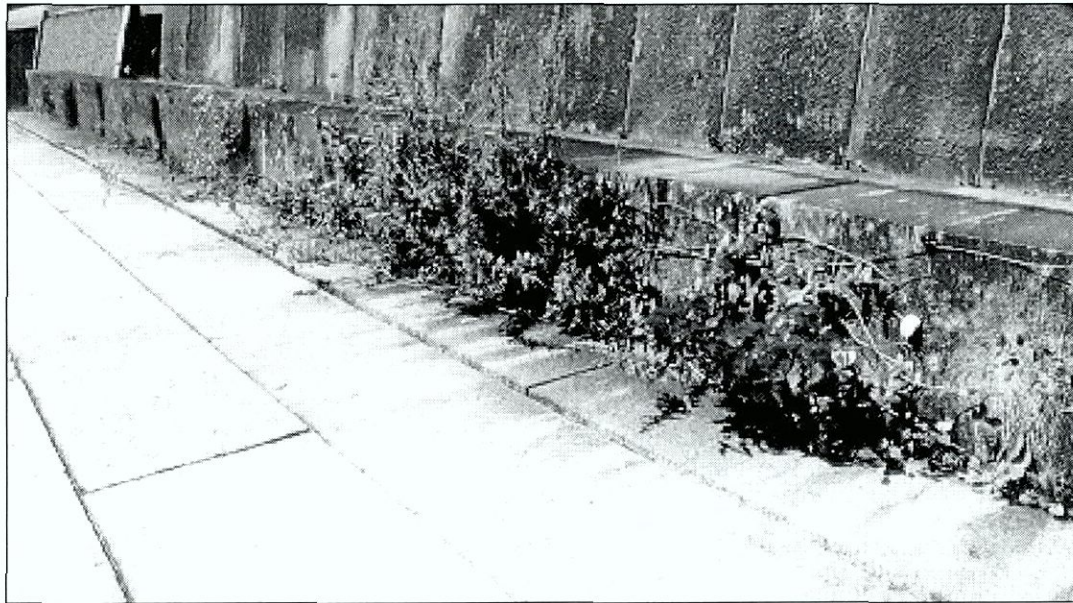


**Figure 6.16** Brick and mortar in-fill of Totten window. Surface corrosion of cast-iron shutters.

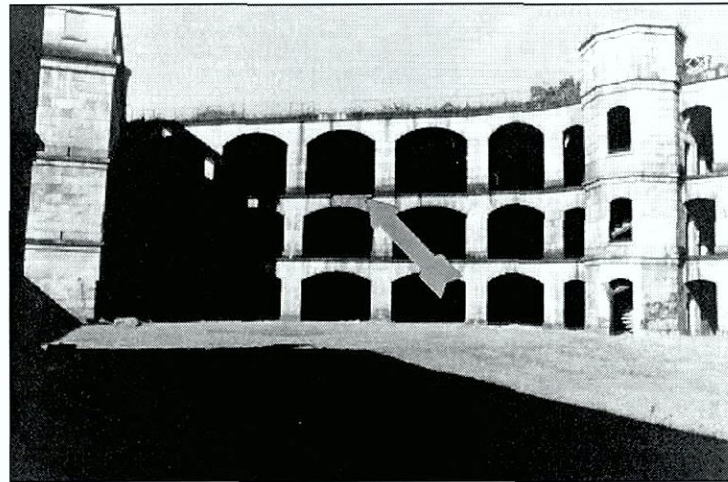


**Figure 6.17** General condition showing black ferrous staining caused by the rusting of the Totten cast-iron shutters. Note ivy at the lower wall and in-fill of the original water moat with vegetation.



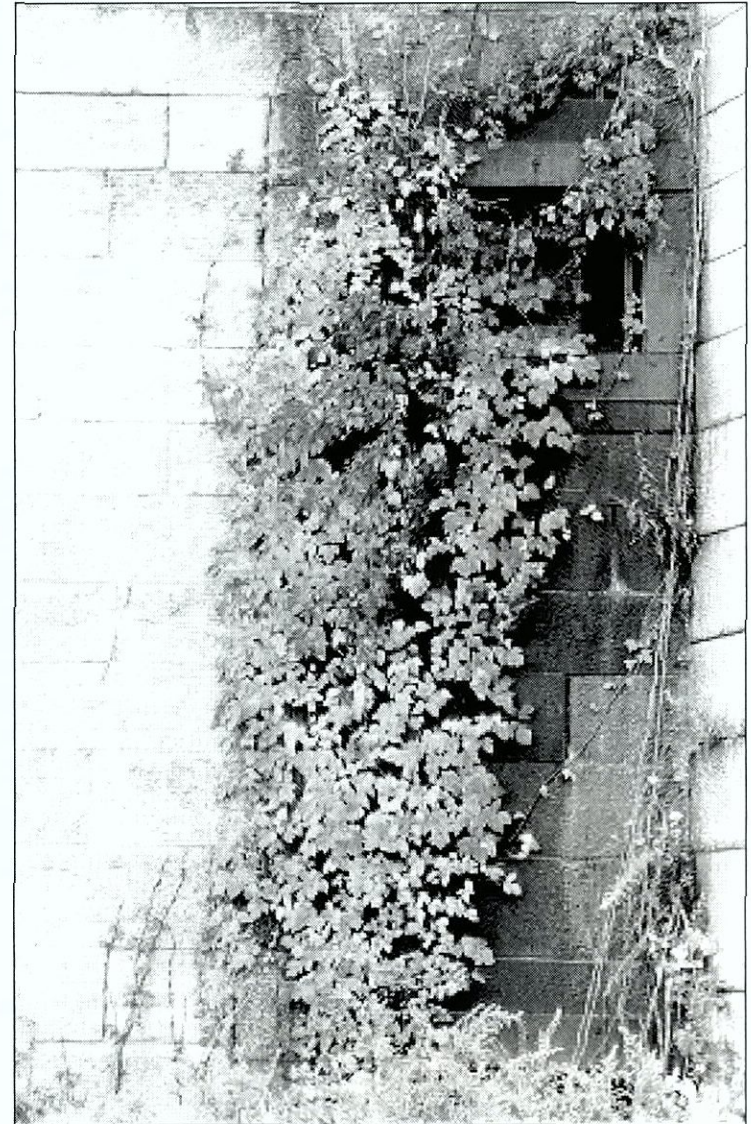


**Figure 6.18** Vegetation growing in the deteriorated mortar joints of the west elevation stringcourse, accelerating erosion of the joints and may lead to the displacement of granite blocks.



**Figure 6.19** Ivy growing on the north masonry facade of Battery Weed. The ivy can work its way into the cast-iron Totten shutters and interior casements resulting in increased deterioration.

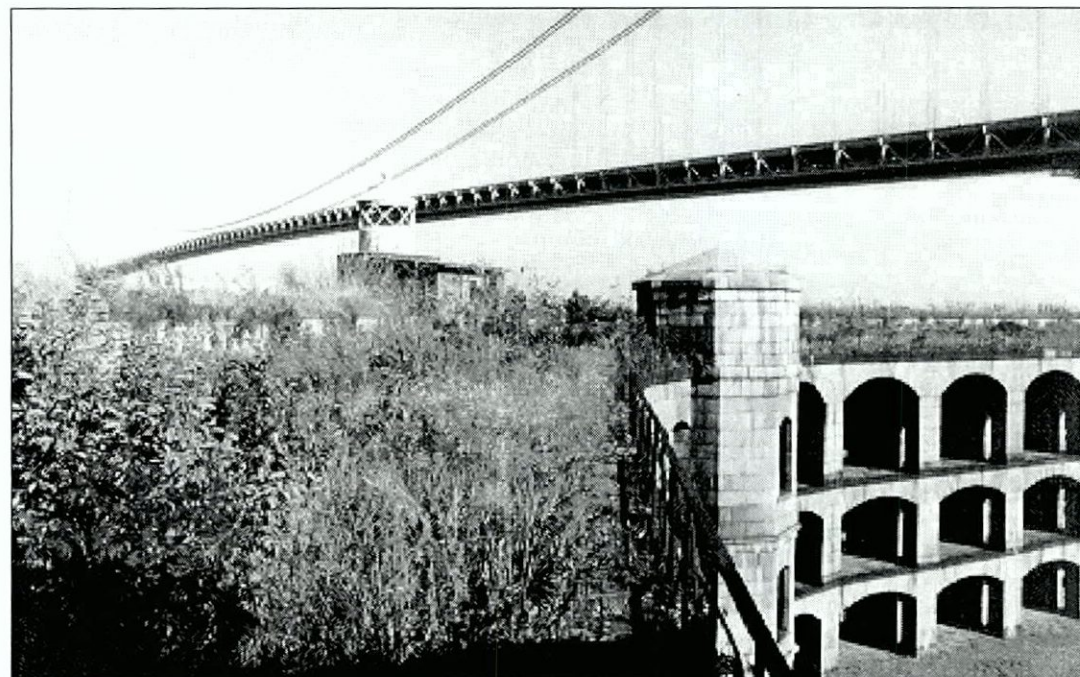
**Figure 6.20** General view of parade elevations with north magazine on the left and stair tower on the right. Arrow identifies missing ledgestone from third tier's central casemate.



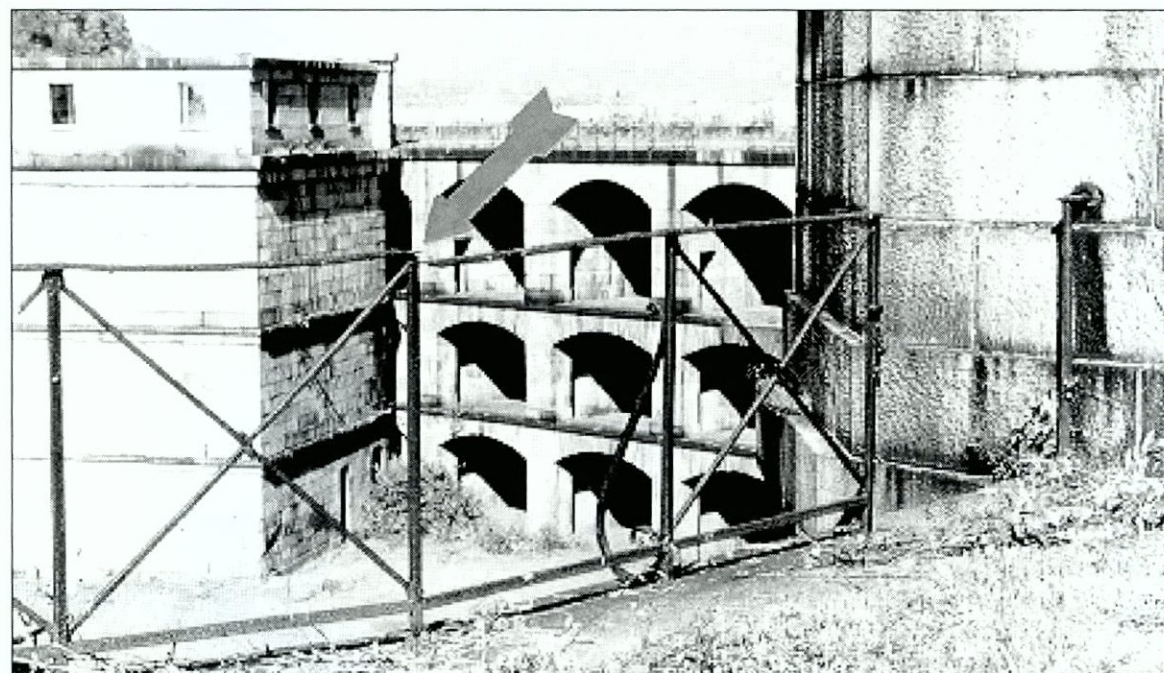




**Figure 6.21** North magazine showing vegetation growing out of deteriorated joints. Magazine interiors exposed to the elements due to lack of roofs or window units.



**Figure 6.22** General view of Battery Weed barbette looking southeast. Excessive vegetation consisting of small plants, ivy, shrubs, and saplings encourage deterioration to the masonry below and conceal gunmounts and kneewall.



**Figure 6.23** Wrought-iron balustrade at barbette. Note missing cross bracing from middle section. Arrow denotes failure of connections due to ferrous corrosion. Crossings originally exhibited cast-iron rosettes.





**Figure 6.24** General view of granite copingstone at the southwest corner of Battery Weed. Volunteer vegetation growing out of vulnerable mortar joints throughout the parapet.

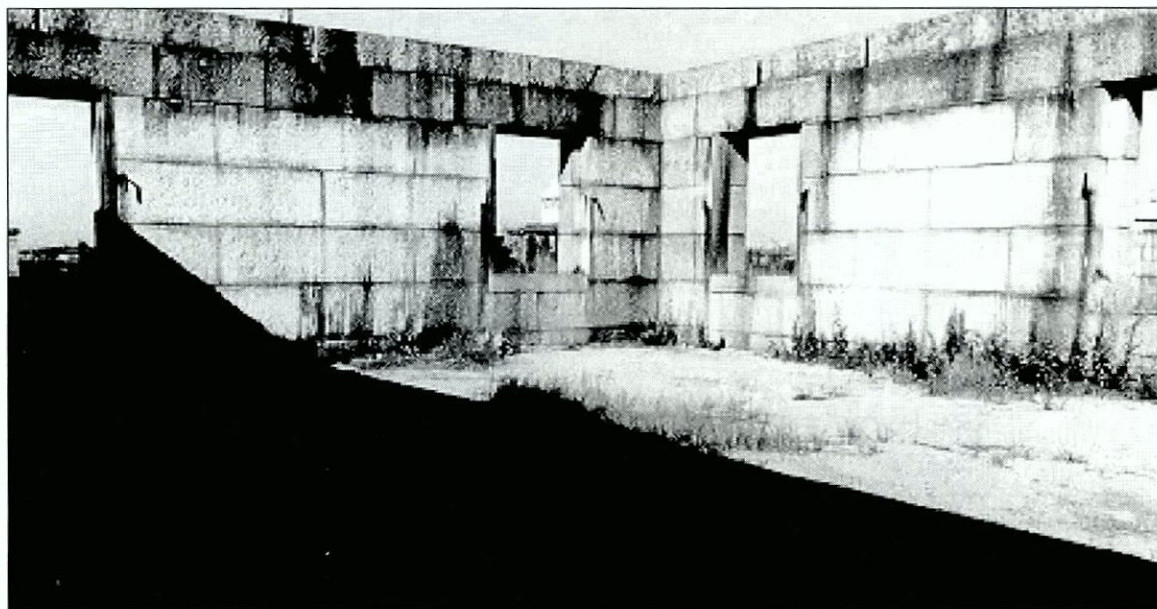
**Figure 6.26** Insensitive in-fill of original embrasure and cast-iron Totten shutters with brick and cement. Serious corrosion and flaking (arrow) of cast iron.



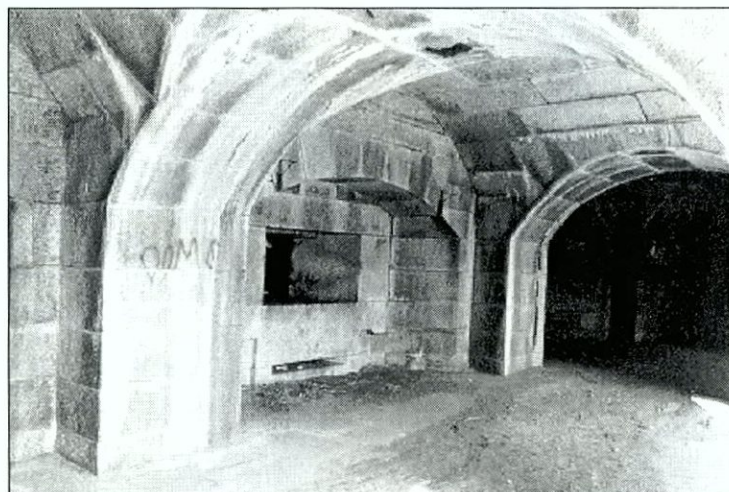
**Figure 6.25** Detail showing general deterioration of cement caps at the stairtowers and the introduction of unwanted vegetation.







**Figure 6.27** General view of south magazine interior showing deterioration of floor; intrusion of organic growth; missing window units; and missing roof system.



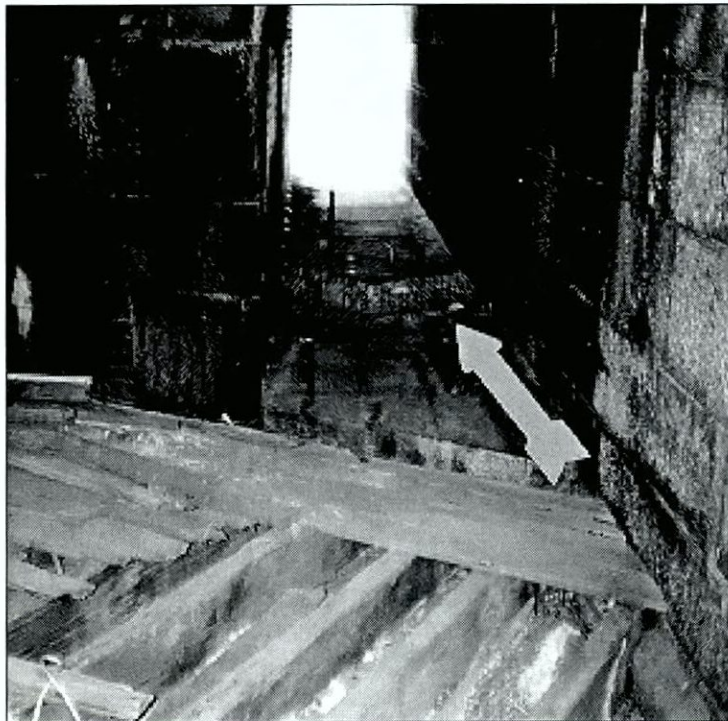
**Figure 6.28** Typical case-mate in Battery Weed showing extensive calcite leaching from joints and deposition onto finish surfaces. Also note green biological staining in the arch.



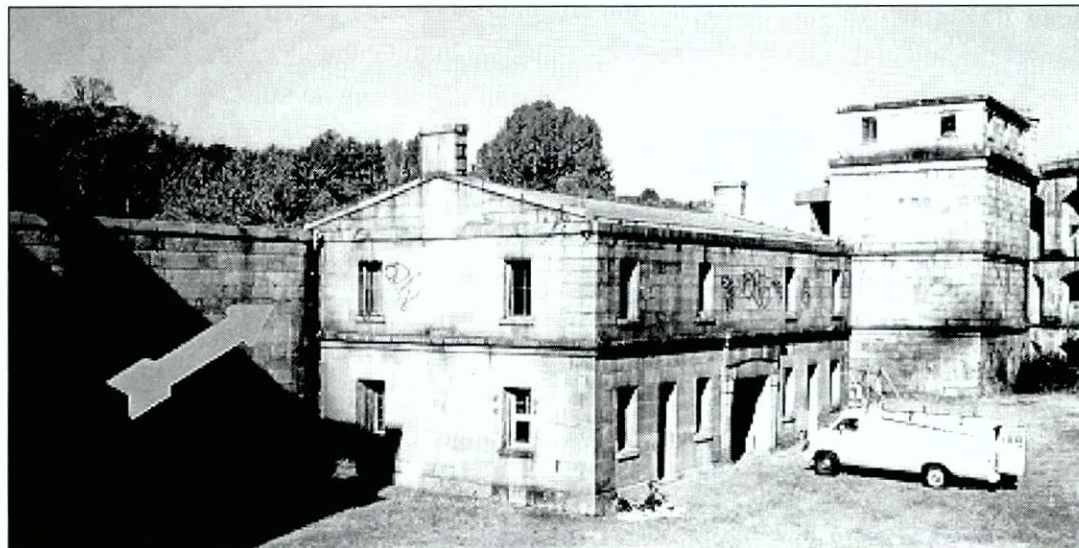
**Figure 6.29** Original brick vault at south magazine showing major efflorescence (arrow) and calcite leaching through granite joints. Extensive loss of mortar from brick joints.



**Figure 6.30** Dismantled and unsafe frame decking located at the north end of Battery. Note large paving block (arrow) removed from original position.

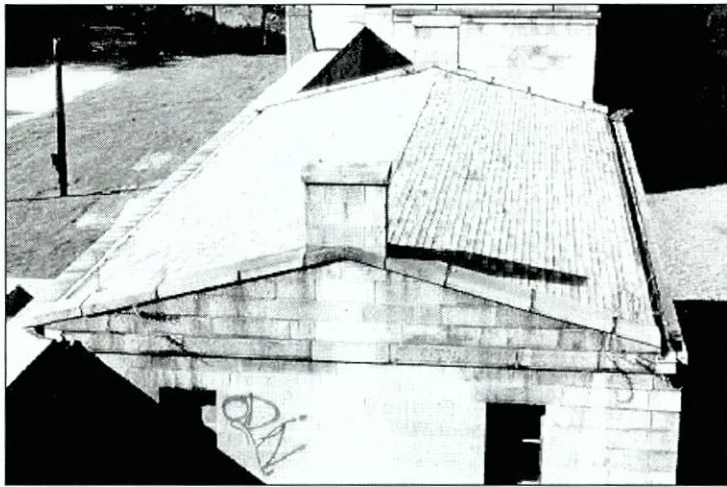


**Figure 6.31** Detail of wood beam and stone pocket located near south magazine; presence of wood rot and formation of water-borne deposits originating from the granite masonry.

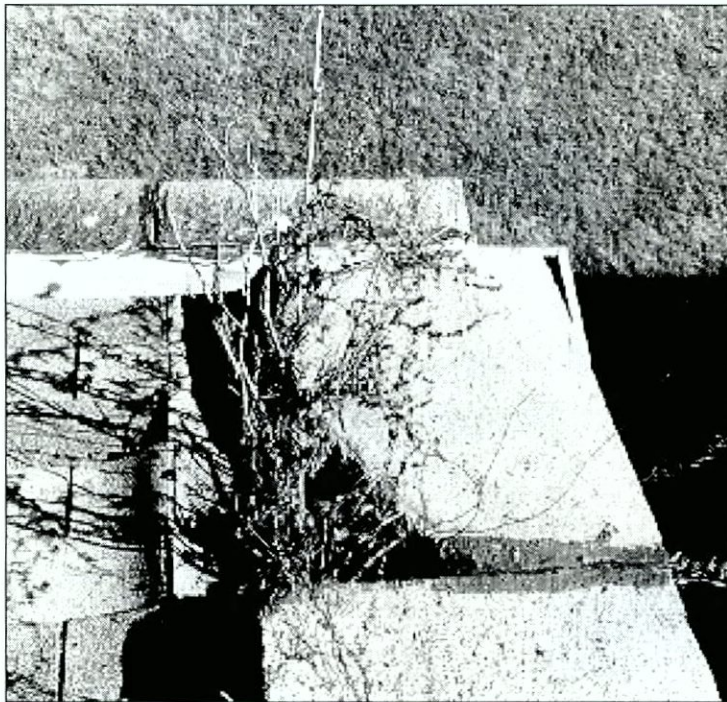


**Figure 6.32** General view of guardhouse showing south and east facades. Note prominence of graffiti at upper levels and poor condition of window units. Arrow identifies dark staining caused by faulty drainage system.

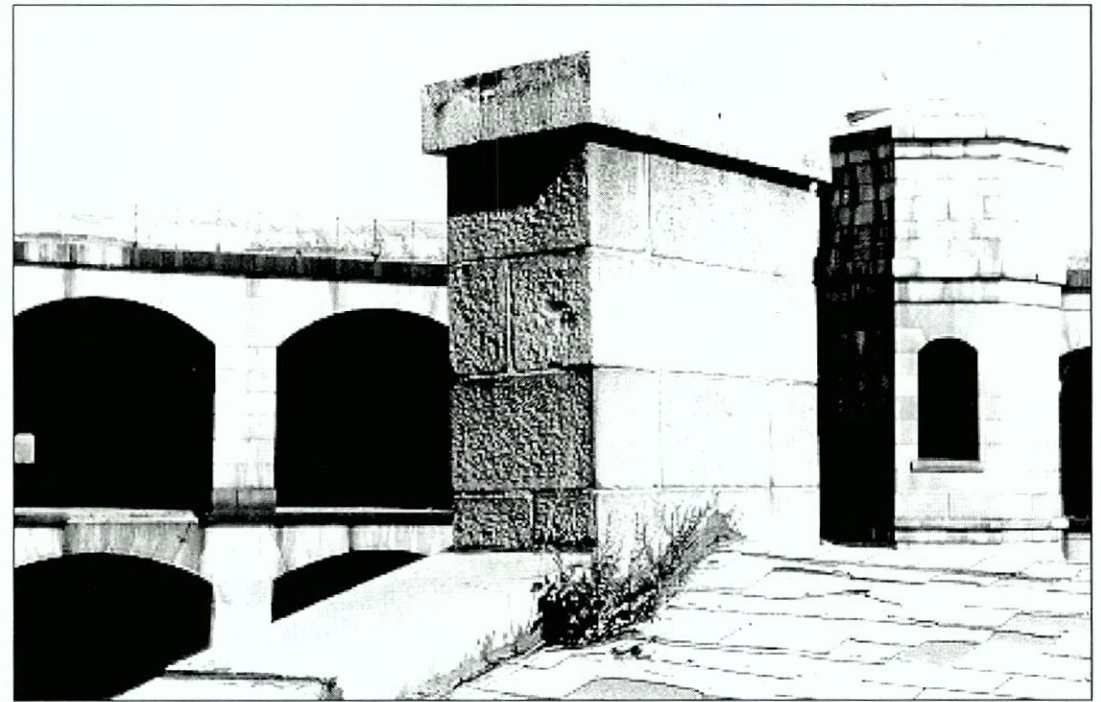




**Figure 6.33** General view of guardhouse roof showing overall poor condition of asphalt shingles. Note poor repair to joints and the presence of vegetation at the southeast corner.

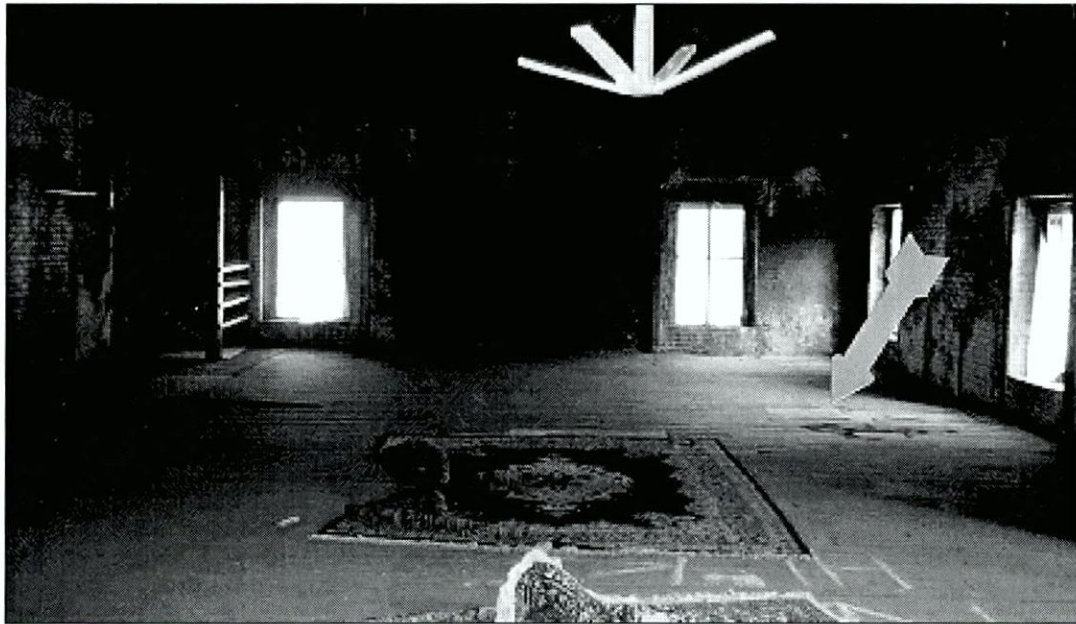


**Figure 6.34** Detail of guardhouse roof showing loss of copingstone corner, failure of mortar, poor repair with bitumastic, and introduction of vegetation.

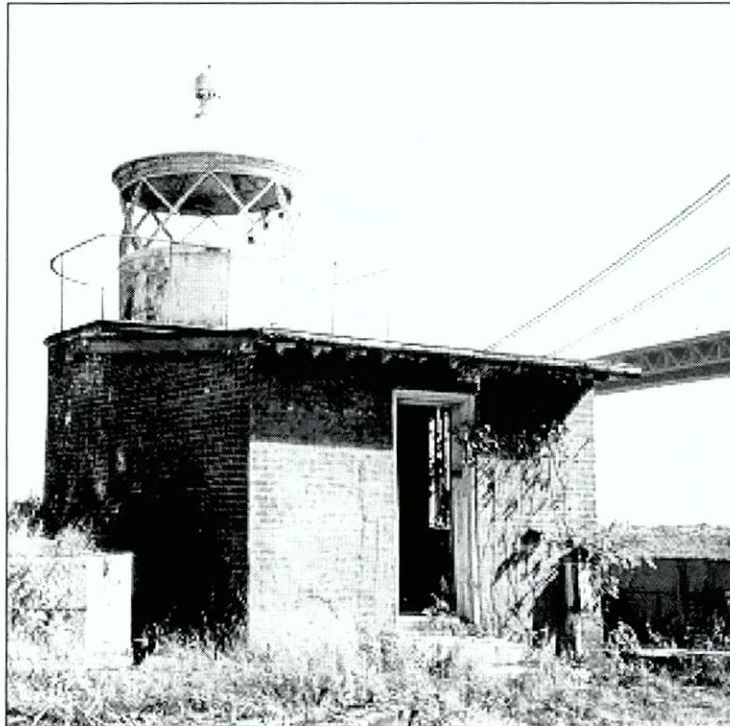


**Figure 6.35** Bowing of guardhouse endwalls has resulted in a gap between the gables and the roof. Note poor repair with mastic and the introduction of vegetation.



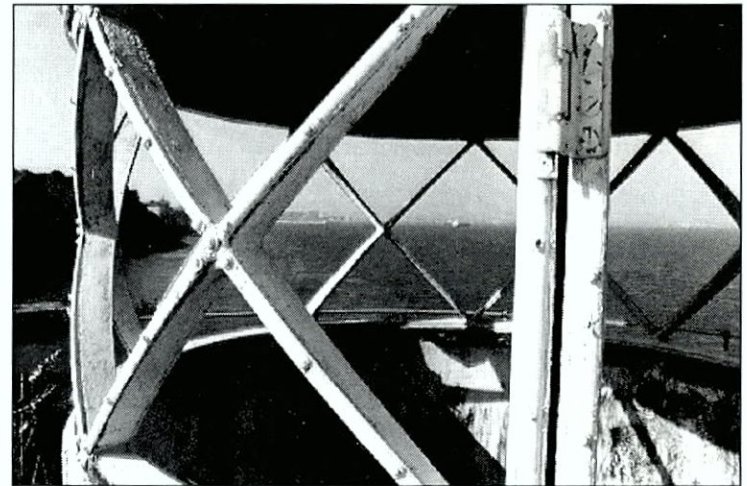


**Figure 6.36** Second floor interior of guardhouse showing general condition. Note poor condition of window units and large patch in the floor (arrow).



**Figure 6.37** General view of lighthouse on barrette level. Photo taken just after cutting of vegetation.

**Figure 6.38** View of sheet-metal roof on the lighthouse showing general poor condition and rusting of ferrous metal surfaces.



**Figure 6.39** Detail of window muntins at lighthouse lantern. General rusting of ferrous metal and absence of window glass.



## North Dock and Seawall

### Description and Development

The north dock and seawall are situated at the water's edge by Battery Weed. The dock juts out into the water just to the north of the battery. The seawall defines the shoreline and water-side perimeter of Battery Weed. It is in poor condition, extending from an area to the north of the dock south, around the fort, to an area by the south salient. The seawall following the perimeter of the fort functioned as the exterior side of the moat that once surrounded the Fort. Both the dock and seawall are constructed of granite blocks, similar in appearance to those of Battery Weed. The portion of the seawall surrounding Battery Weed will be discussed in the section regarding the battery. Adjacent concrete seawalls will not be discussed in this report.

At the location of the dock, the seawall breaks from the shore to jut out slightly into the water in a northeasterly direction. The lower blocks of this section of wall are of rusticated granite ashlar (first phase of construction). The top course of blocks on the seawall, dock piers, and dock perimeter have flat, picked faces and are larger than those below them; the top surface of the dock is of concrete and granite pavers set in geometric patterns (later phases of construction). The total area is about 3850 square feet.

The dock is constructed in an L-shape with the end of the "L" turning the corner in a southeasterly direction. The top surface of the dock is supported on granite piers, spanned by steel beams. An examination of deteriorated areas indicates that the surface of the dock is comprised of a layer of concrete finished on top with pavers. Granite blocks are situated around the perimeter. Situated in the interior corner of the "L" is a set of granite steps, leading down to the water. The concrete surface of the northwest side has two rail tracks laid into it. Wooden piers, once supporting an extension to the dock, stand out in the water to the northeast. Wooden beams, steel beams, and remains of rail tracks project from the northeast end.

Black remarks that a wharf existed near Fort Richmond (the former structure on the site of Battery Weed) during the era of the War of 1812. He may have been referring to a map of 1809 that shows a "new wharf" to the north of the site of Battery Weed, but probably too far north to be the site of the dock existing today. An engraving from 1852 shows a dock to the north of Battery Weed, but again, it may be too far north to be the current dock.

An 1850 plan of Fort Richmond (also the former name of the current Battery Weed) shows the dock with the footprint of the rusticated ashlar structure (figure 6.1 in Battery Weed section). This dock may also appear in an engraving dated 1852, although it is difficult to tell if the structure jutting out from land is man-made or natural (figure 6.3 in Battery Weed section). A plan of Fort Richmond from 1857 clearly shows part of the extant dock with the seawall extending out from either side (figure 6.40).

It is not known when the masonry addition to the dock and the top course of the seawall were constructed. The squared blocks of these additions are of similar appearance to the granite of the guardhouse in Battery Weed, constructed in the late 1860s. The first documentation of an L-shaped dock is a plan of 1871

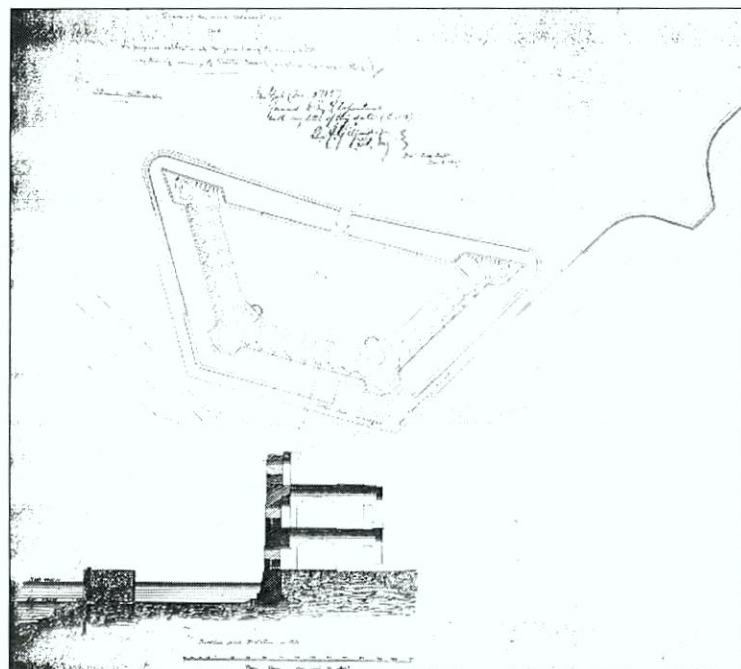
(figure 6.41). Within the L-shape is a small boathouse. An 1890 plan shows the same configuration of the dock and boathouse and notes: "Q.M. Wharf and Boat House." A postcard depicts a small gabled building appearing to be supported by piles. A crane is situated at the end of the dock (figure 6.42).

The rail system emplaced for the deployment of mines connected the Torpedo Storage Building, the cable tanks adjacent to Battery Weed, and the dock. Alterations to the dock were made around 1907. Alterations included the extension of the dock, the laying of a rail track, and the construction of a frame structure.

A plan of Fort Wadsworth from 1896 shows the dock with the extension. The addition projects out slightly from the northeast end of the existing dock, then turns a corner and runs in a southeasterly direction to form an L-shape with a long leg. Both the



**Figure 6.40** Dock, seawall, and corner of Battery Weed, 1857.



existing boathouse and a new structure situated within the “L” of the extension are shown.

A 1904 drawing depicts the dock extension, rail track, and existing boathouse with a “Tide Observing Station” in the north corner (figure 6.43). The track is shown running in a northeasterly direction straight out to the end and another track adjoining it there and running in a southeasterly direction two-thirds of the way down the leg of the “L” extension.

A 1906 drawing is similar to the 1904 drawing. Details of the subflooring and flooring are shown, the latter is marked “3 x 10” Yel. Pine.” The rail track runs out to end of the extension. Notations are made for cleats placed around the outside perimeter and a gangway to be constructed in the center of northeast edge. A letter of the same date provides additional information on the proposed dock. The extension would be “150 feet long and 40 feet wide, with a depth of 18 feet or more at mean low water along the outer face of the dock.” Because it was so difficult to

drive the piles to their proper depth, the construction of rip rap around the piles was suggested. The letter concluded with the proposal for the emplacement of “two or more derricks or cranes upon the deck, capable of handling weights up to about five tons, the location to be presumably at or near the southeast end of the dock.”

The rail track is laid in a concrete bed on the northwest side of the masonry dock. The original granite pavers of the dock were most likely removed for the emplacement of the track. Other alterations to the pavers (visible as changes in paving patterns) may be the result of later alterations, possibly resulting from repair of deteriorated conditions.

The “torpedo planting wharf” was recorded as being completed in 1907. However, a document written the following year records the problems of driving piles into the ocean floor, a surprising problem if the dock’s extension had already been completed; perhaps only part of the extension had been completed.

All piling at the North Dock was delivered by the contractor and was of specified length.

It was found impossible in many instances to drive them [the piles] to the required depth, especially was this so at the cluster at the southeast corner of the dock. The bottom there is composed of rock, stone or cemented gravel. The hammer fell over the required distance, and no pile sank over 10 inches in 12 blows or one inch at the last blow. The penetration at this point was approximately 10 feet for each pile. Any further driving would necessitate the removal and replacing of other piles with no better results.

The author of this letter continued with suggestions on modifying the piles to combat the problem. He also wrote about the dock’s susceptibility to the deteriorative forces of the environment, especially in the winter.

At this cluster on the southeast corner of this dock I do not believe there is a more exposed point about the harbor of New York. At

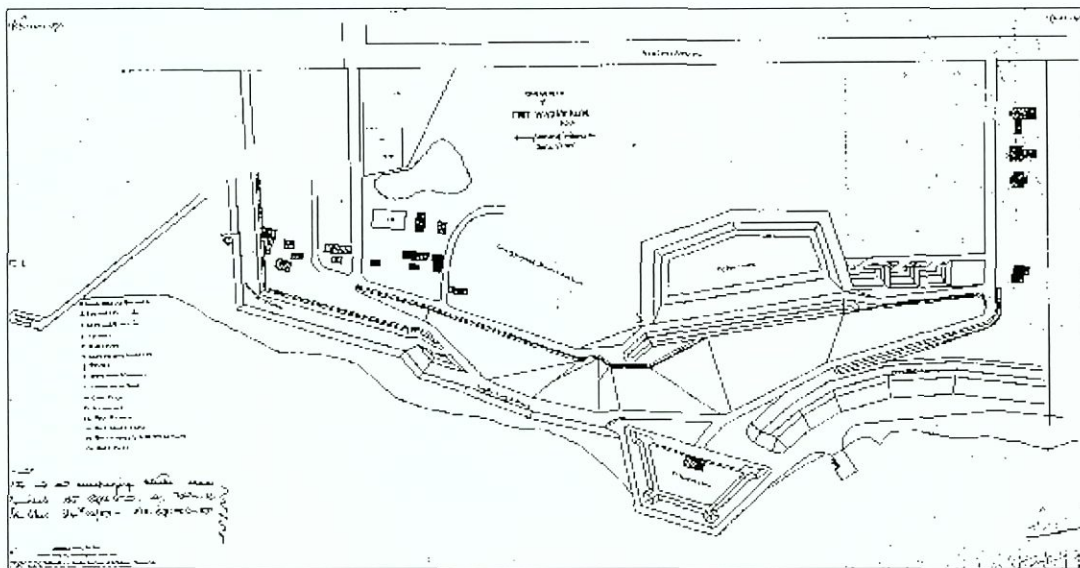


Figure 6.41 Battery Weed, dock, and boathouse (shaded area by dock), 1871.

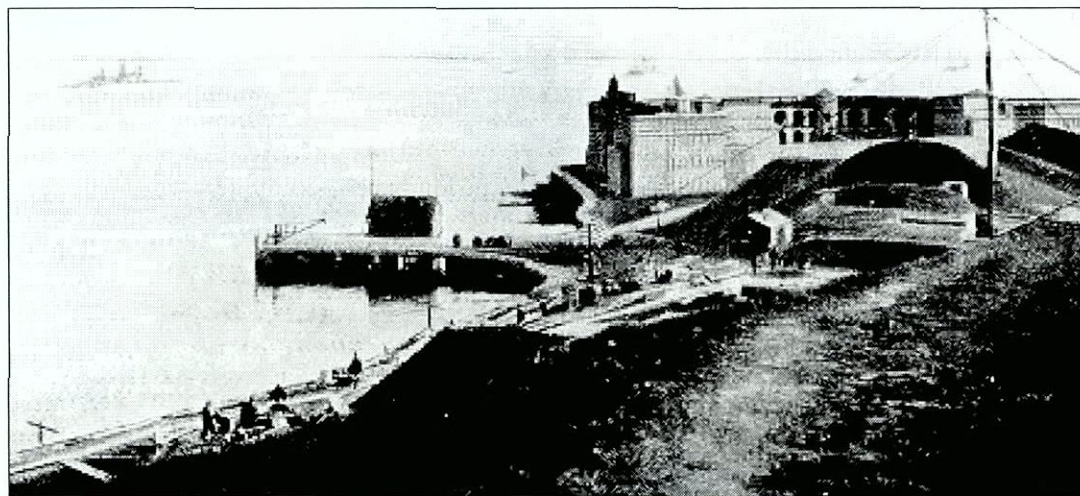
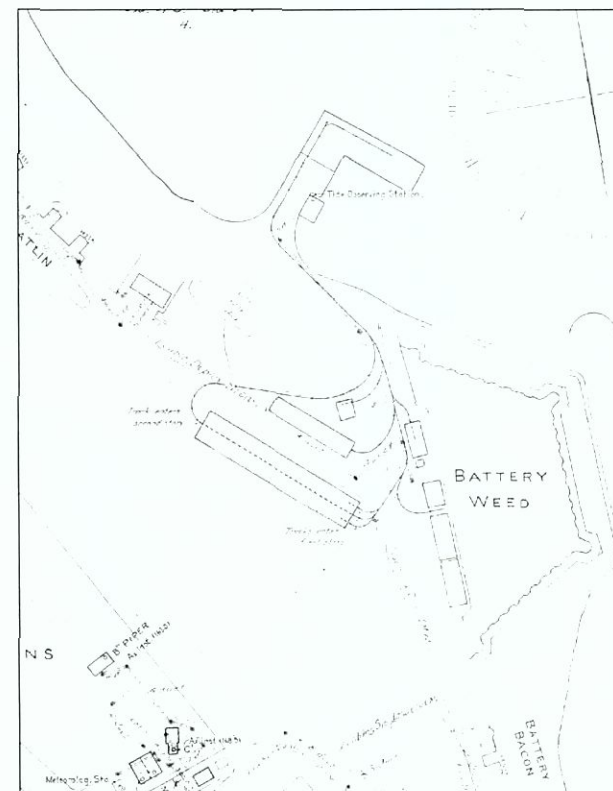


Figure 6.42 Dock and boathouse, n.d.

Figure 6.43 Extension to dock, 1904.





this writing there is a sea of ice drifting against the face of this dock and this ice has probably some time this winter become fastened or clogged about this cluster and lifted it bodily out of the bottom.

As a matter of record permit me to state nearly all Captains of the Harbor with whom I have talked have expressed grave doubts whether a dock such as is built at Fort Wadsworth would stand the action of the heavy flow of ice at this point.

The dock at Quarantine (sic) which is no where near as badly exposed as at Fort Wadsworth has been sheathed on all sides to prevent the ice from getting under same and lifting it. This should be done at the dock at Wadsworth.

It is not known what level of maintenance was carried out to the dock, or how many winters passed before displacement of stone occurred. The displacement of stone today could well be a result of the ice flows described in this letter.

Although the emplacement of two derricks was proposed in 1906, they (one or both) may not have been installed immediately. A letter from 1912 suggests a later installation date.

. . . I beg to inform you that I am canvassing the available derrick material now in the district in the hope of finding enough to erect a derrick at the wharf of sufficient capacity to lift 7,000 lbs. If suitable material cannot be obtained, I shall arrange to purchase enough to erect a suitable derrick.

The first appearance of a second structure adjacent to the dock, after the proposed drawing of 1896, is found in a 1913 map of Fort Wadsworth. This boathouse is situated within the "L" of the dock extension, is oriented in a northwest/southeast direction, and is just slightly smaller in area than the leg of the "L." A photograph shows a wood-frame building with a gable roof, about the same height as the older boathouse, and set on wood piles (figure 6.10 in Battery Weed section). A 1926 document, "Preservation and Repair, General Maintenance Work, Harbor Defenses of Southern New York," reported on the dock.

The Mine Wharf at Fort Wadsworth is maintained as a fortification accessory. Replanking is necessary about every 6 years. Incidental repairs are necessary annually. This wharf now requires replanking.

It is not known if replanking was carried out in this year, or if it was carried out every six years.

A drawing from 1934 shows "repair work needed." This work included removal and replacement of outside perimeter fender piles, bracing of piles, replacement of decking, replacement of stringers and stringpieces, and removal of the boom. The new decking was designed to run on the diagonal across the dock. Two rail tracks ran straight northeast to the end and two turned the corner and ran southeast, one to the ramp located almost to the end and the other directly to the end.

Alterations to the dock are also shown in two drawings from 1951. These alterations are similar to the repairs delineated in 1934. Either the 1934 repairs were never carried out or the condition had deteriorated so quickly that repairs were needed again.

By 1910, the absence of a seawall just to the north of where the present wall ends had allowed some erosion of the shore. The wall and shoreline are described in a memorandum of this year.

. . . The shore line is protected by a sea wall in the vicinity of the old casemated stone fort. This wall extends northerly past the Quartermaster's wharf and about 100 feet beyond. From this point northerly to the end of the reservation the shore is protected by a shingle beach. I did not notice much encroachment upon the shore by wave action and the danger to the earth embankments and slopes did not appear to me at all imminent.

The locality, however, is a very prominent one and the present protection of rip rap stone is out of keeping with the fine background of the old Fort Tompkins, with the stone wall to the south, and with a private sea wall to the north. A concrete retaining wall should be erected when funds are available. . . .

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In the following year, the extant seawall may have been repaired. Some of the stones had become displaced and three days were considered necessary to place them back into position. While it is not known if this work was carried out, displacement problems were occurring at this time and the now-dilapidated wall may have had its genesis at the beginning of this century. The conclusion to the problem of the northern seawall was given in 1912.

... the extension of the sea wall north of the dock to the northernmost limit of the Reservation is not a matter of any urgency, although desirable from an esthetic standpoint, and would improve the appearance of that portion of the Harbor.

The granite seawall was not continued to the north. Perhaps the concrete wall currently extant was constructed instead.

#### **Character-defining Features**

The primary character-defining features of the north dock and seawall are the setting, massing, use of granite for construction, and its semi-demolished condition.

The setting of the dock and seawall, the former jutting out into the water and the latter hugging the shoreline (and artificial shoreline created by the fort), define both the boundary between land and water and the edge of the military installation. At the same time, the dock maintains a functional link between land and water.

The massing of the dock and seawall augments the setting in defining character. The use of granite is also a character-defining feature. Large granite blocks comprise the seawall and the structure of the dock. Small granite pavers (rectangular blocks) are placed in geometric patterns on the top face of the dock, with the larger blocks articulating the edges. The concrete portion of the dock is also character-defining.

Both dock and seawall are in a crumbled condition and this condition is a character-defining feature. The displaced and missing stone and collapse of the northwestern side of the dock where the rails once extended out to boats contribute to this condition.

Secondary character-defining features include the piers at the end, the two stanchions, and rail tracks.

#### **Condition Assessment**

##### *North Dock*

The North Dock exists in a present state of decay exhibiting extensive erosion and loss of architectural fabric. Two forces have been the main impetus in the destruction of the dock: water erosion and vandalism. Constant impact by the ocean water and ice has caused the erosion of mortar joints and shifting of granite blocks resulting in the outward leaning of the wall at its present end. Vandalism has occurred in the form of the removal of granite paving blocks from the deck surface of the dock.

Material failure of the steel beams is also a major contributor in the deterioration of the dock. Reaction with water and oxygen, and the absence of a corrosion inhibitor, has led to the extensive corrosion of the ferrous metal I-beams. Also, the connections between I-beam ends and the granite shelf have failed due to the gradual movement of the endwall towards the water.

Wood pilings exist in a state of decay with tops rotting and overall biological growth present. Vegetation grows through all of the joints in the dock's masonry decking.

In its present state, the dock must be deemed unsafe for public visitation due to the many potential safety threats and possible structural failure.

##### *Seawall*

The seawall, made of massive granite blocks, suffers from erosion caused by the ocean. The wall has been subjected to constant destructive force of the water. Today, the wall exhibits early signs of failure and, if left unattended to, collapse will occur. The entire wall has been gradually shifting and pulling apart. The seawall section near the dock exhibits total failure with granite blocks randomly scattered, and partially buried, throughout the vicinity.



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## Condition Assessment Inventory and Recommendations

### *Dock*

1. Problem: Collapse of the northeast corner at the end of the dock. Granite masonry is slipping into the water.

Solution: Conduct structural survey of the dock to determine rate of movement and to identify other engineering concerns.

2. Problem: Removal and theft of pavers from the decking.

Solution: Upon restoration of the dock replace missing pavers with units of same type, size, color, and pattern.

3. Problem: Ferrous corrosion of steel I-beams concealed in the deck and corrosion of rail tracks.

Solution: Stabilize and repair damaged steel. Chemically treat to prevent further corrosion. Replace severely corroded and structurally failed members.

4. Problem: Volunteer vegetation growing throughout the joints in the deck contribute to the accelerated deterioration of the dock.

Solution: Clear all vegetation from the joints and maintain a weed-free dock.

### *Seawall*

1. Problem: Shifting of granite wall and capstones caused by constant impact with the water. Partial collapse of north wall; east wall beginning to dislodge.

Solution: Consult civil engineer experienced with this type of problem. Upon engineer's survey, restore integrity to the wall system following engineer's recommendations for stabilization.

2. Problem: General loss of mortar throughout the seawall caused by weathering.

Solution: Following stabilization and rebuilding of collapsed sections, repoint deteriorated joints with mortar of same type, color, and performance as existing.

3. Problem: Minor spray-paint graffiti occurring on the capstones near the southeast corner.

Solution: Follow conservator's recommendations for the removal of graffiti.

4. Problem: Excessive vegetation in the moat consisting of grasses, small woody plants, and ivy.

Solution: Clear moat of woody plants and ivy. Grasses should remain to help hold and stabilize the soil.



**Figure 6.44** General view of dock located north of Battery Weed.



**Figure 6.45** General view of North Dock showing deteriorated condition at the end and the intrusion of vegetation through the joints in the masonry deck.



**Figure 6.46** Detail of dock showing failure of steel I-beam and granite shelf connection caused by the gradual movement of the wall towards the water. Note corrosion of I-beams.



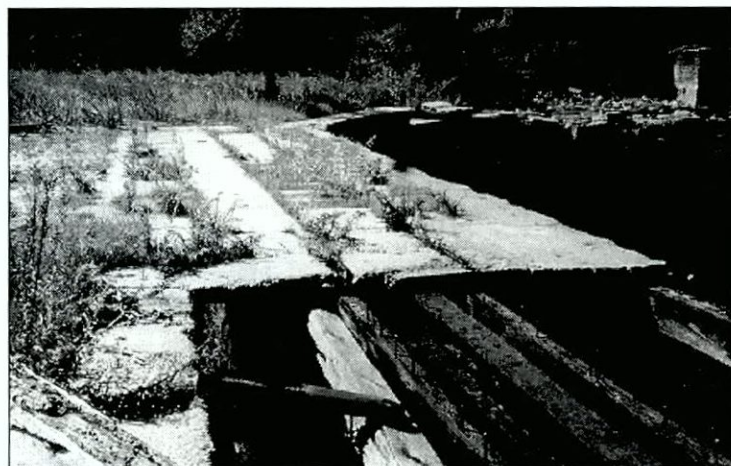
**Figure 6.47** North dock at northeast corner showing area where granite pavers have been removed. End blocks are gradually slipping into the ocean.



**Figure 6.48** Detail of dock end showing deteriorated and unsafe condition of decking. Arrows identify extensive corrosion of I-beams.



