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CULTURAL LANDSCAPES INVENTORY 2009

BATTERY WEED HEADLAND

GATEWAY NATIONAL RECREATION AREA



Documenting existing conditions at Weir Farm National Historic Site in Wilton, Connecticut (OCLP, 2003).

CULTURAL LANDSCAPES INVENTORY

The Cultural Landscapes Inventory (CLI) is a comprehensive inventory of all culturally and historically significant landscapes within the National Park System. The CLI records each landscape's location, historical development, existing conditions, and management. For landscapes found to be potentially eligible for the National Register of Historic Places, the CLI provides an analysis of landscape characteristics and features, allowing for an evaluation of historic integrity and significance. The information is used at parks, regional and national offices to inform planning efforts, budget decisions, and provide a vast array of information specific to the landscape of the park.

In the northeast region, the CLI is coordinated by the Olmsted Center, where the highest

priority for all cultural resource inventory work is given to parks starting a new or updated general management plan (GMP). Parks that have proposed development and construction projects, lack baseline information, or are the focus of ongoing cultural landscape reports are included on the priority list, which is updated regularly as landscapes are inventoried and as regional priorities change. Once the CLI is completed throughout the region, the data will then be updated at a regular interval.

The information contained within the CLI is gathered from existing secondary sources found in park libraries and archives and at NPS regional offices and centers, as well as through on-site reconnaissance of the existing landscape. The information collected provides a comprehensive look at the historical

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development and significance of the landscape, placing it in context of the site's overall significance. Documentation and analysis of the existing landscape allows for an evaluation of landscape integrity and an assessment of condition.

The information provided within the CLI fulfills the inventory requirements of Section 110(a)(1) of the National Historic Preservation Act, *NPS Management Policies* and the *Cultural Resource Management Guideline*. Completion of the CLI also provides each park with an official count of landscapes and component landscapes as well as a condition assessment required by Government Performance and Results Act GPRA and to be entered into Performance Management Data System (PMDS).

Two GPRA goals are associated with the CLI: bringing certified cultural landscapes into good condition (Goal 1a7) and increasing the number of CLI records that have complete, accurate, and reliable information (Goal 1b2B).

Each completed CLI is stored in the national CLI database in Washington, D.C. and in the regional databases at the Olmsted Center. For each inventory a CLI binder is created which contains a printed and digital copy of the inventory and the supplemental documentation. At least one copy of each binder is distributed to the park and is also located at the Olmsted Center. Additional copies of the CLI report are distributed to various NPS regional and national offices.

The NPS National Center for Cultural Resources: Stewardship and Partnership Programs considers completion of the CLI nationwide a priority.

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National Park Service
Cultural Landscapes Inventory
2009



Battery Weed Headland
Gateway NRA - Staten Island District

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Inventory Unit Summary & Site Plan

Inventory Summary

CLI General Information:

The Cultural Landscape Inventory Program

Purpose and Goals of the CLI

The Cultural Landscapes Inventory (CLI), a comprehensive inventory of all cultural landscapes in the national park system, is one of the most ambitious initiatives of the National Park Service (NPS) Park Cultural Landscapes Program. The CLI is an evaluated inventory of all landscapes having historical significance that are listed on or eligible for listing on the National Register of Historic Places, or are otherwise managed as cultural resources through a public planning process and in which the NPS has or plans to acquire any legal interest. The CLI identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved CLIs when concurrence with the findings is obtained from the park superintendent and all required data fields are entered into a national database. In addition, for landscapes that are not currently listed on the National Register and/or do not have adequate documentation, concurrence is required from the State Historic Preservation Officer or the Keeper of the National Register.

The CLI, like the List of Classified Structures, assists the NPS in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2006), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two GPRA goals are associated with the CLI: bringing certified cultural landscapes into good condition (Goal 1a7) and increasing the number of CLI records that have complete, accurate, and reliable information (Goal 1b2B).

Scope of the CLI

The information contained within the CLI is gathered from existing secondary sources found in park libraries and archives and at NPS regional offices and centers, as well as through on-site reconnaissance of the existing landscape. The baseline information collected provides a comprehensive look at the historical development and significance of the landscape, placing it in context of the site's overall significance. Documentation and analysis of the existing landscape identifies character-defining characteristics and features, and allows for an evaluation of the landscape's overall integrity and an assessment of the landscape's overall condition. The CLI also provides an illustrative site plan that indicates major features within the inventory unit. Unlike cultural landscape reports, the CLI does not provide management recommendations or

treatment guidelines for the cultural landscape.

Inventory Unit Description:

Battery Weed Headland

Gateway NRA - Staten Island District

The Battery Weed headland is part of Fort Wadsworth, a former military reservation that was transferred to the Department of the Interior in 1995 as part of the Staten Island Unit of Gateway National Recreation Area (NRA) in New York. Gateway NRA, which encompasses numerous former military and city park lands in lower New York Harbor and adjoining coastal areas, was established by Congress in 1972 along with Golden Gate National Recreation Area in San Francisco as the first park system specifically for urban recreation. The primary purpose of Gateway NRA is to preserve and protect, for the use and enjoyment of present and future generations, an area possessing outstanding natural, historic, and recreational features.

In addition to the Battery Weed headland, Fort Wadsworth includes another other major fortification, Fort Tompkins. The reservation's shoreline is lined by earthen batteries, most of which are hidden beneath vegetation, while the interior or upland portions historically contained support facilities such as housing and mess halls. Much of this area was redeveloped during the 1980s. Today, facilities in this area are used by the park for offices, staff housing, and a visitor center, and by other agencies including the U. S. Coast Guard and Army Reserve.

The Battery Weed headland area is at the eastern edge of Fort Wadsworth and is situated below Fort Tompkins, along the western shore of the Narrows, the water passage to New York Harbor where the landforms of Staten Island and Long Island lie closest together. Here, a massive granite fort named Battery Weed built between 1847 and 1864 holds a commanding position below a 125-foot high bluff, although now greatly overshadowed by the adjoining Verrazano-Narrows Bridge completed in 1964. Battery Weed was once part of a system of fortifications protecting the Narrows that included, among others, Fort Tompkins on the bluff above, and Forts Hamilton and Lafayette on the eastern or Long Island side. The Battery Weed headland area is open to the public from dawn to dusk, and tours of the fort are available by appointment.

HISTORICAL OVERVIEW

Human settlement on Staten Island dates back to the Paleo-Indian period 10,000 years ago. Prior to the late seventeenth century, Staten Island was home to the Lenape people, also known as the Delaware, who were part of the larger Algonquian linguistic group that occupied the East Coast from the Chesapeake Bay to Maine. European colonial settlement of the land began in c.1662 with the Dutch, followed by the British with English Crown land grants for agricultural settlement later in the century. Sometime between 1776 and 1783, the British constructed an artillery post near the present site of Battery Weed. By 1794, following American independence, the State of New York began to acquire lands at the Narrows for defensive works, though none was constructed during the period from 1794 to 1807 that military historians identify as the First American System of coastal fortifications (CLR 2008:5).

During the period between 1809 and 1846 corresponding with the Second American System of coastal fortifications, the Battery Weed headland witnessed its first substantial military fortification. By 1809, a new fort in a half circle of solid masonry, along with a cluster of buildings and a new wharf (dock) north of the fort, was under construction by the State of New York along the shoreline of the Narrows. The

second system fort, on the present site of Battery Weed, was named Fort Richmond, for Richmond County (Staten Island), and was also known as the Water Battery (CLR 2008:6).

The federal government undertook a new program of coastal defense between 1846 and 1867, known as the Third American System. By February of 1847, the forty-seven acre state military reservation at the Narrows passed to federal ownership. The U.S. Army almost immediately began construction of the new Fort Richmond, following the Third American System, but the structure would not be complete for nearly another two decades. By the Civil War, the fort was substantially complete and readied for protection of New York Harbor. In 1865, the War Department officially changed the name of Fort Richmond to Fort Wadsworth in honor of Brevet Major General James S. Wadsworth of New York, who died from wounds he received during the Battle of the Wilderness in Virginia (CLR 2008:6).

In 1876, the new Fort Tompkins was completed on the bluff above Battery Weed, marking nearly three decades of continuous construction activity at the federal military reservation. However, by this time both forts had become in large part militarily obsolete due to technological advances in heavy ordnance. Although no longer used, the armaments remained in place on site. With the heavy construction finally complete and peacetime conditions prevailing, the Battery Weed headland became a favorite spot for informal public use, functioning effectively as a public park. Visitors picnicked along the top of the slope and strolled along its walks and on the seawall around Battery Weed, enjoying the unsurpassed panoramic views of New York Harbor (CLR 2008:6).

Beginning in 1887, the modernization of the harbor defenses brought extensive changes to the landscape of the Battery Weed headland. The assembly of a special board by President Cleveland, chaired by Secretary of War William C. Endicott, to address the state of the nation's military readiness resulted in what is known as the Endicott Era in coastal defense. The Endicott Era brought changes to the Battery Weed headland including the addition of new concrete and earthen batteries, a lighthouse on Battery Weed; and cable tanks, storage buildings, and railways associated with a submarine mine (torpedo) defense system. In 1902, the name of the Fort Wadsworth was changed once again, this time to Battery Weed in honor of Brigadier General Steven H. Weed, killed at Gettysburg. The name Fort Wadsworth was reassigned to the entire military reservation (CLR 2008:6-7).

With the end of World War I in 1918, the garrison at the Fort Wadsworth reservation diminished dramatically. In 1919, command of the post was transferred from the Coast Artillery Corps to the Infantry and by 1927, only fourteen enlisted men resided on site. In the mid-1930s, the Works Progress Administration (WPA) began a series of projects at Fort Wadsworth. These may have included construction of a concrete seawall and construction of a stone wall along the overlook where visitors often came to admire the panoramic view of the harbor. With the onset of World War II, Fort Wadsworth again prepared for military action. Between 1942 and 1944, the Army made plans to deploy a series of submarine mines (torpedoes) across the Narrows by vessels operating from the site of Battery Weed, although it is not known if this ever occurred. In 1942, the last manned battery, Battery Catlin located north of Battery Weed, was taken out of service. Until 1945, Fort Wadsworth was home to the Harbor Entrance Control Post (HECP) with an observation tower located on top of Fort Tompkins (CLR 2008:7).

Fort Wadsworth remained militarily active during the postwar period, but Battery Weed and its surrounding headland were largely abandoned. Along with lack of use came marked changes in the character of the landscape, notably the growth of trees on formerly maintained open ground and deterioration of buildings and structures. Between 1959 and 1964, the Verrazano-Narrows Bridge was constructed across the Narrows with its approach crossing the center of Fort Wadsworth south of Battery Weed. The construction of the bridge resulted in a major change to the setting of the Battery Weed headland, looming high to its south and obstructing the once panoramic views. While the bridge was under construction, all wood buildings were removed from the headland, and in 1965, the lighthouse on the top of Battery Weed was decommissioned (CLR 2008:7).

While Fort Wadsworth was home to the radar control center for the area's NIKE Missile System until the 1970s, no features were within the Battery Weed headland, which remained at most a storage area. In 1972 federal legislation was drafted to establish Gateway National Recreation Area, and Fort Wadsworth was included as a future recreation area, but remained under military administration and use. Around this time, overgrowth was removed from the area within and immediately surrounding Battery Weed, but the rest of the headland continued to become overgrown. From 1979 to 1994, Fort Wadsworth served as the headquarters of the New York Navy Yard and was extensively redeveloped with new facilities. However, the Navy made little use of the Battery Weed headland, which suffered fire damage to two buildings and continued to become overgrown with woods (CLR 2008:7).

In 1995, the administration of the Battery Weed headland, as a part of Fort Wadsworth, was transferred to the National Park Service within the Department of the Interior. In the years following this transfer, the park cleared away some of the woods to reestablish the view of New York Harbor, stabilized buildings and structures, and installed interpretive waysides and benches (CLR 2008:8).

SIGNIFICANCE SUMMARY

The Battery Weed fort continues to meet National Register criteria A and C in the areas of military history and architecture, as documented in the 1972 National Register nomination form. Battery Weed derives significance within the national context of coastal defense, and specifically for its central role in the defense of New York Harbor during the nineteenth and twentieth centuries. The architectural significance of Battery Weed, with its granite block construction in three casemated tiers and former moat bounded by a granite seawall, is an excellent example of the Third System period (1847 to 1861) in coastal defense.

Based on the 2008 findings of the "Cultural Landscape Report (CLR) for the Battery Weed Headland, Fort Wadsworth, Gateway National Recreation Area," the landscape of the Battery Weed headland is also significant under criteria A and C in the areas of military history, architecture, and engineering. The Battery Weed headland, including the steep slope rising 120 feet above the Narrows that is one of the highest points along the shoreline of New York Harbor, provided an ideal strategic location for over two centuries of military development. Although its most active period was from the Civil War through World War I, the Battery Weed headland, as a component of Fort Wadsworth, remained an active

military site into World War II. The Battery Weed headland is also significant as a strategic component in the development of American coastal defense systems. Aside from the fort, contributing resources remaining today include portions of the Endicott-era batteries Catlin and Bacon that were built on the site of earlier batteries flanking the fort; several buildings and structures associated with the Endicott mine defense system, including the north dock; and grading and earthworks associated with the engineered slope and the overlook area. These features represent components of the outwardly expanding New York Harbor system of defenses, and evidence the progression over time of coastal military architecture and engineering technologies.

Based on the extant landscape resources that retain integrity, the period of significance for the landscape at Battery Weed headland extends from the beginning of construction of the Third System fort in 1847 through the end of World War II in 1945. There may be potential for archeological significance prior to 1847, but such investigation and evaluation is beyond the scope of the CLI program. After 1945, there was no substantial new construction, and the site deteriorated from lack of active military use, although other areas of Fort Wadsworth remained under military jurisdiction until 1995 (CLR 2008:140).

ANALYSIS AND EVALUATION SUMMARY AND CONDITION ASSESSMENT

Significant landscape characteristics and features from the period of significance remain today at Battery Weed headland, and are important to its historic character and unique identity. Spatial features include the moat space, the parade ground within Battery Weed, and the overlook space. Circulation features include the mine railway, overlook promenade, Battery Weed Road, and the dock road. Panoramic views from the overlook and waterfront are also contributing features. Buildings and structures include Battery Weed, the Torpedo Storage Building, the second mine casemate, Battery Catlin parados (magazine), the overlook stone wall, concrete block garage, small concrete shed, north dock, seawall, Battery Bacon north gun emplacement, the Coincident Range-Finder station, and slope retaining wall. Topographic features that define the historic character of the landscape include the engineered slope above Battery Weed, and the earthworks of Batteries Catlin and Bacon. Contributing vegetation features include the specimen trees along Battery Weed Road and Hudson Road, and the parade ground lawn. Small-scale features include the parade ground munitions pads, cable testing trough, parade ground flagpole, dock bollards, and dock utility pole (CLR 2008:8).

Although many features have been altered since 1945, there have been relatively few lost altogether. These include six cable tank buildings, a testing tank, and a torpedo loading room building used in the mining defense complex, and three buildings on the north stone dock. There are several non-historic features that detract from the historic character of the landscape, most notably successional woods and invasive vines that cover formerly open ground and batteries, and chain-link fencing that closes off historic circulation patterns. Major condition issues that detract from the historic character of the landscape include fire damage to the Torpedo Storage Building, loss of the roofs on the Battery Weed magazines, removal of sections of mine railway, collapse of the second mine casemate, loss of the wood extension on the north stone dock, and probable loss of sections of the slope walks (CLR 2008:8-9).

Overall, the landscape of the Battery Weed headland retains historic integrity and still clearly conveys its historic significance through existing resources. Integrity of setting and feeling has been diminished, but is in part reversible (CLR 2008:141). The condition of the landscape at the time of this report's completion is evaluated as "fair." The site's major resources – the Battery Weed fort, parade ground, and overlook – are in good condition, but there is deterioration of secondary resources such as the batteries and mine casemate buildings & structures. Additionally, the growth of invasive vines on the slope has limited some of the site's key views and spatial relationships.

Battery Weed Headland
Gateway NRA - Staten Island District



Site Plan. Map 2 of 2 for Battery Weed Headland. (SUNY ESF, 2007)

Property Level and CLI Numbers

Inventory Unit Name:

Battery Weed Headland

Property Level:	Component Landscape
CLI Identification Number:	975512
Parent Landscape:	650080

Park Information

Park Name and Alpha Code:	Gateway NRA - Staten Island District -GATE
Park Organization Code:	1773
Subunit/District Name Alpha Code:	Gateway NRA - Staten Island District - GATE
Park Administrative Unit:	Gateway National Recreation Area

CLI Hierarchy Description

Battery Weed Headland is a component landscape of Fort Wadsworth, which is part of Gateway National Recreation Area – Staten Island District. There are two other landscapes at Staten Island: Miller Field and Great Kills.

Landscapes identified at the Jamaica Bay Unit include Breezy Point, Floyd Bennett Field, Jacob Riis Park, and Floyd Bennett Field. The landscape identified at the Sandy Hook Unit is Fort Hancock Military Reservation with two component landscapes: Fort Hancock Post Grounds and the Fort Hancock Coastal Defense Batteries and Proving Ground.

Concurrence Status

Inventory Status: Complete

Completion Status Explanatory Narrative:

Information for this CLI is taken directly from the 2008 report, "Cultural Landscape Report [CLR] for the Battery Weed Headland, Fort Wadsworth, Gateway National Recreation Area," by Jean B. Gleisner and John Auwaerter, State University of New York, College of Environmental Science and Forestry, Syracuse, New York, in cooperation with the National Park Service, Olmsted Center for Landscape Preservation, Boston, Massachusetts. Existing conditions fieldwork for the CLR was completed in November of 2006 and 2007, and also based on discussions with Phil Melfi, Site Manager at Gateway National Recreation Area, Staten Island Unit, Fort Wadsworth.

Concurrence Status:

Park Superintendent Concurrence:	Yes
Park Superintendent Date of Concurrence:	08/19/2009
National Register Concurrence:	Eligible -- SHPO Consensus Determination
Date of Concurrence Determination:	09/21/2009

National Register Concurrence Narrative:

The New York State Office of Parks, Recreation and Historic Preservation concurred with the categorization of the landscape resources and features at Battery Weed Headland, Gateway National Recreation Area, as contributing, noncontributing, and undetermined, on September 17, 2009. Revisions were made to the CLI per a letter from the New York SHPO dated September 17, 2009, and through several emails exchanged between the New York SHPO (Kathy Howe and Christine Capella-Peters) and NER CLI Coordinator (Jeff Killion). Final concurrence was received via email on September 21, 2009.

Revisions to the CLI were made as follows:

- The period of significance was clarified in both the Component Landscape Description and the Statement of Significance: "Based on the extant landscape resources that retain integrity, the period of significance for the landscape at Battery Weed headland extends from the beginning of construction of the Third System fort in 1847 through the end of World War II in 1945. There may be potential for archeological significance prior to 1847, but such investigation and evaluation is beyond the scope of the CLI program. After 1945, there was no substantial new construction, and the site deteriorated from lack of active military use, although other areas of Fort Wadsworth remained under military jurisdiction until 1995 (CLR 2008:140)."
- The status of "Hudson Road [portion] (176)" and Overlook Promenade" were changed to Undetermined and "Slope & Fortress Grounds Turf" was changed to noncontributing.

Geographic Information & Location Map

Inventory Unit Boundary Description:

The boundaries for the Battery Weed Headland inventory unit include the National Register-listed Battery Weed fort and its immediately surrounding landscape that forms a headland extending into the Narrows of New York Harbor. The boundary includes historically related adjoining property along the shoreline and lower terrace following Battery Weed Road, encompasses portions of Batteries Bacon and Catlin, and includes a now-wooded slope and an overlook terrace bounded on the west by Hudson Road, which borders Fort Tompkins.

State and County:

State: NY

County: Richmond County

Size (Acres): 3.00

Boundary UTMS:

Source:	USGS Map 1:24,000
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18
UTM Easting:	579,871
UTM Northing:	4,495,513
Source:	USGS Map 1:24,000
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18
UTM Easting:	579,783
UTM Northing:	4,495,428
Source:	USGS Map 1:24,000
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18
UTM Easting:	579,929
UTM Northing:	4,495,285
Source:	USGS Map 1:24,000
Type of Point:	Area
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UTM Easting:	579,950
UTM Northing:	4,495,251
Source:	USGS Map 1:24,000

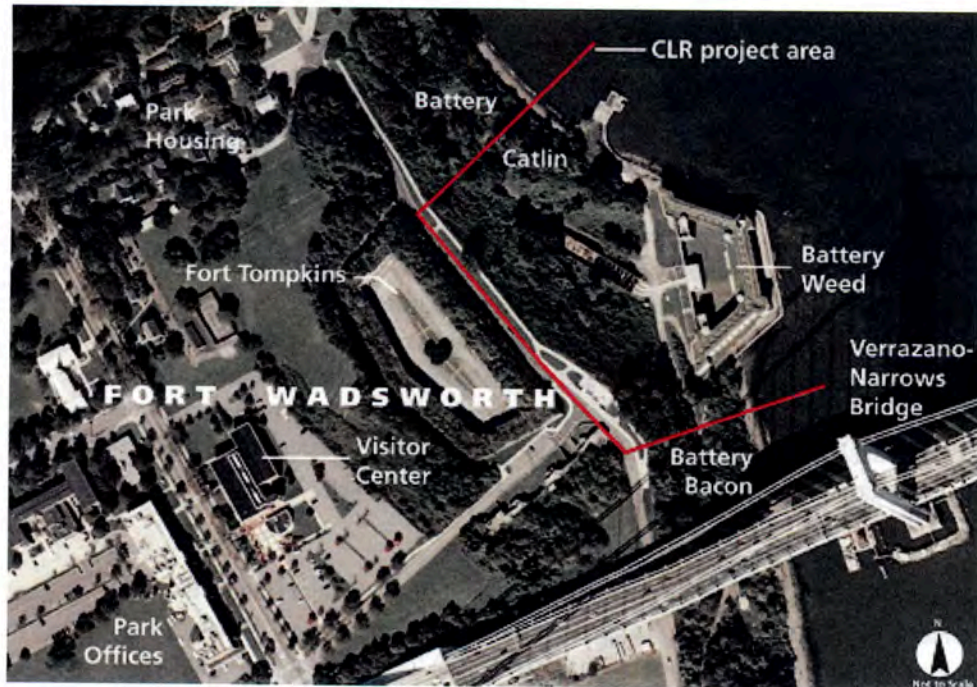
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18
UTM Easting:	580,040
UTM Northing:	4,495,295
Source:	USGS Map 1:24,000
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18
UTM Easting:	580,027
UTM Northing:	4,495,326
Source:	USGS Map 1:24,000
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18
UTM Easting:	580,067
UTM Northing:	4,495,363
Source:	USGS Map 1:24,000
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18
UTM Easting:	580,048
UTM Northing:	4,495,438
Source:	USGS Map 1:24,000
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18

UTM Easting:	579,939
UTM Northing:	4,495,482
Source:	USGS Map 1:24,000
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18
UTM Easting:	579,943
UTM Northing:	4,495,528
Source:	USGS Map 1:24,000
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	18
UTM Easting:	579,894
UTM Northing:	4,495,499

Location Map:



Location Map. Map of Gateway National Recreation Area showing Battery Weed at Fort Wadsworth within the Staten Island Unit, and the other park sites in green. (Park brochure, Government Printing Office, 2004, annotated by SUNY ESF)



Location Map. Aerial showing the Battery Weed headland project area, Verrazano-Narrows Bridge, and major features of the former military reservation. (USGS aerial photograph, c.2007, reproduced from Microsoft Live Search, annotated by SUNY ESF)

Regional Context:

Type of Context: Cultural

Description:

The Battery Weed headland is located in the New York City borough of Richmond on the eastern shore of the Staten Island, approximately six miles by water south of Manhattan. The site lies on the western shore of the Narrows, which forms the southern entrance to New York Harbor where the landforms of Staten Island and Long Island lie closest together. Directly across the Narrows at the opposite side of the Verrazano-Narrows Bridge is Fort Hamilton in Brooklyn, the eastern counterpart to Fort Wadsworth. The bridge is part of Interstate Route 278 that extends from New Jersey across Staten Island and becomes the Brooklyn-Queens Expressway on Long Island. Staten Island is connected to mainland New Jersey by way of the Goethals Bridge, Bayonne Bridge, and Outerbridge Crossing. As of 2006, Staten Island had a population of 464,573, the smallest of the city's five boroughs, with a density of 7,588 people per square mile (CLR 2008:118).

To the north and east of Fort Wadsworth are older street-car suburbs, with Saint George the primary urban center two miles to the north. Along the northern boundary of Fort Wadsworth is Arthur Von Briesen Park, a city park. The approach and toll plaza for the Verrazano-Narrows Bridge extend across the center of Fort Wadsworth from east to west. Along the shoreline south of Fort Wadsworth are boardwalks and bike paths that connect a series of public parks within Gateway National Recreation Area (CLR 2008:119).

Type of Context: Physiographic

Description:

Battery Weed is located within the Atlantic Coastal Plain physiographic region, within the Eastern Broadleaf Forest (Oceanic) ecological sub-region of the upper Atlantic coastal plain. This ecological sub-region consists mostly of northeastern oak-pine forest, along with fringes of northern cordgrass prairie, cedar bogs, transitional pine forests, deciduous swamps, pine plains, and grassy savannas. The region is generally characterized by level to gently sloping terrain. However, glacial deposits across Staten Island resulted in a much more varied topography. Todt Hill, less than three miles west of Battery Weed, is the highest hill on the Eastern Seaboard south of Maine at an elevation of 410 feet. The landform of the Battery Weed headland, with its 125-foot change in elevation that is one of the highest points along the coastline of New York Harbor, was originally formed by a glacial terminal moraine and thousands of years of coastal erosion (CLR 2008:117).

Battery Weed is located within the urban core of the New York bight (recessed coastal area) ecosystem. The area historically was a rich and diverse ecological region due to the confluence of several major river systems at the Atlantic Ocean. Today, three hundred and ninety five ecologically important species are known to occur within the ecosystem, which is on the North American migratory flyway. Peregrine falcons, on the federal and state lists of endangered species, nest on the Verrazano-Narrows bridge immediately to the south of the project area,

and short-nosed sturgeon, listed as endangered by the National Marine Fisheries Service, exists within the Hudson River at New York Harbor. The rocky intertidal areas and tidal wetland areas immediately to the north and south of the Battery Weed headland consist of salt and brackish marshes, tidal creeks, and protected open water coves (CLR 2008:118).

Type of Context: Political

Description:

The Battery Weed headland is part of the 226-acre Fort Wadsworth, a former federal military reservation that was part of a system of New York Harbor defenses dating back to the eighteenth century. The Fort Wadsworth property consists of two nineteenth century stone forts (Fort Tompkins and Battery Weed), nineteenth and early twentieth-century earthen and concrete batteries along the shoreline, and approximately twenty buildings constructed prior to 1945. Approximately sixty buildings at Fort Wadsworth date to after 1945, most built by the Navy in the 1980s when it redeveloped the reservation as the headquarters of the New York Navy Yard (CLR 2008:119).

Today, Fort Wadsworth is a part of the Staten Island Unit of Gateway National Recreation Area, a 26,000-acre urban park system in the New York Harbor region administered by the National Park Service and established on October 27, 1972. The National Park Service assumed jurisdiction of Fort Wadsworth, including the Battery Weed headland, in 1995. The park maintains a visitor center near Fort Tompkins in building #120, a newer building along New York Avenue that is one of two main thoroughfares through the site. Many of the buildings on the reservation are presently occupied by other agencies, including the Army Reserve Center and the U.S. Coast Guard Auxiliary (CLR 2008:118-119).

Management Unit: Staten Island

Track Numbers: 02-103 (portion)

Management Information

General Management Information

Management Category: Must be Preserved and Maintained

Management Category Date: 08/19/2009

Management Category Explanatory Narrative:

The Battery Weed Headland inventory unit meets the criteria of the "Must Be Preserved and Maintained" management category because it serves as the setting for a nationally significant structure. The Battery Weed fort was listed in the National Register of Historic Places on January 20, 1972 as a structure for national significance in the areas of "Military" and "Architecture," in the context of Third System coastal fortifications. On July 5, 1985, the Endicott-period batteries at Fort Wadsworth, including their magazines, casements, emplacements, and earthworks, were determined eligible for listing by the Keeper of the National Register through the Determination of Eligibility process. Portions of Battery Bacon (316A) and Battery Catlin (155,182) are within the boundary of the Battery Weed Headland area.

NPS Legal Interest:

Type of Interest: Fee Simple

Public Access:

Type of Access: Unrestricted

Type of Access: Other Restrictions

Explanatory Narrative:

Access to Battery Weed and the shoreline of the Narrows is from Battery Weed Road, which begins at Mount Sec Avenue and Hudson Road on the north, extends down the bluff toward the shoreline and fort, and then goes back uphill beneath the Verrazano-Narrows Bridge where it terminates at Hudson Road and Richmond Avenue (CLR 2008:119).

The Battery Weed headland is open to the public from dawn to dusk. The Battery Weed fort is open for scheduled tours. Occasional special events are held such as a popular Halloween tour of Battery Weed. Maintenance is focused on the overlook terrace, parade ground and area surrounding Battery Weed, and on the approaches along Battery Weed Road where interpretive waysides and benches are located. The north dock, moat, and seawall are off-limits to the public and are not maintained on a regular basis, as evidenced by the washed-up debris on the beach. The ruins of the Torpedo Storage Building and second mine casemate are fenced off to prohibit access (CLR 2008:124-125).

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Description:

Outward views of the Manhattan skyline to the northeast, the flat expanse of Brooklyn across the Narrows to the east, the Verrazano-Narrows Bridge and the Atlantic Ocean to the south, are critical to the significance of the Battery Weed headland. The panoramic water-level views contribute to the historic character of the landscape as a defining strategic feature of Third System period. The views are also associated with informal recreational use of the military site dating back to the nineteenth century. Aside from the loss of the timber dock extension and addition of the Verrazano-Narrows Bridge, the character of the water-level views remain little changed since the end of the historic period (CLR 2008:169).

The overlook view also contributes to the historic character of the landscape, as a defining feature that illustrates the landscape's strategic importance as well as the basis for its informal recreational use throughout the historic period. While the limits of the view have changed since 1945 through the growth of successional woods and introduction of the Verrazano-Narrows Bridge that constrict the northern and southern extents, overall the view retains its historic panoramic quality (CLR 2008:169).

National Register Information

Existing National Register Status

National Register Landscape Documentation:

Entered Inadequately Documented

National Register Explanatory Narrative:

The Battery Weed headland landscape includes two National Register properties. Battery Weed was listed in the National Register of Historic Places on January 20, 1972 as a structure for significance in the areas of "Military" and "Architecture," in the context of Third System coastal fortifications. The 1972 documentation is limited to the granite structure itself, with a period of significance given as 1847 to 1861. The documentation does not discuss contributing resources and associated features of the Battery Weed headland that also includes the Endicott batteries (c.1898 to 1905), mine defense system (c.1887 to 1921), the north dock (c.1858 to c.1907), and the engineered slope (c.1847 to c.1873) and overlook (c.1873 to c.1938) above Battery Weed.

Battery Weed headland is part of Fort Wadsworth, which includes a number of individually listed or eligible properties. On July 30, 1974, Fort Tompkins (Fort Tompkins Quadrangle), just beyond the CLI boundary, was listed in the National Register for significance as an example of nineteenth-century historic military architecture. On July 5, 1985, the Endicott-period batteries at Fort Wadsworth, including their magazines, casements, emplacements, and earthworks, were determined eligible for listing by the Keeper of the National Register through the Determination of Eligibility process, and nationally significant in the areas of "Military" and "Architecture." Portions of Battery Bacon (Building #316A) and Battery Catlin (155,182) are within the CLI boundary. On November 18, 1996, additional resources at the Battery Weed headland were determined eligible for listing by the New York State Preservation Office as part of an update to the park's List of Classified Structures for Fort Wadsworth, including the seawall (228), light station (181), torpedo storage (147), warehouse (148), north dock (141), and B.C and C.R.F. Station (South) (338). In 1997, documentation of the entire 247-acre Fort Wadsworth reservation, including Battery Weed, Fort Tompkins, and fifty-seven other resources, was prepared and submitted for listing in the National Register as an historic district for national significance in areas of military, social history, architecture, engineering, and archeology (historic non-aboriginal), with the period of significance of 1755 to 1945. An additional resource identified in the 1997 documentation for the Battery Weed headland was the rail tracks (173). Although signed by the New York State Preservation Office on August 3, 1998, the 1997 nomination was not accepted by the Keeper for technical reasons and a substantive question concerning an archeological site.

Existing NRIS Information:

Other Names:	GATE Battery Weed (72000908)
Primary Certification Date:	01/20/1972

National Register Eligibility

National Register Concurrence:	Eligible -- SHPO Consensus Determination
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Contributing/Individual: Individual

National Register Classification: Site

Significance Level: National

Significance Criteria: A - Associated with events significant to broad patterns of our history

Significance Criteria: C - Embodies distinctive construction, work of master, or high artistic values

Period of Significance:

Time Period: AD 1847 - 1945

Historic Context Theme: Shaping the Political Landscape

Subtheme: Political and Military Affairs 1865-1939

Facet: America Becomes A World Power, 1865-1914

Time Period: AD 1847 - 1945

Historic Context Theme: Shaping the Political Landscape

Subtheme: Political and Military Affairs 1865-1939

Facet: World War I, 1914-1919

Time Period: AD 1847 - 1945

Historic Context Theme: Shaping the Political Landscape

Subtheme: World War II

Facet: The Home Front

Area of Significance:

Area of Significance Category: Architecture

Area of Significance Category: Engineering

Area of Significance Category: Military

Statement of Significance:

The Battery Weed fort continues to meet National Register criteria A and C in the areas of military history and architecture, as documented in the 1972 National Register nomination form. Based on the 2008 findings of the "Cultural Landscape Report (CLR) for the Battery Weed Headland, Fort Wadsworth, Gateway National Recreation Area," the landscape of the surrounding Battery Weed headland is also significant under criteria A and C in the areas of military history, architecture, and engineering. It is recommended that future National Register documentation address the contribution of the landscape, and expand the boundary of the Battery Weed fort property to encompass the surrounding landscape that includes the adjoining batteries, slope, and overlook. If a larger Fort Wadsworth historic district is nominated, the Battery Weed headland should be included within it to incorporate the full extent of the intact military landscape. Additionally, research for the CLR also revealed an extensive history of the Battery Weed headland being used as an informal public park. Further research should be undertaken to assess whether the headland and the larger Fort Wadsworth district meet National Register criteria for listing under the area of entertainment/recreation (CLR 2008:136-137,140-141).

Based on the extant landscape resources that retain integrity, the period of significance for the landscape at Battery Weed headland extends from the beginning of construction of the Third System fort in 1847 through the end of World War II in 1945. There may be potential for archeological significance prior to 1847, but such investigation and evaluation is beyond the scope of the CLI program. After 1945, there was no substantial new construction, and the site deteriorated from lack of active military use, although other areas of Fort Wadsworth remained under military jurisdiction until 1995 (CLR 2008:140).

The following sections describe in more detail how the landscape contributes to the historic significance of the Battery Weed headland, in accordance with National Register criteria.

NATIONAL REGISTER CRITERION A

Military History:

As documented in the 1972 nomination form, Battery Weed derives significance under National Register Criterion A in the area of military history within the national context of coastal defense, and specifically for its central role in the defense of New York Harbor during the nineteenth and twentieth centuries. The Battery Weed headland, including the steep slope rising 120 feet above the Narrows that is one of the highest points along the shoreline of New York Harbor, provided an ideal strategic location for over two centuries of military development. Although its most active period was from the Civil War through World War I, the Battery Weed headland remained an active military site into World War II (CLR 2008:137).

As early as the mid-eighteenth century, colonial government authorization was given for guns and signal beacons at the headland on the Narrows of New York Bay. Aside from the site, however, no resources remain from this early period of development through state ownership of the military reservation that ended in 1847. Throughout the period of significance, 1847 to 1945, the Battery Weed headland was a manned and active military site, with a landscape that was developed in accordance

with the evolving technology of American coastal defense. Numerous features dating from 1847 to World War I continued to be used through World War II and remain in the landscape today, including earthworks, buildings and structures related to the Second, Third, and Endicott systems of coastal defense. From 1942 through 1945, the Battery Weed headland was the site of World War II home-front activities such as training, equipping, and decommissioning operations. After 1945, the Battery Weed headland was largely abandoned, serving primarily as a storage area related to military activity elsewhere at Fort Wadsworth. The landscape was largely left to the elements after this point, resulting in collapse of several structures and growth of successional woods on formerly open slopes and batteries. Much of the overgrowth is reversible. The landscape overall retains integrity sufficient to illustrate its significance in military history (CLR 2008:137-138).

NATIONAL REGISTER CRITERION C

Architecture and Engineering:

The current National Register listing documents the architectural significance of Battery Weed, with its granite block construction in three casemated tiers and former moat bounded by a granite seawall, as an excellent example of the Third System period (1847 to 1861) in coastal defense. The Battery Weed headland is also significant under National Register Criterion C in the areas of Architecture and Engineering as a strategic component in the development of American coastal defense systems. Aside from the fort, contributing resources remaining today include portions of the Endicott-era batteries Catlin and Bacon that were built on the site of earlier batteries flanking the fort (c.1898 to 1905); several buildings and structures associated with the Endicott mine defense system (c.1887 to 1921), including the north dock (c.1858 to c.1907); and grading and earthworks associated with the engineered slope (c.1847 to c.1873) and the overlook area (c.1873 to c.1938). These features represent components of the outwardly expanding New York Harbor system of defenses, and evidence the progression over time of coastal military architecture and engineering technologies (CLR 2008:138).

Following acquisition of the headland on the Narrows in 1794 and 1809, the State of New York began initial military development with the construction of Fort Richmond, built of red sandstone according to the Second System specifications for coastal fortifications, and accompanied by several ancillary structures at the water's edge. Federal purchase of the site in 1846 led to the removal of the Second System fortress, and the construction of a new granite Third System fort, later named Battery Weed, in its place between 1847 and 1861. No above-ground features remain from before 1847. The new fort was conceived as a component of a larger system of defenses designed to secure the entrance to New York Harbor in conjunction with Fort La Fayette and Fort Hamilton located across the Narrows on Long Island (Brooklyn). Battery Weed, with its three tiers of granite casemates, was designed in a half-hexagon and carefully situated to complete range of fire objectives together with Forts La Fayette and Hamilton. Included in part of the new construction program was a stone dock extending into the Narrows to the north of Battery Weed built in c.1858 (CLR 2008:138).

The landscape of the Battery Weed headland was engineered with a system of secondary fortifications to protect and support the primary fort. Grading of portions of the site coincided with the construction of the fort in c.1847, and was continued by the Army for a series of earthen and concrete ground

batteries named the South and North Cliff Batteries (named for their respective relationship to Battery Weed) during the Civil War in the 1860s. These batteries were reconstructed in the Endicott period between 1898 and 1904 as Batteries Catlin and Bacon together with Batteries Turnbull and Barbour to the south, incorporating earlier features such as a c.1865 subsurface paradol. Gun emplacements located on the batteries were updated throughout the historic period. In 1918, at the time of the World War I Armistice, Battery Bacon's two three-inch guns were dismounted and sent to Aberdeen Proving Ground in Maryland. Guns mounted on Battery Catlin were out of service by 1942 (CLR 2008:138-139, referencing Black 1983:111).

Construction of the mine defense system, a system of electrically-detonated floating mines that was one of the chief innovations of the Endicott period, began in 1887 with the addition of a mine casemate in Battery Weed and a mine railway leading to the north dock. Later expansions of the system included the Torpedo Storage Building built in c.1894, a second mine casemate on Battery Catlin built in c.1905, six cable tank buildings constructed between 1898 and 1905, additions and realignment of the mine railway up until 1921, and construction of a timber extension to the north dock along with a mine boathouse in c.1907 (CLR 2008:139).

Later military features dating from the World War I period and Great Depression are limited to a Coincidence Range-Finder (CRF) station constructed in c.1917 on the slope above Battery Bacon. Several small secondary structures reflected the continued military use of the headland during this time, including a concrete-block garage adjacent to the torpedo storage building constructed between 1924 and 1940, a concrete shed near the south end of Battery Catlin built in c.1940, and a concrete seawall north of the north dock built in c.1938. A stone wall along the overlook terrace along Hudson Road and specimen roadside sycamore trees were added around the same time (CLR 2008:139).

During World War II, in addition to the presence of troops and more activity, there were some changes in the appearance of the landscape, although there was apparently no new construction at the Battery Weed headland. Vegetation management practices may have changed in response to a 1942 order for a new program of obscurement from aerial attack. Although some successional vegetation may have resulted from this directive on the batteries adjoining Battery Weed, most of successional woods and vines present today are the result of a lack of maintenance that occurred after World War II (CLR 2008:139).

While the Battery Weed headland today retains many of its architectural and engineering features, most notably Battery Weed, the north dock, and Batteries Bacon and Catlin, the overall character of the landscape has changed considerably due to the growth of successional woods and vines on formerly open, mown ground. These woods obscure the batteries and engineered slope, and cover some of the secondary buildings and structures. While this is a dramatic change to the historic landscape, it can be reversed. Significant changes have occurred to 1945 to a number of buildings and structures, including the Torpedo Storage Building and second mine casemate, which were ruined during the 1980s, probably by fire; the loss of eight support buildings in the mine defense system in c.1960; and the loss of the timber extension, mine boathouse, quartermaster's warehouse, and dock house on the north dock in c.1960. The mine railway system remains partially intact, although concealment by vegetation prevented an accurate evaluation of its integrity (CLR 2008:139-140).

State Register Information

Identification Number:	90NR01013
Date Listed:	06/23/1980
Name:	Battery Weed
Identification Number:	98NR01415
Date Listed:	08/03/1998
Name:	Fort Wadsworth

National Historic Landmark Information

National Historic Landmark Status:	No
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World Heritage Site Information

World Heritage Site Status:	No
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Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type:

Designed

Current and Historic Use/Function:

Primary Historic Function:

Battery (Defense)

Primary Current Use:

Outdoor Recreation-Other

Other Use/Function

Other Type of Use or Function

Arms Storage

Historic

Interpretive Trail

Current

Landing (Wharf, Dock)

Historic

Leisure-Passive (Park)

Both Current And Historic

Lighthouse

Both Current And Historic

Military Facility (Post)

Historic

Outdoor Recreation-Other

Historic

Overlook

Both Current And Historic

View

Both Current And Historic

Current and Historic Names:

Name

Type of Name

Battery Weed

Both Current And Historic

Fort Wadsworth

Both Current And Historic

Fort Richmond

Historic

Water Battery

Historic

Gateway National Recreation Area, Staten
Island Unit

Current

Ethnographic Study Conducted:

No Survey Conducted

Chronology:

Year	Event	Annotation
AD 1524	Explored	Giovanni de Verrazano sails into the Narrows.
AD 1609	Established	Henry Hudson names Staaten Eylandt (Island of the States) in honor of the States General of the Netherlands.
AD 1621 - 1664	Established	The Battery Weed headland area is part of the Province of New Netherland/Dutch West India Company.
AD 1630	Land Transfer	Staten Island is granted to Michael Pauw by Dutch West India Company.
AD 1661 - 1662	Settled	First colonial agricultural settlement on Staten Island, Oude Dorpe, is established.
AD 1664	Land Transfer	King Charles II of England grants Staten Island lands to the Duke of York.
AD 1680 - 1689	Land Transfer	Battery Weed headland is assigned to ownership of F. Walton (not patented).
AD 1683	Established	Staten Island is designated Richmond County.
AD 1711	Planned	Plan approved for a system of signal guns and fire beacons to be developed in several locations at the Narrows, including Staten Island.
AD 1712	Established	First ferry charter between Manhattan and Staten Island.
AD 1750 - 1794	Inhabited	VanDeventer family maintains ownership of the headland, known as "Bluff Point" or "Van Deventer's Point" ca. 1750-1794.
AD 1754	Planned	Colony of New York proposal for batteries on Staten Island (not implemented).
AD 1755	Purchased/Sold	Colonial legislation authorizes payment to carry to the site two guns along with tar barrels and posts for beacons.

AD 1776 - 1783	Inhabited	British occupy the Battery Weed headland during the Revolutionary War.
	Farmed/Harvested	British harvest mature trees.
	Established	Signal Hill is established (land title remained with Van Deventer).
AD 1779	Established	British defenses by this time at Van Deventer's Point included earthen batteries, redoubt, twenty-six gun platform, and hot-shot furnace.
AD 1782	Built	British construct four-bastion fort and several barbette batteries at/near Van Deventer's Point.
AD 1794	Purchased/Sold	State of New York acquires 24 ½ acres from Ann Jacobsen and Catherine Van Deventer.
AD 1794 - 1807	Established	Federal government begins First American System of Coastal Fortifications.
AD 1807 - 1817	Established	Second American System of Coastal Fortifications is established.
AD 1808	Planned	Army Engineer Jonathan Williams develops a plan for fortification at the Narrows.
AD 1809	Purchased/Sold	New York State acquires twenty-two additional acres near Van Deventer's Point from John Jacobsen including farm house, barn, and road.
AD 1810	Built	Water Battery-Fort Richmond, Second System Fortress, is completed.
AD 1812	Planned	Due to War of 1812, state and federal governments authorize telegraph observatories and signal poles.
AD 1814	Built	Construction of Second System Fort Tompkins substantially begun, Fort Richmond serves as a checkpoint for all vessels entering or leaving New York Harbor.
AD 1816	Abandoned	Fortifications at the Narrows are largely abandoned by the state due to lack of funds.

Battery Weed Headland
 Gateway NRA - Staten Island District

AD 1817 - 1861	Established	The federal government institutes the Third American System of Coastal Fortifications.
AD 1820 - 1845	Established	Unresolved negotiations between the state and federal governments over ownership of the fortifications at the Narrows.
AD 1828	Established	Fort Tompkins Light near state fortifications at the Narrows.
AD 1847	Land Transfer	Conveyance of land at the Narrows from New York State to the federal government. Construction of Fort Richmond begins.
AD 1848	Built	Slope sustaining wall is constructed.
AD 1852	Built	West wall of moat is completed.
AD 1854	Purchased/Sold	A 5.2 acre parcel is purchased by federal government from Peter Jacobsen on west side of fortifications.
AD 1855	Built	Cofferdam is completed.
AD 1856	Purchased/Sold	A 17-acre strip parcel along New York Avenue is purchased by federal government from William Aspinwell.
AD 1857	Planned	Congress appropriates \$150,000 for reconstruction of Fort Tompkins.
AD 1858	Built	North stone dock is completed.
AD 1859	Built	Construction begins on the new Fort Tompkins; an inclined railway is built from the north stone dock to the top of the bluff in order to transport materials up to the Fort Tompkins construction site.
AD 1860	Built	Two story guardhouse with a drawbridge is built on the west face of Battery Weed. Hourly ferry service from Manhattan instituted.

AD 1861	Inhabited	5th Regiment New York Volunteer Artillery is garrisoned at Forts Tompkins & Richmond.
AD 1862	Developed	Construction of North and South Cliff Batteries is begun.
AD 1864	Built	Fort Richmond is completed (except for seawall/moat) at a cost of \$750,000.00; number of troops at the post peaks at 1,921; many wooden support buildings are constructed.
AD 1865	Altered	War Department changes the name of Fort Richmond to Fort Wadsworth.
AD 1867	Demolished	Many temporary wartime buildings are demolished.
AD 1870	Altered	Around this time, macadam is added to roadways at Fort Wadsworth.
AD 1871	Built	Seawall and moat around Fort Wadsworth is completed.
AD 1871 - 1875	Altered	South and North Cliff Batteries and Hudson Battery are modernized.
AD 1873	Graded	Ground surrounding Fort Wadsworth including glacis, slopes, and batteries graded and seeded; draining and filling of swamp at foot of glacis at New York Avenue.
AD 1876	Built	Second Fort Tompkins is completed.
AD 1877	Built	Boathouse is constructed on north stone dock.
AD 1880	Established	Rail service is established from St. George to South Beach, and runs past military reservation.
AD 1885	Built	President Cleveland establishes Endicott Board to study coastal defense improvements; earthen berm is constructed at top of slope along present Hudson Road; this begins the Endicott Era in coastal fortifications that extends to World War I.

Battery Weed Headland
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AD 1886	Altered	Moat dewatered and reservoir constructed at southwest corner; Staten Island Rapid Transit Railroad Company founded.
AD 1887	Altered	Northwest bastion of Battery Weed is converted to a mining casemate.
	Built	First mine tracks are completed.
AD 1889	Built	Cable tank #2 is built; Staten Island linked to New Jersey by a railroad bridge.
AD 1890	Altered	Around this time, Fort Wadsworth (Battery Weed) is used for storage of munitions from Ellis Island.
AD 1892 - 1894	Built	Mine storage building is constructed west of Battery Weed.
AD 1892 - 1901	Purchased/Sold	Around 141 acres are purchased in ten parcels from various owners to the south and west by the federal government, expanding the Fort Wadsworth reservation from 90 to 226 acres.
AD 1892 - 1902	Built	Fog signal is installed on northeast corner of Fort Wadsworth (Battery Weed) seawall.
AD 1895 - 1904	Built	Six new batteries are constructed for higher-powered artillery South and North Cliff and Hudson Batteries equipped with modern guns.
AD 1898	Built	Cable tank #1 is constructed.
AD 1899	Reconstructed	Battery Bacon is reconstructed from north end of South Cliff Battery.
AD 1901	Altered	Army Corps of Engineers transfers mining complex to Coast Artillery Corps.
AD 1902	Altered	Fort Wadsworth renamed Battery Weed; entire U.S. military reservation renamed Fort Wadsworth.
AD 1902 - 1903	Built	Combined fog signal and lighthouse is constructed on barbette of Battery Weed's northeast bastion.

AD 1902 - 1904	Reconstructed	Battery Catlin is reconstructed from North Cliff Battery.
AD 1904	Altered	West side of moat is filled in around this time; two three-inch rapid fire guns are mounted at Battery Bacon.
AD 1905	Built	Second mine casemate is constructed at Battery Catlin; cable tanks #4, 5, and 6 are constructed outside west wall of Battery Weed.
AD 1906	Expanded	Around this time, a timber addition is constructed on north stone dock along with extension of the mine railway.
AD 1907	Built	Around this time, a mine boathouse and open dock house are constructed on the north stone dock and its timber addition.
AD 1910	Altered	Mine tracks are realigned.
AD 1913	Altered	Six three-inch rapid fire guns mounted at Battery Catlin.
	Destroyed	Timber addition to dock destroyed by steamer "Hamilton" collision.
AD 1916 - 1918	Inhabited	1,400 troops are garrisoned at Fort Wadsworth.
AD 1917	Built	Around this time, a coincidence range finder station is built on the slope above Battery Bacon.
AD 1918	Abandoned	Battery Bacon is taken out of service.
AD 1919	Altered	Command shifts from Coast Artillery Corps to the infantry.
AD 1920	Established	Four anti-aircraft guns are emplaced at Fort Wadsworth.
AD 1921	Altered	Mine tracks are realigned.

Battery Weed Headland
Gateway NRA - Staten Island District

AD 1927	Inhabited	Only fourteen enlisted men are on the post.
AD 1935	Built	Civilian Conservation Corps (390 Veterans Co.) and Works Progress Administration-funded laborers begin work at Fort Wadsworth; they construct part of seawall and undertake limited forestry work; probably also construct overlook wall.
AD 1940 - 1944	Planned	Anti-submarine net (series of subsurface mines) is planned across the Narrows.
AD 1941	Established	Fort Wadsworth is returned to the Coast Artillery Corp.
AD 1942	Abandoned	Battery Catlin taken out of service.
AD 1942 - 1945	Established	Harbor Entrance Control Post (HECP) command center established at Fort Wadsworth.
AD 1944 - 1945	Inhabited	Fort Wadsworth houses a service unit of Italian prisoners of war.
AD 1948	Developed	Trailer camp developed for military housing at Fort Wadsworth.
AD 1952	Moved	Korean War anti-aircraft unit assigned to Fort Wadsworth.
AD 1955	Established	Around this time, NIKE Surface-to-Air Missile Command center is established at Fort Wadsworth.
AD 1959 - 1964	Built	Construction of Verrazano-Narrows Bridge begins; buildings in Fort Wadsworth demolished along the bridge approaches. The bridge opens in 1964.
AD 1960	Removed	Winds and rains from Hurricane Donna probably damages north dock and buildings in the headland. All wood-frame buildings on the headland, including the mine defense buildings along the west side of Battery Weed and buildings on the north dock, are removed.

Battery Weed Headland
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AD 1972	Removed	The Department of Defense identifies Fort Wadsworth as surplus property to be transferred to newly established Gateway National Recreation Area at a future date.
AD 1979	Established	U.S. Navy takes over Fort Wadsworth from the Army as headquarters of New York Naval Station.
AD 1983	Reconstructed	U.S. Navy begins extensive redevelopment of Fort Wadsworth.
AD 1985	Damaged	Around this time, the Torpedo Storage Building is heavily damaged by fire.
AD 1994	Abandoned	New York Naval Station at Fort Wadsworth is decommissioned.
AD 1995	Established	National Park Service assumes jurisdiction of Fort Wadsworth, including the Battery Weed headland.

Physical History:

The following section provides information on the physical development and evolution of the site, organized by time periods. The narrative is taken directly from the 2008 report, "Cultural Landscape Report for the Battery Weed Headland, Fort Wadsworth, Gateway National Recreation Area." Graphics associated with this section are located at the end of this report, but a comprehensive collection of historic and existing photographs, maps, and plans can be found in the CLR.

NATIVE ENVIRONMENT AND COLONIAL SETTLEMENT, PRE-1809

Over many centuries, natural processes and physiographic events have shaped the coastal landscape of Staten Island and endowed it with a wealth of historically important resources both cultural and natural. Landform and habitat changes brought by rising sea levels resulted in the creation of inland marshes and supported a diverse collection of plant and animal species. From the time of the earliest sightings of Staten Island by European explorers, the headland at the western bank of the Narrows has held great strategic importance. Colonial agricultural settlement of the area by the Dutch beginning ca. 1662 included the development of farmsteads featuring simple wooded structures and furrowed fields. Beginning in the mid-eighteenth century, the long and strategic prospect offered from the heights of the bluff above the bay began to overshadow the agricultural value of the land. The vantage point from the bluff above the bay became the site of a semaphore station and lookout as the shipping trade expanded in the region. Recognition of the importance of the vantage point from this landscape led to a continuing effort to protect the entrance to one of the most important cities and trading centers of a young nation (CLR 2008:15).

Natural History:

From the time of the retreat of the last great ice sheet, the Laurentide Glacier, approximately 12,000 years ago, the landscape of the Battery Weed headland has remained an index of natural history. The Ronkonkoma and Harbor Hill moraines, terminal deposits left by the retreating glacier composed of boulders, gravel ridges, striated rock, and surface till, form the heights of the New England south coast islands stretching from Cape Cod to Staten Island. These moraines once acted as natural dams holding back glacial melt-water in a series of great lakes to the north. During a period of global warming, the flow of water from the north breached an area of the morainal dam and carved a deep chasm through the till, from the Hudson Highlands, south of the Catskills, to the mouth of the Atlantic Ocean at the site of Battery Weed on the Narrows of New York Bay (CLR 2008:15).

Although the site of Battery Weed is located within the Atlantic Coastal Plain physiographic region, which is generally characterized by level to gently sloping terrain, the extensive glacial deposits forming Staten Island resulted a much more varied topography. Daily tidal flows through the Narrows, to the present day, have eroded the moraine with a water depth in the Narrows of 100 feet to bedrock (CLR 2008:15).

A formation consisting of a scatter of materials, such as sandstones, siltstones, and schists in a variety of sizes from very large boulders to small stones and top soils, was left behind at the

bluff above Battery Weed because of the carving out of this morainal dam. Over the many centuries, the effects of wind and water further shaped the bluff, eroding away the loose material, and exposing large boulders. This glacial and weather-carved landscape, although it has since been smoothed out and reshaped, remains evident in the steep drop-off from the crest of the bluff above Battery Weed to the waters edge below (CLR 2008:16).

The location of the Battery Weed at the head a major river system and along the coast of the Atlantic Ocean resulted in a diverse ecology. The paleo-environment (pre 8,000 Before the Common Era/BCE) was likely dominated by mixed tundra and spruce woodlands supporting herds of large fauna. During the warming of the Early Archaic period (8,000 BCE - 6,000 BCE), rising sea levels brought environmental changes to the landscape in the form of large inland marsh areas, and a predominance of pine-oak forests (CLR 2008:16).

Native American Habitation:

The ecological changes that resulted from broad environmental trends after the retreat of the glacier led to diverse and abundant fauna that supported Native American hunter-gatherer groups. Until late in the seventeenth century, Staten Island was home to the Lenape people, known by Europeans as the Delaware, who were part of the larger Algonquian linguistic family that lived on the East Coast from Maine to the Chesapeake Bay. Archeologists have unearthed projectile points, ceramic remains, and shell middens dating to 3,000 BCE, evidence of Lenape use of the available natural resources near the Battery Weed headland (CLR 2008:16).

The Lenape people called Staten Island Aquehonga-Monacknong, or Monacknong, meaning enchanted woods. Historian George W. Hilton noted in a 1964 publication that Native Americans also called the island Eghquaons, meaning high sandy banks. By any name, the island was host to a prosperous native culture. The Lenape were hunters and fishers harvesting an abundance of oysters from the shallow beds off the shores of the island. Although it is unknown precisely where, the Lenape also made substantial woodland clearings for the cultivation of corn (maize), beans, pumpkins, and tobacco. They made hooks of bone and wove hemp nets for fishing. The Lenape used rushes, grasses, and husks to make baskets and mats, and a variety of island plants and other materials were used for medicinal and ceremonial purposes (CLR 2008:16).

European Exploration and Colonization:

European discovery of Native American during the sixteenth century, followed by early seventeenth century Dutch attempts at agricultural settlement, began years of conflict over rights to the land. Commissioned by France to find passage to China, Italian Commander Giovanni da Verrazano anchored his vessel, the Dauphine, off Staten Island in April of 1524. He reported that oysters and fish were plentiful, and bears, turkey, wolves, fox, beaver, and muskrat were known to be on the island. Verrazano's report is the first known written description of Staten Island: "...this region which seemed so commodious and delightful, and which supposed must also contain great riches, as the hills showed many indications of minerals." A 1636 map of New Netherland and New England illustrates the abundant resources discovered in early explorations of the new world (CLR 2008:17, citing Holden

1964:10).

Explorations along the eastern seaboard of the United States and up the Hudson River brought several early navigators to the shore of the Battery Weed headland. In 1609, Henry Hudson, an English navigator employed by the Dutch West India Company, anchored his vessel the Half Moon in the Narrows off of Staten Island before embarking on his explorations of the Hudson River. Henry Hudson is credited with naming the island Staaten Eylandt in honor of the States-General, the governing body of Holland. Hudson's mate on the Half Moon wrote in his journal of being welcomed by the native people, "well-dressed in deer skins who brought green tobacco in trade for knives and beads. [They were said to] possess yellow copper and great stores of maize or Indian wheat...The country is full of great tall oaks" (CLR 2008:17, citing Steinmeyer 1987:17).

Settlement by the Dutch began almost immediately following Hudson's reports home. The Dutch established a settlement named New Amsterdam on the southern tip of Manhattan Island, which reached a population of two hundred by 1626. The government of Holland soon attempted to colonize nearby Staten Island by offering patroonships (large tracts of land granted for settlement) to wealthy directors of the Dutch West India Company and requiring them to bring farm workers and their families with them. Although repeated attempts at settlement were made during the period between 1639 and 1661, none was successful. The first Patroon, Michael Pauw, was granted all of Staten Island and part of New Jersey by the Dutch West India Company in 1630. Pauw made no attempt to colonize the land and apparently relinquished his rights in 1637. Captain David Pietersz de Vries, a prolific international maritime trader, received land rights on Staten Island soon after. In 1639, he sent a few families to settle and established a farm complex of his own, known as a *bouwerij* (the Bowery) by the Dutch, in the area of the present Tompkinsville two miles north of Battery Weed. The farm was attacked and destroyed by the Lenape in 1641. Another grant was made to Cornelius Melyn who was granted all of Staten Island except for the De Vries farm. Although Melyn established a colony of about forty settlers approximately one mile south of the present Battery Weed site in 1642, tensions between the Lenape and the settlers led to abandonment of the settlement by 1643. Several violent incidents occurred between the Dutch settlers and the Lenape in the early years of colonial settlement, resulting in casualties of hundreds of people among both groups. In a particularly disastrous massacre known as The Peach War of 1655, a Lenape woman was killed by a farmer named Van Dycke for allegedly stealing a peach from his orchard. The Lenape people avenged her death with an attack on New Amsterdam where they killed Van Dycke. The Lenape were then forced to retreat to Staten Island where they proceeded to destroy Melyn's entire colony. Following this incident, most of the Lenape people left the island, retreating to a mainland area of what would later become New Jersey (CLR 2008:17-18).

It was not until seven years later, in 1662, that the first permanent Dutch settlement was established approximately one mile south of Battery Weed at South Beach. The settlement, later known as New Dorp, was established in an area of fields suitable for the planting of grain with ample room for the pasturage of cattle, and with a creek that gave access to the lower bay. A record of the explorations in 1679 of two Dutch visitors to the island, Jaspas Dankars

and Peter Sluyter, contains a description of a climb up a steep bluff along the eastern shore of Staten Island where the two became lost in the woods before they managed to make their way back to the shore, not far from where they had started their ascent. This account suggests that in 1679, portions of the bluffs along the eastern shore of the island near Battery Weed were thickly wooded (CLR 2008:18).

As the first Dutch colonists were settling in on Staten Island in 1664, King Charles II of England made a gift of the Dutch territories of North America to his brother James, the Duke of York. The agreement allowed the Dutch to remain unharmed, with original rights and uses to remain intact. Following James' accession to the throne of England, and after the Duke of York's purchase of Staten Island from the Lenape on April 13, 1670, English Crown Land Grants were made to various individuals covering every acre of land on Staten Island. The records of the State of New York disclose a large number of Crown Land Grants on Staten Island that were subject to annual quit-rents, which were fees payable by the grantee to England. A map prepared in 1907 shows colonial land patents dating from 1668 to 1712 in the area of the future site of Battery Weed. An unpatented thirty-acre area marked "F. Walton" appears to be on or adjacent to the Battery Weed headland, the earliest indication of ownership. By the mid-eighteenth century, settlements on Staten Island had grown sufficient to support at least four villages, with a ferry on the eastern shore to the north of the Battery Weed headland. Here, the Narrows was one of the most important physiographic place on Staten Island, shown prominently on maps of the period along with primary settlements (CLR 2008:18-19).

Finnish naturalist Peter Kalm (after whom Carl Linnaeus named mountain laurel *Kalmia latifolia*) visited Staten Island in ca. 1748 and described the colonial island landscape as: ...extremely pleasing, as it is not so much intercepted by woods, but offers more cultivated fields to view. Hills and vallies [sic] still continued, as usual, to change alternately. Near every farm house was an orchard. Cherry trees stood along the enclosures round corn fields. The corn fields were excellently situated, and either sown with wheat or rye. They had no ditches on their sides, but (as is usual in England) only furrows, drawn together at greater or lesser distances from each other. In one place we observed a water mill so situated that when the tide flowed, the water ran up into a pond, but when it ebbed, the flood gate was drawn up and the mill driven by the water flowing out of the pond. (CLR 2008:19, citing Steinmeyer 1987:32)

A painting of the eastern shore of Staten Island along the Narrows made two decade later illustrates the agricultural landscape that Kalm described. The shore also contained extensive salt meadows consisting of vast stands of native, saltwater-loving species such as salt cordgrass (*Spartina alterniflora*), and yellow saltgrass (*Spartina patens*), which were mowed for hay even though they were regularly inundated by the tides. The salt marshes of the coast were a valued natural resource as they produced annually large crops of natural grasses, and furnished good year-round natural pastures for cattle and sheep. Salt hay meadows were highly valued by the farmers whose lands bordered on them, as they constituted an unfailing source of hay for winter use and a surplus for exportation. In addition, salt hay meadows attracted a diverse group of coastal wildlife species, such as mussels, egrets, and herons (CLR 2008:19).

From the mid-eighteenth century until 1794, the Battery Weed headland and the area to south belonged to John Van Deventer and his family, and was known as Van Deventer's Point (the actual point was south of the Battery Weed headland). Under British rule, title to the land remained in the hands of the Van Deventer family. A farmhouse, later known as the Van Deventer-Fountain House was constructed on the point in ca.1786. This property was located on a deep-water channel, ideally positioned for launching Atlantic crossings during the eighteenth century. John Van Deventer operated a shipyard during the middle of the eighteenth century and was commissioned by a group of Moravian settlers to build a sailing vessel at Van Deventer's Point. The ship he built there in 1748, the "Irene," made fourteen round-trip Atlantic crossings, bringing missionaries and settlers from Europe to the new world (CLR 2008:19-20).

The Van Deventer property was leased from Ann Jacobsen and Catherine Van Deventer by Cornelius McLean for farming during the late eighteenth century. It is unknown exactly what McLean raised on the leased land, but as illustrated in an etching showing farmland just to the north of the site in 1776, the land would have been suitable for pasturage, and was likely used for this purpose (CLR 2008:20).

Strategic Development at the Narrows:

The landscape of the Battery Weed headland was in a prominent geographic location overlooking the entrance to New York Harbor. During the early years of the eighteenth century, the harbor entrance became the commercial gateway to the interior, including Albany and Montreal and the Great Lakes, by way of the Hudson River. A competitive environment existed between the French and English over important trade routes opportunities for commerce in the region. Although the landscape was not occupied by any fortification at this time, there was a growing recognition of the strategic importance of this and other sites overlooking the entrance to New York Harbor (CLR 2008:20).

Colonial era fortifications in New York Harbor included Fort Amsterdam, built in 1626, at the southern tip of the island of Manhattan, and a battery on Governor's Island. A plan was approved in 1711 for a system of signal guns and fire beacons to be developed for several locations including "some eminence on Staten Island." With a charter for a ferry service between Manhattan and Staten Island given shortly thereafter in 1712, settlers were also beginning to realize the island's potential for agricultural (CLR 2008:20, citing Hilton, 19).

Although concerns related to the outbreak of war in the colonies between the French and the British in 1754 resulted in a proposal by the New York colonial government for batteries on Staten Island, the proposal was not implemented. However, in 1755 the colony did authorize a payment to carry two guns down to the Battery Weed headland along with tar barrels and posts for beacons. Maps of this period indicate only one building and a ferry landing at or near the Battery Weed headland (CLR 2008:20).

Following their evacuation of Boston in March of 1776, the British arrived at the Narrows of New York Bay. A drawing dated July 12, 1776, and titled "View of the Narrows between Long Island and Staten Island with our fleet at anchor and Lord Howe coming in," illustrates the

British arrival at the bay just to the north of the Battery Weed headland. The British used Staten Island as a staging area, and both British and Hessian troops were stationed there throughout the American Revolution. An artillery post, probably of earth with wooden supports, was constructed by the British at an undetermined location at the top of the bluff above the present site of Battery Weed (CLR 2008:20-21).

By 1779, British defenses at the Narrows consisted of a redoubt, a line of twenty-six gun platforms, and a hot-shot furnace that was part of an ammunitions system used to set attacking ships afire. During this period, the bluff above Battery Weed became known as Flagstaff Hill, with a signal house and fort of earthworks. The island landscape served the needs of the military, as well as the burgeoning population of Manhattan, in supplying forage and firewood. The British occupation of the land along the west bank of the Narrows resulted in the harvest of many of the available mature trees in the area for fuel. By 1783, the British had evacuated New York, and the earthen fort they constructed on the slope above Battery Weed deteriorated in the years that followed (CLR 2008:21).

During the later eighteenth century, Governor George Clinton of New York, fearing insufficient federal funding to protect the port of New York, established a state board of commissioners, the Commissioners of Fortifications. The board was given extensive authority, including the power to "...enter and survey any land regarded as required for defense, and to purchase such tracts, and, when owners seemed recalcitrant or unreasonable, to proceed through the Chancery Court of the State of New York to force the sale on fair terms." Charles Vincent, an engineer commissioned by the U. S. War Department, identified privately held lands on both banks of the Narrows as lands required for the defense of the port of New York. Vincent submitted a report and comprehensive survey on the fortification needs of New York Harbor in 1794. In this report, Vincent referred to the site at the top of the bluff on the west side of the Narrows as "Stag Stake" and suggested it be used to pass along a successive relay of signals from Sandy Hook to Manhattan via Bedloe's (Liberty Island) two miles to the southwest of the city. By this method, he proposed a means to monitor the entrance to New York Harbor for any threats to security and commercial activity (CLR 2008:21, citing Black 1983:28).

In his 1794 report, Vincent also discussed several possible sites for constructing batteries, noting the particular suitability of the site at "Sandy Bay" on the west bank of the Narrows, possibly referring to the Battery Weed headland and the cove to its north. Vincent considered the site "much more interesting on account of vessels coming much closer to it, driven by the currents and endeavoring to avoid the advancing high ground." He suggested the establishment of a battery there "above the level of the highest tides" and "connected by a covered way with a redoubt to be erected on the extremity of the steep bank where formerly stood a block house." This land belonged to the Van Deventer family, and although they were willing to sell the farm to the state, the board of commissioners considered the price extravagant. Despite this, in November of 1794, twenty-four and one half acres of the Van Deventer property along the shore passed out of private ownership, by order of the Court of Chancery, to the State of New York. Although the Battery Weed headland was in public ownership, the state would not develop the property for military purposes for another fifteen years (CLR 2008:22, citing Black 1983:32).

Landscape of Van Deventer's Point:

By the first decade of the nineteenth century, the landscape of Van Deventer's Point, including the Battery Weed headland, had changed relatively little over the course of the preceding centuries. Native American habitation of the area probably had little impact aside from possibly small agricultural clearings. Colonial settlement had a more extensive impact through development of agricultural landscapes. British occupation during the years of the American Revolution had probably the greatest impact on the site with development of an earthen fortification and harvesting remaining woods for fuel. In 1809, the Battery Weed headland was likely a broad sandy flat and beach, possibly interspersed with coastal grasses. The steep, irregular bluff above the future site of the present fort was probably characterized by glacial boulders, eroded banks, grasses and wildflowers, and trees, such as red cedar, oak, and pine. Earthen farm roads provided access to the beachfront site from both the north and south running across and diagonally down the bluff. The headland was probably still used for agriculture, probably by the Jacobson family who would have leased the land from the state. A farmhouse was located along the shoreline south of the point, and on the top of the bluff was another farmhouse and barn. Although the state had not constructed fortifications on the headland by 1808, plans were in the works for the strategic development of the Narrows, including construction of a large stone fortress along the water's edge according to the federal second system of coastal fortifications. In the decades to follow, these plans would significantly alter the landscape (CLR 2008:22).

SECOND SYSTEM STATE FORTIFICATION, 1809-1846

During the early nineteenth century, contrasting cultural values of agriculture, harbor defense, and recreation came together in the landscape of the Battery Weed headland. In 1809, the State of New York began construction of its first military fortifications, transforming the earlier agricultural landscape with large masonry forts, batteries, wharfs, and other facilities constructed according to the second system of coastal fortifications developed by the federal military. During a long period of military inactivity that followed the War of 1812, the land was used for agriculture as well as for recreation. By 1846 at the end of state ownership, the fortifications had purportedly fallen into ruins. This condition, however, added to the picturesque character of the landscape, which had become a popular spot for taking in the expansive view of New York Harbor, and the subject of naturalists, authors, and poets (CLR 2008:29).

Romantic Staten Island:

New York City in the early nineteenth century was a rapidly growing center of trade, finance, and commercial activity. Staten Island, less than five miles offshore to the south remained largely a rural and agricultural community. The island, accessible since 1713 by way of a short ferry ride from Manhattan, expanded quickly in population and in 1800, the total population numbered 4,564, and by 1810 nearly a thousand more individuals had arrived. The island's agricultural landscape featured plowed fields of corn, hay, and rye, and orchards and cherry tree hedgerows between the furrowed fields. Although detailed written descriptions of the historic landscape immediately surrounding the Battery Weed headland are few, there are many historic accounts of the landscape of Staten Island. In a book published in 1829 and titled

Three Years in America, author James Stuart wrote:

"We saw many comfortable looking farm houses, amidst rich valleys and lands, and orchards abounding in fruit; but what surprised me the most in looking at the fruit, was the extraordinary quantity of cherry trees producing the small black and red cherry. In this ride, I saw a greater number of cherry trees, I am persuaded, than I had seen in the whole course of my life...No part of the wood in Staten Island...is of great size, the British during their occupation of New York, in the Revolutionary War, having cut down for fuel all the wood within their reach."
(CLR 2008:29, citing Steinmeyer 1987:62)

Continuing increases in population through the nineteenth century brought the growth and development of village settlements along the eastern shore of the island including Stapleton, Clifton, Tompkinsville, and Edgewater. Affluent families established country estates to the north and south of the Battery Weed headland. One observer remarked in 1842:

"...the whole eastern shore [of Staten Island] is becoming almost a continued village from the Quarantine [Tompkinsville] to the Signal poles at Fort Richmond being occupied by country seats and town plots." (CLR 2008:29, citing Steinmeyer 1987:62)

Many authors and artists visited Staten Island during this time or passed along its shores. In 1839, author Herman Melville made a voyage from New York to Liverpool, and passed through the Narrows. Upon his departure and return, he took in the picturesque landscape of the Staten Island shoreline and the state fortifications at the headland in particular. Ten years later, he wrote of this landscape in his novel, *Redburn*. Although probably containing some fiction, Melville captured the character of the Battery Weed headland which had not seen active military use for some time:

"...on the right hand side of the Narrows as you go out, the land is quite high; and on top of a fine cliff is a great castle or fort [Fort Tompkins], all in ruins, and with trees growing round it...It was a beautiful place, as I remembered it, and very wonderful and romantic, too...On the side away from the water was a green grove of trees, very thick and shady and through this grove, in a sort of twilight you came to an arch in the wall of the fort...and all at once you came out into an open space in the middle of the castle. And there you would see cows grazing...and sheep clambering among the mossy ruins...and I once saw a black goat with a long beard standing with his forefeet lifted high up on the topmost parapet, and looking to sea...Yes, the fort was a beautiful, quiet and charming spot. I should like to build a little cottage in the middle of it, and live there all my life." (CLR 2008:29, citing Melville 1849:81,82)

Henry David Thoreau, at the age of twenty-six, lived as a tutor at the home of Judge William Emerson in the Staten Island neighborhood of Concord less than two miles directly west of the Battery Weed headland. Since the headland was between Judge Emersons' home and the sea, Thoreau presumably had occasion to walk along the waterfront there. Thoreau provided another character sketch of the coastal island landscape in a letter he wrote in 1843:

"I must live along the beach, on the southern shore, which looks directly out to sea...The cedar seems to be one of the most common trees here, and the fields are very fragrant with it. There are also gum and tulip trees...The woods are full of honeysuckle in full bloom, which differs from ours in being red instead of white...The painted cup is very common in the meadows

here. Peaches, and especially cherries seem to grow by all the fences...The whole island is like a garden, and affords very fine scenery... seaweed, water, and sand; and even the dead fishes, horses and hogs have a rank, luxuriant odor; great shad-nets spread to dry; crabs and horseshoes crawling over the sand; clumsy boats, only for service, dancing like sea-fowl over the surf, and ships afar off going about their business." (CLR 2008:29, citing Steinmeyer 1987:63-65)

The island landscape, and particularly the Battery Weed headland overlooking the entrance to New York Harbor, drew the attention of many. From the heights of the bluff, visitors enjoyed the views of Manhattan, the bay and islands to the north and east, and the Fort Tompkins lighthouse—an aide to navigation built in 1828 on the Staten Island shore to the south. The coastal landscape also offered scenic views associated with island agriculture, offshore shipping, and fishing activities that appealed to visitors. The long prospect from atop the bluffs also offered strategic value, and although the aesthetic qualities of the site attracted many, its military importance would dominate the landscape (CLR 2008:31).

State Fortification of the Narrows:

By the late eighteenth century, an intensified international competition for territory and resources was underway. American domestic defense policy focused on the identification and acquisition of strategic coastal sites. In 1794, President George Washington initiated the country's earliest unified program for harbor defense, known as the First American System. Washington turned to French engineers residing in the United States to design fortifications for the protection of harbors and ports along the Atlantic Coast. Most forts consisted of shoreline batteries with open works and earthen parapets over which twenty-four pound cannons could fire. Many states retained ownership of defense sites and exercised control over construction and maintenance. While New York had acquired the site at the Narrows during this time, it did not build any structures there under the first system (CLR 2008:31).

Increased tension with Great Britain that led up to the War of 1812 prompted the United States to revitalize its coastal defenses. These improvements in military engineering were later termed the Second American System. The new program initiated during the presidency of Thomas Jefferson called for forts with more elaborate designs, most notably replacing earthen forts with all-masonry structures, many of which included circular or elliptical segments. A major innovation in American military architecture, the casemated gun emplacements, led to the construction of high, vertical-walled harbor defenses with a greater concentration of firepower in multiple tiers of guns. Armament installed during this period was typically larger and of greater numbers than First System weaponry. New York City was one of sixteen coastal locations identified as requiring defensive works in this new program of coastal fortification. Forts constructed by the federal government during this period in the New York Harbor included Castle Williams on Governor's Island, Castle Clinton at the Battery on Manhattan, Fort Gibson on Ellis Island, and Fort Wood on Bedloe's (Liberty) Island. Although the federal government recognized the merits of fortifications on Staten Island, other sites were funding priorities, so the Battery Weed headland was not initially included in the new federal construction Program (CLR 2008:31-32).

In place of a federal presence, the State of New York proceeded with plans for constructing its own fortification at the Battery Weed headland. In 1809, the state purchased an additional twenty-two acres to the south of the twenty-five acre Van Deventer tract it purchased in 1794. The second purchase made possible the construction of substantial defensive works at the site. The state planned two forts, Fort Tompkins at the top of the bluff and Fort Richmond, known as the Water Battery, on the beach below. An 1809 plan illustrates the proposed state military development, as well as the earlier remnants of agricultural land use. This plan locates the Van Deventer farmhouse ("Jacobsons Dwelling") along with a barn and a fish hut on the shore, and the proposed military works, including batteries A and B, Fort Tompkins, Fort Richmond, two barracks, a dwelling, smith shop, office and store. The map shows a wharf extending eastward into the Narrows north of the proposed Fort Richmond (CLR 2008:32).

The state completed construction of Fort Richmond on the shore near the water's edge in 1810. The new Second System fort, built in a half-circle with a cluster of support buildings, and a new wharf to the north was constructed of solid masonry, possibly red sandstone, and measured approximately 266 feet along its west side, roughly 500 feet along the curved channel-facing curtain wall, and approximately 30 feet high. The state constructed two sets of barracks along the straight west wall of the fort and a powder magazine that was located near the center (CLR 2008:32).

By June of 1812, Congress voted for war against Britain, and just a few days later, but prior to the Senate taking the same action, the New York State legislature appropriated \$25,000.00 to build the second or upper fort, Fort Tompkins. Instead of the original modified rectangular plan documented in 1809, the state began building a pentagonal bastion in 1814 near the end of the War of 1812. Funding limitations led to cessation of work and the new Fort Tompkins remained unfinished. In addition to Fort Tompkins, by late in 1813 the state completed a blockhouse on the hill near the new fort (CLR 2008:32).

The bluff at the Battery Weed headland, which had been a signal flag site during the Revolutionary War, became known in the early nineteenth century as "Signal Hill" for its role in the relay of optical signals between Sandy Hook and the Merchant's Exchange in Manhattan. In 1812, the state legislature authorized the governor to arrange with the federal government the establishment of a telegraph observatory and signal poles at the state-owned site. A semaphore station, an optical telegraph system consisting of tall signal poles with adjustable flags, was constructed at the top of the bluff above Fort Richmond. By 1819, the state fortifications at the Narrows also included several small structures, probably the barracks, store, and office shown on the proposed 1809 plan (CLR 2008:33).

Fort Richmond served an important role during the War of 1812, and was considered the most important defensive position at the Narrows. The fort was used as a checkpoint for all vessels entering or leaving New York Harbor during this period. Although a maximum of 558 men were stationed at the site during the war, in 1814 New York Governor Tompkins stated that there were "quarters and tents at the state works at the Narrows for nearly 750 men." The importance of the fortifications at the Narrows was reflected in February of 1815 when, in honor of the ratification of the treaty of peace between Great Britain and the United States, the

46th U.S. Infantry Regiment at Fort Richmond participated in a “national salute” that was given from several New York Harbor defenses (CLR 2008:33, citing Black 1983:53-54).

Following the end of the War of 1812, the state had scarce funding available for the maintenance and repair of the fortifications, which were largely abandoned in 1816, giving good reason for Herman Melville’s description of ruins more than two decades later. Despite the abandonment, the federal government was gaining an increasing interest in the site, in tandem with the growing importance of New York City as a gateway to the interior of the country. Many rounds of negotiations over the transfer of the site to the federal government were held between the State of New York and the War Department from 1820 to 1845, but none was successful (CLR 2008:33).