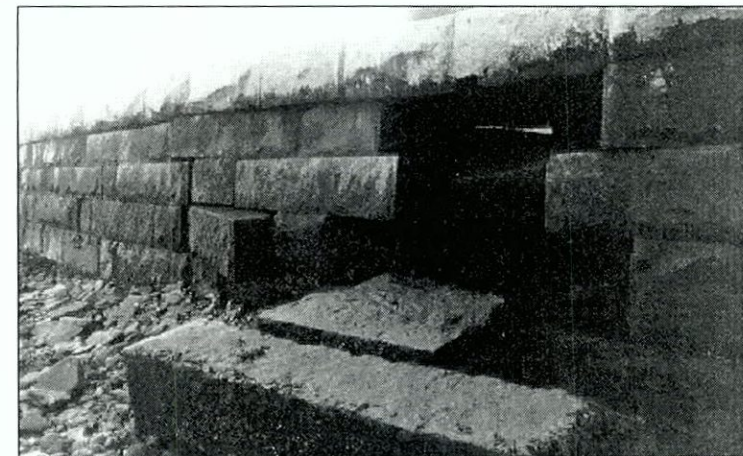
**Figure 6.49** View of dock (looking towards land) showing later-date widening of dock to accommodate tracks.



**Figure 6.50** View of seawall with dock in the distance. Note undulating shifting of capstones caused by the constant impact of ocean waves.



**Figure 6.51** View of seawall near dock showing complete failure and collapse of the wall system.



**Figure 6.52** Early stages of collapse near the SEC of the seawall.



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## Torpedo Storage Building (Building 147)

### Description and Development

The Torpedo Storage Building is constructed into the hillside just to the west of Battery Weed and measures 323 feet by forty-two feet. This banked building is oriented in a northwest to southeast direction, is one story high at the northwest end and two stories high at the southeast end, and has a gable roof. A fire ripped through the building within the last several decades; the southeast wall and part of the roof and floor were destroyed and many steel structural members were deformed by the heat.

The lower level of the Torpedo Storage Building is constructed of rusticated granite ashlar on the exterior and sandstone on the interior. The upper level is constructed of brick and painted light gray. Lintels and sills are of granite. A simple brick cornice follows the perimeter of the roof; returns articulate the corners at the northwest end.

A steel truss system spans the width of the building, supporting a roof made of corrugated asbestos sheet-metal. The roof remains intact at the northwest end but was destroyed in the fire at the southeast end.

Eighteen windows are evenly spaced along the long walls of the upper level. The few sash remaining consist of four-over-four steel sash. Many windows have been replaced with concrete masonry units, completely filling the openings. Shutters consist of ferrous-metal frames with corrugated-metal panels with the corrugations in a horizontal orientation. Some replacement panels are of larger corrugations, orientated vertically. Some shutters are no longer extant.

At the upper level of the building, a large rolling-metal garage door allowed for the passage of rail cars. A smaller door provided entry for personnel. Another door is located in the northeast wall near the southeastern end, accessed by a set of metal stairs, no longer extant. The lower level of the building was accessed by

three large doors in the southeast end, a center rolling-metal door and two ferrous-metal double doors on either side.

Rail tracks run into the building at both ends. They were used to connect the building with the cable tanks at Battery Weed, the dock, and several other ancillary structures.

The interior of the upper level has no division of space. The floor is of concrete in the northwestern half and wood in the southeastern half. The interior of the lower level is divided into three bays, running for half the length of the building. Two rows of brick piers define the three bays. The building has a total of 13700 square feet.

The Torpedo Storage Building holds an important position in the sequence of defense strategies employed at Fort Wadsworth. The development and use of mines in post-Civil War years resulted in the construction of this building, its associated ancillary structures, the extension of the dock, and the interconnecting rail tracks. Black describes the use of mines in harbor-defense strategy.

Most useful in harbor defenses [in the post-Civil-War years] were mines exploded electrically from shore positions, since they posed no threat to friendly ship traffic. Mines were not permanently planted, but they and their miles of cables were stored in shore facilities at the water's edge, ready to be laid when the occasion arose. Controlled mine systems included special mine vessels, loading wharves, fire control stations, and mine and cable storage buildings.

The Torpedo Storage Building was constructed from 1892 to 1894. Its location near the dock was obviously necessary to its operation.

In a proposed plan for the "Torpedo Building," dimensions of 200' x 40' are given, a length 123 feet shorter and a width two feet shorter than what was built. The position was also altered somewhat from the proposal, but not by much.

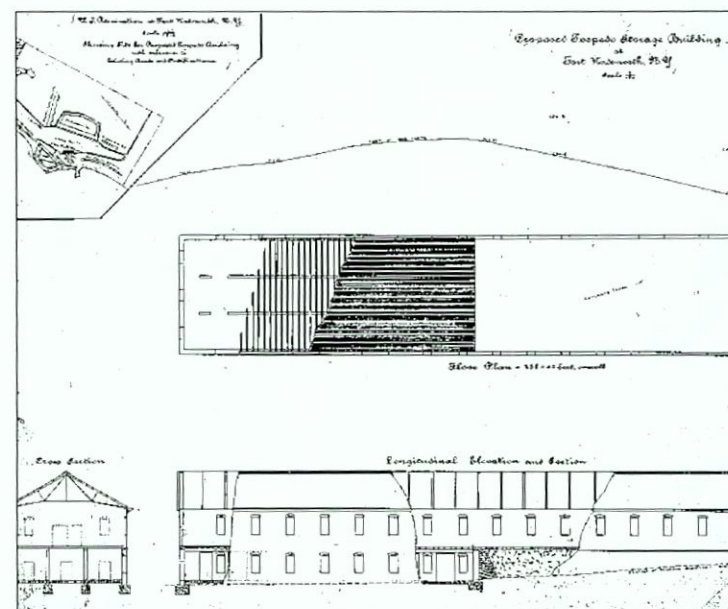


Two drawings (1892 and 1894), each with a longitudinal section and an upper level plan, depict the building much as it appeared before the fire. Both drawings were proposals and slight modifications were made for the actual construction. The earlier drawing shows the floor plan of the upper level, detailing the subflooring beneath the wood floor (figure 6.53). The existing truss is slightly different than that depicted in the drawing, the fenestration of the northwest facade was modified, and the windows were not constructed with the segmental arch lintels shown in the proposal. The proposal from 1894 is for handling appliances for torpedo material (figure 6.54). A rail track for the upper level, a room division in the east corner of the upper level, a hoisting device at the southeast end, and unidentified material or structure on the upper level at the northwest end are depicted. In the small site plan on the same drawing, one track connects the lower center bay of the Torpedo Storage Building and the dock.

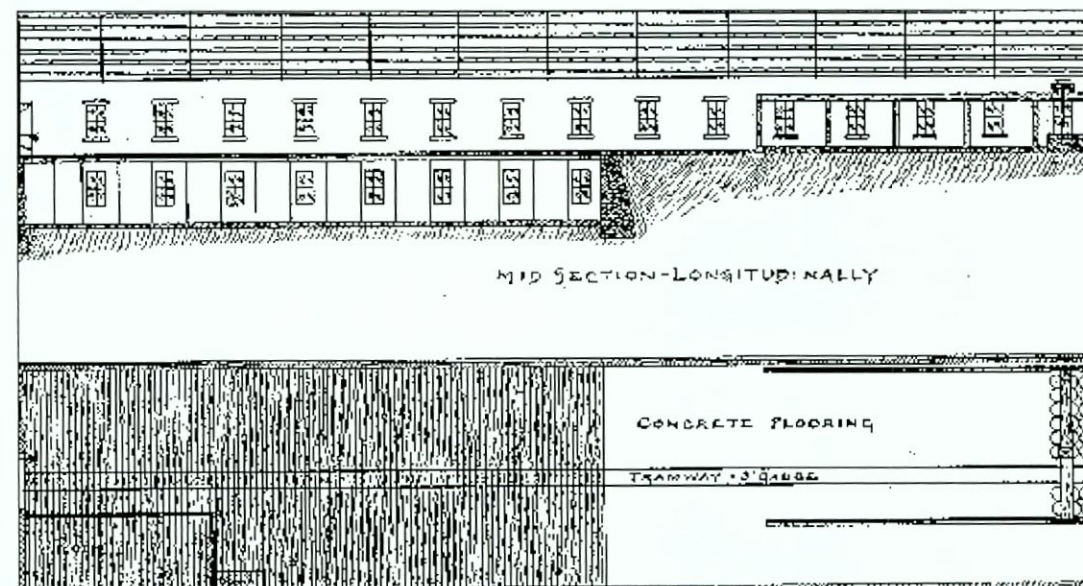
Three photographs, two of 1913, the third of about the same time, show portions of the Torpedo Storage Building as it appeared not too long after it was built (Figs.6.55-6.56 and figure 6.10 in the Battery Weed section). In these photographs, the brick has not been painted and there is no entrance to the upper level from the northeast side. The southeast end has a large garage-type door in the very center of the upper level (corresponding to the opposite side) and a window to the south. A small chimney or vent rises above the roof in the very east corner.

An 1899 drawing of the proposed location of a cable tank notes the "Torpedo Storage Building." Maps of Fort Wadsworth from 1906 and 1913 describe the building as the "Torpedo Shed."

A drawing from 1921 depicts existing and proposed rail tracks running between the Torpedo Storage Building, the cable tanks at Battery Weed, the dock, and ancillary structures (figure 6.57). The only detail of the Torpedo Storage Building is three tracks running into the three bays of the southeast end. The building is called the "Torpedo Storehouse."



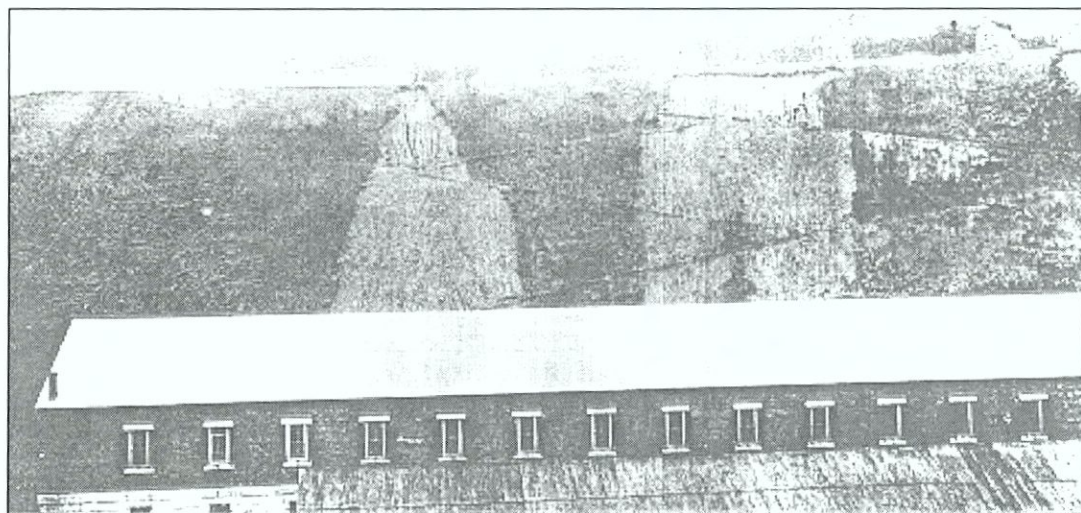
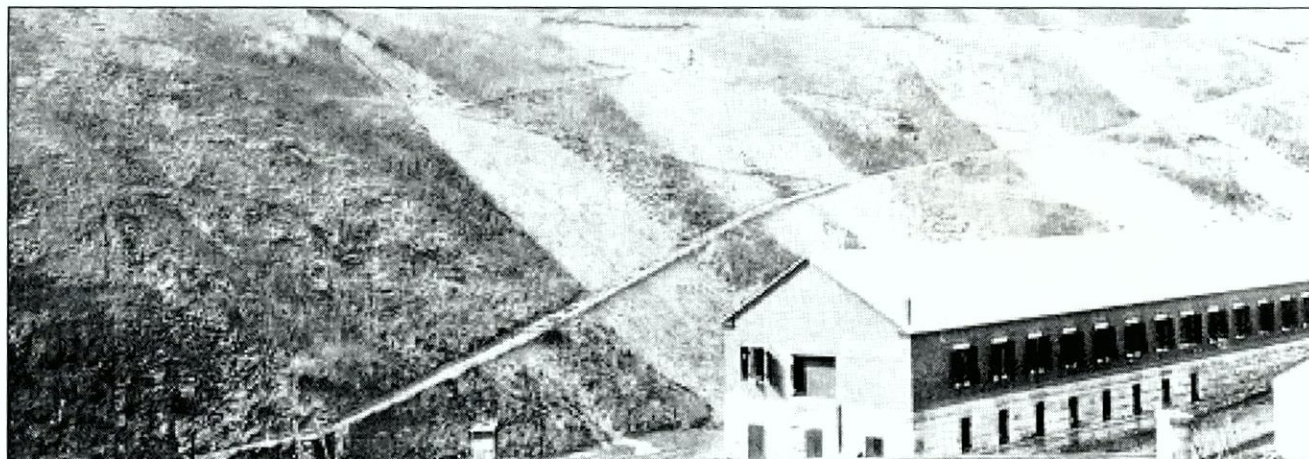
**Figure 6.53** Plan, elevation, and section, Torpedo Storage Building, 1892



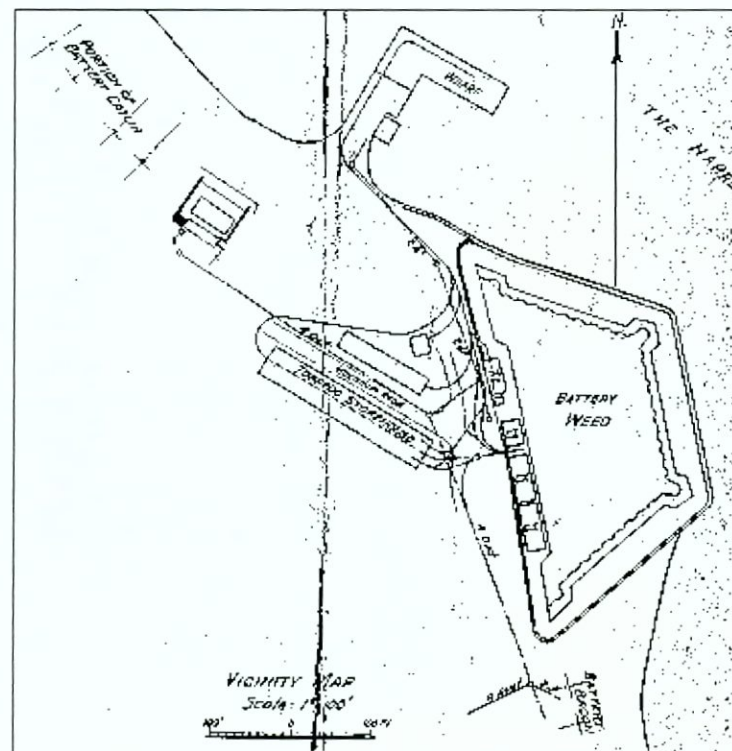
**Figure 6.54** Plan and elevation of Torpedo Storage Building, 1894.



**Figure 6.55** Southeast end of  
Torpedo Storage Building,  
1913.



**Figure 6.56** Northeast side  
of Torpedo Storage Building,  
1913.



**Figure 6.57** Torpedo Storage Building  
and proposed relocation of rail tracks,  
1921.



Two references to the Torpedo Storage Building are found in documents dating to 1926. The “asbestos covered metal roof” was noted as requiring replacement, and the building was “filled with submarine mine material.”

At what date the military function of the Torpedo Storage Building ceased is not known. The service life of the building seems to have continued into the early 1960s. A drawing from 1960 depicts plans of the upper and lower levels and is marked “Signal Service Unit, Office, Shops, and Storage.” Rail tracks are shown only in the northeastern-most bay of the lower level. By this date the northeast door to the upper level had been installed. A “latrine” is housed in one of two small rooms in the eastern corner of the upper level. A photograph from 1961 shows the northwest end, before the brick had been painted.

In 1962, plans were executed for the installation of underlayment and tiles, the installation of oak flooring, and further room divisions in the southeast end of the upper level. Room divisions are marked “work room,” “locker room,” and “office;” two rooms are not marked with a function and one of the two is marked “none.” The large door of the center bay is shown as a window.

The upper level of the building was painted at some time after 1961. After the painting campaign, the Torpedo Storage Building suffered a devastating fire. The fire burned out the entire southeast end. The hazardous conditions of the interior may have prompted the infilling of windows with concrete masonry units and installation of rolling-metal garage doors.

### **Character-defining Features**

The primary character-defining feature of the Torpedo Storage Building is its state as a ruin with its collapsed roof at the southeast end.

The massing is the overall form of a building. The massing of the Torpedo Storage Building is the long rectangular block, capped by a low gable roof, emerging from the hillside. The plan is the footprint of the building and the organization of space within. The

long length in relation to the short width defines the plan. On the interior, the large open space of the upper level and the divided space of the lower level define the interior plan. The fenestration’s most prominent feature is the regular placement of window and door openings along the two longest elevation. In addition to the collapsed southeast end of the building, the oxidized metal elements contribute to the structure’s ruinous and unkempt appearance.

The materials used in the construction of the Torpedo Storage Building also define the character of the building. The juxtaposition of rusticated granite blocks on the lower level and brick on the upper level, including the corbeled cornice and returns, are important features that aid in providing character. Metal elements and their design are also character-defining features: the exposed roof truss system, corrugated roof, corrugated shutters, and doors.

In this case the building’s state as a partial ruin, in part caused by a post-1900s fire, helps to define its character as it exists today. If the building was to be restored, that one feature would be eliminated without detracting from the structure’s architectural integrity or its pre-1960s historical integrity. Other possible treatments would not adversely affect the structure if one of its character-defining features is a partial ruin.

### **Condition Assessment**

#### *Exterior*

The Torpedo Storage Building exists in a state of ruin due to an extensive fire that occurred several decades ago. The southeastern half of the corrugated asbestos roof and the steel truss system has collapsed as have the end brick gable and interior frame floor. Heavy growth of ivy has grown over and into the structure. Other causes for concern are the major structural cracking on the southwest elevation occurring at the corners and at the main gable.

Many windows have been in-filled with concrete masonry units in an attempt to secure the building interior from intruders. In a majority of the replacements, the steel frame window units have

been removed though a few still remain behind the concrete in-fill.

Though the exterior presents no immediate threats to the general public the interior is a direct safety concern and public access should be prohibited at this time. Doors and window openings need to be secured in order to prevent entrance into the structure. Due to the historical significance of the structure it is recommended that the Torpedo Storage Building be stabilized and interpreted.

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### Condition Assessment Inventory and Recommendations

#### *Exterior*

1. Problem: Access into the interior through an open northeast window increases the risk of liability and poses a great safety threat to trespassers.  
  
Solution: Secure the window by in-filling the window with rot-resistant wood framing. Close and secure exterior metal shutters.
2. Problem: Missing second-story door located at northeast elevation exterior stairway. Open doorway provides a means to enter the extremely unsafe interior.  
  
Solution: In-fill door with rot-resistant framing and exterior grade plywood sheathing. Plywood should be painted following the historically-appropriate color.
3. Problem: Failed metal exterior stair on northeast elevation provides an invitation to climb on and gain access to the second-story platform and doorway. Stair components are not structurally sound and may dislodge.  
  
Solution: Remove loose metal rails, runners, or decking as necessary in order to secure the stairway and reduce the possibility of accidents.

4. Problem: Unwanted trees and vegetation growing adjacent to the foundation, on the walls, and into the southeastern half of the interior.  
  
Solution: Implement a clearing program for the removal of trees and shrubs and maintain a schedule for controlling the growth of ivy.
5. Problem: Safety concerns regarding the rail tracks leading from the dock to the Torpedo Building's northwest entrance. Gaps between the rail and adjacent concrete may pose a problem for wheelchairs and strollers.  
  
Solution: Since the tracks are of historical importance their retention and interpretation is encouraged. Gaps should be filled with a cementitious patching compound, matching the original concrete in color and texture.
6. Problem: Trash around the site in the form of metal machinery and fire debris is aesthetically inappropriate and a potential safety hazard.  
  
Solution: Sift through debris for historically important artifacts. Remove unwanted material from the site.
7. Problem: Severely corroded iron doors on the southeast elevation and all shutters may pose a safety threat as a result of the many sharp, rusty edges created by "rust-throughs" in the metal.  
  
Solution: Investigate solutions for correcting this problem such as covering the jagged openings with metal plates or by dulling the sharp edges.
8. Problem: Major structural through-cracking occurring at the north and south corners of the building.  
  
Solution: Monitor the cracking by installing tell-tales in order to determine rate of movement and whether cracking is active.



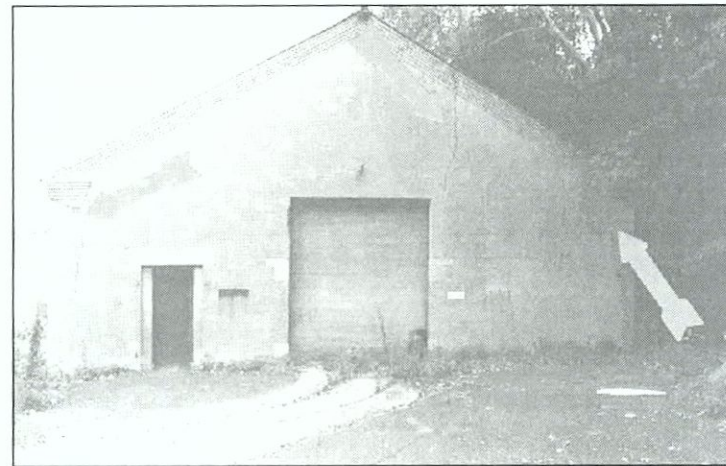
*Interior*

1. Problem: Extremely unsafe conditions on both levels due to fire damage. Floor has collapsed at the southeastern end; roof trusses have melted and fallen. Stability of remaining roof trusses and roofing must be questioned.

Solution: Due to the potential for structural failure, public access to the interior must be prohibited and access by NPS officials should be kept to a minimum.



**Figure 6.58** General view of Torpedo Storage Building showing north and west facades. Verrazano Narrows Bridge is in the background.



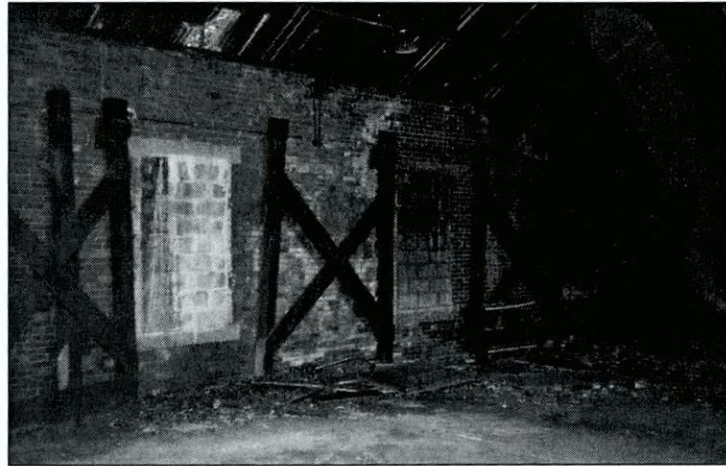
**Figure 6.59** West facade of Torpedo Storage Building. Arrows identify structural through-wall cracking.



**Figure 6.60** Bird's eye view of Torpedo Storage Building looking west. Building is in ruinous state and overgrown with ivy.



**Figure 6.61** Interior view of window showing removal of sash units and in-fill with concrete masonry blocks.



**Figure 6.62** Interior of Torpedo Storage Building looking east out the fire-damaged portion of the building. Note the structural failure and collapse of steel roof trusses and the intrusion of ivy.

## Fort Tompkins (Building 137)

### Description and Development

The extant Fort Tompkins is constructed on the same site as an earlier fortification, also called Fort Tompkins. The first fort was constructed by the state of New York, beginning in 1814, as part of a tandem building project that included Fort Richmond (now called Battery Weed), which had been constructed below it and next to the water's edge. At the site of Fort Tompkins, a blockhouse was constructed initially on what was known as Signal Hill, or Flag Staff Hill, and then a more permanent structure was begun that enclosed the blockhouse. The first Fort Tompkins was a casemated pentagonal structure with five circular bastions at each angle, constructed of solid masonry faced with hewn stone. By the early 1840s, the condition of both Forts Tompkins and Richmond was described as "'in ruins' and 'in a great state of dilapidation.'"

In 1841, the United State sought permission from the state of New York to occupy the site militarily, but the official transfer of the property from New York to the federal government did not occur until 1847. Due to improvements in weaponry technology, proposals for the necessary new construction of both Fort Tompkins and Fort Richmond were accepted by the government. Building funds were not sought for Tompkins until 1857, when the new Fort Richmond was half completed, and after an additional tract of land had been purchased to the west of the present Fort Tompkins site. Fort Tompkins was designed to support the defenses of Fort Richmond, which was 125 feet below it, as well as protect the Narrows. Black describes the construction process well:

Detailed construction plans were not completed or approved by the War Department until April 1858, and operations did not start until the following July. During the remainder of that building season, laborers demolished the old structure and began grading the site, so that actual construction did not commence until spring of 1859. Stone and other heavy material had to be moved from



the wharf to the hill, a vertical lift of 125 feet. This required special equipment and arrangements, including a steam engine and the construction of an inclined plane from the landing into the work area. Also the new Fort Tompkins was farther to the west than its predecessor and its foundation was deeper. Once, started, initial construction progressed so rapidly that at the end of 1859 the engineer in charge expressed the hope that given another large congressional appropriation, the following building season would see the completion of "the counter-scarp, the scarp piers and arches, and the flanks and land front....though, as its armament is all en Barbette, it cannot be mounted until the work is wholly completed."

In spite of the engineer-in-charge's enthusiasm, the fort was not fully completed until 1876. The new plan also had five sides or scarps, but of unequal length, with four land fronts forming half of a faceted ellipse, closed by the linear fifth side facing the channel. The five building sides enclosed an open parade ground in the center. The northern and two western scarps were further protected by a counterscarp between which ran a 40' deep and 12' wide ditch. Apparently the counterscarp originally extended around the full south side of the fort, but may have been shortened when Battery Duane was constructed. The building is overwhelmingly constructed of granite, with the four land-fronted scarps composed of casemates two tiers high, designed to house troops among other uses, including officers' housing and a hospital until other facilities were constructed. The channel scarp is only one tier in height, but with high vaulted ceilings. A barbette exists on top of the circumference scarps (figure 6.63). The counterscarp originally was equipped with two levels, but only one floor level is evident today. The structure occupies approximately 71,637 square feet.

An additional site investigation and survey led to a deduction regarding original elements at Fort Tompkins. Physical evidence suggests that embrasure window openings in the north, west and south scarps were originally protected with eight-light, single-casement sash, mounted on the interior wall place within each



**Figure 6.63**  
Fort Tompkins, barbette.  
Looking west.

room. These sash were metal, possibly iron, with two lights across and four lights in the vertical position. Many of these sash remain. The majority of main window openings facing the parade still retain what are believed to be their original metal window sash. They are double-hung, possibly iron, and arranged in a 9-over-9 configuration. Although they still retain their position midway between the interior and exterior planes of the wall, the sashes' overwhelming majority of glass lights are broken.

Evidence also remains that strongly suggests original door types. Main entrance doors into each of the small casemates were metal,



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probably iron, mounted at the inner wall place on three heavy metal hinges. The doors were flat, possibly rolled metal, approximately 3/4" thick, and completely unadorned except for the hinges and lock. The door height did not extend the full height of the floor-to-ceiling opening, but rather only to a wooden rail that separated a wooden transom from the door. The light configuration of this transom is unknown at this time. It is known that the metal door frame extended to the ceiling and encased the transom at the top edge. The elimination or lack of inclusion of a metal rail separating the door from the transom may have been a cost-cutting measure, when the function was equally served by the wooden rail. Similar frames to the metal door frames are also installed on the interior room planes at the window openings, believed to create a repetition of form rather than of use, except perhaps to conceal the change of granite planes at the window openings. Most of these frames are still installed at the window openings, but with later wooden window frames installed over them.

The interconnecting doorways had doors very similar to the exterior doors. Each opening tunneled through a thick granite wall and therefore a door existed on either side of the opening. The doors were also hung on three heavy hinges and were approximately 3/4" thick solid metal, probably iron. No transoms existed over the doors due to block granite construction.

The floors originally may have been wood, laid lengthwise in the room, probably on first floor sleepers. Since only a few wood floors remain, and they have different characteristics, it is difficult to distinguish the replacements from what may have been original.

The physical evidence indicates that many alterations took place within the confines of the fort. However, it is difficult to be certain how often and how many alterations occurred. Certainly like elements suggest contemporary changes and many groupings of these like elements could be identified and enumerated. For instance, a certain wood door type is prevalent in the doorways facing the parade. Although this installation could not be specifically dated, it does suggest that a large campaign occurred to replace doors, probably in the first half of the twentieth century

(based on stylistic details). In addition, certain doorways were infilled with cement block in the lower section of the opening and a window was installed in the upper portion of each of these former doorways. This installation type is almost entirely consistent in the use of materials, including the muntin profiles of the window sash. This indicates that all similar openings were infilled during the same campaign. To totally document the same depth of evaluation is beyond the scope of this project.

It has been suggested that the northeast section of the extant Fort Tompkins may incorporate part of the original fort due to the presence of red sandstone (brownstone) and rubble of the same filling an interior opening adjacent to the entrance to the counterscarp passageway (figure 6.64). However, red sandstone is used throughout the interior of the counterscarp and building fabric seams do not exist on the fort's east exterior granite wall. These two factors lead one to suspect that independent structures were erected. In addition, a drawing survives that may represent original construction, although the copy in the author's possession is of poor quality. This drawing has no notations that document that any part of the earlier fort was to be incorporated in the construction of the new fort. An additional map, dating to 1859, depicts an overlay of the new fort over the old (figure 6.65). Again there is no indication that any part of the old fort was merged into the new, and this map also disagrees with Black's statement that the new fort was farther to the west than the old.

Nonetheless, drawings dated as early as 1871 show a battery directly north of Fort Tompkins, sometimes connected as in the 1871 plan, and sometimes labeled as "Glacis Battery" as in an 1882 map. This north battery became less specifically delineated in an 1897 map, reappeared as very specific in a 1900 map, and then disappeared in maps dated after 1902. The brownstone rubble in the northeast corner of the Fort Tompkins may relate to a former connection to the Glacis Battery, now defunct, and not to the earlier fort.

An inspection report dated 1867 indicated that a casemated barracks for men's quarters and a guard house and prison were "situ-





Figure 6.64 Fort Tompkins, interior, first tier. Rubble-filled doorway at northeast corner.

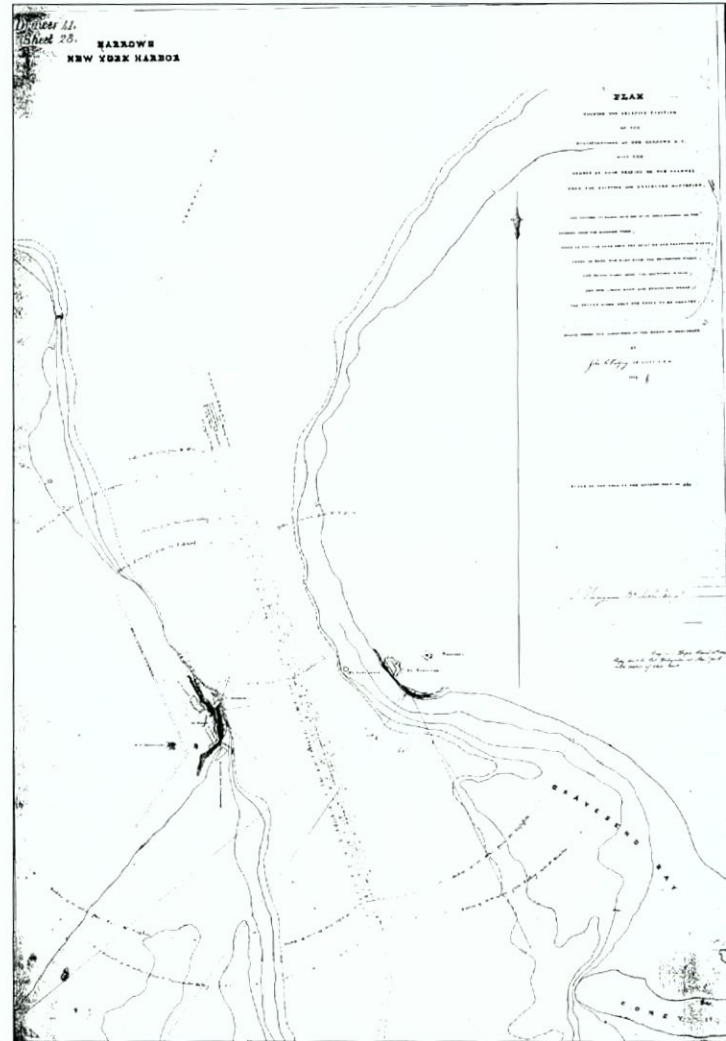
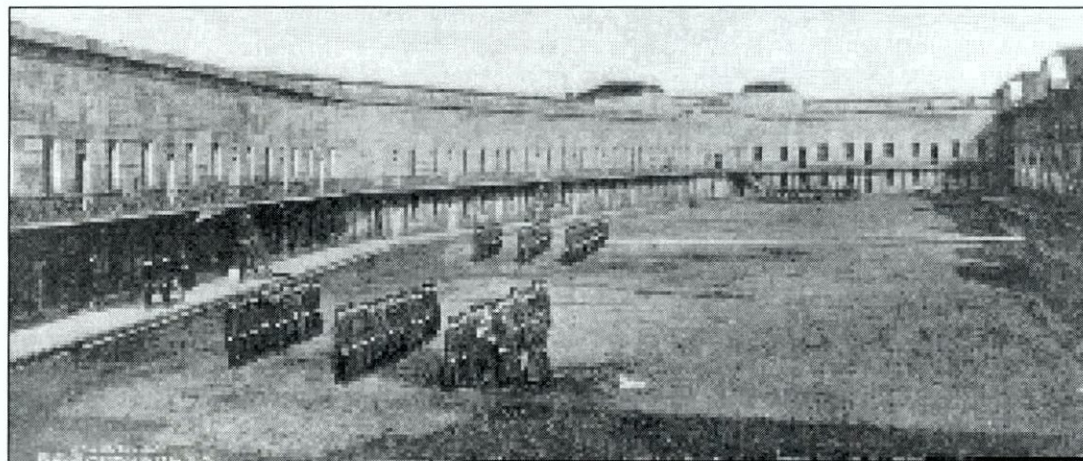
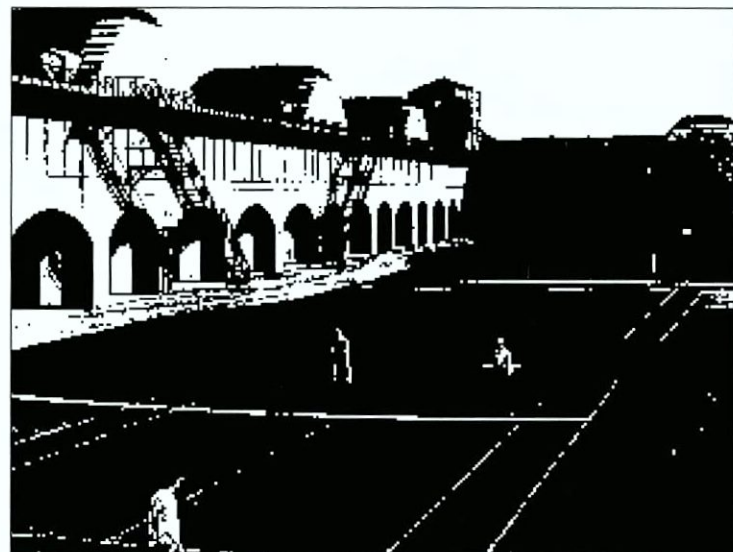


Figure 6.65 "Narrows, New York Harbor, plan showing the relative position of the fortification at the Narrows, N.Y.,....," 1859.



**Figure 6.66** Fort Tompkins, parade ground, November 6, 1888. Staten Island Historical Society, by Miss E. Alice Austen, neg. No. D-486.



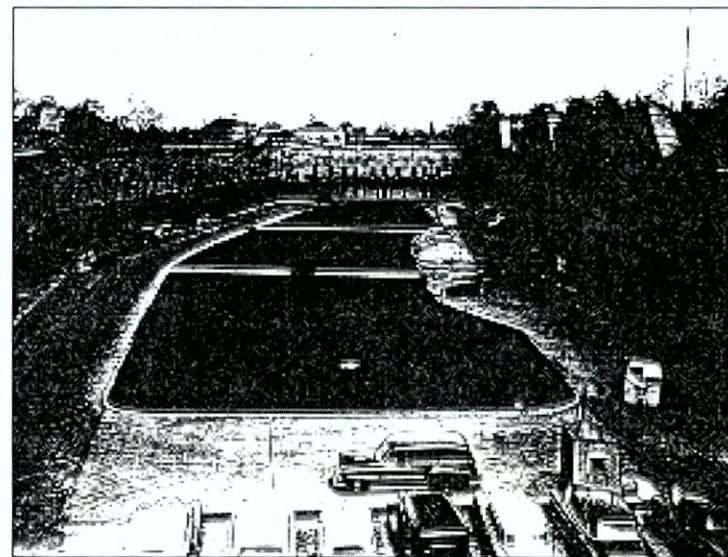
**Figure 6.67** Postcard, Fort Tompkins parade ground. Staten Island Institute of Arts & Sciences, #84.75 331/57hp, neg 21.

**Figure 6.68** Fort Tompkins, parade ground, 1951. National Archives, Still Prints, SC-369624 19416, 10 May 1951.

ated in Fort Tompkins” and their condition was listed as new. A list of rooms occupied by Battery “B” 1st Artillery, dated the same year showed that six rooms were barracks rooms, two rooms were mess rooms and kitchens, and that their condition was good and comfortable. They were located in the ground tier casemates on the south side of Fort Tompkins, had one cook stove, two boilers (one was old and worn), two mess pans in good order, and nine camp kettles (five in good order and 4 unfit for use).

Before construction of the fort was completed, a local malaria scare and public pressure in 1873 prompted the military to regrade the glacis around Fort Tompkins. This documentation records a change in the landscape at that time.

The channel front was completed last, and not structurally ready for armament until 1875, although only one barbette gun emplacement was documented as utilized during the fort’s entire history. The channel front included 17 large casemates that were constructed for storage and open to the parade ground. During the 1880s eight of these casemates were enclosed to support the torpedo mine storage system. It is not known which eight casemates were selected for this use. About this same time, the





parade ground or quadrangle was converted into seven courts for lawn tennis. Alice Austen documented this evidence in a photograph of 1888, found in the collection of the Staten Island Historical Society (figure 6.66). Postcards which appear to date to the early twentieth century suggest that the recreational pastime was short-lived on the parade ground. No lime lines or nets are visible in the post cards found in the collection of the Staten Island Institute of Arts and Sciences, one of which is presented here (figure 6.67). In these images, the parade ground appears to extend to a perimeter walkway or road, with a center walkway bisecting the grounds in a general east-west direction. The former walkway is indented somewhat into the grassy area at the landings of the double iron staircases on the east side of the grounds. A drawing dating to 1939 shows that a curb separated the perimeter walkway from the road at that time, at least on the west side of the courtyard, and that the road may have straightened along its grassy side rather than follow the shape of the fort where the two west scarps meet. However, one cannot determine if this delineation was a proposed or existing design. A later drawing dating to 1951 documents a proposal for paving a new configuration that is similar to what exists today, and a photograph of the same year records conditions prior to construction (figure 6.68). The newly-proposed and smaller grassy area also had several intersecting concrete walkways designed through it. A drawing from a decade later with new specifications for resurfacing the roadway shows the same existing condition of the grassy center with traversing walkways.

Two documents from 1883 recorded that the company quarters and storehouses were in casemates; and that a request had been made "for 600 ft of timber to repair and build slope steps leading to wharf and reservoir." These slope steps are believed to have related to the sloped paths on the hillside between Fort Tompkins and Battery Weed.

By 1889 the Commanding Officer at Fort Wadsworth was submitting a proposal to the Quarter Master General's Office for increasing the capacity of the casemates for housing four instead of three

batteries of men. With three batteries housed there, the lower tier was occupied by casemate in the following order, assuming that the first casemate was at the south end, starting in the east corner and progressing in a westerly direction (this assumption is based on a 1904 numbered diagram that follows this same pattern: 1-6 are designated as Store Rooms (no floors); 7 is Dining Room (with floor); 8 is Kitchen (with floor); 9 is Store Room (no floor); 10 is Oil Room (no floor); 11 is Store Room (no floor); 12 is Store Room for clothing (with floor); 13-14 are Store Rooms (13 has a floor, 14 does not); 15 is Paint Shop (with floor); 16 is Carpenter Shop (with floor); 17 is Prison Room (with floor); 18 is Guard Room (no floor); 19 is Commissary Store Room and 20 is Commissary Office (with floors); 21 is Quarter Master Store Room (with floors); 22 and 23 are Store Rooms (with floors); 24 and 26 are Kitchens (with floors); 25 and 27 are Dining Rooms (with floors); 28 is Bake House (no floor); all first tier casemates are listed as not having (finished?) Ceilings. The second tier casemates were designated as: 1 is Store Room (no floor or ceiling); 2 is School Room (with floor and ceiling); 3-6 are Squad Rooms (with floors and ceilings); 7 is Office (with floor and ceiling); 8 is Wash Room (with floor but no ceiling); 9 is Vacant (no floor or ceiling); 10 is Store Room and Work Shop (no floor or ceiling); 11-14 is ordnance (no floor or ceiling); 15 is Post Canteen, 16 is Reading Room, 17-20 are Squad Rooms, 21 and 22 are Offices, 23 is Squad Room, 24 is Store Room, 25 is Workshop, 26 and 27 are Squad Rooms, and 28 is Bathroom (all with floors and ceilings); and 29 is Wash Room (with floor but no ceiling).

The only proposed first tier room designation changes were casemates five and six which were to be converted from Store Rooms to a Dining Room and Kitchen, respectively. However, three floors and 13 ceilings were to be done. At the second tier level, casemates 1, 2, 7, 9, 10-13, 16, 21, 22, 24, and 25 were to be converted to Squad Rooms, and casemate 14 was to be converted to a Canteen. Two floors and ceilings required new flooring and ceilings at this level. In addition "The change will require . . . range and plumbing in Kitchen & two new bathtubs. Not only does this



documentation provide clear uses for the casemates, but also for room treatments. By 1891 an estimate had been submitted for “reflooring twenty and one half casemates at Fort Wadsworth.

An 1890 guidebook relates that behind Fort Richmond (Battery Weed):

rises a grassy mound, the earthworks of Fort Tompkins, declared to be the finest in the country.... The paths are laid out with tactical precision; the officers quarters are models of neatness and beauty; and the immense lawn, with a sentinel pacing here and there, makes a pleasing impression of army life on the civilian.

The paths to which this quote refers may not be those on the parade ground, but instead those that once existed on the hillside below Fort Tompkins, leading to Battery Weed. These are well documented in a series of photographs, almost invisible from some angles, tucked into the hillside (figure 6.69). This quote also suggests that the majority of the parade ground was seeded, but without mention of lawn tennis courts.

**Figure 6.69** Fort Wadsworth hillside, looking from Battery Weed to Fort Tompkins. Storm erosion: Oct 1, 1913, National Archives, NE Region, RG77, entry 802, either 3/13 or 4/13.



Complaints regarding the use of the casemates as barracks began to arise at the turn of the twentieth century. One piece of correspondence suggests that the casemate floors need renewal and that water closet facilities are inadequate; another proposes alternatives to the poor housing conditions, including new construction.

Complaints and proposals continued throughout the first decade, but insufficient funds appear to be the reason for lack of movement in the direction of building new barracks.

In 1904 individual casemate use was again documented, but with the large one-story casemates in the east scarp also receiving labels. The first casemate at the north end was designated as the Orderly Room, the next four as Squad Rooms, the sixth as Mess Room, the seventh as Kitchen, the eighth as Squad Room, the ninth as Store Room, the next two as Post Exchange, the twelfth as Library, the next as Gymnasium, the next two as Electric Plant, and the last two as Coal Casemates. All of the lower-tier casemates along the other scarps contained utilitarian functions except for casemate 17, which was a Squad Room. All of the upper-tier casemates were used as Squad Rooms, except for two Store Rooms, three Wash Rooms, one Recreation Room, and one Orderly Room.

Generator stations and transformer buildings were constructed between 1890 and 1920 in order to provide electricity for many purposes. Remaining equipment of early electrical technology was found in a south second tier “closet” in Fort Tompkins. It was labeled “Automatic Transfer Switch; Automatic Switch Co.; Orange, New Jersey; Cat. No. 908 10C(IOC?); patent pending.” Its specific use is unknown, but research into the records of the Automatic Switch Co. might prove when the “Automatic Transfer Switch” was manufactured and exactly what electrical function it served. A power plant was in existence by 1910, based on correspondence found from that time period, but whether it powered lighting in any other part of Fort Wadsworth in addition to the batteries and searchlights is unknown. Fort Tompkins was not mentioned in this correspondence which listed powered batteries. Correspondence of the same year notes that buildings 1, 2, 4, and 5, were lamp or gas lighted, suggesting that these structures, whichever they were, were not yet electrified. Black states that the former Appleton estate was the site chosen for the central electric power and light plant in the early twentieth century, a structure that was most likely demolished when the Verrazano



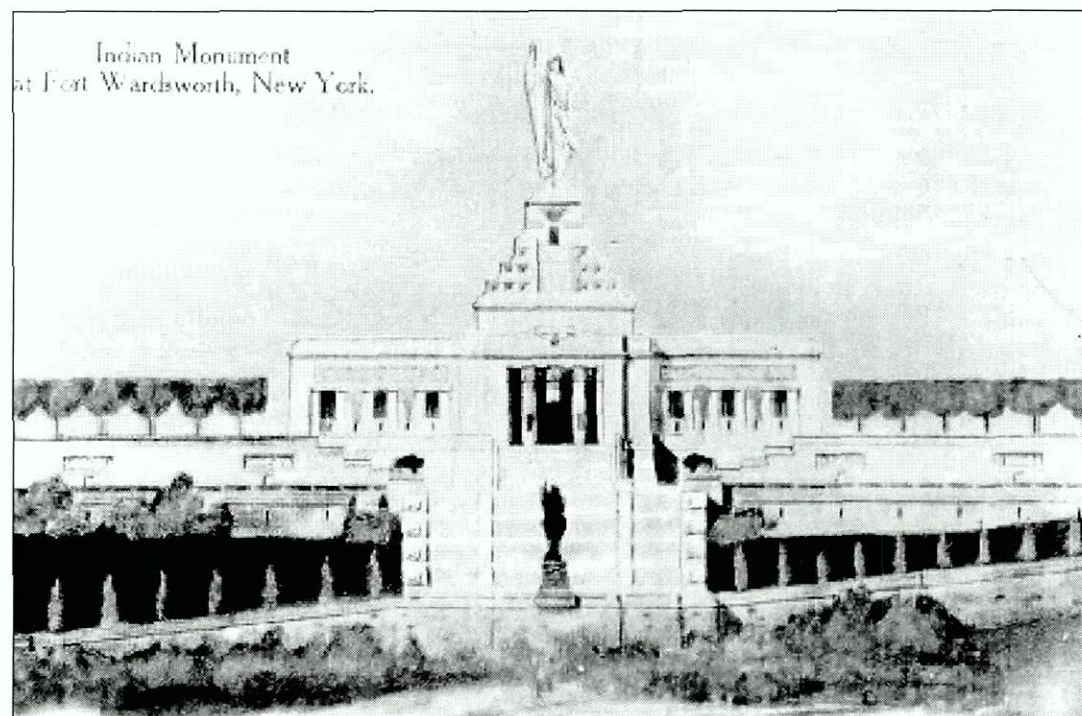
Narrows Bridge was constructed. By 1920 an allotment was made for completing electrical installations at Fort Wadsworth, but since the power plant had already been constructed no later than 1911, the funding most likely represented wiring and electrification for lighting. A building file begun in 1905 showed that electricity was added to Fort Tompkins in 1911, which meant that either the "Electric Plant" listed as occupying two casemates in 1904 was supplying electricity to other sources like the defense batteries or it was in the process of being converted to channel electricity throughout Fort Tompkins.

Fire control and battery control stations were located on the barbette of Fort Tompkins in 1902. Correspondence from 1908 records the need for an iron railing "from the railing near M'2 Station to the Meteorological Station ...on the ramparts of old Fort Tompkins..." because the passageway was so near the edge it was dangerous. These structures may have been two of the buildings located at the southeast corner on Fort Tompkin's barbette during this time period.

Buildings at Fort Wadsworth were apparently painted in 1911, but which buildings were included in the campaign was not specified.

A proposal was made by the National American Indian Memorial Association in the early twentieth century to construct a memorial to the American Indian. The site of Fort Tompkins was selected because of its extreme visibility to all ships entering New York Harbor. The memorial was to be incorporated into the channel scarp of the fort (figure 6.70). The project progressed as far as drawing and sculpture proposals (the architect was Thomas Hastings and the sculptor was Daniel Chester French), the dedication of the site, and groundbreaking ceremonies in 1913 that included President William Howard Taft and many chiefs from representative Indian nations. The association abandoned its plans eventually, apparently due to lack of sufficient funding.

During World War I the casemates at Fort Tompkins provided quarters, a main guardhouse, storerooms, offices, and shops under the control of the quartermaster, ordnance officers and artillery



engineer. A plan of the western section of the fort, appearing to date to the same time frame is entitled "Repairs to Casement (sic) Stone Barracks, Building No. 30, Fort Wadsworth, N.Y." This drawing suggests that new ventilators were installed through the topsoil on the roof above each second floor casemate. Evidence for these ventilator caps was not found through the thick foliage during the physical investigation, but their existence was not known until after the site visit occurred. A note on the plan reveals that changes were made in 1920 in red ink, which is not discernable on the photocopy in the possession of the author. Correspondence from 1920 seeking to correct the installation, records that the earlier work "consists of circular ventilators set in masonry roof and earth parapet of casemate and connected to ducts in room of upper and lower tiers; ducts provided with registers (louvers) and registers to be installed in outer doors." It seems that the original installation was deficient, and the 1920 specifications sought to correct the continuing ventilation prob-

**Figure 6.70** Postcard, Indian Monument at Fort Wadsworth, New York. Staten Island Institute of Arts & Sciences, #84.75 308/57hp, neg. 19.



lem.

Several renovations at Fort Tompkins are documented through three sets of drawings produced under the Works Progress Administration (WPA) during the 1930s. The first dates to 1937 and includes alterations to the channel casemates. Brick walls, new toilets, new windows and doors, wood flooring over concrete in selected areas, two chimneys, and two new boilers were proposed. The second project in 1938 included placing cable and transformers, presumably for electricity, along the southwestern parapet wall of the counterscarp. This installation type "obviated the need for trenching," although no installation differences are shown along the south side of the fort, where the counterscarp ends.

The biggest WPA project at Fort Tompkins was planned in 1939. The drawings include: channel scarp renovations of new stud and brick partitions to be plastered, existing walls and ceilings to be left unplastered, new concrete floors with a cement finish, and new security windows in the brick walls; first and second floor south, west, and north scarp renovations of all rooms to be furred with metal lath and plaster applied on walls and ceilings, new exterior Kalamein doors, frames, transom and trim, and new wood doors and trim were to be installed in the interconnecting doorways, but only specified on the first floor; the floors in the south scarp on both the first and second tiers were to be quarry tile, as were floors in the new toilet areas of the second floor west scarps; floors on the first tier in the two west and one north scarp were to be concrete and 13/16" maple on the second tier. In all, existing wood and concrete floors were to be removed, fireplaces were to be bricked up, new framing and underflooring was to be of Douglas fir, new door trim was to be of Ponderosa pine, the new maple flooring was to have a layer of asphalt between the rough and finished floors, the quarry tile was to be 6" x 6", new steel window sash (Fenestra Security or equal) were to be purchased, new iron work was proposed to match existing for a new staircase at the intersection of the two west scarps, old paint surfaces were to be burnt and scraped before painting with three coats of the

best lead and oil, and the new Kalamein doors were to be a kiln-dried pine core covered with 24-gauge steel.

Perhaps the most radical proposal was the addition of a boiler room under ground, where the two western scarps intersected. Apparently the 1937 proposal to install two boilers in the channel scarp had not been implemented: the chimneys were not reflected in the 1939 drawings and this newest proposal would negate any need for boilers on the east side of the structure.

Ascertaining how much of this work was actually completed is beyond the scope of this project, however it appears that not all of it was accomplished, including the new boiler room. These sets of drawings do record the use or at least the proposed use of all of the casemates, in 1939. The channel scarp was used for the Commissary and Warehouse; both tiers of the south scarp were used for the Guard Section; the southwestern scarp was labeled C.A.C. (Coast Artillery Commander?) and Carpenter Shop on the first tier and Coast Artillery and Engineer on the second; the northwestern scarp was simply labeled Shop on the first tier and Quartermaster Offices on the second; and in the north casemates the Electric Shop was on the first tier and Clothing Warehouse on the second.

A copy of a section of a blueprint, probably dating to sometime in the second quarter of the twentieth century based on the style of the drawing, shows at least four small structures on the barrette at the southeast corner of Fort Tompkins. Unfortunately, the label name of the westernmost visible structure is cut off in the photocopy and simply reads Sta. (station). The two adjoining middle structures appear to be labeled M11 and M12. The structure directly situated on the southeast bastion does not appear to be labeled. This blueprint seems to document a cable installation, probably for electricity, but the accuracy of this assumption is unknown since the title block was not included in the photocopy.