Landscape of the Battery Weed Headland:

After the initial development during the period leading up to and during the War of 1812, the state fortifications at the Narrows witnessed little new construction in the decades that followed. At the completion of a survey of the reservation in 1819, the state fortifications included the half-circle of Fort Richmond at the water’s edge accessed by a road extending down the steep bluff. To the north of the fort was a wharf (dock), sheltered in a small bay that was probably lined by a sandy beach. The lower terrace surrounding Fort Richmond also contained a number of smaller buildings in a line at the base of the bluff between the fort and wharf, including a long rectangular building used as a barracks, a storehouse, office, and smith shop, all probably built around the same time as the fort in ca. 1809. The pre-existing fish hut south of Fort Richmond, a remnant of the earlier private use, probably was removed with the state fortification of the headland. On the top of the bluff overlooking Fort Richmond was Fort Tompkins, the pentagonal bastion partially completed in 1814. To the south on the high point of the bluff was the wood signal tower erected in ca. 1812 as part of a system of semaphore signals used to communicate across the broad expanse of the harbor. The old farmhouse near the south shore of Van Deventer’s Point was probably removed with the development of Fort Tompkins in 1814. The state had planned construction of batteries along the edge of the bluff south of Fort Tompkins, but these were apparently not built during this period (CLR 2008:33-34).

By 1846, more than three decades after the completion of Fort Richmond, the reservation was reportedly in a ruinous state. While the degree of deterioration at Fort Richmond is not known, Fort Tompkins, which was never completed, was apparently quite ruinous according to the earlier quoted description by Herman Melville. Fort Richmond probably fared better because of its function as a monitor of the shipping lanes through the Narrows. The rest of the state reservation was leased to farmers, who, as Melville wrote, grazed their sheep, cows, and goats there (CLR 2008:34).

While military use of the headland had declined by 1846, this pastoral landscape, including the craggy bluff above Fort Richmond with its panoramic views and groves of trees clinging to the slope, was becoming a favorite destination for strolling. The bustling activity of the sailing vessels below, the curved stone walls of the two Second System forts—Fort Tompkins on the top of the bluff and Fort Richmond on the beach—together with the wind-blown and weathered

quality of the eroding rocky bluff lent a lovely picturesque quality to the site. A ca. 1840 etching captures the uniquely layered character of the headland during this period. In the etching, entitled "Scene on Battery Point," a curious discussion takes place atop the bluff between what appears to be military, government and private interests while sightseers stroll along the crest of the bluff in the background (CLR 2008:34).

Within a decade of this etching, the landscape would change dramatically as the old state fortifications gave way to much larger and stronger defenses erected by the federal government. Despite the change, however, visitors would continue to come to the site for its picturesque qualities (CLR 2008:34).

THIRD SYSTEM FEDERAL FORTIFICATION, 1847-1885

The headland at the west bank of the Narrows, although used consistently for both harbor defense and recreation, changed dramatically during the years between 1847 and 1885. The construction of a new Third System Fort Richmond (Battery Weed), and the later reconstruction of Fort Tompkins above, resulted in extensive reshaping of the coastal landscape. The bluff above the present site of Battery Weed, a rocky and partially wooded overlook, was cleared, graded smooth, and seeded with lawn. Technological advancements in weaponry and military tactics lead to the acquisition of more land for the military post and the addition of ground batteries, large new earthen forms, and subsurface structures in the landscape. All the while, visitors came to the increasingly popular seaside site to enjoy the scenic views of busy New York Harbor (CLR 2008:43).

Pastoral Staten Island:

Throughout the early nineteenth century, the port of New York served as the main gateway to the interior of the rapidly developing nation. The port was at the head of the state's canal system that gave access to the Great Lakes, and served a rapidly expanding system of railroads on both the New York and New Jersey sides. By 1840, New York City was the busiest port in America, moving tonnages greater than Boston, Baltimore, and New Orleans combined. Seventy percent of the total imports into the United States passed the Narrows into New York Harbor. A renewed interest in coastal defense, particularly at the Narrows that was the main entrance into the harbor from the Atlantic Ocean, accompanied this rapid economic growth. Development of the New York Navy Yard at Brooklyn underscored the nation's interest in the security of New York Harbor (CLR 2008:43).

Along with the economic growth, New York City's population swelled with the influx of immigrants from Europe during the 1840s, and by 1860, the city numbered more than one million people. Respite from the crowded streets was difficult to find. Residential squares such as St. John's Park, Gramercy Park, Union Square, and Washington Square were usually fenced in with access restricted to neighboring property owners. It was not until 1858 that concerns for public health, in addition to a growing desire for pleasant outdoor public social spaces such as those provided in Europe by noblesse oblige, resulted in the Greensward Plan for Central Park by Frederick Law Olmsted and Calvert Vaux (CLR 2008:43).

While such new urban landscapes as public parks and promenades fulfilled some of the needs

for public green space, the wealthy and leisure class could also afford to escape the city entirely. The rural, coastal landscape of Staten Island, somewhat wild and windswept, provided a welcome relief from the pace and disturbance of rapid industrialization and working-class crowds of Manhattan Island, Brooklyn, and nearby cities in New Jersey. For many, Staten Island also had strong romantic appeal. Although romanticism had its roots in Europe in the late eighteenth century, by the mid-nineteenth century, the idea of naturalistic or picturesque beauty that harkened back to preindustrial harmony was becoming widely appreciated among the wealthy and in artistic circles. This was especially evident in New York, a cosmopolitan city with continuing ties to European cultural influences (CLR 2008:43).

Staten Island was especially favored because it offered a sense of remoteness, yet was easily accessible by ferry from Manhattan. During the 1850s, running time of the ferry was only about thirty minutes, only slightly more than it is presently, and by the 1860s, ferries were operating on an hourly schedule. The accommodations aboard these ferries included bars with refreshments, and lunch counters stocked with biscuits, sausages, dried beef, and fruits. On the approach to the island, passengers were able to view the dramatic rise of the terrain from the water. Todt Hill, five miles to the west of Battery Weed at an elevation of 409 feet, was the highest point on the eastern seaboard south of Maine (CLR 2008:44).

Places such as the military fortifications at the Narrows offered cool breezes and picturesque vistas, and were especially popular destinations for an afternoon stroll. During the middle of the nineteenth century, many wealthy New Yorkers also settled on Staten Island, establishing large country estates overlooking the harbor (Figure 1). By the post-Civil War years, these estates, laid out in the tradition of English landscape gardens with winding drives through ample grounds, extended across former farmland to the west and south of Fort Tompkins and Fort Wadsworth (Figure 2). One of the largest estates in the area, belonging to the Appleton and Jones families, lined the west side of New York Avenue across from the military reservation (CLR 2008:44).

The Staten Island landscape also offered its seaside charms as inspiration to artists such as American landscape painter Frederick Kost (1861-1923), who resided on the island between 1867 and 1900. Kost painted softly lit and atmospheric scenes in the New York Harbor region, often depicting harvest of salt hay meadows. Jasper F. Cropsey (1823 - 1841), painter and architect known for landscape and Civil War scenes, was a founder of the American Watercolor Society and was born on his father's farm in Rossville on Staten Island. The landscape architect Frederick Law Olmsted, who designed Central Park along with Calvert Vaux, also was charmed by the beauty of Staten Island. The shorefront farm he purchased at the south end of the island in 1848 was advertised as having a "prospect...of unsurpassed beauty" (CLR 2008:44, citing Roper, 56).

Federal Fortification of the Narrows:

The origin of the federal fortification of the Narrows that began in 1847 traces back to development of the Third System of coastal defense that began in 1817 under the direction of French military engineer, Simon Bernard. Unlike the earlier two systems, the Third System was initiated with no immediate need for war-time security. Bernard's goal was to construct forts of permanence that could resist the erosive actions of storms and waves as well as enemy

attacks. All forts utilized casemates resulting in multiple tiers of armament. Third System forts varied widely depending on the topography, available materials, remoteness, or proximity to population areas, as well as the size and importance of the channel requiring protection. Third System forts were generally hexagonal in plan, and included one or more tiers of arched casemates that nearly always extended the full length of the seaward front, and walls were made of stone or brick a minimum of five feet thick. Armament improvements included the Columbiad, a smaller gun with greater versatility and range that fired either shell or shot at any angle between zero and forty degrees, and Rodman guns in calibers as large as fifteen or twenty inches. The substantial increase in firing elevation afforded by the multiple tiered-forts nearly tripled the range of American armaments (CLR 2008:45).

Under the Third System, the Army Corps of Engineers designated the west bank of the Narrows a "class one" project, vital to the security of the nation, and recommended that the development of adequate defenses there be commenced as soon as possible. New military objectives began to take shape as hostilities developed with Mexico over expansion of United States territory in the mid-1840s. Plans for construction of the new Third System Fort Richmond (Battery Weed) were begun in 1846, the same year that the Mexican-American War began. Major General Joseph G. Totten, U. S. Chief Engineer, was the principle designer of the new federal fortifications on both sides of the Narrows from 1838 until his death in 1864. One of Totten's main objectives was to have the field of fire include as much of the shoreline to the north and south of the Narrows as possible. Plans for the new Fort Richmond rested on the potential to increase the field of fire by the reorientation of a new structure fifteen degrees further to the south. This reorientation in combination with the range of fire possible from the east side of the Narrows at Forts LaFayette and Hamilton, would secure the harbor entrance (CLR 2008:45).

Conveyance of the forty-seven acre military reservation on Staten Island from state to federal ownership occurred in February of 1847. Almost immediately, the U. S. War Department began construction of the new Fort Richmond directly on the site of the earlier Second System fort. A new stone dock was also planned just to the north. Construction of the new fort employed men with horses and carts and a pivoting crane structure used to move heavy materials into place. Work on the new fort proceeded quickly. In mid 1850, however, in the wake of the Mexican-American War, federal appropriations began to dry up. The lack of funding slowed work considerably until 1852, when construction operations were suspended completely. It was not until late in the summer of 1854 that Congress renewed appropriations to continue work on the new fort (CLR 2008:45-46).

Federal plans for the fortifications required the acquisition of additional lands, including five acres in 1854, and seventeen acres at the top of the bluff along New York Avenue acquired from William Aspinwell in 1856. With these purchases, the federal government was in possession of the area from the waterfront at the Narrows to beyond the crest of Flagstaff Hill, a roughly seventy-acre tract that became known as the United States Reservation (CLR 2008:46).

The years leading up to and during the Civil War brought conflicts of ideologies and commercial

interests to the New York City region. Economic competition between the northern and southern regions of the nation became an important factor in the years leading up to the Civil War. During this politically tumultuous time, the northeast witnessed a rapidly growing urban population and economy based on industry, family farms, mining, commerce, and transportation. New York City had strong commercial and economic ties with the south and resisted demands to discontinue the profitable cotton shipping trade (CLR 2008:46).

Fort Richmond was nearing completion when the Civil War broke out in 1861, but sections such as the seawall remained under construction. In August of 1861, the fort became garrison for the first troops from the 5th Regiment New York Volunteer Artillery. Despite this, through most of the long years of the Civil War, Fort Richmond did not see any active combat, only occasional artillery testing. Army reports give 1864 as the year of completion of Fort Richmond; adjoining Fort Tompkins remained unfinished. That same year, an inventory of armaments at Fort Richmond listed guns in every position of the three-tier casemates with more guns added to the earth-covered barbette tier during the following year. At the close of the Civil War in November of 1865, the United States War Department changed the name of Fort Richmond to Fort Wadsworth in honor of Brevet Major General James S. Wadsworth who died due to wounds received at the Battle of the Wilderness in Virginia the year before (CLR 2008:46).

In the isolationist climate of the years following the Civil War, domestic affairs, especially economic development, became a national priority. A broadly held belief existed that war was unlikely, and a new attitude of anti-militarism developed. A distrust of the military was even voiced by some citizens, and this dampened support for the expansion or modification of coastal fortifications (CLR 2008:46).

Despite this, the War Department invested in a number of major improvements during the post-war period at the Narrows. However, technological advances in heavy ordnance that were occurring during the 1870s soon rendered the forts on the Staten Island shore militarily obsolete. The Third System of compactly designed granite casemates proved to be impossible to modify to accommodate the new larger guns and rifles that emerged following the Civil War (CLR 2008:47).

Development of the U.S. Military Reservation:

The construction of the new Fort Richmond by the federal government beginning in 1847 resulted in extensive changes to the former state military reservation at the Narrows. Other than the earthen batteries Morton and Hudson, the reservation, however, initially featured few military structures aside from the main forts. Much of the landscape continued to be used for pasturage even beyond the federal purchase of the land. Indeed, account books of Major General Delafield from the 1850s include entries for pasture rental (CLR 2008:47).

In 1859, as work continued on Fort Richmond, the War Department began construction on a new fort to replace the old pentagonal Fort Tompkins. The new fort was planned as a supplemental structure intended primarily to protect Fort Richmond and the reservation's batteries. The new stone fort was built on the site of the old fort in an asymmetrical pentagon

plan with flanking earthen batteries to the north and south. The fort featured a dry moat, central parade ground, and exterior earthen glacis. Materials were brought to the site by an inclined railway extending up from the shoreline. Construction would continue for another decade and a half, slowed in part by supply limitations during the Civil War (CLR 2008:47).

The Civil War witnessed construction of a number of other buildings and structures as the troops at the military reservation rose to a high of 1,921. Wood buildings constructed to support the garrison included twelve two-room barracks, two stables, officer's quarters, a hospital, laundry, kitchens, and storage buildings. Following the war, federal funds were not always forthcoming for modifications to batteries and armaments, but engineering and labor was available, and was put to use in the repair and maintenance of the grounds, roads, and remaining buildings and structures on post. By 1867, most of the frame buildings constructed during the war were condemned and subsequently removed. Primary roads were macadamized after the war and others received a new dressing of gravel (CLR 2008:47).

Despite the post-war decrease in military expansion, the military reservation at the Narrows continued to witness major construction as work progressed on completing the new Fort Tompkins that was begun just prior to the Civil War. Work on the structure was largely complete by 1871, but work continued through 1876, although it was never fully completed. In the surrounding landscape, the new fort replaced the fenced pastureland, round stone bastions, and gently curving earthen road of the earlier fort with paved and straightened roads (present Hudson Road), engineered slopes, and expansive manicured lawn (CLR 2008:47-48).

Fort Wadsworth was garrisoned by units of the Regular Artillery regiments in the decades following the Civil War. During this time, the number of men on post declined markedly, fluctuating between fifty and one hundred prior to 1890. With much less military activity, and the completion of major construction at Fort Tompkins by 1876, the landscape of the military reservation began to assume a park-like character with only an occasional test firing of artillery. Within the wider scenic context of the island landscape, the dramatic beauty of the reservation with its bluff overlooking the harbor drew the attention and praise of both military and non-military visitors. General Sheridan, who inspected the reservation in the late summer of 1884, wrote that it was "a beautiful post." Caroline Winne, wife of Army surgeon Captain Charles Winne, wrote in the closing years of the nineteenth century after many years on post that she was "...still discovering the attractions at Fort Wadsworth, such as walking in the woods, where she admired the great variety of wild flowers" (CLR 2008:47-48, citing Black 1983:97,99).

The Landscape of the Battery Weed Headland:

With federal refortification of the Narrows that began with the construction of the new Fort Richmond in 1847, the landscape began to shift from its romantic, ruined character in the preceding decades since the end of the war with Britain, to a highly engineered, manicured appearance. The landscape during this time also became an integral part of a larger system of defenses designed by General Joseph G. Totten. The headland was carefully engineered to coordinate not only its site-specific conditions, but also a network of fortifications, particularly those on the opposite side of the channel on Long Island: Fort Lafayette as Fort Richmond's

water-level counterpart, and Fort Hamilton as Fort Tompkins' upper-level counterpart (Figure 3) (CLR 2008:48).

Construction of the new Fort Richmond, which was completed at the close of the Civil War in 1864 at a cost of three quarters of a million dollars, had a marked impact on the surrounding landscape, most notably through replacement of the much smaller half-round fort. The new granite fort was constructed seventy-five feet into the Narrows, which interrupted the natural beach that had remained in front of the old fort. The northeast bastion was located between the high and low water marks. The eastern scarp or outer edge of the new fort was designed to parallel the main ship channel. Given its watery location, the stone structure was built on a network of wooden piles driven into the earth that supported granite foundation slabs (CLR 2008:48-49).

The granite block fort measured 286 feet along each channel front wall, and 450 feet along the west or inland scarp wall. Designed with three casemated tiers rising one on top of the other, the fort featured an open top fourth tier known as the barbette tier, which rose sixty-three feet above the Narrows. It was covered with earth and edged with a four foot high wall (parapet) along the channel side. Thirty-one gun emplacements, nine on each of the channel fronts and one in each bastion (corner position) were located on the barbette tier. The gun emplacements, circular raised brick and mortar pedestals, featured iron pintles, or pins, designed to attach to rotating cannon. The area surrounding the gun emplacements on top of the parapet was finished in turf. Circulation was along the interior edge of the barbette tier, which was fitted with an ornamented iron railing (CLR 2008:49).

The increased size of the new Fort Richmond necessitated not only its extension into the Narrows, but also into the adjoining bluff near the southwest bastion. The bluff here was excavated and plans were developed for grading the area into an even, engineered slope. The grading and excavation was, however, limited to a relatively small area and much of the bluff remained in its rocky, eroded, and tree-covered condition. Engineers constructed a retaining wall at the base of the steep slope to hold back the earth and provide a level area for the realigned roadway that extended along the base of the bluff. A second wall was constructed to retain the lower edge of the roadbed (CLR 2008:49).

In an effort to inhibit direct ground attack by land or water, General Totten designed a moat around the entire fort. Entry to the fort would be only by way of a drawbridge that was later integrated into a two-story guardhouse completed in ca. 1860 on the west wall of the fort. Plans for the moat called for it to have a depth of six-and-one-half feet along the gorge curtain, or landward side of the fort. The ditch was thirty feet wide at its widest point at the entrance to the fort and fifteen feet wide at the bastions. Because the fort was sited beyond the low-tide mark, a cofferdam was needed to allow for the construction of the outer walls of the moat (seawalls). The cofferdam, in place by 1855, was approximately forty feet out from the eastern scarp, and measured about sixteen feet wide, filled with cobbles and boulders contained within a timber frame (Figure 4). The cofferdam also served as a temporary construction wharf (CLR 2008:49).

In 1858, the Army began construction of a new stone dock (wharf) at the north end of the seawall, north of the fort. This replaced the cofferdam around the perimeter of Battery Weed that had been used as a temporary wharf, and apparently supplemented a second wharf at the south end of the reservation. Measuring thirty-eight feet wide and eighty-one feet long, the north dock provided a permanent berthing place where cargo was unloaded, a necessity given the lack of land routes to Staten Island. Soon after the dock was completed, the Army built an inclined railway extending up the slope from the new dock. The primary purpose of this railway was to bring supplies up to the top of the bluff where construction of the new Fort Tompkins was begun in 1859. Materials were lifted from ships on a davit and powered by steam engine over a horizontal distance of 700 feet and a vertical lift of 125 feet to the construction site (CLR 2008:49-50).

To the rear of the fort and north dock at the base of the bluff were six ancillary buildings, probably constructed of wood. Several of these may have existed prior to the federal government's acquisition of the reservation in 1847, while others were probably built to support the construction of Fort Richmond. The buildings extended in a row and included, from south to north, a smith shop, galvanizing building, store house, carpenter's shop, office, and a barn (CLR 2008:50).

During the Civil War, the federal government began construction on a number of new fortifications intended to supplement Fort Richmond and Fort Tompkins. On the headland, two massive earthen batteries were built beginning in 1862 along the shoreline to the north and south of Fort Richmond. Construction of the batteries required realignment of the roads as well as removal of the six support buildings at the base of the bluff. Named the North and South Cliff Batteries, each featured a massive earthen berm with a series of open barbette batteries on the top supporting fifteen-inch guns set on stone and concrete emplacements (Figure 5). The North Cliff Battery also featured an underground ammunition magazine known as a bomb-proof parados. This structure was constructed at the south end of the earthen battery, close to Fort Richmond. Access to the parados was by a narrow passage lined by granite retaining walls. The 1863 plan for the batteries also called for construction of an earthwork or berm along the top edge of the bluff with several gun emplacements, and the grading of the bluff into a uniform, engineered slope apparently intended as a sort of glacis for Fort Tompkins (see Figure 5). These changes were not made until after the Civil War (CLR 2008:50).

Aside from its primary purpose as a fortification, the military reservation was a popular place for the public to visit in the years leading up to the Civil War, attracted in part by the ongoing construction of the two forts. An etching overlooking Fort Richmond from the top of the bluff published in 1852 illustrates visitors taking in the view of the construction of the new fort and the busy harbor in the background. The etching also shows the irregular and apparently eroded bluff and a signal house and semaphore station, successors to the earlier signal tower, perched at the edge of the bluff just east of the round bastions of the old Fort Tompkins. A two-rail pasture fence ran alongside an unpaved road at the top of the bluff. This illustration was apparently accompanied by the following article entitled "New York Bay and Harbor:" "...the view...from this high promontory, is truly beautiful; here opens from the sea, or lower bay, a fairy scene unsurpassed in the world, not excepting the bay of Naples. All tourists agree

on this point. The bay...its smooth surface dotted over by numerous snow-white sails; the hurrying to and fro of hundreds of steamboats, packet ships, and smaller craft, continually passing in and out; while here and there is a gigantic ocean steamer from old Europe. The whole forms a picture of brilliancy, which defies the painter's pencil or the poet's pen." (CLR 2008:51, citing "New York Bay and Harbor," 25 September 1852).

This scene was also the subject of an etching produced in 1860, looking over the southwest bastion of Fort Richmond from the top of the bluff, with the Great Eastern steamship sailing up the Narrows. This illustration shows the watered moat with visitors strolling on top of the seawall. Others appear to be taking in the view from the barbette tier of the fort. In ca. 1872, Fort Richmond—by then renamed Fort Wadsworth—was the subject of a painting by soldier and artist Seth Eastman. Viewed from Fort LaFayette across the Narrows, the painting depicts the massive fortress set against the rough bluff with the low profile of Fort Tompkins above. This water-level view of the fort clearly illustrated its formidable presence on the Narrows (CLR 2008:51).

The character of the landscape surrounding the military fortifications changed markedly in the years soon after this painting was completed. Much of the change was not related to major new building construction, aside from addition of a boathouse on the north dock in 1877, but rather to refinement of the landscape. The long years of construction at the reservation had resulted in irregular piles of earth and improper drainage. Grading and maintenance of the grounds was not just an aesthetic improvement, but was also considered an important contribution to the military readiness of the forts and batteries. The condition of the landscape had also become a matter of public concern. Nearby residents believed drainage problems resulting from the unevenness of the ground contributed to a higher than usual incidence of malaria in the nearby Village of Edgewater. They petitioned the Secretary of War and Congress for appropriations to carry out the needed landscape improvements. In 1873, perhaps as a result of this public pressure, the grounds surrounding Fort Tompkins and Fort Richmond were cleared of vegetation and graded into even slopes (Figure 6). After grading, the exposed soil on parapets, parados, traverses, terrepleins, glacis, and elsewhere was finished in turf, resulting in a look of manicured lawn. The turf was necessary to hold down the earth and prevent erosion, while mowing kept the ground open and free of obstructing woody vegetation (CLR 2008:51-52).

One of the most noticeable of these landscape changes was the extensive grading of the bluff to an even, engineered slope, completing the plans drawn in ca. 1863 and extending the work that had been completed earlier to the section off the southwest bastion of Fort Wadsworth (see also Figure 6). Completed in ca. 1873, the grading transformed the once craggy bluff above the fort into a carefully groomed, steeply sloping lawn. With this grading, the site became spatially open and views to the northeast, east, and southeast were no longer framed with trees and rock outcrops, but completely unrestricted. This change was necessary from a military need in order to provide clear lines of sight from the new Fort Tompkins. It was probably as part of this grading that the earthwork at the top of the slope parallel to Fort Tompkins, proposed in the ca. 1863 plan, was constructed. The earthwork, referred to as a covered way, featured a road along its inner side, later known as Hudson Road, and two gun

emplacements at its south end aimed southeast toward Lower New York Bay (CLR 2008:52).

The engineered slope with its finely manicured lawn is illustrated in a postcard dating to ca. 1890 looking north toward officers' quarters and post headquarters north of Fort Tompkins on Mount Sec Avenue. The postcard also shows the turf glacis extending off the north end of Fort Tompkins, Hudson Road, and the road leading down to Fort Wadsworth, later known as Battery Weed Road, surfaced either in macadam or fine gravel. This park-like setting proved popular with visitors, who continued to come for the spectacle of the busy harbor. Visitors also picnicked along the crest of the slope and strolled along the seawall around the waterfront of Fort Wadsworth (CLR 2008:52).

Perhaps the most revealing description of the Battery Weed landscape during the late nineteenth century comes from an 1889 Staten Island guidebook by Reau Campbell. Although written two years after the end of this period, this account expresses the character of the headland landscape as it had developed over the previous decades. Campbell describes the experience of visitors who came to the military reservation for a stroll and to take in the view: "Fort Wadsworth is a more formidable name than Rosebank [a neighborhood to the north], but in these piping times of peace the Fort is a good place to go for a summer's jaunt...Passing in front of the Officers' quarters, a row of comfortable houses with the Commandant's elegant one on the bluff overlooking the sea; then come to the grassy parapets. There is a smooth pathway all along the top. The view is magnificent. A hundred feet below is the granite lower fort [Battery Weed] bristling with a hundred guns...These parapets do not look as made for war, but for lovers' uses. It is a veritable lovers' walk. The gentle sloping [sic] requires a slow walk, and there is time to say many pretty words before the end is reached; and the green grass is an inviting resting place, where one may sit and watch the ships come and go...The music from Fort Hamilton comes floating on the summer air across the Narrows...Fort Wadsworth offers everything for a delightful ramble on a summer's day." (CLR 2008:52-53, citing Black 1983:101-102)

Between 1847 and 1885, the landscape of the old state military reservation at the Narrows was transformed under federal ownership. Aside from the two new stone fortresses and extensive lines of earthen batteries, the once wooded and rocky bluff had been cleared, graded smooth and planted with grasses. Views of the bay from the crest of the slope, once framed with mature trees, were now spatially open, unrestricted, and covered with neatly groomed lawn. Despite the change to a more engineered appearance, the public continued to visit the military reservation, particularly for the walk along the top of the slope and down to Fort Richmond to take in the panoramic view of the harbor. This use, in conjunction with decreased military activity, lent the landscape the feeling of a public park and promenade. In the decades to come, the landscape of the Battery Weed headland would see the addition of many military structures and technological advances, but its overall character as developed during this period would persist (CLR 2008:53).



*Figure 1. C.1854 view showing country estates on Staten Island and federal fortifications at the Narrows. (Reproduced from John A. Kouwenhoven, *The Columbia Historical Portrait of New York*, New York: Doubleday & Company, Inc., 1953. Annotated by SUNY ESF)*

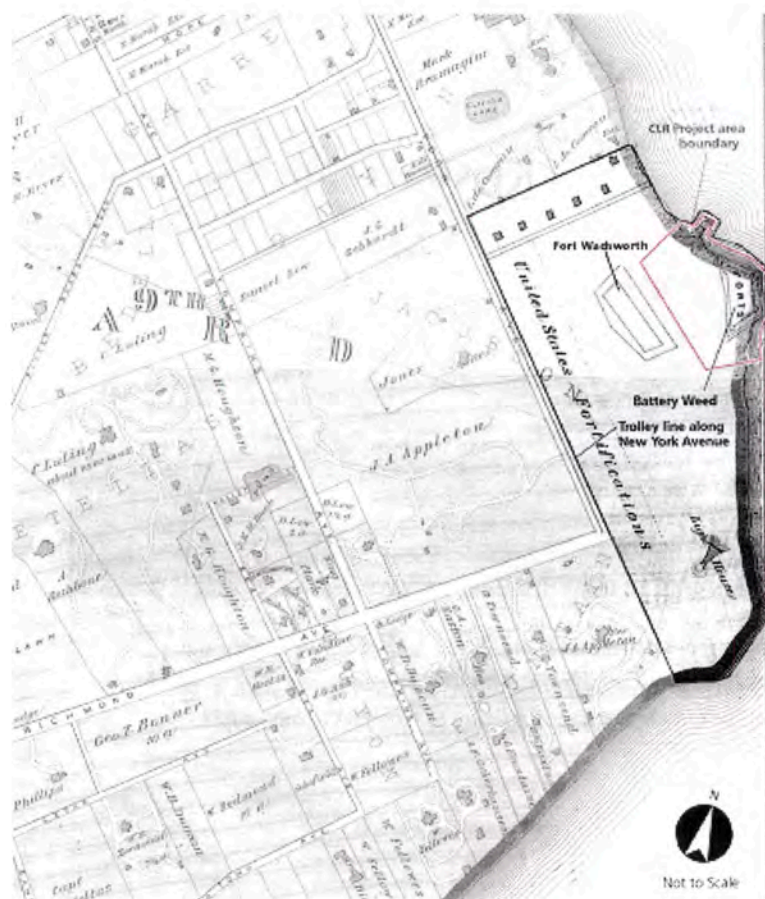


Figure 2. Detail of an 1874 atlas of Staten Island showing the development of country estates in the area surrounding the federal military reservation. (Collection of the Staten Island Institute of Arts & Sciences, annotated by SUNY ESF)

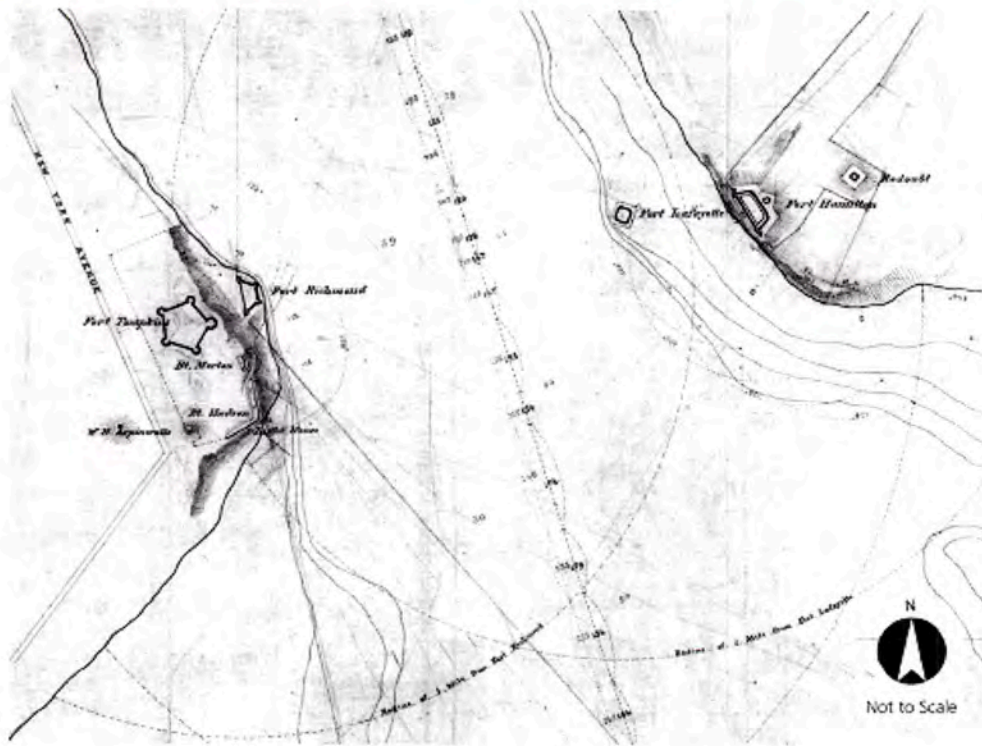


Figure 3. An 1857 plan showing the context of the new Fort Richmond as part of a system of fortifications in the Narrows. (RG 77, Dr 36, Sht. 65, Cartographic Division, National Archives II, College Park, Maryland, annotated by SUNY ESF)

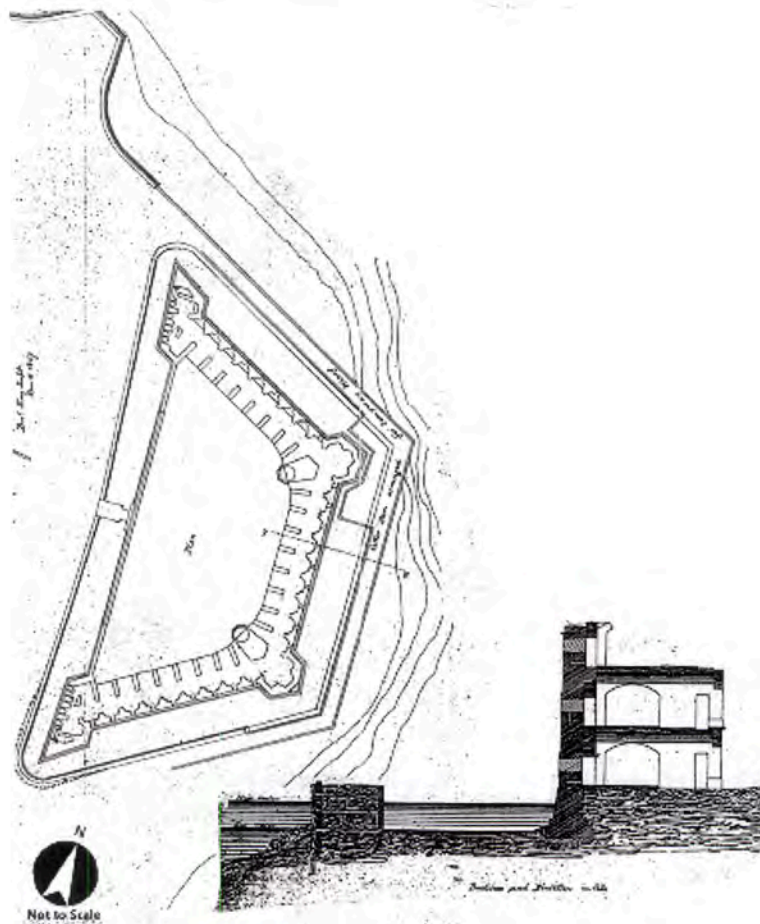


Figure 4. Plan and section drawings made in 1857 showing the moat and cobble filled timber cofferdam. (RG 77, Dr 43, Sht. 46, Cartographic Division, National Archives II, College Park, Maryland, annotated by SUNY ESF)

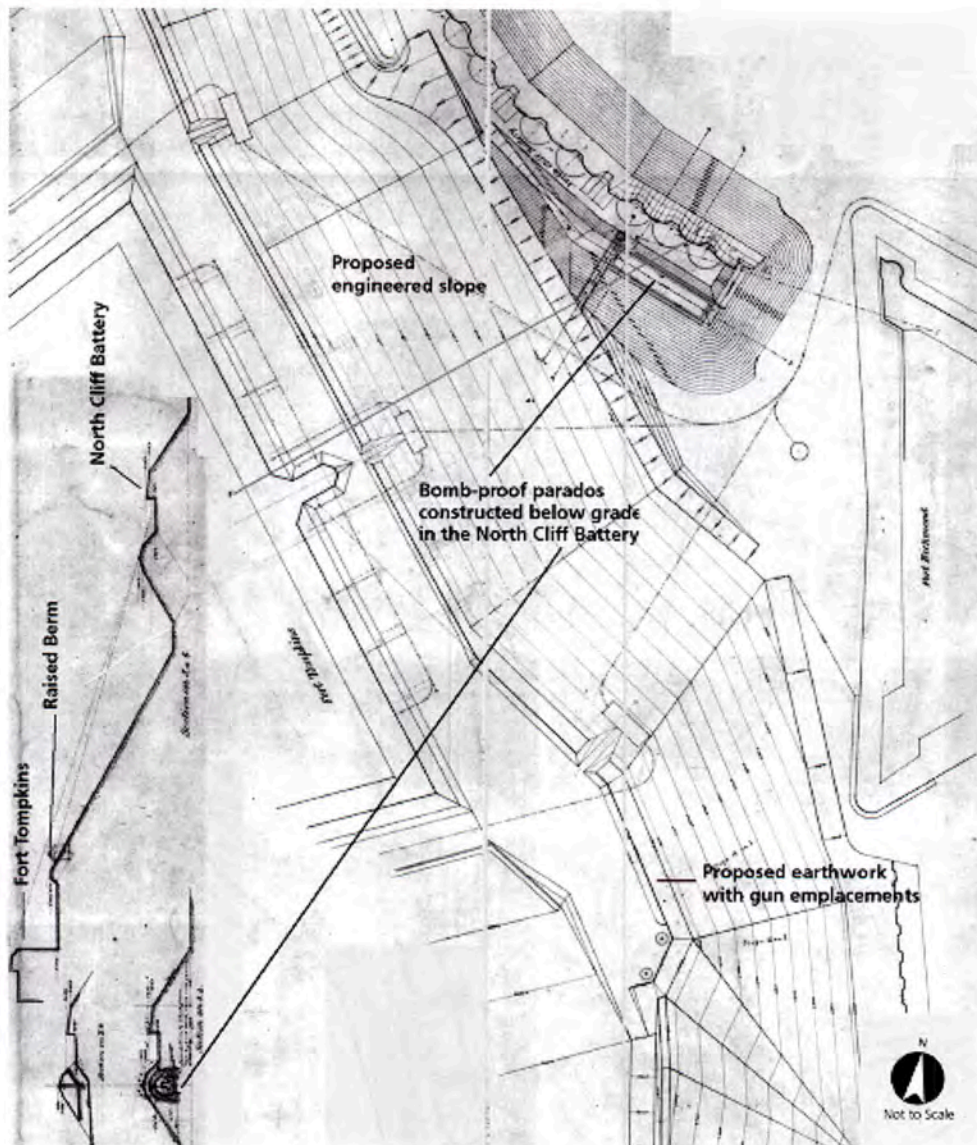


Figure 5. C.1863 drawings showing the location of North Cliff Battery with below grade bomb-proof parados. (RG 77, Dr 41, Sht. 55, Cartographic Division, National Archives II, College Park, Maryland, annotated by SUNY ESF)

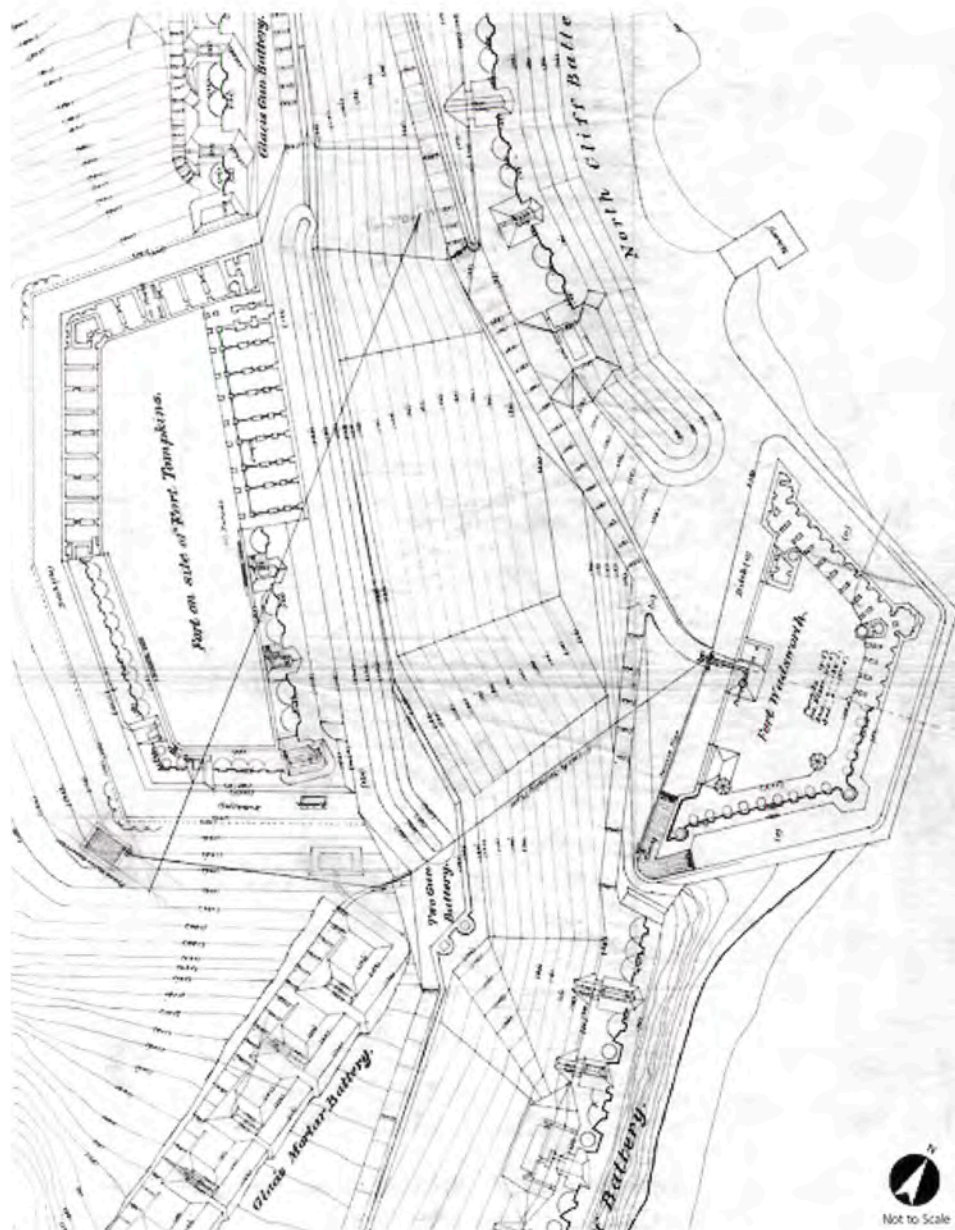


Figure 6. A 1886 plan of the headland through the end of the Third System period following extensive grading work during the 1870s. (RG 77, Dr 41, Sht. A, Cartographic Division, National Archives II, College Park, Maryland, annotated by SUNY ESF)

ENDICOTT PERIOD AND WORLD WARS I AND II, 1886-1945

From 1886 to 1945, the landscape of the Battery Weed headland was developed and adjusted repeatedly as the military reservation adjusted to technological innovations in a new phase of coastal defense known as the Endicott period. Fort Wadsworth, renamed Battery Weed in 1902 after Brigadier General Steven H. Weed who was killed at Gettysburg, was adapted from

its function for heavy ordnance to being a storehouse and part of an extensive underwater mine defense system, one of the chief technological innovations of the Endicott period. This system included additions to Battery Weed, construction of a railway system to transport torpedoes, modification of the north dock, and construction of several support buildings. In addition to the mine defense system, changes during this period also included reconstruction of the North and South Cliff Batteries to accommodate upgraded weaponry. After World War I and end of the Endicott period, the Battery Weed headland entered another period of minimal military activity when few changes came to the landscape (CLR 2008:75).

Staten Island – New York City Borough:

At the end of the nineteenth century, northeastern Staten Island in the vicinity of the U. S. military reservation was in transition as new transportation links to rapidly urbanizing New Jersey fostered industrial and residential development. In response to its development potential as well as efforts to secure ties to New York, Staten Island was incorporated as one of the five boroughs of Greater New York City in 1898 (CLR 2008:75).

While regular ferry service to Manhattan continued throughout this period, the shift in the island's transportation network came with the first railroad bridge to New Jersey completed in 1889. The increasing use of automobiles further spurred development and connections to New Jersey, with three bridges to Staten Island opening between 1928 and 1931. Within the island, transportation improvements included a street-car trolley started in 1886, which began at St. George on the northeastern shore of Staten Island, ran south on New York Avenue, and turned west on Richmond Avenue within the military reservation. Here, riders could get off to walk the short distance to the bluff above the Narrows to take in the panoramic views of New York Harbor, or continue to the end of the line at South Beach, a short distance from Fort Wadsworth. A separate dedicated rail line, the Staten Island Rapid Transit Railway, was built prior to 1907 running roughly parallel to the trolley line (CLR 2008:75).

These changes in transportation and increasing industrialization during the late nineteenth and early twentieth centuries led to continual residential growth, with street-car suburbs replacing many of the former large country estates in the vicinity of the Narrows. The population of Staten Island gained nearly 100,000 people between 1900 and 1930, when it totaled 158,346. Much of this growth was concentrated on the northern side of the island, while the central and southern portions remaining sparsely developed. By the first decade of the twentieth century, the area to the north and west of the military reservation was largely small-lot residential neighborhoods, with a few remnant country estates remaining on larger lots (CLR 2008:76).

In addition to residential and industrial development, Staten Island continued to offer recreational attractions during this period. Amusement parks, including Happyland Park and resort hotels at South Beach less than a mile to the southwest of Battery Weed, became well known throughout the New York area by the turn of the century, attracting thousands of visitors. Many of these visitors passed through the military reservation on the trolley line that ran down New York Avenue, which included a car named "Fort Wadsworth." The trolley line would continue to run until 1934, when the automobile became the preferred means of personal transportation (CLR 2008:76).

The Endicott Period:

During the 1880s, a more active foreign policy and associated naval build-up focused action on the nation's antiquated system of coastal defense and the need to adapt to major technological advances in weaponry. In 1885, President Grover Cleveland convened a joint Army-Navy-civilian board under the direction of Secretary of War William Endicott to develop recommendations for upgrading coastal defense systems to respond to the threats of newly developed weapons. The Endicott Board issued its recommendations in 1886 calling for larger guns, floating batteries, torpedo boats, and submarine mines. The most evident physical change was the shift in emphasis from the walled fort to the weapons themselves. Now built of reinforced concrete, new batteries were dispersed along the shoreline with two to four large mortars designed to blend with the surrounding landscape (CLR 2008:76).

Major armaments of the Endicott Period included three classes. The first was flat-trajectory weapons mounted on disappearing-type carriages in massive emplacements. The second class included heavy armament that fired twelve-inch mortars, clustered in groups of four with dugout emplacements behind hills or parapets that shielded them from enemy fire. The third class of weapons involved marine minefields designed to prevent penetration by shallow-draft vessels, supported by an onshore battery of rapid-fire guns (CLR 2008:76-77).

This third class of weapons would become the primary function of the Battery Weed headland during this period. Marine mine defense systems involved the deployment of contact mines in buoyant cases anchored to float just under the surface of the water. The mines were usually designed to be electrically detonated by a signal sent through a single-conductor cable from an on-shore fire control operator. This operator was located in a mine casemate which housed all necessary electrical and control apparatus. Mines were positioned visibly to force vessels to slow down and allow guns in on-shore batteries to command a field of fire. In addition to the mine casemate, the system also required the construction of loading wharfs and storage facilities for the cables, mines, and anchors. With electronically-controlled firing technology, Endicott mine defense systems did not interfere with friendly shipping traffic, an especially important consideration for busy shipping channels such as the entrance to New York Harbor (CLR 2008:77).

In the years after World War I, the Endicott system of coastal defenses was superseded by new systems focusing on anti-aircraft. While many coastal fortifications were outfitted with anti-aircraft weapons in the 1920s and 1930s, overall the period prior to World War II witnessed little substantial redevelopment of the nation's coastal defenses. During the World War II era, another new and much more extensive system of coastal defenses was developed, which featured new and more powerful armament with substantial concealment from aircraft, ranging from heavy reinforced concrete cover to disguises meant to look like civilian buildings. These World War II developments in coast artillery would not, however, be implemented on the Battery Weed headland (CLR 2008:77).

Changes at the Military Reservation:

The U. S. military reservation, designated Fort Wadsworth upon the renaming of Battery Weed

in 1902, expanded during the late nineteenth and early twentieth centuries to accommodate the new Endicott technologies and systems of coastal defense. Land purchases by the federal government between 1892 and 1907 extended the military reservation to the west beyond New York Avenue and to the south of Richmond Avenue through acquisition of fourteen parcels, most part of preexisting country estates. Most of these estates were destroyed to clear the way for the construction of modern batteries and military housing (CLR 2008:77).

Prior to the country's formal entrance into World War I in 1917, the garrison of military troops at Fort Wadsworth increased to 1,400 men and remained close to that number until 1918. At the end of World War I, the garrison diminished dramatically, and as a coast defense site, it was essentially mothballed. In 1928, the coast artillery personnel at Fort Wadsworth consisted of just twelve enlisted men and one officer, who basically performed a caretaking detachment. The post's armament during this period was described as being in excellent condition, but out of commission (CLR 2008:77-78).

The years following World War I probably witnessed a reemergence of informal public recreational use of the grounds that had ceased during the war years. The ample grounds of Fort Wadsworth with its scenic views and its close proximity to dense residential neighborhoods ensured the public's interest in the military post as a sort of informal public park (Figure 7). Recreation was an important part of military life at Fort Wadsworth. Tennis courts were laid out on the parade grounds in the quadrangle of Fort Tompkins. A nearby country club offered a golf course, and officers at the post were usually invited to become members. Fishing was reportedly fair, and Staten Island's excellent roads provided many opportunities for automobile touring. From the trolley line that stopped at Fort Wadsworth, military personnel had a direct line to the Manhattan ferries at St. George prior to the line's termination in 1934 (CLR 2008:78).

With declaration of the national emergency in 1939 and subsequent entry of the United States into World War II, Fort Wadsworth once again became a hub of military activity. Heightened activity during this period included the movement of various units of Coast Artillery Corps, Military Police, and National Guard through Fort Wadsworth for activation, equipping, and training for service overseas. In March of 1944, a service unit of two hundred Italian prisoners of war was quartered at Fort Wadsworth and they remained at the Staten Island post until August of 1945. In the landscape, the development of aerial warfare caused the War Department to initiate a program of so-called protective obscurement, which required all military reservations to disperse, conceal, or camouflage themselves in preparation for attacks that might now come from the air. This program may have resulted in planting of vegetation on the batteries to conceal armament. No new batteries were constructed or improved at Fort Wadsworth during the war, although a number of guns remained active. During the war, however, many were scrapped. By the end of the war, all gun emplacements stood silent and vacant, signaling the final end of Fort Wadsworth's role as a coastal fortification in New York Harbor (CLR 2008:78).

Landscape of the Battery Weed Headland:

The War Department quickly implemented the 1886 recommendations of the Endicott Board at

the Battery Weed headland, beginning in 1887 with development of a submarine mine defense system in the Narrows and continuing through the first decades of the twentieth century with reconstruction of the earthen batteries to protect the mine field. The War Department continued to adjust this system into the early 1920s. These last adjustments reflected the final military developments on the headland. Aside from a few minor improvements for anti-aircraft weaponry, the Battery Weed headland would see few changes in its landscape for the remainder of the period (CLR 2008:78-79).

As the military redevelopment of the headland got underway in the late 1880s, the landscape continued to be a popular place for visitors to take in the spectacular views of the harbor from the grassy slope above the fortress, despite the earlier grading and removal of nearly all trees. A drawing made eight years later indicates not only the public park-like use of the landscape, but also visitors' enjoyment of the inactive guns, which served not only as benches for reading a newspaper, but even as a children's play ground. Between 1887 and 1892, the Army built three walks extending from the overlook down the steep slope to Battery Weed. While the original intent of these walks is not known, they were probably used by visitors who would have enjoyed a changing panorama of the harbor scene as they descended down the switchbacks. The walks may also have had a military function, to allow personnel to bypass the mine railway at the base of the slope that was begun in ca. 1887. The walks extended to the south and north of a proposed building for the storage and processing of torpedoes (CLR 2008:79).

Changes to the Fort & Batteries

In the early years of this period, many of the guns at Battery Weed remained intact. A photograph taken in ca. 1902 shows the barbette tier, the earthen turf-covered roof of the fort, carefully maintained with the grasses kept short to allow clear access in the operation of the guns on their round emplacements, with their rammers close by, perhaps as part of a recent firing exercise (Figure 8). Down in the parade ground in the center of the fort stood large piles of shot. Soon, however, these armaments would become obsolete and removed from the fort. By the turn of the century, the guns on the barbette tier were gone and the lower casemates of Battery Weed were maintained with just fifteen mounted and serviceable guns, most of which would soon be scrapped. The fort's function had, aside from an addition for the mine defense system, transitioned to more of a storehouse than an active military fortification. Munitions removed from Ellis Island in 1890 were stored here, and in later years, mines, submarine nets, and accessories of the Third Naval District, and miscellaneous stores of Army Corps of Engineers and the Lighthouse Division of the Treasury Department, were stored among the casemates on all three tiers (CLR 2008:79).

Aside from its storage function, Battery Weed did continue to serve its long-time function as a guardian of the shipping lane through the Narrows. In 1903, a light and signal station was completed on the northeast bastion of the barbette tier, a feature that would have been a strategic obstruction had the guns remained in place. The lighthouse, which had a fourth-order Fresnel lens visible for fourteen nautical miles, replaced the earlier Fort Tompkins (Wadsworth) Lighthouse constructed south of Fort Tompkins in 1873. It was replaced due to its remoteness from the Narrows and probably also because its site was needed for the construction of new batteries. Around the same time as the new lighthouse was built, a fog signal was erected on

the seawall along the northeast side of Battery Weed. Sometime after 1904 and prior to the outbreak of World War I, a thirty-six inch searchlight was installed on the barbette of the southeast bastion to illuminate the Narrows at night (CLR 2008:80).

Elsewhere in the Battery Weed headland, the Endicott period brought substantial changes to the Civil War-period batteries that flanked the shoreline north and south of the fort. These batteries were redesigned for rapid-fire weapons intended to cover the mine field in the Narrows that was developed beginning in ca. 1887. The north end of the South Cliff Battery was reconstructed in 1899 and renamed Battery Bacon; the sections to the south were rebuilt as two separate batteries named Barbour and Turnbull between 1898 and 1903. The entire North Cliff Battery was reconstructed between 1902 and 1904 and renamed Battery Catlin, although its weapons were not mounted until 1913. While portions of the old batteries were retained and reused (including the bomb-proof paradors in the North Cliff Battery), much was constructed anew. The new batteries featured reinforced concrete gun emplacements and expanded earthworks above the shoreline. Sand was excavated from the beaches for the enormous quantities of cement needed for the parapets. A system of trolleys, light inclined trestles, steam hoisting engines, and mixers were used to build the massive structures (CLR 2008:80).

The new technologies and systems developed throughout the site required the careful maintenance of grass and vegetation to preserve the earthworks from erosion and to maintain both clear sight lines between the fire control facilities and the water passage, as well as easy access to the artillery. The result was a carefully graded and neatly clipped landscape surrounding Battery Weed that, although heavily engineered, was a favorite subject for artists with its still picturesque setting along the Narrows (CLR 2008:80).

Mine Defense System

The most extensive change to the headland was a result of the development of the mine defense system for the Narrows, begun soon after the Endicott Board issued its recommendations in 1886. The narrowness of the water passage into New York Harbor made it an ideal place for use of buoyant mines, initially known as torpedoes. Mines used in the new system were not permanently placed in the waters, but stored along with miles of cables in waterside facilities where they could be quickly deployed. The deployment of the mines and cable was undertaken by a special mine-laying vessel. The physical facilities that were developed throughout the Battery Weed headland, aside from Batteries Catlin and Bacon, included fire-control stations, improved dockage with buildings for storing the mine-laying vessel, mine casemates, and mine and cable storage buildings (CLR 2008:80-81).

Plans for developing the mine defense system began early in the Endicott period, perhaps as early as 1886. A plan drawn that year indicated that the strategically obsolescent moat around Battery Weed had been dewatered in apparent anticipation of building a mine casemate at the northwest bastion that would require space in the former moat. A section of the moat at the southwest bastion was retained as an open reservoir, fed by a natural spring with water piped to the guardhouse for distribution through the fort. Construction of the casemate and first sections of the mine railway followed in ca. 1887, soon after the moat was dewatered and the

reservoir constructed. The casemate was designed to house the electric switchboard used to control the firing of the mines, with a large conduit running out through the seawall and into the waters of the Narrows to the east and northeast. An electrical cable, probably lead-sheathed copper, was run through the conduit to connect the mines to the firing switchboard in the casemate. To protect the equipment in the casemate from bombardment, solid concrete additions were added to either side of the bastion within the dewatered moat (CLR 2008:81).

Battery Weed initially served as the center of the mine defense system, along with the north dock where the mines were loaded onto vessels for deployment. Aside from the casemate, the fort served as the storage area for the mine equipment, which would have included such things as mines, cables, and nets. The first alignment of the mine railway most likely ran from the interior of the fort to the dock, but it was extended in the 1890s to reach new facilities built outside of Battery Weed. The first of these freestanding facilities was the Torpedo Storage Building completed in ca. 1894 at the base of the slope parallel to the road. The two-story brick and stone building was used for storage, assembly, and loading of mines onto rail cars. The mine railway was extended through the building by 1896, entering on the first floor at the east end, and on the second floor at the west end. The railway formed a circuit to the north dock that curved sharply around the south end of Battery Catlin. The mine railway was designed to allow rail cars, probably manually pushed, to carry mine cases, cables, and anchors directly to the north dock where a crane was used to transfer the materials to awaiting mine planting vessels. By 1910, the original railway was proving inadequate, and sections were rebuilt and realigned. The rails had originally been laid on uneven and improperly prepared ground with little or no ballast to prevent heavy rail cars from overturning (CLR 2008:81-82).

Many additional structures supporting the mine defense system were built around the turn of the century. The arrangement of these structures was intended to allow the fewest number of men to deliver the mines to the vessels in the shortest time possible. In 1898, a cable tank building was constructed parallel to the Torpedo Storage Building on the opposite side of the road. This facility, which was connected to the mine railway, consisted of a long, rectangular one-story frame building with a gable roof that served as the cover for the actual cable tank. Anchors were stored on the edge of an associated platform for easy loading. A second cable tank building was constructed onto the north side of the original building in 1899. In 1903, a smaller third cable tank was built east of the first two (Figure 9) (CLR 2008:82).

To provide much-needed space for additional support buildings, the Army filled the west side of the dewatered moat to ground level in ca. 1904, obscuring the inland moat wall. The reservoir at the southwest bastion was either covered or filled. Between 1904 and 1905, an in-ground cable testing trough and a series of wood-frame gabled buildings were constructed on top of the filled moat, abutting the west wall of Battery Weed. These included a torpedo loading room and testing room, and cable tank buildings 4, 5, and 6 (see also Figure 9). At some point after 1907, a dynamite testing room building was added in front of the cable tank building. The cable tank building, which was actually one long structure, extended across the main pedimented entrance to Battery Weed. In place of this ceremonial portal, the entrance to the fort became a nondescript opening in a wood-frame building (CLR 2008:82).

While these buildings were being constructed along the west wall of Battery Weed, work was underway on replacing the ca. 1887 mine casemate in the northwest bastion, which was suffering from excessive moisture that apparently damaged its electrical firing switchboards. In ca. 1905, work was completed on a second mine casemate, a one-story brick building constructed on high ground at the south end of Battery Catlin, north of the bomb-proof parados (see Figure 9). The firing controls in the new casemate included a twenty-four inch cable conduit that extended 130 feet down the slope of Battery Catlin and through the seawall into the Narrows (CLR 2008:82).

As the mine defense system was expanded during the first decade of the twentieth century, the old north dock proved inadequate for its primary function of transferring submarine cables and mines between the on-shore storage facilities and mine-planting vessels. The dock also continued to serve as a main delivery point for the post, receiving supplies through the Quartermaster's office located in the boathouse built alongside the dock in 1877. In order to retain space for the Quartermaster and provide additional room for the mining defense operations, a large timber extension was built on the east side of the dock in ca. 1906 (see Figure 9). The mine railway was extended across the length of the new dock, which more than doubled the size of the original structure. By 1907, a long, rectangular boathouse was constructed alongside the dock extension for sheltering the mine-planting vessels, and a smaller open dock house was constructed between it and the Quartermaster warehouse. A marine crane for hoisting anchors and mines onto the vessels from the mine railway was installed at the corner of the dock extension (CLR 2008:83).

By World War I, advances in gun ranges reduced the effectiveness of mine defense systems, and the technology faded in importance. Despite this, the system at Battery Weed was kept operational into the 1920s by a skeleton detachment of troops. A few improvements were also made to the system due to the increasing weight of the mines. In 1921, the railway was rebuilt and realigned to straighten out sharp curves and to prevent trucks on their way to and from the dock from crossing the rails. Soon after these changes to the railway, a concrete cable testing tank or turntable was installed just outside the long cable tank building near the entrance to Battery Weed (CLR 2008:83).

An aerial photograph of Battery Weed taken in 1924 illustrates the full extent of the mine defense system at the end of its development, with its various buildings and railway (Figure 10). This photograph also shows the overall character of the headland landscape, which was devoid of trees except for small groves to the west and southwest of Battery Weed (CLR 2008:83).

Later Changes

Aside from the modifications to the mine defense system in the early 1920s, the period from World War I through World War II witnessed few changes in the landscape of the Battery Weed headland. The only new military feature added during this period was a coincidence range-finder station, which was built during World War I on the lower part of the engineered slope above Battery Bacon in ca. 1917 (see Figure 10). This small in-ground concrete structure directed fire from the adjoining batteries. Just two other buildings were constructed on the headland through the end of World War II. These included a small garage built of

rock-faced concrete block constructed at some point between 1924 and 1940 off the south end of the Torpedo Storage Building. During World War II, a small building of unknown function was constructed of prefabricated concrete panels between cable tank building 3 and cable tank buildings 1-2 (CLR 2008:83-84).

In addition to these minor buildings, the Battery Weed headland underwent several improvements to its landscape during the 1930s, thanks in part to the availability of federal work relief programs. Civilian Conservation Corps (390 Veterans Co.) and Works Progress Administration-funded laborers undertook a number of projects at Fort Wadsworth between 1933 and ca. 1941. At the Battery Weed headland, this work purportedly included construction of poured concrete seawall north of the north dock, and improvements to the overlook at the top of the slope along Hudson Road, probably to accommodate long-standing informal public use of the area for its panoramic views of the harbor. These improvements included construction of a low stone wall along the entire top of the slope bordering Hudson Road, with an expanded terrace off the southwest corner of Fort Tompkins. The wall was probably intended as a barrier for pedestrians and automobiles from toppling down the steep slope. It cut off access to the walks that led down the slope to Battery Weed. As part of the improvements, Hudson Road was apparently surfaced in concrete and lined in part by a row of sycamore trees. These trees were apparently planted as part of program of planting sycamores as street trees throughout the reservation, including along Battery Weed Road near the Torpedo Storage Building and along Mount Sec Avenue (CLR 2008:84).

Once the national emergency began in 1939, public visitation to the Battery Weed headland was most likely prohibited. During the war, Battery Weed once again would have taken on the hum of an active military post, although its fortifications were largely obsolete and inactive. However, the mine defense system and other marine defenses such as nets may have been used during the war to protect the harbor from German U-boats. Some of the formerly manicured turf on the batteries may have been planted or allowed to transition to shrubs to fit in with the native environment as part of the Army's program of aerial concealment (CLR 2008:84).

By the end of the war, the landscape of the Battery Weed headland had seen extensive and complex development since the beginning of the Endicott period over five decades earlier. The landscape featured a number of additional structures and systems that changed its character and function. Vegetation was probably kept trim and neat except perhaps on the batteries. Despite these changes, the overall open character of the landscape remained much as it had been developed during the Third System period, with Battery Weed forming the central and most prominent organizing element. The end of the war marked the end of the active military use of Battery Weed and its Endicott-period fortifications. In the years to follow, the landscape would change markedly in character, although most of the military infrastructure would remain (CLR 2008:84).



Figure 7. Photograph from 1923 looking northwest across the Narrows of the Battery Weed headland within Fort Wadsworth and adjoining residential neighborhoods that made it a popular recreational spot. (Photograph 19397, NPS/Gateway NRA Museum Collection)

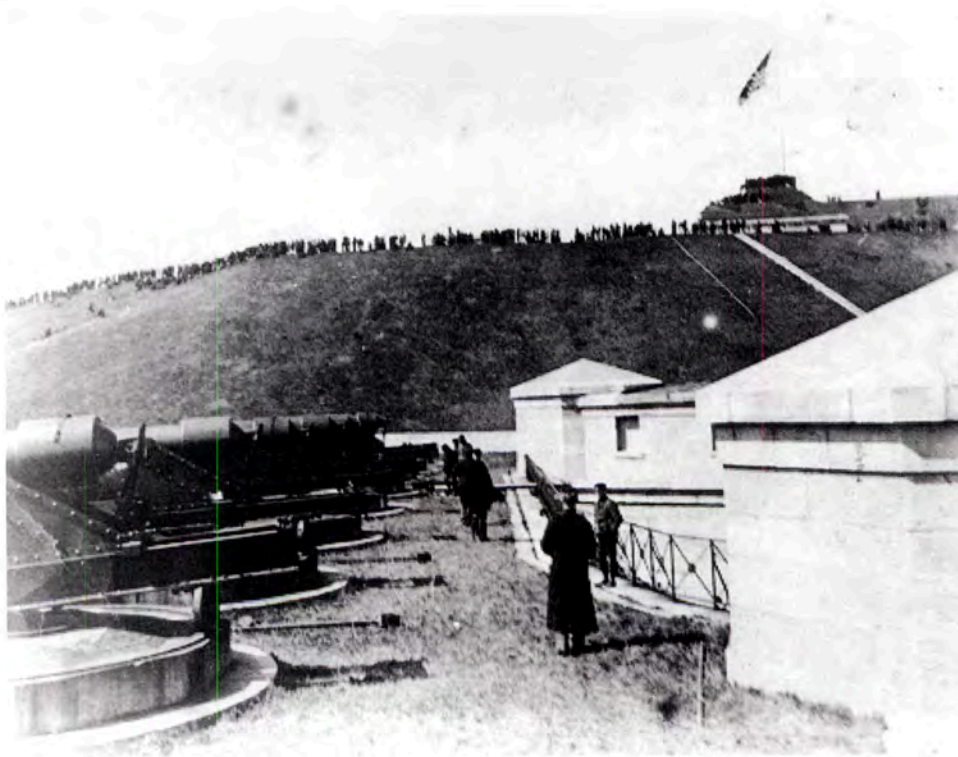


Figure 8. A photograph taken in 1902 looking southwest toward Fort Tompkins showing the barrette tier of Fort Wadsworth (Battery Weed) with its rotating guns still in place. (Photograph 19401, NPS/Gateway NRA Museum Collection)

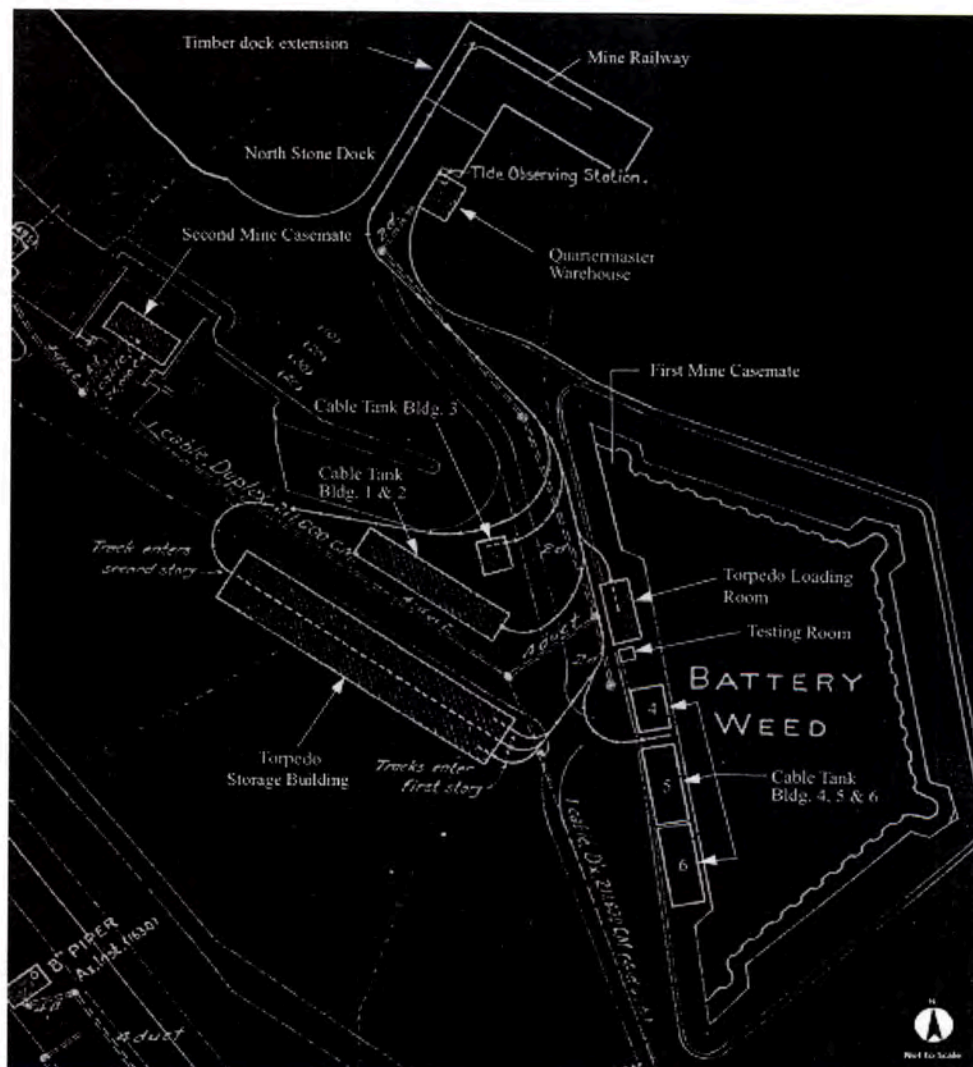


Figure 9. C.1906 plan of the mine defense system with support buildings and second mine casemate on Battery Catlin. (Unpublished report prepared for the National Park Service by URS Corporation, 2006, further annotated by SUNY ESF)

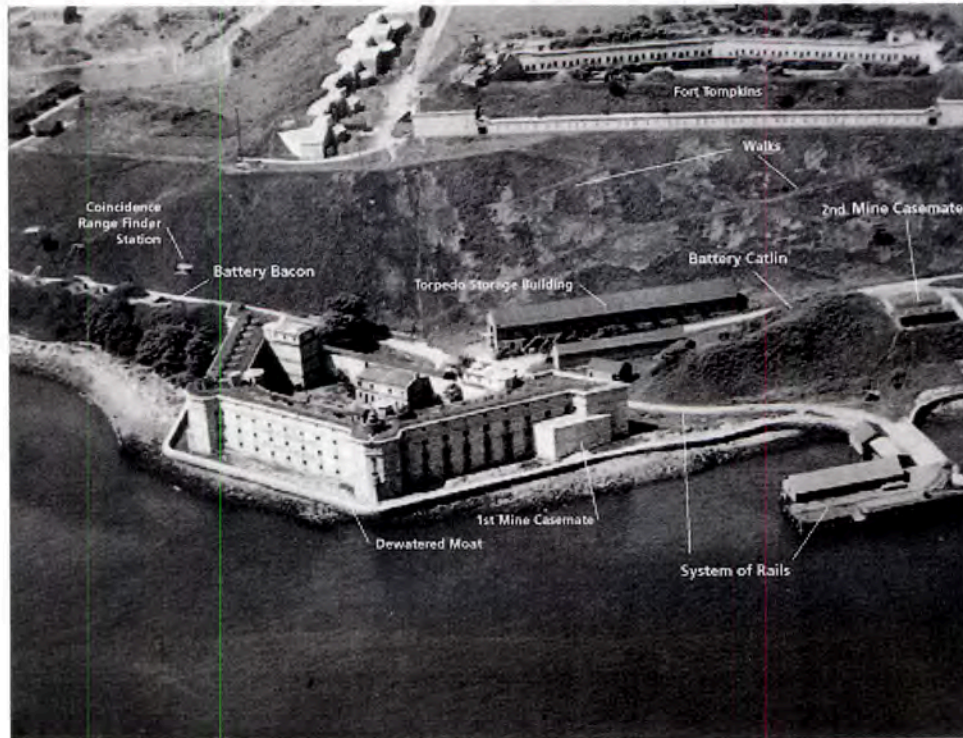


Figure 10. A 1924 photograph looking west across Battery Weed illustrating mine defense components and the overall open landscape character. (Unpublished report prepared for the National Park Service by URS Corporation, 2006, annotated by SUNY ESF)

LATE MILITARY AND NATIONAL PARK SERVICE PERIOD, 1946-2008

The close of World War II in 1945 marked the end of the Battery Weed headland's role in the coastal defense of New York Harbor. Although this role had been diminishing for some time, the refinement of aerial warfare during World War II launched a new era in military tactical technology in the post-war years that rendered final obsolescence to the ground batteries and mine defense system. With the development of long-range missiles came changing requirements for the siting of artillery, leaving little use for the water-front site with its earthen batteries and three-tiered granite casemated fort. While the headland would remain part of a larger active military reservation into the 1990s, its subsequent stewardship as part of Gateway National Recreation Area would return public use to the Battery Weed headland, the origins of which extended well back into the nineteenth century (CLR 2008:103).

Growth of Staten Island:

In the years following World War II, the outer boroughs of New York City and adjoining counties experienced rapid growth as villages and farmland were transformed by housing tracts, industrial parks, and commercial strips tied to parkways and interstate highways. As the least developed of the city's five boroughs, Staten Island experienced similar patterns of

growth. In the 1940s and 1950s, most development on the island was related to the growth of New Jersey, since the island was connected to the rest of New York City only by ferry. From 174,441 residents in 1940, the population of Staten Island climbed to 221,991 by 1960, an increase of about twenty-two percent. By 1980, the population had climbed to 352,029, an increase of an additional forty percent since 1960. Much of this latter growth was due to completion of the Verrazano-Narrows Bridge in 1964 that linked the island to Brooklyn and the city's highway network. The later development occurred primarily in the central and southern parts of the island, not in the older neighborhoods surrounding the Narrows (CLR 2008:103).

While proposals for tunnels and bridges across the Narrows dated back to the 1880s, it was not until 1946 that planning began for the suspension bridge that would ultimately be built under the direction of master planner Robert Moses. The Army had long fought plans for encroachment onto its military reservations on either side of the Narrows, but by the mid twentieth century, much of Forts Hamilton and Wadsworth had become obsolete. Although the Battery Weed headland was the actual narrowest point on the Narrows, planners chose a location just to its south that avoided the old granite fortress. After lengthy consideration by the Army as well as opposition from adjoining neighborhoods, final construction was approved in 1957 for a steel suspension bridge designed by Othmar Ammann. Work was completed in 1964, resulting in a towering presence over Battery Weed. In the decades following completion of the bridge, hundreds of thousands of motorists passed through Fort Wadsworth, but few probably were aware of the historic military reservation beneath the approaches. As the military importance of the site declined, public interest in its value as open recreational space increased sufficient to support its inclusion within the National Park System (CLR 2008:103-104).

Fort Wadsworth: Military Reservation to Public Park:

Although the nation was at peace during the years immediately following World War II, Fort Wadsworth remained an active military reservation. At the end the war, it was used for processing military service separations for soldiers returning home from the war. As personnel on base increased, a trailer camp was established in 1948 to provide housing on post for forty military families including those of the arriving Army Signal Service Units. The trailer camp, the first to be established in New York City, was unique in that city zoning prohibited them within the city limits, and the camp at Fort Wadsworth was only possible because of federal ownership of the property (CLR 2008:104).

With the eruption of the Korean War in 1950, Fort Wadsworth became host to New York National Guard Unit Antiaircraft Artillery Brigades and was used as a basic training station and antiaircraft defense site. An Army unit, the 52nd Antiaircraft Artillery Brigade, replaced the New York National Guard Unit at Fort Wadsworth in 1952, but the antiaircraft guns were located in field positions off site at other military posts, including Fort Tilden in Queens and Sandy Hook in New Jersey. Fort Wadsworth served as the radar command and control center for the New York-New Jersey area NIKE missile systems from 1954 to 1966. None of the NIKE facilities at Fort Wadsworth were located on the Battery Weed headland (CLR 2008:104).

During construction of the Verrazano-Narrows Bridge between 1959 and 1964, many buildings

in Fort Wadsworth were demolished and roads removed to make room for the bridge approaches. In the eastern half of the reservation, the approaches were on a raised viaduct, which allowed for retention of New York Avenue and Hudson Road, as well as Battery Turnbull along the shoreline south of Battery Weed (CLR 2008:104).

In the early 1970s, Fort Wadsworth was identified in federal legislation as a future site within the proposed Gateway National Recreation Area, an expansive federal park system composed of former military sites and city park lands on Long Island, Staten Island, and New Jersey. The Gateway legislation as passed in 1972 also established Golden Gate National Recreation Area in the San Francisco Bay Area as the country's first two urban national recreation areas within the National Park System. Unlike other former military sites in Gateway which had previously been decommissioned, the U. S. Department of Defense retained Fort Wadsworth as an active military reservation following passage of the park legislation. The reservation was home at the time to the 52nd Antiaircraft Artillery Brigade, but that unit left in 1974 and Fort Wadsworth became home of the U. S. Army Chaplain School until 1979. That year, the Army transferred jurisdiction to the Navy, which used the reservation as its headquarters for the New York Naval Station. Over the following decade, the Navy extensively redeveloped areas of Fort Wadsworth outside of Battery Weed and Fort Tompkins, which had been listed in the National Register of Historic Places in the early 1970s. Many former barracks and other support buildings along New York Avenue and to the west and south were demolished and new housing complexes and support building were constructed in their place. The Navy did not redevelop any part of the Battery Weed headland. The Naval Station headquarters had a brief history at Fort Wadsworth, lasting just fifteen years at the time of its closure in August 1994. The following year, the 226-acre reservation was transferred to the National Park Service for incorporation into Gateway National Recreation Area and was opened to the public in 1997 (CLR 2008:105).

In the years following the transfer, the National Park Service adapted portions of Fort Wadsworth for public visitation. It created a visitor center in one of the buildings along New York Avenue erected by the Navy in the 1980s, established headquarters of the Staten Island unit of Gateway in one of the former Army barracks, and opened Fort Tompkins and Battery Weed for limited guided tours. Public access to the reservation was returned after a long hiatus, and thousands came annually for the New York City Marathon, which began at Fort Wadsworth and proceeded across the Verrazano-Narrows Bridge for its five-borough route. Because there were far more buildings than it could use, the park entered into leases and use agreements to allow other agencies and partners, including the U.S. Coast Guard and Army Reserve, to occupy the extensive infrastructure of the reservation (CLR 2008:105).

Landscape of the Battery Weed Headland:

While the Army and later the Navy used the upland portions of Fort Wadsworth in the decades after World War II, the Battery Weed headland was, with few exceptions, abandoned as a functioning military facility. The only structure added during this time was a wood frame building, perhaps related to the postwar separations operation, constructed in ca. 1946 at the edge of the overlook to the east of Fort Tompkins (CLR 2008:106).

Without any critical function in the Battery Weed headland, the Army put little into its care and the once highly maintained landscape began to change dramatically by the late 1950s and early 1960s. Vandals damaged the buildings and spray-painted graffiti on walls, formerly mown areas on slopes and batteries became wooded, and volunteer trees including tree of heaven (*Ailanthus altissima*) grew up around buildings and structures (Figure 11). Battery Weed, the Torpedo Storage Building, and the second mine casemate were maintained in part for storage, while several small buildings were removed, including the testing room and service dynamite room along the west side of Battery Weed. Portions of the fortress, including its two magazines, were gutted, leaving only a shell. The only feature that continued its historic function during the post-war years was the lighthouse on the barbette tier. It was maintained as an aid to navigation until completion of the Verrazano-Narrows Bridge, which rendered it obsolete. The lighthouse was abandoned in 1965 (CLR 2008:106).

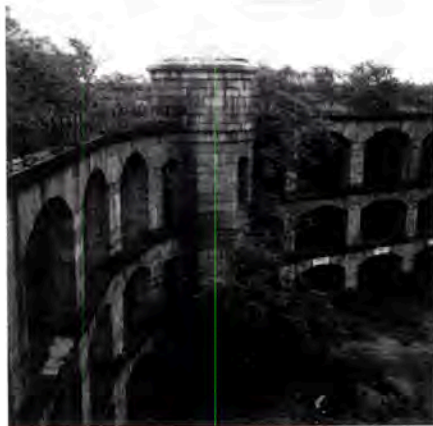
The construction of the Verrazano-Narrows Bridge resulted in a dramatic change to the setting of the Battery Weed headland. Its 693-foot tall west tower loomed high over the landscape, just 340 feet to the south of the fort. While the bridge did not have a direct impact on the headland, its construction between 1959 and 1964 nonetheless led to a number of changes to the landscape. During this time, the grounds adjoining the fort were apparently used as a staging area and place for workers to park. More importantly, in 1960, while the buildings beneath the approaches were being demolished, all of the frame buildings in the Battery Weed headland were removed. These included the three cable tank buildings and the torpedo loading room along the west wall of Battery Weed, cable tank buildings 1, 2, and 3 north of the Torpedo Storage Building, and the mine boathouse, dock house, and Quartermaster warehouse on the north dock and its timber extension. These were all probably in poor condition after being largely abandoned for fifteen years and more. Damage from Hurricane Donna in September 1960 may also have led the Army to undertake the demolitions. The hurricane brought the high tide up to approximately one foot above the level of the seawall along with four and one half inches of rainfall and seventy mile-per hour winds. The storm probably also damaged the stone seawall and south part of the timber dock, and washed out parts of the filled moat (CLR 2008:106-107).

In the years following completion of the Verrazano-Narrows Bridge in 1965, the condition of the Battery Weed headland continued to deteriorate. Periodic maintenance was undertaken in Battery Weed itself, probably at the urging of those who recognized its historic value. In 1970, a National Guard crew cleared away the woody vegetation that had grown up on top of and around the fortification. By 1980, when Fort Wadsworth was transitioning to use as the New York Navy Yard headquarters, Battery Weed was still kept free of encroaching vegetation, but the engineered slope and batteries had become covered in dense woods. Portions of the seawall had also collapsed by this time. During the 1980s, the Navy continued to mow the areas within and immediately around Battery Weed as well as the south end of Battery Catlin, but let nature take its course elsewhere. By 1990 during the Navy's tenure, the Torpedo Storage Building had suffered a devastating fire that collapsed a portion of the roof (Figure 12). The second mine casemate, which had been used for a time by a local rod and gun club, apparently also suffered fire damage around the same time, leaving only the shell of its brick walls. At the time the military transferred Fort Wadsworth to the National Park Service in

1995, most of the Battery Weed headland was heavily wooded except for the area surrounding the fortress. These woods obstructed the view from the overlook and concealed the batteries and many of the remaining ancillary buildings in the headland (CLR 2008:107).