Several sets of drawings, most likely all dating to the 1950s and 1960s, suggest that the interior configuration of the channel scarp casemates changed periodically, depending on special needs.



Another drawing dating to 1952 seems to reiterate almost exactly what the 1939 WPA drawings denoted for the prison cells on the second tier of the south scarp, but these drawings appear to call for new construction that already had been specified in the 1939 drawings.

Other proposed work in 1951 included painting and repairs to the stairs and walkways in Fort Tompkins. New wood steps, joists at landings, and planking were to be installed, all metal was to be prepped and painted with one coat of red lead paint and one finish coat of blue lead paint, and all wood doors and windows were to be wire brushed, cleaned, and finished with one coat of exterior paint. A later modified drawing, the date of which is not readable, records the replacement of the planking and joists with metal grating and beams, the same condition that exists today where the materials have not been removed.

One embrasure at the first tier level of the channel or eastern scarp was scheduled for alteration in 1959, to be modified for the commissary conveyor system. Granite blocks were to be removed, a square-shaped opening to be made, a wooden door of double thickness mimicking the main gate doors was to be constructed, and infill was to be of concrete. The specific location of this embrasure is not mentioned, but an undated drawing showing locations of painting needed in bastion areas, obviously of a later date, shows a squared cut-through in the east wall after the sixth casemate from the south.

A canopy was proposed in 1960 to be erected at the front entrance of the commissary store, to span three casemates, in the east scarp. The same undated drawing as previously mentioned, specifying bastion painting locations also records the existence of the canopy, but only spanning one-and-a-half casemates. The relocation of sewer piping was proposed in 1962, but it is unknown whether it was implemented.

A map revised in 1962 showing the Verrazano Narrows Bridge lists several offices in Fort Tompkins including Central Procurement, Commissary, Consolidate Property, Finance &

Accounting, Fire Marshal, Post Engineer, Post Signal, Narrows Bridge Liaison Officer, and Quartermaster.

A later drawing, probably drawn in the 1970s or 1980s (the date again based on the style of drawing since no date exists in the title block), suggests that the roof structure was scheduled for waterproofing. This work entailed removal of sections of the sod-covered earth, and apparently additions of concrete and coal tar pitch and bituminous waterproofing. Additional notes indicate that the granite and concrete-patched cornices and arch joints needed repair. Whether this work was ever completed is unknown. However, this drawing is the first documentation of the existence of the hoist/lift structure located in the northeast corner of the parade ground, at the one end of the northern sally port. Although this drawing is undated, the same structure is not documented on any drawings dating to the 1950s or 1960s.

According to the referenced drawings, Fort Tompkins was called Building No. 30 until or soon after World War II, when it was renumbered as Building No. 137. It was listed in the National Register of Historic Places on July 30, 1974.

### **Character-defining Features**

Fort Tompkins has several prominent character-defining features. These are:

1. The setting - including a.) Fort Tompkins' overlook to Battery Weed designed for protection of the lower fort; and b.) the camouflage of the higher fort from sea level (the Narrows), evident in early photographs. Along Hudson Road, Fort Tompkins' granite wall facing the Narrows is totally visible, almost monumental, but as one drops in elevation toward the coastline, the wall begins to disappear. This camouflage is not due to overgrown vegetation on the structure or the hill below where only cropped or mown grass was cultivated. In addition the glacis on the north and west sides (and previously the south side) of the counterscarp totally hide those elevations of the Fort. Therefore the landscape is an integral factor in one of the structure's most important character-defining features (figure 6.71).

2. The plan and elevations - including a). the five-sided shape of the fort, surrounded by a counterscarp and glacis on the north and west sides and the space between the counterscarp and fort walls; b). the open space (parade ground) within the fort confines; c). the fort interior elevations with two-tier fenestrated casemates on the north, two west and south elevations versus the single tier casemates with large (once-open) arches on the east elevation. The repetition and placement of openings and the solid-to-void ratios are part of the character-defining features found in the elevations (figure 6.72 and 6.73); and d). the earthen roofs with gun emplacements (barbettes).

3. Construction materials and devices - including a). the granite work of the fort walls, with ashlar treatment on the exterior east face and interior elevations facing the parade ground, and rusticated treatment in all other locations (figure 6.74); b.) the ironwork of the original staircases and walkways surrounding the courtyard (figure 6.75); c.) the granite and brick arches and vaulted ceiling systems that comprise the interior of the large casemates; and the metal window sash (and security bars in some cases) and heavy wooden doors with iron rivet-like fasteners (figure 6.76 and 6.77 respectively).

### **Condition Assessment**

#### *Building Exterior*

Causes leading to the destruction or deterioration of significant architectural fabric on the exterior facades of the fort and corresponding counterscarp result from either natural weathering or human intent.

Like Battery Weed, Fort Tompkins exhibits white staining on its granite surfaces originating from water leaching through the structure. This condition suggests water infiltration into the earthen roof system, concrete vaults, and masonry walls and leads to the accelerated deterioration and ultimate failure of building systems. Another cause for deterioration is the encroachment of unwanted vegetation into the vulnerable mortar joints at the copingstones. As exhibited in the southeast corner's condition, this vegetation

can widen joints and lead to the dislodging of granite blocks.

The fort's historic appearance has been changed through alterations to the fenestration. Many embrasures have been used to run utility pipes and conduit and have been filled with cement.

#### *Counterscarp*

Leaching and white staining are evident on the granite facades of the counterscarp and are a result of water migration in the wall.

Corrosion of the cast-iron shutters has resulted in black and rust colored staining on the granite facades below the window.

#### *Barbette*

Volunteer vegetation consisting of ivy, shrubs, and saplings, has established itself in the earthen barbette; this area was originally planted with natural grasses. This unwanted vegetation has also accelerated deterioration of building components such as mortar joints in the knee wall, parapet and vents stacks, as well as, working their root systems or vines into door openings and building interiors.

A grouping of apparent lookout structures, located at the southeast corner of the barbette, exhibits many forms of deterioration on both the exteriors and interiors of its small brick buildings. The iron roofs and shutters exhibit rust; concrete ledges are crumbling, interior floors have become unstable.

The decorative wrought-iron balustrade which runs along the entire upper barbette of the east facade exhibits general surface corrosion. The decking and corresponding stair treads have been removed rendering the system inoperable.

#### *Parade Elevations*

Fort Tompkins' parade elevations are in good condition and show no imminent signs of structural failure. The major cause for concern involves the water-born leaching of calcite from the mortar joints onto the brick and granite masonry in the arcade. The deposition of calcites from mortar results in white staining and crusts



on the vertical planes, and stalactites hanging from the arches. The source of this problem is water infiltrating through the earthen roof at the barrette level and a corresponding breakdown within the concealed waterproof coating of the vaults. Water infiltration leads to the deterioration of mortar joints; encourages organic growth; and promotes freeze-thaw within the structure's masonry.

Window and door units are also in poor condition. The steel muntins and frames are rusting; glass panes have been shattered. Due to the failure of the windows and doors to promote weather-tight protection, the interior is subject to accelerated deterioration from unrestrained wildlife occupation and vegetation growth.

Structural integrity of the northeast hoist (at the entrance of the counterscarp) is exhibiting signs of potential structural failure in the form of cracking and dislodging of the brick piers and deterioration of the wood platform. Since the hoist is in the direct path of future visitors as they enter into the counterscarp, a more detailed engineering assessment, as well as further historical research should be conducted.

An insensitive alteration is the in-filling of two arched openings at the center of the channel-block arcade. Constructed of concrete masonry units, this intrusion destroys the pedestrian path through the arcade and alters the rhythm of fenestration, shade, and shadow.

#### *Parade*

The asphalt surface is in poor condition exhibiting major cracking, unevenness, holes, and remedial repair; vegetation is presently growing through cracks and holes.

Adding to the problem is the use of this parade as a dumping ground for debris (junked autos, garbage receptacles, scrap material). This is an aesthetic, as well as a safety concern and should be dealt with immediately. Due to the hazardous material involved, however, the Navy is preparing a scope of work for removal of this material.

#### *Counterscarp Interior*

Like the exterior of Fort Tompkins, the interior counterscarp is in good condition and exhibits a high degree of historic integrity.

Major issues concern public access into the counterscarp. Interior lighting, ventilation, visitor circulation, egress, and decking material must be skillfully selected to meet maximum efficiency and satisfy ADA requirements. Another concern involves soiling of the fragile sandstone walls by human touch and the potential destruction to the masonry by graffiti scratching.

#### *Fort Interior*

Though the Scope of Work for the physical condition assessment of Fort Tompkins does not include an investigation of the casemate and storage room interiors, a walk through these areas was conducted in order to verify safety issues and hazardous materials.

Isolated areas of wood rot in the floor systems occur throughout the second story barracks. In some locations, the extent of deterioration is advanced enough to warrant the floor inaccessible.

There also exists the potential for lead paint and asbestos (in the plaster, ceiling tile, pipe wrap) throughout the interior of all the casemates.

Window and door units are in poor condition and are contributing to the accelerated deterioration of the interior by encouraging animals and vegetation to inhabit these locations.

Public access to Fort Tompkins also introduces the issue of denying access to areas which will be "off limits." Securing stairways, walkways, and doorways to "restricted access" areas must be achieved prior to public visitation.

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#### **Condition Assessment Inventory and Recommendations**

##### *Fort Exterior*

1. Problem: Settlement cracking at embrasures.

Solution: Fill crack using a mortar of same strength or weaker than the existing masonry. Mortar should match per-

- formance, texture and color of existing mortar.
2. **Problem:** Graffiti on granite wall.  
**Solution:** Remove graffiti following conservator's recommended testing and removal procedures.
  3. **Problem:** Intrusive infill of embrasures with utility pipes and cement.  
**Solution:** Remove pipes and cement and restore opening to original condition.
  4. **Problem:** Structural crack in brick chimney.  
**Solution:** Fill crack using a mortar of same strength or weaker than the existing masonry. Mortar should match performance, texture and color of existing mortar.
  5. **Problem:** Unsecured temporary closure of south doorway with plywood.  
**Solution:** Install more secure barrier or reopen doorway and secure with a metal gate.
  6. **Problem:** Shifting of granite capstone at southeast corner.  
**Solution:** Secure block by resetting and pinning block and repointing using an approved restoration mortar.
  7. **Problem:** Deterioration and loss of mortar from copingstone joints due to water-infiltration and weathering.  
**Solution:** Clean out and repoint joints following approved restoration materials and techniques.
  8. **Problem:** Vegetation at facade and capstone joints.  
**Solution:** Mechanically remove vegetation and root systems from joints. Repoint joints and maintain a vegetation-free condition.
  9. **Problem:** Recently installed metal conduit mounted on masonry facades.

**Solution:** Determine if system is still in use; if not then remove conduit. If system is still active then reroute conduit in a less conspicuous location.

10. **Problem:** White leaching and crust deposits on granite facades caused by water-born displacement of mortar and masonry constituents traveling through joints.  
**Solution:** Reduce water infiltration through the barbette and vaults by introducing subsurface waterproofing and alternative drainage.
11. **Problem:** Orange staining under embrasure caused by ferrous corrosion.  
**Solution:** Remove source of staining and clean masonry following conservator's recommendations.
12. **Problem:** Paint deterioration at entrance door.  
**Solution:** Conduct paint analysis to determine paint finish chromochronology. Scrape, prime and paint following conservator's recommendations.

#### *Counterscarp Exterior*

1. **Problem:** Surface corrosion of cast-iron shutters.  
**Solution:** Repair shutters and chemically treat cast iron to inhibit corrosion.
2. **Problem:** Ivy growing on masonry facade and in shutters.  
**Solution:** Mechanically remove ivy from wall and root systems from masonry and mortar.
3. **Problem:** Leaching and staining of white deposits on masonry wall caused by water-born migration of mortar / masonry constituents.  
**Solution:** Reduce water infiltration through the wall.

#### *Barbette*



1. **Problem:** Chimney deterioration and failure: shifting of stacks, loss of mortar, vertical cracking, dislodging of concrete caps, cracking tile stacks, and collapsing stacks.

**Solution:** Rebuild specified quantity of chimneys following approved restoration materials and techniques.

2. **Problem:** Ivy and wild flowers growing in parapet joints leading to the deterioration and expansion of joints.

**Solution:** Mechanically remove vegetation and root systems from joints. Re-align shifted blocks and repoint joints following approved methods. Maintain a vegetation-free condition.

3. **Problem:** Volunteer vegetation, i.e. trees and ivy, growing on barbette originally planted with grass.

**Solution:** Mechanical removal of unwanted vegetation and the restoration of the barbette with grasses. Repair any damage to physical fabric caused by excess vegetation.

4. **Problem:** Deck missing from wrought-iron balcony; treads missing from short flight of stairs at SEC.

**Solution:** Since the barbette level is not accessible to the general public, then the missing deck does not pose a safety threat nor does it seriously alter the original appearance of the walkway.

5. **Problem:** Deteriorated condition of iron shutters, brick walls, and interior of lookout buildings at the south barbette.

**Solution:** Implement a program to stabilize and weather-tight lookout buildings.

#### *Parade Facades*

1. **Problem:** In-fill of central bays on the east arcade resulting in the aesthetic alteration of bay fenestration and the destruction of the arcade pathway.

**Solution:** Removal of in-fill walls is recommended if

enough original fabric remains behind the walls and if removal is compatible with interior space planning issues.

2. **Problem:** Deteriorated wood and steel window and door units throughout the parade facades.

**Solution:** Repair and/or replace units as required and reglaze with historically appropriate glass.

3. **Problem:** Unsafe, deteriorated hoist at the entrance to counterscarp; deck has collapsed; brick piers have cracked and shifted; steel is corroding.

**Solution:** Since this is the future public entrance into the counterscarp the deteriorated condition of the hoist is an imminent safety concern. Archival research will determine significance of hoist; stabilize/restore or remove depending on findings.

4. **Problem:** Wrought-iron balustrade: missing deck at east side, rosettes missing, stair treads deteriorated or missing, ferrous corrosion, general paint failure.

**Solution:** Restore decking and stair treads and repaint with historically appropriate finish. Install barriers to prevent visitors from accessing balcony level.

5. **Problem:** Black, brown and orange staining on granite caused by ferrous corrosion of wrought-iron balcony.

**Solution:** Restoration of paint finish on balcony should inhibit further corrosion. Leave stains on wall to reinforce age value of Tompkins and as an example of how building materials weather.

6. **Problem:** Conversion of doors into windows at the second story of the west facade; corrosion of reinforcing steel and spalling of concrete window sills.

**Solution:** Probably executed in the 1930s, these alterations have gained historical significance. The retention or alteration of these areas should coincide with the general master

plan for Fort Tompkins.

7. **Problem:** Destructive vegetation at joints in gable-end bunkers and at bunker entrances; Vegetation at masonry joints in capstones.  
**Solution:** Mechanical removal of all vegetation; The restoration of mortar joints and bunker doorways.
8. **Problem:** Exposed metal conduit mounted in arcade.  
**Solution:** Determine historical significance and working condition of conduit. Leave historically- significant conduit. Conduct detailed inspection into concerns such as proper mounting techniques and electrical safety issues.
9. **Problem:** General paint failure on granite walls and clap-board siding inside arcade.  
**Solution:** Conduct paint analysis to determine finish chronology. Re-establish finishes following future research recommendations.
10. **Problem:** Severe erosion of mortar joints in arcade vaults and the formation of efflorescence, crusts and stalactites caused by the water-born migration of calcite. Degradation of masonry due to freeze-thaw.  
**Solution:** Reduce water infiltration by introducing new waterproofing and alternative drainage systems to the roof system. Repoint mortar joints following approved restoration techniques.
11. **Problem:** Damaged and unsafe chain-link barrier fence around parade stairs.  
**Solution:** Remove existing fencing and replace with more efficient, less obtrusive design.
12. **Problem:** Gentle bowing of the west facade at parade.  
**Solution:** Implement a monitoring system to determine if movement is active and, if so, at what rate.

### *Parade*

1. **Problem:** Asphalt in poor condition exhibiting extensive cracking, potholes, patching, unevenness, and weed growth.  
**Solution:** Restore parade according to determined period of significance for Fort Tompkins.
2. **Problem:** Debris and surplus materials stored around perimeter of the parade.  
**Solution:** Remove materials and maintain a garbage-free parade.

### *Counterscarp Interior*

1. **Problem:** Removal of plank decking at entrance and randomly located throughout gallery. Remove obstacles such as dirt piles, raised platform and hole.  
**Solution:** Design and install temporary flooring which is sympathetic to the historical design and meets ADA code.
2. **Problem:** Existing electrical wires and control panel may pose a safety threat to visitors.  
**Solution:** Determine if all or part of the system is active and whether it merits any historic value. If historic, make system safe to the public and interpret accordingly.
3. **Problem:** Possibility of lead paint on walls and vaults throughout gallery.  
**Solution:** Contact NARO's Hazardous Management and Waste Enforcement Unit in order to determine lead content.
4. **Problem:** Surface erosion of soft sandstone walls throughout gallery. With expected visitation there is the concern for accelerated damage to the walls in the form of abrasion, scratching and the depositing of lipids onto the surface.  
**Solution:** Upon public visitation, instigate a policy to con-



tinually inform the general public as to the fragility of the walls and “touching is prohibited.” Investigate the use of stone consolidants to retard deterioration.

5. Problem: Opening of the counterscarp to the general public introduces concerns such as traffic patterns, egress, lighting, ventilation, security and general safety.

Solution: Implement a rigorous planning program which identifies all concerns associated with public visitation and interpretation.

#### *Fort Interior*

1. Problem: Spray-paint graffiti at entrance to the counterscarp. Graffiti is applied on top of a painted granite wall.

Solution: Determine significance of painted surface in which graffiti is adhered to. If nonhistoric, then remove paint layer and uncover granite finish. If paint layer is historic, follow conservator’s methods for removal of spray-paint graffiti.

2. Problem: Possibility of lead paint on walls and vaults throughout former barracks, museum and support facility rooms.

Solution: Contact NARO’s Hazardous Management and Waste Enforcement Unit in order to determine lead content.

3. Problem: Debris and surplus materials randomly stored throughout the fort interior.

Solution: General house cleaning to remove debris and reorganize storage materials in a predetermined area.

4. Problem: Unsafe and deteriorated flooring, interior stairs, doors, windows, and failed paint finishes.

Solution: Repair unsafe conditions with similar construction materials and techniques as the original. Conduct a paint analysis to determine historic finish and repaint according

ly.

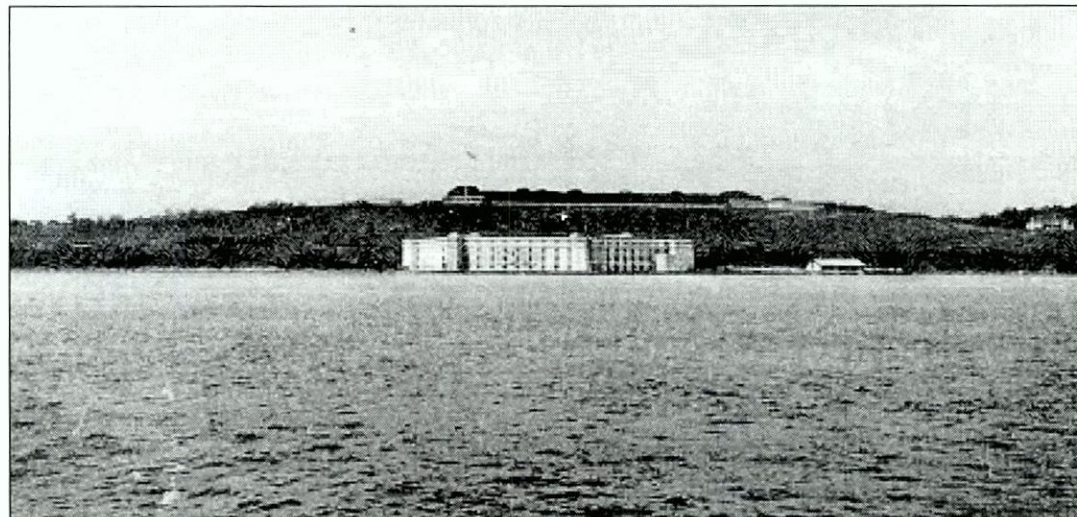
5. Problem: Infill of embrasures with masonry.

Solution: Remove infill and restore fenestration to its original appearance.

6. Problem: With anticipated public visitation, areas “off limits” to the general public must be secured.

Solution: Explore solutions for barriers such as gates, chains, plexi-glass, or guards, for each area in question. Different areas may require different solutions.

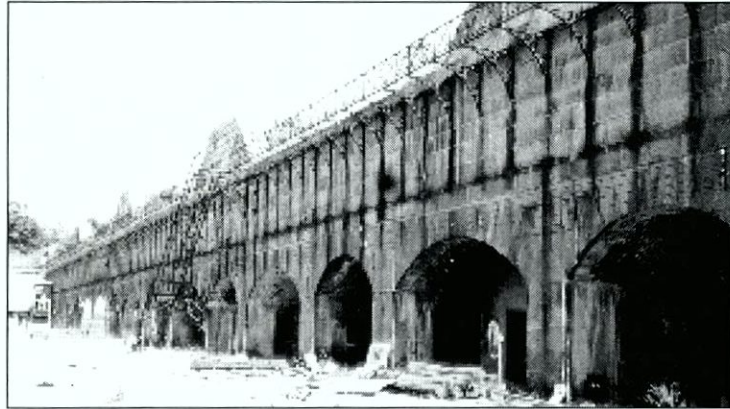
**Figure 6.71** Postcard, Fort Wadsworth, Staten Island, N.Y. Staten Island Institute of Arts and Sciences, #84.75 303/57hp, neg. 17.



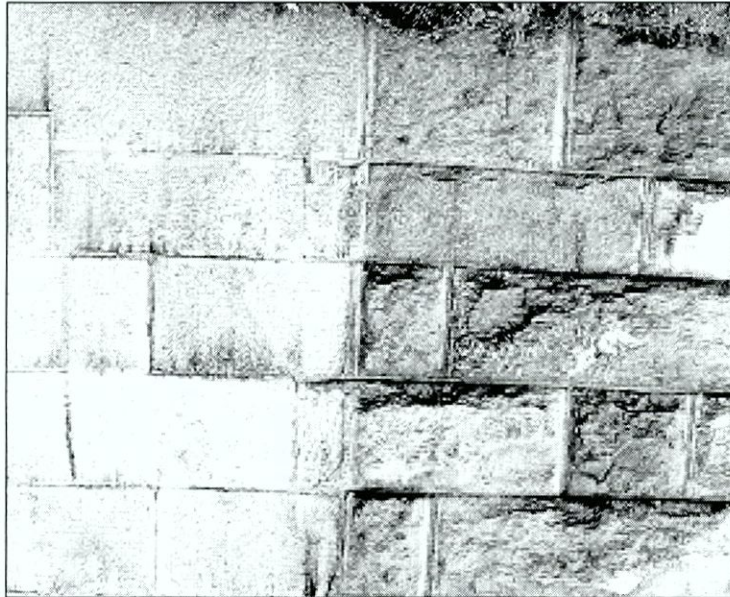
**Figure 6.72** Fort Tompkins, north scarp at east corner, from parade ground. By Cultural Resources Center, 1994.



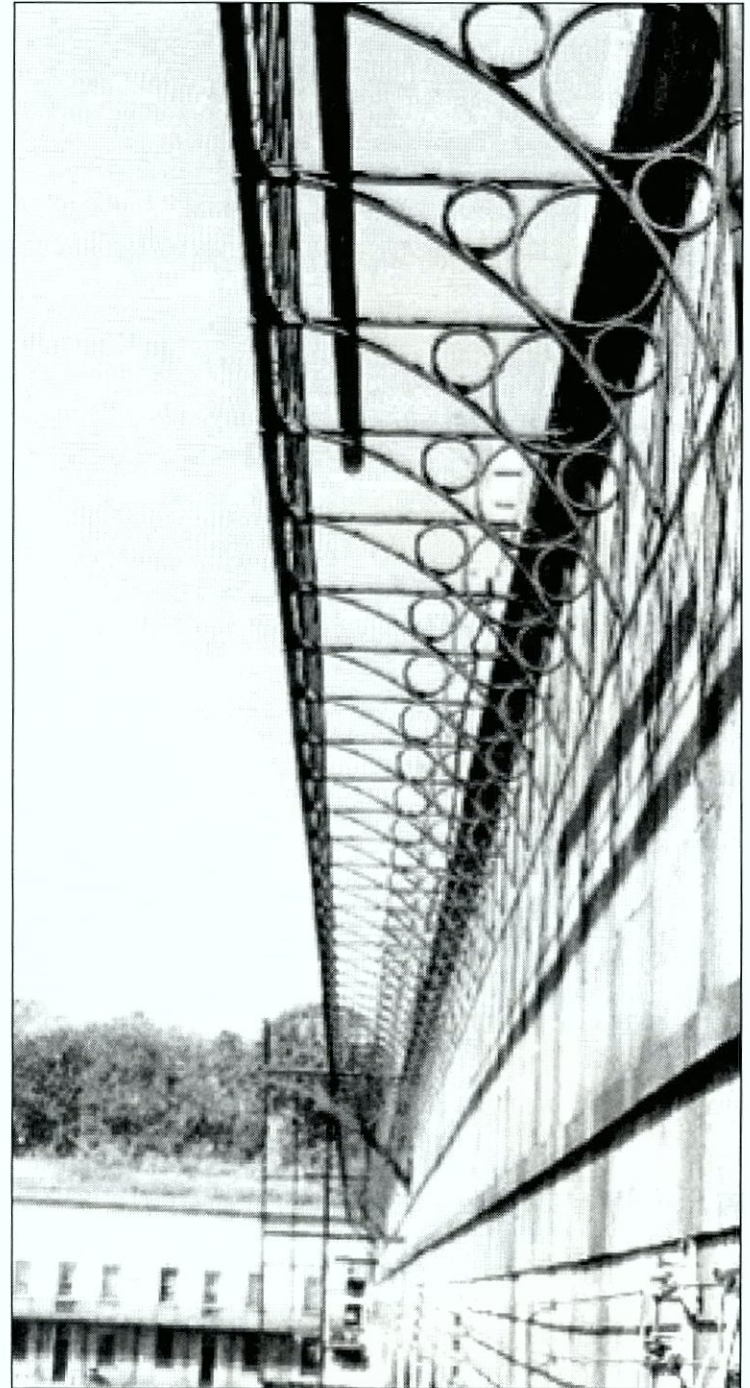
**Figure 6.73** Fort Tompkins, channel scarp.



**Figure 6.74** Fort Tompkins, south exterior wall, showing two granite dressings. By Cultural Resources Center, 1994.

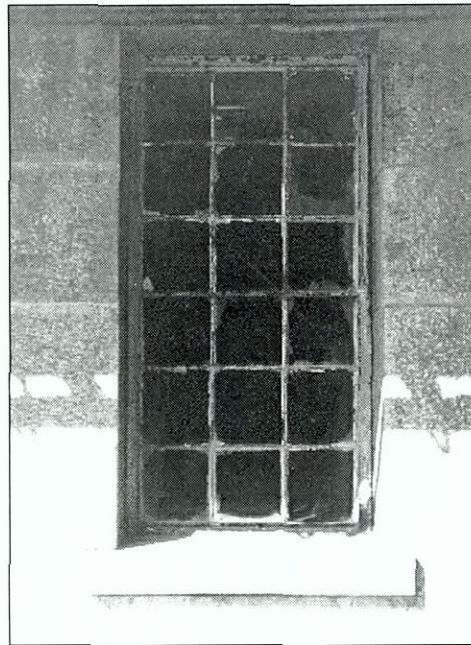


**Figure 6.75** Fort Tompkins, ironwork along east interior wall. By Cultural Resources Center, 1994.

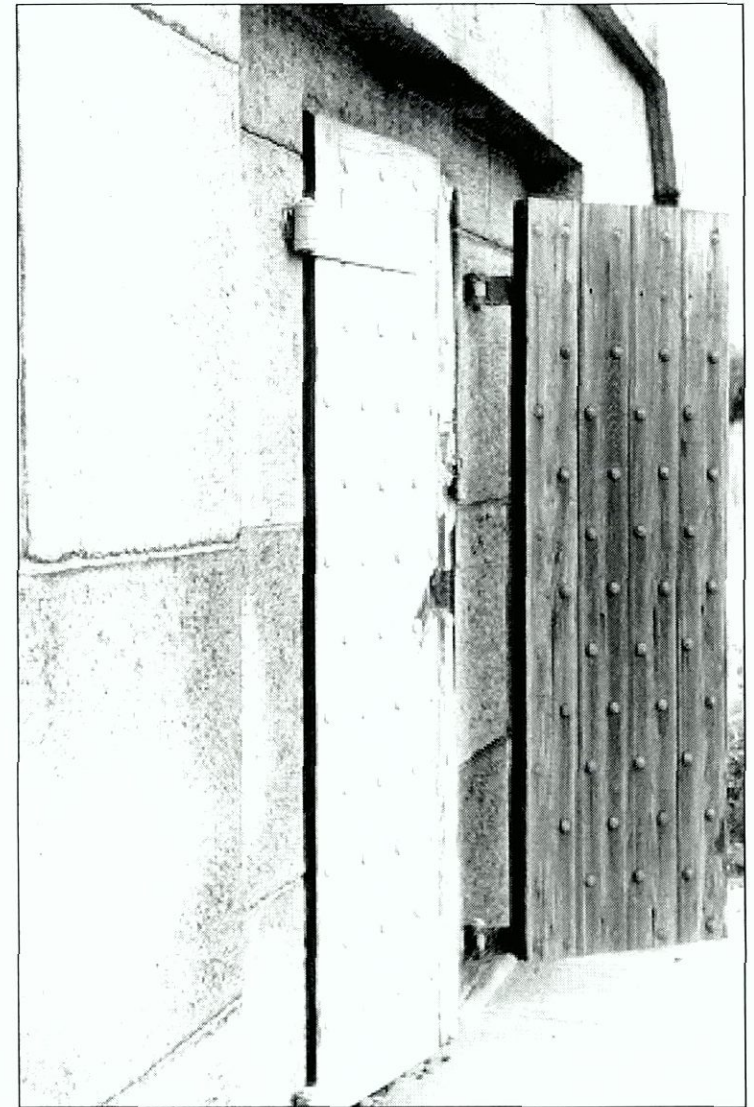
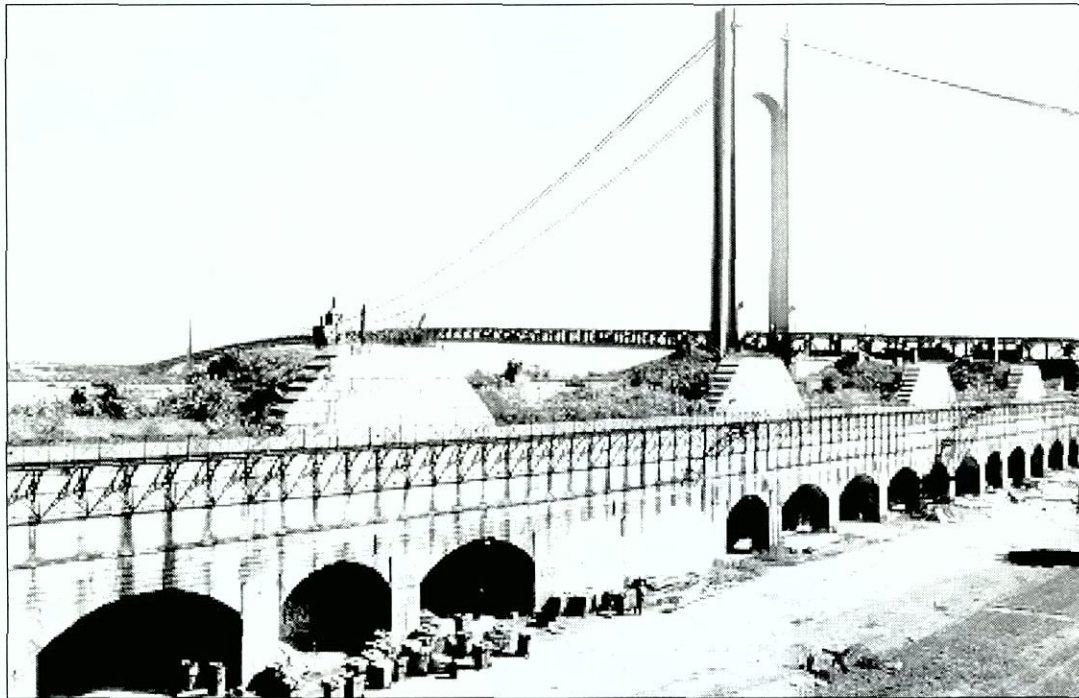




**Figure 6.76** Fort Tompkins,  
metal window sash. By  
Cultural Resources Center,  
1994.



**Figure 6.78** View of Fort  
Tompkins interior with  
Verrazano Narrows Bridge in  
background.

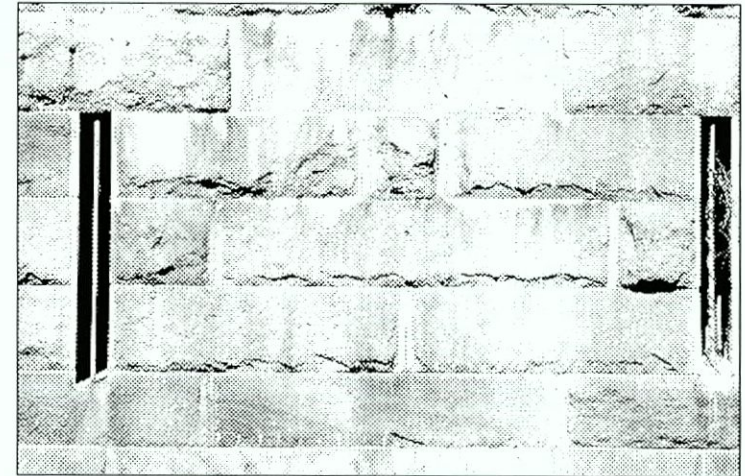
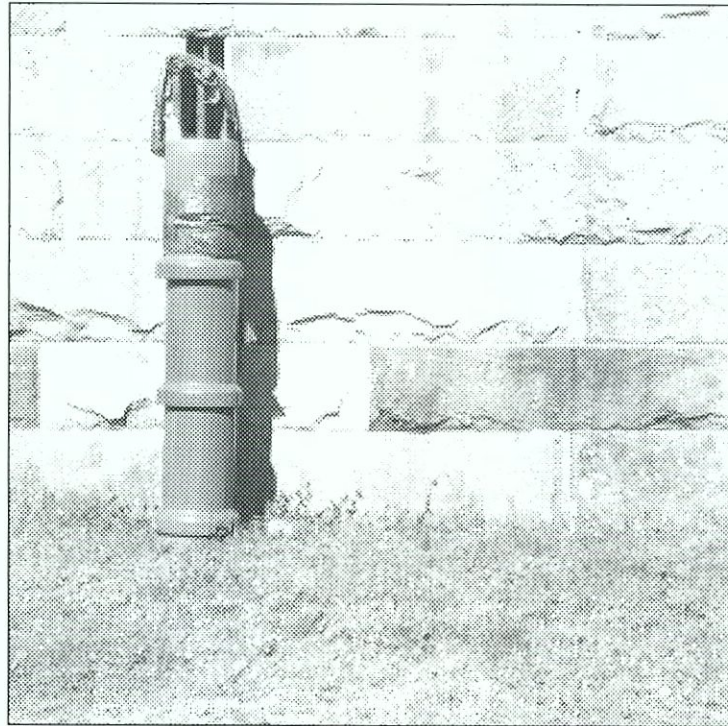


**Figure 6.77** Fort Tompkins,  
wooden doors with rivet-like  
fasteners. By Cultural  
Resources Center, 1994.

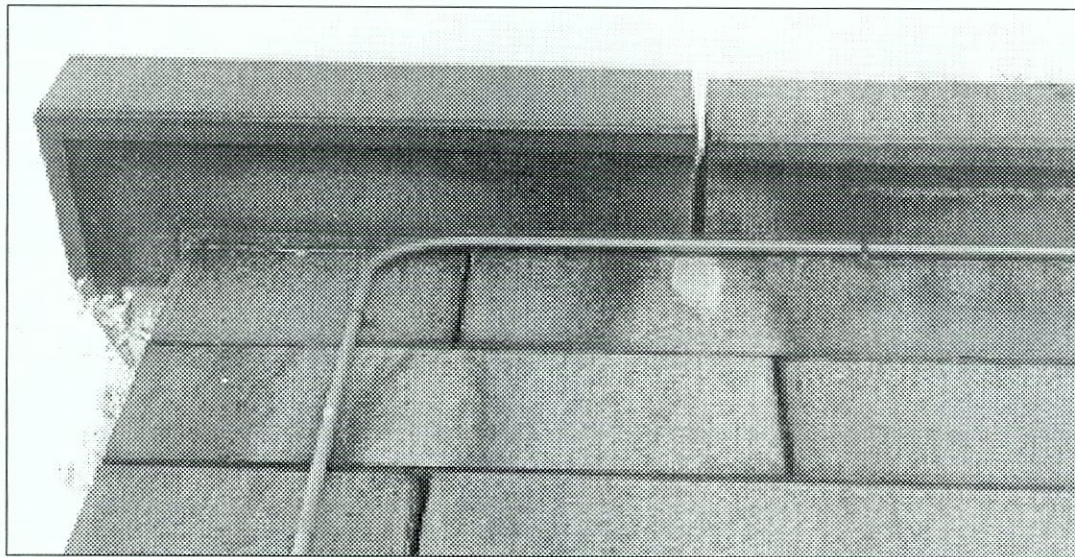




**Figure 6.79** South facade. In-filling of windows with pipework and cement has altered original integrity.

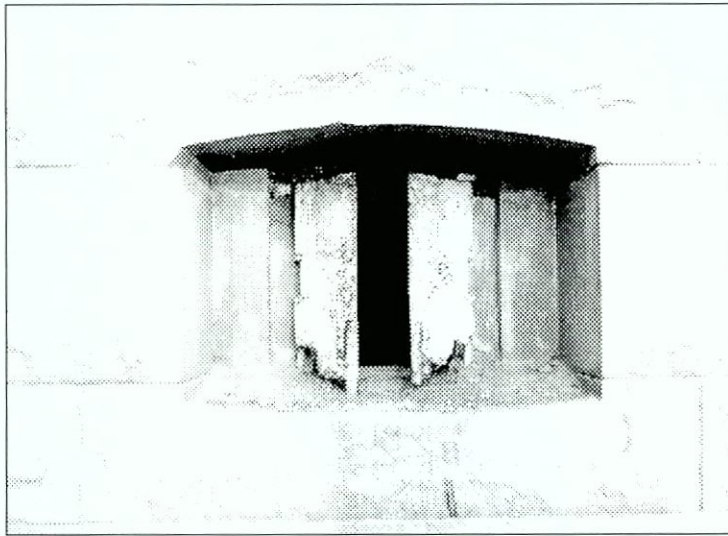


**Figure 6.80** South facade. Water-borne migration of calcite through joints and onto granite masonry leads to deterioration and weakening of joint and wall system.



**Figure 6.81** Loss of mortar and shifting of granite capstone at the southeast corner of Tompkins. Note vegetation in joints and obtrusive newer metal conduit.

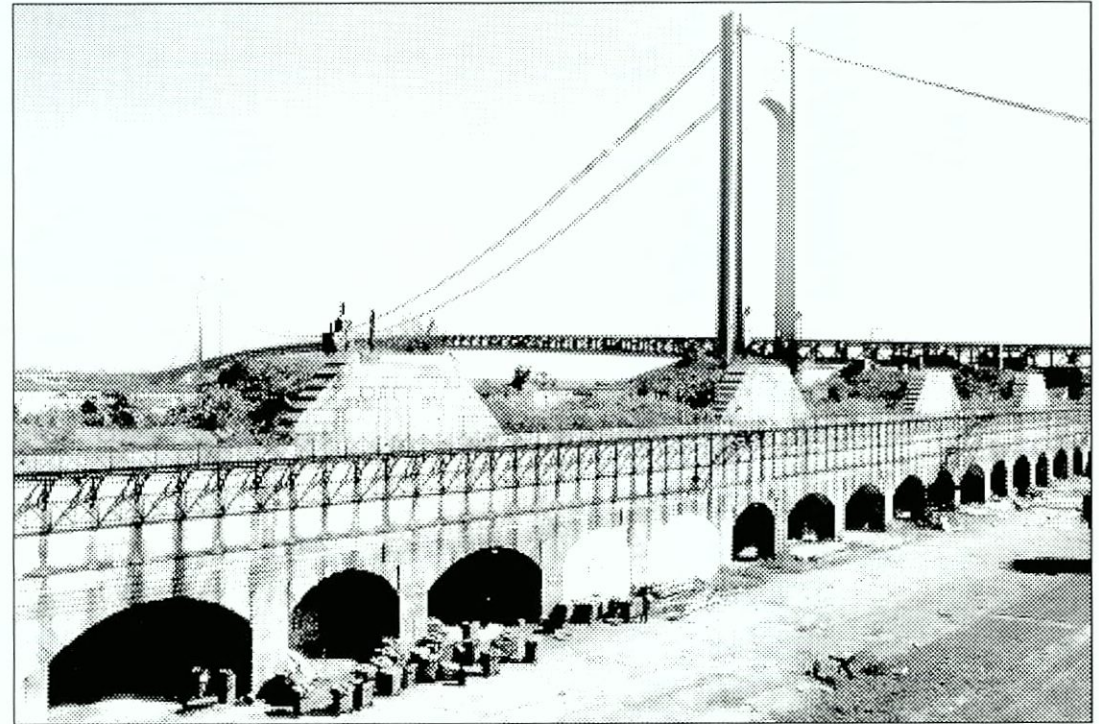




**Figure 6.82** Rusting of cast-iron shutters on the counterscarp. Arrows note major loss of original fabric due to ferrous corrosion.

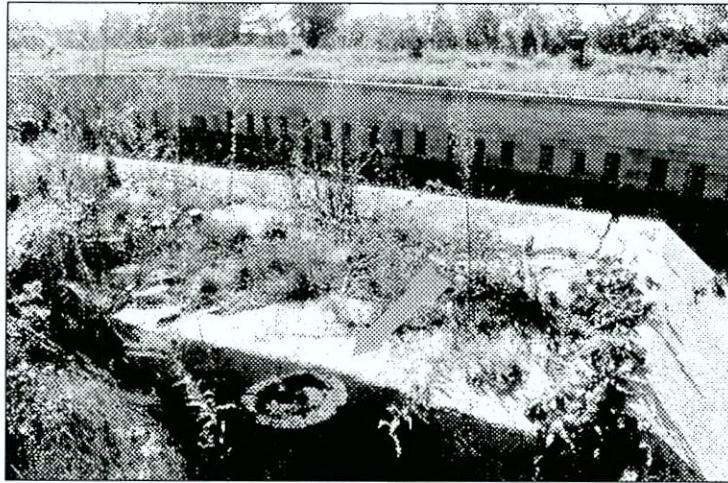


**Figure 6.83** Unwanted ivy growing on granite facade and cast-iron shutters of Fort Tompkins counterscarp. Light green biological growth evident to the left of the window (arrow).



**Figure 6.84** General view of barbette looking south. Originally planted with grasses, the barbette now exhibits ivy, bushes and trees which work to destroy the masonry walls.





**Figure 6.85** Detail of parapet showing destructive effects of unwanted vegetation. Arrow identifies remedial cement patch which is falling.

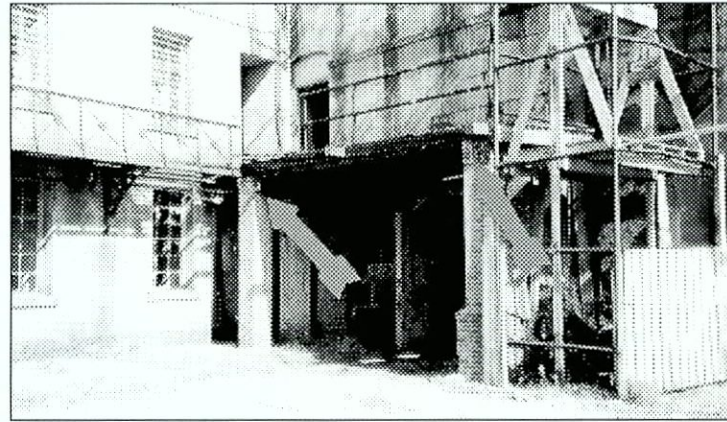


**Figure 6.86** Look-out complex located at the southeast corner of Tompkins' barbette. Portion of building removed. General deterioration of concrete and brick. Vegetation entering interior through doorway.

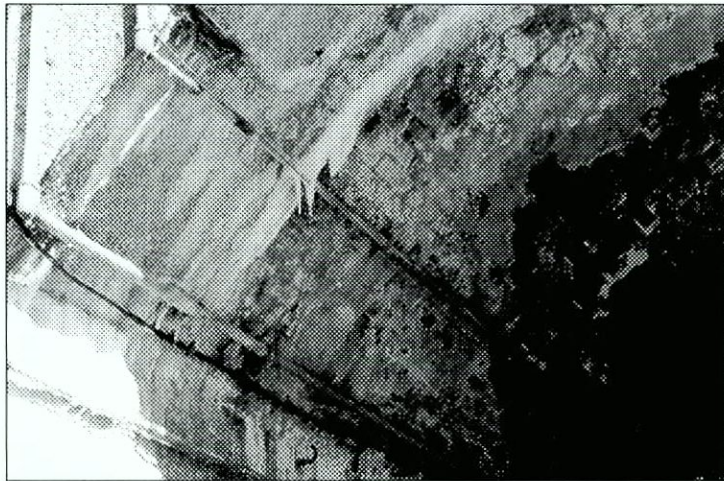


**Figure 6.87** South barbette looking west. Gunmounts concealed by vegetation. Cracking of concrete throughout. Spalling of concrete (arrow) caused by ferrous corrosion of piperail.

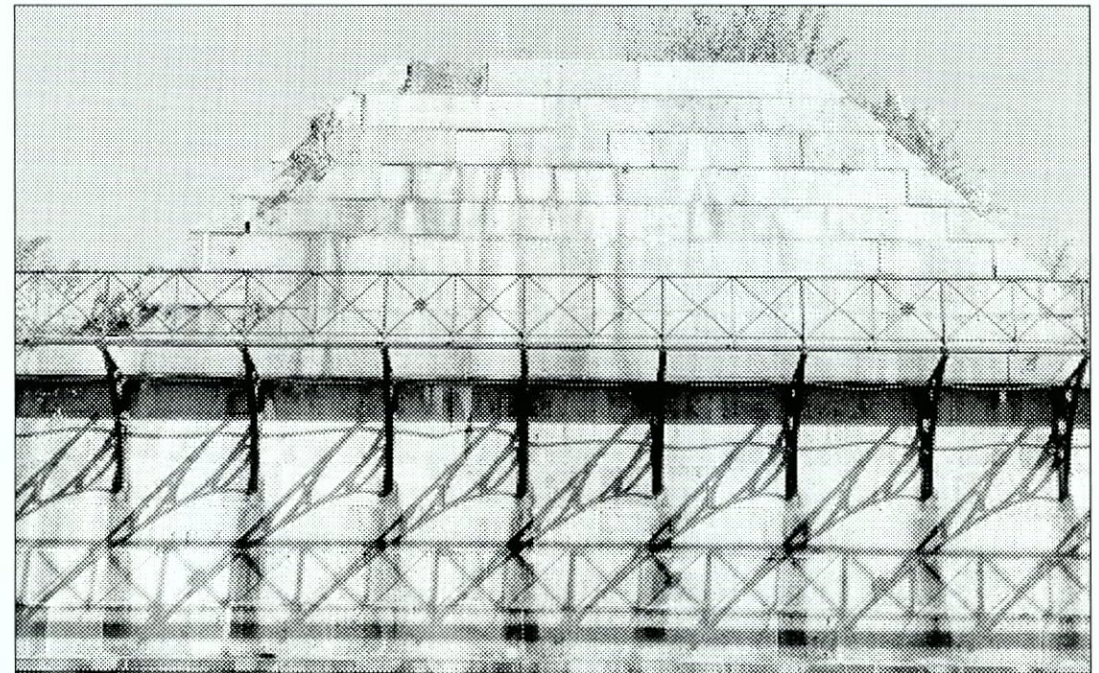




**Figure 6.88** Hoist at entrance to counterscarp. Arrows identify dislodging of brick piers. Note deterioration of second-story decking, missing handrail and poor condition of window units.

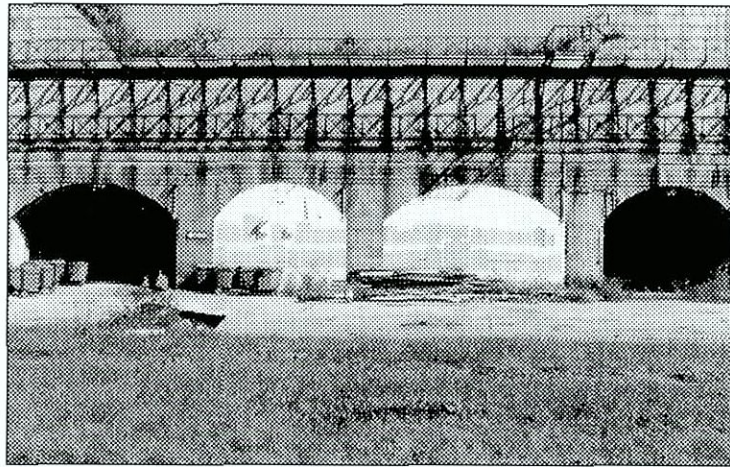


**Figure 6.89** Water-borne deterioration resulting in the formation of stalactites and extreme mortar loss through-out vaulted arcade. Note poor condition of conduit.

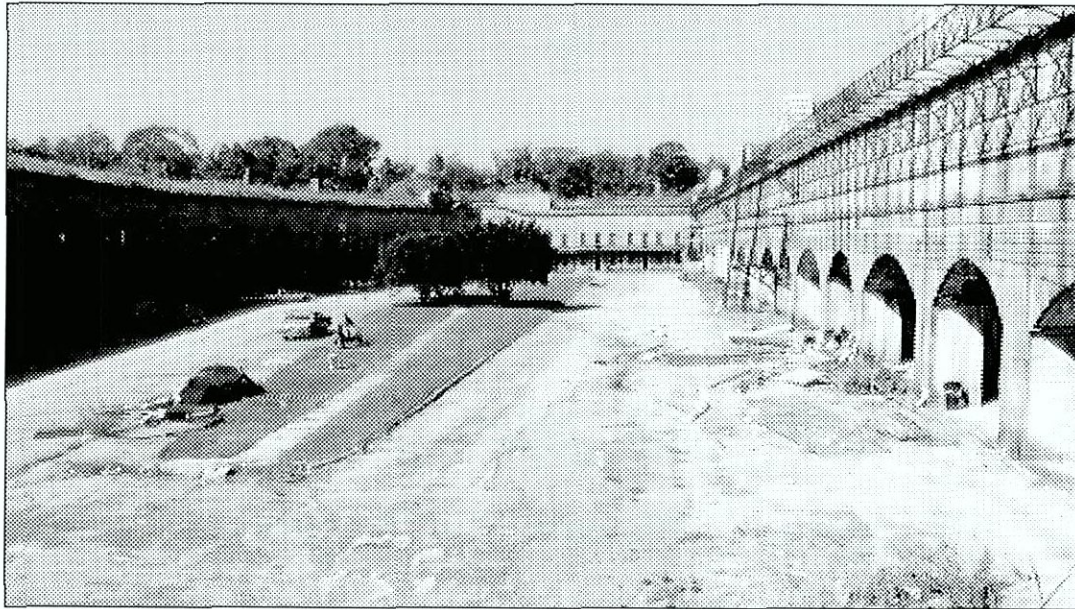


**Figure 6.90** Typical gable showing shifting of granite blocks. Brown staining caused by rusting of wrought-iron balustrade; note missing rosettes and decking.





**Figure 6.91** Otrusive in-fill of arched openings prohibits visitors from walking through the arcade, as well as altering original intention and appearance.

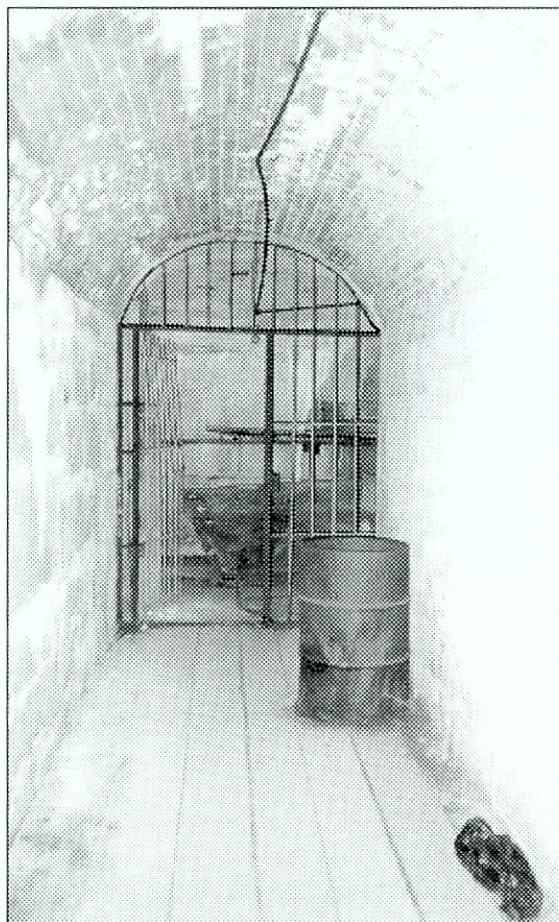


**Figure 6.92** General view of Tompkins' parade looking north. Asphalt pavement in poor condition. Debris and inappropriate storage of materials around the perimeter.