In the years after the National Park Service acquired Fort Wadsworth, it began planning for the rehabilitation of the Battery Weed headland and its eventual opening to the public. Work was undertaken on stabilizing the key buildings and reestablishing the view from the overlook by clearing away a portion of the successional woods. The park redesigned the overlook, removing the frame building added in ca. 1946 and adding new pavement, shrubs, benches, a flagpole, and interpretive signs. The southern part of Battery Weed Road was reconstructed with concrete gutter curbs, and several interpretive waysides were installed. The park was aided by volunteer groups and partners in preservation of the historic buildings, notably the repair of the lighthouse on Battery Weed completed in 2004 by volunteers with materials provided by the park. Despite these improvements, limited funding and staffing kept the park from carrying out needed repairs and maintenance. For safety purposes, the park restricted public access to ruined buildings and much of the shoreline with cyclone fencing (CLR 2008:107).

While the Battery Weed headland today has lost much of its historic landscape character, its historic infrastructure remains to large extent beneath overgrown woods and invasive vines. Current park planning efforts are examining possible clearing of this overgrowth, as well as reconstruction of the Torpedo Storage Building for visitor services, rehabilitation of the north dock as a possible ferry landing, and repair of the stone seawall. With these and other much-needed repairs and improvements in interpretation, the landscape of the Battery Weed headland has the potential to convey fascinating insights into the history of the gateway to New York City and once again allow the public to enjoy one of the harbor's most scenic promontories (CLR 2008:107-108).



*Figure 11. Battery Weed in 1964 showing poorly maintained conditions including piles of soil and ruts in the parade ground and volunteer vegetation around the building.
(Print 12C02F, Still Pictures Division, National Archives II, College Park, Maryland)*



Figure 12. View in 1990 of the headland near the end of Navy administration showing dense woods on the slope and batteries and fire damage to the lower end of the Torpedo Storage Building. (Unpublished report prepared for the National Park Service, 1995)

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

Significant landscape characteristics identified for Battery Weed Headland include natural systems and features, spatial organization, land use, circulation, topography, vegetation, constructed water features, buildings and structures, views and vistas, small scale features, and archeological sites. Many of these characteristics have associated with them features that contribute to the site's overall historic significance and identity, as well as features that do not contribute or are undetermined. The analysis that follows is taken directly from the 2008 report, "Cultural Landscape Report for the Battery Weed Headland, Fort Wadsworth, Gateway National Recreation Area."

The physical integrity of the Battery Weed headland landscape is evaluated by comparing landscape characteristics and features present during the period of significance (1847-1945) with current conditions. Many features still contribute to the historic character of the Battery Weed headland landscape. Spatial features include the moat space, the parade ground within Battery Weed, and the overlook space. Circulation features include the mine railway, overlook promenade, Battery Weed Road, and the dock road. Panoramic views from the overlook and waterfront are also contributing features. Buildings and structures include Battery Weed, the Torpedo Storage Building, the second mine casemate, Battery Catlin parados (magazine), the overlook stone wall, concrete block garage, small concrete shed, north dock, seawall, Battery Bacon north gun emplacement, the Coincident Range-Finder station, and slope retaining wall. Topographic features that define the historic character of the landscape include the engineered slope above Battery Weed, and the earthworks of Batteries Catlin and Bacon. Contributing vegetation features include the specimen trees along Battery Weed Road and Hudson Road, and the parade ground lawn. Small-scale features include the parade ground munitions pads, cable testing trough, parade ground flagpole, dock bollards, and dock utility pole (CLR 2008:8).

Although many features have been altered since 1945, there have been relatively few lost altogether. These include six cable tank buildings, a testing tank, and a torpedo loading room building used in the mining defense complex, and three buildings on the north stone dock. There are several non-historic features that detract from the historic character of the landscape, most notably successional woods and invasive vines that cover formerly open ground and batteries, and chain-link fencing that closes off historic circulation patterns. Major condition issues that detract from the historic character of the landscape include fire damage to the Torpedo Storage Building, loss of the roofs on the Battery Weed magazines, removal of sections of mine railway, collapse of the second mine casemate, loss of the wood extension on the north stone dock, and probable loss of sections of the slope walks (CLR 2008:8-9).

INTEGRITY

Overall, the landscape of the Battery Weed headland retains historic integrity and still clearly conveys its historic significance through existing resources. Integrity of setting and feeling has been diminished, but is in part reversible (CLR 2008:141).

Location:

The Battery Weed headland, a part of the Fort Wadsworth reservation, retains all of the land included

in its development in 1847 to 1945 (CLR 2008:141).

Design:

The Battery Weed headland retains the original fortification plan as developed during the Third System period of coastal fortifications between 1847 and 1885. The landscape also retains features illustrating design during the Endicott period from 1886 through the early twentieth century, including reconstructed batteries and remnants of a mine defense system. The additions made from World War I through World War II resulted in little change to the Third System and Endicott period design of the landscape. The water-filled moat was drained in c.1887 and filled in c.1904. Since there was little new construction after 1945, the design has been largely unaltered except through forces of deterioration and natural succession, the latter being mostly reversible. Significant changes to the overall design of the landscape include loss of mine defense buildings and portions of the mine railway, loss of the timber extension and buildings on the north dock, and damage to the Torpedo Storage Building and second mine casemate. Although some historic fabric has been lost, the Battery Weed headland retains much of its historic design as a Third System and Endicott-period military installation (CLR 2008:141-142).

Setting:

The Battery Weed headland retains its overall setting defined by its waterside position along the Narrows below the 120-foot slope extending up to Fort Tompkins. The integrity of setting has been diminished since 1945 by the growth of successional woods on the slope and batteries, as well as the introduction of the Verrazano-Narrows Bridge, which although outside of the headland impacts the setting due to its enormous scale. The bridge also obscures the historic visual connection to Fort Hamilton on the opposite side of the Narrows. The historically open setting of the slope and batteries that provided panoramic views of New York Harbor from the overlook has been diminished by the growth of successional woods. The larger setting of Fort Wadsworth outside of the project boundaries to the south and west on the approach to Battery Weed has been diminished with the addition of multifamily housing units and other structures built primarily during the 1980s with the Navy's redevelopment of Fort Wadsworth as the New York Naval Station. The loss of setting resulting from successional vegetation is reversible (CLR 2008:142).

Materials:

The Battery Weed headland retains historic built materials of granite, concrete, stone, earth, brick, asphalt, iron and steel in its buildings, walls, batteries, roadways, rail tracks and dock. Historic materials have been diminished due to the removal of sections of the mine railway in the resurfacing of Battery Weed Road, loss of wood-frame support buildings in the mine defense system, and loss of the roof and portions of the walls in the Torpedo Storage Building and second mine casemate. No buildings or structures have been covered or rebuilt in substitute materials. The palette and location of historic plant materials has been altered because of natural succession and spread of invasive vines that has led to loss of historically mown turf. This condition is reversible (CLR 2008:142).

Workmanship:

Workmanship is the physical evidence of the crafts and methods of construction used during the

specified historic period. The Battery Weed headland retains workmanship characteristic of the evolution of coastal defense systems and technologies during the nineteenth and twentieth centuries. This is evident in the fine masonry of Battery Weed and north dock, and seawall, the more rustic construction of the overlook stone wall, and the early techniques of poured concrete found in Endicott-period gun emplacements and mine casemate additions to Battery Weed. Although not historically prominent, the workmanship of the macadam roads has largely been lost due to contemporary reconstruction and repaving (CLR 2008:143).

Feeling:

The Battery Weed headland retains the commanding presence along the Narrows that characterized it historically. However, the landscape surrounding the fort has lost its feeling as a highly maintained military property. There is a loss of feeling in the sense of abandonment that exists on the site today as a result of limited public access, fenced off areas of the fort grounds, the deterioration of several abandoned buildings, and most notably, the growth of successional woods and vines on historically mown and open slopes and batteries. This latter condition is reversible (CLR 2008:143).

Association:

Although the historic association of the Battery Weed headland with the U. S. Army no longer remains, the property continues to reflect this association through its physical features remaining from the Mexican-American War through World War I. These features include the fort, flanking earthen batteries, north dock, and the mine defense system buildings and structures. Battery Weed headland remains under federal administration as it has since 1847 (CLR 2008:143).

The section that follows presents an analysis of landscape characteristics and their associated features and corresponding List of Classified Structures names and numbers, if applicable. It also includes an evaluation of whether the feature contributes to the property's National Register eligibility for the historic period (1847-1945), contributes to the property's historic character, or if it is noncontributing, undetermined, or managed as a cultural resource. The following information is taken directly from the 2008 report, "Cultural Landscape Report for the Battery Weed Headland, Fort Wadsworth, Gateway National Recreation Area." Items noted with an * are listed on the National Register of Historic Places.

Landscape Characteristic:

Natural Systems and Features

The Battery Weed headland includes natural flora, landforms, and hydrology. Natural flora (successional woods) is considered a natural system while managed vegetation (specimen trees, hedgerows, lawn, etc.) is not. Since the historic period, mown grasses have been succeeded by a mix of hardwoods and shrubs, and an invasive wild grape species, porcelain berry (*Ampelopsis brevipedunculata*). Porcelain berry has its origins in northeast Asia and was originally cultivated in the United States as a bedding and landscape plant in c.1870. Natural succession since the historic period has led to an increased area of wooded and scrub land in large areas of the Battery Weed headland (CLR 2008:144).

Another natural characteristic is the landform, not including constructed topography (drainage

ditches, earthworks, etc.). Battery Weed was developed on this site specifically because of the steep bluff rising approximately 125 feet above the Narrows of New York Bay, and the relatively level area at the water's edge of a deep-water channel. At the beginning of the historic period, the bluff above Battery Weed featured a steep and irregular form with rock outcroppings and eroded ravines. During the historic period, the bluff was graded to an even and consistent slope and planted with grasses (see topography characteristic) (CLR 2008:145).

The hydrology and ecology of the site includes the waterfront and rocky beach on the Narrows, a part of the Hudson-Raritan Estuary. The Battery Weed headland forms the southern edge of a protected open water cove in an estuarine system influenced by both fresh and salt water and strong tidal currents. Also present in some form during the historic period was a fresh water spring located below the bluff that emerged from the ground approximately 120 feet from the high water line near the southwest bastion of Battery Weed. Prior to c.1860, this spring was probably minimally managed as a water resource. A moat and granite seawall, completed in 1871, surrounded the fort and incorporated the spring in its design to fill and keep the structure supplied with water. The moat has since been filled and it is unknown if the spring remains intact underground. The spring no longer forms a visible natural feature of the landscape (CLR 2008:145).

NS-1, Successional Woods and Vines

Historic Condition:

During the construction of Battery Weed from 1847 through the completion of the seawall surrounding the fort in 1871, the broad sandy beach was probably interspersed with coastal grasses including saltwater-loving species such as salt cordgrass (*Spartina alternifolia*) and yellow saltgrass (*Spartina patens*). A mix of grasses, wildflowers, and successional tree species, such as cedar, oak, and pine existed on the steep, irregular bluff above the site of the fort. The natural flora was likely removed when the site was graded in c.1873 and replaced with managed grasses for a period of many years until c.1940. During World War II, some of the natural flora may have become reestablished on and around the batteries through the direction of the Coast Artillery command in an effort to conceal the earthworks from aerial attack (CLR 2008:145).

Existing Condition:

Since the end of the historic period in 1945, natural succession has reclaimed most of the mown grass on the slope and batteries (Figure 13). These areas are now covered in a mix of native and non-native species including Norway maple (*Acer platanoides*), tree of heaven (*Ailanthus altissima*), black cherry (*Prunus serotina*), and a wild grape or porcelain berry (*Ampelopsis brevipedunculata*). This vine is climbing many of the trees in the successional woods and covering much of the slope and the earthworks of the batteries (CLR 2008:145-146).

Character-defining Features:

Feature: Successional Woods and Vines [NS-1, Successional Woods and Vines]

Feature Identification Number: 137902

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:

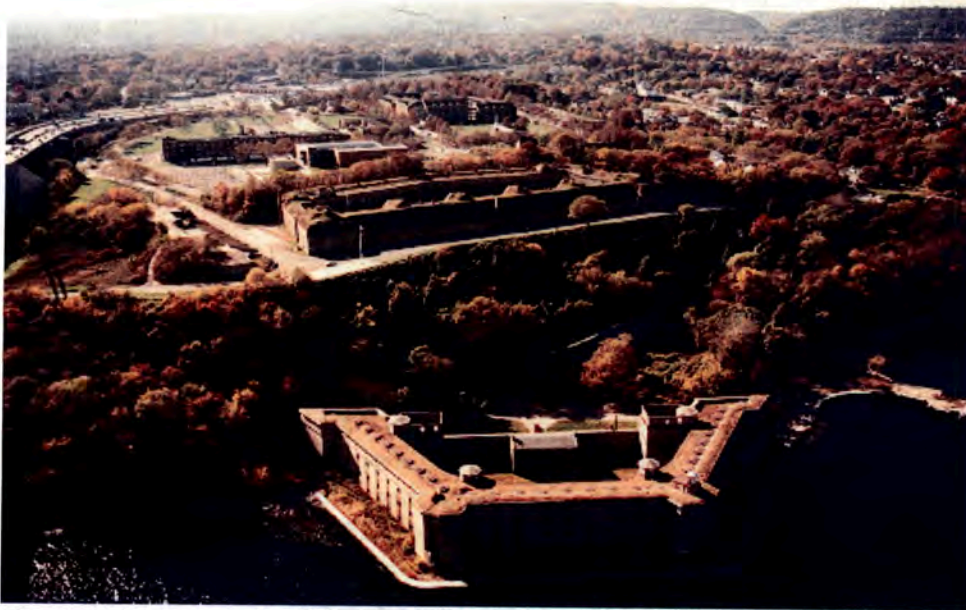


Figure 13. View across the Battery Weed headland in 1994 showing the growth of successional woods on formerly open ground. Compare this photo with Figure 7. (Unpublished report prepared for the National Park Service, 1995)

Spatial Organization

During the historic period, the Battery Weed headland was defined spatially by the steep slope to the west, raised earthen batteries to the south and north, and the open waters of the Narrows to the east. Since 1945, the spatial organization has been altered mainly through natural succession, and the removal of some of the mine complex buildings and structures. Despite these changes, the landscape retains the overall organization that has defined it since its development between 1847 and 1894, although it has become much more enclosed due to the growth of successional woods (CLR 2008:146).

SO-1, Parade Ground

Historic Condition:

Early in 1847, the parade ground began to take shape with the start of construction of the granite fort that would later be known as Battery Weed. When the fort was completed in 1864, the space at its center, the parade ground, was a nearly level lawn area, open to the sky above with a passage to the outside in the center of the west curtain wall, and a cistern set below grade adjacent to each of the eastern stair towers. From the parade ground, the only opening to the exterior was a narrow gated passage through the guardhouse. During the historic period, the parade ground was probably used in part for storage of munitions as well as for military exercises centered on a flagpole (CLR 2008:146).

Existing Condition:

Little change has occurred in the parade ground since the end of the historic period in 1945

aside from its use for storage and military exercises. Measuring approximately 260 feet by 140 feet, the parade ground is enclosed and framed to the east by three sides of a gently rounded half-hexagon of arched granite casemates in three tiers at a height of approximately thirty-six feet with two four-story stair towers and a delicate iron railing between the towers along the top tier (Figure 14). A lower, straight granite wall encloses the parade ground on the west side and incorporates a two-story guardhouse with iron entry gate and two four-story magazines with stair towers at the northwest and south corners. The parade ground is maintained entirely as mown lawn except for two concrete munitions pads (CLR 2008:146-147).

SO-2, Moat Space

Historic Condition:

Construction of a four-sided, seven-foot deep moat between 1851 and 1871 established a space surrounding Battery Weed defined by the high granite walls of the fort and the low granite seawall, with a granite or concrete retaining wall on the west or landward side. The water-filled moat was intended to provide strategic protection, but also served as a waterfront walkway or promenade. In c.1887, water was drained from the moat, except at the southwest corner where a reservoir was established. In c.1904, the landward (west) side of the moat was filled to ground level for construction of mine defense support buildings, which obliterated this part of the moat space. On the seaward sides, the moat space was altered around the same time through partial filling to a depth of about four feet (CLR 2008:147).

Existing Condition:

Since the end of the historic period in 1945, the seaward sides of the moat were filled to a level just below the capstone, which altered the enclosure of the moat space (Figure 15). The filled moat surrounds Battery Weed at a distance of approximately thirty-three feet from the outer granite walls of the fort. Grasses, weeds and reeds occur in the fill, which has a top dressing of gravel to protect against outwash. The space of the filled-in moat to the south, east, and northwest defines a bay-front terrace along the seaward sides. Lawn extends across the grounds abutting the west wall of Battery Weed over the filled landward side of the moat. The mine defense components were removed at some point after 1945, leaving concrete footing on the filled moat (CLR 2008:147).

SO-3, Overlook Space

Historic Condition:

At the beginning of the historic period in 1847, the overlook was a grassy knoll at the crest of a weathered and eroding, partially treed-covered bluff 125 feet above the Narrows and the construction site of Battery Weed. The space was defined by a large rock outcropping to the south, a pasture fence, dirt road, and the round stone bastions of the original Fort Tompkins to the west. A small signal house and semaphore signal was located at the crest of the bluff above the bay. In 1859 with construction of the new Fort Tompkins, plans were developed for constructing a raised earthen berm with gun emplacements along the top of the bluff. This earthwork was built by c.1873, probably at the time the slope was graded. Between c.1897 and 1908, the earthwork was removed and the top of the bluff was graded into a level terrace bordered by Hudson Road. In c.1938, a stone wall was built along the crest of the slope,

apparently to define the space for informal use by the public for its scenic views (CLR 2008:148).

Existing Condition:

After 1945, the overlook space became enclosed by the growth of successional woods on the slope and by construction of a wood-frame building at the widest part of the overlook in c.1946. Portions of the slope and the wood-frame building were removed and space reopened as part of the park's redesign of the overlook terrace in c.1995. The redesign included a visitor gathering area at the widest part of the overlook space at the head of Tompkins Road, defined by a flagpole, low concrete wall, and shrubs, surrounded by an open expanse of concrete and turf panels (Figure 16) (CLR 2008:148).

SO-4, Slope Space

Historic Condition:

Prior to c.1873, the 125-foot high slope above Battery Weed was mostly a steep and craggy, eroded bluff scattered groves of trees including cedar and pine. Portions of the slope were cleared from grading completed off the southwest bastion of the fort in c.1847, and most likely adjoining the North and South Cliff Batteries during their construction in the 1860s. In c.1873 as work was nearing completion of Fort Tompkins, the Army graded the remainder of the bluff to an even grade of approximately fifty degrees, removing all remaining trees and creating one large open space maintained in mown grasses (CLR 2008:149).

Existing Condition:

Since the end of the historic period in 1945, the slope space above Battery Weed, bordered by the overlook stone wall at the top and Battery Weed Road at the base with a base plane at an angle of approximately fifty degrees, became enclosed in dense successional woods. A large area was cleared in c.1995 to reestablish the view from the overlook, but this area is today covered by a blanket of invasive porcelain berry vine (Figure 17) (CLR 2008:149).

Character-defining Features:

Feature: Parade Ground, [SO-1, Parade Ground]

Feature Identification Number: 137904

Type of Feature Contribution: Contributing

Feature: Moat Space, [SO-2, Moat Space]

Feature Identification Number: 137906

Type of Feature Contribution: Contributing

Feature: Overlook Space, [SO-3, Overlook Space]

Feature Identification Number: 137908

Type of Feature Contribution: Contributing

Feature: Slope Space, [SO-4, Slope Space]

Feature Identification Number: 137910

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:



Figure 14. The parade ground (SO-1) view looking northeast, is enclosed by a half-hexagon of arched granite casemates with two four-story stair towers and guardhouse on the west side. (SUNY ESF, 2006)



Figure 15. The moat space (SO-2) and waterfront promenade (C-5), looking north, is filled with earth and rubble and top-dressed with gravel between the granite seawall (BS-2) and the fort walls. (SUNY ESF, 2006)



Figure 16. The overlook terrace (SO-3) and overlook promenade (C-3), and overlook stone wall (BS-10), looking north, incorporates a contemporary gathering area and a stone wall built c.1938 along the top of the slope above Battery Weed. (SUNY ESF, 2006)



Figure 17. The slope space (SO-4) in foreground looking southeast from the overlook illustrating open areas interrupted by woods and scrub. (SUNY ESF, 2007)

Land Use

During the historic period, the Battery Weed headland was characterized primarily by military use and secondly by informal public recreation. Although Fort Wadsworth remained under United States military jurisdiction and was part of an active military base until 1994, the Battery Weed landscape largely fell out of active military use after 1945. The site, and in particular the overlook at the top of the slope with its panoramic views, was also used during the historic period as a quasi- public park and promenade outside of times of war, especially after completion of major construction in the 1870s. Recreational uses also diminished after 1945, as reflected in the loss of the panoramic views from the overlook due to the natural succession. In 1995, recreational use became formalized with the incorporation of Fort Wadsworth into Gateway National Recreation Area (CLR 2008:149).

Circulation

Circulation through the Battery Weed headland during the historic period included roads, walks, and rail lines. Public use of the headland for taking in the views created patterns of circulation along the overlook and along the moat surrounding Battery Weed. After World War II, some of the circulation features were lost as military and public recreational uses disappeared. Circulation at the overlook has been returned, but has been lost on the walks extending down

the slope and along the moat, where access is restricted by chain-link fencing (CLR 2008:150).

C-1, Battery Weed Road (174) (portion)

Historic Condition:

During the historic period, Battery Weed Road, built in c.1847 roughly following an earlier farm road, entered the site from the south along the edge of the cliff, at the east end of Richmond Road, and turned to the northwest near the entrance of the fort ascending the slope above the north dock and connecting with Mont Sec Avenue. The road was realigned with the construction of the North and South Cliff Batteries in the 1860s. In c.1883 the road surface was first dressed with macadam and gravel. When the Torpedo Storage Building was constructed in c.1894, Battery Weed Road was realigned and widened at the north and south entrances of the new building. The steel rails of the mine railway were set into the road surface along with construction of the Torpedo Storage Building (CLR 2008:150).

Existing Condition:

In c.1995, the south part of Battery Weed Road, which extends up a steep grade adjacent to Battery Bacon, was reconstructed with concrete gutter-curbs, and the area in front of the entrance to Battery Weed was widened. The north leg of Battery Weed Road is surfaced in asphalt without curbs and measures approximately twelve feet wide and widens around the Torpedo Storage Building (Figure 18). The south curbed leg of the road measures approximately twenty feet wide. The road is surfaced in concrete where it is crossed by the mine railway. The wide area between Battery Weed and the Torpedo Storage Building is occasionally used for short-term visitor parking (CLR 2008:150).

C-2, Hudson Road (176) (portion)

Historic Condition:

Hudson Road originated prior to 1847 as a dirt road along the crest of the bluff and was realigned several times into the early twentieth century. In c.1873, it was lined by an earthwork (berm) along the crest of the bluff. Hudson Road was first given a macadam (asphalt) surface in c.1880. It was widened and realigned with removal of the earthwork in c.1908, and again with the addition of the overlook stone wall and roadside sycamore trees in c.1938 (CLR 2008:151).

Existing Condition:

Between 1945 and 1961, Hudson Road was widened at its mid-section and at the north end to incorporate perpendicular parking spaces on the east side of the road. The last realignment of the road took place in c.1995 with redesign of the overlook terrace. Hudson Road has an asphalt surface and is approximately twenty feet wide and 2,000 feet long running along the overlook terrace immediately to the east of Fort Tompkins. The road has concrete curbs with integral gutters. It connects to Battery Weed Road completing a loop that circumnavigates the slope between Battery Weed and Fort Tompkins (CLR 2008:151).

C-3, Overlook Promenade (no #)

Historic Condition:

The overlook promenade was an informal circulation route along the crest of the bluff above

Battery Weed prior to 1873. Following the grading of the bluff in c.1873, circulation probably followed an earthwork (berm) that extended along the crest of the bluff and expanded into a terrace measuring approximately 250 feet long by thirty feet wide. In c.1892, the overlook terrace and walk were linked to new walks that crossed the slope diagonally above Battery Weed, connecting the overlook terrace and walk with Battery Weed Road below. In c.1908, the earthwork was removed, allowing for the widening of the circulation route. A stone wall along the top edge of the slope constructed in c.1938 formalized the circulation route and also blocked access to the slope walks (CLR 2008:151).

Existing Condition:

In 1995, circulation along the overlook promenade was formalized with the addition of concrete sidewalks along the stone wall and a paved terrace area at the intersection of Tompkins Road (see Figure 16). The walks extend approximately seventy feet to the south of the terrace and 600 feet to the north along Hudson Road (CLR 2008:151).

C-4, Slope Walks (no #)

Historic Condition:

In c.1892 around the time the Torpedo Storage Building was being constructed, the Army constructed three walks crossing the steep slope down to Battery Weed Road. One approximately 660 foot-long walk extended from the northwest to the southeast crossing the other two walks at a switchback about halfway down. The other two walks extended from the northwest along Battery Weed Road to the southeast, connected in an acute angle and joined the path at the crest of the slope near the overlook. The walks were approximately six feet wide with concrete edging. The historic surface is unknown (CLR 2008:152).

Existing Condition:

Since the end of the historic period in 1945, the slope walks have been obscured with successional vegetation and invasive vines, and impacted by erosion. It is unknown whether they remain substantially intact. A part of the walk is visible from Battery Weed Road north of the Torpedo Storage Building. Approximately 120 feet of concrete edging remains along this walk. Further investigation, including possibly archeological testing, is necessary to determine historic width, surface, and edging of the walks (CLR 2008:152).

C-5, Waterfront Promenade (no #)

Historic Condition:

The waterfront promenade around Battery Weed, which probably came into use with completion of the cofferdam in c.1850 and then the seawall in c.1871, was used by visitors outside times of war and major construction for strolling and taking in the view of the harbor. Visitors probably also walked along the moat once it was partially filled in c.1904 (CLR 2008:152).

Existing Condition:

Since the end of the historic period in 1945, use of the waterfront promenade declined as conditions became hazardous and as public use of the overlook decreased due to growth of woods and use restrictions. The promenade follows the top of the granite seawall and the adjoining filled moat (see Figure 15). Access to the promenade is presently blocked by plastic

fencing at the southwest bastion, and a six-foot high chain-link fence extending from the northwest bastion (CLR 2008:152-153).

C-6, Mine Railway (173)

Historic Condition:

In c.1887, the first sections of mine railway were extended from the mine storage area in Battery Weed to the north dock where they were deployed by boat. In 1896, the railway was extended to the new Torpedo Storage Building, where three sets of tracks entered the south end for deployment to the dock, and a return set entered the upper floor at the rear of the building. The rails were extended several times to reach mine support buildings built between 1904 and 1905, and then in 1907 to access a timber extension and mine boathouse at the north dock. In 1910, the rails were realigned to reduce the sharp curves at the south end of the Torpedo Storage Building. In 1921, final modifications to the railway further adjusted the alignment (CLR 2008:153).

Existing Condition:

Since the end of the historic period in 1945, sections of the mine railway have been lost at the north dock, parade grounds, and along the west side of Battery Weed. Sections remain at Battery Weed Road at the north and south ends of the Torpedo Storage Building, and extending toward Battery Catlin and the north stone dock. The rails are generally set into concrete pavement (Figure 19). In Battery Weed Road, the concrete pavement has been rebuilt and the rails set in a polymer caulk. Where the rails are covered by dense vegetation at the south end of Battery Catlin, it is unknown whether they still exist or have been removed (CLR 2008:153).

C-7, Dock Road (175)

Historic Condition:

The dock road was probably established along with the construction of the north dock in c.1858. In c.1887, the road was improved and possibly realigned as part of the development of the mine railway. A spur off the road was constructed to the north along Battery Catlin at some time after 1913. It is not known where this spur ended. The dock road was paved in asphalt at an undetermined date during the historic period (CLR 2008:153-154).

Existing Condition:

Since the end of the historic period in 1945, the east end of the dock road has washed out and become covered in weeds and scrub. The remainder of the road is asphalt with worn and indefinite edges. A chain link fence cuts off access to the dock road at the north end of Battery Weed. There is no trace of the spur to the north along Battery Catlin (CLR 2008:154).

Character-defining Features:

Feature: Battery Weed Road (portion) (174) [C-1, Battery Weed Road]

Feature Identification Number: 137932

Type of Feature Contribution: Contributing

IDLCS Number: 41235

Feature: Hudson Road (176) (portion) [C-2, Hudson Road]

Feature Identification Number: 137934

Type of Feature Contribution: Undetermined

IDLCS Number: 41237

Feature: Overlook Promenade (no #) [C-3, Overlook Promenade]

Feature Identification Number: 137936

Type of Feature Contribution: Undetermined

Feature: Slope Walks (no #) [C-4, Slope Walks]

Feature Identification Number: 137938

Type of Feature Contribution: Undetermined

Feature: Waterfront Promenade (no #) [C-5, Waterfront Promenade]

Feature Identification Number: 137940

Type of Feature Contribution: Contributing

Feature: Rail Tracks (173) [C-6, Mine Railway]

Feature Identification Number: 137942

Type of Feature Contribution: Contributing

IDLCS Number: 41244

Feature: Dock Road (175) [C-7, Dock Road]

Feature Identification Number: 137944

Type of Feature Contribution: Contributing

IDLCS Number: 41236

Landscape Characteristic Graphics:



Figure 18. Battery Weed Road (C-1), looking southeast along the Torpedo Storage Building. The concrete surfaced track of the mine railway extends across the road from the rear of the building. (SUNY ESF, 2006)

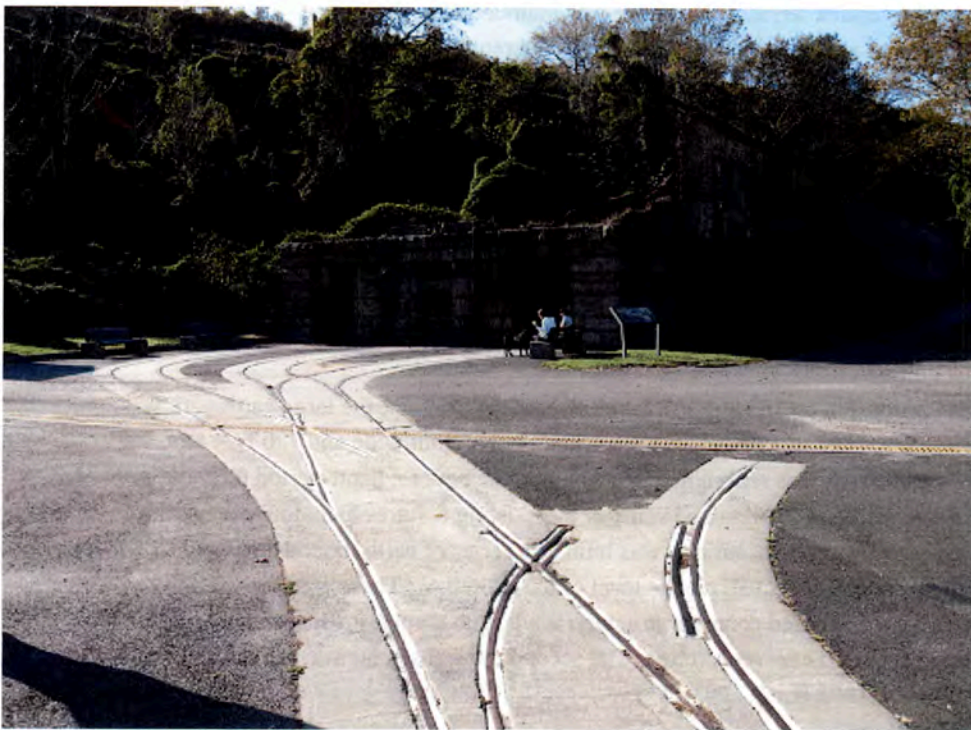


Figure 19. The mine railway (C-6), built between c.1887 and 1921 looking northwest toward a section to the Torpedo Storage Building (BS-3) built in c.1896. (SUNY ESF, 2007)

Topography

The topography of Battery Weed was historically characterized by a dominance of engineered slopes with even grades on earthworks and slopes. In the initial development of the landscape, the natural contours of the land were manipulated to provide more even, level surfaces for circulation of laborers, carts, and materials involved in the construction of the fort. In c.1862, construction of large earthworks for the South Cliff and North Cliff Batteries began on the level waterfront area and continued with reconfigurations of the topography through c.1905 with the completion of Battery Bacon and Battery Catlin, together with Batteries Turnbull and Barbour to the south outside of the project area. The final major reconfiguration of the topography came with the reconstruction of Fort Tompkins between 1859 and 1876, which impacted the adjoining engineered slope extending down to Battery Weed (CLR 2008:154).

T-1, Engineered Slope

Historic Condition:

In c.1848 with the start of construction on Battery Weed, the portion of the natural bluff off the southwest bastion was graded into an even slope, retained by a wall at its base along Battery Weed Road. Additional portions of the bluff were graded in the 1860s as part of the construction of the North and South Cliff Batteries. In c.1873, as part of the completion of Fort Tompkins, the remaining sections of the natural bluff were graded to a nearly even slope of approximately fifty percent from its crest to its base. When the grading was complete, approximately two feet of its earlier 125-foot elevation had been lost and the slope crested at 123 feet at the overlook terrace. The slope was maintained in mown turf. In c.1892, three walks were graded into the slope, supported by concrete edging on the downhill side (CLR 2008:154-155).

Existing Condition:

Since the end of the historic period in 1945, some soil erosion has occurred in the slope above the north end of the Torpedo Storage Building where a gully has formed as a result of water runoff. The grade of the slope has most likely become more irregular overall due to erosion and growth of vegetation (CLR 2008:155).

T-2, Battery Catlin Earthwork (South End)

Historic Condition:

Initially constructed in c.1863 to 1867 as the North Cliff Battery, the large earthwork was reconstructed in c.1902 to 1904 as the approximately 140 foot wide and 720 foot long Battery Catlin. The earthwork was redesigned to accommodate new Endicott-period technology in coastal defense artillery, but retained some of the existing features including a subsurface parados. Battery Catlin in its entirety was built as a series of earth mounds rising approximately forty-five feet above the level of the shoreline. These earth mounds incorporated several poured concrete structural walls, gun emplacements, steps, access paths, and with earth-covered concrete arches. The second mine casemate was built at the south end of the battery in c.1905 (CLR 2008:155).

Existing Condition:

With the exception of some erosion and deterioration of structural elements and a dense covering of successional woods, little change has occurred to the Battery Catlin earthwork since the end of the historic period in 1945. The southern end of Battery Catlin consists of a large earth mound measuring approximately 320 feet by 140 feet rising to a height of forty-five feet above the level of the dock road (CLR 2008:155).

T-3, Battery Bacon Earthwork (North End)

Historic Condition:

Battery Bacon was initially constructed in c.1862 to 1866 as the South Cliff Battery and reconstructed in c.1898 as Batteries Bacon, Turnbull, and Barbour. Redesigned to accommodate new Endicott period technology in coastal defense artillery, the earthwork of Battery Bacon rose approximately fifty feet above the water level of the Narrows just above the shoreline and included poured concrete structural walls, steps, and gun emplacements (evaluated under BS-9) (CLR 2008:156).

Existing Condition:

With the exception of the overgrowth of vegetation on the battery, little change has occurred to the Battery Bacon earthwork since the end of the historic period in 1945. The northern end of Battery Bacon consists of a large earthen mound measuring approximately 200 feet by 80 feet, rising to an elevation of fifty feet above the water level of the Narrows (Figure 20). The only section that has been cleared of heavy vegetation is the north gun emplacement (CLR 2008:156).

Character-defining Features:

Feature: Engineered Slope (see also SO-4) [T-1, Engineered Slope]

Feature Identification Number: 137956

Type of Feature Contribution: Contributing

Feature: Battery Catlin Earthwork (155) (South End) [T-2, Battery Catlin Earthwork (155) (South End)]

Feature Identification Number: 137958

Type of Feature Contribution: Contributing

IDLCS Number: 41216

Feature: Battery Bacon Earthwork (316A) (North End) [T-3, Battery Bacon Earthwork (316A) (North End)]

Feature Identification Number: 137960

Type of Feature Contribution: Contributing

IDLCS Number: 41220

Landscape Characteristic Graphics:



Figure 20. The vine and tree-covered Battery Bacon earthwork (T-3) built in c.1898 above the shoreline, looking southeast from the parapet of Battery Weed. The battery is the area above the shoreline. (SUNY ESF, 2007)

Constructed Water Features

The only constructed water feature in the Battery Weed headland was a moat designed by Army Chief Engineer General Joseph G. Totten in c.1850 to be filled by a combination of water sources including a spring located near the fort, and tidal waters of New York Bay. Totten designed the moat to surround the fort providing highly controlled access and thus protection from landward attack. Construction of the moat was undertaken in stages and included the temporary construction of a timber and stone cofferdam below the high tide line that allowed the permanent construction of the granite seawall that formed the outer edge of the moat. The moat surrounding Battery Weed, approximately thirty feet wide and seven feet deep, was finished with the completion of the seawall in c.1871. The moat was dewatered in c.1887, and partially filled with earth and rubble in c.1904 to a depth of approximately four feet below the capstone. At some point after 1945, the moat was completely filled to within a foot of the capstone (see SO-2 for evaluation of the moat space) (CLR 2008:156).

Vegetation

Planted vegetation on the site prior to c.1930 was limited primarily to perennial grasses that were established as lawn and mown turf covering the grounds, slope, and batteries (see NS-1 for successional woods and vines). In the 1930s, roadside specimen trees were added to the landscape, the only known instance of ornamental plantings in the headland during the historic period. Since 1945, much of the lawn and mown grasses have been lost with the cessation of

maintenance that led to the growth of invasive vines and successional woods (CLR 2008:157).

V-1, Parade Ground Lawn

Historic Condition:

The Army established a lawn on the parade ground within the walls of Battery Weed during the initial construction period in c.1847 to 1864 and maintained it throughout the historic period (CLR 2008:157).

Existing Condition:

The parade ground lawn was not maintained after 1945 and by the 1960s, it was characterized by volunteer trees, ruts, and piles of earth. The lawn was restored in c.1995 as a mix of perennial grasses mown short, less than four inches (Figure 21). There are no other plantings on the parade ground (CLR 2008:157).

V-2, Slope & Fortress Grounds Turf

Historic Condition:

The open ground around Battery Weed, including the slope and overlook, Batteries Catlin and Bacon, and the level areas along the roads and adjacent to the fort, were planted with grasses as the land was graded in stages from c.1847 through c.1904. Although the topography of the slope and batteries was adjusted to accommodate new gun technologies, the vegetation was maintained as mown grasses throughout the historic period, with some shrub growth along the shoreline near the batteries by the 1920s. The turf on the batteries may have been let go during World War II as part of an order for aerial concealment, but this vegetation would have been low (CLR 2008:157).

Existing Condition:

Since the end of the historic period in 1945, most of the slope & fortress grounds turf (approximately eighty percent) has been lost, except for the area bordering Battery Weed and Battery Weed Road. Most of the former areas of mown turf on the slope and batteries has been lost to successional woods and a blanket of invasive porcelain berry (see also NS-1) (CLR 2008:157).

V-3, Roadside Specimen Trees

Historic Condition:

A row of sycamore trees was planted along Battery Weed Road across from the Torpedo Storage Building and along Hudson Road near the overlook in c.1938. The addition of these trees was an aesthetic enhancement that probably was made in conjunction with the formalization of the overlook that included construction of a stone wall. The plantings were probably made at the same time as the existing sycamores along nearby Mount Sec Avenue (CLR 2008:158).

Existing Condition:

Since the end of the historic period, most of the roadside specimen trees have been lost. Three sycamore (*Platanus occidentalis*) trees remain. One is located on the east side of Hudson Road across from Fort Tompkins, at a diameter of approximately fourteen inches. This sycamore may be a replacement planting or a remnant of the row of trees that existed during

the historic period. Two mature sycamore trees are located along the east side of Battery Weed Road across from the Torpedo Storage Building. One is approximately forty-two inches in diameter, and the other is of approximately thirty-six inches (CLR 2008:158).

Character-defining Features:

Feature: Parade Ground Lawn [V-1, Parade Ground Lawn]

Feature Identification Number: 137962

Type of Feature Contribution: Contributing

Feature: Fortress Grounds & Slope Turf [V-2, Fortress Grounds & Slope Turf]

Feature Identification Number: 137964

Type of Feature Contribution: Non Contributing

Feature: Specimen Roadside Trees [V-3, Specimen Roadside Trees]

Feature Identification Number: 137966

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:



Figure 21. The parade ground lawn (V-1), looking south from an upper tier casemate showing also the flagpole and flanking munitions pads. The munitions pads (SS-6) and flagpole (SS-7) can also be seen. (SUNY ESF, 2007)

Buildings and Structures

Most of the existing buildings and structures in the Battery Weed headland were developed as a part of an evolving complex of coastal fortifications over a period of approximately seventy-four years from 1847 to c.1921. Only one structure and two ancillary buildings were added after this time. There were a number of buildings in the landscape prior to 1847, notably the Second System Fort Richmond and a row of support buildings to its west, but all were removed during the historic period. Battery Weed remains the dominant and most significant building in the landscape. A number of ancillary buildings and structures associated with the mine defense system, constructed between 1887 and 1921, have been lost since 1945. These include a complex of buildings and a timber extension on the north dock, which were removed in c.1960 during construction of Verrazano-Narrows Bridge and probably as a result of Hurricane Donna. At the same time, the wood-frame support buildings for the mine defense system located on land were also removed. These included cable tank buildings 1 (c.1898), 2 (c.1899), 3 (c.1904), and 4, 5 & 6 (c.1905); a testing room (c.1904), and a torpedo loading room (c.1904) located along the west wall of Battery Weed and parallel to the Torpedo Storage Building. All other secondary buildings and structures remain, although many are in poor or ruined condition (CLR 2008:158-159).

BS-1, Battery Weed (150, 151,181)

Historic Condition:

Battery Weed was designed in c.1846 under the direction of Army Chief Engineer General Joseph G. Totten according to the Army's specifications for Third System coastal fortifications. Construction began in 1847 and was complete by 1864. The granite fort, extending into the waters of the Narrows, was built in a half-hexagon plan with three tiers of casemates surrounding a central parade ground, with a perimeter moat and seawall. The top or barbette tier featured a turf-covered earthen surface and parapet with gun emplacements. Incorporated into the west curtain wall of the fort were the main entrance (via a drawbridge prior to c.1904), guardhouse, and magazine towers. In c.1887, two concrete sections were added to the northwest bastion to provide protection for the first mine casemate located within the fort. In 1903, a lighthouse was added to the barbette tier at the northeast bastion. Most of the guns had been removed from the fort by this time (CLR 2008:159).

Existing Condition:

Since the end of the historic period in 1945, the only substantial change to Battery Weed has been the loss of the roofs of the magazine towers, which occurred prior to 1958. Battery Weed is a massive granite structure measuring 286 feet along each channel-front wall, and 450 feet along the west scarp wall (Figure 22). The fort features three casemated tiers, rising one on top of the other, and an open earth-covered barbette tier with a breast height parapet wall along the channel side that rises sixty-three feet above the Narrows. Thirty-one gun emplacements are located on the barbette tier, each a circular raised brick and mortar pedestal with iron pintles that held rotating canon. The area surrounding the gun emplacements and the area on top of the parapet are planted with mown turf (CLR 2008:159).

BS-2, Granite Seawall (228)

Historic Condition:

Construction of the granite seawall, completed in c.1871, began with the building of a temporary timber and stone cofferdam in c.1851. The seawall consisted of two different sections. Around the channel sides of the fort, the seawall was a freestanding structure forming the outside wall of the moat. It continued to form the inland wall of the moat, which was buried beneath fill in c.1904. North of the fort, the seawall was a retaining structure that curved outward to form a bulkhead for the north dock (CLR 2008:160).

Existing Condition:

Since the end of the historic period in 1945, two sections of the retaining wall section of the seawall have collapsed, one between Battery Weed and the north dock, and the other north of the dock. A portion of the moat seawall along the east side of Battery Weed was rebuilt in 2006. The granite seawall extends for approximately 1,000 feet from the south end of Battery Weed to a point north of the north dock. The moat section of the seawall extends along the entire outer channel-facing sides of Battery Weed and terminates at the rocky beach near Battery Bacon on the south (see Figure 22). The retaining wall section of the seawall extends from Battery Weed north beyond the north dock. Both sections are built of coursed quarry-faced granite ashlar (CLR 2008:160).

BS-3, Torpedo Storage Building (147)

Historic Condition:

The first freestanding structure to be constructed as a part of the mine defense complex was the Torpedo Storage Building (#147) in c.1894. Sited at the base of the slope on the west side of Battery Weed Road, the two-story stone and brick structure featured engineered iron roof trusses and windows with steel shutters. Used for the storage, processing, and delivery of underwater mines (torpedoes) and cables, the building contained three mine railway entry doors on the south end at the first story level, and one on the north end at the second story level (CLR 2008:160).

Existing Condition:

After the end of the historic period in 1945, the Torpedo Storage Building was used only for storage. In the 1980s, it suffered extensive fire damage, which resulted in loss of roof trusses and brick walls at the south end. As a result of this fire, the roof skin was removed and the building left as a shell. Sections of wood structural timbers and window sash remain. Overall, the brick and stone building with a steel-truss gable roof measures approximately 230 feet by 40 feet (see Figure 19). Planning is underway to rehabilitate this building for visitor use (CLR 2008:160-161).

BS-4, Concrete Block Garage (148)

Historic Condition:

Sometime between 1924 and 1940, a small, concrete-block building with a gable roof was erected at the base of the slope to the south of the Torpedo Storage Building. The building may have been used for storage or housing a vehicle (CLR 2008:161).

Existing Condition:

The concrete block garage at the base of the slope to the south of the Torpedo Storage Building measures approximately nine feet by eleven feet. The building is constructed of rock-faced

concrete block and has a gable-front roof with a boarded-up garage door and attic vent in the front wall. The asphalt-sheathed roof has deteriorated and has a large hole on the north side (CLR 2008:161).

BS-5, Concrete Shed (144)

Historic Condition:

In c.1940, a small concrete-slab shed was constructed immediately to the east of cable tank buildings 1 and 2 on the west side of the dock road. The building may have housed utilities or possibly served as a guard station during World War II (CLR 2008:161).

Existing Condition:

The small, one-story, concrete-slab shed on the west side of the dock road measures approximately ten feet by twelve feet and has a low-pitched concrete shed roof and a door opening on the southwest side (Figure 23). The door is missing (CLR 2008:161).

BS-6, North Dock (141)

Historic Condition:

The north dock was initially built in c.1858 as an 'L'-shaped granite masonry structure approximately forty-feet wide by eighty-feet long, supported by granite piles and extending from a curved bulkhead retained by the granite seawall. The deck was surfaced in granite block, the same material used in the construction of Battery Weed and the seawall. In c.1877, a boathouse, later used as the quartermaster's warehouse, was built along the south side of the dock. Steel rails of a mine railway were initially laid in c.1887 from Battery Weed to the end of the stone dock so that subsurface mines could be transported to vessels for deployment. The rails were laid on a concrete bed that replaced the granite blocks. A large timber extension, measuring 154 feet long by sixty-five feet wide, was built off the east end of the dock in c.1907. The mine railway was extended onto the new section and a mine boathouse was built along its western side. At the same time, an open dockhouse, enclosed by 1945, was built off the east side of the quartermaster's warehouse. Inside this building was a tide station installed in c.1925 (CLR 2008:162).

Existing Condition:

In c.1960, part of the timber dock extension and the three dock buildings—quartermaster's warehouse, dock house, and mine boathouse—were removed, possibly as a result of hurricane damage. The remainder of the timber dock extension collapsed prior to 1995, leaving scattered piles and remnants of the mine railway. The remaining original stone section of the dock, extending from the shoreline north of Battery Weed in an 'L' shape, is approximately forty feet wide by eighty feet long. The structure consists of granite piles spaced approximately sixteen feet that support granite and iron beams. The deck is surfaced in granite block with concrete along the mine rails (Figure 24) (CLR 2008:162).

BS-7, Second Mine Casemate (140)

Historic Condition:

In c.1905, a brick and concrete structure designed as a mine casemate was built into the south end of recently constructed Battery Catlin, overlooking the Torpedo Storage Building, north

dock, and harbor where the mines were processed and deployed. From its perch thirty-five feet above the Narrows, the second mine casemate held a commanding view. The building was a replacement of the first mine casemate built into the northwest bastion of Battery Weed in c.1887. Like the first casemate, its replacement housed a switchboard that controlled detonation of the mines through electrical signal transmitted over cables. These cables extended from the casemate through a twenty-four inch conduit extending 130 feet from the building through the seawall into the Narrows. The casemate also housed telecommunication equipment used to monitor activities in the harbor (CLR 2008:163).

Existing Condition:

Since the end of the historic period in 1945, the second mine casemate has stood empty except for a period when it was used by a local rod and gun club. At some point, probably in the 1980s, the building suffered extensive damage due to a fire that left only the brick walls standing. Measuring approximately sixty feet by seventy-five feet, the mine casemate is buried in invasive and successional vegetation on Battery Catlin. It is surrounded by a terrace, probably surfaced in concrete. The building is cordoned off by chain-link fence (CLR 2008:163).

BS-8, Battery Catlin Parados (182)

Historic Condition:

As part of the construction of the North Cliff Battery between 1863 and 1867, the Army constructed a subsurface chamber within the earthwork. In the plans for this structure, it is labeled as a "Bomb-proof Parados." Covered under several feet of earth in the south end of Battery Catlin, it was designed to provide protection from fire behind the fort. The only exterior feature of the chamber was an entry door set into the steep slope, today facing the mine casemate to the north. The three-inch thick, bronze-fastened, wood plank door had a small vertical window and opened outward. The hillside doorway was flanked by granite block cheek walls, which led to four steps down inside to two narrow barrel-vaulted concrete corridors, one of which was connected with a concrete underground chamber. Between 1902 and 1904, the North Cliff Battery was rebuilt as Battery Catlin, but the project apparently left the parados intact (CLR 2008:163).

Existing Condition:

The bomb-proof parados is located at the south end of Battery Catlin, and measures approximately twenty feet by forty feet in over-all dimension. Access to the underground vault is by an exterior walk set into the earthwork with heavy granite-block cheek walls that are in poor condition (Figure 25). A three-inch thick, bronze-fastened wood plank door with a small vertical window opens outward and leads to steps down through a narrow, barrel-vaulted concrete corridor and interior chamber. The entryway is concealed by dense woods and vines (CLR 2008:164).

BS-9, Battery Bacon North Gun Emplacement (portion of 316A)

Historic Condition:

In c.1898, South Cliff Battery was reconstructed as a series of earthen and reinforced concrete batteries to accommodate new gun emplacements. The northernmost of these batteries,

immediately to the south of Battery Weed was Battery Bacon. The gun emplacement at its north end, rising forty-nine feet above the Narrows, contained a raised concrete platform accessible by concrete steps on each side. To the north of and extending from this platform was a gun emplacement edged with a low granite parapet wall with a round concrete pad, iron pintle and semi-circular rail set into the ground. Guns were mounted at Battery Bacon until c.1942. (The earthwork is evaluated under Topography, T-3.) (CLR 2008:164).

Existing Condition:

Since 1945, the north gun emplacement of Battery Bacon, located just to the south of Battery Weed and along the east side of Battery Weed Road, became covered in successional woods. In c.1995, the emplacement was cleared of vegetation and an interpretive panel was installed. Today, the gun emplacement is the only part of Battery Bacon kept open, although it is partially covered in invasive vines. The masonry features are deteriorating (Figure 26) (CLR 2008:164).

BS-10, Overlook Stone Wall (180)

Historic Condition:

A stone wall along the edge of the overlook along Hudson Road was probably constructed as a Works Progress Administration project in c.1938. The wall formalized the recreational use of the overlook, which had been a popular spot for taking in the panoramic views of New York Harbor since the early nineteenth century. The wall appears to have been intended as a barrier to keep pedestrians and automobiles from toppling down the steep slope. The wall cut off access to the walks that extended down the slope (CLR 2008:165).

Existing Condition:

The stone wall along the crest of the slope above Battery Weed measures approximately 2,000 feet in length and ranges in height from approximately eighteen to thirty-eight inches. It is mortared rubble wall with a mix of quarried rock and large stones, including brownstone and granite, with a parged cap. Repairs to the mortar and concrete have been made with white Portland cement in some areas, and the top parging is cracking and lifting in places (see Figure 16). Cars can no longer pull up to the wall (CLR 2008:165).

BS-11, Overlook Concrete Structure (no #)

Historic Condition:

No documentation was found on the square concrete structure to the east of the stone wall at the top of the slope below the overlook stone wall. A structure in this approximate location is indicated on a 1865 plan as a latrine. It is possible that the structure is a portion remaining from that period, although its shape appears to be different from that on the 1865 plan (CLR 2008:165).

Existing Condition:

A square concrete structure measuring approximately fifty-two inches and set into the slope immediately to the east of the stone wall at the top of the slope is flush with the surface of the slope on the west side and approximately eighteen inches above grade on the east side. The concrete is weathered and worn away in places, and the center of the structure appears to have been an opening that is covered in concrete (CLR 2008:165).

BS-12, Parade Ground Stone Gutters (no #)

Historic Condition:

Surface drainage within the parade ground was accommodated by stone gutters that emptied into a common cistern. This system was probably built between 1847 and 1864 as part of the original construction of Battery Weed. An 1893 photo of the parade ground indicates that the gutters were present at that time (CLR 2008:166).

Existing Condition:

In c.1995, the cistern cover was rebuilt in concrete with a steel hatch. It is not known if the underground section was replaced at the same time. The stone gutters, approximately 180 feet long and twenty-four inches wide, are located along the eastern edge of the parade ground approximately twenty-five feet from the casemate walls of the fort. The alignment of the three sections roughly parallels the north, east, and south walls of the fort. The gutters consist of three stone slabs forming a depressed channel that drain into the cistern at the intersection of the two northern gutter sections (Figure 27) (CLR 2008:166).

BS-13, Concrete Seawall (no #)

Historic Condition:

Records of the Works Progress Administration indicate that a seawall was constructed at Fort Wadsworth in c.1938. The WPA records likely refer to the poured concrete seawall constructed north of the end of the granite seawall, north of the north dock (CLR 2008:166).

Existing Condition:

The concrete seawall, approximately 550 feet long and seven feet high and partly covered in vines, extends from a large pilaster or utility structure measuring approximately six feet square continues north along the edge of the beach below Battery Catlin, beyond the project area (Figure 28). The adjoining granite seawall has collapsed (CLR 2008:166).

BS-14, Slope Retaining Wall (no #)

Historic Condition:

The slope retaining wall (labeled 'sustaining wall' on historic plans) along Battery Weed Road was constructed of eight-inch thick granite blocks in c.1848 to support the steep slope above the southwest bastion of the new fort then under construction. The south portion of the wall was buried or removed with construction of the South Cliff Battery in c.1862 (CLR 2008:167).

Existing Condition:

The slope retaining wall extends approximately fifty-six feet in length and follows the slope of Battery Weed Road rising from approximately eight inches at the north end to approximately twenty-six inches on the south end (Figure 29). No substantial change has occurred to the slope retaining wall since the end of the historic period in 1945 aside from the adjoining addition of a curb gutter along Battery Weed (CLR 2008:167).

BS-15, Reveal Coincidence Range-Finder (CRF) Station (338)

Historic Condition:

The Coincidence Range-Finder (CRF) Station was constructed on the slope above Battery Bacon in c.1917 as part of the modifications to the site in support of firing accuracy from the

batteries. Another CRF Station, although not within the project area for this report, was built at approximately the same time on the slope above Battery Catlin (CLR 2008:167).

Existing Condition:

The Coincidence Range-Finder (CRF) Station is a concrete and metal structure that is obscured by dense vegetation. It appears to retain its overall structure, but the interior workings have probably been removed (CLR 2008:167).

BS-16, Surface Drain (no #)

Historic Condition:

The surface drain did not exist historically (CLR 2008:167).

Existing Condition:

The surface drain across Battery Weed Road near the entrance of Battery Weed is approximately fifty feet long and one foot wide, and was installed in c.1995 to intercept surface water flow before it reached Battery Weed. The drain did not remove the mine rails (CLR 2008:167-168).

Items noted with an * are listed on the National Register of Historic Places.

Character-defining Features:

Feature: Battery Weed (150,151) * [BS-1, Battery Weed]

Feature Identification Number: 137968

Type of Feature Contribution: Contributing

IDLCS Number: 41198

Feature: Light Station (181) [BS-1, Battery Weed]

Feature Identification Number: 137970

Type of Feature Contribution: Contributing

IDLCS Number: 41243

Feature: Seawall (228) [BS-2, Granite Seawall]

Feature Identification Number: 137972

Type of Feature Contribution: Contributing

IDLCS Number: 41170

Feature: Torpedo Storage (147) [BS-3, Torpedo Storage Building]

Feature Identification Number: 137974

Type of Feature Contribution: Contributing

IDLCS Number: 41196

Battery Weed Headland
Gateway NRA - Staten Island District

Feature: Warehouse (148) [BS-4, Concrete Block Garage]

Feature Identification Number: 137976

Type of Feature Contribution: Contributing

IDLCS Number: 41197

Feature: Concrete Shed (144) [BS-5, Concrete Shed]

Feature Identification Number: 137978

Type of Feature Contribution: Contributing

Feature: North Dock (141) [BS-6, North Dock]

Feature Identification Number: 137980

Type of Feature Contribution: Contributing

IDLCS Number: 41215

Feature: Mining Casement (140) [BS-7, Second Mine Casemate]

Feature Identification Number: 137982

Type of Feature Contribution: Contributing

IDLCS Number: 41195

Feature: Battery Catlin Magazine (182) [BS-8, Battery Catlin Parados]

Feature Identification Number: 137984

Type of Feature Contribution: Contributing

IDLCS Number: 41231

Feature: Battery Bacon (316A) (portion) [BS-9, Battery Bacon North Gun
Emplacement]

Feature Identification Number: 137986

Type of Feature Contribution: Contributing

IDLCS Number: 41220

Feature: Hudson Road Wall (180) [BS-10, Overlook Stone Wall]

Feature Identification Number: 138256

Type of Feature Contribution: Contributing

IDLCS Number: 41242

Feature: Overlook Concrete Structure (no #) [BS-11, Overlook Concrete Structure]

Feature Identification Number: 138282
Type of Feature Contribution: Undetermined

Feature: Parade Ground Stone Gutters (no #) [BS-12, Parade Ground Stone Gutters]
Feature Identification Number: 138284
Type of Feature Contribution: Contributing

Feature: Concrete Seawall (no #) [BS-13, Concrete Seawall]
Feature Identification Number: 138286
Type of Feature Contribution: Contributing

Feature: Slope Retaining Wall (no #) [BS-14, Slope Retaining Wall]
Feature Identification Number: 138288
Type of Feature Contribution: Contributing

Feature: B.C. and C.R.F. Station (338) [BS-15, Coincidence Range-Finder Station]
Feature Identification Number: 138290
Type of Feature Contribution: Contributing

IDLCS Number: 41225
LCS Structure Name: Fort Wadsworth - B.C. & C.R.F. Stations
LCS Structure Number: FW-338

Feature: Surface Drain (no #) [BS-16, Surface Drain]
Feature Identification Number: 138292
Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Figure 22. Battery Weed (BS-1), constructed between 1847 and 1864, and the seawall (BS-2) completed in c.1871, view looking northeast at section that forms the outer wall of the moat around Battery Weed. (SUNY ESF, 2007)



Figure 23. The small concrete shed (BS-5), constructed in c.1940, looking north with the rise of Battery Catlin in the background. The historic function of this building is not known. (SUNY ESF, 2007)



Figure 24. The north dock (BS-6), built in c.1859, view looking northeast showing granite and concrete surface, and remnants of the mine railway and timber extension dating to 1907. (SUNY ESF, 2007)



Figure 25. The exterior entry of the Battery Catlin parados (BS-8) built in c.1865, looking east showing granite cheek walls and overgrown conditions. (SUNY ESF, 2007)



Figure 26. The gun emplacement (BS-9) at Battery Bacon (see T-3) built in c.1898 looking north showing concrete platform and parapet walls, iron pintle, and traverse circle. (SUNY ESF, 2007)

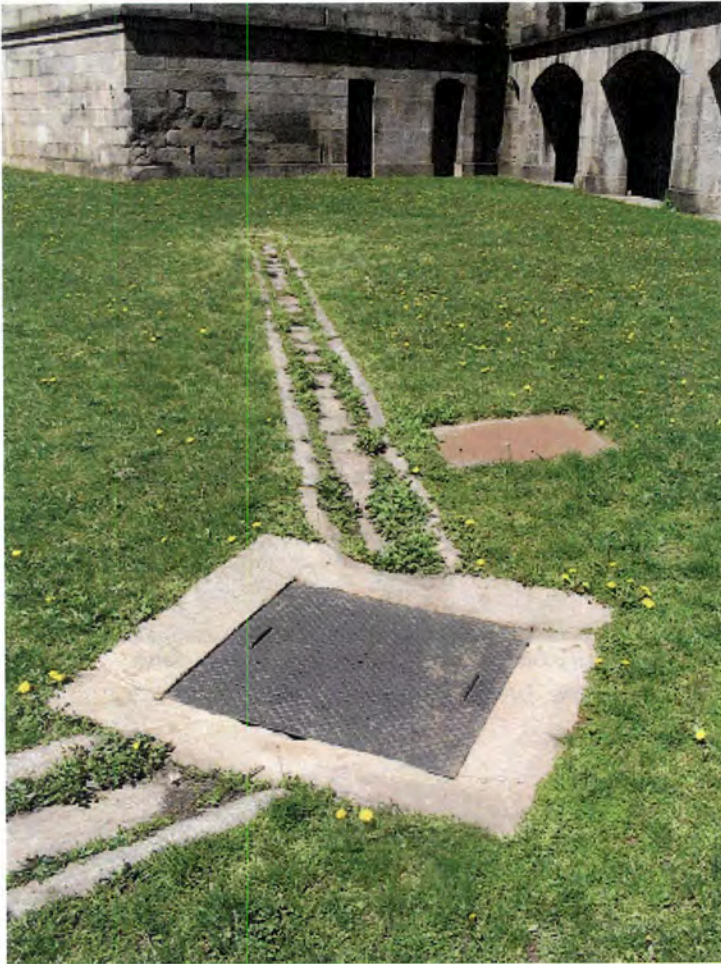


Figure 27. The stone gutters and cistern (BS-12), built c.1847-1864, looking west with contemporary cistern hatch in the foreground. (SUNY ESF, 2007)



Figure 28. The partially vine-covered concrete seawall (BS-13) built in c.1938, view looking northwest with Battery Catlin in the background. In the foreground is a collapsed section of the granite seawall. (SUNY ESF, 2007)



Figure 29. The slope retaining wall (BS-14), built in c.1848, view look west with Battery Weed Road in the foreground. (SUNY ESF, 2007)

Views and Vistas

During the historic period, the panoramic views of New York Harbor from the headland, both from the overlook and shoreline, were character-defining features that were key to the strategic design of the landscape and also drew many visitors. Visitors also enjoyed sweeping water-level views from the granite seawall of Battery Weed and from the north dock. The view from the barbette tier of Battery Weed was an important strategic element that allowed a full range and angle of fire for the guns mounted there. During times of military inactivity, visitors also climbed the circular granite steps and enjoyed the spectacular views from the barbette tier. Some of these views were either obstructed or disappeared after 1945 due to growth of successional woods, but since 1995 have in part been reopened by the park (CLR 2008:168).

VV-1, Overlook View

Historic Condition:

The overlook at crest of the slope, 123 feet above the Narrows and Battery Weed, provided an open and panoramic view from north to south. Strategically, it provided for an open range of view from Fort Tompkins. Visible from this view to the north were the bluffs along Staten Island, Upper New York Bay, and Manhattan; to the east, Brooklyn with Fort La Fayette and Fort Hamilton guarding the opposite side of the Narrows; and to the south, Lower New York Bay, the Atlantic Ocean, and Sandy Hook, New Jersey. In the foreground of the view above the bay were the north dock on the waterfront, Battery Weed, the earthen batteries and the bustling maritime activity through the Narrows. As visitors strolled along the promenade along the overlook and walked down the slope, they experienced a changing perspective on this view and the activities on the bay and waterfront below. Access to the slope walks was removed in c.1938 (CLR 2008:168).

Existing Condition:

By the 1980s, the panoramic view from the overlook became obstructed through the growth of successional woods on formerly open ground. In c.1995, the park cleared a large part of these woods to reopen the view, but left portions of the slope to the north and south wooded, which provided a more constricted view than what existed prior to 1945. The Verrazano-Narrows Bridge also obstructs views to the east and south. Despite growth of the clearing in vines, the view of the harbor looking northeast from the overlook is panoramic (Figure 30) (CLR 2008:168-169).

VV-2, Water-Level Views

Historic Condition:

Panoramic views across the water are inherent in the coastal site, but became formalized with construction of the Battery Weed, which required the views for strategic purposes. The completion of the seawall and moat in c.1871 allowed access to the waterfront, opening the views to informal, occasional public use (CLR 2008:169).

Existing Condition:

Loss of the timber dock extension in c.1960 resulted in restricted range of view from the

waterfront. The panoramic waterfront views along the seawall and north dock encompass the Staten Island shoreline, Upper New York Bay, and Manhattan to the north, the Narrows, Brooklyn, and Forts Lafayette and Hamilton to the east, and Lower New York Bay to the south with Coney Island in the distance (Figure 31). The Verrazano-Narrows Bridge constricts the views to the south. Access to the shoreline and waterfront views is restricted by fencing (CLR 2008:169).

Character-defining Features:

Feature: Overlook View [VV-1, Overlook View]

Feature Identification Number: 138318

Type of Feature Contribution: Contributing

Feature: Water-Level Views [VV-2, Water-Level Views]

Feature Identification Number: 138320

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:

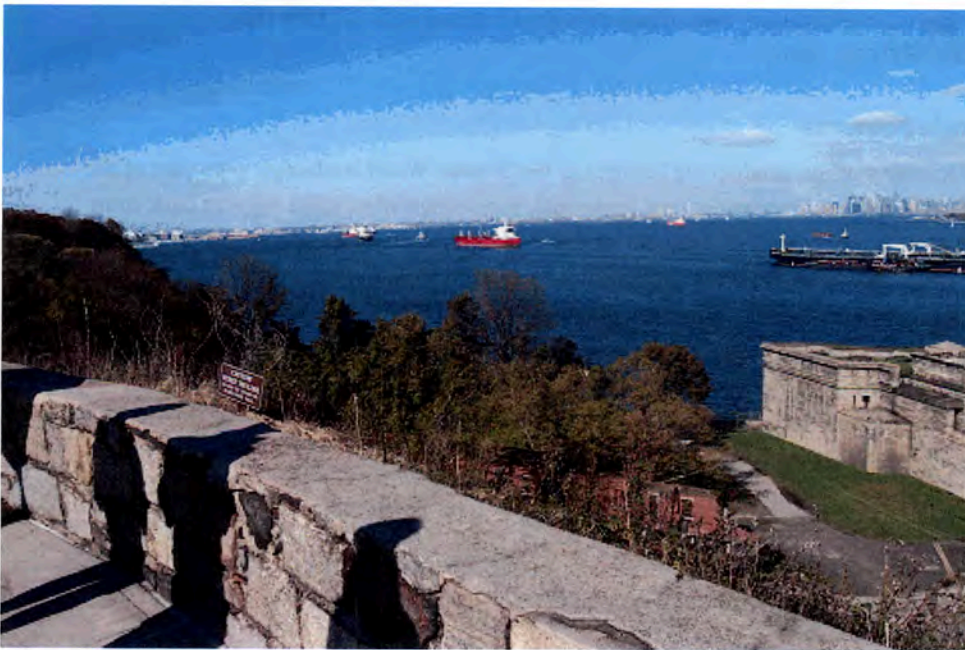


Figure 30. The panoramic view (VV-1), looking northeast across New York Harbor toward Manhattan at upper right. (SUNY ESF, 2007)



Figure 31. Water-level views (VV-2) looking southeast from the north dock with Coney Island (Brooklyn) in the distance. One of two iron dock bollards (SS-11) is in the foreground. (SUNY ESF, 2007)

Small Scale Features

Historically, many of the small-scale features in the Battery Weed landscape were part of the coastal defense artillery, including guns (cannons), long-rangerifles, mine railway cars, mine cases, and mine planting vessels, but also included features such as flag poles, utility poles, and bollards. After c.1942, most of the cannons were removed from the site and stored elsewhere or used for scrap as part of the war effort, and after the war, the remainder of the artillery including smaller guns and mines were also removed. Small-scale features introduced after 1945 were installed either for security purposes, such as fences and light standards, or for recreation, such as benches, signs, and trash cans. Several guns were installed as interpretive elements (CLR 2008:169-170).

SS-1, Chain Link Fencing

Historic Condition:

Chain-link fencing most likely did not exist in the landscape during the historic period (CLR 2008:170).

Existing Condition:

Six-foot high chain-link fencing, installed after 1945 to close off access to the waterfront and abandoned buildings, is located along the east side of the Torpedo Storage Building, around the second mine casemate on Battery Catlin, and across the dock road, where a locked gate closes off access to the waterfront (CLR 2008:170).

SS-2, Overlook Telescopic Viewing Stations

Historic Condition:

Telescopic viewing stations did not exist in the landscape during the historic period (CLR 2008:170).

Existing Condition:

Two binocular telescopic viewing stations, installed after c.1995, are located along the west side of the stone wall at the overlook terrace. The viewing stations allow visitors to get a closer look at sights such as Battery Weed, shipping traffic in the Narrows, the Manhattan skyline, Brooklyn, and the Verrazano-Narrows Bridge (CLR 2008:170).

SS-3, Overlook Flagpole

Historic Condition:

The flagpole at the overlook did not exist during the historic period (CLR 2008:171).

Existing Condition:

An aluminum flagpole with yardarms, approximately fifty feet tall, was installed at the overlook above Battery Weed in c.1995 as part of the park's redesign of the overlook terrace. The pole, which is on axis with Tompkins Road, displays an American flag, a National Park Service flag, and a Department of the Interior flag (CLR 2008:171).

SS-4, Overlook Gun

Historic Condition:

Two cannons (guns) existed at the south end of the overlook between c.1873 and c.1908. The existing gun did not exist during the historic period (CLR 2008:171).

Existing Condition:

The overlook gun was installed as an interpretive element in the late 1990s or early 2000s as part of the park's redesign of the overlook terrace. The gun, on a concrete mount, is smaller than those that existed historically near this location. The successional woods on the adjoining slope block the line of fire toward the harbor that would have existed from this gun (CLR 2008:171).

SS-5, Cable Testing Trough

Historic Condition:

A cable testing trough was installed in c.1904 near the entrance to Battery Weed. The feature was used to test mine cable that were stored in adjoining buildings that lined the west side of Battery Weed (CLR 2008:171).

Existing Condition:

The cable testing trough, a metal covered chamber located on the fortress grounds near the entrance to Battery Weed, measures approximately four feet by six feet and is set flush with the lawn (Figure 32). Adjoining the cable testing tank are two concentric concrete footings that are the remains of the cable testing tank (see A-4) (CLR 2008:171).

SS-6, Parade Ground Munitions Pads

Historic Condition:

The parade ground munitions were probably installed prior to 1893. A photograph by Alice

Austin dated 1893 showing cannon balls stacked in an area corresponding with the existing pads. There may have been additional munitions pads in the parade grounds at the time. Following removal of the guns from Battery Weed by c.1903, cannonballs were probably no longer stored on the parade grounds (CLR 2008:172).

Existing Condition:

The parade ground munitions pads are two rectangular poured concrete panels located to either side of the flagpole near the east edge of the parade ground beside the stone gutters. Both are approximately seven feet wide, one is twenty feet long, the other thirty-two feet long (see Figure 21). The concrete is flush with the lawn (CLR 2008:172).

SS-7, Parade Ground Flagpole

Historic Condition:

A steel flagpole was installed in the center of the Battery Weed parade ground between 1893 and 1945 (it is not visible in the 1893 Alice Austin photograph). The exact date of the flagpole's installation is not known. Flagpoles were historically key features of military parade grounds (CLR 2008:172).

Existing Condition:

The parade ground flagpole is steel with a concrete base and a ball finial. It is located between the two parade ground munitions pads near the north/south center of the parade ground and is approximately twenty feet tall (see Figure 21). (CLR 2008:172).

SS-8, Park Benches

Historic Condition:

The eight park benches in the Battery Weed headland did not exist during the historic period (CLR 2008:173).

Existing Condition:

Four of the park benches are located at the overlook terrace, three are outside the south end of the Torpedo Storage Building, and one is along the west wall of Battery Weed. They are constructed of plastic or fiberglass and metal with concrete bases (CLR 2008:173).

SS-9, Interpretive Waysides

Historic Condition:

The six interpretive waysides in the Battery Weed headland did not exist during the historic period (CLR 2008:173).

Existing Condition:

Installed after 1995, three of the interpretive waysides are located at the overlook terrace, one near the south end of the Torpedo Storage Building, one near the entrance to Battery Weed, and one along the dock road near the chain link fence. They are approximately thirty by forty inches, constructed of metal and plastic (CLR 2008:173).

SS-10, Dock Utility Pole

Historic Condition:

The dock utility pole at the shoreline was probably installed by c.1907 with construction of the

timber dock extension, dock house, and mine boathouse. It probably provided power and communications between the north dock facilities and other locations at Fort Wadsworth (CLR 2008:173).

Existing Condition:

By 1960, the facilities on the north dock that the utility line serviced had been removed. The wood dock utility pole is approximately thirty feet tall with climbing hardware and a single wire remaining attached (Figure 33) (CLR 2008:173).

SS-11, North Dock Bollards

Historic Condition:

The dock bollards were probably installed at the time of the north dock's construction in c.1858. These may have been fabricated from cannon shafts, with a cap installed on the top. There may have been additional bollards, but their number and location are not known (CLR 2008:174).

Existing Condition:

The two dock bollards located on the southeast and southwest corners of the north dock are made of cast iron, approximately three feet tall in a gently tapered column that has the shape of cannon shafts (see Figure 31). The surface of the bollards is lightly rusted and smooth, and they are in good condition (CLR 2008:174).

Character-defining Features:

Feature: Chain Link Fencing (no #) [SS-1, Chain Link Fencing]

Feature Identification Number: 138332

Type of Feature Contribution: Non Contributing

Feature: Overlook Telescopic Viewing Stations (no #) [SS-2, Overlook Telescopic Viewing Stations]

Feature Identification Number: 138334

Type of Feature Contribution: Non Contributing

Feature: Overlook Flagpole (no #) [SS-3, Overlook Flagpole]

Feature Identification Number: 138336

Type of Feature Contribution: Non Contributing

Feature: Overlook Gun (no #) [SS-4, Overlook Gun]

Feature Identification Number: 138338

Type of Feature Contribution: Non Contributing

Feature: Cable Testing Trough (no #) [SS-5, Cable Testing Trough]

Feature Identification Number: 138342

Type of Feature Contribution: Contributing

Feature: Parade Ground Munitions Pads (no #) [SS-6, Parade Ground Munitions Pads]

Feature Identification Number: 138344

Type of Feature Contribution: Contributing

Feature: Parade Ground Flagpole (no #) [SS-7, Parade Ground Flagpole]

Feature Identification Number: 138346

Type of Feature Contribution: Contributing

Feature: Park Benches (no #) [SS-8, Park Benches]

Feature Identification Number: 138348

Type of Feature Contribution: Non Contributing

Feature: Interpretive Waysides (no #) [SS-9, Interpretive Waysides]

Feature Identification Number: 138350

Type of Feature Contribution: Non Contributing

Feature: Dock Utility Pole (no #) [SS-10, Dock Utility Pole]

Feature Identification Number: 138352

Type of Feature Contribution: Contributing

Feature: North Dock Bollards (no #) [SS-11, North Dock Bollards]

Feature Identification Number: 138358

Type of Feature Contribution: Contributing

Landscape Characteristic Graphics:



Figure 32. The cable testing trough (SS-5) (upper left of photograph) installed in c.1904, looking north with the circular foundations of the c.1921 cable testing tank in the foreground (A-4). (SUNY ESF, 2007)

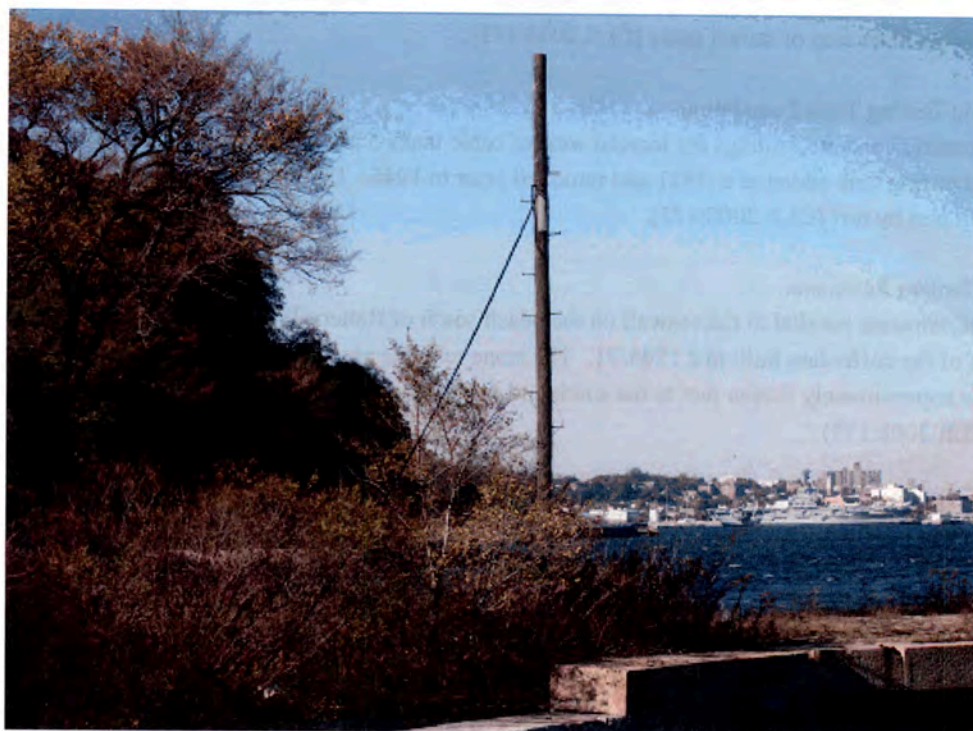


Figure 33. The dock utility pole (SS-10) added by c.1907, looking northwest with the seawall and bulkhead for the north dock in the foreground. (SUNY ESF, 2007)

Archeological Sites

There remain a number of foundations and other remnants of buildings and structures in the Battery Weed headland, most of which have been removed since 1945. Although these do not contribute to the overall character of the landscape, they do have the potential to serve as important interpretive elements and provide information on the historic operation of the fortifications on the headland. These include the following:

A-1, Cable Tank 1 and 2 Foundations

Concrete foundations from two wood-frame cable tank buildings built in 1898-1899 are located in an area approximately one hundred feet long, parallel to the Torpedo Storage Building. Remnants of the mine railway extend up to the south end of the foundations. These foundations are partly concealed by vegetation (CLR 2008:174).

A-2, Cable Tank 3 Foundation

Concrete foundations from a wood-frame cable tank building dating to c.1905 are located in an area just to the west of cable tanks 1 and 2, near the dock road. These foundations are concealed by vegetation (CLR 2008:174).

A-3, Cable Tanks 4, 5 and 6 Foundations

Concrete foundations from three wood-frame cable tank buildings built in c.1905 extend along the exterior of the west wall of Battery Weed, over the west moat wall. The foundations are clearly visible in an area of mown grass (CLR 2008:175).

A-4, Cable Testing Tank Foundations

Two concentric concrete footings are located west of cable tanks 5 and 6. These are remains of a cable testing tank added in c.1921 and removed prior to 1945. The foundations are covered in part by turf (CLR 2008:175).

A-5, Cofferdam Remnants

Structural remnants parallel to the seawall on the beach south of Battery Weed may be remnants of the cofferdam built in c.1846-71. The stone remains are located below the high water line approximately fifteen feet to the south and east sides of the seawall around Battery Weed (CLR 2008:175).

In addition to visible remnants, there are also many subsurface archeological remains in the Battery Weed headland. Archeological investigations by the Navy and National Park Service over the past two decades reveal some level of general environmental sensitivity for prehistoric use of the bluff edge and base for resources procurement, but the potential for presence of intact or significant resources has been limited by the historical construction episodes. Construction of Batteries Catlin and Bacon between 1898 and 1904 probably destroyed most of the earlier batteries, and additional resources most likely have been destroyed by construction of the mine defense complex buildings and structures. However, there is some potential for resources associated with the early British block house and with the first Fort Richmond to be present beneath or immediately adjacent to Battery Weed. Prior archeological investigation

also has identified some potential for evidence of later features including support buildings associated with the construction of Fort Wadsworth/Battery Weed, the cofferdam remnants, and water-control features within the filled moat (CLR 2008:175).