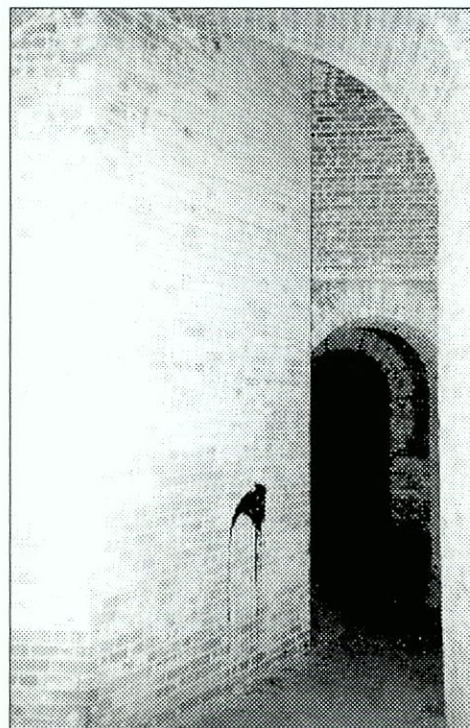
**Figure 6.93** Spray-paint graffiti on painted granite located at the entrance to the counterscarp.



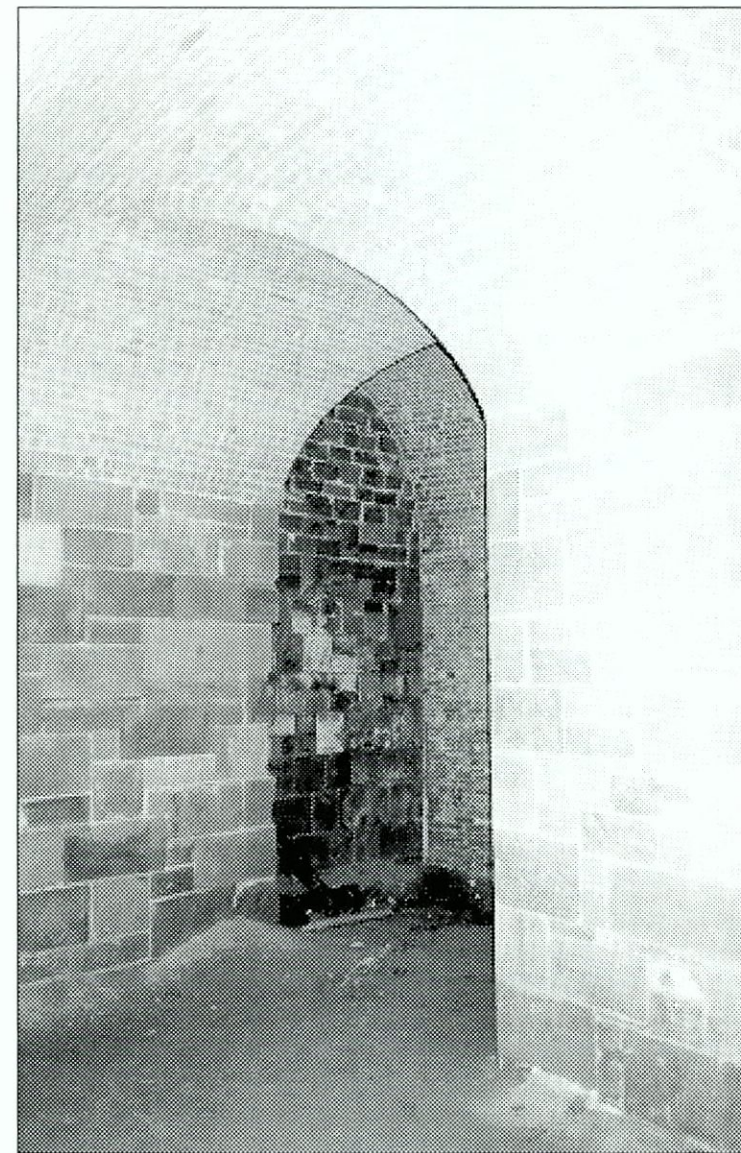




**Figure 6.94** Loose plank decking at beginning of counterscarp gallery. Note white staining on masonry walls.



**Figure 6.95** Counterscarp gallery at northwest corner showing ghosts of white interior finish on walls and vaults. Dirt floor in this area. Isolated occurrence of bitumastic splattered on brick masonry.



**Figure 6.96** Counterscarp interior showing loss of sandstone surface as evidenced by sandstone piles at the base of the wall and abrasive erosion of sandstone surface as evidenced by sandstone piles at the base of the wall and abrasive erosion of sandstone corner.



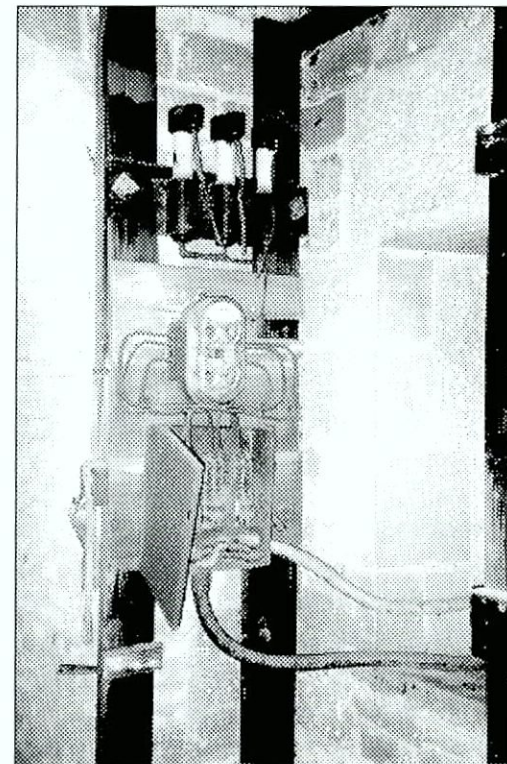


**Figure 6.97** View through counterscarp gallery showing dismantled plank flooring and suspended electric cable.



**Figure 6.98** Northeast gallery of counterscarp where two large piles of rubble, consisting of rock and dirt, obstruct the path. Piles originate from window-type fenestration on the side facing earth.

**Figure 6.99** Electrical switch box with raised frame platform (not in photo). Further research must be undertaken in order to establish significance of this system and whether it should be retained.







**Figure 6.100** Interior of former museum located in the channel block of Fort Tompkins. Peeling paint (probably containing lead) of walls and ceiling.



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## Battery Duane (Building 133)

### Description and Development

Military historians have theorized that eight periods of American military operations existed, with a twenty-year gap between the end stage of the Third System in 1865 and the beginning of the stage labeled the Endicott-Taft period in 1885. However, a defensive building campaign occurred at Fort Wadsworth during this twenty year gap that included at least a Glacis Mortar Battery at the approximate site of Battery Duane and a Glacis Battery immediately to the north of Fort Tompkins. The Battery Duane site was referred to as the Mortar Battery in later drawings, and the older battery faced a more southeasterly direction than the extant Duane. It apparently was replaced and modernized with the construction of the new Battery Duane, which was a linear arrangement of five gun emplacements, built from granite, concrete, and brick, and occupying approximately 13,000 gross square feet. In visual terms of locations, the eastern end of the old battery could have been anchored and pivoted, while the western end was rotated until the back of the battery was almost parallel to Fort Tompkins' south wall: this was the location difference of the new Battery Duane from the old mortar battery (figure 6.101). Although figure 6.101 represents the earliest proposal record (1889) for building a new battery at the site Battery Duane, the construction did not occur immediately.

During the Endicott-Taft period of fortifications (1885-1905), many batteries were constructed at Fort Wadsworth.

... however, construction had to await the purchase of additional land since the existing post lacked suitable locations for new batteries. Battery Duane was the exception. On a site immediately south of Fort Tompkins, the battery was started in July 1895, its guns were mounted in 1896, and it was reported completed in 1897. A five-gun battery, Duane was armed with 8-inch rifles on Buffington-Crozier disappearing carriages.

One author has said that Duane was only a four-gun emplacement, but all other evidence indicates that he was in error. It does seem logical, however, that construction of the new five-gun battery necessitated the demolition of part of the counterscarp at the south side of Fort Tompkins. This is first evidenced in an 1894 map. The demolition of the counterscarp also promoted greater vehicle access or pedestrian communication on the grounds by construction of a new road. The road that now runs between Fort Tompkins and Battery Duane may have been begun at the time that Duane was constructed, but does not appear to have been completed through to New York Avenue until at least 1900.

Additional information regarding specific construction techniques at Battery Duane was found in a report prepared for the Navy as documentation for the Historic American Engineering Record (HAER). While many of these techniques related to general construction practices at Fort Wadsworth, the report clearly states that Rosendale cement and large irregularly-shaped rocks were used to construct Battery Duane's concrete, a practice that was discontinued shortly thereafter when the superior Portland cement was more readily available and affordable.

As was the case in most fortifications, new technology in weaponry made older batteries obsolete unless they were revamped. Battery Duane was the first of the Endicott-Taft fortifications to succumb to obsolescence in 1915, its career as a battery being short-lived.

The only correspondence found regarding Battery Duane during its active life dates to 1911 and 1912. Apparently the "wooden floor of passage way between loading platforms of Nos. 1 and 2 emplacements,... has many rotten planks and is not believed to be safe." Since "this battery has no fire control system and is of practically no value to the armament at this post.... It is recommended that the wooden floor be entirely removed." Three weeks later the Corps of Engineers notified the Chief of Engineers that the "Engineer Department has no use for the wooden-floor passageways in question and the Commanding Officer will be notified that they can be removed." Ten years after the battery was

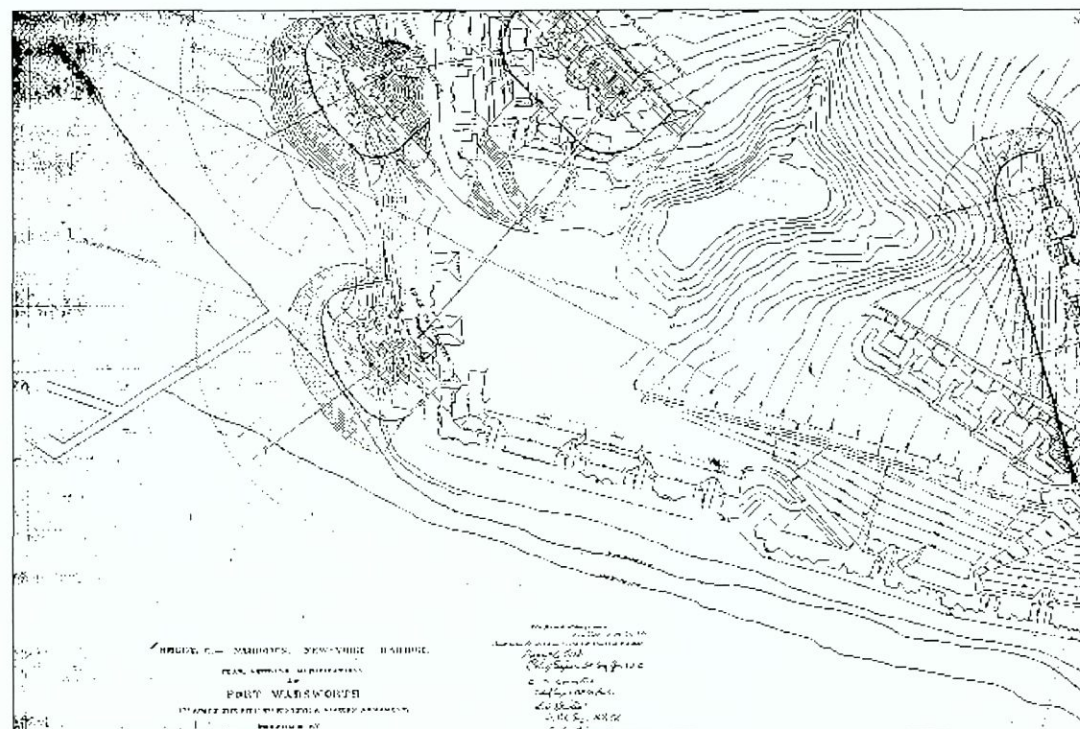


declared inactive, correspondence records that a clean-up of the battery took place, and that wooden stairs leading to search light #11 were torn down, suggesting that the battery became an emplacement for a search light rather than armament.

A drawing probably dating to the early twentieth century showing utility connections and conduit depicts only the two most western gun emplacements at Battery Duane. The reason for this partial representation is unclear, since both documentary and physical evidence suggests that the bulk of the entire battery remains today. One possible explanation is evidenced in plans dating to 1902 and 1903. The earliest shows proposed ductwork for electric wires for the high power guns, but depicts only the western three gun emplacements at Battery Duane; the later drawing is labeled "Plan for Rebuilding Left Two Emplacements of Battery Duane," which appear to be the two most western emplacements. If only the western two emplacements were updated, they may have been the only two that were operational after 1903, and therefore the only two worthy of documentation on the utility map mentioned above.

In 1943 a plan for a new warehouse at the approximate location of the extant flagpole overlook recorded that Battery Duane was used as a coal bin and had a 3.5 foot high retaining wall (noted but not drawn). A small stone block building (portland?) was situated at the extreme east end of the battery, and a driveway or walkway led to the top of the battery over the embankment from the southeast corner.

A map revised to 1962 showing the Verrazano Narrows Bridge construction lists Battery Duane as Building 132 and Coal Storage (temp.), with a separate building on the platform at the east end listed as Storage. The walk or roadway leading to the top of the embankment from the southeast corner is squared-off in this map and labeled Parking Lot No. 4. The existing condition of the latter is more consistent with that found on the 1943 plan, and the two other structures once located at either end of the battery have been demolished.



Based on the research information, it cannot be determined when the concrete buttress walls were installed at Battery Duane. However, based on their use for engineering and construction purposes, one might assume that they were part of the original construction or added at an early date, built in order to buttress the battery from the shock of the jolting guns. The concrete retaining walls could also have been constructed to separate coal bins. Physical evidence left by the planks of the concrete forms suggests that the construction occurred prior to the modern-day practice of smoother and more finished concrete work, but a precise date of construction would need to be clarified through further research. Contrary to previous assessments, Battery Duane does not appear to have been initially constructed by relocating the south end of the counterscarp of Fort Tompkins (figure 6.103). However, the south wall of Duane may have been reused from the former mortar battery, but further physical investigation would be necessary to confirm or disprove this.

**Figure 6.101** Proposal for Battery Duane, superimposed over extant mortar battery. "Sheet C.- Narrows, New York Harbor. Plan, showing Modifications at Fort Wadsworth to Adapt the Site to Receive a Modern Armament", June 24, 1889.





**Figure 6.102** Battery Duane, north face at east corner. By Cultural Resources Center, 1994.

### Character-defining Features

The three most character-defining features associated with Battery Duane are 1.) that it is a ruin; 2.) its basic plan; and 3.) its different construction materials, which are exposed because of its state as a ruin. While one can glean the locations of gun emplacements from the street level, Duane's ruinous state is more overpowering than evidence of its former use. Clearly it represents the fort as a whole in that it became obsolete and was abandoned. The combination of construction materials, that is of brick, granite, concrete, and wet-laid stone (or possibly another type of concrete using large aggregate) make this an interesting structure from an engineering standpoint (figure 6.102)..

Contrary to previous assessments, Battery Duane does not appear to have been initially constructed by relocating the south end of the counterscarp of Fort Tompkins (figure 6.103). However, the south wall of Duane may have been reused from the former mortar battery, but further physical investigation would be necessary

to confirm or disprove this.

### Condition Assessment

Battery Duane was constructed in the 1890s during the Endicott-Taft Period and is located south of Fort Tompkins. The long, low battery is constructed primarily of poured-in-place cement with iron rebars; the eastern end is of smooth-face ashlar granite.

Battery Duane was the first of the Endicott-Taft Period batteries to be abandoned at Fort Wadsworth and, subsequently, was not maintained. Natural forces have also contributed greatly to the structure's ruin. Vegetation is growing out of cracks, spalls, and in the forecourt of Battery Duane. These unwanted plants cause destruction by establishing root systems within the concrete walls thus forcing the cracks to widen. The root systems draw and hold moisture resulting in freeze-thaw spalling of the concrete during cold temperatures. General rainfall results in the water-born migration of cement constituents from the inside of the wall onto the outside surface; this process weakens the strength of the concrete until failure occurs.

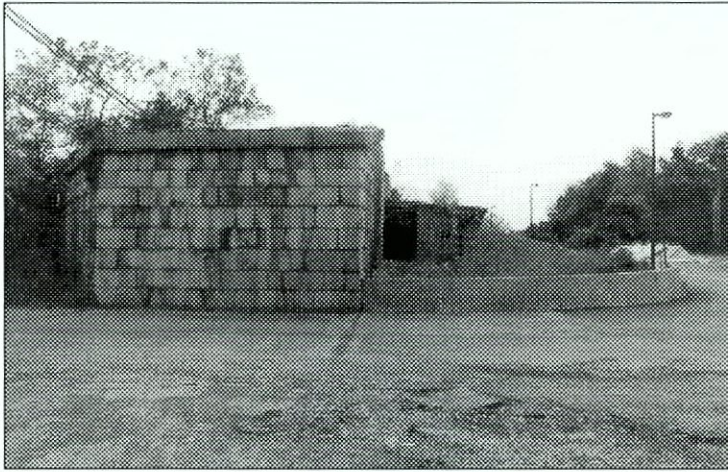
Due to the present state of decay at Battery Duane the entire structure must be deemed unsafe. Crumbling ledges, falling concrete, and missing stair sections, combined with the lack of adequate handrails, warrants Battery Duane "off limits" to the general public.

### Condition Assessment Inventory and Recommendations

1. Problem: Extreme deterioration has resulted in the ruinous and unsafe condition of Battery Duane. Crumbling concrete and lack of adequate barriers add to the potential hazards.

Solution: Stabilize remaining portion of Battery Duane. Install permanent barriers which will keep visitors away from climbing on the structure. Provide close-range interpretation in the form of text and photographic images which help convey the original intent and appearance of the battery.

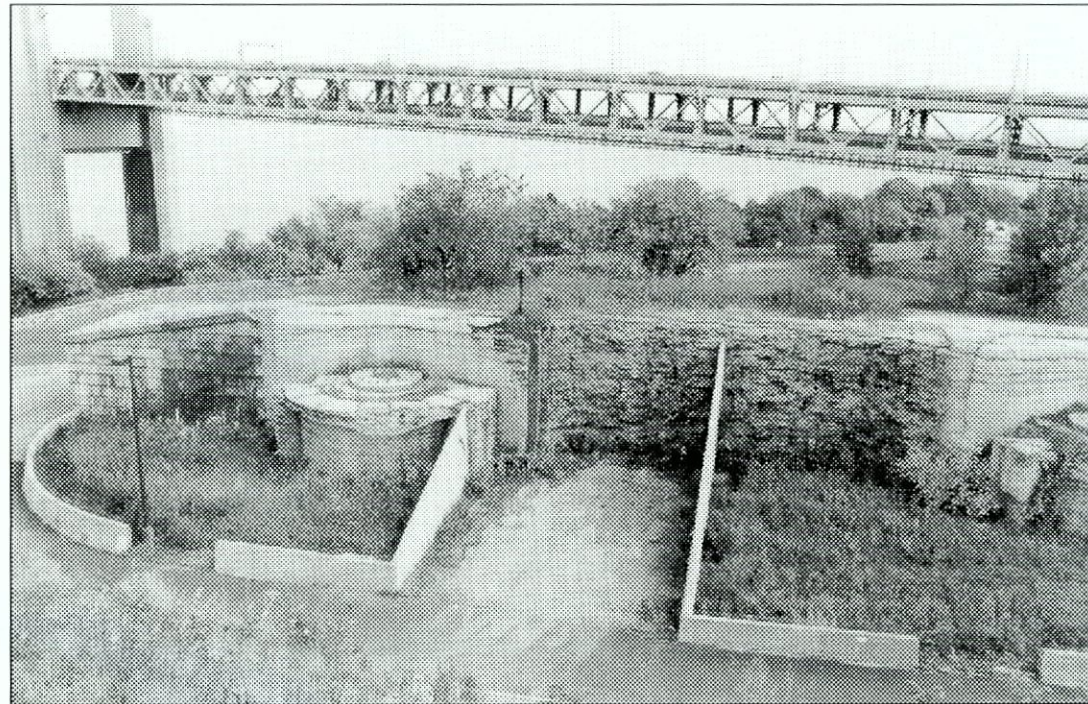




**Figure 6.103** Battery Duane, granite wall at south end. Cultural Resources Center, 1994.

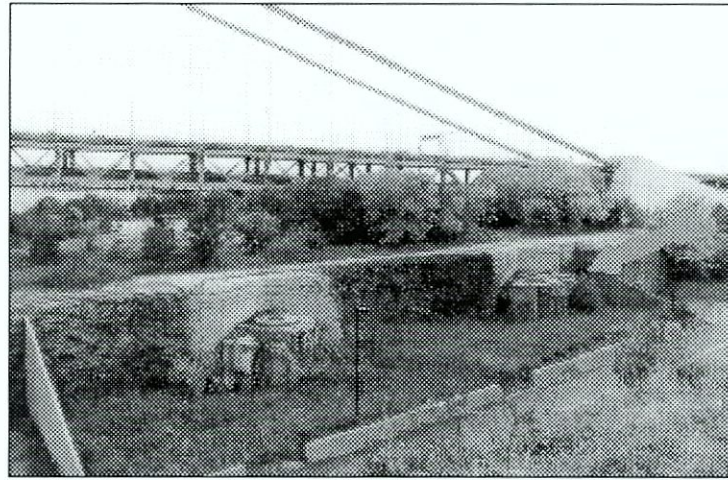


**Figure 6.104** General view of Battery Duane in its ruinous state. Verrazano-Narrows Bridge is in the background.



**Figure 6.105** East portion of Battery Duane showing ashlar granite end and later-date addition of poured-concrete dividers.





**Figure 6.106** View of battery showing forecourt of grass originally occupied by disappearing guns. Arrow identifies open doors to magazine.



**Figure 6.107** Detail of Duane showing extensive crumbling of concrete and the establishment of vegetation throughout. Arrow identifies ruins of handrail and stair.



**Figure 6.108** Detail of unwanted vegetation growing out of cracks in concrete at top of battery. Wall edge is very unstable.



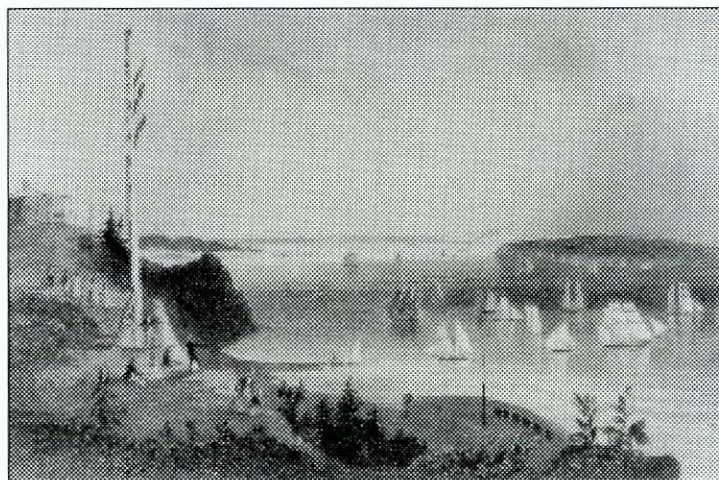
## Flagpole Area

### Description and Development

The “Flagpole Area” will be generally defined as the area directly east of the southeast bastion of Fort Tompkins, currently the site of a flagpole and overlook.

The current flagpole site may be the general area previously known as Flag Staff Hill during the British occupation of the site throughout the Revolutionary War. Early maps indicate that poles or staffs that may have been used for signaling purposes were located on the hill. When Charles Vincent researched his investigative report for construction of new fortifications for the State of New York in 1794, he confusedly referred to the area as Fort Stag Stake in his native French language. An 1809 map shows an “observatory” point on the hill, but it is farther south than the current flagpole location, marked here as a “Dwelling” site. (No documentation has been found regarding this dwelling at this time.) In January of 1814 the Commissioner of Fortifications referred to the area as “Signal Hill” with reference to the construction of a new blockhouse “within the picket work on the hill,” but without any specific description of signaling devices.

A sketch of the area made sometime between ca. 1815 and 1847 (based on the depictions of the first Forts Richmond and Tompkins) shows a semaphore in what appears to be the approximate location of the extant flagpole, but slightly farther to the south (figure 6.109). The semaphore acted as a type of telegraph, providing a signaling relay system for ships entering New York Harbor. This relay began at Sandy Hook to the south and ended at lower Manhattan. This was labeled as “Telegraph Hill” at the time of this printing, but an 1839 map suggests that the telegraph was nearer to Battery Hudson and the lighthouse. Another map, dating to 1850, also labels the same approximate area, again maybe slightly to the south of the extant flagpole location, as “Telegraph Knoll.”



**Figure 6.109** Print, depiction ca. 1815 to 1847. Staten Island Institute of Arts & Sciences, Neg. #4.

A sketch published in “Gleason’s Pictorial” on November 27, 1852, shows the old semaphore pole at the edge of the hill with no signals evident and a small square structure to the north of it, with some type of apparent signaling apparatus attached to its roof (see figure 6.3 in Battery Weed section). No documentation has surfaced to date which records the construction of a new signaling station, however replacement of a similar device at the same prominent location would be the most logical choice for a new installation using upgraded technology.

Several mid- to late-nineteenth century maps indicate that a two-gun emplacement was installed in this general area. The year 1897 is the last year the gun emplacement was drawn on maps, probably because the construction of Battery Duane in 1895 superseded its need.

A photograph from 1913 shows a flagpole at the same approximate location as the one that exists today (see figure 6.69 in Fort Tompkins section). A photocopied section of a blueprint, undated but possibly drawn during the second quarter of twentieth century, shows that two search lights had been installed where the former two-gun emplacement was, but nothing is reflected at the flagpole location.



Plans dating to 1943 propose the construction of a warehouse at the location of the extant flagpole overlook. The size, shape, and foundation and floor materials (concrete block and concrete, respectively) of the so-called temporary structure echo the remains of the concrete slab and piers that exist today. Drawings dating to 1960 and 1962 confirm that the structure was built in the proposed location, and the physical evidence remains of the structure's foundation and floor. The demolition date of this structure is unknown, as is the installation date of the extant flagpole. However, based on the construction materials and the means employed for installing the flagpole, one could assume that it was a fairly recent addition to the site.

### **Character-defining Features**

The most important character-defining feature of the flagpole area is its setting. Documentation supports that the area near the top of the hill was used during the early occupation of the site as a strategic location for communication. This use continued through the nineteenth century, then was changed to defensive purposes ca. 1870, first with armament, then with the installation of search lights. The installation of the extant flagpole at this site carries on the early tradition of the flag staff installations. The only non-strategic use (if one considers displaying the nation's colors as strategic) of the area occurred between ca. 1943 until sometime after 1962 when the "temporary" warehouse was located here.

Two lesser character-defining features of the area are the flagpole itself and the retaining wall at the top of the hill. The long pole is necessary for elevating the nation's banner to a proper height for display, while the wall provides a safety barrier for any observers of the magnificent scenery below.

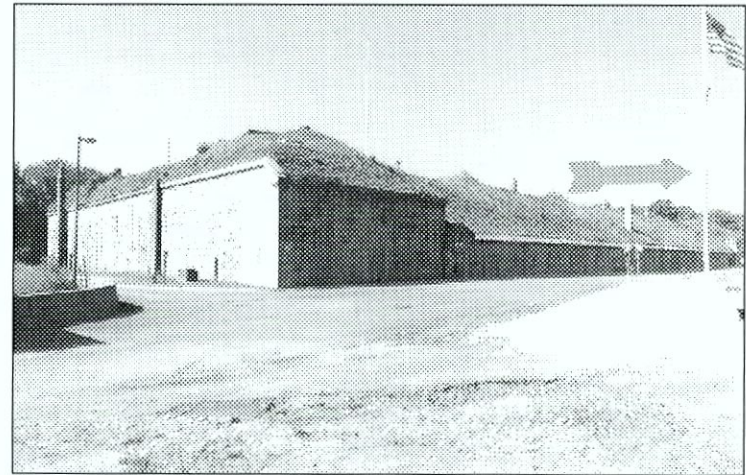
### **Condition Assessment**

For the sake of the Condition Assessment, the "Flagpole Area" has been generally defined as the area directly east of the south-east bastion of Fort Tompkins, currently the site of one flagpole and the overlook wall.

The recently-installed new flagpole consists of a tapered, cast-aluminum body with concrete base. It is mounted into what was once a building foundation pad (building is non-extant).

### **Condition Assessment Inventory and Recommendations**

1. **Problem:** Cracking and deteriorating concrete foundation pad around the general area of the flagpole.  
**Solution:** Redesign site using historical precedence of the original "Flagpole Area" as a model for interpretation. Depending on solution, existing flagpole may either be incorporated into the new design or relocated elsewhere in the park.



**Figure 6.110** General view of recently installed flagpole located east of Fort Tompkins' main entrance.



## Mont Sec Avenue (Officers' Row)

### Introduction

Mont Sec Avenue represents a cohesive streetscape, both architecturally and through its association to Fort Wadsworth as a site for officers' housing. Even though the structures that line the street were erected at different intervals, the extant buildings were all constructed for one purpose, with the exception of Building 109 at the far end of the street. All of these surviving buildings originally provided housing to officers, while Building 109 was erected to house the Headquarters Office.

Mont Sec Avenue first emerges as a planned street on an 1871 map of Fort Wadsworth. At that time only four structures were evident on the street, all on the north side. These included the Commanding Officer's Quarters at the head of the road to Fort Tompkins (figure 6.111), the Subalterns' Quarters (double unit), the Captain and Surgeon's Quarters (double unit), and the Hospital (figure 6.112). The design drawings for all of the dwellings have been located, approved in 1870 and 1872. By 1882, three additional structures were proposed to be erected on the north side of the street, including two Officers' Quarters between the Commanding Officer's and Subalterns' Quarters and the "Office" or what is now known as Building 109. An 1886 drawing shows that a building had been added between the Commanding Officer's Quarters and the administrative office building. This is thought to have been a stable. Another document dated 1888 proposed new construction for a Guard House and an administration building. This same set of correspondence also proposed to "convert the present post hospital into an administration building and to erect a new hospital". It is unknown whether the referenced Guard House was the one built at the west end of Mont Sec Avenue or if the original administration building had surpassed its capacity. By 1889 four new double structures for Officers' Quarters (now 111 - 114) were proposed for the south side of the street, and a Guard House was situated at the entrance of Mont Sec Avenue from New York Avenue. The

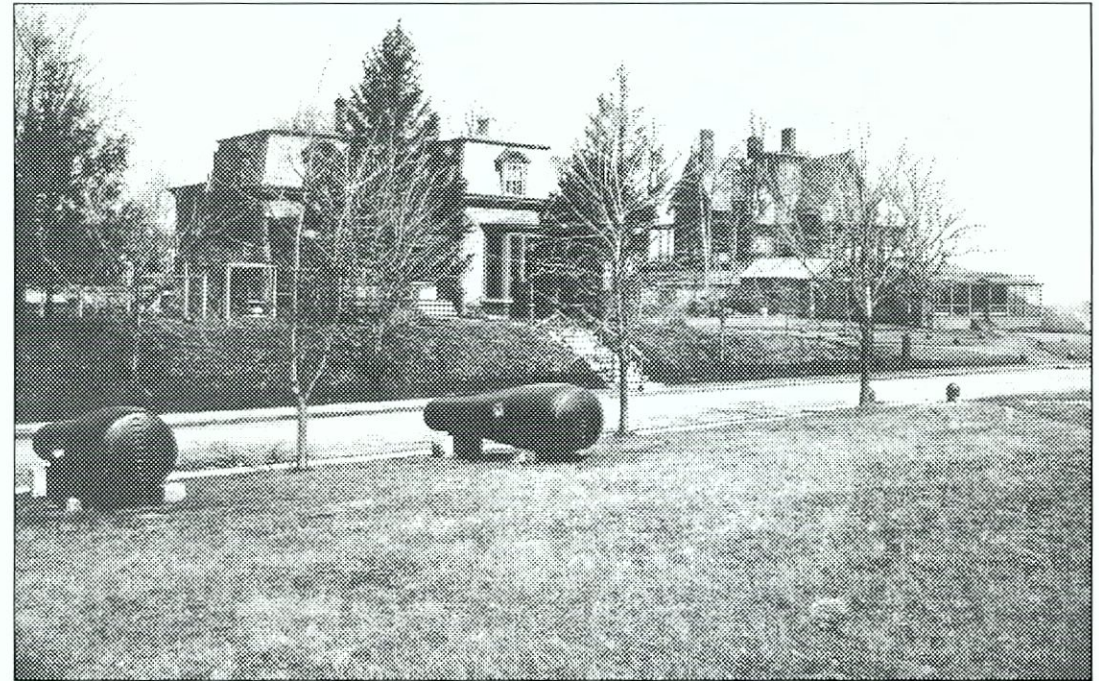


Figure 6.111

office was listed as the "Headquarters Office" at this time, and only one of the Officers' Quarters buildings that originally surfaced on the 1882 map was recorded in 1889 (the westernmost one). Additional proof for the erection of only one of these generic structures was found in a document dated 1883, which stated that only a total of four buildings existed for Officers' Quarters, providing seven sets of quarters. The commanding Officer had one structure to himself, the generic Officers' Quarters was one structure housing two families, the Captain and Surgeon's Quarters was one structure housing two families (figure 6.113).

An 1894 reservation plan seems to confirm that seven structures existed on the north side of the street, and the four housing units existed on the south side. The seven structures on the north side from west to east included the hospital, the captain and surgeon's residence (double unit), the subalterns' residence (double unit), an officers' housing structure (double unit), the commanding officer's residence, the assumed stable, and the administrative office. This number seems to fluctuate for the next two decades, leaving



Figure 6.112

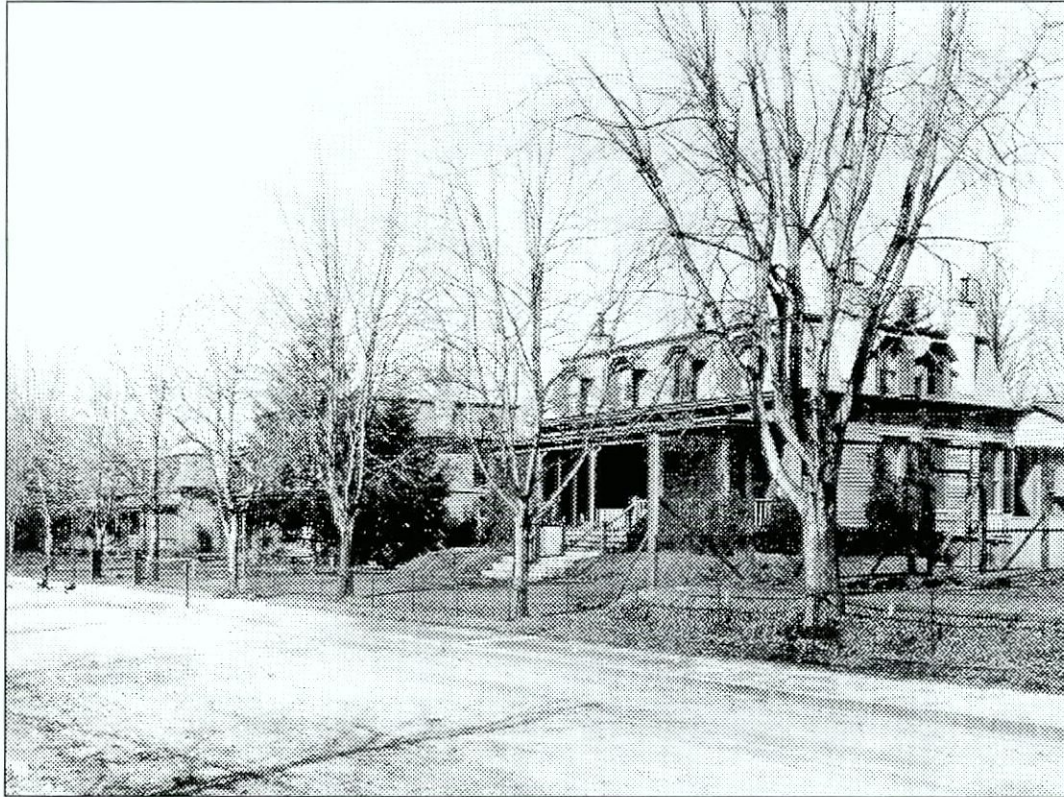
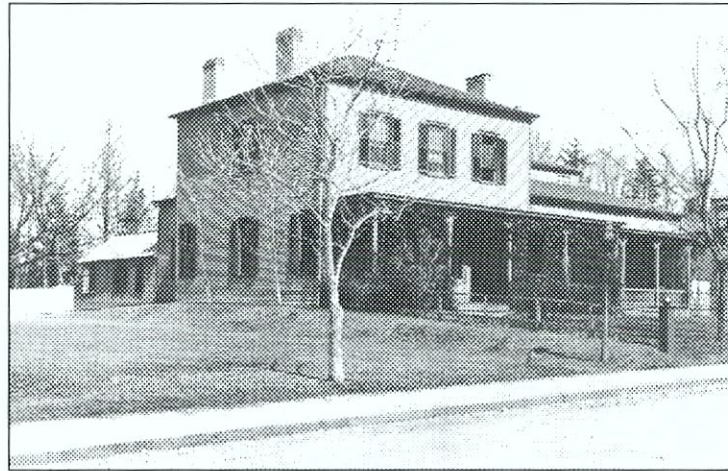


Figure 6.113

one to wonder if some of these drawings were only proposals. What does remain constant are the hospital building, the captain and surgeon's residence, the subalterns' residence, the one officers' quarters building, the commanding officer's residence, and the office. A new hospital was constructed on New York Avenue in the late 1890s, and the old hospital building became the Subsistence Storehouse.

Many of the extant structures on Mont Sec Avenue were either built or brick-faced during the Works Progress Administration campaign to bring America out of the depression in the 1930s. At some point the old hospital building was demolished and another officers' quarters structure may have been erected to match the original subalterns' quarters, or more likely the structure was relocated to the former hospital site. Comparison of original plans to WPA drawings confirm similarities that are too alike to dismiss. The structure was brick-faced and altered during the WPA era, and also may have been altered in 1962. Eventually this structure was labeled Building 102.

What is now called Building 103 was originally the Captain and Surgeon's Quarters, erected ca. 1872. During the WPA campaigns, the structure was altered and brick-faced. The Army proposed the brick design for Buildings 106 and 107, each providing the same double officers' quarters, in 1931. Building 106 was built after Building 102 was relocated, assuming the theory that Building 102 was moved is accurate. When Building 108, formerly the Commanding Officer's Quarters, was brick-faced is unknown. However, most likely this alteration also occurred during the WPA campaigns. The building was converted into bachelor officers' quarters, possibly in 1955. The last building to be erected on the street, exclusive of the westernmost end, was the Field Officer's Quarters, or Building 115. It was designed as a brick single-family home in 1932. The construction date of the two westernmost buildings, one on either side of the street, is unknown. However, they both are very similar to Buildings 106 and 107 and may have been constructed at the same time, that is the early 1030s. The demolition date of the gate house once



located at the same end of the street is also unknown at this time.

Although one researcher recommended against nomination of the brick and brick-faced structures for inclusion in the National Register of Historic Places, almost a decade has passed since his report. While beyond the scope of this section, (only five individual structures will be addressed here), the entire street reflects a scene of continuity, worthy of consideration for National Register nomination. Certainly most of the structures on the street are more than fifty years old, one of the criteria used for National Register nomination. The brick-facing project has lent a visual uniformity to the street, uninterrupted except for the four asbestos-sided dwellings. This uniformity is enhanced by the equal and repeated setbacks of the structures on both sides of the street.

## Headquarters Office (Building 109)

### Description and Development

Based on the evidence presented in the Mont Sec Avenue introduction, it is known that the original Building 109 (formerly Building 15) was erected between 1871 and 1882 as the Headquarters Office. Early photographs of the structure, taken at a distance, show that it was originally a one-story structure, probably of frame construction, with columned porches across its south and east facades, and had what appears to be a low hipped roof (figure 6.114 and 6.115). An undated utility plan of the site, probably dating to ca. 1910, shows the structure as fairly small and rectangular, with a wing off the back at the east end. A circular drive with two pathways to the front door is also delineated on this plan as well as earlier plans. This configuration is similar to what survives today. Figure 6.115 also shows that a wide path led past the structure to the property immediately to the north, almost like the cliff walk that exists in Newport, Rhode Island.

Recent discoveries of Fort Wadsworth's individual building files housed in the National Archives provide more detailed information regarding Building 109, including a clearer photograph of the



structure prior to its major renovations (figure 6.116). In 1905, when the file was first compiled, the building was of frame construction with a brick foundation, had a shingle roof, was heated by stoves and lighted by electricity, had water and sewer connections, one water closet, one urinal, and one wash basin, was 40 by 44 feet and contained 1,729 square feet. The basement had one room, 10 by 13 feet, and the first floor appears to have had eight rooms. In May of 1905, a one-story addition (12 by 14 feet) was constructed for the storage of records, also of frame construction but on brick piers, and with a tin roof; electricity was installed in 1911; three years later in 1914 the building designation was changed to Officers' Club, and then to Officers' Quarters in 1926. The designation may have been changed back to Officers' Club when the building was enlarged and brick-faced, but this is only an hypothesis.

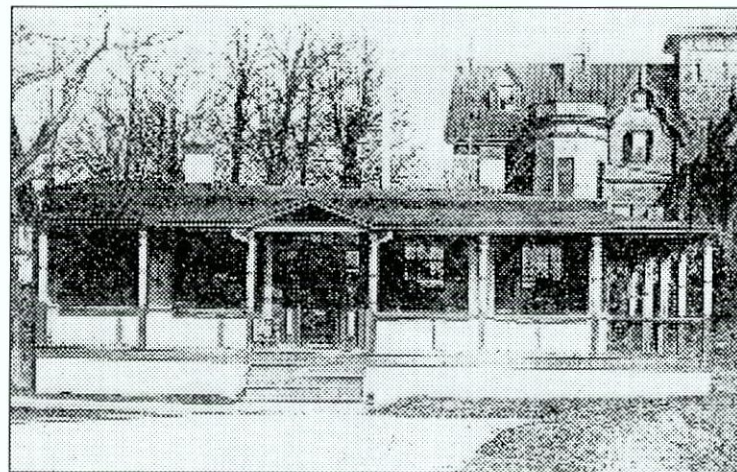
It is not known when the structure was remodeled to its current

**Figure 6.114** Headquarters Office from Battery Catlin, October 1, 1913. National Archives, Northeast Region, RG77, entry 802.





**Figure 6.115** Postcard, Fort Wadsworth, Commanding Officer's Quarters and Headquarters Office. Staten Island Institute of Arts & Sciences, 84.75 365/57hp, neg 32.



**Figure 6.116**

configuration. A hole in the documentation is not closed until 1957, the date of sprinkler plans for the structure. By this time it had been enlarged to its one-and-a-half story bungalow form, and from notations on the drawings, was already an officers' club. The earlier renovation had retained the columns along the front porch, which supported a new roof that was continuous from ridge to porch edge and typical of the bungalow style. The main body of the building was brick-faced, probably during the late 1930s when the campaign for such was rampant at Fort Wadsworth. This date also may be the date of the enlargement of the structure, but this conclusion is not supported by specific evidence. The upper half story are shingled. The wing on the east side may have evolved from the earlier porch, but when it was enclosed and/or brick-faced is not known. This brick appears to have been installed at a different time than the main body of the structure. Three single-window dormers punctuate the roof on the main facade. The building is approximately 51 by 46 feet and has a gross square footage of 7,669 square feet.

A set of drawings from 1959 suggests that interior renovations were being made at the officers' club. These changes appear to be mostly cosmetic, but it is difficult to ascertain if the notes pertain to existing conditions or new work. A bar may have been added in the basement, along with a small partition under the front porch, the kitchen may have been converted to a storage and dishwasher room under the former east porch, a storage room may have been converted to a ladies toilet, and the coal room was converted to storage. The rear northwest room on the first floor was made into a kitchen from a reception room and the rear northeast room into a scullery area from a ladies room. Four picture windows and a glass door at the center entrance were specified. On the second floor a partition change was suggested to enlarge a bathroom and eliminate a bedroom. An additional set of drawings dating to 1968 mirror the drawings from 1959 with one exception: the second floor partition change was never made. The Colonial Revival style of some of the building details, especially those found on the staircase, suggest that these elements were not altered in the 1950s, and may date to the enlargement of the



building.

In 1985, plans were approved by the Naval Facility Engineering Command to alter Building 109 to its current appearance. These changes included new windows and doors, including a new front door, the replacement of two porch columns and all of the column bases, a new roof, new stair treads, and the removal of radiators. It is assumed that this 1985 alteration brought the building to the conditions that exist today.

Building 109 is currently used as the Navy's Caretaker Site Office (CSO), but still retains some details from its use as the Officers' Club. These include its fireplaces and hearths, basement quarry tile floor, rusticated ceiling (although this has been painted over), and flagstone floor with a quarry tile border under the front porch. It also retains the same basic partition configuration as found in the 1950s drawings. Evidence of the original structure could probably be found through selected demolition of the interior. However, this type of investigation is beyond the scope of this project.

#### **Character-defining Features**

Building 109's most outstanding exterior character-defining feature is its 1). sweeping roof slope with integral front porch. This architectural detail is typical of bungalow construction, which Building 109 represents in its current form. 2). The contrast of the white painted columns and upper story shingles to the red brick (set in Flemish bond) first floor body is also character-defining (figure 6.117).

On the interior, several details are outstanding and merit inclusion as character-defining features. These include 3). both basement and first floor fireplaces and their hearths; 4). the Colonial Revival staircase and trim; 5). the one large open space on both of the two lower floors, and 6). the flooring and ceiling materials found in the large open basement space. The flooring in the basement in the space under the front porch is similar to that found in the large room in the basement.



**Figure 6.117** Building 109, south facade. By Cultural Resources Center, 1994.

#### **Condition Assessment**

##### *Building 109*

Building 109 is in good structural condition with no major recent additions or alterations which hinder its architectural merit, except the glass, front entrance enclosure.

Peeling paint on the soffit and remedial repair with bitu-mastic at the dormer-roof connection signal a leaking roof system.

Inspection of the interior confirmed this with evidence of recent plaster damage at the second level.

Other causes for concern are the haphazard arrangement of electrical wires, conduits, control boxes, and lighting concentrated at the northwest corner of the building. Many of these wires collect under the roof gutter and elbow connection. Water "freeze ups" at this vulnerable location may put the nearby electrical systems in jeopardy and lead to failure and/or safety concerns.

##### *Interior*

The only imminent cause for concern on the interior is the infiltration of water due to the faulty roof system. Second-story plaster exhibits recent plaster deterioration, known as "lime blooming", and is caused by the water-born plaster constituents distributed on



the surface of the plaster. If left to continue, the plaster will continue to decompose until it weakens, cracks, and falls to the floor.

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### Condition Assessment Inventory and Recommendations

#### Exterior

1. Problem: Faulty roofing and flashing system resulting in major water damage to interior plasterwork.

Solution: Remove existing asphalt shingles, sheathing and flashing and replace with new. Flashing details should be redesigned to give maximum performance.

2. Problem: General paint failure at soffit suggests improper painting and/or water saturation caused by faulty drainage system.

Solution: Conduct a detailed performance inspection of gutters and downspouts and correct any deficiencies.

Regularly inspect gutters for debris and clean out as necessary. Scrape, prime and repaint soffit and surrounding trim.

3. Problem: Seemingly haphazard arrangement and placement of utility wires, conduit and control boxes at the northwest corner of the building.

Solution: Investigate solutions for the consolidation of utilities and relocation of boxes in a less conspicuous location. Wires hanging near gutters and downspouts should be relocated away from these potential problem areas.

4. Problem: Questionable efficiency of existing aluminum storm windows, non-original to the building.

**Figure 6.118** Former Officers' Club Building, 109 located at the east end of Mont Sec Avenue.





Solution: Conduct an energy audit to determine problem areas and, if necessary, replace storms with historically appropriate units.

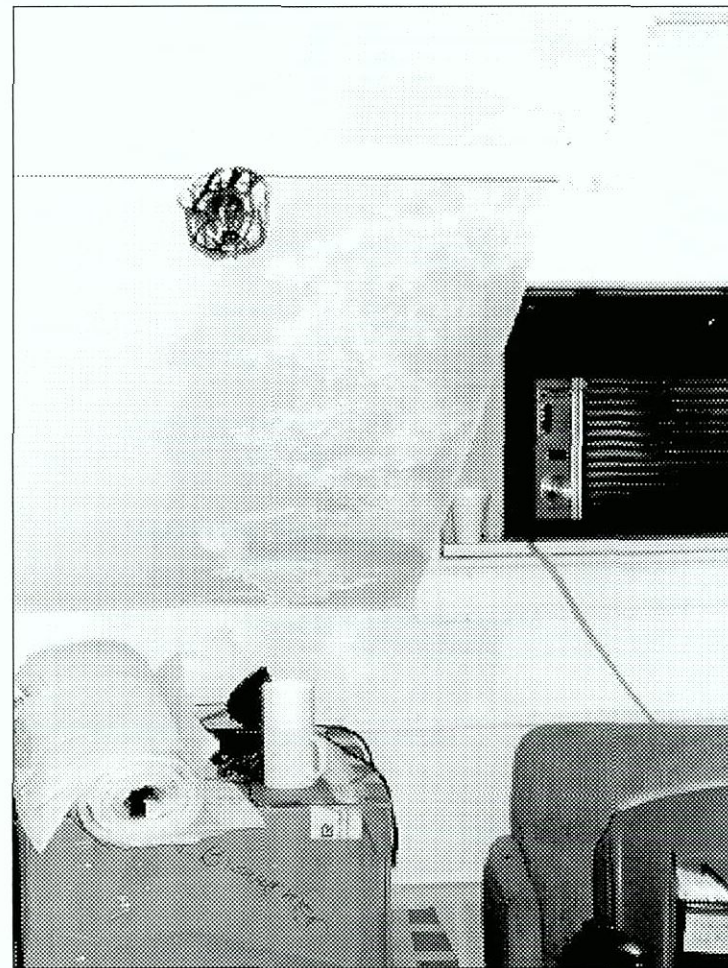
*Interior*

1. Problem: Extensive damage to second-story interior plaster most of which is concentrated at the gable dormers.

Solution: Replace roof and flashing. Re-establish plaster finish by utilizing approved methods of preparing and patching which follow original techniques.

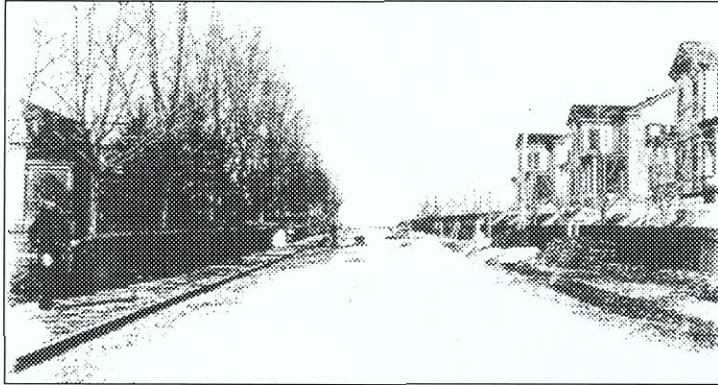


**Figure 6.119** Utility wires, control boxes haphazardly mounted, northwest corner. Arrow identifies peeling paint; signals poor water drainage from roof. Extensive reporting of chimney and rust staining seen on foundation wall.



**Figure 6.120** Building 109, Lime "blooming" of interior plaster located near dormers is caused by water infiltration through faulty flashing at roof-dormer connections.





**Figure 6.121** Fort Wadsworth, Mont Sec Avenue, between 1889 and 1992. Staten Island Historical Society.



**Figure 6.122** Postcard, Fort Wadsworth, Mont Sec Avenue. Staten Island Institute of Arts and Sciences, 84.75 298/57hp, neg. #25.



**Figure 6.123** Postcard, Fort Wadsworth, Mont Sec Avenue. Staten Island Institute of Arts and Sciences, 84.75 333/57hp, neg. #33.



## Officers' Quarters (Buildings 111 - 114)

### Description and Development

Dolkart states that the original specifications and blueprints for these four structures are housed in the National Archives (Blueprints, Record Group 92). His research indicated that the four same structures were designed by the Office of the Chief Quartermaster and built by a local builder named Henry Spruck in 1889. The specifications called for "seasoned spruce timbers sheathed with hemlock boards; roofs to be clad with pine shingles; front piazzas and rear sheds to be covered with 'Gilbertson's Old Method' tinsplate; floors to be of yellow pine; newels, rails, and balustrades to be of black walnut; and mantels to be marbleized and have slate hearths." Dolkart also says that Neo-Grec panels were designed as ornament for some first and second floor windows, but since the shingles cover over the original clapboard siding and details, one cannot determine at this date if they were ever installed. A search for these records suggested that drawings may exist for only two of the structures. These drawings are currently on order from the National Archives and await further comment.

Several historic images of the four structures depict them similarly as they appear today, except for the extant asbestos siding. What seems to be the earliest image, based on size of vegetation, shows a picket fence next to the sidewalk along the length of the street (figure 6.121). Two postcard images show the street without the picket fencing but with a main gate at the New York Avenue end of the street (figure 6.122 and 6.123). Clearly these structures were originally built with open porches and hooded window lintels. They may have contained six-over-six sash that were obscured by eight-light storm windows, and in two of the images all visible window openings were outfitted with shutters. When all of these elements were altered or removed is unknown.

WPA drawings dating to 1936 show that the buildings were still clapboarded at that time. In fact, there was tin roofing over the front porch, which had been enclosed by this time, and shingle (wood?) roofing existed on the main and rear porch roofs.

Another set of 1930s drawings reflects dimensions of Building 114, but does not record or suggest any alterations.

According to one drawing, the cement-asbestos siding was installed on the four structures in 1950. It may have been at this time that the hooded window lintels and shutters were removed, however this is a conjectural conclusion. The fire escape ladders that are still obvious on the sides of the structures also were installed in the 1950s.

While the basic form of the structures remains the same as original construction, the porch enclosures, shutter removal, some chimney rebuilding, and asbestos siding application change the character of each structure. Some of that character still remains through the retention of the form (figure 6.124), main entrance molding details (figure 6.125), bracketed cornices and rakes, and corbeled chimneys (figure 6.126). The structures still retain their basic original use, that of duplex housing. Buildings 111 and 112 contain 8080 square feet, while buildings 113 and 114 contain 8179 square feet. The reason for the difference has not been discerned at this time.

(The architectural investigators gained interior access only to Buildings 111B, 112A, 113 A&B, and 114A.)

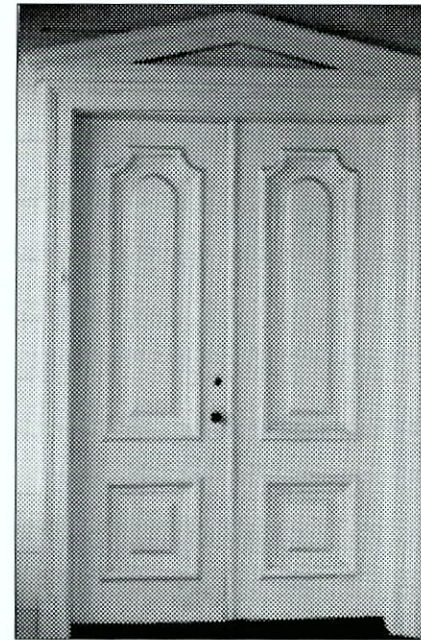
The interiors of the Buildings 111 and 112 are quite impressive. While not overly ornate, the pressed metal ceilings (figure 6.127), plaster medallions, molding profiles, mantels, tiled firebox surrounds (figure 6.128), and door hardware typify an era when quality materials with intricate detailing were used. Their combined use creates an aesthetically cohesive interior, even if too many layers of painted coatings obscure many of their details.

The interiors of Buildings 113 and 114 are different. No pressed metal ceilings, no plaster medallions, and no wooden mantels remain here. The "Victorian" door hardware has also been replaced in 113. The interior of Building 113 underwent a major renovation during the WPA building campaigns. At this time it was stripped of all of its "Victorian" elements and detailing, and updated to reflect the tastes of the 1930s.





**Figure 6.124** Building 114.  
By Cultural Resources  
Center, 1994.



**Figure 6.126** Building 111,  
front entrance. By Cultural  
Resources Center, 1994.

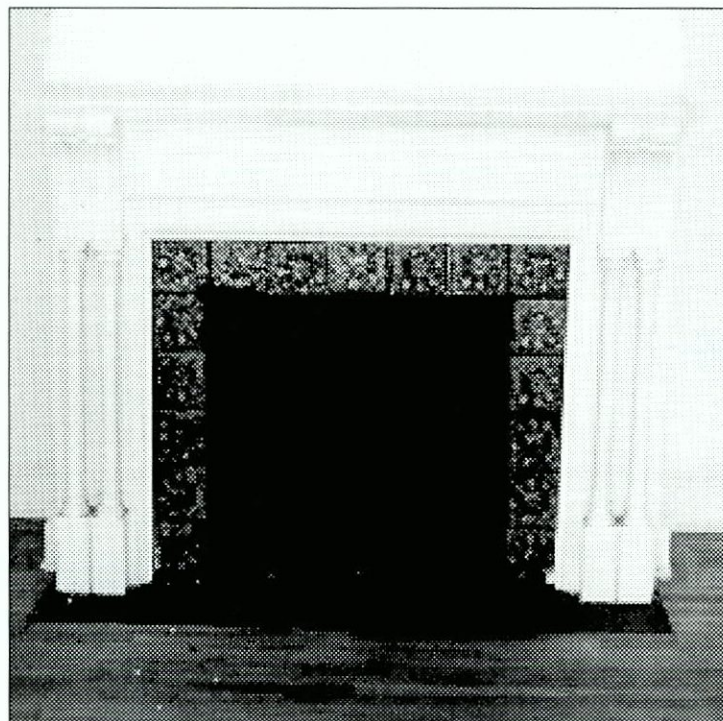


**Figure 6.125** Typical rakeboard  
and chimney, Buildings 111-114.  
By Cultural Resources Center,  
1994.

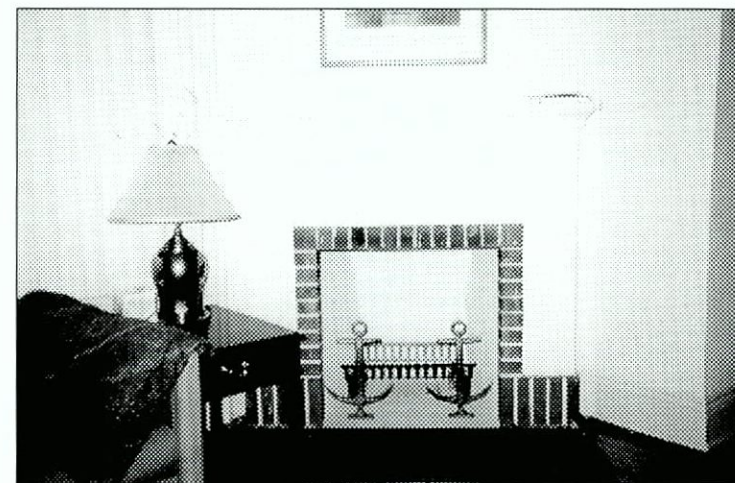




**Figure 6.127** building 111,  
pressed metal ceiling. By  
Cultural Resources Center,  
1994.



**Figure 6.128** Building 111,  
Dining Room mantel. By  
Cultural Resources Center,  
1994.



**Figure 6.129** Building 113,  
Parlor fireplace. By Cultural  
Resources Center, 1994.



Perhaps a directive to cut costs was issued during construction and after Buildings 111 and 112 were nearly completed: the trim around the window and door surrounds associated with the front porch and main entrance are more simple in Buildings 113 and 114, and the locations of the fireplaces are different. However, certain similarities remain, especially in 114. These include the staircase and associated banister, and molding profiles in 114. Clearly the mantels have been changed in both latter buildings, and certainly the brick ones found in 114 are blatantly 1930s alterations (figure 6.129). No specific drawings were found that record the fireplace changes in Building 114.

In the 1960s, a so-called modernization of the structures took place, including kitchen remodeling, electrical work, painting, removal of metal ceilings, installation of ceramic tile, and possibly window replacement. Another remodeling was proposed in the 1989, again including kitchen and bathroom updates, and new window installation. Not all of the proposed work may have been undertaken.

#### **Character-defining Features**

The two most prominent exterior character-defining features of Buildings 111 through 114 are 1). their repetition on the streetscape and 2). their individual and combined symmetry. Others include 3). the entrance porch doorways and windows (trim); 4). fenestration; 5). bracketed rakes; and 6). the original corbeled chimneys. While the 7). two-over-two window sash are non-original, they are a configuration of light arrangement that represents a sympathetic installation to the original construction period and style of the buildings, and are therefore included as a character-defining feature. The metal fire escapes are extremely prominent features, but if they were removed they would not detract from the character of the structure.

The interior features that are character-defining include 8). the plan of each half-house, typical of the period of construction and based on "Victorian" standards, with the more formal areas leading from the main entrance to the more informal areas leading to

the rear of the house and third floor (hierarchy of space). The remaining features vary from house to house, depending on the extent of renovations. For Buildings 111B and 112A interior character-defining features include 9). the molding profiles including the over-mantel chamfers and lamb's tongues; 10). the mantels; 11). the tiled firebox surrounds; 12). the pressed-metal ceilings; 13). the plaster ceiling medallions; 14). the interior doors; 15). door hardware (knobs, locks, latches, and hinges) and 16). the staircases.

While some alteration has occurred in Building 114A, some of the original detailing and elements remain and are the same as in 111 and 112. Therefore, its interior character-defining features include 9). the molding profiles; 14). the interior doors; 15). door hardware, and 16). the staircases. While they are of a different style and design than their counterparts in Buildings 111 and 112, 17). the mantels are also character-defining.

The interior of Building 113 is completely different than the others, except for the 16). staircases, which should be included as character-defining features. Others include 17). the mantels; 18). the interior doors and their resin finish; 19). the door hardware; and 20). the combination of the plain moldings with the doors (this represents an aesthetically cohesive design detail).

#### **Condition Assessment**

##### *Site*

Though only the residences on the south side of Mont Sec Avenue have been chosen for the General Condition Survey, both sides of the avenue contribute to the integrity of the complex and should be evaluated as a whole when considering the site integrity.

There exists a unity of massing, scale, and rhythm among the north and south residences even though the dates and styles vary between sides. Set backs have been uniformly maintained and vegetation, consisting of grass, deciduous trees, and bushes, further unites the row.

An investigation of specific site features has identified a number of minor maintenance issues, such as painting of the pipe railings, light standards, and picket fences, which can easily be corrected.

Large poured-concrete slabs at back entrances detract from the original site design. In addition, the concrete slabs are set too high in relationship to the back steps creating a safety concern.

#### *Building Envelope*

The four residence duplexes under study have retained their original core massing and porches with no major additions made. Except for some in-fill of foundation windows, all other original door and window fenestration has remained, though the actual units have been replaced.

#### *Facades*

The brick foundations and frame facades are in good condition and show no signs of structural failure in the form of cracking, shifting or bulging. A major aesthetic alteration concerns the application of composite shingles over the original wood clapboards and the subsequent removal of decorative window hoods and window surround trim. Aesthetics aside, the composition siding, which was installed in 1950, is showing signs of failure. This siding contains asbestos and will have to be dealt with as a hazardous material. Corner locations and bottom courses are cracking and breaking or dislodging and falling to the ground. An investigation under the sheathing system revealed insect infestation. Isolated areas of green biological staining are also present on the siding. All siding has been painted white and its paint is beginning to blister and peel.

The original multi-pane, wood-frame storm windows have been replaced with metal storm windows or jalousie units. Porches were enclosed with the wood-frame fixed windows originally used as storm windows on the main core.

Frame cellar doors have been replaced with steel units of the same size and do not detract from the original in mass or operation. Back doors have been replaced and also have additional aluminum

storm doors. Front doors, inside the enclosed porch, are original wood doors with carved ornament and appear in good condition.

#### *Roofs*

Black asphalt shingles sheath all of the four roofs on the south side of Mont Sec Avenue. Though they differ in appearance from the original wood shingles, the current roofs are in good condition and show no signs of immediate replacement.

Frame soffits, raking eaves and paired brackets exhibit early stages of wood rot; some areas have completely eroded. General paint failure is also evident throughout all of the wood trim. Contributing to the wood rot problem is the faulty drainage system consisting of non-original, stock aluminum gutters, elbows and downspouts.

Brick chimneys exhibit many signs of remedial repair in the form of external bracing, patching, and repointing. Bowing is also a major problem as is extensive mortar loss, and shifting of bricks.

#### *Interiors*

Interiors retain a good degree of original space planning with some alteration of kitchen and back stair areas. Decorative woodwork and floor/wall/ceiling finishes have undergone more alterations. Buildings #113 and #114 exhibit replacement of wood trim, doors and hardware, and fireplace surrounds, some of which was undertaken in the 1930s. During this same period, main story floor joists, in buildings #113 and #114, were filled with loose asbestos and board sheathing as a fire retardant. New wood floors were laid on existing floors throughout. Buildings #111 and #112 exhibit more of their original late-nineteenth century interior decorative features than buildings #113 and #114.



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## Condition Assessment Inventory and Recommendations

### *Site*

1. Problem: Improper grading and setting of concrete pads at back porches. Concrete steps at front entrances in need of repair.  
  
Solution: Remove back slabs and replace with a more historically-appropriate design. Repair front stairs or replace as necessary.
2. Problem: Chain-link fence along the alley road is in need of repair and painting.  
  
Solution: Fix damaged areas; prime and repaint with rust-inhibitive paint.
3. Problem: Pipe stair rails and fire escape chutes are exhibiting general paint failure.  
  
Solution: Conduct paint analysis to determine history of paint finish. Scrape, prime and repaint using a rust-inhibitive paint following analysis recommendations.

### *Facades*

1. Problem: Asbestos-cement siding, not original to the buildings, is showing signs of performance failure as evidenced by cracking, dislodging, and falling of shingles; peeling paint finish; isolated areas of green biological growth; evidence of mildew; and insect infestation.  
  
Solution: Remove entire asbestos-cement siding and dispose of as solid waste; asbestos is not air-borne and does not pose a threat. Repair and repaint original clapboards according to paint analysis recommendations.
2. Problem: Alterations and modifications made to the windows when composite asbestos-cement shingles were applied. Such alterations may be the trimming of window

sills, removal of ornament, and removal of window and door hoods.

Solution: Upon removal of composite siding, restore altered frames, sills, and hoods.

3. Problem: Removal of original storm windows and back doors and replacement with aluminum and Jalousie units. Note: some of the original storms were used to enclose the front porches.

Solution: Conduct an energy audit of the existing storms and doors to determine their efficiency. If necessary, replace with historically compatible units. Enclosure of front porches was done at an early date and should remain as such.

4. Problem: Seemingly haphazard arrangement of power lines, conduit and utility meters around and mounted to facades.

Solution: Conduct survey to determine which lines are active or not. Relocate meters and connection points in less conspicuous places. Trim bush and tree limbs to reduce the risk of hazard.

5. Problem: Rotting of wood door and window frames, porch posts, and decking.

Solution: Conduct a detailed inspection of all wood components and replace sections or chemically treat rotted areas as required.

### *Roofs*

1. Problem: Brick chimneys exhibit frost heaving, bowing and cracking. Previous mechanical repairs, i.e. metal straps, are rusting and contribute to the general poor condition of the chimney.

Solution: Rebuild chimneys, as required, in order to restore original integrity of appearance and performance.



2. Problem: Evidence of wood rot in eaves, brackets and raking cornice. General paint failure.

Solution: Replace missing or rotted sections with pieces that match the existing profile. Conduct a paint analysis to determine finishes and repaint accordingly.

3. Problem: Original box gutter covered and substituted with existing stock metal system. New system is stylistically inappropriate and has failed in shedding water from the building.

Solution: Remove existing drainage system and replace with more durable system. Relocate downspouts for maximum performance.



**Figure 6.130** General view of Officers' Row on Mont Sec avenue.

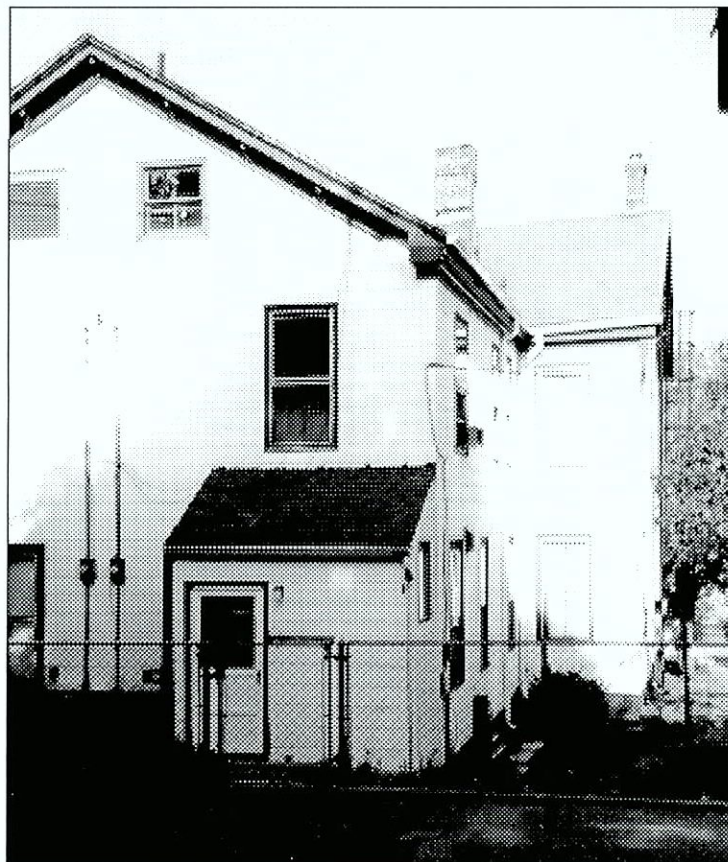
**Figure 6.131** typical Officers' duplex. Note enclosure of porch with storm windows intended for the main core.







**Figure 6.132** Typical rear facade of duplex. Note numerous electrical wires, window AC units, and inconsistency in window storm units.



**Figure 6.133** Rear facade of duplex. Jalousie retrofitting of upper left attic window next to unaltered window unit. Replacement of all multi-paned storms (and possibly seasonal screens) with fixed metal storm units.

**Figure 6.134** Detail of typical door at porch. Failed paint finish and deteriorating wood trim. Breakage of composite shingle is typical throughout duplex units. Note: newer aluminum porch doors alter original integrity.

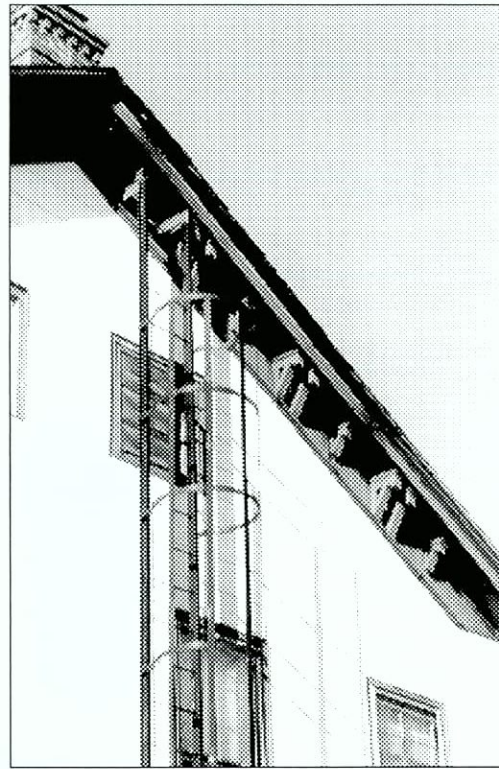




**Figure 6.136** Detail of wood roof trim showing missing area of molding on the raking eave exposing the roof to water infiltration and vermin. Note strap-metal fire escape; one located at each duplex.



**Figure 6.135** Detail of siding where asbestos cement composite shingles have fallen thus exposing furring strips and original clapboards. Note evidence of insect infestation and plant growth.



**Figure 6.137** Poor repair of typical chimney resulting in poor repointing, patching, and structural bracing with corrosive metal angles. Inappropriate and inefficient placement of down spouts.



## Infantry Battalion Barracks (Building 210)

### Description and Development

Building 210 was constructed ca. 1929, is approximately 400 feet long by 40 feet deep, and contains 95,364 gross square feet. A set of utility drawings dating to 1927 and labeled for “Infantry Battalion Barracks, Building 210” are actually for the extant building’s companion structure that was erected adjacent to it to its south along New York Avenue. This latter building was probably demolished when the Verrazano Narrows Bridge was constructed. The current Building 210 and its companion structure were both erected as three story brick barracks, with four main entrances and simple Art Deco detailing along the facade (figure 6.138). Open porches were tucked in the rear elevations, at least at the first floor level, between the two end U-shaped spans of building ells. These porches were enclosed, increasing barracks’ capacity in 1940 (completed in January 1941).

**Figure 6.138** building 210, facade. By Cultural Resources Center, 1994.



A master plan for development, dating to 1960, records Building 210 as the EM (Enlisted Men’s) Barracks, housing 735 men. A map revised to 1962 showing the Verrazano Narrows Bridge lists several functions in Building 210, including Civilian Personnel (Section D), Comptroller, Fixed Plant Fac. 1st USA SSSU1267th (Section D), Library (Section A), Medical Administration

(Section D), Military Police Desk (Section A), Publications (Section D), Post Office (Section A), and Post S-4 (Section D). The exact date of conversion from barracks to offices is unknown, however ca. 1961 appears to be an intelligent estimate.

Drawings were prepared in 1962 for alterations to Building 210, and the as-built notes are dated July 24, 1963. The alterations at this time seem to include only some *partition* changes, the installation of new doors, new toilets, new electrical and lighting work, and a new air conditioning system. Window sash were not replaced at this time. The porches had been enclosed prior to 1962 or 1963, but again, the date of that alteration is unknown. The physical evidence for the porch enclosures is evident, discerned from the obvious changes in brick and use of vinyl siding on the rear elevation (figure 6.139).

A 1974 drawing chronicles the relocation of signs for the U.S. Army Chaplain Center & School to Building 210. Whether the whole building was used for this purpose at this time is not known, nor is the date the school relocated to another location.

### Character-defining Features

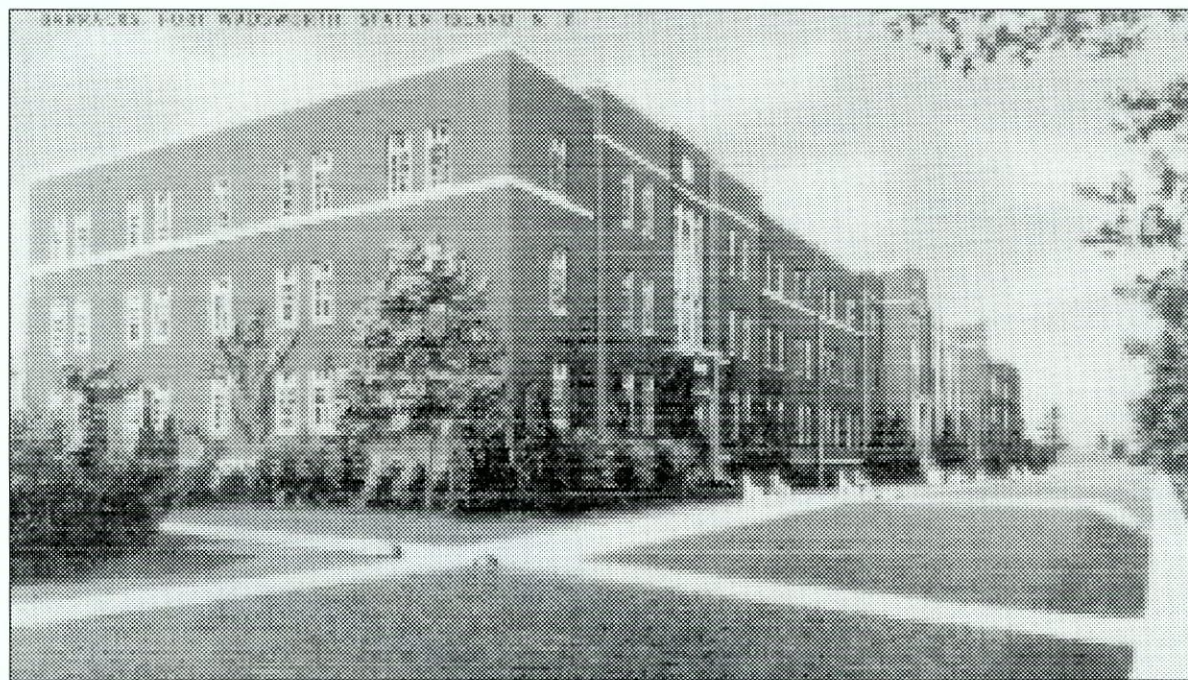
The exterior character-defining features include 1). the building materials used in the building envelope, i.e. brick and concrete, which are especially cohesive on the east facade and north and south elevations [Note: The building parapet has been rebuilt in several places using slightly different brick and certainly different mortar joints. This obvious wrong use of materials (see figure 6.138) distracts from an important character-defining feature]; 2). the repetitive sections of the facade with slight indentations and projections along the plane of the front elevation (figure 6.140); 3). the fenestration and solid to void ratio (see figure 6.139 [Note: If one compares original windows (figure 6.141) to the replacement windows, one can see that the same solid to void ratio is maintained, but the character of the building has been changed]; and 4). the overall plan of the structure, with special emphasis on its length. These features are significant.



**Figure 6.139** Building 210, rear addition. By Cultural Resources Center, 1994.



**Figure 6.140** Building 210, facade, looking north. By Cultural Resources Center, 1994.



**Figure 6.141** Postcard, Building 210, between 1929 and ca. 1961. By Cultural Resources Center, 1994.



The interior character-defining features include 1). the progressions of continuous spaces on every floor from north to south with no clear hierarchy in the plan; and 2). a uniform paint scheme throughout the building. The first-mentioned feature has a negative impact on the interior as a working environment, while the second rates as character-defining only in the sense that it is a constant.

### **Condition Assessment**

#### *Exterior*

Building 210 is constructed of concrete masonry units with brick veneer. It is three stories in height with full basement. The footprint is rectangular with wings, perpendicular to the core, extending off the west facade.

At first glance, the exterior gives the appearance of being in good condition, but this is not the case. The brick parapet has undergone numerous remedial repair campaigns but continues to exhibit serious deterioration. At the time of this field inspection, parapet rebuilding was, once again, being conducted. Detailed inspection of this recent parapet work has revealed inadequate allowances for contraction and expansion in the form of expansion joints.

Aesthetically, the new brick work is noticeably different in color from the existing.

The south parapet has been patched with bituminous mastic concealing severe deterioration and crumbling condition of the underlying brickwork. Copingstone caps have been improperly sealed with bituminous mastic.

Another serious exterior problem is the rust jacking of all steel window and door lintels. As the ferrous metal corrodes (due to paint failure and exposure of steel to water and oxygen) the rusting lintel expands in size and exerts pressure on the adjacent brick masonry and mortar joints. As a result, joint cracking and spalling of bricks are occurring throughout the structure. Lintel corrosion is advanced enough to require total replacement at all openings.

Numerous aesthetic changes have been made which have resulted in the reduction of original integrity. Basement windows have all been permanently sealed with cement. Improper retrofitting of smaller window units into original size openings also detracts from the original appearance of the building. The west three-story porches have been filled with brick, clapboard siding and windows. Mechanical equipment appears randomly scattered around the perimeter of the building.

#### *Interior*

Recent interior alterations and conversion into offices have obliterated the original space planning and finishes of the barracks building. Even though the existing finishes lack historic integrity, they appear to be in good general condition.

A future concern involves ADA requirements and, specifically, the introduction of handicap access into the building.

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### **Condition Assessment Inventory and Recommendations**

1. Problem: Corroding of steel lintels (rust jacking) leading to the expansion of lintels and subsequent cracking, fracturing and weakening of the wall system.  
  
Solution: Corrosion of lintels is advanced enough to require total replacement of all lintels and subsequent repair to damaged brick and mortar joints.
2. Problem: In-filling of all basement story windows denies interior of natural light and ventilation and alters the original exterior character of 210.  
  
Solution: Restoration of the basement fenestration is recommended in order to restore natural light and ventilation into the interior and should only be undertaken if it enhances adaptive re-use for this area.
3. Problem: Energy efficiency of non-original windows and doors must be determined. Retrofitting of windows and doors has compromised original integrity.

Solution: Conduct an energy audit in order to determine efficiency of windows and doors. If replacement is recommended, restore altered fenestration to their original sizes and replace windows and doors with historically-appropriate units.

4. Problem: Improper, and potentially dangerous, placement of utility systems around the building perimeter and west side.

Solution: Relocate utilities on the front (east) facade to the rear of the building. Air-conditioning unit above a west entrance door exhibits leaking onto the masonry and should be relocated.

5. Problem: Freight door on the west facade has improper drainage and currently allows water to run into the interior.

Solution: Regrade entrance ramp at entrance and incorporate new internal drainage at landing.

6. Problem: Original copper downspouts for overflow scuppers removed from the building. Hanger straps still remain in some locations. Drainage pipes filled with debris.

Solution: Since this drainage system has been replaced by an alternate system, remove hanger straps from the building and downspouts from around the perimeter of the building. Cap ground drainage pipes to prevent further infiltration of debris and water.

7. Problem: Mortar loss occurring randomly throughout the facades.

Solution: Rake and repoint with mortar that matches original in performance, installation, texture and color.

8. Problem: Areas of sloppy repointing occurring randomly throughout the facades.

Solution: Rake and repoint with mortar that matches original in performance, installation, texture and color.

9. Problem: Vertical cracking in masonry facades caused by lack of expansion joints. Newly created expansion joints should relieve pressure in the wall though cracks still need to be filled.

Solution: Fill cracks in order to protect the wall from water infiltration. Use mortar which is the same strength or weaker than existing masonry in order to prevent further destruction.

10. Problem: Lack of amicable access for the physically challenged. One wheelchair ramp exists on the rear of the building. Equal access should provide for a ramp on the front of the building.

Solution: Provide ramp access on the front (east) of the building. New ramp should be sensitive to the existing building.

#### *Roof*

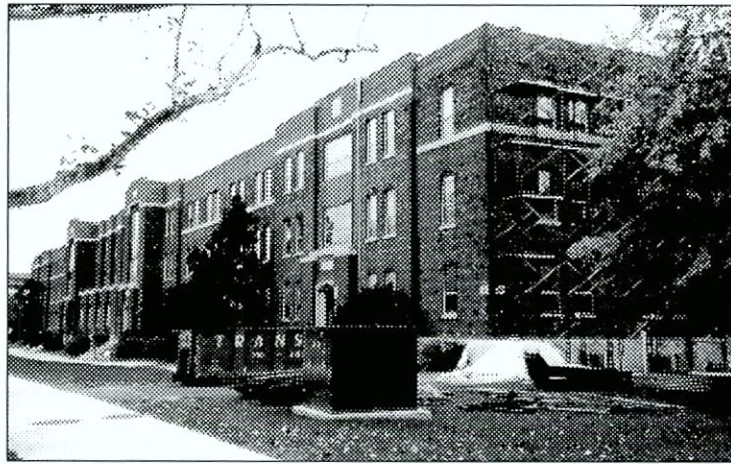
1. Problem: Evidence of repeated parapet failure and repair. Parapet is currently being rebuilt though brickwork differs in color from original brick.

Solution: Parapet is currently being rebuilt and should help to correct current poor conditions. New parapet brickwork is noticeably different in color from existing.

2. Problem: Poor repair of copingstone joints and interior of parapet wall with bitu-mastic. Interior wall brickwork is saturated with water and crumbling. Recently installed new copingstones are lifting at areas of expansion joints; this is caused by insufficient allowance for expansion and contraction.

Solution: Incorporate additional soft joints into the coping stone to provide for expansion and contraction. Faulty mortar work should be removed and corrected using proper materials and techniques.

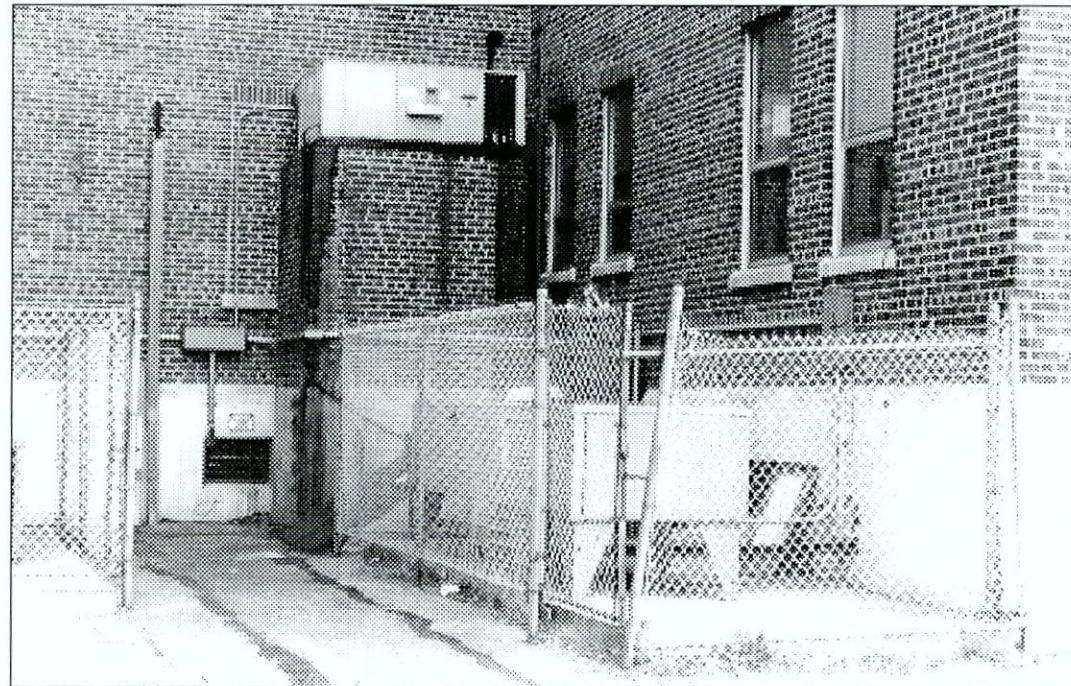




**Figure 6.142** General view of building 210 showing north and east (main) facades.

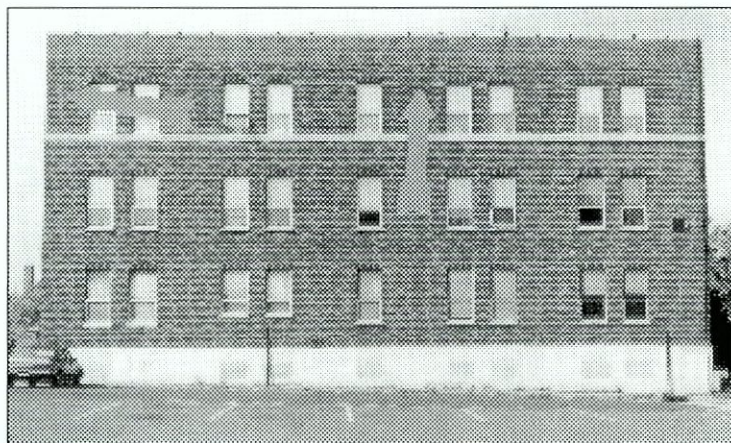


**Figure 6.143** West facade of Building 210 showing enclosure of three-story open porch.

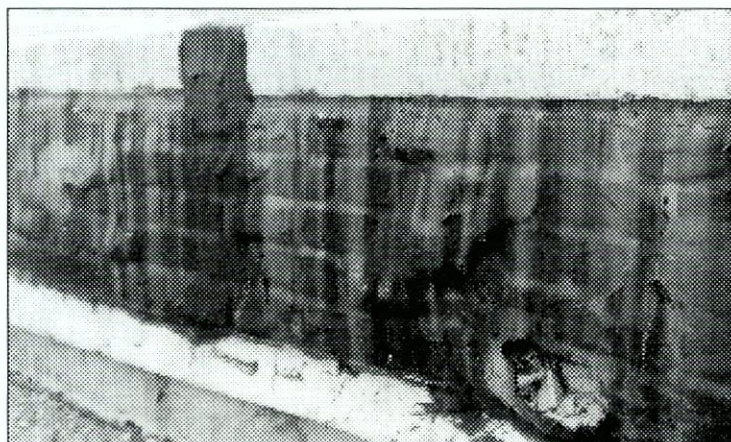


**Figure 6.144** Poor placement of mechanical systems. Note water damage to masonry caused by leading machinery.

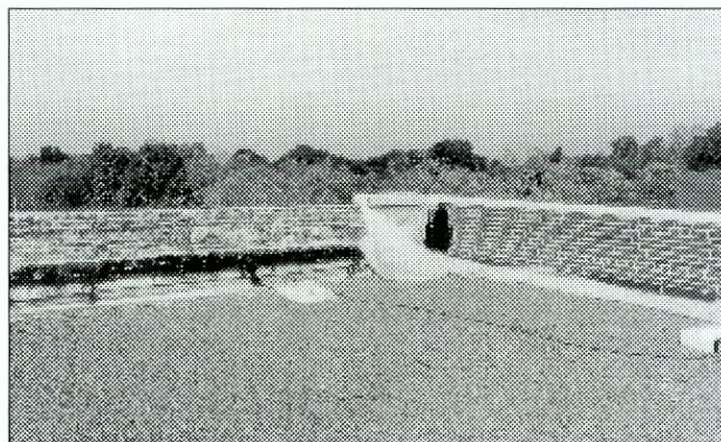




**Figure 6.145** South side of Building 210 showing difference in replacement brick at the parapet and the in-fill of basement windows. Arrows identify structural cracking and rust jacking of lintels.



**Figure 6.146** Detail at inside face of south parapet showing poor repair and continued failure. Brickwork is crumbling due to moisture saturation and freeze-thaw conditions.



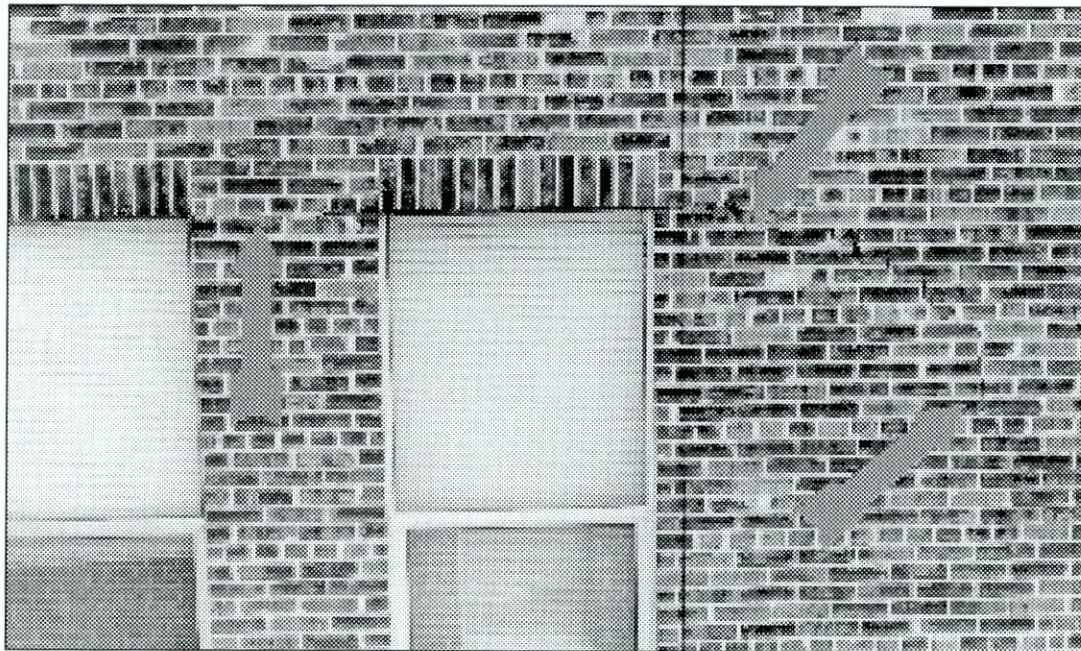
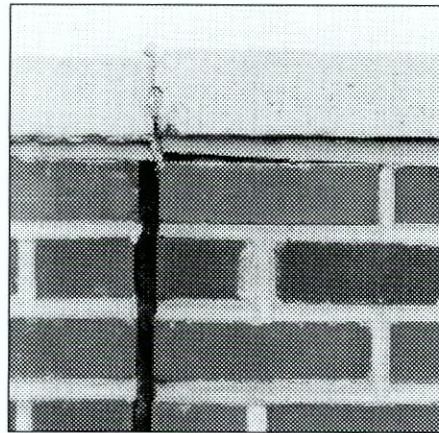
**Figure 6.147** Parapet detail at northeast corner showing 100% replacement of brickwork and copingstones.



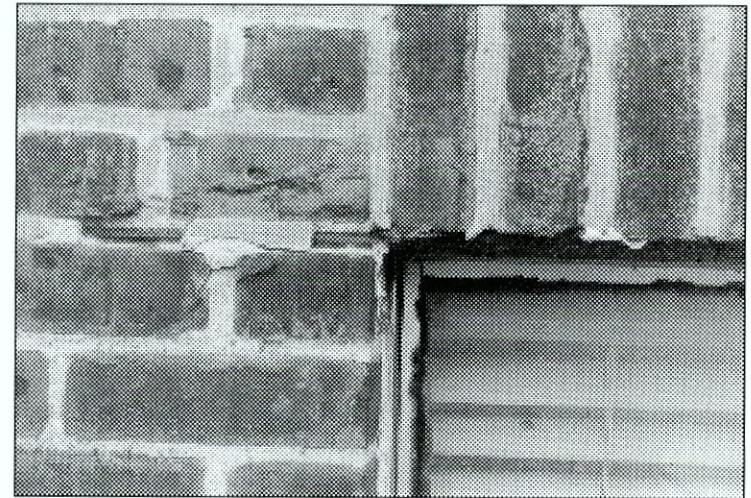
**Figure 6.148** Detail of southwest corner showing earlier rebuilt parapet with bitu-mastic repairs made to coping-stone joints. Arrows identify structural cracking (and subsequent filling).



**Figure 6.149** Failure of expansion joint in recently rebuilt east parapet. Note poor bond between mortar and coping stone as evidences by separation.



**Figure 6.150** Detail of north-east corner showing major cracking (arrow). Brickwork is beginning to spall.



**Figure 6.151** Detail of rusting lintel showing "rust jacking" damage to the surrounding brick and mortar.



## Police Station (Building 354)

### Description and Development

The building now labeled the police station is constructed of red brick in the shape of a box, with a large overhanging flat roof. Upon close examination, at least two different kinds of brick, segregated by building seams, are evident. This evidence suggests that alterations were made to the structure's exterior.

The Tidewater Oil Company produced a set of boilerplate drawings for construction of service stations in the 1950s. A set of these, supplemented by related drawings, exists in a microfiche collection of drawings related to Fort Wadsworth (however a few individual drawings are labeled Fort Hamilton). Based on physical evidence found in the exterior brick walls of Building 354, it is believed that this structure began its use as a service station, built in ca. 1958 from drawings issued by the Tidewater Oil Company.

A 1970 Reservation Map related to a master plan labels the corner where building 354 is located as "community facilities," along with Building 352 (Carriage House). (The Ammo Storage Building had not yet been constructed.) Whether the building was still used as a service station or had been converted to another use (i.e. Police Station) by this time is unknown. Both known uses could be classified as community facilities. Certainly by 1990 or 1992 its use had been converted to the "D.O.D. Police Station."

### Character-defining Features

Building 354 is not overly architecturally significant, however it does have one major character-defining feature: 1). its overhanging roof. A minor feature is 2). its shape and form, that of a brick box (figure 6.148).

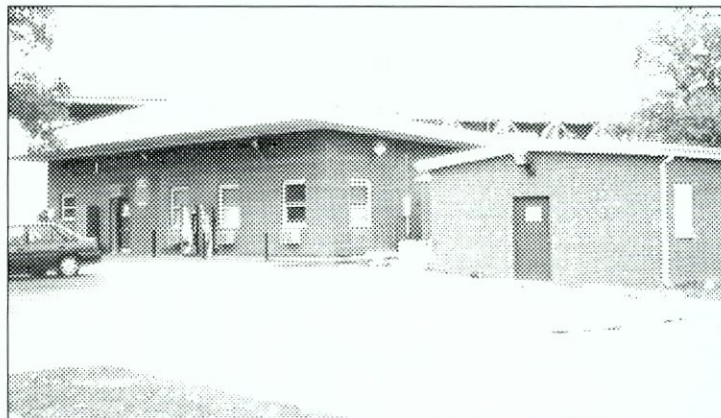
## Ammo Storage (Building 355)

### Description and Development

Building 355, once used to store ammunition, is another red brick box-like structure found within the confines of Fort Wadsworth. It has only one window and one door, a low-pitched gable roof, and occupies 1800 square feet (see figure 6.152).

The Ammo Storage Building does not appear on a 1970 reservation map of Fort Wadsworth. However it does appear on a site plan initially dated 1990 and updated in 1992. Its actual date of construction is unknown, other than between 1970 and 1990.

### Character-defining Features



**Figure 6.152** Fort Wadsworth, Police Station (left) and Ammo Storage Building (right). By Cultural Resources Center, 1994.



**Figure 6.153** North and west elevations of Police Building. Removal of plate glass and replacement with double-hung windows and brick in-fill during conversion from gas station.



Building 355 is not architecturally significant. Its one minor character-defining feature is its shape and form, that of a brick box.

### **Condition Assessment**

#### *Exterior and Interior*

The police complex is comprised of two brick buildings originally constructed and operated as a gas station. The former gas station office building had its large plate glass windows and garage doors in-filled with brick; smaller double-hung windows were installed in their place. The in-fill brick is an acceptable match in size and color to the original brickwork. Minor settlement cracking has occurred at the corners of the building.

The interior was extensively remodeled during the conversion from gas station to police station and exhibits new spatial arrangements and finish treatments.

The small ammunition building, to the south of the police station, is in good condition. Access to the interior was not permissible at the time of this survey.

Both buildings are in good physical condition, but a tank formerly used for gasoline or oil storage may be buried nearby.

### **Carriage House (Building 352)**

#### **Description and Development**

Building 352 fronts Richmond Avenue, just after the junction with New York Avenue as it descends down the hill to the batteries. It is a two-story building with a rectangular plan and gable roof. Three large dormers with bay windows pierce the roof on the east side. A fenced-in deck is also situated on the east side of the building. The front entry (a one-story gabled vestibule) is on the end of the building facing south. The building is currently known as the "Carriage House."

Facades are clad in red vinyl siding with red and dark brown trim. Multi-gray toned asphalt shingles cover the roof. Windows are

one-over-one aluminum sash.

Both first and second stories are almost completely open plans. A few small rooms function as toilets and offices. The building has a total of 13761 square feet.

Original material is visible in only a very few locations. Beneath the bottom course of siding a concrete and brick foundation is visible. At the top of the west wall, just under the eave where some of the siding has been removed, yellow-painted brick are visible.

The first indication of the presence of a building on this site is in a 1920 drawing. Situated in the same location of Building 352 is a proposal for a stable. The proposed building measures 20 by 80 feet; the current building measures about 40 by 70 feet. A "Record of Communications Received", dating to 1920, documents the proposal for the stable and a brief discussion concerning its location. It was described as a non-fireproof building. In 1930, reference was made to a "permanent stable (building No. 80) with a capacity of 12 animals", indicating that the 1920 proposed stable was constructed. The "Detailed Inventory of Naval Shore Facilities" gives a construction date of 1921.

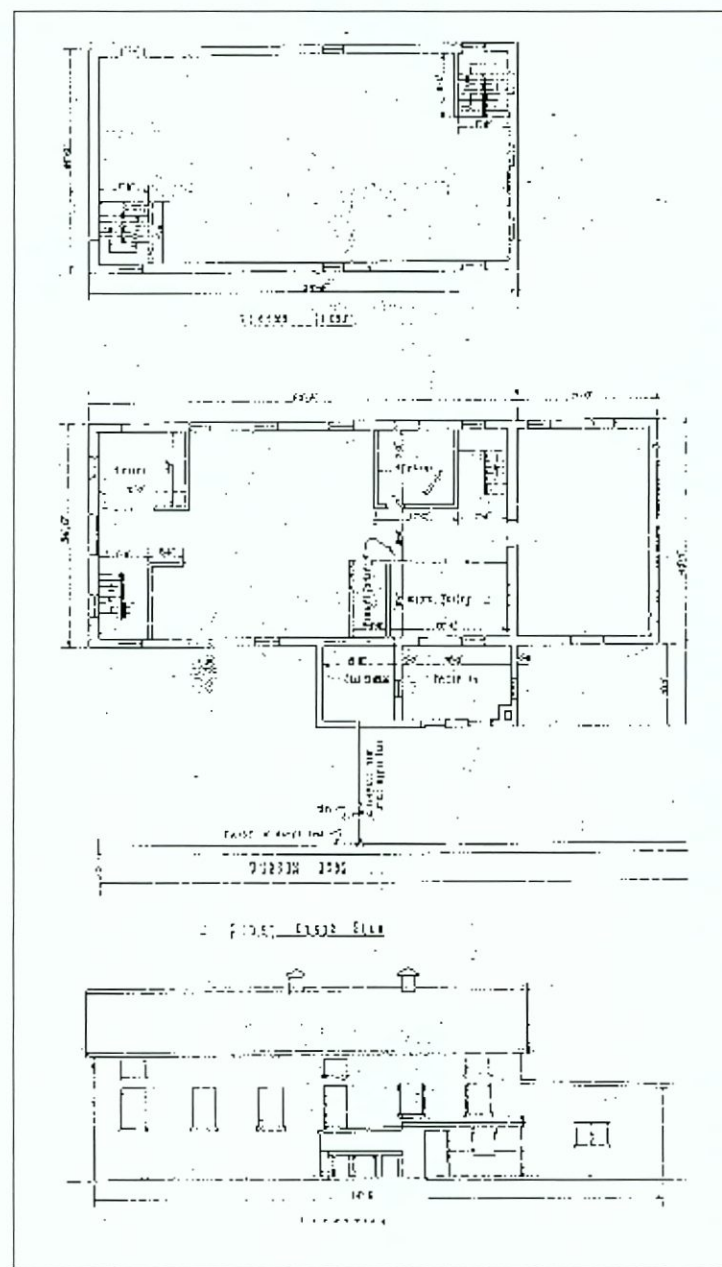
Although no documentation was found giving a construction date for the present building, it is not the same building as that constructed in 1921. The present building has different dimensions than the 1920 proposal, it is not a non-fireproof building, and the window openings are not those of a stable (one would expect smaller windows placed in a row farther up on the facade, spaced to the width of stalls).

Several drawings from the early 1960s depict the building before the last alterations were carried out. The building is designated as the "N.C.O. Club". A note in the 1st Lt. A.G. Gillespie's 1915 Guide to Coast Artillery Posts states that Fort Wadsworth had "no club or officers' mess". Most likely the building was constructed as a mess hall to fulfill the need cited by Gillespie, on the site of the 1921 stable, demolished when Building 309 (a stable) was constructed in the early 1930s.

A 1961 drawing provides an elevation of the east facade and first- and second-story floor plans (figure 6.154). The west elevation is depicted in a drawing from 1964. The first-floor plan and elevations show a one-story structure (of one room) with a shed roof constructed onto the north end of the building. A “Boiler Rm” and “Coal Storage” are built into the east wall at the north end. There are six first-story windows along each side (the two northern-most windows on the east side are smaller due to the structure beneath them), three small second-story windows on each side of the second story, three windows on the north end of the second story, two windows to either side of the front door, and three windows in the north room (one in the east wall and two in the west wall). The boiler room also has a window and door. The first-floor plan shows a central open space and two stairways, an office, storage room/kitchen, and restrooms in the corners. The room to the north, in the one-story portion, is not designated with a function. The second floor is completely open with the two stairways in the northwest and southeast corners.

A photograph printed in the Staten Island Advance in 1970 shows the south facade as a uniform light color (figure 6.155). Entry is through a central double door (there is no vestibule); it appears that the doors are embellished with four little windows placed in a row at the top. Two windows flank the door, surmounted by little aluminum awnings. A set of double windows with four-over-four sash, situated side-by-side, are directly above the door in the second story (not shown in the 1961 plan). Single windows, also with four-over-four sash, are situated to either side of the double window. Second-story windows are narrower than first-story windows. A square vent covered with louvers is situated directly at the peak of the gable. Above the door is an “NCO” sign and the caption to the picture describes the building as the “non-commissioned officers mess hall.”

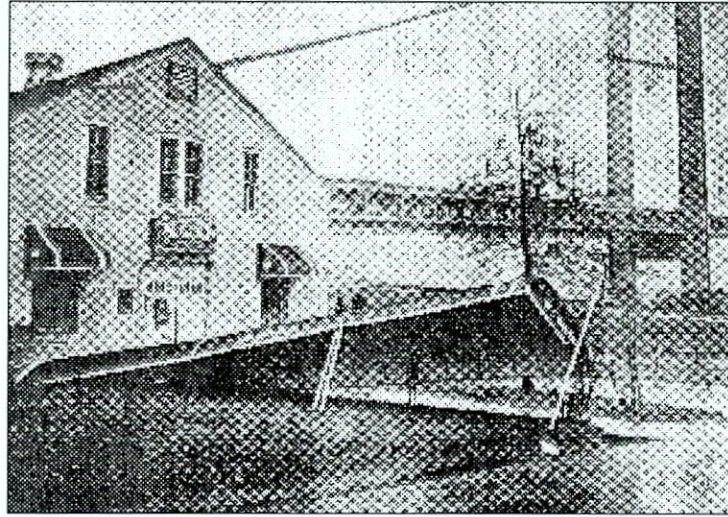
In the last five years, numerous changes have occurred to the architectural fabric and appearance. On the exterior, red vinyl siding has been used to cover all elevations and as well as some windows. The small vestibule was built in front of the south



**Figure 6.154** Plans and east elevation of building 352, 1961.1



**Figure 6.155** Newspaper clipping from the Staten Island Advance, 11 February 1970.



door. The roof was recovered with asphalt roofing shingles and three dormers added onto the east side (physical evidence for this addition is obvious). A frame deck was built onto the east side. Windows not covered up with siding were replaced with aluminum sash. Interior room arrangements and finishes were also altered. It is not known when the north structure was removed, nor if and when the east structure was removed (it may remain intact under the deck).