Character-defining Features:

Feature: Cable Tanks 1 and 2 Foundations [A-1, Cable Tanks 1 and 2 Foundations]

Feature Identification Number: 138376

Type of Feature Contribution: Undetermined

Feature: Cable Tank 3 Foundation [A-2, Cable Tank 3 Foundation]

Feature Identification Number: 138378

Type of Feature Contribution: Undetermined

Feature: Cable Tanks 4,5 and 6 Foundations [A-3, Cable Tanks 4,5 and 6 Foundations]

Feature Identification Number: 138428

Type of Feature Contribution: Undetermined

Feature: Cable Testing Tank Foundations [A-4, Cable Testing Tank Foundations]

Feature Identification Number: 138432

Type of Feature Contribution: Undetermined

Feature: Cofferdam Remnants [A-5, Cofferdam Remnants]

Feature Identification Number: 138434

Type of Feature Contribution: Undetermined

Condition

Condition Assessment and Impacts

Condition Assessment: Fair
Assessment Date: 08/19/2009

Condition Assessment Explanatory Narrative:

The condition of the landscape at the time of this report's completion is evaluated as "fair." The site's major resources – the Battery Weed fort, parade ground, and overlook – are in good condition, but there is deterioration of secondary resources such as the batteries and mine casemate buildings & structures. Additionally, the growth of invasive vines on the slope has limited some of the site's key views and spatial relationships.

Stabilization Measures:

A project entitled "Stabilize Battery Weed Seawall and Walkway to Provide Visitor Access" (PMIS 134585) will consist of stabilizing the historic Battery Weed Seawall and adjacent walkway. Stabilization work will consist of repairs to the masonry seawall structure, and drainage improvements to the platform surface behind the seawall.

The Battery Weed seawall and walkway have been closed to the public for the entire period of NPS administration of Fort Wadsworth. Recently completed masonry repairs to the seawall, as well as completion of a nearby bicycle path extending along the eastern shore of Fort Wadsworth, have improved conditions in this area of the site. The goal of the proposed project would be to build on these previous projects, and stabilize the seawall and walkway sufficient to allow for visitor access.

Impacts

Type of Impact:	Erosion
Other Impact:	n/a
External or Internal:	Internal
Impact Description:	Erosion around the seawall is an ongoing problem at this coastal site. Measures are currently underway to stabilize this area, but will always need to be monitored, especially after storm or wind events.
Type of Impact:	Exposure To Elements
Other Impact:	n/a
External or Internal:	Internal
Impact Description:	Corrosion is an ongoing problem to buildings, structures, and other

landscape features at this coastal site, and should be carefully monitored.

Type of Impact: Improper Drainage

Other Impact: n/a

External or Internal: Internal

Impact Description: Drainage of sea and storm water around the seawall are an ongoing issue at the site. Measures are currently underway to stabilize this area, but will always need to be monitored, especially after storm or wind events.

Type of Impact: Vegetation/Invasive Plants

Other Impact: n/a

External or Internal: Internal

Impact Description: Invasive trees, shrubs, vines and other vegetation have shrouded some of the site's historic buildings, structures, landscape features, and key views. This vegetation has also begun to cause extensive damage to the mortar and the various structural components that make up the fortifications.

Type of Impact: Vandalism/Theft/Arson

Other Impact: n/a

External or Internal: Internal

Impact Description: Missing shutters on the Battery Weed fort as well as other structures have allowed access to vandals. In some instances, vandals have set fires.

Stabilization Costs

Landscape Stabilization Cost: 866,988.00

Cost Date: 02/25/2009

Level of Estimate: C - Similar Facilities

Cost Estimator: Park/FMSS

Landscape Stabilization Cost Explanatory Description:

The cost estimate above is from PMIS 134585.

Treatment

Treatment

Approved Treatment: Rehabilitation

Approved Treatment Document: Cultural Landscape Report

Approved Treatment Document Explanatory Narrative:

Extensive treatment recommendations for the Battery Weed headland are presented in the 2008 report, "Cultural Landscape Report for the Battery Weed Headland, Fort Wadsworth, Gateway National Recreation Area." The year 1945 provides an appropriate benchmark for treatment of the landscape of the Battery Weed headland. It represents the end of the period of active military use and is consistent with the end of the period of significance recommended in the Draft Site Management Plan (CLR 2008:205).

Previous planning reports including the 1979 General Management Plan (GMP) and the 1995 Draft Site Management Plan do not prescribe a specific treatment approach for the landscape of the Battery Weed headland. However, in keeping with the general management approach of the plans, the CLR recommends Rehabilitation as the primary treatment to allow the park to meet objectives to both preserve and enhance the property for public visitation. Rehabilitation as the primary treatment does not preclude application of the other standards on a feature-level basis. Preservation should be the baseline treatment for all landscape features, including buildings and structures. In addition to Preservation, Rehabilitation could include resurfacing of park roads to improve accessibility, restoration of the partially ruined Mine Casemate, reconstruction of lost cable tank buildings, or addition of new facilities such as restrooms or a transportation shelter provided they are designed in a manner that is compatible with the historic character of the landscape (CLR 2008:204-205).

Current planning efforts anticipate the development of a new GMP for Gateway National Recreation Area that will supersede the 1979 General Management Plan. It will become the primary planning document for Fort Wadsworth and the Battery Weed headland over the next two to three decades. Completion of the updated General Management Plan is not expected for another five years. Given this, this treatment plan refers to the 1995 Draft Site Management Plan as the most current planning document for the Battery Weed headland (CLR 2008:203).

Proposed construction projects at the Battery Weed headland that will directly impact the landscape include "Rehabilitation of Battery Weed Seawall and Dock" (PMIS 16634) and "Manage Vegetation at Endicott-Era Batteries" (PMIS 47251). Other projects at the site include: "Repair And Rehabilitate Battery Weed Lighthouse" (PMIS 13258); "Restore Battery Weed Gatehouse" (PMIS 17271); "Rehabilitate Torpedo Building into Visitor Use Facility" (PMIS 16639); and "Reproduce 10 Cannons & Carriages for Exhibit at Battery Weed" (PMIS 11410).

Approved Treatment Completed: No

Bibliography and Supplemental Information

Bibliography

- Citation Author:** Black, Frederick R.
Citation Title: A History of Fort Wadsworth, New York Harbor.
Year of Publication: 1983
Citation Publisher: Boston, Massachusetts: U.S. Department of the Interior, National Park Service, N
- Citation Author:** Hilton, George W.
Citation Title: The Staten Island Ferry.
Year of Publication: 1964
Citation Publisher: Berkeley, CA: Howell-North
- Citation Author:** Holden, Edna
Citation Title: "Staten Island, A Resource Manual for School and Community, Board of Education of the City of New York."
Year of Publication: 1964
Citation Publisher: Bureau of Curriculum Research
- Citation Author:** Gleisner, Jean B. and John Auwaerter
Citation Title: Cultural Landscape Report for the Battery Weed Headland, Fort Wadsworth, Gateway National Recreation Area.
Year of Publication: 2008
Citation Publisher: State University of New York, College of Environmental Science and Forestry, Syr
- Citation Author:** Melville, Herman
Citation Title: Redburn.
Year of Publication: 1849
Citation Publisher: Harmondsworth, Middlesex, England: Penguin English Library

- Citation Author:** National Park Service.
- Citation Title:** Gateway National Recreation Area National Register Status: Summary and Detail. Unpublished paper, October 1997.
- Year of Publication:** 1997
- Citation Publisher:** National Park Service, Boston Support Office, History Program files.
-
- Citation Author:** National Park Service.
- Citation Title:** Letter, Terry W. Savage, Superintendent, New England Support Office, to Bernadette Castro, Commissioner Parks Recreation and Historic Preservation, State of New York, 1996.
- Year of Publication:** 1996
- Citation Publisher:** National Park Service, Boston Support Office, History Program files.
-
- Citation Author:** National Park Service.
- Citation Title:** List of Classified Structures.
- Year of Publication:** 2009
- Citation Publisher:** National Park Service, <http://www.hscl.cr.nps.gov/>
-
- Citation Author:** National Park Service.
- Citation Title:** National Register of Historic Places Determination of Eligibility, Endicott-Era Batteries of Fort Wadsworth, 1985.
- Year of Publication:** 1985
- Citation Publisher:** National Park Service, Boston Support Office, History Program files.
-
- Citation Author:** National Park Service.
- Citation Title:** National Register of Historic Places Registration Form, Battery Weed, 1972.
- Year of Publication:** 1972
- Citation Publisher:** National Park Service, Boston Support Office, History Program files.

Citation Author: National Park Service.
Citation Title: National Register of Historic Places Registration Form, Fort Tompkins Quadrangle, Ft. Wadsworth, 1974.
Year of Publication: 1974
Citation Publisher: National Park Service, Boston Support Office, History Program files.

Citation Author: National Park Service.
Citation Title: National Register of Historic Places Registration Form, Fort Wadsworth, draft 1997.
Year of Publication: 1997
Citation Publisher: National Park Service, Boston Support Office, History Program files.

Citation Author: n/a
Citation Title: New York Bay and Harbor.
Year of Publication: 1852
Citation Publisher: Unidentified newspaper article, clipping in collection of Staten Island Institut

Citation Author: Roper, Laura Wood
Citation Title: FLO, A Biography of Frederick Law Olmsted.
Year of Publication: 1973
Citation Publisher: Baltimore: The Johns Hopkins University Press

Citation Author: Steinmeyer, Henry G.
Citation Title: Staten Island 1524-1898.
Year of Publication: 1987
Citation Publisher: Richmondtown, NY: Staten Island Historical Society

Digital Files

Correspondence

CULTURAL LANDSCAPES INVENTORY
CONCURRENCE FORM

Battery Weed Headland
Gateway National Recreation Area

Gateway National Recreation Area concurs with the findings of the Cultural Landscape Inventory (CLI) for Battery Weed Headland including the following specific components:

MANAGEMENT CATEGORY: Must Be Preserved and Maintained

CONDITION ASSESSMENT: Fair

Good: indicates the inventory unit shows no clear evidence of major negative disturbance and deterioration by natural and/or human forces. The inventory unit's cultural and natural values are as well preserved as can be expected under the given environmental conditions. No immediate corrective action is required to maintain its current condition.

Fair: indicates the inventory unit shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some degree of corrective action is needed within 3-5 years to prevent further harm to its cultural and/or natural values. If left to continue without the appropriate corrective action, the cumulative effect of the deterioration of many of the character defining elements will cause the inventory unit to degrade to a poor condition.

Poor: indicates the inventory unit shows clear evidence of major disturbance and rapid deterioration by natural and/or human forces. Immediate corrective action is required to protect and preserve the remaining historical and natural values.

The Cultural Landscape Inventory for Battery Weed Headland is hereby approved and accepted.



Superintendent, Gateway National Recreation Area

8/19/09

Date



"Howe, Kathy (PEB)"
<Kathy.Howe@oprhp.state.ny.us>

09/21/2009 02:58 PM

To "Jeff_Killion@nps.gov" <Jeff_Killion@nps.gov>

cc "Capella-Peters, Christine (CEN)"
<Christine.Capella-Peters@oprhp.state.ny.us>, "Mackey,
Douglas (PEB)" <Douglas.Mackey@oprhp.state.ny.us>,
bcc

Subject RE: Comments from SHPO on the Battery Weed CLI

History:

☞ This message has been replied to.

Hi Jeff,

Thank you, again. Yes, the changes you've suggested to the text of the CLI are acceptable to the NY SHPO.

Best,

Kathleen A. Howe
Historic Preservation Program Analyst
NYS Office of Parks, Recreation & Historic Preservation
Field Services Bureau
Peebles Island
P.O. Box 189
Waterford, NY 12188-0189
ph. 518-237-8643 ext. 3266
fax 518-233-9049
kathy.howe@oprhp.state.ny.us

-----Original Message-----

From: Jeff_Killion@nps.gov [mailto:Jeff_Killion@nps.gov]
Sent: Friday, September 18, 2009 10:42 AM
To: Howe, Kathy (PEB)
Cc: Capella-Peters, Christine (CEN); Mackey, Douglas (PEB); Peckham, Mark (PEB)
Subject: RE: Comments from SHPO on the Battery Weed CLI

Hi Kathy,

Chris is satisfied with our solution regarding the three resources in question, so that part of the issue is resolved.

Regarding the period of significance, the CLI is documenting the landscape, which is what the period of significance refers to. Since we agree that the landscape retains integrity to the period 1847-1945, we will clarify sections in the report (p.11 and p.25) that speak of the period of significance as follows:

Based on the extant landscape resources that retain integrity, the period of significance for the landscape at Battery Weed headland extends from the beginning of construction of the Third System fort in 1847 through the end of World War II in 1945. There may be potential for archeological significance prior to 1847, but such investigation and

evaluation is beyond the scope of the CLI program. After 1945, there was no substantial new construction, and the site deteriorated from lack of active military use, although other areas of Fort Wadsworth remained under military jurisdiction until 1995 (CLR 2008:140).

Jeff

Jeffrey Killion
Historical Landscape Architect, Cultural Landscapes Inventory Coordinator,
Northeast Region
Olmsted Center for Landscape Preservation
15 State Street, 6th Floor
Boston, MA 02109
617-223-5053 (telephone)
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"Howe, Kathy
(PEB)"
<Kathy.Howe@oprhp
.state.ny.us>

09/17/2009 03:01
PM

"'Jeff_Killion@nps.gov'"
<Jeff_Killion@nps.gov>

To

cc

"Capella-Peters, Christine (CEN)"
<Christine.Capella-Peters@oprhp.state.ny.us>, "Mackey, Douglas (PEB)"
<Douglas.Mackey@oprhp.state.ny.us>, "Peckham, Mark (PEB)"
<Mark.Peckham@oprhp.state.ny.us>

Subject

RE: Comments from SHPO on the
Battery Weed CLI

Hi Jeff:

I'll defer to Chris on the "Status of Landscape Features" part of your email.

It would be fine to add the sentence below to p. 11 and p. 25, but we would want to be sure there are no references in the CLI to a "period of significance" of 1847-1945 for either the Battery Weed fort, Battery Weed headland landscape, or the larger Fort Wadsworth. Citing integrity to a specific period is fine for the landscape but we need to be careful throughout the document that the 1847 to 1945 period does not get misconstrued with the NR use of the term "period of significance." Doug

Mackey, our archaeologist, feels quite strongly that we should not overlook the archeological potential of the site. But, we understand that any archeological investigations are outside the scope of the CLI.

Sincerely,

Kathleen A. Howe
Historic Preservation Program Analyst
NYS Office of Parks, Recreation & Historic Preservation
Field Services Bureau
Peebles Island
P.O. Box 189
Waterford, NY 12188-0189
ph. 518-237-8643 ext. 3266
fax 518-233-9049
kathy.howe@oprhp.state.ny.us

-----Original Message-----

From: Jeff_Killion@nps.gov [mailto:Jeff_Killion@nps.gov]
Sent: Thursday, September 17, 2009 2:15 PM
To: Howe, Kathy (PEB)
Cc: Capella-Peters, Christine (CEN); Elizabeth_Igleheart@nps.gov
Subject: Re: Comments from SHPO on the Battery Weed CLI

Dear Kathy and Chris:

Thanks for the review comments regarding the Battery Weed Headland Cultural Landscape Inventory at Gateway National Recreation Area. We propose the following changes to the CLI that we hope will address your comments.

Period of Significance

On p.11, at the end of the first full paragraph, and on p.25, at end of the first full paragraph, we will add the following statement:

"The cultural landscape retains integrity from 1847 to 1945, although the beginning date of significance for the property is contingent upon archeological investigation. Such investigation, however, is beyond the scope of the Cultural Landscapes Inventory program.

Status of Landscape Features:

Circulation features table on p.83 and vegetation features table on p.87: "Hudson Road [portion] (176)" and Overlook Promenade" will be changed to Undetermined. Such status means that additional research will be required in the future.

"Slope & Fortress Grounds Turf" will be changed to Non Contributing. At such time that this feature is restored, the status can be reexamined.

Please let me know if these changes are acceptable.

Thank you,

Jeff

Jeffrey Killion
Historical Landscape Architect, Cultural Landscapes Inventory Coordinator,
Northeast Region
Olmsted Center for Landscape Preservation
15 State Street, 6th Floor
Boston, MA 02109
617-223-5053 (telephone)
617-223-5172 (fax)

"Howe, Kathy
(PEB) "
<Kathy.Howe@oprhp.state.ny.us>

09/17/2009 12:23
PM

"Jeff_Killion@nps.gov"
<Jeff_Killion@nps.gov>

To

"Capella-Peters, Christine (CEN) "
<Christine.Capella-Peters@oprhp.state.ny.us>

cc

Subject
Comments from SHPO on the Battery
Weed CLI

(Embedded image moved to file: pic23623.gif)

Dear Jeff,

I've attached the SHPO's comments on the Battery Weed CLI. If you have any questions about our review please contact either me or Chris Capella Peters at 315-492-1756 or christine.capella-peters@oprhp.state.ny.us.

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[attachment "Battery Weed CLI comments.pdf" deleted by Jeff
Killion/Boston/NPS]



"Capella-Peters, Christine
(CEN)"
<Christine.Capella-Peters@oprhp.state.ny.us>

09/17/2009 03:06 PM

To: "'Jeff_Killion@nps.gov'" <Jeff_Killion@nps.gov>

cc: "Mackey, Douglas (PEB)"
<Douglas.Mackey@oprhp.state.ny.us>, "Peckham, Mark
(PEB)" <Mark.Peckham@oprhp.state.ny.us>, "Howe, Kathy

bcc

Subject: RE: Comments from SHPO on the Battery Weed CLI

Jeff: I agree with the language modifications addressing the landscape features. Thanks for seeking our comments.

My best to everyone at the OCLP.
Chris

From: Howe, Kathy (PEB)
Sent: Thursday, September 17, 2009 3:01 PM
To: 'Jeff_Killion@nps.gov'
Cc: Capella-Peters, Christine (CEN); Mackey, Douglas (PEB); Peckham, Mark (PEB)
Subject: RE: Comments from SHPO on the Battery Weed CLI

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p.state.ny.us>

"Jeff_Killion@nps.gov"

<Jeff_Killion@nps.gov>

09/17/2009 12:23

PM

"Capella-Peters, Christine (CEN)"

<Christine.Capella-Peters@oprhp.state.ny.us>

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Killion/Boston/NPS]



New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

David A. Paterson
Governor

Carol Ash
Commissioner

September 17, 2009

Jeff Killion
CLI Coordinator
National Park Service
Olmsted Center for Landscape Preservation
15 State Street, 6th Floor
Boston, MA 02109

Re: NPS
Battery Weed Cultural Landscape Inventory
Staten Island, Richmond County
09PR04861

Dear Mr. Killion:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO) on the Cultural Landscape Inventory (CLI) for the Battery Weed Headland in Gateway National Recreation Area. We have reviewed the CLI in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to the Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

The report was reviewed by National Register, Archeology, and Landscape staff. While the SHPO concurs with many of the conclusions of the CLI, we cannot concur with the beginning date of 1845 for the period of significance without archeological investigation of the Battery Weed fort and headland. The year 1775 is recommended in the National Register nomination (1997) as the beginning date for Fort Wadsworth. The nomination notes that "a systematic archeological inventory of Fort Wadsworth is planned by the National Park Service." It is our opinion that an archeological inventory would help clarify the archeological potential of the Battery Weed Fort and headland, and Fort Wadsworth.

Specifically, it is the opinion of the SHPO that:

- The Battery Weed fort is significant under criterion A in the area of military history and criterion C in the area of architecture. The fort may also possess significance under criterion D.
- The end date for the period of significance for the Battery Weed fort is 1861. The beginning date for the period of significance cannot be fully established without further archeological investigation.

- The Battery Weed headland contributes to the significance of Fort Wadsworth under criterion A in the area of military history and criterion C in the areas of architecture and engineering. The headland may also possess significance under criterion D.
- The end date for the period of significance of the Battery Weed headland, as part of Fort Wadsworth, is 1945. The beginning date of the period of significance cannot be fully established without further archeological investigation.
- The property retains landscape characteristics and associated features that contribute to the site's historic character.
- The cultural landscape retains substantial integrity from 1847 to 1945.

Historic Sites Restoration Coordinator Christine Capella Peters concurs with the CLI's identification of specific contributing, non-contributing and undetermined status landscape features with three exceptions, specifically:

1. Hudson Road [portion] [176]: Of the noted 2,000 linear ft. within the property, it is unclear what percentage of this road retains integrity to 1945 or earlier and therefore which section should be designated contributing.
2. Overlook Promenade: It is unclear whether the majority of this feature retains integrity to 1945 or earlier and can be considered contributing.
3. Fortress Grounds & Slope Turf: Because the document states "most of the slope and fortress grounds turf (approximately eighty percent) has been lost" it appears there is too little of this vegetation extant to demonstrate integrity and subsequently justify designating the feature contributing. It should be noted, however, that re-establishing this turf on the slope and grounds through appropriate restoration could reverse this determination in the future.

If you have any questions, I can be reached at (518) 237-8643, ext. 3266. Please refer to the Project Review (PR) number in any future correspondences regarding this project.

Sincerely,



Kathleen A. Howe
Historic Preservation Program Analyst



IN REPLY REFER TO:

H30 (NER-HPPC-OCLP)

United States Department of the Interior

NATIONAL PARK SERVICE
Northeast Region
United States Custom House
200 Chestnut Street
Philadelphia, PA 19106

AUG 07 2009

Ruth Pierpont
Director
New York State Historic Preservation Office
P.O. Box 189
Waterford, NY 12188-0189

Dear Ms. Pierpont:

Enclosed you will find a copy of the Cultural Landscape Inventory (CLI) for the Battery Weed Headland, located within Gateway National Recreation Area consisting of the Battery Weed fort and surrounding landscape that includes adjoining batteries, slope, and overlook. We seek your confirmation on previously evaluated resources and concurrence on the status of resources and features identified in this CLI that contribute to the Fort Wadsworth historic district and are previously unevaluated for listing in the National Register of Historic Places. The report has been prepared by a team of historical landscape architects with the National Park Service (NPS) Olmsted Center for Landscape Preservation. The CLI program and the enclosed report continue the NPS efforts to update our cultural resource inventories.

Through the CLI program, the NPS is currently in the midst of a nationwide effort to inventory its cultural landscapes. The CLI is conducted in accordance with Section 110 of the National Historic Preservation Act of 1966 (as amended). It is an inventory of baseline information for all historically significant cultural landscapes within the National Park System, and it examines multiple landscape features that contribute to the significance of historic properties. The CLI process includes gathering information from existing secondary sources and conducting on-site reconnaissance of the existing landscape. The information collected provides a comprehensive look at the historical development and significance of the landscape, placing it in context of the property's overall significance. For landscapes found potentially eligible for the National Register of Historic Places, the evaluation describes their character-defining features and assesses the landscape's overall historical integrity. It also raises questions about the landscape that need further study.

It is important to note that the CLI reports are not intended as comprehensive inventory reports for any one property, although for some properties they provide fuller documentation than for others. For example, the reports do not include a full architectural description of structures, but document structures as elements of the overall landscape, and similarly documents other characteristics such as vegetation, spatial organization, and views and vistas. The CLI is one component of the NPS inventory effort that also includes cultural resource inventories for

historic structures, archeological sites, ethnographic resources, and museum objects. For example, the NPS List of Classified Structures inventory includes structural features of cultural landscapes, but the CLI takes a more encompassing approach to the properties, inventorying all above-ground features in each park in which the NPS has a legal or mandated interest.

The Battery Weed headland landscape includes two National Register properties. Battery Weed was listed in the National Register of Historic Places on January 20, 1972 as a structure for significance in the areas of "Military" and "Architecture," in the context of Third System coastal fortifications. The 1972 documentation is limited to the granite structure itself, with a period of significance given as 1847 to 1861. The documentation does not discuss contributing resources and associated features of the Battery Weed headland that also includes the Endicott batteries (c.1898 to 1905), mine defense system (c.1887 to 1921), the north dock (c.1858 to c.1907), and the engineered slope (c.1847 to c.1873) and overlook (c.1873 to c.1938) above Battery Weed.

Battery Weed headland is part of Fort Wadsworth, which includes a number of individually listed or eligible properties. On July 30, 1974, Fort Tompkins (Fort Tompkins Quadrangle), just beyond the CLI boundary, was listed in the National Register for significance as an example of nineteenth-century historic military architecture. On July 5, 1985, the Endicott-period batteries at Fort Wadsworth, including their magazines, casements, emplacements, and earthworks, were determined eligible for listing by the Keeper of the National Register through the Determination of Eligibility process, and nationally significant in the areas of "Military" and "Architecture." Portions of Battery Bacon (Building #316A) and Battery Catlin (155,182) are within the CLI boundary. On November 18, 1996, additional resources at the Battery Weed headland were determined eligible for listing by your office as part of an update to the park's List of Classified Structures for Fort Wadsworth, including the seawall (228), light station (181), torpedo storage (147), warehouse (148), north dock (141), and B.C and C.R.F. Station (South) (338). In 1997, documentation of the entire 247-acre Fort Wadsworth reservation, including Battery Weed, Fort Tompkins, and fifty-seven other resources, was prepared and submitted for listing in the National Register as an historic district for national significance in areas of military, social history, architecture, engineering, and archeology (historic non-aboriginal), with the period of significance of 1755 to 1945. An additional resource identified in the 1997 documentation for the Battery Weed headland was the rail tracks (173). Although signed by your office on August 3, 1998, the 1997 nomination was not accepted by the Keeper for technical reasons and a substantive question concerning an archeological site.

The findings of this CLI indicate that the Battery Weed fort continues to meet National Register criteria A and C in the areas of military history and architecture, as documented in the 1972 National Register nomination form. Battery Weed derives significance within the national context of coastal defense, and specifically for its central role in the defense of New York Harbor during the nineteenth and twentieth centuries. The architectural significance of Battery Weed, with its granite block construction in three casemated tiers and former moat bounded by a granite seawall, is an excellent example of the Third System period (1847 to 1861) in coastal defense.

The landscape of the Battery Weed headland is also significant under criteria A and C in the areas of military history, architecture, and engineering. The Battery Weed headland, including the steep slope rising 120 feet above the Narrows that is one of the highest points along the shoreline of New York Harbor, provided an ideal strategic location for over two centuries of military development. Although its most active period was from the Civil War through World War I, the Battery Weed headland remained an active military site into World War II. The Battery Weed headland, as a component of Fort Wadsworth, is also significant as a strategic component in the development of American coastal defense systems. Aside from the fort, contributing resources remaining today include portions of the Endicott-era batteries Catlin and Bacon that were built on the site of earlier batteries flanking the fort; several buildings and structures associated with the Endicott mine defense system, including the north dock; and grading and earthworks associated with the engineered slope and the overlook area. These features represent components of the outwardly expanding New York Harbor system of defenses, and evidence the progression over time of coastal military architecture and engineering technologies.

The period of significance for the Battery Weed headland, as reflected in its landscape resources, extend from the beginning of construction of the Third System fort in 1847 through the end of World War II in 1945. The period prior to 1847 has not been included because there are no physical resources from that time, as the first fort was removed and the landscape was largely reformed. After 1945, there was no substantial new construction, and the site deteriorated from lack of active military use, although other areas of Fort Wadsworth remained under military jurisdiction until 1995.

The CLI fully evaluates the cultural landscape, particularly the associated landscape characteristics and features, and finds that overall the Battery Weed headland landscape retains sufficient integrity to convey its significance in the areas of military history, architecture, and engineering. The landscape characteristics and features that date to the period of significance should be preserved since they contribute to the historic character of the property. As noted previously, thirteen of the resources and features on the enclosed lists have already been evaluated. There are twenty-five additional features related to spatial organization, circulation, topography, vegetation, buildings and structures, views and vistas, and small-scale features that also contribute to the significance and historic character of Battery Weed headland.

We call your particular attention to the Landscape Description, the National Register Information and the statement of significance, and the Analysis and Evaluation Summary in the enclosed CLI.

Based on the CLI, we are confirming the following:

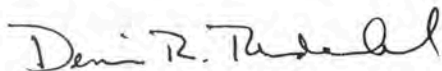
- The Battery Weed fort is significant under criteria A in the area of military history and criteria C in the area of architecture.
- The existing period of significance for the Battery Weed fort is 1847-1861.

We also seek your concurrence on the following:

- The Battery Weed headland landscape, which includes the Endicott batteries, mine defense system, the north dock, and the engineered slope and overlook above Battery Weed, contributes to the significance of Fort Wadsworth under criteria A in the area of military history and criteria C in the areas of architecture and engineering.
- The period of significance for the Battery Weed headland landscape, as part of Fort Wadsworth, is 1847-1945.
- The property retains landscape characteristics and associated features that contribute to the sites' historic character (see enclosed lists).
- The cultural landscape retains integrity to the period of significance.

If you concur with our categorization of the landscape resources and features at Battery Weed headland at Gateway National Recreation Area, as contributing, noncontributing, and undetermined, enumerated on the enclosed list, we ask that you please sign on the space provided and return this letter to Jeff Killion, CLI Coordinator, National Park Service, Olmsted Center for Landscape Preservation, 15 State Street, 6th Floor, Boston, MA 02109. We would appreciate your response within thirty days. Thank you for your attention to this inventory. Should you have any questions, please feel free to contact Mr. Killion at 617-223-5053, or by email at jeff_killion@nps.gov.

Sincerely,



Dennis R. Reidenbach
Regional Director
Northeast Region

Enclosures

cc:

Superintendent, Gateway National Recreation Area
Christine Capella-Peters

I concur with the National Park Service categorizations of the Battery Weed headland landscape resources and features at Gateway National Recreation Area as contributing, noncontributing, or undetermined.

New York State Historic Preservation Officer

Date

NPS Cultural Landscapes Inventory – Battery Weed Headland

Gateway National recreation Area

List of Contributing and Non-Contributing Landscape Features

July 2009

Contributing Landscape Characteristics & Associated Features

The following landscape characteristics and associated features contribute to the property's historic character, though not all are considered countable resources according to the National Register of Historic Places. Those marked with an * have been documented on the National Register (1972). Those marked with a # have been determined eligible for listing by the Keeper of the National Register (1985) or by the New York State Historic Preservation Office (1996, 1998).

Spatial Organization

- Parade Ground
- Moat Space
- Overlook Space
- Slope Space

Circulation

- Battery Weed Road (portion) (174)
- Hudson Road (portion) (176)
- Overlook Promenade
- Waterfront Promenade
- # Rail Tracks (173)
- Dock Road (175)

Topography

- Engineered Slope
- # Battery Catlin Earthwork (South End) (155)
- # Battery Bacon Earthwork (North End) (316A)

Vegetation

- Parade Ground Lawn
- Fortress Grounds & Slope Turf
- Specimen Roadside Trees

Buildings and Structures

- * Battery Weed (150,151)
- # Light Station (181)
- # Seawall (228)
- # Torpedo Storage (147)
- # Warehouse (148)
- Concrete Shed (144)

- # North Dock (141)
- # Mining Casement (140)
- # Battery Catlin Magazine (182)
- # Battery Bacon (portion) (316A)
- Hudson Road Wall (180)
- Parade Ground Stone Gutters
- Concrete Seawall
- Slope Retaining Wall
- # B.C. and C.R.F. Station (338)

Views and Vistas

- Overlook View
- Water-Level Views

Small-scale Features

- Cable Testing Trough
- Parade Ground Munitions Pads
- Parade Ground Flagpole
- Dock Utility Pole
- North Dock Bollards

Non-Contributing Landscape Characteristics & Associated Features

Natural Systems and Features,

- Successional Woods and Vines

Building and Structures

- Surface Drain

Small-scale Features

- Chain Link Fencing
- Overlook Telescopic Viewing Stations
- Overlook Flagpole
- Overlook Gun
- Park Benches
- Interpretive Waysides

Undetermined Landscape Characteristics & Associated Features

Circulation

- Slope Walks

Building and Structures

- Overlook Concrete Structure

Archeological Sites

Cable Tanks 1 and 2 Foundations

Cable Tank 3 Foundation

Cable Tanks 4,5 and 6 Foundations

Cable Testing Tank Foundations

Cofferdam Remnants

bcc:

Robert Page

Paul Weinbaum

Peggy Albee-Vance

Allen Cooper

Chuck Smythe

Sara Wolf

National Register

August 3, 1998

NPS Form 10-900
(Rev. 10-90)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Fort Wadsworth

other names/site number _____

2. Location

street & number Fort Wadsworth (FOWA), Gateway NRA not for publication
city or town Staten Island vicinity _____
state New York code NY county Richmond code 085
zip code 10305

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets the National Register Criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Signature of certifying official _____ Date _____

State or Federal agency and bureau

In my opinion, the property meets the National Register criteria.
(See continuation sheet for additional comments.)

J. W. Adams, Deputy Commissioner 3 August '98
Signature of commenting or other official _____ Date _____

New York State Office of Parks, Recreation and Historic Preservation
State or Federal agency and bureau

=====

National Park Service Certification

=====

I hereby certify that this property is:

- ☐ entered in the National Register
 See continuation sheet.
- ☐ determined eligible for the
 National Register
 See continuation sheet.
- ☐ determined not eligible for the
 National Register
- ☐ removed from the National Register
- ☐ other (explain): _____

Signature of Keeper

Date of Action

=====

Classification

=====

Ownership of Property

- (Check as many boxes as apply)
- ☐ private
 - ☐ public-local
 - ☐ public-State
 - ☒ public-Federal

Category of Property

(Check only one box)

- ☐ building(s)
- ☐ district
- ☒ site
- ☐ structure
- ☐ object

Number of Resources within Property

Contributing Noncontributing
51 60 buildings

JSDI/NPS NRHP Registration Form

For Wadsworth

Ramond Co., New York

Pg. No. 3

<u>1</u>	<u>2</u>	sites
<u>8</u>	<u>2</u>	structures
		objects
<u>60</u>	<u>62</u>	Total

Number of contributing resources previously listed in the National Register 2

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.) N/A

5. Function or Use

Historic Functions (Enter categories from instructions)

Cat: <u>defense</u>	Sub: <u>fortification</u>
<u>social history</u>	

Current Functions (Enter categories from instructions)

Cat: <u>landscape</u>	Sub: <u>park</u>
<u>defense</u>	<u>military facility</u>

6. Description

Architectural Classification (Enter categories from instructions)

mixed

Materials (Enter categories from instructions)

foundation	<u>granite, concrete, sandstone</u>
roof	<u>asphalt</u>
walls	<u>granite, concrete, brick,</u>
	<u>sandstone</u>
other	<u>earth</u>

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

USDI/NPS NRHP Registration Form

to Wadsworth

Albany Co., New York

Pg. No. 4

1. Statement of Significance

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- ☒ A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ B Property is associated with the lives of persons significant in our past.
- ☒ C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☒ D Property has yielded, or is likely to yield information important in prehistory or history.

2. Criteria Considerations (Mark "X" in all the boxes that apply.)

- ☐ A owned by a religious institution or used for religious purposes.
- ☐ B removed from its original location.
- ☐ C a birthplace or a grave.
- ☐ D a cemetery.
- ☐ E a reconstructed building, object, or structure.
- ☐ F a commemorative property.
- ☐ G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)

military ☒

architecture ☒

engineering ☒

archeology historic ☒

non-aboriginal ☐

social history ☐

Period of Significance 1755-1945

Significant Dates 1755, 1779, 1810, 1847, 1870, & 1898

Significant Person (Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder U.S. Army

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS)

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested.
- ☒ previously listed in the National Register
- ☒ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey #
- ☐ recorded by Historic American Engineering Record #

Primary Location of Additional Data

- ☐ State Historic Preservation Office
- ☐ Other State agency
- ☒ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Name of repository: Gateway National Recreation Area

10. Geographical Data

Acres of Property 244.7

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing	Zone	Easting	Northing	
1	18	579330	4495530	3	18	579470	4493990
2	18	580110	4494540	8	18	579030	4495100
<u> </u> See continuation sheet.							

Verbal Boundary Description See Pg 6

Boundary Justification See Pg 6

1. Form Prepared By

Name/Title: Larry Lowenthal, Historian NER
Peter Bathurst, Chief, Cultural Resources Management, GATE

Organization: Gateway National Recreation Area (NPS) Date: July 15, 1997

Street & Number: HQs, Bldg #69 Floyd Bennett Field Telephone: 718-448-5679

City/Town: Brooklyn State: NY Zip Code: 11234

Additional Documentation

Submit the following items with the completed form:

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.
Sketch maps for historic districts and properties having large acreage
or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner

Complete this item at the request of the SHPO or FPO.)

Name _____

Street & number _____ telephone _____

City or town _____ state _____ zip code _____

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties or listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended 16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated at an average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form should be sent to the Chief, Administrative Services Division, National Park Service, P.O. Box 7127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

DESCRIPTION

Fort Wadsworth occupies 244.7 acres on the eastern shore of Staten Island at the Narrows of New York Harbor. The geography of the Narrows forms a gate-like entrance to what became the most important port in the country. General von Steuben, of Revolutionary War fame called the Narrows "the place pointed out by nature for the defense of the harbor."

The historic resources at Fort Wadsworth are associated with the coastal defenses of New York Harbor. They formed part of a complex of harbor fortifications that protected the vital port for some 200 years. At present the site includes two major Third System fortifications that are listed on the National Register of Historic Places--Battery Weed and Fort Tompkins. Fifteen other batteries and numerous military-related resources on the site date from the early 1800s to the 1990s. These resources include a wide variety of facilities typically found on military bases, such as housing, barracks, offices, maintenance/storage facilities, post exchange, and ancillary support facilities.

The site's most conspicuous and determining landform is a bluff that rises from sea level to an elevation of 150 feet. Battery Weed lies at the toe of the slope, with Fort Tompkins at the highest point. Wetlands exist along the confluence of the uplands and the Narrows. Bordering the site's eastern and southern edges is a natural sandy beach. A diversity of native and nonnative vegetation has taken hold throughout the site, with ages varying from recent plantings to trees that are 150-200 years old.

The Narrows and adjacent high ground constitute the most significant geological remains of the last glacial period. These types of features are not often found in such close proximity. It is these landforms that led the military to develop a strong defense capability. This configuration provides the spectacular view of inner New York Harbor and Raritan Bay, is one of the distinguishing characteristics of the site. It is an excellent vantage point from which to gain an appreciation of the geographic factors that shaped the historical development of the New York metropolitan area.

Description of Contributing Resources within the Historic Site

The most important resources are described below.

Historic Buildings and Structures

Fort Tompkins (Building 137). The extant Fort Tompkins is constructed on the same site as two earlier fortifications, one built by the British (ca 1781), the other built by the state of New York (ca 1810). It was begun in 1859 and completed in 1876. It was originally designed and built as a fortified barracks in support of Battery Weed. Built of granite and brick with an earthen roof, the fort is a prime example of architectural stone fortifications. The five-sided building has one side that overlooks Battery Weed and the entrance to the inner harbor. Its granite walls surround a parade ground. A counterscarp wall was constructed on the landward sides of the fort, but the south wall no longer remains, having been shortened by the later construction of Battery Duane. Fort Tompkins is an outstanding example of Third System military architecture and is well preserved.

Battery Weed (Building 151). The earliest structure remaining in its entirety at the fort is Battery Weed, begun in 1847 and completed between 1861 and 1864. At that time it mounted 102 cannons and was garrisoned by a large force from the Fifth Regiment, New York Volunteer Artillery. The building, a half-hexagon shape with a central parade ground, is constructed of ashlar granite blocks. It has three tiers of casemates and a fourth barbette tier, each

with gun emplacements. Circular granite staircases of astonishingly perfect spirals provide access between tiers. In the center of the landside (west) wall is a two-story guardhouse and large main gate through which the battery is entered. A moat originally surrounded the battery, but it has been filled in, the drawbridge is missing. Battery Weed is an important example of a multi-tiered casemated fort belonging to the "Third System" of American seacoast fortifications and is still in an excellent state of overall preservation.

Endicott Batteries (buildings 133 Battery Duane; 155 Battery Catlin; 315 Battery Emory Upton; 316 Battery Bacon; 316A Battery Turnbull; 316B Battery Barbour; 317 Battery Hudson; 318 Battery Mills; 319 Battery Dix; 321 Battery Barry; 421 Battery Richmond; and 422 Battery Ayres). These batteries, constructed between 1895-1904, represent the Endicott Period of American military defense. They carried out the recommendations of the Endicott Board, headed by Secretary of War William C. Endicott. Made of concrete, granite, and extensive earthen construction, they were a response to the failure of previous systems to defend against the newly developed rifled artillery. Some of these structures were constructed over earlier batteries dating to the Second System. Visually, they are a major departure from the batteries and forts they replaced. Many of these batteries featured breech-loading, disappearing guns that were designed to protect the defenders and "could fire projectiles that, caliber for caliber, were four times as heavy, to effective ranges two to three times as great; and they could do so with remarkably increased armor-penetration ability and accuracy." The batteries varied with respect to the number of guns mounted. Their present condition also varies widely, but are generally in a state of deterioration..