#### **Character-defining Features**

The primary character-defining features of Building 352 are its massing, exterior siding, and interior plan. The large rectangular box with shallow gabled roof and dormers define the massing. The red vinyl siding is equally as prominent as the massing, and almost totally encases and camouflages the brick structure beneath it. (The siding hides the original intention of the structure, creating a different character of structure, in this case with little historical integrity. While the siding is character-defining for the extant exterior of the building, its removal would not destroy the building's architectural character. Conversely, its intended architectural character would be uncovered and its newly exposed features would need to be reassessed for their character-defining w\quali-

ties.) The open floor plans of both the first and second stories are the character-defining features of the interior.

#### **Condition Assessment**

##### *Exterior*

Major alterations have occurred to the Building 352 during its conversion into a recreation center. The most severe alterations are the additions of three broad-gabled dormers (with a large bay window in each) on the east facade. Other recent appendages are the central-gable entrance wing on the main facade and the large frame deck on the east.

Sheathing materials have also drastically altered the historic appearance of this building. On all four sides vinyl siding conceals the original brickwork and second-story windows. Asphalt roofing shingles and a stock aluminum drainage system further detract from original appearance. All visible window and door units have been replaced.

The building appears to be in good physical condition despite its lack of original integrity. There are no imminent safety threats and the building appears to meet ADA requirements.

##### *Interior*

Like the exterior, the interior has also undergone extensive remodeling. Room configurations have been redesigned as have all interior finish treatments. Interior access appears to meet ADA requirements except for the lack of accessibility to the second floor via an elevator or chairlift.



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### Condition Assessment Inventory and Recommendations

1. Problem: Faulty installation of vinyl siding has resulted in areas with missing sections and areas which are loose.

Solution: Secure loose sections and install same type and color of siding to those areas currently void of sheathing.

#### *Interior*

1. Problem: Lack of equal access to the second level due to the absence of a lift or elevator.

Solution: The degree of ADA access will depend upon a re-



**Figure 6.157** East facade of Building 352 showing recent additions of the three dormers with bay windows and the addition of a large deck.



**Figure 6.156** General view of Building 352 showing south and west facades. Recent addition of central-entry wing and replacement of all window units, new vinyl siding and asphalt shingle roofing.



use plan chosen for the building.

## Warehouse (Building 306)

### Description and Development

Building 306 is located south of Richmond Avenue just to the east of the Seebee Complex and is commonly referred to as the "Warehouse," despite there having been several different uses since construction. The building has a rectangular plan and low gable roof with an overhang covering a concrete loading platform/porch on the north side. Walls are fabricated of concrete masonry units and painted a pale gray-blue color with teal blue trim. Three large fan-housing units protrude from the roof.

The interior consists of one large room with the roof's steel truss exposed and small rooms constructed of concrete masonry units with dropped acoustical tile ceilings. The large room is located in the west side of the building and the smaller rooms in the east

**Figure 6.158** General view of Building 306 showing west and south facades. Arrow identifies failure of the vinyl sheathing at the raking eave.



side. The building has a total of 13,134 square feet.

The Warehouse was constructed in 1960 by the Triborough Bridge and Tunnel Authority to replace a similar structure(s) demolished for the construction of the Verrazano Narrows Bridge. Plans for the building date to 1957. While there were probably some alterations made to the building during construction, the drawings will be considered to depict the original appearance.

The most pronounced differences between the original and present appearance of the building are the fan-housing units and covered porch. Neither of these features were part of the original building. On the interior, the original mostly-open plan had only three small rooms in the very western end.

In 1963, a proposal was made to relocate the commissary to the Warehouse. The proposal is presented in one floor plan of 1963 and a set of eleven drawings of the following year (including modifications to Buildings 301 and 308); construction probably followed shortly thereafter. The floor plan delineates the arrangement of shelving units, storage facilities, and room partitions. The later drawings are much more detailed and include alterations to the exterior, and electrical and mechanical systems.

The exterior alterations delineated in the plans are visible today, with little alteration since. The porch and overhanging roof on the north side were constructed. A compressor room was added onto the north side, built of concrete masonry units, and three large structures for fan housing were installed in the roof. Some windows and doors were altered.

In the early 1980s, the commissary was removed from the building and offices were installed. Numerous alterations were made to the interior. Modifications to doors and windows were the primary changes affecting the exterior. The Warehouse has been painted since these changes were made; painting either occurred soon after the last alterations or more recently, when facades of adjacent buildings were clad in vinyl siding. There may also have been more than one painting campaign in the last decade.

## Character-defining Features

The primary character-defining features of Building 306 are the massing, including the platform/porch with roof overhang, and construction materials. Construction materials contributing to the character include concrete masonry units painted pale gray blue, aluminum windows, roof vents, and roof truss on the interior.

## Condition Assessment

This warehouse building is in good condition and exhibits only minor wear and tear. Three north facade garage openings have been sensitively in-filled with concrete masonry units which match the original construction material. The roof, walls, and foundation exhibit no signs of failure. Maintenance issues involve the repainting of pipe handrails and the repair of vinyl siding on the west raking eave.

## Condition Assessment Inventory and Recommendation

1. Problem: General paint failure on pipe railing.  
Solution: Scrape, prime, and paint following paint manufacturer's recommendations.
2. Problem: Partial failure of vinyl siding at west eave rake.  
Solution: Repair with existing material or material of same type and color.

## SeeBee Complex (Buildings 301, 302, 303/304, 305, 309, and 310)

### Introduction

The SeeBee Complex is located on the south side of Richmond Avenue, north of Battery Barry. The complex of buildings (Buildings 301, 302, 303/304, 305, 309, and 310) provided a support function for Fort Wadsworth, serving as garages, motor pools, a motor dispatch, storage facilities, a stable, and associated offices. It appears to have been built as a planned complex.

A 1963 history of Fort Wadsworth describes the 1920s and 1930s as two decades of construction: "Fort Wadsworth assumed a new look between the wars." Construction crews from both the Works Progress Administration (WPA) and the Civilian Conservation Corps (CCC) worked alongside Army Engineers in creating new buildings.

A 1936 map of Fort Wadsworth shows part of the Seebee Complex extant (figure 6.159): Buildings 302, 305, 309 and 310

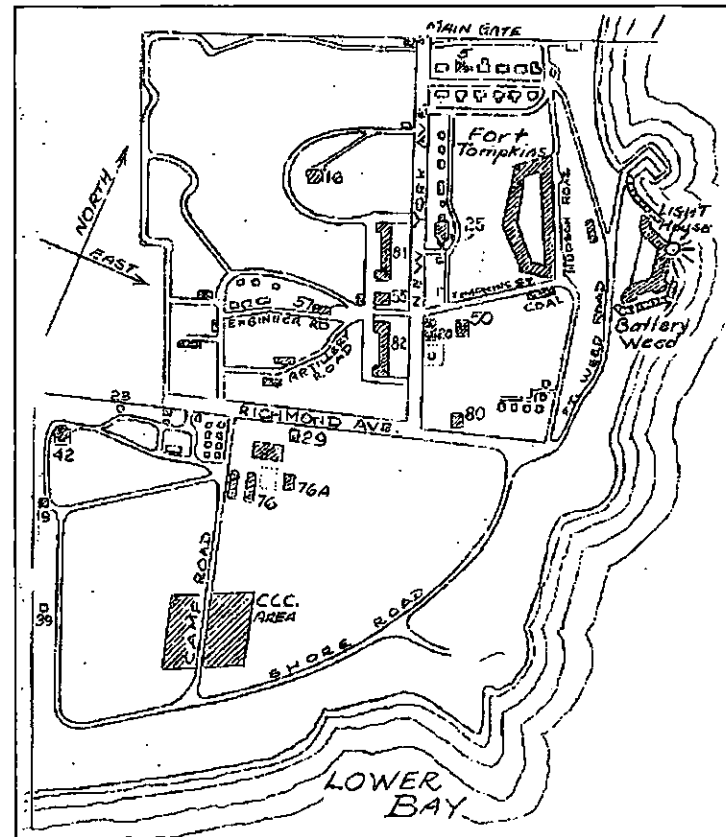


Figure 6.159 Map of Fort Wadsworth, 1936.

had been built by this date. The motor pool parking lot is also delineated. Building 301

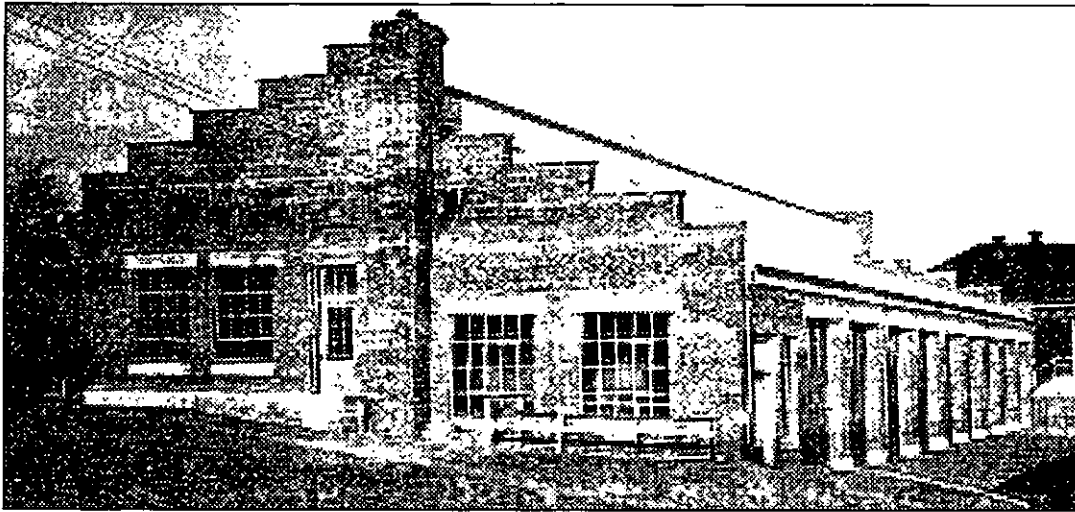


## 6.14a Building 301

### Description and Development

**Figure 6.160** building 301 and Building 305 in the background, 1938.

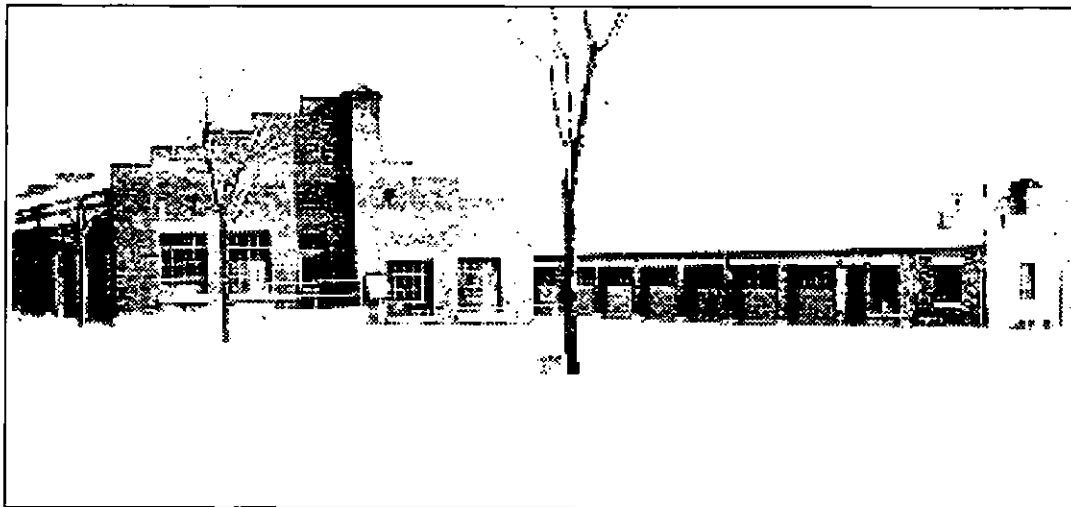
Building 301 is a large garage/office building fronting Richmond Avenue. It has a rectangular plan and double shed roof with the



northern half higher than the southern half. Facades are clad with light beige vinyl siding. Doors and trim are dark brown. The fenestration of the north side consists of paired windows and that of the south side of regular doors and large garage doors. Roofing is of corrugated metal. The interior plan has room-divisions along the north side, a center corridor (running east-west), and garage spaces along the south side. The building has a total of 6395 square feet.

Building 301 was constructed in 1938 as a garage. Drawings from 1936 depict the building as it was planned and photographs show the "Garage" as it appeared in 1938 (figure 6.60 and 6.161).

The building is constructed with two levels, the north half is about five feet higher than the south half. A wall separates the two halves. The plan of the building shows an almost completely open interior with the steel truss system of the roof exposed. The length of the building is divided into ten equal bays on both sides, defined by brick piers and garage doors. A concrete-block wall partitions off the two western-most bays on the south side. This space is finished with a plaster ceiling and defined on the exterior by a door and windows. A plan from 1950 designates this room "office" and "shop." Beneath the western-most bay of the south



**Figure 6.161** Buildings 301 and 302, 1938.

side is a boiler room, accessed by a set of stairs leading down from the exterior of the building.

Elevations, sections, and the photographs show the brick end walls finish as stepped gables, following the diagonals of the shed roofs. The coping on the steps is shown as terra cotta. An exterior chimney is depicted as situated at the junction of the two roofs on the west side. Windows pierce the vertical portion between the top edges of the two shed roofs. Four large windows are situated in each end elevation. Doors, with transoms, are also situated in each end elevation.

The building is constructed of brick with reinforced concrete lintels. Garage doors are described as "steel canopy doors." Window sash and frames in the vertical section between the two shed roofs are of wood. Window sash and frames in the end walls and western-most bays of the south side are probably steel; windows are configured with a pivotal sash in the center. Floors are of concrete.

Numerous alterations have been made to the building since its construction date. A drawing from 1964 shows a "new storage area" in the north side of the building, created when the commissary was relocated to Building 306. A drawing from 1967 depicts the north elevation with seven of the ten openings closed (the first bay on the east and the last two bays on the west remain open). A detail shows the enclosures made with concrete blocks.

A major alteration was made to the interior when the north side of the building was divided into rooms (offices) and a corridor. This may have taken place simultaneously with the in-filling of the garage doors on this side, although the drawing from 1967 depicts the complete enclosure of the openings and not partial enclosure for doors and windows. Either the alterations of 1967 were never carried out or else the enclosures were opened up again later, when the interior was reconfigured into the present plan. Garage doors on the south side have also been altered.

Within the last five years, all elevations were covered with beige-colored vinyl siding. Brown vinyl trim was used to articulate

edges. The siding does not follow the outline of the stepped gables but rather covers them over, creating simple diagonal lines at the top of the east and west ends. Windows in the clerestory between the top edges of the two shed roofs were covered over, as were other windows and garage doors. Perhaps other alterations were carried out at this time as well.

### **Character-defining Features**

The primary character-defining features of the exterior of Building 301 are the massing and elevation materials. The long rectangular box with a double-shed roof and the beige-colored vinyl siding are the most prominent features. (The siding hides the original intention of the structure, creating a different character of structure, in this case with little historical integrity. While the siding is character-defining for the extant exterior of the building, its removal would not destroy the building's architectural character. Conversely, its intended architectural character would be uncovered and its newly exposed features would need to be reassessed for their character-defining qualities. On the interior, the plan of the building, with the room-divisions, center corridor, and garage spaces, is the prominent feature.

## **Building 302**

### **Description and Development**

Building 302 is a large garage building situated behind and parallel to Building 301. It has a rectangular plan of roughly the same size as its neighbor, with a total of 7221 square feet. The center bay pops up above the roof and has extra-large garage doors on either side. Elevations are clad with light beige vinyl siding. Doors and trim are dark brown. Large garage doors are situated along both sides of the building. Roofing is of corrugated metal. The interior plan is comprised primarily of large spaces open to the roof with steel trusses visible. Steel sash are present in some windows visible from the interior but covered over on the exterior.

The 1936 map of Fort Wadsworth shows Building 302 extant and



the "Detailed Inventory of Naval Shore Facilities" gives a construction date of 1937. Perhaps construction commenced in 1936 and finished in 1937. Two WPA drawings (the photocopies have no dates) depict the building as it originally appeared. The western end and part of the north side are visible in a 1938 photograph (see figure 6.161). This building is shown as similar to the adjacent Building 301 with its brick exterior, stepped gable ends, and large garage doors on north and south elevations.

Elevation materials consist of brick and "cement blocks" on the west elevation and extension. The drawings do not depict the east elevation. An exterior "cement block" chimney is situated in the center of the west end. The coping of the stepped end walls is of terra cotta. The roof is of "cor. asbestos" (corrugated?).

Early plans show the interior of Building 302 completely open, spanned by a large truss supporting a gable roof. The building is divided into eleven equal bays, each with a garage-door opening (and steel canopy door). The western-most bay on the north side (the "office" location) and the end walls are pierced with doors and windows, the latter are of steel with a pivotal sash in the center. A small extension of one room ("sleeping quarters") is positioned on the north side of the west end.

Several alterations have been made to Building 302. At some point, the center bay was enlarged by raising the roof; the garage doors were also enlarged. Partitions now divide the interior space.

At the same time that Building 301 was covered with vinyl siding, Building 302 was clad as well. Vinyl siding covers all elevations and some windows and garage doors also. Windows not covered over were replaced with aluminum sash.

#### **Character-defining Features**

The primary character-defining features of the exterior of Building 302 are the massing and siding materials. The long rectangular box with raised center bay and the beige-colored vinyl siding are the most prominent features. (The siding hides the

original intention of the structure, creating a different character of structure, in this case with little historical integrity. While the siding is character-defining for the extant exterior of the building, its removal would not destroy the building's architectural character. Conversely, its intended architectural character would be uncovered and its newly exposed features would need to be reassessed for their character-defining qualities.) On the interior, the garage space is the prominent feature.

### **Building 303/304**

#### **Description and Development**

The Motor Pool Dispatch consists of a small brick building with a porte cochere in front. A hip roof covers the entire structure, intersected by a gable roof covering the porte cochere; roofing is of multi-toned gray asphalt shingles. The end of the roof over the porte cochere is supported by four brick piers and within the rectangle defined by the piers is a concrete pad. A small brick structure extends out from the back of the building. The "Detailed Inventory of Naval Shore Facilities" does not provide square footage for this building.

The 1960 general site plan for Fort Wadsworth gives two numbers for this building: Building 303 is labeled as the "Motor Pool Dispatch" and Building 304 as "Storage-Flammable." The latter refers to the small addition on the back.

The building is not shown on the 1936 plan of the site but must have been built shortly thereafter, since it was a necessary accessory to the motor pool. The "Detailed Inventory of Naval Shore Facilities" gives a construction date of 1938.

A photograph from 1938 shows only a concrete pad and single gas pump in the location of the present Motor Pool Dispatch. The building was probably built soon after the photograph was made. The concrete pad of 1938 may be the same as that extant today. A patch on the pad indicates the former location of the pump.

Alterations to the building envelope include the replacement of

windows, roofing, roof trim, and siding within the gable. Some of these alterations may have occurred within the last five years, when other alterations were made on the site.

#### **Character-defining Features**

The primary character-defining features of Building 303/304 are the hip roof and its intersecting gable, the porte cochere, and the brickwork of the elevations and piers.

### **Building 305**

#### **Description and Development**

Building 305 is situated on the south side of Richmond Avenue between Buildings 301 and 306. It is a one-story rectangular-plan structure with a low hipped roof. A porch (with garage underneath) wraps partially around the east and fully around the south sides. The building is covered with light blue vinyl siding with white trim and the roof is covered with multi-toned gray asphalt shingles.

The interior space of the building is divided into rooms. The ceiling is now covered with an acoustical tile system; when one of the tiles was lifted, a sloping ceiling, following the planes of the roof, was visible. Walls are covered with wood paneling. There is a total of 3177 square feet.

The ashlar granite foundation is the only original material visible on the exterior. On the interior, one can easily see the granite foundation with brick walls above and the first floor framing. Other visible material that may be original includes two doors, one door frame and transom, and bathroom floor tile.

Building 305 was probably built in the early part of this century; it does not appear in the 1889 plan of the site. The "Detailed Inventory of Naval Shore Facilities" gives a construction date of 1900. A 1926 plan shows a building with a rectangular footprint in this location, suggesting that the porch and garage were later additions. Stylistically, the porch/garage configuration and the square piers are of a date a few decades later than 1900. A 1938

photograph shows a small portion of the building; it appears to be constructed of brick and a door is situated on the west side (see figure 6.160).

The building envelope was altered in the last five years, probably at the same time that Buildings 301 and 302 were altered. Vinyl siding now covers all elevations (excluding the foundation) and the inside brick wall of the porch has been painted a matching light blue. Window openings were reduced in size and sash replaced with one-over-one aluminum sash. Window trim, door trim, and the underside of the porch roof were covered with white vinyl. The roof was covered with asphalt shingles.

Interior alterations may have occurred simultaneously with the exterior alterations, or may have been carried out earlier or in several remodeling campaigns. The ceiling is hidden by a suspended acoustical tile system. Room arrangements may have been altered. All wall finishes were altered.

#### **Character-defining Features**

The primary character-defining features include the box-like massing, low hipped roof, and light blue vinyl siding. (The siding hides the original intention of the structure, creating a different character of structure, in this case with little historical integrity. While the siding is character-defining for the extant exterior of the building, its removal would not destroy the building's architectural character. Conversely, its intended architectural character would be uncovered and its newly exposed features would need to be reassessed for their character-defining qualities.) The covered porch with the square columns is also a character-defining feature. On the interior, the division of space into rooms defines the character.

### **Building 309**

#### **Description and Development**

Building 309, sometimes called the "Stable," is located behind Building 302. It is a long one-story rectangular-plan building



with shallow gable roof. Elevations are pierced with doorways, garage-size doorways, and small square window openings in a row under the eaves. Three ventilators are situated on the roof ridge.

The building is constructed of rockfaced concrete or cement block. Mortar joints are finished with raised beads. Roofing is of corrugated asbestos.

The interior faces of the walls are smooth. An exposed steel truss supports the roof. The interior plan is arranged with a center corridor, running the length of the building, and stalls on either side. The stalls are partitioned with waist-high concrete block walls and horizontal bars (pipes) above them. The floor is of concrete. The building has a total of 5530 square feet.

Building 309 was completed in 1931, to house the Army's mules and horses. It was constructed on the site of a stable that had burned down in the previous year. (A 1926 plan shows a "stable" in this location, measuring 260 feet long and about forty feet wide. "Under Construction" is written within the footprint of the building.)

A description of the building is provided on a form (QMC Form No. 117) that includes a photograph and a list of the stable equipment installed. The equipment includes: hay racks, harness hooks, saddle and blanket racks, wheel guards, ventilators, flues, implement holders, hose racks, tie rings, electric fixtures, and a magnetic switch.

Plans for alterations to the building were made in 1957, but few of the changes seem to have been carried out (material that was designated for removal is still in place). A floor plan from 1960 records the building as the "Billeting Supply Warehouse." Three small rooms are delineated, as well as all of the stall partitions planned for removal in 1957.

Some openings have been filled in with concrete masonry units (the garage-size openings in the north and south elevations and some windows. This work must post-date 1960.

Many features necessary to the stable's function have been removed. None of these features are delineated on the 1957 drawing. It is quite possible that other alterations were made if and when the building ceased functioning as a stable.

### **Character-defining Features**

The massing of the building, fenestration pattern, and construction materials define the character of Building 309. These construction materials include the rockfaced concrete or cement block, beaded mortar joints, metal roofing, steel truss, concrete floor, and stall partitions.

## **Building 310**

### **Description and Development**

Building 310 is situated parallel to Building 309 on Camp Road. It is a long one-story structure with a rectangular plan and gable roof. Walls are built of brick in stretcher courses; window sills and lintels are also of brick. The roof is covered with standing-seam metal roofing and gables are sheathed in brown vinyl siding. Three roof vents are situated on the roof ridge. Access to the interior was not possible during the site visit. The total square feet for the building is listed as 1482 in the "Detailed Inventory of Naval Shore Facilities," but appears to be inaccurate.

The "Detailed Inventory of Naval Shore Facilities" gives a construction date of 1927. The building appears on the 1936 map of Fort Wadsworth.

An undated plan of the building (with a similar title box and drawing style to a 1960 plan of Building 309) has "Warehouse" written within the footprint of the plan and "Billeting & Billeting Supply" written below it. As presented in the plan, the interior space consists of one large room with a small office in the north-east corner.

Alterations to the exterior envelope include the addition of metal roofing and cladged gable ends. These alterations may date to the same period as other exterior changes in the Seebee Complex.

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Other alterations may have occurred to the windows and doors.

### **Character-defining Features**

The primary character-defining features of Building 310 are the massing and elevation materials. Materials include the brickwork and roofing.

### **Condition Assessment**

Six buildings comprise the Seebee Complex and most date from the late 1930s WPA-era. All buildings are in good to excellent condition and present no physical signs of failure or public safety concerns. In most cases, interiors have been extensively and consistently remodeled with little original fabric visible. Exteriors retain their original core massing though siding materials and fenestration patterns have been altered.

#### *Building 301*

The major alteration on the exterior of Building 301 is the recent siding of the brick elevations with vinyl siding. Window fenestration and the stepped gable ends have also been altered by the recent siding campaign. Window and door units have been replaced. The interior floor plan has also been remodeled as have interior finishes.

#### *Building 302*

The major alteration to Building 302 is the raising of the central bay to accommodate large trucks. Like the other motorpool building to the north, Building 302's fenestration has been altered by in-filling the large industrial windows with plywood; window units are still visible from the interior. All brick elevations have been sided in vinyl siding. Remaining window and door units have been replaced. The interior floor plan has also been remodeled, as have interior finishes.

#### *Building 303/304*

The former brick filling station/dispatch, consisting of office core and single-auto porte cochere, is in good condition and exhibits

little sign of deterioration. Vinyl siding has been installed in the two gables. Recently-installed asphalt shingles cover the roof.

The greatest concern may be the presence of buried fuel tanks near the location of the former gas pumps. Archival research, site probing, and inquiries with personnel should determine the type and locations of such tanks.

#### *Building 305*

Building 305 is one of the oldest buildings in the Seebee complex dating to the early part of the twentieth century. It retains its original core massing and 1920s "L-shape" porch. Window openings have been reduced in size and window units have been replaced. Elevations have been recently sided in vinyl siding. Existing gray asphalt roof shingles also differ from the original shingling material. The interior has been significantly altered in both spatial layout and finish treatment.

#### *Building 309*

Building 309 is constructed of cement blocks made with a block mold. The consistency of cement varies throughout the wall system with some units containing more aggregate and other units more binder. Many of the blocks suffer from surface erosion and weathering and by physical abrasion. Major vertical cracking has occurred at the south portion of the building.

Many of the garage door openings have been infilled with smooth-face concrete masonry units (CMU). This infill, though similar to the original construction material, detracts from the original appearance in color and surface finish and alters the interior space plan.

The corrugated asbestos roof sheathing exhibits cracking and breaking of the edges and corners. Green biological growth is present on the east slope.

The interior has retained its original open plan and exhibits no major signs of deterioration. The lighting system is in need of repair or replacement.



### *Building 310*

Building 310 is in good condition and exhibits no major signs of deterioration. The brick elevations and the standing-seam metal roof appear to be in sound condition. Door and window units are also in good condition.

Interior access was not permissible at the time of this field survey.

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### **Condition Assessment Inventory and Recommendations**

#### *Building 301*

1. **Problem:** Recent application of vinyl siding over the brick elevations has resulted in the alteration of door and window fenestration and the alteration of the stepped-gable ends.

**Solution:** Depending on the re-use plan, there may be a need to reopen certain windows in order to improve natural day light and ventilation. Removal of siding may coincide with rehabilitation treatment.

#### *Building 302*

1. **Problem:** Recent application of vinyl siding over the brick elevations has resulted in the alteration of door and window fenestration and the alteration of the stepped-gable ends.

**Solution:** Depending on the re-use plan, there may be a need to reopen certain windows in order to improve natural day light and ventilation. Removal of siding may coincide with rehabilitation treatment.

#### *Building 303/304*

1. **Problem:** Possibility of hazardous materials located in the south storage wing and the possibility of buried fuel tanks near the location of former pumps.

**Solution:** Contact NARO's Hazardous Management and Waste Enforcement Unit in order to conduct a thorough investigation into the presence of hazardous materials.

### *Building 305*

1. **Problem:** The recent application of vinyl siding on the elevations has resulted in areas which have not been properly covered thus exposing the inside of the siding and wall fabric to potential moisture and insect problems.

**Solution:** Repair missing sections with siding of same type and color. If restoration of the building is desired than removal of the siding should commence.

2. **Problem:** Reduction of window sizes at all locations around the building during recent retrofitting of units.

**Solution:** Conduct energy audit on windows and doors to determine the efficiency of existing units. If restoration is desired, return window openings to their original size and replace units with historically appropriate types.

### *Building 309*

1. **Problem:** Major vertical cracking occurring at various locations around the exterior envelop of the building.

**Solution:** Fill joints with soft mortar that match color, texture, installation and performance of surrounding concrete block.

2. **Problem:** Cracking and breaking of corrugated asbestos roof due to general aging and weathering of the material.

**Solution:** Replace seriously broken sections with asbestos roofing sections currently in storage or with compatible substitutes which replicate the original.

3. **Problem:** Deterioration of concrete blocks and window sills due to general weathering and physical impact.

**Solution:** Repair seriously damaged concrete sills with restoration mortar which matches original in color and texture.

4. **Problem:** General paint failure on all wood trim.

Solution: Conduct paint analysis in order to establish chromochronology. Scrape, prime, and repaint according to paint analysis recommendations.

*Building 310*

No imminent concerns.

Interior not accessible at time of survey.



**Figure 6.162** Building 305 showing the north and east facades. Recent alteration to fenestration size, window units, and wall and roof sheathing. Note original stone foundation.



**Figure 6.163** Building 301 showing the west and south facades.. Recent sheathing with vinyl siding has altered the original fenestration and stepped gable ends.





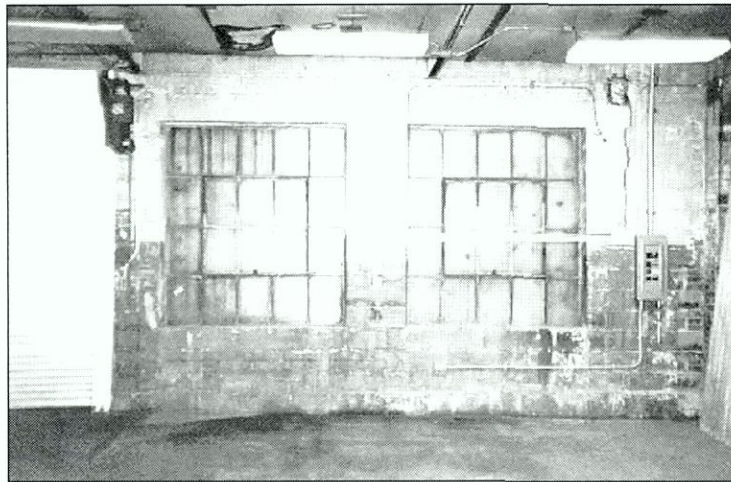
**Figure 6.164** Building 303/304 showing the east and north facades. Recent vinyl siding in gables and asphalt shingle roof sheathing. Potential for buried fuel tanks.



**Figure 6.165** Building 302 showing east and north facades. K Note recent alteration of central bay to receive large trucks. Vinyl siding has covered original industrial windows.





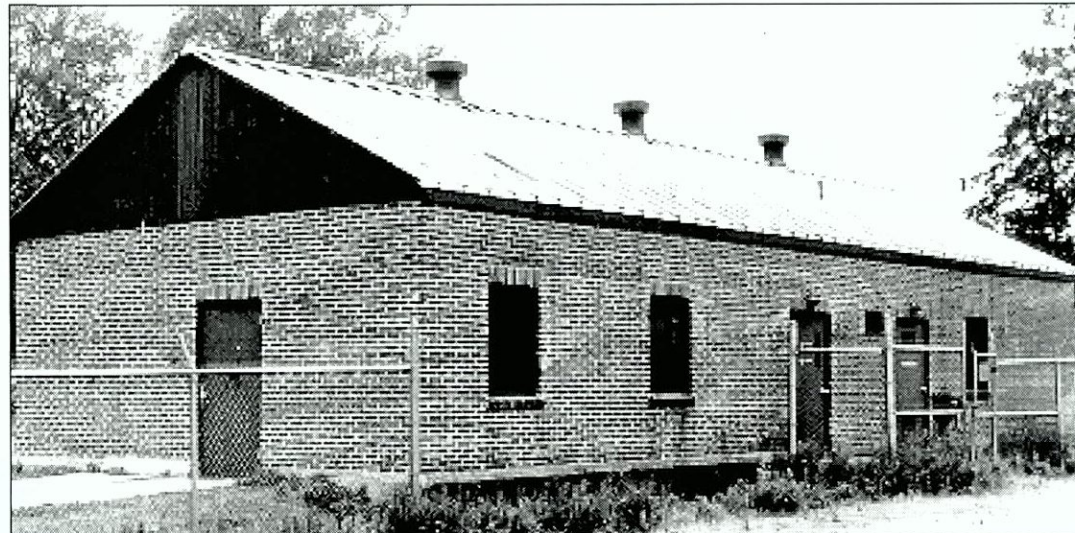


**Figure 6.166** Interior view of Building 302 showing typical covering of industrial windows.



**Figure 6.167** Building 309 showing north and west facades. K Arrow identifies in-fill of original garage opening with smooth-face concrete masonry units.

**Figure 6.168** Storage Building 310 showing south and east facades. Building exhibits very little signs of deterioration or failure of building components.





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## House (Building 406)

### Description and Development

Building 406 is situated on Richmond Avenue at the corner of the North Path. It is a two-story building with a cruciform plan (one arm is longer than the others) and hipped roofs with shallow inclines. Each arm of the plan ends with a half hexagon; the building can also be described as a center block with four five-sided bays protruding off of it. Two of the spaces between arms have been filled in with one-story enclosed rooms. The building has a total of 1195 square feet.

The foundation is built of brick with some areas of sandstone. Elevations are sided in light blue vinyl siding. Windows are one-over-one aluminum sash; window surrounds have been painted dark blue. The cornice fascia is dark blue. The roof is covered with multi-toned gray asphalt shingles. Two ceramic chimney pots, painted green, are set on a central chimney stack, painted black.

The front door, leading to an enclosed porch, is a hollow-core door painted dark blue. The adjacent window has a six-over-six sash painted green. This sash may be original to the building. The back door (solid wood with panels) may be original to the building as well.

Access to the interior was not possible during the site visit. Views through first-story windows show the plan divided into rooms. Some trim appears to be original.

Building 406 does not appear on a Board of Engineers map of 1889. This map has batteries drawn over property lines and buildings south of Richmond Avenue, most likely a proposal or plan for defense development. A small cruciform-plan building does appear on an 1894 map, in the location of the present Building 406. Property on both sides of the street was sold to the Army between the years 1895 and 1901. Black mentions that most of the houses on the south side of the street were demolished for the construction of batteries. However, this building, or house as it

probably once was, obviously survived. A 1902 map of Fort Wadsworth labels the building "Engineer Office." A map from 1913 labels the building "N.C.O. QRS." The "Detailed Inventory of Naval Shore Facilities" gives a construction date of 1905, but this is more likely the date of purchase by the Army and not the construction date.

A second-story plan of the building shows two bedrooms, a bath, and hall. This plan appears to be a "rehab" plan and dates to 1978. The text on the photocopy of the plan is difficult to read. The original plan, coupled with an investigation of the house, would be useful to understanding the original arrangement of rooms and alterations.

The siding, windows, and some interior alterations date to within the last five years. The green and black paint on the chimney and its chimney pots, and the extant roofing materials are, most likely, not original but predate the last alterations. The green paint of the one wooden sash is probably the same paint as that on the chimney pots and was probably applied at the same time.

### Character-defining Features

The primary character-defining features of Building 406 are its massing, its chimney and its pots, and elevation fabric of light blue vinyl siding with dark blue trim. (The siding hides the original intention of the structure, creating a different character of structure, in this case with little historical integrity. While the siding is character-defining for the extant exterior of the building, its removal would not destroy the building's architectural character. Conversely, its intended architectural character would be uncovered and its newly exposed features would need to be reassessed for their character-defining qualities.) The division of the plan into rooms is the character-defining feature of the interior.



## Condition Assessment

### *Exterior*

The main core of Building 406 retains a high degree of original integrity even though other elements like fenestration, roofing, and siding have been drastically compromised. New vinyl siding has covered over the original building material and has also covered numerous window openings on all of the elevations. Once open porches have also been enclosed with vinyl siding. New metal double-hung window units lack historic merit. A newer asphalt shingle roof and corresponding stock aluminum gutters and downspouts contribute to the lack of original integrity of this former residence.

### *Interior*

The interior has undergone extensive remodeling to the extent of new wall configurations, carpet, drywall, and suspended acoustical tile ceilings.



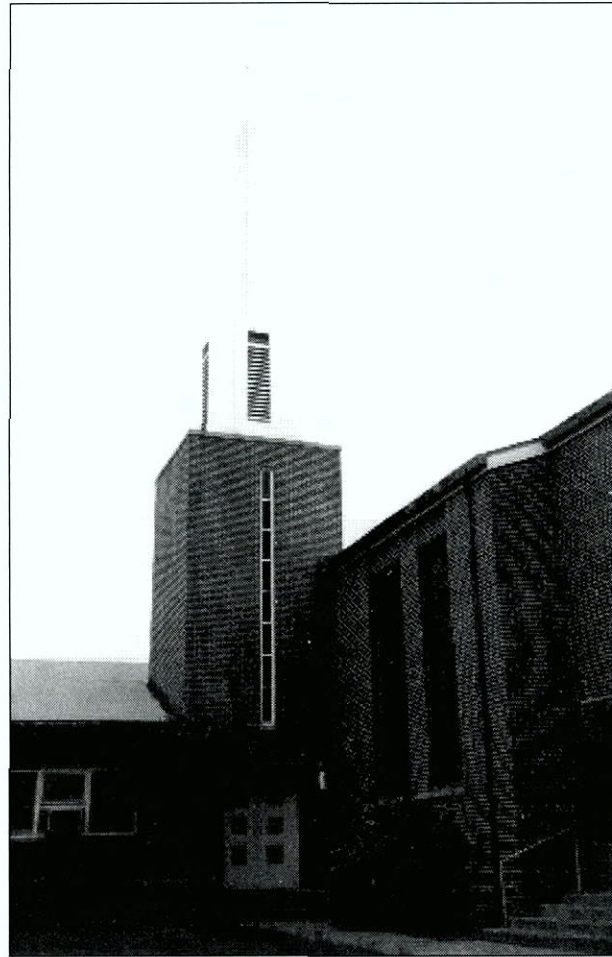
**Figure 6.169** General view of building 406 (former residence) showing south and west facades. Note recent application of vinyl siding and replacement of window units.



**Figure 6.170** General view of building 406 showing the north and east elevations. Note enclosure of porches and the covering of windows with vinyl siding.



**Figure 6.171** Chapel steeple.  
By Cultural Resources  
Center, 1994.



## Chapel (Building 203)

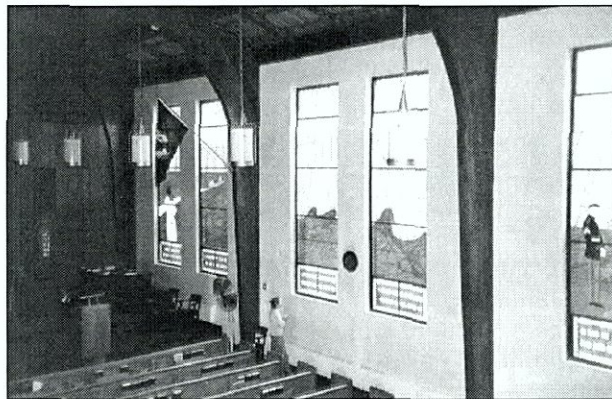
### Description and Development

The existing chapel was designed in 1959 and completed ca. 1960. It was constructed in conjunction with the demolition of buildings in the path of the new Verrazano Narrows Bridge. It is not known whether the new chapel replaced a specific building devoted entirely to worship, since this author has not found documentation recording the existence of any chapel on the military base. It is known that prior to 1918, since the post was near churches of many denominations, a place of worship definitely did not exist on the grounds.

Apparently the extant chapel and its ancillary wing reflect much of the original design, with the possible exception of the art glass windows. The building is a combination of connecting brick box-like structures forming an "L", with a steeple at the junction of the "box" of the chapel and the "box" of the supporting offices (figure 6.171). The combined square footage of the structure is 8,585. Documentation for any alterations has not been located. The original design drawings did not specify window treatment, but art glass exists today. Stylistically, the glass installation dates to the ca. 1960s (figure 6.172) and may have been installed shortly after the building was completed under a separate contract, but this is only a conjectural conclusion.

### Character-Defining Features

The exterior character-defining features include 1). the form of the building; 2) its brick massing and the fenestration, especially of the art-glass window openings; and 3). the steeple. Interior character-defining features include 4). the stained-glass windows; 5). the pews; 6). the large open space of the nave and altar area; and 7). the high ceiling in the nave and laminated trusses that support it. The chapel and its connecting structure are not great architectural designs. While standards of aesthetics do change with time, if this example were compared to outstanding exam-



**Figure 6.172** Chapel interior, art glass windows, north side. By Cultural Resources Center, 1994.



ples of architecture from the same period, this one would not rate highly in the comparison

### Condition Assessment

#### *Exterior*

The chapel, tower with steeple, and office wing are constructed of concrete masonry units with red brick veneer. The entire complex is in good condition and exhibits only minor deterioration problems.

The central colored glass panel above the main entrance has two small pieces of glass missing from the middle of the window.

The concrete canopy above the main entrance is showing early signs of water-born leaching and hairline cracking on the underside. This condition is due to a failure in the roof sheathing and/or flashing. If left uncorrected, the concrete will continue to degenerate ultimately leading to unsafe conditions.

Another minor problem is the recent lack of grounds maintenance which has contributed in the occurrence of weeds growing in the sidewalk and step joints.

#### *Interior*

The exposed wood ceiling with laminate trusses and board sheathing shows traces of a previous acoustical tile system which once encompassed the entire ceiling surface between the trusses.

Due to the recent closing of the Fort Wadsworth base, the church has not been in operation and, thus, climate control for the interior has been non-existent. As a result, the parquet floor has severely buckled. Other moisture-sensitive finishes, such as wood veneer, plaster, and carpet, showed no reactionary affects due to the lack of climate control. However, the lack of climate control is a recent change to the church's interior and damage to its finishes is sure to occur unless a minimum temperature and humidity standard is maintained.

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### Condition Assessment Inventory and Recommendations

#### *Exterior*

1. Problem: Minor impact damage to the central colored glass lancet window on the chapel.

Solution: In-situ replacement of broken glass with colored glass of same color and texture as original.

2. Problem: Concrete canopy above the main entrance is crazing and cracking due to water infiltration from above.

Solution: Clean concrete of foreign matter and apply a waterproof coating according to manufacturer's recommendations.

3. Problem: Mortar deterioration in front step joints. Weeds growing out of joints.

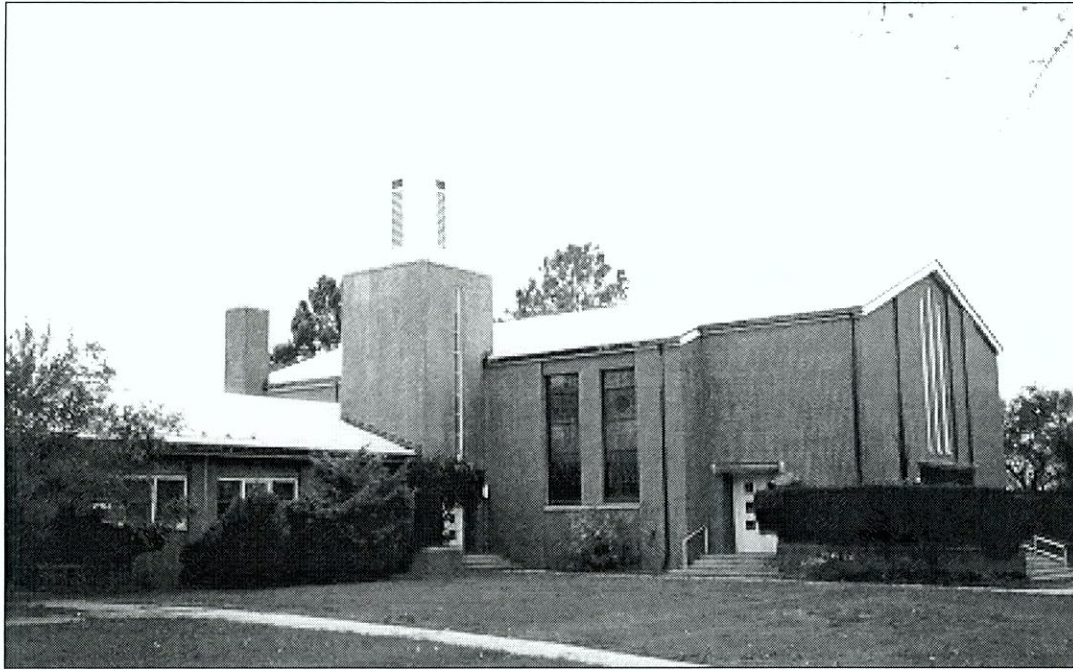
Solution: Remove weeds and organic matter. Rake joint and repoint with mortar or sealant.

#### *Interior*

1. Problem: Damage caused by lack of climate control in the chapel's interior. Since the closing of the base, the HVAC system in the chapel has been turned off, resulting in buckling of the parquet floor.

Solution: Establish and maintain a minimum level for temperature and humidity control in order to prevent damage to interior finishes. Reset damaged tiles in parquet floor.





**Figure 6.173** General view of religious complex consisting of main chapel and support offices.

**Figure 6.174** Main entrance. Note cracking in the concrete canopy caused by water infiltration through the faulty roof. Note vegetation growing out of sidewalk and step joints. Arrow identifies broken colored glass in window.



**Figure 6.175** Interior view of the chapel looking towards the altar. Exposed wood ceiling once had acoustical tile panels.





## Theater (Building 205)

### Description and Development

Like the chapel, the extant theater was built immediately prior to the construction of the Verrazano Narrows Bridge. It is known that a theater had existed on the post, presumably in the path of the new bridge.

The extant theater's exterior appearance is that of a windowless brick box with an entrance porch (figure 6.176). The building is approximately 86 feet long and 43 feet wide, and reflects a gross area of 5,407 square feet. The design drawings were completed in 1959 and the as-built notations were added to the drawings in 1960. No documentation for alterations has been uncovered for this structure, but a sign still remains on the front door stating that the building will close on a certain date in 1979.

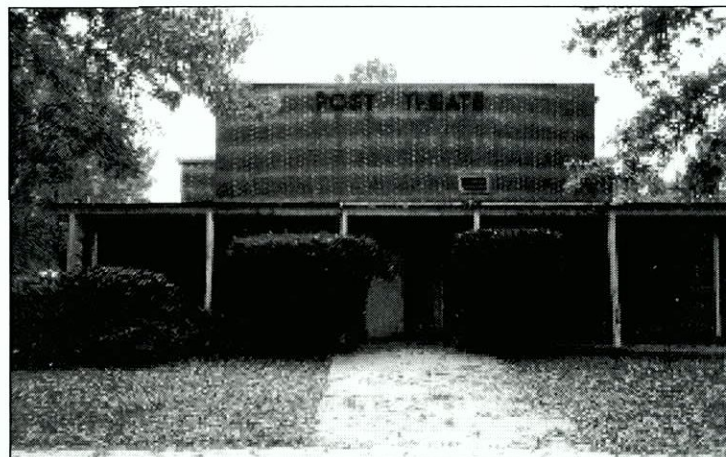
The authors were only able to illuminate the interior of the building with a single flashlight, it was obvious that the structure was being used for storage. Permanent seating, if it ever existed, has been removed. The stage and projection booth appear to be intact.

### Character-defining Features

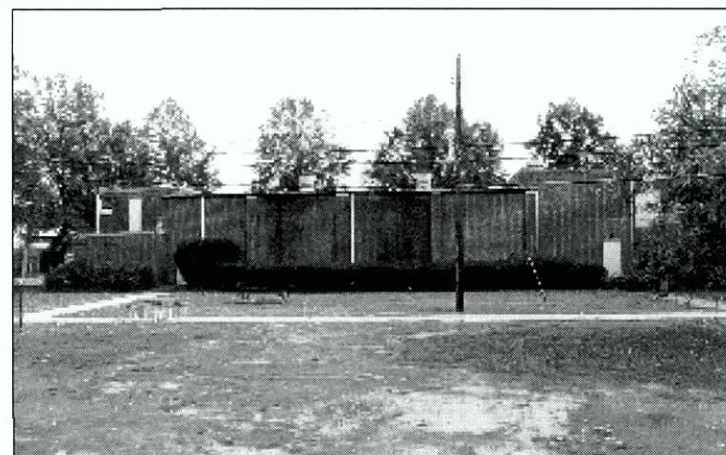
The two exterior character-defining features of the Theater are 1). the massing of the brick box structure and its 2). angled steel I-beams which support the front porch roof. The interiors 3). open space, 4). sloping floor, 5). stage, and 6). projection booth comprise the interior character-defining features. This structure fulfilled its role as a utilitarian building, with its design geared to a specific function.

#### *Exterior*

The Theater, abandoned for some time, suffers from maintenance neglect and extensive damage caused by water. The main source of destruction is water penetration through the failed built-up roof and copper flashing. Damaged gutters and missing downspouts have contributed to this problem as evidenced by dark water-born staining and biological growth evident throughout the exterior ele-



**Figure 6.176** Theater, north elevation. By Cultural Resources Center, 1994.



**Figure 6.177** Main facade (east) of the Theater.

vations. Attempts to repair the faulty components of the drainage system, such as downspout replacements, have led to the aesthetic detraction and failed performance to shed water successfully. In addition, the present drainage system fails to shed water away from the building's foundation.

Ferrous corrosion is occurring at the welded and bolted connections of the front entrance porch; rust stains are accumulating on the concrete paving. The steel window and door lintels are also showing advanced stages of ferrous corrosion which has led to "rust jacking". As the lintels rust, they expand and exert force on



**Figure 6.178** North and east (main) facade showing boarded windows, rusting porch and faulty downspouts.



**Figure 6.179** West (rear) elevation of the Theater showing boarded windows, staining on brick caused by faulty gutter.



the brick masonry. The wall is forced open, through cracking, and exposes it to a whole range of further deterioration from water penetration and freeze-thaw cycles.

## **Post Exchange or Commissary (Building 206)**

### **Description and Development**

The Post Exchange is one of three buildings under study that was erected during the planning process for the construction of the Verrazano Narrows Bridge. Like its counterparts, the chapel and theater, it is a basically a red brick box, designed in 1959 and probably completed in 1960. It is 57 feet long and 42 feet deep.

This structure is different from its two companion buildings because it has one fenestrated wall on the facade.

### **Character-defining Features**

This structure has four character-defining features, three of which are related to the exterior (figure 6.180). These are 1). its brick box form; 2). its fenestrated elevation with aluminum panels above the glazing; 3). its angled steel girders supporting the free-standing porch roof/promenade in front; and 4). its main open room in the interior. Condition Assessment

#### *Exterior*

The exterior of the PX Building retains a good degree of original integrity and has only suffered minor alterations. A large plate glass window at the northwest corner of the building was replaced with plywood. The roof over the covered walkway has been removed. Doors have been replaced on the main facade. A couple of terra-cotta capstones at the parapet have been replaced in-kind.

#### *Interior*

Interior layout and finishes appear original to the building. All interior fixtures have been removed.





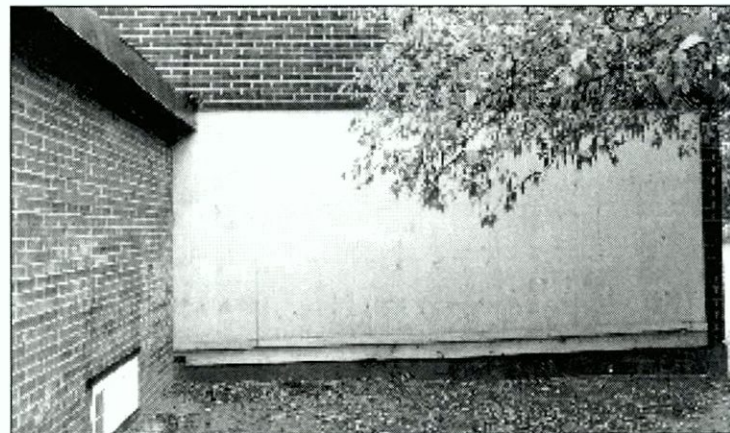
**Figure 6.180** Building 206 - Post Exchange, facade. By Cultural Resources Center, 1994.



**Figure 6.181** View of the north (main) facade of PX Building 206.6.182 View through covered walkway looking east. Awning originally had a roof to shed water away from the sidewalk and protect shoppers from rain.



**Figure 6.181** View of the north (main) facade of PX Building 206.6.182 View through covered walkway looking east. Awning originally had a roof to shed water away from the sidewalk and protect shoppers from rain.



**Figure 6.183** Detail view showing boarded window at northwest corner of the building.



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## 6.3 Recommendations

### General

A recommendation for rehabilitation treatment has been made for the nominated Fort Wadsworth National Register Historic District. The Secretary of the Interior Standards (for the Treatment of Historic Properties 1992) for rehabilitation state:

Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.... Rehabilitation is 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.... Rehabilitation as a Treatment: When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.

According to these standards there is some flexibility in treatment of many different structures within one district. However, one must be cognizant of the temptation to stretch the spirit of the guidelines to treat each structure at Fort Wadsworth as it may have appeared individually at one point in time, without a correlation to the structure or landscape adjacent to it. When so many structures exist within this proposed district whose original construction periods span a century and a half, it can become a difficult task to successfully interpret the site as a cohesive whole showing the evolution of a military base rather than specific interpretations of individual structures. Informed and sensitive architectural treatments will provide a better overall comprehension of the interpretive experience by the visitor.

The treatment latitude that rehabilitation allows should not be considered a license to make a structure "romantically pic-

turesque" so that its age value is lost by the removal of patina, as in projects like Quincy Market in Boston and South Street Seaport in New York. The loss of sense of time and weathering through fabric refinishing and replacement undermines the historic architectural context and the context of the National Register district as a whole. In considering this potential problem, character-defining features become the main force in treatment recommendations. Foremost, these features for individual structures must be maintained. Although unpainted fabric is not specifically listed as an individual character-defining feature, the granite work found at Battery Weed and Fort Tompkins, for example, cannot be painted because the granite work at both structures is character-defining.

Window replacement should not be specified for the sole purpose of energy conservation. Conservation of energy can be achieved through means other than total window replacement, like inserts or storm windows that are sympathetically designed. Only if a structure's windows are out of character, inoperable, or operate with difficulty, should replacement be considered.

### General Safety Concerns

Hazardous materials exist at the site in several structures. A contractor should be employed to inventory any hazardous materials that exist, including asbestos, lead and lead paint, undetonated ammunition, and the possibility of underground tanks that once held materials such as oil. Lead may be found in the soil under the Verrazano Narrows Bridge, deposited from former automobile emissions and from peeling paint. This becomes a problem if children or family pets play in the dirt or if food is planted in the soil. This may also continue as a problem until the bridge is deleded. Priorities should be set for hazardous material removal based on potential public access, with the exception of lead paint.

Lead paint does not need to be abated unless it is found in a dwelling where small children will reside or in a day-care center. Loose lead paint found in buildings that will be open to the public for visitation can be scraped and a new coat or coats of paint can be applied over it. If local regulations are more stringent than



state or federal regulations, then park rental housing needs to be addressed under the most stringent regulations. In this case, New York City's Local Law No. 1 states that lead paint in residences should be wet sanded down to the substrate using a HEPA vacuum, and repainted. The federal standard, the Lead Hazard Reduction Act of 1992, says that the hazard should be removed, recognizing the impossibility of removing all of the lead. The federal standard states that a risk assessment should take place, and that friction surface areas such as sash windows and floors provide the greatest risk for lead paint dust. These areas should be treated first. Since some of the windows are new in the residences under study, they may not contain any lead paint, assuming the frame was replaced with the sash. In the case of the painted floors, like porch floors, then maybe the flooring material can be replaced in kind. However, each area should be addressed on an individual basis, and the significance of fabric determined prior to a treatment proposal.

Barriers that are required to prevent public access to certain areas of structures should not be anchored into the building fabric and should be sensitively designed to match the historic character of the individual structures. A boilerplate design for all structures is not necessarily the best solution.

Designs for handicapped access for historic structures are allowed some leeway but should follow ADA guidelines. Likewise, they should be considered unique applications for each structure, and either complement or not interfere with the character-defining features of the structures.

### **Research**

An incredible amount of primary documentation pertinent to Fort Wadsworth was found in a very short period of time. However, it is known that more information exists, for instance at the National Archives in Washington, D.C. It is recommended that more research be conducted. It may take a minimum of two weeks to collect more primary source materials, and another month to sort out the information and collate it into a simple compilation of

material. Additional time would be required to document specific aspects of structures not already covered in this report.

It has been felt by these authors that all of the batteries have been ignored in this project, and yet they constitute a major force in understanding the significance of the site. Not only are they significant in the history of coastal defense, but also for their early use of concrete. More time should be spent in culling information from the existing collected documentation regarding these batteries, they should be physically inspected, and documented. Additional information undoubtedly would be found at the National Archives.

Several structures have not been adequately documented for purposes of this study due to time constraints. These include Battery Weed and Fort Tompkins, which require a more thorough level of Historic Structure Report based on their significance. This work could be accomplished in conjunction with future research at the National Archives, with additional time required to comprehend and compile all of the information. The Dock and Seawall should be more carefully studied. Mont Sec Avenue structures should be studied inclusively, not just the five structures included with this study. In conjunction with the WPA work that transformed Mont Sec Avenue into its current general appearance, the majority of the Seebee Complex was also constructed under the auspices of the same program. Much documentation regarding Mont Sec Avenue and the Seebee Complex has already been collected. While undoubtedly valuable information could also be found in the National Archives, some extra time should be allotted to further study the existing documentation regarding the WPA influence on the site.

Three other topics are worth consideration for future research. They include the influence of the Verrazano Bridge construction on the whole site, which required comprehensive site planning for demolition and reconstruction of buildings; the torpedo mining operation of the Narrows, which was once a large part of the fort's operation; and the effect of military spending cycles and the final

demise of the military base due to the end of the cold war and the dissolution of the USSR.

### **Specific Areas of Potential Impact**

In addition to the character-defining features and conditions and stabilization recommendations that have been listed with individual structures, certain areas of potential impact are addressed by respective structures below.

#### *Battery Weed*

Removing the brick in-fill in all openings would reestablish the original appearance of openings. This would also allow for natural light to illuminate interiors; the movement of sun would create ever-changing patterns of light and shadow on masonry floors, piers, and walls during daylight hours. Brick in-fill should be carefully removed to prevent damaging surrounding granite (the removal method should be approved prior to execution).

The extant metal shutters have value as original and weathered material. If new shutters are fabricated, they should match the original in form. Fabricating shutters from "Corten" steel (copper-bearing steel) would provide an oxidized surface with a sound substrate. The installation of new shutters will be extremely expensive and will not have a noticeable impact on the quality of interpretation at the Fort.

Installing a replica Rodman gun would have little impact on architectural fabric. Either the gun should be mounted on an existing mount or on a replica mount, in the location of a former gun. If a replica mount is used, it should be bolted to the floor using the existing holes from the original mount.

The construction of a grass-crete wheelchair-accommodating path on the parade of Battery Weed is a better solution than a concrete path which would intrude upon the character of the open, grassy space. Grass growing through the vents

would partially camouflage the material, making it only moderately visible. Another less intrusive system such as a metal mesh system around the perimeter of the parade is also an alternative.

In order to prevent visitors access to certain areas of the structure, barricades at the entrances or openings (i.e. to the stairtowers) could be installed. Gates should be inset within the openings with end posts bolted to the floor and not to the wall faces. If possible, holes for bolts should be drilled into existing joints.

The rail tracks are integral to the history of the site and should be retained in their existing locations and included in an interpretive program relating to the mining of the Narrows. The concrete paving west of Battery Weed is contemporary to the rails and should be retained as well. Surface cracks and voids can be patched with a cementitious compound matching the original paving in overall color and texture.

#### *North Dock and Seawall*

The fabric of the dock and seawall dates to several periods, from the earliest configuration of the mid-nineteenth century, to the last rebuilding campaign in the 1950s. The dock and seawall are very important to the history of Fort Wadsworth and require more documentation if they will be impacted by proposed alterations.

#### *Torpedo Storage Building*

Both the northwest garage door and the southeast center garage door are not original to the building. Both doors could be replaced with doors similar to what was original. Photographs from the early twentieth century show the southeast door as identical to the two doors on either side. A photograph from 1961 shows the northwest door before it was replaced with the extant metal door. (Original photographs are found in the Staten Island Institute of Arts and



Sciences.) If doors are replicated, they should match the original form. Remnants of the southeast door may be found in the pile of refuse on the site. Using "Corten" (copper-bearing) steel would provide an oxidized surface while maintaining a sound substrate. An oxidized surface would not have an adverse visual impact on the ruinous condition of the building.

Replacement shutters will appear disharmonious to the ruined condition of the building. Shutters from the less visible southwest side can be moved to replace shutters that are missing or dissimilar on the northeast side.

Shutters should be secured in their closed positions but not sealed with a permanent seal.

Refuse from the fire and building collapse situated by the southeast end of the building should be examined for related building fabric that may contribute to the interpretation of the structure and/or park collection. After examination and salvage, the materials can be removed and discarded.

The paving dating to the emplacement of the rails should be retained and patched as needed with a cementitious compound matching the original paving in overall color and texture. If the current paving is deteriorated to such an extent that patching is not feasible, then replacement paving can be considered. The replacement should match the existing in overall color and texture. Proposed plans and material samples need to be submitted for approval prior to execution of work.

### *Fort Tompkins*

Lead paint abatement is not a required treatment at Fort Tompkins. However, a certified professional who uses X-ray fluorescence should be hired to identify all of the areas where lead paint exists. Loose paint in the casemates can be scraped off, and in casemates that will be open to the public, a new paint finish can be applied. The counterscarp

walls and ceiling should not be retreated at all. A test for lime-based paint was conducted using dilute hydrochloric acid (HCl) and for lead paint using sodium sulfide (Na<sub>2</sub>S) on samples removed from the counterscarp and from a large casemate pier, second from north end, east face. The counterscarp sample tested negatively for both lime and lead (only two layers of white paint were apparent, and they were both powdery). The casemate pier sample tested positively for lime-based paint on at least several of the layers, and a slight positive for lead paint for one layer (there were approximately seven layers of paint, mostly white, one cream, and one dirty off-white). There is a 10% margin of error when using the sodium sulfide (Na<sub>2</sub>S) method of testing.

The west wall of casemates facing the parade should not be altered except to remove the cement block "plugs" within the sixth and seventh arches from the north, as long as removal does not disturb original fabric. Existing recessed and interior brick partitions should be maintained and reused wherever possible, demolishing and/or reconfiguring new brick partitions on a very limited and strictly as-needed basis. Windows and doors should remain as-is until further study is completed.

The floors of the smaller casemates should be cleaned and patched to match existing material, but not sanded or refinished at this time.

The exterior windows and doors of the smaller casemates should be scraped of any loose paint and repainted. None should be replaced at this point in time until more research can be completed. If a historic color is requested for the windows and doors, then paint analysis would have to occur before any treatment is carried out.

A configuration for the parade ground should be selected based on the historical information presented in the text of

this report. Once a historic configuration is chosen, then access for the disabled can be addressed.

No documentation has surfaced regarding the lift located in the northeast corner of the parade ground. More research may be required to determine its significance, or if it is not contributing to the significance of Fort Tompkins, then it possibly could be removed. It is currently a safety threat.

Electrical wiring and electrical and plumbing chases may have existed exposed for quite some time within Fort Tompkins. While electricity seems to have been an operational asset for the batteries during the Endicott-Taft period, learning more about its specific use at Fort Tompkins may be important in deciding whether or not to save the existing wiring. The plumbing chases could be considered as somewhat less important to the operation of the Fort.

No documentation for the counterscarp floor has been found. It should be treated relative to safety concerns and sympathetically to its surroundings. Vinyl composition tile laid on runners or deck boards laid on edge would not be acceptable replacements to what currently exists.

The openings that are filled with rubble at the northeast corner of the counterscarp should be stabilized by removal of the rubble and possibly installing reproduction doors, similar to the double-plank doors that are found throughout Fort Tompkins.

The dry moat apparently was originally a ditch. When it was filled in is unknown. If it is graded, reseeded, and a wheelchair path installed, the path should be laid in an innocuous location and camouflaged through its use of materials. The wrought-iron fence and gate should not be attached to the structure, but anchored into the ground. Its design should be sympathetic to the design of the extant structure.

### *Battery Duane*

There is not sufficient documentation to determine when the concrete buttresses were installed at Battery Duane.

The concrete path at the southeast corner of Battery Duane was extant by 1943. It is suggested that if barriers can limit public access to the top of the battery, then they be installed instead of the path being removed.

The road configuration of Tompkins Road was established possibly as early as ca. 1900. A reconfiguration proposal should be submitted prior to the approval of actual work.

### *Flagpole Area*

The concrete pad in this area represents the foundation of a temporary pesticide storage building that existed from ca. 1943 to after 1962. It most likely could be removed, assuming the building use was not significant to the proposed district.

The reconfiguration of sidewalks and parking area is allowed under rehabilitation treatment, but approval of the final design should be dependent on the proposal. Materials that are proposed should be sensitive to existing conditions.

Stabilization of the retaining wall is possible, with final approval dependent upon the specifics of the restoration.

Historically, the American flag has been displayed from several locations within the confines of Fort Wadsworth, including the barbette of Fort Tompkins. The extant flagpole could be relocated to any former location.

An assessment of the manholes and associated infrastructure should be conducted by a licensed engineer, prior to removal or infill.



### *Building 109*

The openings of Building 109 could be reconfigured only if the reconfiguration does not destroy the rhythm of fenestration. If new openings are required they should be installed on less prominent elevations, that is the north and east elevations. The main doorway could be replaced with something more appropriate to the structure's design. If the windows are inoperable, then they should be replaced with sympathetic materials, that is sympathetic to the 1930s bungalow style. Approval for specific proposals would be required.

The site feature (small rotary) immediately to the west of Building 109 is similar to what has existed throughout the twentieth century. Parking should be provided without disturbing this feature, perhaps provided in the adjacent "tot lot."

The large interior space on each of the basement and first floor levels should be maintained. Individual interior elements listed as character-defining features should also be maintained.

### *Buildings 111-114*

The asbestos siding could be removed from Buildings 111-114, and the original hooded window lintels could be reproduced based on historic photographic evidence. If the original drawings are ever located, they could also be a source for reproduction guidelines. Many of the clapboards may need replacement due to rot. If this is true, they should be replaced with the same type of material, including dimensions and exposures.

Many of the windows found in these four structures are fairly new and in good condition. Although they do not appear to be original, the two-over-two sash are an acceptable design to both the Italiante design and the 1889 period of construction. If individual sash or windows need to be

replaced, two-over-two reproductions would be suitable, assuming molding profiles are similar. Some windows have been replaced with modern casements. These should be removed and replaced with windows and sash more typical to the structures.

If interior alterations are necessary, great care should be taken in preserving the interior character-defining features for individual structures.

### *Buildings 354 and 355 - Police Station and Ammo Building*

The Police Station was constructed ca. 1958; the Ammo Building after 1970. If it was not necessary to interpret either the Police Station's former use as a service station or the Ammo Building's use, and if it is determined that both of these structures are non-contributing to the district as a whole, then they could be demolished.

### *Building 352 - Carriage House*

The vinyl siding is a character-defining feature of the Carriage House. However, unless the recent past is interpreted, the siding does not contribute to the structure's significance and removal can be justified. The structure must then be reexamined for the condition of its newly-exposed brick envelope and repairs made as necessary. Character-defining features should also be reassessed. It is known that the dormers and windows are recent alterations, but additional physical and archival investigation should determine the final proposed treatment.

The upper floor of the Carriage House is original, is integral to the building and is a character-defining feature. It should not be removed.

### *Seebee Complex*

The SeeBee Complex is a WPA site, constructed to serve the military base's automotive (and perhaps equestrian) needs. The complex should be treated as a group and not as

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individual buildings. Any reuse, rehabilitation, or restoration plans must be critically reviewed before approval can be given.

*Building 203 - Chapel*

The chapel is an outstanding structure only because its steeple heralds its use as a place of worship. If it was scheduled for reuse, its exterior might be altered minimally and the interior of the sanctuary should not be changed. Interior changes could occur in the connecting "box" now used as offices, as could minor exterior sympathetic changes to the connecting "box."

*Building 205 - Theater*

The theater was originally designed for a very specific use and has been closed for approximately fifteen years. It appears that it acquired a reuse as a storage center by default. It is not a significant structure, but remains as part of a grouping of structures that provided community services. Before the theater is approved for demolition, a plan for the northwest quadrant of the base should be formulated.

*Building 206 - PX/Commissary*

Likewise, the PX was designed for a very specific use, and is not a significant structure. It too remains as part of a grouping of structures that provided community services. Before the PX is approved for demolition, a plan for the northwest quadrant of the base should be formulated, rather than creating a wasteland reminiscent of the 1960s urban renewal disasters.



## Section 6: Building Specific Studies

### Battery Weed

- 1 Unless otherwise noted, all measurements are from Frederick R. Black, "A History of Fort Wadsworth, New York Harbor," Historic Resource Study, Cultural Resource Management Study No. 7, 1983.
- 2 "Detailed Inventory of Naval Shore Facilities," 30 September 1992, source
- 3 Totten to John Bell, May 12, 1841, in Report COE, May 31, 1841; Annual Report, COE, 1842, in Black, "A History of Fort Wadsworth," p. 70.
- 4 "Plan of the grounds about Forts Tompkins & Richmond, Staten Island, State of New York, Showing the position and trace of a Battery on the grounds of Mr. Lowe, who proposes to grant to the United States the Right to Construct and use such a battery on Certain Conditions," July 3, 1850, Record Group 77, Dr. 43 Sht. 29, source
- 5 "Plan of one half of Fort Richmond (on a large scale) showing details of construction," Engr. Dept., 1847, National Archives source, Record Group 77, Dr. 43, Sht. 9.
- 6 "Plan of Fort Richmond, showing the roofing over the Casemates; and the Terreplein. Drawn under the direction of Bv't Brig. Gen. J.G. Totten, Ch'f Eng'r. by G. Carlton Humphries. Sketch showing the sides and angles of Fort Richmond as calculated by Lieut. B.S. Alexander, Corps of Engrs. Sections, Elevations & Plans, showing the details of the manner of covering the Roofs, supporting the Breast-height Wall &c. of Fort Richmond," April 1850, National Archives, source, Record Group 77, Dr. 43, Sht. 25; and "Plan of part of the upper, or barbet tier of Fort Richmond, New York Harbor," April 1850, Record Group 77, Dr. 43, Sht. 24.
- 7 "View of the New York Bay and Harbor, from the Telegraph Station," 25 September 1852, Staten Island Institute of Arts and Sciences. citation
- 8 "Fort Richmond," Frank Leslie's Illustrated Magazine, 1862, Staten Island Institute of Arts and Sciences, SI-ER 4, x35.

- 9 Annual Reports, COE, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1857; Winfield Scott to His Honor Mayor Wood, no date, New York Historical Society, in Black, "A History of Fort Wadsworth," p. 71.
- 10 "Fort Richmond, Plan and Section, Showing the state of the work October 1, 1857, and the proposed application of the force during the coming winter in continuing masonry of Counter Scarp (as shown by lines in Red)," Record Group 77, Dr. 43 Sht. 46, source
- 11 Annual Reports, COE, 1858, 1860, in Black, "A History of Fort Wadsworth," p. 71.
- 12 "Guard Houses, Roof ....." 4 January 1866. Drawer C-8 79 Wad. source ; and "Inside Elevation, Guard House, Fort Wadsworth, showing arrangement of flues on fire places as constructed." 14 March [18]67. "U.S. Engr. Office, Second District, N.Y., Traced
- 13 "Ground Plan of Fort Wadsworth, N.Y.H., showing location of buildings &c.," 1871, National Archives, source, Record Group 77, Miscellaneous Fort File.
- 14 "Defenses on Staten Island, N.Y.H., As proposed by The Board of Engineers, 1869 to 1880," Drawn by Office of Chief of Engineers, June 1886, National Archives, source, Record Group 77, Dr. 41 Sht. A.
- 15 "Fort Tompkins, Fort Wadsworth, N.Y.," postcard, Staten Island Institute of Arts and Sciences, 84.75 324.
- 16 Photograph, A308, Austen, c.1900, Staten Island Institute of Arts and Sciences, 536-G.
- 17 "The 'Great Eastern' Steamship Coming up the Narrows into the Harbor of New York," June 28, 1860, Staten Island Institute of Arts and Sciences, citation
- 18 "Fortifications, New York Harbor, Plans, Sections & Elevations of Fort Wadsworth, Staten Island," two drawings, U.S. Engineer Office, November 1, 1917, to accompany 1st ind. on Wads. 6/12, File No. Was. 6/16, original date and source
- 19 Submarine mine defenses mining casemate at Fort Wadsworth. Tracing No. 5. Proposed by the Board of Engineers in report dated October 24, 1887. Dr. 36 Sht. 100-

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5. Record Group 77, source
- 20 W.B. Ladue, Colonel, Corps of Engineers, District Engineer, War Department, United States Engineer Office, Third District, New York, N.Y. to The Chief of Engineers, U.S. Army, Subject: Preservation and Repair, General Maintenance Work, Harbor Defenses of Southern New York, 8 February 1926. U.S. Engineer Office, Third Dist. New York, NND Project Number 813524. source
- 21 "Fort May Yield Secrets," 19 December 1965, newspaper clipping, source
- 22 "Fort Wadsworth, N.Y., Proposed Relocation of Mine Track at Torpedo Storehouse," War Department, Corps of Engineers, U.S. Army, U.S. Engineer Office, Third District, New York City, 1 March 1921. source
- 23 Photograph, Staten Island Institute of Arts and Sciences, citation
- 24 "Fort Wadsworth, S.I.," Smedley, New York, Staten Island Institute of Arts and Sciences, citation
- 25 Black, "A History of Fort Wadsworth," p. 124.
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- North Dock and Seawall**
- 1 Frederick R. Black, "A History of Fort Wadsworth, New York Harbor," Historic Resource Study, Cultural Resource Management Study No. 7, 1983, p. 53.
- 2 "A Map of the State Land at Staten Island. Representing the situation of the ground and the fortifications to be erected. Surveyed by order of the Commissioners for Fortifications," March 13, 1809 By Charles Loss, Record Group 77, Dr. 36 Sht. 17. source
- 3 "View of the New York Bay and Harbor, from the Telegraph Station," 25 September 1852, Staten Island Institute of Arts and Sciences, citation
- 4 "Plan of the grounds about Forts Tompkins & Richmond, Staten Island, State of New York, Showing the position and trace of a Battery on the grounds of Mr. Lowe, who proposes to grant to the United States the Right to Construct and use such a battery on Certain Conditions," July 3, 1850, Record Group 77, Dr. 43 Sht. 29, source
- 5 "View of the New York Bay and Harbor, from the Telegraph Station," 25 September 1852, Staten Island Institute of Arts and Sciences. citation
- 6 "Fort Richmond, Plan and Section, Showing the state of the work October 1, 1857, and the proposed application of the force during the coming winter in continuing masonry of Counter Scarp (as shown by lines in Red)," Record Group 77, Dr. 43 Sht. 46, source
- 7 "Ground Plan of Fort Wadsworth, N.Y.H., showing location of buildings &c.," 1871, National Archives, source, Record Group 77, Miscellaneous Fort File.
- 8 "Plan and Reservation—Fort Wadsworth, N.Y.H.," July 1890, source
- 9 "Fort Wadsworth, New York", Adolph Koettgen, Publisher New York, No. 402, undated postcard, Staten Island Institute of Arts and Sciences, 84.75 329/57hp.
- 10 "Fort Wadsworth, N.Y.H., Shows reservation, location of buildings, batteries, with site of new hospital specially indicated", October 12, 1896, 17600/21, Record Group 77, Dr. 43 Sht. 85-12, source
- 11 "Map of U.S. Government Land at Fort Wadsworth, New York", December 1904, Record Group 92, Blueprint file, Fort Wadsworth, New York, source and a detail of the same, National Archives source, Cartographic Division, Record Group 77, Drawer 43, Sheet 21-4.
- 12 "Proposed Extension of North Dock at Fort Wadsworth, N.Y.," November, 1906, citation
- 13 [No name], Lt. Col., Corps of Engineers, United States Engineer Office, New York City to Brig. Gen. A. Mackenzie, Chief of Engineers, U.S.A., Washington, D.C., November 9, 1906, U.S. Engineer Office, New York City, Received Febr'y 12, 1907, File Wads, Case 10, No. 1. Source
- 14 [Illegible signature], Lieut. Col., Corps of Engineers, War Department, Office of the Chief of Engineers, Washington to Col. W.L. Marshall, Corps of Engineers, New York City, 24 September 1907. U.S. Engineer Office, New York City, File: Wads., Case 10, No. 36. Source
- 15 [Illegible signature], Superintendent, United States Engineer



- Office to Colonel W.L. Marshall, Corps of Engrs. U.S.A., Army building, N.Y. City, 26 Feb 1908. U.S. Engineer Office, New York City, File: Wads., Case 10, No. 40. Source
- 16 [Illegible signature], Superintendent, United States Engineer Office to Colonel W.L. Marshall, Corps of Engrs. U.S.A., Army building, N.Y. City, 26 Feb 1908. U.S. Engineer Office, New York City, File: Wads., Case 10, No. 40. Source
- 17 [S.W.] Roessler, Colonel, Corps of engineers to Major Edwin Landon, Coast Artillery Corps, U.S.A., Commanding Fort Wadsworth, N.Y., August 19, 1912, U.S. Engineer Office, New York District No. 2, Received [—1912], Wads/10/47. source
- 18 "Post and Reservation Map of Fort Wadsworth, N.Y.H.", 1913, Record Group 77, War Department Collection, source
- 19 Photograph, Staten Island Institute of Arts and Sciences, citation
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- 21 "Fort Wadsworth, New York, Project No. 85, General Layout of Dock Showing Necessary Replacements", Nov. 7, 1934. source
- 22 "Mine Wharf Alterations", Department of the Army, Fort Wadsworth, S.I., N.Y., Office of the Post Engineer, Drawing 1A, 29 Oct. 1951; and "Mine Wharf Alterations", Department of the Army, Fort Wadsworth, S.I., N.Y., Office of the Post Engineer, drawing 1B, 9 Nov. 1951, source
- 23 Headquarters Department of the East Inspector Generals Office Governors Island, New York to the Adjutant General, Department of the East, Governors Island, N.Y. 29 April 1910. U.S. Engineer Office, New York City, Received July 19, 1910, File: Wads. 22/?. Source: National Archives?
- 24 W.H. Bixby, Chief of Engineers, U.S. Army, Memorandum, 27 July 1910. U.S. Engineer Office, New York City, Received July 19, 1910, file: Wads. 22/?. Source: National

Archives?

- 25 Wm. R. Lee, War Department, United States Engineer Office to Col. S.W. Roessler, Corps of Engineers, U.S. A., Army Building, N.Y. City, 14 August 1911. U.S. Engineer Office, New York District No. 2, File: Wads/8/269. Source
- 26 [no signature] Colonel, Corps of Engineers to The Chief of Engineers, U.S.A., Washington, D.C. 11 January 1912. U.S. Engineer Office, New York District No. 2, File: Wads/8/295 or 245. source

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**Torpedo Storage Building (Building 147)**

- 1 Various names for this building are found on drawings and in reports over the years. For this report, the current use of "Torpedo Storage Building" will be maintained.
- 2 "Detailed Inventory of Naval Shore Facilities", 30 September 1992, source
- 3 Frederick R. Black, "A History of Fort Wadsworth, New York Harbor", Historic Resource Study, Cultural Resource Management Study No. 7, 1983, p. 105.
- 4 Engineers Office, U.S. Army, New York City, "Proposed Torpedo Storage Building at Fort Wadsworth, New York", Dec. 17, 1892, NAW-Cart., Drawer 43, Sheet 90-3; Annual Reports, COE, 1893, 1894, 1898, 1899, 1900, 1901, cited in Frederick r. Black, "A History of Fort Wadsworth, New York Harbor", Historic Resource Study, Cultural Resource Management Study No. 7, 1983, p.125.
- 5 "Sketch showing Proposed Location for Storage House for Torpedoes at Fort Wadsworth, N.Y.", April 1, 1892, Record Group 77, Dr. 43 Sht. 90-1, source
- 6 "Proposed Torpedo Storage Building at Fort Wadsworth, N.Y., Showing Site for Proposed Torpedo Building with Reference to Existing Roads and Fortifications", Dec. 17, 1892, Record Group 77, Dr. 43 Sht 90-3, source; and "Torpedo Storage Building, Fort Wadsworth, N.Y., Showing Proposed Appliances for Handling Torpedo Material, Sketch Showing Location of Torpedo building and Tramway for Transporting Material", April 18, 1894, Record Group 77, Dr. 43 Sht. 90-4, source.

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- 8 Photograph, n.d., Staten Island Institute of Arts and Sciences, citation
- 9 "Proposed Location for Additional Cable Tank and Cover at Fort Wadsworth, N.Y.," February 1899, Record Group 77, Dr. 43 Sht. 90-10, source
- 10 "Fort Wadsworth, N.Y.H.," 30 June 1906, source; and "Topographical Map of Fort Wadsworth, N.Y.," 1913, Record Group 77, War Department Map Collection.
- 11 "Fort Wadsworth, N.Y., Proposed Relocation of Mine Track at Torpedo Storehouse", War Department, Corps of Engineers, U.S. Army, U.S. Engineer Office, Third District, New York City, 1 March 1921. Source
- 12 W.B. Ladue, Colonel, Corps of Engineers, District Engineer, War Department, United States Engineer Office, Third District, New York, N.Y. to The Chief of Engineers, U.S. Army, Subject: Preservation and Repair, General Maintenance Work, Harbor Defenses of Southern New York, 8 February 1926. U.S. Engineer Office, Third Dist. New York, NND Project Number 813524. Source
- 13 W.B. Ladue, Colonel, Corps of Engineers, District Engineer and Division Engineer, N.E. Division to the Chief of Engineers, U.S. Army, 9 June 1926. U.S. Engineer Office, Third Dist. New York, Wads. 20/139. citation and source
- 14 "Basement Plan & First Floor Plan, Bldg — Old No. E-50, new No. 147", Department of the Army, Fort Wadsworth, N.Y., Office of Post Engineer, 15 June 1960, source
- 15 Photograph, April 1961, Staten Island Institute of Arts and Sciences, citation
- 16 "Installation of Underlayment and Tiles; Installation of Oak Flooring Bldg 147", Department of the Army, Fort Wadsworth, N.Y., Office of the Engineer, 16 April 1962, source
- Fort Tompkins**
- 1 Frederick R. Black, "A History of Fort Wadsworth, New York Harbor," Historic Resource Study, Cultural Resources Management Study No. 7, Division of Cultural Resources, North Atlantic Region, National Park Service, (Boston: 1983), p. 45.
- 2 Ibid.
- 3 Ibid., p. 51.
- 4 Ibid., p. 70.
- 5 Ibid., p. 59.
- 6 Ibid., p. 60.
- 7 Ibid., p. 78.
- 8 Ibid., p. 78-9.
- 9 Ibid., p. 79.
- 10 Ibid., p. 91.
- 11 National Archives, Cartographic Division, RG77, War Department Map Collection, "Plan & Sections of a Battery for Ten Mortars for the Glacis of Fort Tompkins," September 22, 1870.
- 12 Black, p. 91.
- 13 Ibid., p. 92
- 14 P164 - Detailed Inventory of Naval Shore Facilities (Part 2), 30 Sept. 1992, Station New York, New York.
- 15 Microfiche collection, drawing, "Plans and Sections of Fort Tompkins," no visible date.
- 16 Ibid., "Ground Plan of Fort Wadsworth. N.Y.H.," 1871.
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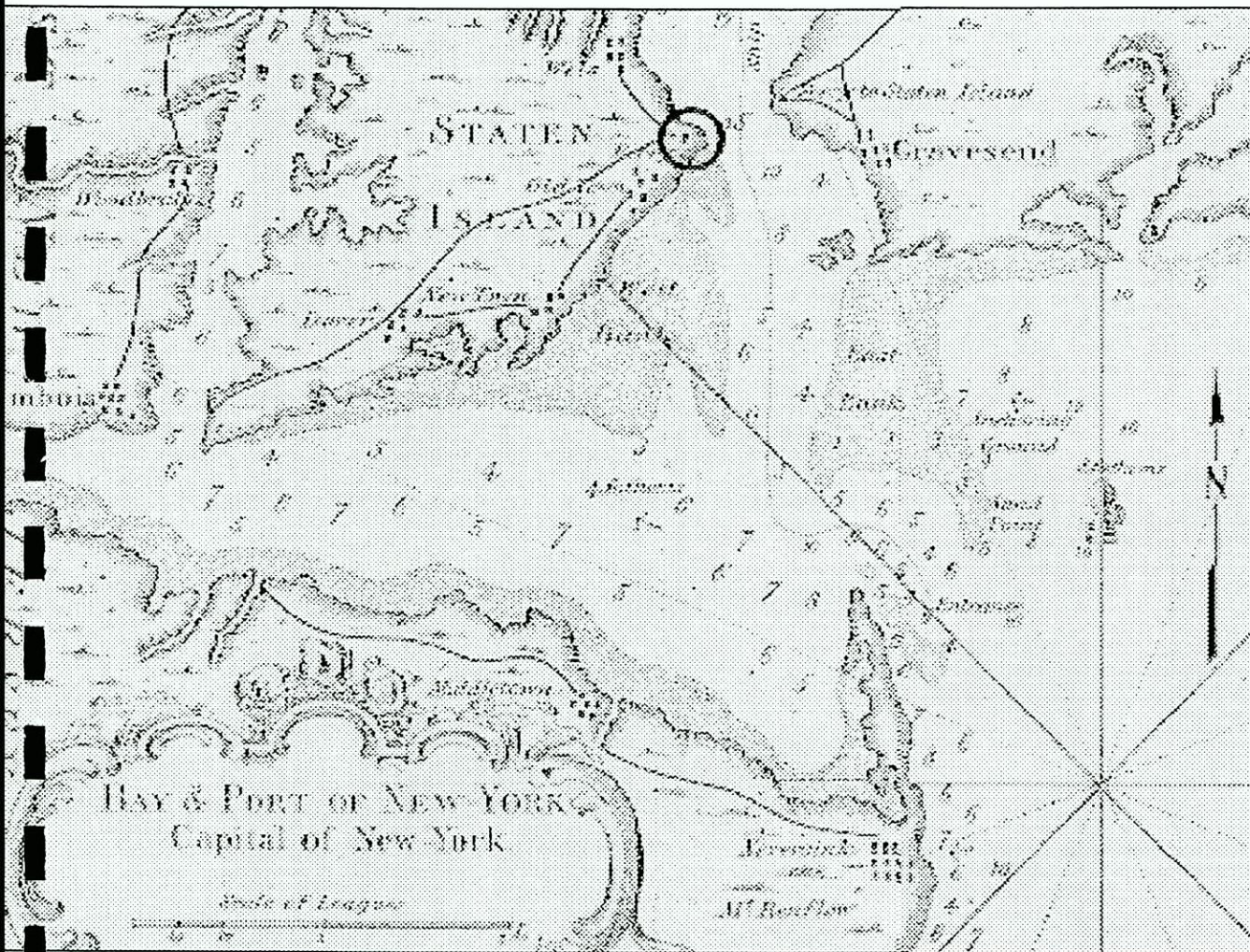
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**Post Exchange or Commissary (Building 206)**

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- 7.1 Introduction
- 7.2 Scope of Collection Statement
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- 7.5 Collections /Storage
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7

Collections Survey



## **7.1 Introduction**

During the week of October 10, 1994, site visits were made to Fort Wadsworth to survey collections and examine spaces proposed for conversion to storage areas for Gateway National Recreation Area's museum collections. This chapter identifies the need for a revised Scope of Collection Statement, provides a brief description of Fort Wadsworth related artifacts and records on the site, and discusses options for consolidating Gateway's museum collections at a storage facility at Fort Wadsworth. An appendix to this report provides a more detailed survey of records found at the Fort.

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## **7.2 Scope of Collection Statement**

Gateway's Scope of Collection Statement was prepared in 1990, before Fort Wadsworth became a unit of the park. The existing SOCS is very broad and general. This allows some elements of the existing document to be extended to Fort Wadsworth, because it shares historical themes with Forts Hancock and Tilden. Nonetheless, a revised scope should be drafted that explicitly identifies this installation's part of the story. The revised version, at least as it applies to Fort Wadsworth, should be much more restrictive and tied to the period of significance.

Frederick R. Black, and other historians, have argued convincingly that Fort Wadsworth's primary period of significance is tied to its role as a coastal defense work, from the now obliterated British Colonial and New York State works of the 18th and early 19th centuries, through 1945 when the last of Fort Wadsworth's guns fell into disuse. The site did remain a functioning Army installation until 1979, and was subsequently taken over by the Navy, but for the purposes of NPS interpretation and museum collecting the post's administrative and training functions of those years are of far less consequence than its earlier role in defending New York harbor.

In this light, Home Port activities by the Navy (1986-1994) are

not nearly as significant as Army coast defense works of the previous two centuries. The park could collect a small sample of Home Port New York materials that represent the end of military occupation of the site.

Because records are continually used in the management of an historic site, the archival section of the Scope of Collection Statement does not need to be tied so closely to the period of significance and should be expanded to include records produced by the Army and Navy. Although twentieth-century use of the Fort is less significant than the earlier occupations, the records produced during this century are valuable from a resource management standpoint. In particular, the records of the Public Works Division and the collection of architectural drawings and maps should be included in the SOCS.

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## **7.3 Survey of Objects**

On-site collections from the period of significance are minimal. The Army conducted a remarkably thorough clean-up when it moved out of Fort Wadsworth in the 1980s. Any items of historical interest were transferred to the Harbor Defense Museum on the opposite side of the Narrows at Fort Hamilton, Brooklyn, and elsewhere.

So far, the only harbor defense artifacts that NPS staff have been able to find on site are wood fragments of a flank howitzer carriage on the second level of Battery Weed, and a badly rusted skid jack and some twisted light-gauge railroad rail in front of the Torpedo Building. Some casemate bays in the upper two levels of Fort Tompkins were not examined, but based on those that were accessible, it seems reasonable to conclude that few artifactual materials remain there. There are a number of historic signs attached to structures throughout the Fort. Those that are stable and secure should probably be left where they are. A selection of signs and architectural elements that are removed for safekeeping in the course of restoration work and park development may be added to the museum collection, subject to the criteria outlined in



the Museum Services Quarterly Vol. 1, No. 4 (August, 1994).

Because of new standards and guidelines for property disposal when military bases are closed, the Navy left a far larger number of objects from their brief tenure on the site. Office furniture was left in place; some computers, AV equipment, and other high value items were moved to Building 209. Despite the volume of material, there is little of any historical consequence. The park should be highly selective when acquiring recent material for the museum collection — taking only those few objects that have symbolic or interpretive value. The Navy legacy at Fort Wadsworth seems limited in impact and does not present a valuable collecting opportunity.

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#### 7.4 Survey of Archives

As with the objects, few archival materials from the period of significance remain on site. However, there are a few collections of more recently created materials which provide valuable information. During the October 1994 site visit, a records survey was conducted to identify potential archival collections. The following buildings were surveyed:

- 109 (Navy's CSO, or Caretaker Site Office)
- 203 (Chapel building)
- 204 (Gymnasium)
- 205 (Theater)
- 208 (Office building)
- 210 (Administrative office building)
- 221 (Front gate)
- 305 (Marine Relief Society office)
- 306 (Warehouse)
- 354 (Security station)

358 (Public works building)

406 (SeeBee headquarters)

This list is not comprehensive of all of the buildings at the Fort. Only those buildings in which staff at the Fort thought records might remain were surveyed. A summary of what was found at each location is provided in a table in an appendix to this report. The most significant collections are the group of drawings and maps stored in Building 208; the files at the CSO building; the Engineering Division's files; and the files in the basement of 305.

The most significant group, in terms of size and informational value, is the collection of approximately 50,000 architectural drawings and maps stored in Building 208. Approximately 3,000 are flattened and organized; the remainder are unprocessed. The processed drawings and maps are stored in map cases in room 1-18 (the Public Works Department). A list of the drawer labels, along with the table mentioned above, is available an appendix to this report. The drawings and maps were and continue to be created by the Navy's Public Works Department and its NPS equivalent. Currently the drawings and maps are managed by a former Navy employee who is now a National Park Service engineering technician.

Although there is a large group of architectural drawings and maps, the volume of textual records is far smaller. It is apparent that there was a systematic removal of files in coordination with the Fort's closure; most of the material that remains appears to have been created only within the last five to ten years and seems to have been left behind. There are a few significant groups remaining, however, scattered throughout the various buildings and totaling approximately 340 linear feet. Many of the remaining records are valuable because they are the files of the Public Works Division. Changes made to buildings throughout the site and jobs such as asbestos removal and the addition of bathroom facilities are documented in the Public Works Division records. Of particular significance are the files at the CSO building; the Engineering Division's files; and the files in the basement of 305.

The first two groups mentioned above are active files. The Caretaker Site Office records consist of drawings and textual records (contracts, reports, correspondence, etc.) on the first floor and in the basement of the Building 109. The records on the main floor are currently being used by the CSO. There are less current records in two rooms in the basement — the basement storage room and a room off of that storage room referred to by CSO staff as the “room under the porch.” However, because the building is still used by the Navy, these records are still accessed at various times by the CSO for research. In addition, although there appears to be some material related to Fort Wadsworth, much of the material is related to other sites. Materials include many rolled and unrolled architectural drawings, boxes of contract material, and various other items such as bound and unbound reports.

The second significant group consists of an estimated 171.5 linear feet of actively used Engineering Division textual records in hanging files, cabinets, and binders. These records are stored in the division’s office, room 1-1 in Building 208.

The third significant group was created by the Public Works Division, USN, and was found in the basement of Building 305, most recently the office of the Marine Relief Society. The Public Works Division moved its headquarters many times, from building to building. The division used Building 305 prior to the Marine Relief Society and apparently in the last move did not take with them a group of “archived” records which had been stored in the basement. Several unorganized piles were found in the basement. Additionally, nine cabinets of organized records were found. The folder titles for several of the cabinets are provided in an appendix to this report, followed by a summary of the contents of the remaining cabinets.

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## 7.5 Collections Storage

The bulk of the Gateway National Recreation Area’s museum collections are now stored in Fort Hancock Building 47 at the Sandy

Hook unit with smaller collections in Building 28 at Sandy Hook and at the Jamaica Bay and Breezy Point units. The need for upgraded collections storage was identified more than a decade ago in the park’s Resource Management Plan (RMP). The Collections Management Plan (CMP), completed by WASO in 1989, and a 1991 Collections Storage Plan (CSP) call for consolidated storage of all non-exhibited Gateway collections in an upgraded facility.

At a minimum, any building considered for that use would have to have at least 3,000 square feet of useable floor space to accommodate collections now housed at Sandy Hook (1,320 sq ft), plus space for drawings and archival materials at Fort Wadsworth, collections at other Gateway units, and some room to accommodate collections growth.

Building 210 at Fort Wadsworth has been identified as the location of the new Gateway museum storage area. There will be 2 areas for artifact storage in Building 210. The larger of the 2 areas will be in the basement of the building. This storage area will cover just over half the area in the basement. This area consists of several rooms, hallways, a walk in vault and large open spaces sectioned off by fencing material

The building’s water, steam and drain lines run through parts of this area. Care should be taken during the planning of the storage space to ensure that objects are not placed directly on the floor, in case of leaks or flooding. Artifacts should also be placed as far away from these pipes as possible as a precautionary measure. Museum objects stored in the basement will be items such as projectiles, structural pieces, signs, oversized, etc. These are the items that are presently stored in an area in Sandy Hook with no climate control.

The other area in Building 210 that will house artifacts is on the first floor. It is a 480+ square foot room that will be furnished with movable compact storage equipment. This room will be across the hall from the Curator’s Office. This area will contain artifacts such as paper, textiles, fire arms, small objects, etc.



These are the items that are presently stored in the environmentally controlled room at Sandy Hook.

The basic requirements for museum collections storage are identified in 80-1 and the NPS Museum Handbook, and were amplified in Gateway's 1991 CSP. They are reprinted here to help focus consideration of possible sites at Fort Wadsworth:

**Museum Collection Storage:** Safe and secure storage of museum collections demand dedicated space. Museum storage areas should be used only for museum collections. Museum storage is separated from all other uses including office space and research and work space. Generally, outbuildings, unimproved basements and closets do not contribute to the preservation and effective use of collections. The space selected for museum storage is spatially adequate to accommodate the peculiar characteristics and quantity of objects. Adequate space is provided to avoid having objects or boxes of objects stacked on one another. The space is organized to allow for the efficient use of curatorial equipment and techniques and to provide for effective access and optimum preservation of the museum collection. Objects are housed in appropriate containers and packaged with appropriate materials.

Beyond this standard, the elements of good collection storage are:

**Attitude:** A general recognition, respect and sensitivity on the part of all park personnel for cultural resources.

**Accountability:** Cataloging, object numbering, shelf numbering, and periodic inventory.

**Accessibility**

**Security**

**Fire Detection/Suppression**

**Appropriate building construction**

**Ability to meet proper environmental parameters based on an environmental monitoring program.**

**Cleanliness**

**Proper storage equipment and techniques**

**Dedicated space**

**Proximity to compatible functions**

- Curatorial work space
- Curatorial office space
- Conservation laboratories (if applicable)
- Loading docks
- Fumigation areas

**Isolation from incompatible functions**

- Maintenance areas
- Dining areas/cafeterias
- Public areas

**The Facility:** The collection must have suitable and sufficient space for proper storage. Suitable space means first quality space that has been planned and evaluated for museum storage. Good storage has certain characteristics that contribute to effective storage. The storage space should:

Be insulated and have a vapor barrier to help attain and maintain the appropriate environmental conditions.

Have no windows and as few doors as practical to enhance security and environmental control, but not so few as to cause safety hazards in the event of fire or other emergency.

Be free of water lines or other pipes that can burst or leak or the objects should be protected in case an accident occurs.

Be free of electric junction boxes, gas and electric meters, and gas lines.

Be able to maintain, either passively or with a mechanical system

such as an HVAC, a steady environment required for the preservation of the collections.

Be of fire-resistant or fireproof construction.

Allow safe movement of personnel, equipment, and objects.

Be of sufficient size to properly accommodate the collection. The space should be large enough to allow the use of proper storage equipment and techniques and to provide 48" wide aisles between rows of equipment to insure safe handling of drawers and large objects. Inadequate space, inefficient use of space, and improper storage methods can cause physical damage to objects.

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## 7.6 Recommendations

### 1. Revise the existing Scope of Collection Statement:

- a. Provide explicit identification of Fort Wadsworth's significance and role in the mission of Gateway National Recreation Area. The revised version, at least as it applies to Fort Wadsworth, should be much more restrictive and tied to the period of significance.
- b. In regards to preserving the Navy's Home Port activities (1986-1994), the park could collect a small sample of Home Port New York materials that represent the end of military occupation of the site.
- c. The archival section of the SOCS should be revised to include a section regarding records produced by the Army and Navy. Indicate that Army and Navy records relating to the period of significance should be considered for accessioning as they are encountered, but that the Federal Records Center should be consulted when such material is uncovered. Army and Navy records which fall outside of the period of significance are of less interest to the National Park Service from an historical or interpretive point of view; however, those records are important for continuing land and buildings management.

2. Using the records survey provided in an appendix to this report, the curator, in consultation with the Regional Curator and Museum Services Center archivist, should identify which records remaining at the Fort should be retained. A representative from the Federal Records Center should be consulted to determine which records the National Archives will accession. Some of those records, however, may be of continuing interest to the National Park Service; consequently, arrangements should be sought with the Federal Records Center for long-term loan of the materials. Prior to approaching the Federal Records Center, the park should be prepared to state which records they would like to have continuing access to. In particular, the group of drawings and maps in Building 208 and the Public Works Division files in the basement of Building 305 will be of continuing use to the park in the management of its buildings.

The records at the CSO building and the current facilities management files are significant as well. The park's interest in these files should be communicated to the appropriate officials.

The remaining records at the Fort are of less value; however, the curator should look at the survey carefully to identify potential collections.

3. Move the Public Works Division records out of the basement in Building 305. Either move the filing cabinets and loose drawers and boxes in their entirety out of the basement into proper storage, or transfer the files to Record Center cartons. If the material is transferred to cartons, follow exactly the list provided in the appendix to this report. Number the boxes and label them as containing Public Works Division files. The list provided in the appendix will provide the preliminary finding aid and serves as base-line data which can be used in the formal processing of the records.

4. Currently the collection of drawings and maps stored in Building 208 is managed by a former Navy employee who is now a National Park Service engineering technician. The park should determine what division (curatorial or engineering) and individ-



ual(s) are responsible for management of this collection and position descriptions should be revised accordingly. Two scenarios present themselves: 1) determine that the drawings should be accessioned and therefore managed under the Curatorial Division; or 2) keep the drawings under Facility Management. In either case there should be cooperation between the two divisions. An individual in the appropriate division should be assigned responsibility for management of the collection, and a contact person in the other division should be named and should be consulted on collection management decisions. Because the drawings and maps fall outside of the site's period of significance, because they do not hold exceptional aesthetic or artifactual but rather informational value, and because they are continually used and created by the engineers, it is recommended that the collection be maintained by facilities management. However, the curator must be involved in the management of the drawings and maps. In addition, this issue may be revisited in the future with the decision being made that the collection should be accessioned, particularly since such a large percentage of the collection remains unprocessed.

The division assigned responsibility for the collection should continue with the good work already accomplished in processing the drawings and maps. Out of approximately 50,000 drawings, only an estimated 3,000 have been flattened and organized into map drawers. The collection is roughly organized by building. In addition, drawings of utilities for the entire Fort are stored together. The drawer list provided in the appendix demonstrates this organization. Rolled or folded drawings and maps should be flattened using appropriate techniques (consulting a conservator when necessary) and they should be placed in groups following the existing organization which should be expanded as necessary. Within each group keep series of drawings together and arrange the series or individual drawings chronologically. At the moment, keep the drawings in map drawers; if the decision is made in the future to accession the collection, rehouse the drawings in folders, separate them by type (e.g. blueprints from hand-drawn), and catalog them. A finding aid to the collection should be produced. The simplest such document should contain a listing of drawer

labels with a summary of the number, types, and dates of the items in each drawer. A more detailed finding aid could list the series of drawings in each drawer, even down to the item level. Once the collection is organized, each drawing could be assigned a consecutive identification number which could be marked on the reverse of each drawing in pencil. If the collection is eventually accessioned and cataloged, series of drawings should be cataloged into the main collection database (ANCS, the Automated National Catalog System) as lots, and individual drawing should be described in a separate database. The separate database (containing fields such as item number, drawing title, size, medium, and storage location) could be set up now as well. The basic processing of the drawings (unrolling or flattening, organizing into groups stored in map drawers, and describing in a basic finding aid) would take four full-time GS-7 technicians a minimum of approximately two years.

5. Investigate what happened to the records of the Army and the records of all Navy divisions except the Public Works Division (whose records are in the basement of Building 305). Contact appropriate authorities at the New York Federal Records Center and the Center for Military History. Because Fort Wadsworth was managed at one point by the Engineering Division of Fort Hamilton, investigate the possibility that records relevant to the Fort Wadsworth may be stored at Fort Hamilton. In addition, see if any objects relating to Fort Wadsworth are stored at Fort Hamilton.

6. Upgrade storage of all Gateway National Recreational Area collections. Building 210 will be adapted for collections storage use following the specifications outlined in this chapter and the site's Collection Management Plan and Collections Storage Plan.

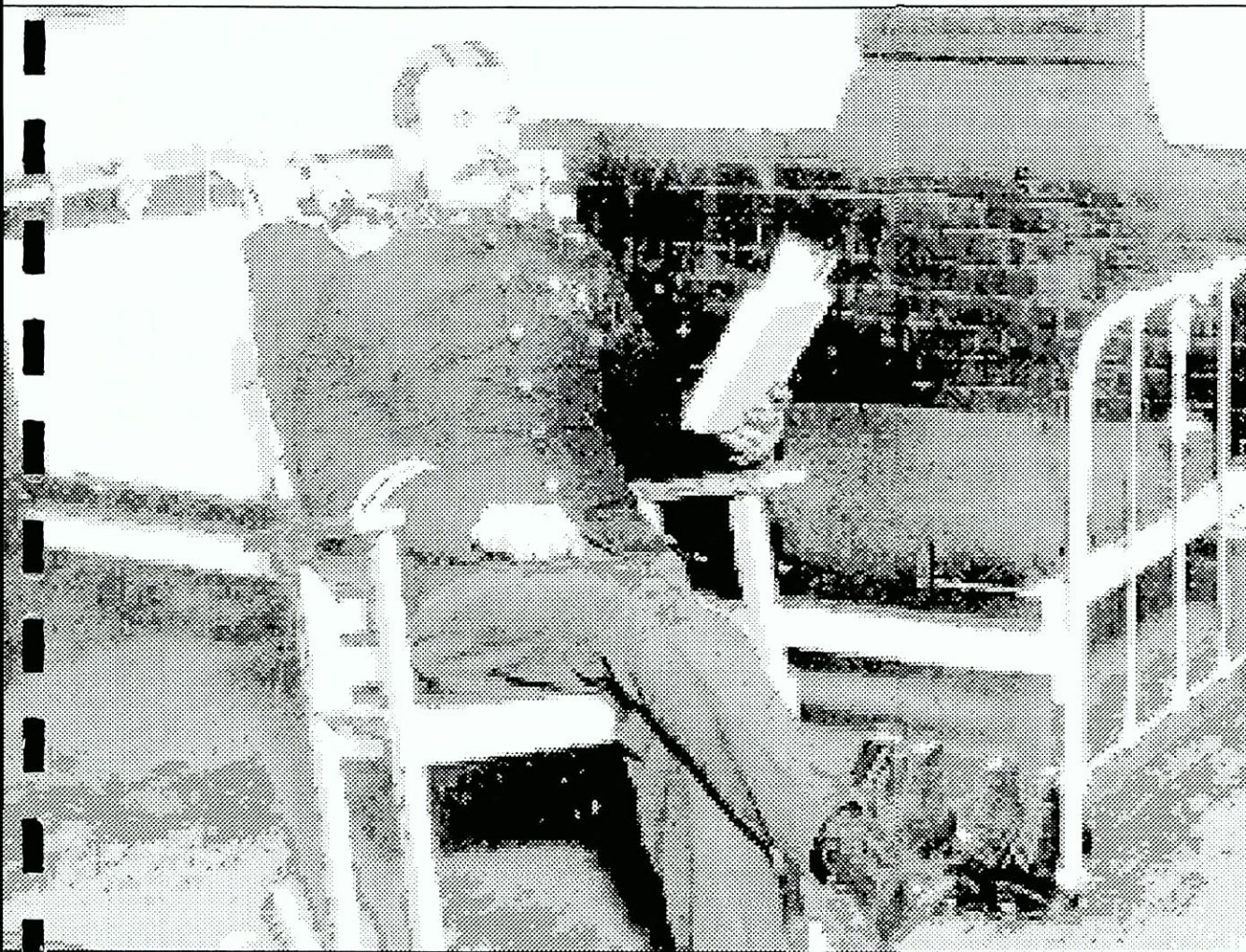
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## Section 7: Collections Survey

## List of Footnotes

- 1 Frederick R. Black, *Historic Resource Study: A History of Fort Wadsworth, New York Harbor*. (Boston: National Park Service, NARO Division of Cultural Resources, Cultural Resource Management Study No. 7, 1983).
- 2 Diana R. Pardue, Don Cumberland, & Lynne Leopold-Sharp, "Gateway National Recreation Area, Collection Management Plan." (Washington, DC: National Park Service, Curatorial Services Division, October, 1989); Bernholz, Martha, "Gateway National Recreation Area, Collection Storage Plan." (Boston, MA: National Park Service, Cultural Resources Center, Collections Conservation Branch, September, 1991).
- 3 Bernholz, 1991, pp. 2-3.





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Appendix



### Section 3: Site Description and Site History

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**Figure 3:2** Plan and sections of the state-constructed Fort Tompkins, Fort Richmond and Battery Hudson (also shows location of Battery Smith). From "Fort Tompkins and Fort Richmond, State of New York," drawn by W. Tell Poussin, 1819. (Cartographic Research Room, National Archives, Washington, Drawer 41, Sheet 3.)

**Figure 3:3** "A Sketch of the United States Land on Staten Island Showing the Tract About to be Purchased from the Jacobson, and the Tract Now Offered to the United States by Mr. William Aspinwall, June 26, 1954." From a letter of Major R. Delafield, 28 June 1854. Courtesy of the Delafield Papers, New York Historical Society.

**Figure 3:4** Shows temporary quarters erected at Fort Wadsworth during the Civil War. From "A Sketch of Proposed Site for a Post Cemetery at Fort Wadsworth, Staten Island, N.Y." From a letter from Major Q.A. Gilmore, June 24, 1869. Cartographic research Room, National Archives, Washington, Drawer 43, Sheet 58.

**Figure 3:5** Shows the appearance of Fort Wadsworth following the Civil War, including buildings along Mont Sec Avenue. From "Ground Plan of Fort Wadsworth Showing Location of Buildings, 1871. From Cartographic Research Room, National Archives, Washington, Miscellaneous Fortification Files, Fort Wadsworth.

**Figure 3:6** Tennis courts at Fort Tompkins, November, 6, 1888. Courtesy of Staten Island Historical Society.

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**Figure 3:11** "United States Reservation, Fort Wadsworth, New York. Location of Buildings with Reference to Their Occupancy as Quarters, June 1902." National Archives, Cartographic Division, Bayonne, RG 77 Drawer 43, Sheet 85-3.

**Figure 3:12** Shows location of Endicott Batteries, and topographic conditions. From "Post and Reservation Map of Fort Wadsworth, NYH, Compiled from the Latest Information." National Archives, Bayonne, RG 77 War Department Collection.

**Figure 3:13** Proposed Location for Additional Cable Tank and Cover at Fort Wadsworth, February, 1899. From Letter of Major H.W. Adams, February, 1899. National Archives, Bayonne, RG 77.

**Figure 3:14** "Part of United States Government Land at Fort Wadsworth, New York, ShowinProposed Site for Light Keepers Dwelling." Drawn by Major H.M Adams, Corps of Engineers, October, 26, 1898. National Archives, Bayonne, RG 77.

**Figure 3:15** Shows new construction, 1900-1906. "Fort Wadsworth, N.Y.H." Source, RG 92, Blueprint File, Fort Wadsworth, New York.

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**Figure 3:18** Shows weapons and range finders located at Fort Wadsworth, circa 1918. National Archives Source?

**Figure 3:19** Aerial view of Fort Wadsworth, c. 1927. Note the structures along New York Avenue, the temporary barracks at the southern end of the post, and the range-finders along Artillery Road. From Department of the Army, United States Army Military History Institute, Carlisle, PA. RG 100.

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**Figure 3:21** Aerial View of Fort Wadsworth, c. 1927. Note appearance of Parade area west of New York Avenue. From Department of the Army, United States Army Military History Institute, Carlisle, PA. RG 100.

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**Figure 4.5** "Plan (No. 34) du Camp Anglo-Hessois dans Staten Island (Baie de New York) de 1780-1783." Scale 1 inch:5/8 miles. Limits of Fort Wadsworth Reservation shown with dashed line.

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**Figure 4.8** Poussin, Capt. W. Tell. "State of New York, Fort Tompkins, Fort Richmond". 1819. Scales as indicated. (National Archives, Record Group 77, Drawer 41, Sheet 3.)

**Figure 4.9** "Plan of the Grounds about Forts Tompkins and Richmond, Staten Island." 1850. Scale 1 inch:160 feet (approx.) Northern limit of Fort Wadsworth Reservation shown with dashed line. (National Archives, Record Group 77, Drawer 43, Sheet 29.)

**Figure 4.10** Dugan, L. "Plan and Reservation, Fort Wadsworth, N.Y.H.". 1890. Scale 1 inch:325 feet (approx.) Northern limit of Fort Wadsworth Reservation shown with dashed line. (National Archives, Record Group 92.)

**Figure 4.11** "Map of the Vicinity of Fort Wadsworth, Staten Island, N.Y." 1889. Scale as indicated. Limits of Fort Wadsworth Reservation shown with dashed line. (National Archives, Record Group 77, Drawer 43, Sheet 53.)

**Figure 4.12** "Description of the Defenses on Staten Island at the Narrows of New York Harbor." 1886. Scale 1 inch:240 feet (approx.). Northern limit of Fort Wadsworth Reservation shown with dashed line. (National Archives, Record Group 77, Drawer 41, Sheet A.)

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Institute of Arts & Sciences, Neg. #4.

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### Building 109

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### Seebee Complex (buildings 301, 302, 303/304, 305, 309, and 310)

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### Building 301

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**Figure 6.169** General view of building 406 (former residence) showing south and west facades. Note recent application of vinyl siding and replacement of window units.

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**Figure 6.173** General view of religious complex consisting of main chapel and support offices.

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**Figure 6.183** Detail view showing boarded window at northwest corner of the building.



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The following is a preliminary list of buildings at Fort Wadsworth including building number, name, date and status as contributing or non-contributing (NC or C) within the proposed historic district. This list is limited to buildings and structures but does not include objects or other landscape features such as roads, walls or fields. It should further be noted that this list has not been field checked, and that further research and field work may reveal changes in name, date and National Register status.

100	GP Berth Pier	1990	NC
101	Housing	1933	C
102	Housing	1939	C
103	Housing	c. 1870	C
104	Detached Garage	1936	C
105	Detached Garage	1932	C
106	Housing	1932	C
107	Housing	1932	C
109	Administrative	1871-1882	C
110	Housing	1933	C
111	Housing	1890	C
112	Housing	1890	C
113	Housing	1890	C
114	Housing	1889	C
115	Housing	1933	C
116	Detached Garage	1935	C
117	Detached Garage	1935	C
118	Housing	1960	NC
119	Housing	1939	C
120	Offices/Visitor Center	1992	NC
125	Substation	1940	C
133	Battery Duane	1895-1897	C
137	Fort Tompkins	1859-1876	C
138	Mars Station (Inside wall at Tompkins)	1900	C

#### **A.4 Fort Wadsworth Building Inventory**

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139	Signal Storage (Inside wall at Tompkins)	1891	C	220	Post Office	1989	NC
140	Rod and Gun Club	1940	C	221	Handball Court	1960	NC
141	North Deck/Supply Wharf	1850	C	222	Housing	1962	NC
147	Torpedo Storage	1894	C	223	Housing	1960	NC
148	General Warehouse	1939	C	300	Ammunition Storage		
150	Guardhouse	1861	C	301	Motor Pool	1938	C
151	Battery Weed	1861	C	302	Motor Pool	1937	C
155	Battery Catlin	1902-1904	C	303	Motor Pool Office	1938	C
? 155A	Battery	1895	C	305	Administrative Office	1900	C
? 164	Shelter			306	Warehouse	1960	NC
201	North Gatehouse	1990	NC	307	Ready Magazine	1910	C
203	Chapel	1963	NC	309	Stables (Storage)	1931	C
204	Gymnasium	1962	NC	310	Administrative Storage	1927	C
205	Theater	1960	NC	312	Sewage Pump Station	1927	C
206	Post Exchange - Commissary	1960	NC	314	General Storage Shed	1900	C
207	Post Exchange - temp	1962	NC	315	Battery Upton	1896	C
208	Administrative Office	1961	NC	316	Battery Bacon	1898	C
209	Admin/Computer Center	1960	NC	316A	Battery Turnbull	1901-1903	C
210	Administrative Office	1929	C	317	Battery Hudson	1899-1904	C
211	Open Warehouse	1939	C	318	Battery Mills	1899-1904	C
214	Electric Distr.	1962	NC	319	Battery Dix	1802-1904	C
215A-F	Bachelor Enlisted Quarters Building	1990	NC	320	Command Post	1895-1900	C
216	Dining Facility (BEQ)/Galley	1990	NC	321	Battery Barry	1896-1897	C
? 218	Incinerator	1962	NC	? 336	Latrine	1959	NC
				? 337	Latrine	1960	NC



338	Guard Watch Towers	1905	C	432	Housing	1989	NC
339	Small Arms Range	1944	C	433	Housing	1989	NC
? 341	Shelter			434	Housing	1989	NC
352	Carriage Club	1921	C	435	Housing	1990	NC
354	Police Station	1960	NC	435A/B	Consolidated Civilian Personnel Office	1959	NC
356	Reserve Training Building	1974	NC	436	Housing	1990	NC
357	Vehicle Shop	1977	NC	437	Housing	1990	NC
358	Public Works Shop	1992	C	438	Housing	1990	NC
375	Gas Station	ND	NC	439	Housing	1990	NC
? 401	Gatehouse	1989	NC	440	Housing	1990	NC
404	West Gatehouse	1939	C	441	Housing	1990	NC
406	Housing	1905	C	442	Housing	1990	NC
408	Navy Lodge	1991	NC	?442A/B	Youth Center	1952	NC
421	Battery Richmond	1898-1899	C	443	Housing	1990	NC
422	Battery Ayres	1900-1901	C	444	Housing	1990	NC
423	Housing	1989	NC	445	Housing	1990	NC
? 423A	Detached Garage	1989	NC	446	Housing	1990	NC
424	Housing	1989	NC	447	Housing	1990	NC
425	Housing	1989	NC	448	Housing	1990	NC
426	Housing	1989	NC	449	Housing	1990	NC
427	Housing	1989	NC	450	Housing	1990	NC
428	Housing	1989	NC	451	Housing	1990	NC
429	Housing	1989	NC	452	Housing	1990	NC
430	Housing	1989	NC	453	Housing	1990	NC
431	Housing	1989	NC				

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<b>A.4 Fort Wadsworth Building Inventory</b>	454	Housing	1990	NC
	453A	Detached Carport	1990	NC
	454A	Detached Carport	1990	NC
	455	Jr. Officer Housing	1990	NC
	455A	Detached Carport	1990	NC
	456	Jr. Officer Housing	1990	NC
	457	Jr. Officer Housing	1990	NC
	458	Jr. Officer Housing	1990	NC

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This appendix provides supplementary information to section 6., "Collections Survey," of this report. Information for both the collections survey chapter and this appendix was gathered during site visits made during the week of October 10, 1994. The appendix is divided into three sections: 1)a table with summarized survey findings; 2)a list of the drawer labels for the cases in which the Public Works Drawings are stored; and 3)a detailed description (including folder lists) of the Public Works Division Files found in the basement of building 305.

**A5**

**1. Summarized  
Survey Findings**

**2. Drawer Labels  
for Public Works  
Drawings**

**3. Public Works  
Division Files**

**A5.1****Summarized Survey  
Findings of Records  
at Fort Wadsworth**

(Buildings are listed  
in numerical order)

<b>Location</b>	<b>Description</b>	<b>Amount</b>
<b>Building 109 (Caretaker Site Office)</b>	drawings and textual records (contracts, reports, etc.) in basement relate to CSO activities (i.e., maintenance of site) some records relate to Brooklyn and Stapleton records are active and date from Navy residence building also referred to as "ROICC" (Resident Officer in Charge of Construction)	est. 18 cu ft
<b>Building 203 (Chapel)</b>	no records relating to chapel remain currently office of JETA (Joint Employee Transition Assistance Committee) office of former Congressman, current President of Staten Island Guy Molinari, was in building 203	no records
<b>Building 204 (Health/Wellness Building)</b>	miscellaneous material (binders, ledgers, videotapes, computer printouts, flyers, loose papers, etc.) in and near the office of the MWR Director primarily reference material relating to safety and to personnel management created during Navy residence	est. 8 LF
<b>Building 205 (Theater)</b>	no records were found	no records
<b>Building 208 (Offices)</b>	only 2 rooms contained records	est. 203 LF , 100 binders, & 50,000 drawings (entire bldg)
<b>Room 1-1 (Engineering)</b>	estimated 8 cabinets, 28 shelves of hanging files, and 23 shelves of binders with recently created files	est. 171.5 LF
<b>Room 1-18 (Public Works Department)</b>	estimated 21 boxes of material piled in corner, completely unorganized estimated 100 binders and 10 filing cabinets with recently created files relating to public works estimated 50,000 drawings produced by the Maintenance Control Division, an engineering department under Public Works; estimated 3,000 are flattened and organized in map drawers; mix of originals and prints; mix of FOWA, Brooklyn, and Stapleton; date C1939-1994; list of drawer labels provided after this table	est. 131.5 LF , 100 binders, & 50,000 items



Location	Description	Amount	A5.1
<b>Building 210</b> (Administrative Offices)	building has atmosphere of ghost town — apparent systematic removal of files; those materials found are the “leftovers” all records were recently created	est. 13.5 LF , 9 binders, 26 ledgers, 215 items, & 8 tapes (entire bldg)	<b>Summarized Survey Findings of Records at Fort Wadsworth</b>
Basement	no records were found	no records	
1st floor, Section D	3 ledgers	3 ledgers	
2nd floor, Room 2-4 (Administrative Office)	6 ledgers (with titles such as “PCS In/Out,” “Instructions/Notices,” and “Registered/Unclassified Mail” multiple copies of the Customer Command newsletter	6 ledgers est. 24 items	
2nd floor, Room 2-6 (Supply/TAD Room)	17 ledgers (with titles such as “TAD Log FY 92,” “Engraving,” “UIC’s,” and “Misc. Medals Check Out Log”) 9 binders (with titles such as “Printing Manpower FY 93” and “ Administration FY 93”) estimated 1.0 linear foot of folders and loose papers estimated 2.5 linear feet of supply catalogs, equipment manuals, flight manuals, etc. estimated 8 computer tape cartridges	17 ledgers 9 binders est. 3.5 LF est. 8 tapes	
2nd floor, Room 2-11 (Office of the Command Master Chief)	1 one color photograph package of black and white prints of the USS New York in the East River in 1917 estimated half-dozen items clipped together	est. 35 items	
2nd floor, Room 2-12 (Office of the Command Master Chief)	1 framed proclamation (by President of Staten Island) framed certificates	est. 6 items	
2nd floor, Rooms 2-14 & 2-15 (Board Room)	estimated 0.5 linear feet of material such as the social roster under Captain Gorden E. Kauffman’s command, training announcements, agendas, and items relating to public affairs	est. 0.5 LF	
2nd floor, Room 2-16 (Public Affairs Room)	1 carton of unsorted color and black and white photographs and negatives which appear to document recent events	est. 9 LF	

**A5.1**  
**Summarized Survey**  
**Findings of Records**  
**at Fort Wadsworth**

<b>Building 210</b> <b>(Administrative Offices)</b> <i>(cont.)</i>	5 cartons containing records in an ante-room to the Public Affairs office; 4 have "OIDET 102" written in black magic marker on the side; 1 has "Fleet week" and 3 have "files" written on them; several were sealed and unopened; material in the open boxes included memoranda, reports, etc. date from recent years	
2nd floor, Room 2-40 (Photo Studio)	at least 6 packs of black and white photographs and negatives 1 8x10 black and white 1 5x7 color photograph taken recently	est. 150 items
3rd floor, JETA Offices	estimated 0.5 linear foot of material consisting of 1 binder and 2 piles of paper recently created	est. 0.5 LF
<b>Building 221</b> <b>(Front Gate)</b>	no records were found	no records
<b>Building 305</b> <b>(Marine Relief Society)</b>	most recently used as office of Marine Relief Society (all remaining records date C1989-1994) estimated 2-3 linear feet of material left when MRS vacated first floor (handbooks, forms, memos, publicity material, computer printouts, index card boxes, booklets, pamphlets, a volunteer log book, a videotape, a cassette tape, floppy disks, misc. items such as calendars and posters taped to walls) material in basement relating to the Marine Relief Society: -estimated 6 linear feet (binders, pamphlets, booklets, a "Facility Energy Plan," a "Natural Resources management Plan," an EPA report, a videotape, loose papers, etc., all generally related to housing) in two boxes by heating equipment -estimated dozen items (NAVOSH [Navy Occupational Safety and Health] binder, manuals, catalogs, booklets, record ledgers, etc.) on bench in main area of basement building previously was Public Works Office material in basement relating to Public Works Office: -estimated 5 linear feet in boxes by base of stairs (binders & booklets covering the following subjects or with the following titles: Public Works Support Services 1984; facilities project manual 1985; Imperial Equipment Corp.; project requests; Navy installation restoration program & manual 1988; casualty assistance calls 1988; Navy housing C1979-1983; disaster preparedness 1985; maintenance & operation of active solar heating systems 1990; environmental	est. 9 LF (related to the Marine Relief Society) & est. 75 LF (related to the Public Works Division)



## Summarized Survey Findings of Records at Fort Wadsworth

compliance evaluation of Naval Station New York; 1989 contract regarding Triplex Flooded Suction; temperature control systems 1989; operations & maintenance manual for family housing 1990, Signal Communications equipment service guide; OPM job grading standards for supervisors; Public Works Officer's Navy Occupational Safety and Health Resource Guide; Disaster Control; & Capabilities of Commercial Maintenance Software vs. NAVFAC PUMA 1988)  
 -2 architectural drawings regarding lighting  
 -flip chart presentation regarding Staten Island Home Porting  
 -9 cabinets in basement containing Public Works general files dating from C1942-1989 and covering electrical, plumbing, water, gas, asbestos removal, etc., for each building; lists are after this table

<b>Building 306</b> (Warehouse)	was JETA office no records relating to JETA were found 4 framed proclamations were found in the warehouse (by NY Governor in 1975; by Mayor in 1975; by NY Governor in 1974; and by Brooklyn President in 1982) 4 binders; recently created	4 items 4 binders
<b>Building 354</b> (Security Station)	estimated 3-4 linear feet of material left when building was vacated (log books, misc. files, ledgers including a work request ledger, manuals, binders, etc.) created recently	est. 3-4 LF
<b>Building 358</b> (Public Works)	estimated 3-4 linear feet of material left when building was vacated (log books, memos, business cards, forms, binders, catalogs, handbooks, duplicates, floppy disks, etc.) created recently files of the maintenance foreman remain (in room 105); however, he is in the process of cleaning out his office 4 shelves of catalogs in parts and tools room (room 133)	est. 16 LF
<b>Building 406</b> (CB HQ)	estimated 1.0 linear foot of hanging files with forms, calendars, etc.	est. 1 LF

## A5.2

### Public Works Drawings

### Public Works Drawings

The most significant group of archival materials remaining at Fort Wadsworth, in terms of size and informational value, is the collection of approximately 50,000 architectural drawings stored in Building 108. Approximately 3,000 are flattened and organized in map drawers in room 1-18 (the Public Works Department). The following is a list of the drawer labels:

#### First Cabinet

Flat File No.	Drawer Label
1	Ft. Wadsworth Utilities — Gas, Plumbing, Water
2	Ft. Wadsworth Utilities — Electrical
3	Bldg. 203 Chapel
4	Bldg. 204 Gym
5	Site Plan & Utility Plan
6	Bldg. 205 Theater
7	Bldg. 206 Commissary
8	Bldg. 308 [Offices]
9	Bldg. 209 [Computer Building]
10	Bldg. 210 [Administrative Offices]
11	Family Housing
12	“BEQ”
13	Navy Lodge
14	Bldg. 358 Public Works
15	Tracing Paper [i.e., no drawings]

### Second Cabinet

Flat File No.	Drawer Label
16	Cape Haut Housing
17	Bldgs. 352, 354 & 356
18	Bldg. 120 Administration Headquarters
19	Fort Tompkins
20	Bldg. 109 ROICC
21	Bldgs. 101-223 Mont. Sec. Hse. Bldgs.
22	Bldgs. 301-321
23	Bldg. 216 General Mess
[no #]	Utility Drawings
[no #]	Cyclone Fence
[no #]	Bldgs. 343, 403, 424 Family Housing & Pool
[no #]	[Aerial Photos]
[no #]	[Maps]



## Public Works Division Files

Besides the collection of architectural drawings and maps, the other very significant group of records was created by the Public Works Division, USN, and was found in the basement of building 305, most recently the office of the Marine Relief Society. Several unorganized piles of Public Works materials were found in the basement; they are described above in the table. In addition, nine cabinets were found with Public Works Division files. Three cabinets are near the base of the stairway; they are described first. Six additional cabinets are further into the basement, away from the stairway and central area; they are described last.

Most of the materials are textual records (forms, memos, certificates, etc.) and there is a mix of photocopies and originals. There are some drawings.

Most of the folders in these cabinets are turquoise or brown; there are some brown accordion folders and hanging files. In addition, there are many manila folders with titles written in red marker. Most of the titles on the folders are in all capital letters; however, they appear in both upper and lower case below for ease of reading. Inaccuracies in spelling and inconsistencies in punctuation and word arrangement have been corrected. In addition, in the list below all years include centuries (i.e., "1987" is always used even if "87" appeared on the folder title). Word abbreviations (such as "est." for "estimate") were recorded in this list.

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### 3 Cabinets at the Base of the Stairway:

**Note:** These files appear to be the General Information files and seem to be in alphabetical order; however, there has been some apparent misfiling. The materials in these three cabinets appear to date C1977-1990. For the purposes of this appendix, the cabinets have been numbered 1-3, left to right.

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#### Cabinet 1 (left cabinet) (5-drawer)

##### Drawer 1 (drawer label: ONE)

Approximately 1.0 linear foot.

##### Folder:

- Robert Shaw Controls
- Safety 3
- Safety 2
- Roofs
- Shore Base Readiness Report
- Shore Facilities Planning System (SFPS)
- Special Projects 3
- Special Projects 1
- Special Projects 2
- Special Projects Guide
- Standards of Conduct
- SIOH (Supervision, Inspection, & Overhead)
- Support Agreement
- Sweets' Catalog
- Tenant Activities
- Terrorism
- Test Equipment
- Training 1
- Site Approvals

##### Drawer 2 (drawer label: THREE)

Approximately 2.5 linear feet.

**Note:** There are empty folders mixed in with the following titles.

A5.3

## Public Works Division Files

**A5.3****Public Works  
Division Files****Folder:**

Training: Individual Development Plans (IDPs) Fy 1987  
Service Contracts  
Workload FY 1986 & Out Years  
SFPS  
Budge (Station)  
Tenant Activity Charges  
Special Projects Active  
Water Treatment  
Utilities Floyd Bennett Field  
PCB XMRS  
Personnel  
Personnel — Project Engineer GS-11/12  
National Park Service  
Hazardous Waste/Material  
FADS (BEST)  
Environmental Engineering  
Designs/Surveys etc.  
Workload Preparation: PCB Transformers  
Boilers/Temp  
Temporary Boilers  
BEST  
Vulnerability Assessments  
Water Service Mitchel Manor:  
    Nassau County Agreement  
Utilities Mitchel Manor  
Utilities Mitchel F???  
Utilities — NY Housing Electrical  
Utilities: FBF Gateway National Park (Reimbursement  
    Issue, ISSA, etc.)  
Utilities General & Brooklyn  
Utilities (Historical Data: U.S.N. & Click Agreements)  
Transportation  
Milcon Program; Status  
DEIS II

**Drawer 3** (drawer label: S.I. Facility Support Contracts/SEVEN)  
Empty.

**Drawer 4** (drawer label: FIVE)  
Empty.

**Drawer 5** (drawer label: NINE)  
Approximately 2.5 linear feet.

**Folder:**  
BEST Software/Hardware Service  
BEST Software/Hardware Renewal FY 1989  
BEST Hardware Maintenance  
BEST Software Licensing  
Computers: Base Engineering Support Technical (BEST)  
    [Transportation]  
Computers: Best Engineering Support, Technical  
    (BEST) 2  
Computers: Best Engineering Support, Technical  
    (BEST) Maintenance System 1  
BEST System 12/28/84  
HC-8-83 Install Additional Street Lighting MF  
STU Workload  
Work to Engineering Design Branch  
Ft. Wadsworth — ROICC SI Bldg. # 109  
Ft. Wadsworth — NEX Bldg. # 206  
Ft. Wadsworth — CBU  
CBU Compound 383 Cost Est.  
CBU Compound  
CBU Compound  
Ft. Wadsworth — Navy Reserve Bldg. # 350  
Ft. Wadsworth — Army Reserve bldgs. 356/357  
Ft. Wadsworth — Congressman Molinari Bldg. # 203  
Asbestos Removal  
Higher Priority Work Requests  
Work Requests  
Commissary Work  
Commissary Work  
Boiler/Furnace Maintenance Contract FBF, MF, MM



NISRO/NISRA I.D.S.  
Housing Work  
Reimbursable Work  
Work Requests  
Electric — Station  
Electric — Housing  
Electric — MWR  
Electric — Commissary  
Electric — Medical  
Electric — Navy Exchange  
Electric — NISRA  
Electric — NMPS  
Electric — PSD  
Electric — SUPSHIP  
Mechanical — Station  
Mechanical — Housing  
Mechanical — MWR  
Mechanical — Commissary  
Mechanical — NEX  
Mechanical — NMPS  
Mechanical — NISRA  
Mechanical — SUPSHIP  
Structural — Station  
Structural — Housing  
Structural — MWR  
Structural — Commissary  
Structural — CCPO  
Structural — Dental  
Structural — NEX  
Structural — NMPS  
Structural — SUPSHIP  
Multi-discipline — Station  
Multi-discipline — Housing  
Multi-discipline — MWR  
Multi-discipline — Commissary  
Multi-discipline — NMPS  
Multi-discipline — SUPSHIP

Multi-discipline — Miscellaneous Reimbursable

A5.3

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**Cabinet 2 (middle cabinet) (5-drawer)**

**Drawer 1 (drawer label: TWO)**

Approximately 2.5 linear feet.

**Folder:**

Accident Reporting  
Administrative Services (typing, supplies, etc.)  
AFPD  
Acquisition North Division Notes  
Administrative Workload Reduction  
Air Conditioners  
Ammunition & Explosives Facilities  
Annual Inspection Summary (AIS) FY 1981  
Annual Inspection Summary (AIS) 1982  
Annual Inspection Summary (AIS) FY 1983  
Annual Inspection Summary (AIS) FY 1984  
AIS FY 1985  
AIS FY 1986  
AIS FY 1987  
AIS FY 1988  
Appreciation Letters  
Architects & Engineers  
Areas  
Asbestos  
Audio Equipment  
Audits  
Audit: Accountability & Control of Plant Property and  
other Navy Property (JAN-MAR1983)  
Audit: Small Purchases OCT1983  
Audits: Naval Audit May 1985  
Automatic Data Processing (ADP)  
Bachelor Housing  
Bachelor Housing FY 1985 Improvement Program  
Bachelor Housing Requirements FY 1989  
(BMARD) Backlog of Maintenance & Repair

**Public Works  
Division Files**

**A5.3**

**Public Works  
Division Files**

Base Closures  
Beepers  
Beneficial Suggestions  
Beneficial Suggestion (A. Seskin 01 04 83)  
Boilers  
Boiler Inspection Reports  
Bomb Threats  
Books & Magazines  
Brooklyn Navy Yard  
Brooklyn Navy Yard Development Corporation  
Budget  
Budget Requirements FY 1983 (Housing)  
Budget Items FY 1983 (Station)  
Budget FY 1983 (Maintenance Action Plan) (Station)  
Budget FY 1984 (Station)  
Budget FY 1984 (Housing)  
Budget FY 1985 (Station)  
Budget FY 1985 (Housing)  
Budget FY 1986 (Station)  
Budget FY 1987 (Housing)  
Budget FY 1987 (Station)  
Budget FY 1988 (Station)  
Budget FY 1988 Increases/Decreases Exhibits  
Budget FY 1989 (Station)  
Budget 1985/1986 BB-SAG Input  
Budget: POM88 (Station)  
Budget: POM FY 1990  
Budget: POM FY 1990/1991  
Budget: POM-1992  
Business Cards  
Cablevision Cable Television  
Calculators  
Camels (Floating Fenders)  
Car Wash  
Cement  
Change of Command  
Nassau NY (Change of Command) 12FEB1982

Change of Occupancy

**Drawer 2 (drawer label: GENERAL INFORMATION FOUR)**

Approximately 2.5 linear feet.

**Folder:**

Child Care  
Child Care Centers  
CINCLANTFLT Facilities Management Newsletter  
Circuit Breakers  
Clean Slate (NEPSS)  
Coffee Maker  
Command Action Plan  
Command History  
Command Management Guidance  
Command History  
Command Inspection  
Command Inspection 13SEP1982  
Inspection: COMNAVSURFLANT Visit Assessment 24-26OCT1984  
Command Inspection 17-21JAN1985  
COMNAVSURFLANT  
COMNAVSURFLANT Command Inspection 19-23JUN1989  
Commercial Activities (CA) Program  
Command Action  
COMNAVSURFLANT  
Computers  
Computer Aided Design  
Con Edison  
Construction Battalion Unit  
Construction Criteria Base  
Construction Newsletter (NAVFAC)  
Contracts  
Contracts — Facility Support 2  
Contracts — Maintenance Service 1  
Facility Support  
Contracts FSC 6MAY-8AUG1984



Service Contracts (SOW etc.)  
Contracts Short/Long  
Contracts 3  
Contracts 2  
Contracts Information 1  
Contracts Acquisition Management Review (AMR) 14-  
18JUL1986  
Contracts Accepting  
Contracting — Out  
Conversion Factors  
Corps of Engineers  
Correspondence  
Cranes  
Custodial Services  
DEIS — II  
DEIS — II Info.  
DEIS — 2 1975  
DEIS — 1976  
DEIS 2 — 1977  
DEIS 2 — 1978  
DEIS 2 — 1979  
DEIS 2 — 1980  
DEIS II — 1981  
DEIS — FY 1982  
DEIS — FY 1983  
DEIS II Reports — FY 1984  
DEIS II — FY 1985  
DEIS II — FY 1986  
Defense Environmental Restoration Account  
Demolition Projects (Historical)  
Demolition (Pride & Professionalism in Shore Action  
Ties Program)  
Demolition (Defense Environment & Restoration  
Program)  
Demolition (Pride & Professionalism in Shore Action  
Ties Program)  
Demolition of Buildings R427, R428, & 315

Demolition (Defense Environment & Restoration  
Program) Remove Exterior Crane & Associated  
Structure Near Building 2  
Design Criteria  
Disaster Preparedness Program  
Disposal  
(DOGS) Military Working Dogs  
Domestic Bask Factors Report (DBFR)  
Drafting  
Drawings & Specifications  
Dredging  
Drilling  
Drought  
Drug Testing  
Drum Disposal  
Earthquakes  
Economic Analysis  
Education  
Elevators  
Elevators (Vertical Transportation System Audit —  
DEC1980)  
Elevators (Vertical Transportation System Audit 1981  
North Division)  
Elevators (Vertical Transportation System Audit 15-  
17FEB1983 North  
NAVFACENGCCM)  
Emergency Contract Authority  
Encroachment  
Energy & Environmental News  
Energy Audit Report (EAR)  
Energy Conservation: Audit of FY 1982  
Energy Conservation: Audit OCT1982 (Internal Audit)  
Energy Conservation Award Report FY 1981

**A5.3**

**Public Works  
Division Files**

**A5.3**

**Public Works  
Division Files**

**Drawer 3 (drawer label: GENERAL INFORMATION SIX)**

Approximately 2.5 linear feet.

**Folder:**

Energy Conservation Award Report  
Energy Conservation Award Report FY 1982  
Energy Conservation Award Report FY 1983  
Energy Conservation Award Report FY 1984 ECAR  
Energy Conservation Awards FY 1986  
Energy Conservation Award FY 1987  
Energy Design  
Energy Matters Newsletter  
Energy Monitoring & Control Systems  
Engineering  
Engineered Performance Standards  
Engineering Service Request (ESR)  
ESR 1-80  
ESR 2-80  
ESR 3-80  
ESR 4-80  
ESR 5-80  
ESR 1-81  
ESR 2-81  
ESR 3-81  
ESR 4-81  
ESR 5-81  
ESR 1-82  
ESR 2-82  
ESR 3-82  
ESR 1 through 3-83  
ESR 1-85  
ESR 2-85  
ESR 1-86  
ESR 2-86  
ESR 1 through 6-87  
ESR 1 to 9-88  
ESR 1-89, 2-89  
Engraving

Environmental Engineering  
Equal Employment Opportunities (EEO)  
Escalation Rates  
Estimates  
Excellence Award  
Excess Property  
Explosive Material Storage (Explosives)  
Facility Intrusion Detection System  
Facility Evaluation Assistance Team (FEAT) Visits  
Facility Evaluation Assistance Team (FEAT) Visit 12-  
26APR1982  
Facility Evaluation Assistance Team (FEAT) Visit 12-  
22APR1982  
Facility Evaluation Assistance Team (FEAT) Visit  
28MAY-6JUN1985  
FEAT 3-7OCT1988  
Facilities Maintenance Newsletter  
Facilities Management  
Facilities Management Systems  
Facilities Management Systems  
Fallout Shelters  
Family Housing Newsletter  
Family Service Center  
Fire Protection  
Fire Protection Engineering Survey  
(NORTHHAVFACENCOM) AUG-SEP1979  
Fire Protection Engineering Survey for Building 311  
(NORTHHAVFACENCOM) 28APR1981  
Fire Protection Engineering Survey  
by NORTHHAVFACENCOM Nassau, NY  
4-11 MAR1982  
Fire Protection Engineering Survey Review of NMPS  
Fire Alarm System & Child  
Care Repairs/Alterations APR1982  
FIRS  
Fleet Facilities Excellence (FFX) Award Program  
Fleet Week 1988



Floyd Bennett Field Heating  
Ft. Wadsworth  
Fraud Waste & Abuse  
Fuel Dispensing System  
Funding  
Funding Authorization (Work Requests)  
Furniture  
Garbage/Trash Collection  
General Development Maps  
General Services Administration (GSA)  
Geological Survey  
Grounds Maintenance  
Handicapped  
Hazardous Waste  
Heating Systems  
Historic Items  
Historic Studies of Building R95 — Naval Hospital  
Law & Instructions on *Historic Structures*  
Homeless (Housing/Shelter)  
Housing Change of Occupancy Procedure  
Housing 2  
Housing 1  
Housing Projects  
Housing Information  
Family Housing Management: Audit of 26OCT1981  
Housing Inspection Form  
Housing Maint. Serv. Contracts  
Housing (House Numbering Lists)  
Housing Projects  
Housing 1977  
Housing 1978  
Housing: Energy Conservation Opportunity Program  
(ECOP)  
Housing RFP 300 Unit Family Housing  
Hurricane Actions  
Informal Contracts Dead Proposals

**Drawer 4** (drawer label: GENERAL INFORMATION EIGHT)  
Approximately 2.5 linear feet.  
**Folder:**  
Information Handling Services  
Injuries  
Inspector General (IG) CNSL JUN1989  
Inspections  
Installation Excellence Award  
Insulation  
Interviewing [NOTE: 32 folders)  
Intrusion Detection System  
Inventory of Facilities  
P-164 Detailed Inventory of Facilities (Obsolete Copies)  
Issue Paper (Brief Sheet)  
Job Order Numbers  
Labor Distribution  
Land Utilization  
Leases  
Legal  
Life Insurance  
Liquid Oxygen/Hydrogen Facilities  
Locksmith Work  
Logistics Support Mobilization Plan  
Mail  
Maintenance & Operation Manuals  
Maintenance Control Branch  
Maintenance of Real Property  
Manpower  
Manpower Availability Summary/Engineer Program  
Maps/Area Information  
Marine Corps Projects  
MATV System  
Messenger  
Metric System  
Microfilm Supplies  
Microwave Ovens  
Mid-year Review

**A5.3**

**Public Works  
Division Files**

**A5.3**

**Public Works  
Division Files**

Military Construction 3  
Military Construction Program 2  
Military Construction Program 1  
Military Construction Cost Estimate Preparation  
Minor Construction  
Minor Property  
Mission NAVSTA NY  
Mitchel annex  
Mobile Homes  
Mobil Utilities Support Equipment (MUSE) Program  
Mobilization  
Model Installation Program  
Monuments  
Moral Welfare & Recreation  
Motors  
Nassau County  
NFPA  
National PS  
National Technical Information Service (NTIS)  
Natural Resources  
Naval Civil Engineering Laboratory  
Naval Construction Force  
Naval Material Command  
NAV COMPT 140 Work Requests  
NAVELEX  
NAVFACENGCOM  
NAVSTANY Instructions (Miscellaneous)  
Navy Exchange  
Navy Terminology  
Non-appropriated Funds  
NORTHAVFACENGCOM  
Office Supplies  
Oil  
Oil Spill Control  
OMSI: Operating & Maintenance Support Information  
Organizational Charts  
Overtime

Painting (Sq. Ft.: Figures)  
Parking, NSA  
Payroll  
Performance Appraisals  
Personnel Awards Preparation  
Personnel  
Personnel Support Detachment (PSD)

**Drawer 5 (drawer label: GENERAL INFORMATION TEN)**

Approximately 2.5 linear feet.

**Folder:**

Pest Control  
Petroleum Products  
Pier Facilities  
Planning  
Planning Board  
Plant Property  
Plaques  
Point Paper  
Pollution Solution  
Pools  
Port Authority  
Position Descriptions 2  
Position Descriptions 1  
Position Management  
Preventive Maintenance Literature  
Pride & Professionalism  
Productivity Investment Fund  
Projects  
Projects (FY 1980)  
Projects (FY 1981)  
Projects (FY 1983)  
Projects (Navy Occupational Safety/Health)  
Prompt Payment Act  
Portable (Public Address System)  
Public Address System  
Public Works



P.W. Support Newsletter NORDIV  
Publications  
Radio Equipment  
Radar  
Ranges  
Real Estate — Historical Deeds  
Real Estate — General  
Real Estate — Shipyard Park Access  
Real Estate — Brooklyn Pier K  
Real Estate — Utilization of Building R-95  
Real Estate — License Department of Correction  
Training Academy, B-2 16SEP-8NOV1985  
Real Estate — Brooklyn (Disposal/Sale of Shipyard)  
Real Estate — Transfer of NY Naval Shipyard  
to City of New York  
Real Estate — Brooklyn License for NYPD Use of R-95  
(not interested)  
Real Estate — Brooklyn License NYC, DOI,  
B-1 Antenna Tower  
Real Estate — Excess Real Property,  
Buildings R427/R428 MAY1983  
Real Estate — Shipyard Park Leases  
Real Estate — Floyd Bennett Field  
Real Estate — Floyd Bennett Field (Land Transfer) 2  
Real Estate — Floyd Bennett Field (Land Transfer) 1  
Real Estate — Dayton Manor  
Real Estate — Staten Island (BB-SAG)  
Real Estate — Mitchel  
Real Estate — Mitchel Field — Lirr Easement  
Real Estate — Mitchel Exchange of Bradley Hall for  
Land at Mitchel Manor  
Real Estate — Mitchel Field Nassau City Easement  
NR B-19  
Real Estate — Mitchel Field Transfer of GSA Property  
North of West Ellington  
Real Estate — Mitchel Field (Development of Nassau  
County Land @ Intersection of Stewart & Selfridge

Avenues)  
Real Estate — MF Selfridge Development Atrium Plans  
Real Estate — MF Relocate Easement for Atrium  
Buildings  
Real Estate — MF Proposed Recycling Center  
Real Estate — MF Santini I  
Real Estate — MF Santini II  
Real Estate — Santini III Real Estate Acquisition  
Real Estate — Facility Access File  
Real Property  
Real Property — Utilization Analysis JUL1983  
Recreational Services 2  
Recreational Services 1  
Repair Work Classification

**A5.3**

**Public Works  
Division Files**

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**Cabinet 3 (right cabinet) (5-drawer)**

**Drawer 1 (drawer label: 1)**

Approximately 2.0 linear feet of brown paper envelopes containing information regarding audits and internal inspections/internal control of Public Works.

**Drawer 2 (drawer label: 2)**

Approximately 2.0 linear feet of brown paper envelopes containing information regarding audits and internal inspections/internal control of Public Works. Also 1 ledger record (titled "PWO CY 82") and computer print-outs (status reports).

**Drawer 3 (drawer label: 3)**

Approximately 2.5 linear feet of brown paper envelopes containing information regarding audits and internal inspections/internal control of Public Works.

**Drawer 4 (drawer label: 4)**

Approximately 2.5 linear feet of brown paper envelopes containing information regarding audits and internal inspections/internal control of Public Works.

## A5.3

### Public Works Division Files

#### Drawer 5 (drawer label: 5)

Approximately 2.5 linear feet of brown paper envelopes containing information regarding audits and internal inspections/internal control of Public Works.

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#### 6 Cabinets Further into the Basement:

**Note:** The materials in these cabinets appear to date C1979-1985, with the exception of the group of materials in cabinet 4, drawer five, dating from C1942. For the purposes of this appendix, the cabinets have been numbered 1-6, left to right.

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#### Cabinet 1 (2-drawer)

##### Drawer 1 (no drawer label)

Approximately 2.0 linear feet.

##### Folder:

FMED Tasking  
FMED Pending  
Milcon Projects  
New Projects  
Special Projects  
Proposal for MiniMart  
Construction Battalion Unit (CBU)  
CBU  
Planning/Design Review  
Asbestos Action  
Installation Excellence Award  
BB-SAG Contracts (Offer)  
Safety  
BB-SAG Homeporting  
Energy & Environmental News  
Engineering Service Requirements  
Energy Model  
Public Works Misc. Items  
Real Property Inventory  
Facility System Safety (RAC, PHA)  
Software Misc.

#### Collated EQ\*MNT

Forms  
Environmental  
Housing  
Transition  
Facility Planning  
Code 90/Operations  
Asbestos Repair  
Safety Action  
Special Projects (BBBQ/FY 1988)  
Drawer 2 (no drawer label)  
Approximately 1.5 linear feet.

#### Folder:

ESR  
MIP  
BRC  
Communications  
DEIS  
Submittals  
NCF  
MWR  
Bus Plan  
Ship Arrival  
PW Staffing  
Transportation  
Transportation  
Surfant [sic] Items  
NFCU  
S.P. Prep. Family Serv. Ctr. Expansion  
Brooklyn Building Specs  
Routing & Trans. Slips  
Security (MWD)  
PWD ENG Status Report  
A & E Appendix & Misc.  
Appendix  
App.  
Housing



Property Record (Class Two)  
Bronze Hammer  
Parking  
Summary List  
Bachelor Quarters  
Site Approvals  
Medical Dental  
SOWI/MOD, Order for Work  
Instructions  
N Nav. Off. Ass.  
Self Help  
Contract Info.  
Energy Conservation Award Report FY 1985  
EMAAV  
Spending Plan/RAT  
Spending Plan

**Note:** A box on top of Cabinet 1 has approximately 1.0 linear feet of material relating to Public Works.

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**Cabinet 2 (4-drawer) (This cabinet was locked.)**

**Drawer 1**

(drawer label: SFPS Proposed Projects/Estimates)  
This drawer was locked.

**Drawer 2 (no drawer label)**

This drawer was locked.

**Drawer 3 (no drawer label)**

This drawer was locked.

**Drawer 4 (no drawer label)**

This drawer was locked.

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**Cabinet 3 (5-drawer)**

**Drawer 1**

(drawer label: SpecialProjects/HousingProjects)  
Approximately 2.5 linear feet of Special Projects folders;

each folder numbered and labeled with the title of the project, e.g. R1-80 Repairs and Alterations to Steam Distribution System. The folders are arranged chronologically.

**Drawer 2 (drawer label: MICON Projects)**

Approximately 0.5 linear foot of Housing Projects folders; each folder labelled in a similar manner to the Special Projects folders.

**Drawer 3 (no drawer label)**

Approximately 1.5 linear feet of folders containing records possibly relating to A & E projects. The folders are labelled in a similar manner as the Special Projects folders. Most reference A & E services; however, one folder is labelled Special Projects Tennis Court.

**Drawer 4 (drawer label: Completed/Canceled Projects)**

Approximately 1.625 linear feet of Projects folders: approximately 0.75 linear foot of Special Projects Complete folders, then approximately 0.5 linear foot of Housing Projects Complete folders, then approximately 0.25 linear foot of MICON Projects Complete folders, and finally approximately 0.125 linear feet of Miscellaneous Projects Complete folders.

**Drawer 5 (no drawer label)** Approximately 1.0 linear foot of numbered and titled folders; probably need to be interfiled with the other folders. These folders have titles such as R 21-88 and CA 22-87.

**Note:** On top of Cabinet 3 is an open carton containing approximately 1.5 linear feet of material regarding jobs and work safety. Additionally, there is approximately 1 linear foot of material regarding jobs (e.g. utility invoices), dated C1986-1988.

**A5.3**

**Public Works  
Division Files**

## A5.3

### Public Works Division Files

#### Cabinet 4 (5-drawer) (sticker on top says #3)

##### Drawer 1 (no drawer label)

Approximately 1.0 linear feet of project files; probably need to be interfiled with the other folders. These folders are numbered (e.g. 04-83-0274) and many contain folded drawings.

##### Drawer 2

(drawer label: NAVSTA/Staten Island/Stapleton)  
Approximately 0.5 linear feet of material that is less organized than material described above. In addition to the folders listed below there is a work log book dated FY 1990.

##### Folder:

Utilization/Requirements — Various Buildings  
Transformers ft. Wadsworth Staten Island  
Family Housing NAVSTA, SI  
Staten Island Buildings 209, 210, 301 & 302  
Mods/Alt. Family Housing Buildings Building 114-B,  
NAVSTA, SI  
Service Maintenance, NAVSTA, SI  
Navy Resale & Services Building 209, SI  
UPS Systems Building 209 NAVSTA, SI  
Security Fencing NAVSTA, Staten Island  
Family Housing PPR & MOD: Program, NAVSTA, SI  
A/E Tonetti Association Family Housing &  
Modernization, NAVSTA, SI  
Boiler Room Building 210  
NAVSTA, SI, Discrepancies Reported  
Building 206 Navy Exchange Complex Comm. Store  
Gate House, NAVSTA, SI  
Telecommunication, Ft. Wadsworth  
Public Works Facilities  
Staten Island Misc.  
NFCU Staten Island

##### Drawer 3

(drawer label: ENVIRONMENTAL HAZARDOUS  
MATL.)

Approximately 0.5 linear feet of material that is less organized than material described above. There are reports, photographs, and other unfolded materials relating to contaminant & clean up of pollutants at NAVSTA; utilities for Stapleton; underground tank removal; hazardous waste; etc. Following the unfolded materials are the folders listed below. After the folders are four books: ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers) Handbook: 1981 Fundamentals; Technical Manual for 55 Ton Capacity Chilled Water Air Conditioning Plant; Environmental and Natural Resources program Manual (1990); and ASHRAE Guide and Data Book: Applications for 1966 and 1967.

##### Folders:

Sample Contract for IH  
Asbestos Survey Report  
Kalken & Llamelson  
Radon Testing  
Senior Environmental Seminar  
Field Inspection & Reports

##### Drawer 4 (no drawer label)

Approximately 1.0 linear foot of folders containing information regarding the 1975 inspection. Approximately 1.0 feet of folders containing information regarding older jobs — from 1970. These folders are numbered and have titles describing the job (e.g. Window Cleaning or Paving of Parking Lot). Finally, approximately 0.5 linear foot of folders containing forms, memos, photocopies, originals, drawings, etc. relating to energy (e.g. Wind, Energy Contingency, Energy Conservation Awards Program FY 1983).



**Drawer 5 (no drawer label)**

Approximately 0.3 foot of material relating to energy conservation. Then approximately 2.5 linear feet (C1942-1972) of folders (made of heavier stock) relating to equipment. Some of these folders contain folded architectural drawings. There are also forms, memos, reports, etc.

**Note:** On top of Cabinet 4 is an open file drawer containing approximately 2.5 linear feet of hanging files regarding jobs and a pile of catalogs.

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**Cabinet 5 (4-drawer) (sticker on top says #2)**

**Drawer 1**

(drawer label: NEW JOBS ENVIRONMENTAL [sic])  
Approximately 2.5 linear feet of folders with numbers and job descriptions for titles (e.g. 86-3730 Repair of Swimming Pool, MF). There are about 12 architectural drawings in the middle of the files. Most files contain stapled packages of "Request for Quotation" forms; others are actual order forms with supporting documentation.

**Drawer 2**

(drawer label: MITCHEL FIELD MitchelManor)  
Approximately 2.5 linear feet of folders with numbers and job descriptions for titles (e.g. 86-3707 Alterations for ROICC and FSCM Offices, 3rd Floor, B-1). **NOTE:** approximately 2 inches at the front of the drawer are folders which appear to need to be interfiled with the materials in drawer 1.

**Drawer 3 (drawer label: CATALOG)**

Approximately 1.25 linear foot of catalogs for various equipment, stored in folders with labels such as "U.S. Steel Supply Co.," "Wire Rope on Hot Water Heater," etc. Then approximately 1.75 linear foot of files on various buildings; the folders have titles such as "BLDG #1," "PHOTO LAB," "HVAC," "A/E CONTRACT," etc. and

the material dates C1979-1985.

**Drawer 4 (no drawer label)**

Approximately 1.25 linear foot of folders with metal clips at top, containing materials for various jobs. Folders are numbered and have titles such as "N62319-69-C-2008 (Neg) Repair of Rolling Doors." The materials date C1968-1968 and there are several architectural drawings. Then, approximately 1 linear foot of folders (C1979-1985); these materials appear to be misfiled.

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**Cabinet 6 (4-drawer) (sticker on top says #1)**

**Drawer 1**

(drawer label: FT. WADSWORTH NAVSTA, SI, DOCUMENTS, REFS.)

This cabinet is stored in a corner and the drawers cannot be opened entirely because of piping obstructions. It appears there is approximately 2.5 linear feet of folders with titles such as "04-82-0271 Guard Services," such as the materials in the other cabinets (dating C1979-1985).

**Drawer 2 (drawer label: NEW PROJECTS)**

This cabinet is stored in a corner and the drawers cannot be opened entirely because of piping obstructions. It appears there is approximately 0.5 linear feet of Special Projects folders dating C1990-1991 (faxes are included). Then, approximately 1.5 linear feet of reports, folded architectural drawings, etc., apparently related to projects.

**Drawer 3 (drawer label: NORTH DIV. INFOS...)**

This cabinet is stored in a corner and the drawers cannot be opened entirely because of piping obstructions. It appears there is approximately 2.5 linear feet of folders with titles such as "84-0103 Repair Elec. Dist. Sys. Fed.From R450/R104," such as the materials in the other cabinets (dating C1979-1990).

**A5.3**

**Public Works  
Division Files**

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**A5.3**

**Public Works  
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**Drawer 4 (drawer label: SPC CONTRACTS)**

This cabinet is stored in a corner and the drawers cannot be opened because of piping obstructions.