B.C. & C.R.F. Stations. Three Battery Control and Coincident Range Finder (B.C. & C.R.F) Stations survive. Two, located in proximity to Batteries Catlin and Bacon, are of the World War I vintage. The third, located east of Battery Dix, was constructed during World War II to control fire from four nearby guns which had been removed from Battery Turnbull. They were used for optically spotting and determining azimuth of targets and then relaying the information over telephone lines to the gun emplacements.

Glacis Mortar Battery; Glacis Gun Battery and South Mortar Battery. These batteries, representing the post Civil War period of American military defense, were constructed in the early 1870s. The glacis gun battery, consisting of three granite gun emplacements in a staggered line descending the ridge north of Fort Tompkins, was built for five-inch guns and provided with two magazines. It contained no mounted weapons during the period ending in 1890. The glacis mortar battery, south of Fort Tompkins, was the only open battery to receive its entire armament. The gun battery is mostly intact; the foundation of the parapet of the mortar battery remains. The South battery magazine and earth works remain, although encroached by later Endicott batteries.

Seawall and Dock. Constructed ca; 1847, the dock and seawall are at the water's edge just north of Battery Weed. The L-shaped dock juts out into the water. The seawall, which is in poor condition, follows the perimeter of Battery Weed and extends to the dock. The seawall functioned as the exterior side of the moat that once surrounded the battery. Both the dock and seawall are constructed of granite blocks similar in appearance to those of Battery Weed.

1st Sec Avenue (Officer's Row) (Buildings 101, 102, 103, 106, 107, 109, 110-115 Officer Housing; 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115 garages). Mont Sec Avenue was the primary locale for officers' housing for the fort beginning in the 1870s and continuing to the present day. There are 10 duplexes and one single-family residence. Four of the duplexes (111-114, built ca. 1890) are Italianate in style, asbestos shingle over the original clapboard, and 2½ stories. All were constructed by local builder Henry Spruck and conform closely to designs provided by the Chief

Quartermaster. Except for the synthetic shingles, these houses retain their original form and much of their original detail, both exterior and interior. Building 103 (ca. 1870s), a duplex that was originally clapboard but now brick faced with a mansard roof, was originally a quarters for the post surgeon or other medical officers. Buildings 101, 102, 106, 107, 110 (all duplexes), and 115 are brick buildings that were constructed by the Works Progress Administration in the 1930s. Located behind the houses, the garages serve multiple residences. Mont Sec Avenue and its associated 11 residential buildings represent a cohesive streetscape, both architecturally and functionally through use as officers' housing. Lined with rows of London Plane trees of similar age, it presents a scene of considerable visual uniformity, with buildings having repeated setbacks on both sides of the street.

Torpedo Storage Building (Building 147). This is a long, rectangular, two-story building with a gabled roof. The first story is of rusticated granite, the second is brick. It has metal windows and doors, a corrugated roof, and metal window shutters. It was built into the hillside behind Battery Weed and served as storage for the "torpedoes" or submarine mines that protected the harbor. The south end of the building was gutted by fire sometime in the last two decades.

Infantry Battalion Barracks (Building 210). Building 210 was constructed in 1929 as a three-story barracks with four main entrances and simple Art Deco detailing along the facade. It is a long, narrow building, approximately 100 feet long and 40 feet deep. Two pairs of bays project from the rear (west elevation), one pair at each end. Porches on the rear between the two pairs of bays were enclosed around 1941 to increase capacity. Sometime after 1960 the barracks was converted to office use and the windows were replaced.

Building 352. This is a two-story building with a rectangular plan and gabled roof. It has red vinyl siding with red and dark brown trim. Multi-gray-tone asphalt shingles cover the roof. Windows are one-over-one aluminum sash. Although sometimes known as the "carriage house" it appears to have been a non-commissioned officer's club built over the site of an earlier stable that was constructed on the site in 1921.

Seabee Complex (Buildings 301, 302, 303/304, 305, 309, 310). Six buildings comprise the Seabee complex. Most date from the late 1930s WPA era; building 305 dates to 1900. The complex provided support functions for the fort, 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. The exteriors of each building retain their core massing although siding materials and fenestration patterns have been altered.

Gatehouse (Building 406). This clapboard sided building was constructed sometime before 1895, before the property was acquired by the military. It is a two-story building with a cruciform plan and hipped roofs with shallow eaves. Two of the spaces between arms have been filled in with one-story enclosed rooms. The foundation is of brick and sandstone. The elevations have been covered with blue vinyl siding. Two ceramic chimney pots are set on a central chimney stack.

Gatehouse (Building 404). The west entrance gatehouse was constructed in 1939, a one story 15' square ashlar cut stone structure with a poured concrete hip roof. The building is no longer used as a gatehouse.

Non-historic Buildings and Structures

A number of non-historic buildings and structures exist within the fort, including the recently constructed three-story

brick facade building 120, 34 multi-family housing units built in 1986, three multi-unit 1990s residential buildings on New Mexico Court, and numerous ancillary support buildings.

A towering presence that overshadows the military fortifications is the Verrazano-Narrows Bridge, which was begun in 1959 and finished in 1964. The bridge bisects the site and spans the Narrows, connecting Staten Island to Brooklyn.

The complete list of contributing buildings and structures follows:

9500190

LIST OF CONTRIBUTING BUILDINGS AND STRUCTURES

101	Housing	1933	C	NPS
102	Housing	1939	C	NPS
103	Housing	c1870	C	NPS
104	Detached garage	1936	C	NPS
105	Detached garage	1932	C	NPS
106	Housing	1932	C	NPS
107	Housing	1932	C	NPS
109	Administrative (former officer's club)	1938	C	NPS
110	Housing	1933	C	NPS
111	Housing	1890	C	NPS
112	Housing	1890	C	NPS
113	Housing	1890	C	NPS
114	Housing	1889	C	NPS
115	Housing	1933	C	NPS
119	Housing	1939	C	NPS
137	Fort Tompkins	1859-76	C	NPS
138	MEARS station (inside moat at Tompkins)	1900	C	NPS
139	Signal storage (inside moat at Tompkins)	1891	C	NPS
140	Mining casemate	c1940	C	NPS
150	Guardhouse	1861	C	NPS
210	Infantry battalion barracks	1929	C	NPS
301	Motor pool	1938	C	NPS
302	Motor pool	1937	C	NPS
303	Motor pool office	1938	C	NPS
305	Administrative office	1900	C	NPS
309	Stables (storage)	1931	C	NPS
310	Storage shed	1927	C	NPS
352	NGO Club (carriage house)	1921	C	NPS
404	West gatehouse	1939	C	NPS
406	Gatehouse	pre 1895	C	NPS
421	Battery Richmond	1898-99	C	NPS
422	Battery Ayres	1900-1901	C	NPS
116	Detached Garage	1935	CS	NPS
117	Detached garage	1935	CS	NPS
133	Battery Duane	1895-97	CS	NPS

05001.000367

141	North dock/supply wharf	c1850	CS	NPS	05501.000366
147	Torpedo storage	1894	CS	NPS	
151	Battery Weed	c1861	CS	NPS	
155	Battery Catlin	1902-1904	CS	NPS	
307	Ready magazine	1910	CS	NPS	
315	Battery Upton	1896-99	CS	NPS	
316	Battery Barbour	1898	CS	NPS	
317	Battery Hudson	1898-99	CS	NPS	
318	Battery Mills	1899-1900	CS	NPS	
319	Battery Dr.	1902	CS	NPS	
320	Battery 218	1943	CS	NPS	
321	Battery Barr	1897-1899	CS	NPS	
339	Small arms magazine	1944	CS	NPS	
316A	Battery Bacon	1899	CS	NPS	
316B	Battery Turnbull	1902-1903	CS	NPS	
The following resources were not numbered historically (see sketch map)					
A	Glacé Gun Battery	1874	CS	NPS	08501.00270
B	Cable storage tank	c1900	CS	NPS	
C	B.C. & I.R.F. Station	1943	CS	NPS	
D	B.C. & I.R.F. Station	c1917	CS	NPS	
E	B.C. & I.R.F. Station	c1917	CS	NPS	
F	Rail tracks	c1894	CS	NPS	
G	Wharf/jetty	pre 1875	CS	NPS	
H	Seawall	c1850	CS	NPS	
I	Glacé Mortar Battery	1871-72	CS	NPS	
J	South Mortar Battery	1871	CS	NPS	
The following are Non-Contributing Properties					
306	Warehouse	1960	NC	NPS	05501.000366
354	Police station	1960	NC	NPS	
355	Ammo storage	1960	NC	NPS	
356	Reserve training building	1974	NC	other	
357	Vehicle shop	1977	NC	other	
358	Public works shop	1992	NC	other	
375	Gas station	ND	NC	NPS	
408	Navy Lodge	1991	NC	other	
423	Housing	1989	NC	other	
424	Housing	1989	NC	other	
425	Housing	1989	NC	other	
426	Housing	1989	NC	other	
427	Housing	1989	NC	other	
428	Housing	1989	NC	other	
429	Housing	1989	NC	other	

JSDI/NPS NRHP Registration Form

Fort Wadsworth

Richmond Co., New York

Continuation Sheet

Section 7

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430	Housing	1989	NC	other	✓
431	Housing	1989	NC	other	✓
432	Housing	1989	NC	other	✓
433	Housing	1989	NC	other	✓
434	Housing	1989	NC	other	✓
435	Housing	1989	NC	other	✓
436	Housing	1990	NC	other	✓
437	Housing	1990	NC	other	✓
438	Housing	1990	NC	other	✓
439	Housing	1990	NC	other	✓
440	Housing	1990	NC	other	✓
441	Housing	1990	NC	other	✓
442	Housing	1990	NC	other	✓
443	Housing	1990	NC	other	✓
444	Housing	1990	NC	other	✓
445	Housing	1990	NC	other	✓
446	Housing	1990	NC	other	✓
447	Housing	1990	NC	other	✓
448	Housing	1990	NC	other	✓
449	Housing	1990	NC	other	✓
450	Housing	1990	NC	other	✓
451	Housing	1990	NC	other	✓
452	Housing	1990	NC	other	✓
453	Housing	1990	NC	other	✓
454	Housing	1990	NC	other	✓
455	Jr. officer housing	1990	NC	other	✓
456	Jr. officer housing	1990	NC	NPS	✓
457	Jr. officer housing	1990	NC	NPS	✓
458	Jr. officer housing	1990	NC	NPS	✓
215A-F	Bachelor enlisted quarters building	1990	NC	other	✓
435A/B	Housing/office	1959	NC	NPS	✓
442A/B	Youth Center	1952	NC	other	✓
453A	Detached carport	1990	NC	other	✓
454A	Detached carport	1990	NC	other	✓
455A	Detached carport (Battery Control or Incident range finder)	1990	NC	other	✓

Cultural Landscape

The 244-acre Fort Wadsworth comprises a cultural landscape that is diverse and complex. Having evolved over more than two centuries of military use, the character and appearance of Fort Wadsworth is typical for a military base. New York Avenue generally divides the older portion of the post from the section acquired between 1892-1901 to provide expansion room for many of the Endicott batteries and related buildings.

In the northeast portion of the site, the Fort Tompkins and Battery Weed areas dominate the scene with their massive, ashlar cut-stone construction. Battery Weed protrudes into the Narrows, looming over the water, while behind it the land rises sharply. Atop the 150 foot knoll sits Fort Tompkins with its unrestricted views of the harbors.

Along Mont Sec Avenue there are eleven 2 to 2½-story quarters that were used for housing officers. Lined on both sides of the street are generous sidewalks, graceful London Plane trees and decorative light standards, Mont Sec Avenue has the character of an attractive residential neighborhood. Building 109, at the east end of Mont Sec Avenue, was an administrative office and then an officers' club, and has scenic views of the harbor.

New York Avenue, which bisects the northern half of the site from north to south, has served as the main street of Fort Wadsworth since the mid 19th century. Historically, the appearance of New York Avenue was a fairly dense streetscape of one to three-story buildings including a hospital, barracks, and single-family residences. With the development of the U.S. Navy homeport, the historic hospital along New York Avenue was demolished and replaced with a modern building, partly used as the NPS Staten Island Visitor Center. To the west of New York Avenue and north of the Verrazano-Narrows Bridge approach, lies the former parade ground, now partially occupied by a quadrangle of four-story buildings built in the early 1990s and now known as the USCG Headquarters. A gym, theater, post exchange, and chapel were also constructed during this period.

Just south of the bridge, New York Avenue terminates at Battery Road, (the former Richmond Avenue), which proceeds west and is lined by a variety of utilitarian buildings relating to the operation of the base. From this location to the south, lay the Endicott period batteries, Ayres, Dix, Richmond, Barry, Upton and Mills. From here, the land slopes sharply down to a sand beach that lines the southern shore. During the late 1980s, a portion of this lower area was cleared for the construction of 32 three-story multi-unit residential buildings.

Vegetative growth was controlled through World War II to retain critical military sight lines. The dramatic views of New York Harbor also brought visitors to the base in the 19th century and remain an important feature at Fort Wadsworth, as does the varied and steep topography. A dominant feature of the local landscape is the span of the Verrazano-Narrows suspension bridge which passes directly over the center of the site.

In summary, character defining features of the cultural landscape at Fort Wadsworth include:

- approximately 1/2 of the buildings at the post are contributing structures;
- the boundary as it existed from the 1901 to present;
- the circulation system, including entrances on New York Avenue and Battery Road (the former Richmond Avenue);
- the open, park-like feeling throughout the base, including older trees, both native and planted;
- the varied, and, at times, dramatic topography throughout the base;
- the impressive views of New York Harbors;
- the special alignment of the fortification to the terrain.

Archeological Resources (1 site)

Limited archeological testing completed by the U.S. Navy in support of the environmental impact statement for the homeport and archeological work undertaken in the area surrounding Fort Wadsworth, suggests a reasonably high likelihood of prehistoric and pre-Fort Wadsworth era archeological resources remaining on fort grounds. There is a high probability of finding resources with military significance. This is borne out by archeological testing at the site of old Fort Morton and related work at Fort Tompkins. A systematic archeological inventory of Fort Wadsworth is planned by the National Park Service.

The earliest prehistoric resources found on Staten Island are from the Archaic period (ca. 6,000–1,000 B.C.). No major Archaic period sites have been identified in the immediate Fort Wadsworth vicinity, although some Archaic cultural materials have been recovered from the later Woodland period (1,000 B.C. – A.D. 1600) contexts. Woodland sites, the most common archeological sites on Staten Island, have been identified near Fort Wadsworth (Arrochar Station and at the Walton-Stillwell House just west of the fort). Prehistoric artifacts housed at the Staten Island Institute of Arts and Science reportedly were recovered by members of the Staten Island Archeological Society from the Verrazano-Narrows Bridge toll booth plaza area during construction of that facility.

Pockets of prehistoric cultural strata and materials, notably in the southwestern section of the reservation, have been identified on the fort grounds. Such resources are anticipated elsewhere on the property, especially on naturally disturbed, flat terrain within approximately 1,000 feet of the southeast shoreline. There is no clear evidence of 17th-century Dutch-American settlement within the fort limits, but there is a possibility that one—or possibly two—such farmsteads were established on the Doddman/Kingdom, Hedger/Walton, and Walton land parcels that are now part of the fort. 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 or other properties. Remains of a series of signaling beacons, reportedly installed in the mid-1740s, may also survive.

Limited archeological traces may survive of the fort, shoreline batteries, more beacons, a possible redoubt, and other installations established by the British between 1779 and 1783. The integrity of such resources is likely to have been compromised by later military construction, but their total removal is unlikely. 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, Tompkins, Hudson, Morton, and Smith and other related support facilities—all of which emerged through a building program that extended from 1807 to at least 1817. Later redevelopment of the site has resulted in the reconstruction or removal of these features (for instance with the creation of Battery Weed on the site of Fort Richmond), but subsurface remains are still likely to be found. A portion of the glacis, from the first Fort Tompkins, was discovered beneath the south curtain of the present Fort Tompkins.

Modifications (primarily the use of stone on the terraplane curtain wall) to existing batteries flanking Fort Richmond and its successor Battery Weed in the 1840's may have been partially incorporated into the Civil War period batteries. Three Civil War Gun Mounts in Battery Hudson, significantly different in shape and masonry type, probably date from the 1840's but may prove to date back as far as 1809. Portions of the Civil War North Cliff and South Cliff Batteries have been incorporated into later Endicott fortifications (Catlin, Turnbull and Bacon). At the north end of North Cliff Battery are three Civil War era "Rodman" gun emplacements. The top of the parapet of the northern most emplacement is exposed, the other two emplacements are approximately 2 to 3 inches below grade. After the Civil War, a practice battery and an experimental battery were constructed south and downhill from

battery Hudson. The experimental battery was designed to incorporate lessons learned in the Civil War-- it was semicircular and protected overhead with earth. The foundation of the battery is probably extant as present grade is higher than historic grade. The experimental battery is extant but has suffered from ice and water damage due to its location so close to the sea.

Numerous 19th century residential properties were formerly located in the southwestern and western sections of the present-day fort. Although some of these have been entirely removed, the Van Deventer-Fountain House Site, also known as the Fountain-Mouquin House Site (AO85-01-0007) was determined eligible by the Keeper in 1986. The site, occupied during the late Woodlands period, was the location by 1759 of a farmstead owned by the VanDeventer and Fountain family. In 1881 Henry Mouquin of New York City bought the property. He used it as a country retreat and, in 1901, sold it to the U.S. Government as part of the Endicott-era expansion of the Fort Mifflin reservation. In 1987, subsequent to the Keeper's determination, the site was excavated to mitigate possible destruction of the resource during the construction of Homeport housing. It is today located partially under and to the south of Building 444. Comparison of the topographic maps before and after construction suggests that much of the site is extant.

The National Register eligibility documentation for the Van-Deventer-Fountain House Site also references prehistoric resources. The site has revealed prehistoric tool manufacturing resources, but the material excavated was too scant to provide any new data about tool-making or settlement patterns. This excavation, however, indicates that other prehistoric resources not yet discovered may exist elsewhere in the district.

The baseline prehistoric research and results of Phase I and Phase II testing of the VanDeventer-Fountain Site area provided a framework for developing a Phase III research design. The following questions are presented for evaluating the significance of the prehistoric materials that may be preserved at the site:

What prehistoric periods are represented at the VanDeventer-Fountain Site? Are there any features and/or intact deposits that can be associated with particular periods of occupation?

What types of occupation are represented at the site? Is there evidence that utilization of the site changed through time?

What portions of prehistoric settlement systems are represented by the archaeological deposits located at the VanDeventer-Fountain Site?

Are any subsistence remains preserved and, if so, what types of environments and activities do they represent?

How do the cultural remains at the VanDeventer-Fountain Site compare with other known prehistoric sites on Staten Island and the Middle Atlantic region?

What aspects of group interactions and/or population movements are represented by the archaeological remains at the site?

HISTORICAL RESEARCH ISSUES

Future investigation of this site offers an excellent opportunity to examine issues relating to consumer behavior and use of space in several comparative frameworks. These frameworks comprise the urban-rural continuum (cf. Gjerden 1985) and possible expressions of status in the layout of the late eighteenth early-nineteenth century farmstead. Discussion of issues relating to the urban-rural continuum are most likely to be addressed through analysis of consumer behavior whereas issues related to the treatment of space are obviously approached through architectural remains.

LIST OF MAJOR ARCHEOLOGICAL FEATURES*

AA	North Cliff Battery			1863	NPS
BB	South Cliff Battery			1863	NPS
CC	Experimental Battery			c1870	NPS
DD	Practice Battery			c1820	NPS
EE	First Fort Tompkins			c1820	NPS
FF	First Fort Richmond			c1814	NPS
	Electric & telephone conduits			after 1892	NPS

*See sketch map for lettered features

strategy may be considered successful, since a strongly fortified position like Fort Wadsworth was never attacked.

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 as 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.

Lewis, the most influential scholar of the subject, has identified eight "systems" of fortifications, divided into two groups of four each. The first four were mostly constructed of earth and wood, earth and stone, stone or brick, and armed with smoothbore cast-iron muzzle-loading cannon; the last four were based on rifled steel breech-loading guns mounted in batteries 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 fifteen years beginning in 1875, a time of reconstruction in the coast defense establishment, coastal defenses throughout the nation were neglected and early 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 6 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.³ 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."⁴

Lewis has demonstrated how the number of fortified places decreased in response to economic concentration resulting in part from the development of larger vessels, as well as increased ranges that enabled shore-mounted artillery to cover a more extensive area. 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 1940.⁵ No matter what the total, New York was always given highest priority. Furthermore, from the earliest stage of coastal defense preparations, the problem of defending the city was viewed holistically. The emphasis placed on individual fortifications such as those on Staten Island was the result of a complex set of relationships among geographical factors, weapons capabilities, and defensive needs.

Lewis also describes how fortifications moved steadily farther out from the cities that they were defending, in

³ David A. Clary, *Fortress America: The Corps of Engineers, Hampton Roads, and United States Coastal Defense*. Charlottesville, VA: Univ. of Virginia Press, 1990, p.129, 133.

⁴ Quoted in Clary, *Fortress America*, p.127.

⁵ Lewis, *Seacoast Fortifications*, p.9.

STATEMENT OF SIGNIFICANCE

SUMMARY STATEMENT OF SIGNIFICANCE

Fort Wadsworth is significant under Criteria A, C, and D within the national context of coastal defense, and specifically for its central position within the defenses of New York Harbor, the most important port in the country. It was a component of the harbor defenses from the late 18th Century to the end of World War II, with its relative importance changing in relation to strategic considerations and advances in weaponry. Beginning with the 1746 signaling system developed by New York State militia, it represents much of the evolution in the philosophy and technology of American coastal defense from 1794 to 1945. Numerous resources remain to provide evidence of its long and prominent history. In particular, two major "Third System" fortifications on the site, present Battery Weed and Fort Tompkins, are outstanding examples of military architecture.

Specific archeological resources significant under Criteria D include the first Fort Richmond, Fort Tompkins, Battery Hudson, North Cliff Battery, South Cliff Battery, mortar batteries and Glacis Battery, Practice Battery and the Experimental Battery. These archeological resources, constructed between c1810 and c1875, represent portions of the second, third, and fourth systems of coastal defense at this site. Fort Wadsworth also includes within its boundaries the Fountain-Mouquin House Site (AO85-01-0007). The site is significant under Criteria D for data related to the settlement and change from a rural farmstead to a weekend country retreat for affluent urban residents (see the determination of eligibility). Prehistoric resources have been identified in connection with the Fountain-Mouquin site but they do not meet the criteria of significance.

HISTORICAL CONTEXT

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.¹ Physically, the focus on coastal defense has left what Emanuel R. Lewis terms "an enduring heritage of military architecture."²

The persistent 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. Other factors obviously came into play, but at least to a degree this defensive

¹ Russell F. Weigley, *History of the United States Army*, enlarged edition. Bloomington, IN: Indiana Univ. Press, 1984, p.284.

² Emanuel Raymond Lewis, *Seacoast Fortifications of the United States*. Washington: Smithsonian Inst. Press, 1970, p.xii.

response to improved capability of both offensive and defensive weaponry--resulting in what he terms "horizontal ratification".⁶ This long-term trend is important in understanding the development of the Staten Island fortifications and their relationship to other defensive works guarding New York City. 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. The Bernard Board, headed by Brig. Gen. Simon Bernard, was mandated to study the nation's coastal defenses and make recommendations for a new program. The resultant program is also known as the Permanent System, and the underlying philosophy is evident in the fortifications it produced. With their innate conservatism reinforced 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 pressed the grandiose goal of making the coast "so far as it might be practicable, impregnable."⁷

The two most conspicuous individual buildings on Fort Wadsworth are products of the later stages of this period and attitudes. Present Battery Weed was begun in 1847 and essentially completed around 1864, while Fort Tompkins was started in 1859 and finished in 1876. These works are outstanding examples of Third System fortifications and are noteworthy for their architecture and craftsmanship, apart from their 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. A Board of Engineers for Fortifications was convened in 1869 in an effort to assimilate the lessons of the Civil War. It concluded that only large rifles and 15-inch Rodman smoothbores were effective against armored vessels; that masonry works were vulnerable to such weaponry; and that earthwork barbette batteries were not only the most resistant to such fire, but the most cost effective to build. In consequence, considerable changes to the defenses at Fort Wadsworth were implemented in the period immediately following the Civil War, although a comprehensive program was not completed.

The speed and magnitude of the technological upheaval were so great that for a number of years the engineers were unable to agree on a course of action. By 1875 the nation's coastal defenses were virtually moribund and a 15-year period of neglect had set in. The only exception lay in the development of submarine mine warfare.

In the absence of a credible foreign threat, the United States was granted the opportunity for a leisurely reamination 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

⁶ Ibid, p.12.

⁷ James D. Richardson, *A Compilation of the Messages and Papers of the Presidents, 1789-1897*. Washington: U.S. Congress, 1899, vol.II, p.78; vol.III, p.119.

defenses can be prepared with confidence that they will not prove abortive."⁸ Less than two years later the Endicott Board, which had been formed by President Cleveland and headed by Secretary of War William C. Endicott to study the coastal defense situation throughout the country, recommended an extended program of fortification based on newly developed weapons.

The Board made detailed defensive recommendations for 22 major seaports, giving New York City the highest priority. As this comprehensive program was carried out, the United States by 1900 had come once again to possess the most powerful coast defense system in the world. 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. By 1904 this program had resulted in the construction of 12 new "Endicott" batteries (some of which consisted of rebuilding older batteries) at Fort Wadsworth.

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 qualifications 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.⁹ 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 ammunition used--is not categorical.

While the location and armament of each battery was calculated with great precision, probably because of the topography, it does not appear that the post in general was "designed" to create an orderly park-like or campus-like appearance as was done at posts expected to have a larger and more permanent garrison. One partial exception was the construction of several similar officers' quarters on present Mont Sec Avenue.

The Endicott period works, as improved by the Taft Board early in the 20th Century, remained in service through World War I & II. Modernization endorsed by the Taft Board (named for William H. Taft, then Secretary of War) emphasized greater use of searchlights, telephones, electric power and an improved system of indirect firing. Like their predecessors, the Endicott/Taft fortifications 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, notably 16-inch rifles. These longer-range guns were not 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 as had the earlier inner harbor defenses previously done within the New York harbor defense system, declined.

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. National concern for coastal defense continued. Another harbor defense board was convened in 1940 and between that year and 1945 about \$250 million was spent on harbor defenses.

The tactical and strategic lessons of World War II doomed traditional concepts of coastal defense at Fort Wadsworth and throughout the United States. According to Lewis, the technology of amphibious invasion and the

⁸ Richardson, *Messages and Papers of the Presidents*, vol. VIII, p. 246.

⁹ G.M. Williford, compiler, "Summaries of Endicott and Taft Fortifications." Unpublished manuscript, 1976?. Figures refer to potential number of guns, not numbers actually emplaced at a given time.

creasing reliance on aircraft for both defense and attack reduced the strategic importance of port facilities. Heavy ships' guns, if used at all, would be fired in connection with open beach landings and not in bombarding coastal ties 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 officially ended. At the same time responsibility for minefield defense was transferred to the Navy. In 1950 the remaining harbor defense commands were disbanded. That same year the Coast Artillery Corps was abolished as a separate branch of the military and combined with the Field Artillery Corps into a single artillery branch.

Seacoast defense entered a final brief stage in which it became solely a means of defending against air attack. This phase occurred during the Korean War and is reflected to a limited extent at Fort Wadsworth. Shortly afterward, in 1954, the first generation of NIKE anti-aircraft missiles became operational. Despite the magnitude of the technological leap, the function of the missiles--protection of population centers--was essentially unchanged from the First System of smoothbore cannon.

ISTORICAL SUMMARY

Staten Island was occupied by indigenous people from the Raritan and Hackensack chieftains of the Unami-Algonquian tribes. In 1524 Giovanni Verrazano, an Italian explorer in the service of France, entered the Narrows and anchored overnight. On or about September 1, 1609, Henry Hudson, serving the Dutch East India Company, discovered New York Harbor. He gave the island the name Staaten Eylandt (Island of the States) in honor of the Netherlands' governing body, the States-General.

Between 1621 and 1664 the lower Hudson Valley constituted part of the province of New Netherland, administered by the Dutch West India Company. The first three efforts at colonization of Staten Island by the Dutch failed due to the hostility of the Indians. In 1661-62 a fourth effort to establish a permanent community finally succeeded. Later called Oude Dorp (Old Village), the settlement was located about one mile southwest of the present Fort Wadsworth reservation. Currently there is no documentary or architectural evidence of the Dutch period at Fort Wadsworth.

In 1664 the English King Charles II conquered the Dutch territories in North America and gave them to his brother James, Duke of York. The agreement reached between the Dutch and English provided that the Dutch settlers were to retain their individual rights and privileges. They submitted relatively peacefully to the English governors sent by the Duke and later by the King. Through much of the period of English control, the land comprising Fort Wadsworth remained in the ownership of the Van Deventer family.

The plans for erecting beacons at the narrows were formulated 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"

The British apparently did not fortify Staten Island before the American War for Independence. Following the British evacuation of Boston in March 1776, American General Charles Lee prepared to defend New York from expected British attack. Because American efforts were concentrated on Manhattan and Long Island, 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. Throughout the war a limited number of British and Hessian troops were stationed on Staten Island.

In 1779 British defenses at the Narrows on Staten Island consisted of a redoubt, a line of 26 gun platforms holding numerous guns, and a hot-shot furnace. By 1782 a four-bastion fort and several barbette batteries had been added. There are no visible remains from the British period of occupation. However, portions of the British works

may have been salvaged for use in the development of Fort Wadsworth by the United States military.

In response to an undeclared war between the United States and the Revolutionary government of France in the last decade of the 18th Century, President Washington made efforts to provide for the protection of American harbors. A congressional report in February 1794 listed New York among 16 places in the United States requiring defensive works. As part of this campaign, the Secretary of War appointed a 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. A state board was established to oversee the construction of these fortifications. Consistent with General von Steuben's earlier observation that the Narrows was "the place pointed out by nature for the defense of the harbor," the site was given considerable attention. After lengthy negotiations the state secured title to a 24-acre parcel along the Narrows on Staten Island. Even before the title had been obtained, work on temporary defenses at the Narrows had begun. Under engineer Vincent, 50 men were employed restoring what was salvageable from the earlier British fort and building a blockhouse. Although there is no written evidence that this work was completed, it is likely that the orders were carried out.

In mid-1807 renewed interest in America's coastal fortifications arose in response to growing British hostility. During the next five years Congress authorized the expenditure of \$3,000,000 for the development of fortifications known as the Second American System. Staten Island was not included in this plan. However, the State of New York insisted that fortifications should be built on the west bank of the Narrows and elected to pay for this work itself. The Secretary of War ordered Army engineer Jonathan Williams to plan fortifications at Fort Wadsworth, to be erected at the expense of the state. In 1808 Williams presented a plan that called for two permanent works and a range of small batteries.

In November 1809 the state purchased an additional 22 acres to accommodate the full extent of Williams' plan. By January 1810 the water battery, named Fort Richmond, was complete and awaited its complement of 27 guns. Two earthen batteries, forts Hudson and Morton had also been completed. Work on the hilltop fortification known as Fort Tompkins did not begin seriously until 1814. Following the end of the War of 1812, in January 1815, interest in completing this fort waned, and by 1817 the site was largely abandoned.

Under the Third System of coastal defense, begun after the War of 1812, fortification of the west bank of the Narrows was identified as vital to national security, except for work remodeling Fort Hudson by Robert E. Lee in 1841-2. Long delays in transferring the land to the federal government impeded work on new fortifications. It was only after Congress purchased 47 acres in 1846 that plans drawn up by Chief Engineer Gen. Joseph G. Totten could be put into effect. Construction of new Fort Richmond, on the site of its predecessor, began in 1847 and was completed around 1864.

Pressure to reconstruct Fort Tompkins led Congress to appropriate \$150,000 for this purpose in 1857. The site presented severe challenges, since stone and other material had to be moved from the wharf to the top of the hill, a vertical lift of 150 feet. With the outbreak of the Civil War construction slowed, and the fort was not finished until 1876. Construction of two open barbette batteries, known as South Cliff Battery and North Cliff Battery, began during the Civil War.

With the Civil War came the first permanent garrisoning of Fort Wadsworth. The number of troops at the post peaked at 1921 in February 1864. To provide quarters and meet other needs of the garrison, wooden buildings were constructed on the site. By the end of the war 194 guns were mounted at the post, but the garrison had been reduced to about 400 men.

lton, Reginald Pelham
Litians Paths in the Great Metropolis. (Italo) 1922.

In November 1865 the War Department officially changed the name of Fort Richmond to Fort Wadsworth, to honor Brigadier General James S. Wadsworth of New York, who had been mortally wounded during the Battle of Wilderness in 1864. During the next two decades the waterside fort became effectively obsolete because of rapid advances in heavy ordnance. Many of the temporary wartime buildings were demolished beginning in 1867, but permanent quarters and facilities such as a hospital were constructed elsewhere on the post during the 1870s.

Between 1871 and 1875 South Cliff Battery, North Cliff Battery, and Battery Hudson were modernized to hold ever but larger weapons. In addition to these improvements, three new batteries, including mortar batteries, were constructed. These works were associated with the interim "Fourth System," which was not completed either at Fort Wadsworth or nationally. All batteries survived from this system. With the construction of an extension to Battery Hudson, a nearly complete line of batteries extended from the western boundary of the post, stretching east to the rows and then north along the shoreline.

Despite grand plans for armament at Fort Tompkins, its role remained largely limited to providing quarters for enlisted men. In the decades following the Civil War the number of men stationed at Fort Wadsworth decreased sharply to a low of 41 in 1884. Fort Wadsworth acquired an attractive, park-like appearance in the 1880s, partly due to the cessation of construction. Many portions of the post were graded and sodden, creating large expanses of rolling lawns. The splendid scenery made the post popular for excursionists.

In 1885 President Grover Cleveland established a committee, headed by Secretary of War William C. Endicott, to study America's coastal defenses. This board's report called for an enormous national undertaking. It identified sites in the United States that required new defenses and placed New York at the top of the list. As a result of these recommendations, Fort Wadsworth experienced dramatic change in the years from 1890 to 1905. To accommodate the new fortifications, Fort Wadsworth expanded by 129 acres between 1892 and 1901, absorbing several private residences. This program, which more than doubled the size of the post, brought it to its present dimensions. Present New York Avenue, which had formed the western boundary of the old base, became its central thoroughfare. During this period the entire post was named Fort Wadsworth, while the individual fortification that had borne that name, and had earlier been known as Fort Richmond, was renamed Battery Weed.

Between 1895 and 1904 six batteries for high-powered artillery were built at Fort Wadsworth, all but one on the recently purchased land. In addition, the Army almost completely reconstructed the existing ground-level works of North and South Cliff Batteries, and Battery Hudson and its extension, and equipped them with modern guns. From 1900 to 1920 many buildings other than batteries were constructed, among them quarters, hospital and associated facilities, a power plant, shops and a combined post exchange/gymnasium. Several substantial buildings were built to house and operate "torpedoes," or submarine mines, for additional protection against naval attack. Furthermore, a lighthouse was constructed on the northeast bastion of Battery Weed. Infrastructure improvements included an electrical distribution system for both military and domestic use and a communication system for military use.

During World War I Fort Wadsworth's garrison increased sharply, to about 1500 men. Two cantonment areas of ten barracks and related buildings were erected. In the following decade these buildings were burned or dismantled. The increasingly complex aiming and artillery fire-control system required numerous positions for range finders, battery commanders and observers. The use of electricity to light the batteries and power the mechanisms that moved ammunition required generator stations and transformers. Air attack became a concern, and beginning in July 1918 anti-aircraft guns were emplaced. By 1920, if not earlier, four guns were present at Fort Wadsworth.

Following World War I the garrison at Fort Wadsworth was again reduced, and command of the post was shifted from the Coast Artillery Corps to the Infantry. With only a small detachment of Coast Artillery men left to maintain the guns, some of which had already been dismantled, the fort's importance in coast defense declined.

Prior to 1926 there had never been permanent housing for enlisted men at Fort Wadsworth. The normal detachment lived in the casemates of Fort Tompkins, which as early as 1903 had been declared "unfit for long-continued human habitation," while temporary housing was built to handle wartime needs. With an expanded role for the post being planned, this situation had to be changed, and a housing program approved by Congress on May 1926 appropriated \$285,000 for barracks at the post.

Shortly before, for the first time in its history, a systematic plan for permanent housing and support of troops at the fort had been developed. Discussion of where to locate a new barracks led to a fundamental debate over the future of the post. The commander, the well known Brig. Gen. Hugh A. Drum, contended that the post had outlived its usefulness as a coastal defense installation and should be converted entirely to an infantry base. The Chief of Coast Artillery disagreed, arguing that "The batteries of Forts Wadsworth and Hamilton form a strong second line defense for New York Harbor against naval attack." This position received support at higher levels of the War Department. On August 29, 1927 the Secretary of War decreed that "The Harbor Defenses of Southern New York (Forts Hamilton and Wadsworth) should be maintained at all times in a serviceable condition."

The result was a compromise, in which the infantry presence was greatly expanded, but the coast defense function remained paramount. Although the remaining big guns were out of service and were maintained by a small detachment that in 1927 consisted of only 14 enlisted men, construction was not allowed to interfere with the sighting and potential firing of the artillery. Conversely, funds for maintaining the guns were kept to a minimum, and plans to widen the 12" gun platforms were repeatedly deferred.

The first products of the building campaign were two barracks for infantry battalions, completed in 1929 and 1931. In the remainder of the 1930s a number of brick officers' and NCO's quarters and related garages were built and rehabilitated in various sections of the post. A comprehensive plan presented by Lt. Col. Torrey B. Maghee in October 1933 provided a basis for the remainder of a massive construction program intended to house 1172 enlisted men and 90 officers and NCO's. Some quarters had already been completed, and the Maghee plan determined the need for additional residences, as well as other buildings necessary to maintain troops adequately. In this group were a new Officers' Club, a Post Exchange and a Theater, built in large measure by federal prisoners housed in Fort Tompkins. The morgue, originally built in 1899, was converted to a Post Library in 1936.

A similar but less systematic program of constructing utility buildings began in 1925, when the post commander reported "intolerable facilities for housing animals, forage, vehicles, storage of property and shops." These defects were remedied during the remainder of the 1920s and through the next decade. At first, under the tight budgets of the 1920s, service buildings were salvaged from other bases such as Camp Dix. With the flusher appropriations of the 1930s, new buildings were constructed. Most of the buildings now known as the "Seabee Complex" date from this period. Like most of the living quarters, these buildings were constructed by WPA forces. A considerable landscaping effort provided the finishing touches.

With the approach of World War II, Fort Wadsworth resumed, on a diminished level, its role in the defense of New York Harbor. In March 1941 it was returned to the control of the Coast Artillery Corps, and during the war the post commanders belonged to this branch. The emphasis in coastal defense shifted to anti-aircraft armament, and a number of fixed and mobile guns were deployed. None of the 16-inch anti-ship guns that formed the latest generation of coastal artillery were located at Fort Wadsworth, but a new battery for two six-inch guns on barbette mountings was constructed. Although the battery was completed, it was overtaken by the progress of the war, and the guns were never mounted. Several of the Endicott-era guns remained, but it is not certain whether they were

serviceable; all were gone by the end of the war. In addition, \$131,000 was spent on a program to conceal batteries and other military features. A mine planting vessel operated out of Fort Wadsworth, and an anti-submarine net was laid across the Narrows.

In addition to its coastal defense function, Fort Wadsworth housed a unit that was responsible for supplying and servicing troops that manned guns throughout Staten Island and at shore points of New Jersey. Along with its role in coastal defense, Fort Wadsworth served as a training ground for units preparing for overseas assignments. Finally, from 1944-45, the post housed a service unit composed of Italian prisoners of war. Despite this level of activity, few lasting physical changes seem to have occurred during this war. Early in the war, 29 temporary wooden barracks were built.

At the end of World War II Fort Wadsworth served briefly as a classification center. By 1946, however, the post was generally quiet. Around 1948 a large trailer camp, the only one within the limits of New York City, was set up to house military families.

The Korean War brought a temporary revival of concern for defense, and in 1952 a regular anti-aircraft unit was assigned to Fort Wadsworth. The post was also briefly used during the Korean War as a basic training station for National Guard infantry units. Two new barracks and two officer's quarters were constructed during this period. Between 1953 and 1954 the Army studied the New York metropolitan area to select sites for launching Nike surface-to-air missiles. Although no actual missiles were emplaced at Fort Wadsworth, the post served as the command center for Nikes throughout the New York area. Some 66 units of Capehart housing were constructed in the late 1950s, allowing the removal of the trailer camp.

By far the most dramatic physical changes to Fort Wadsworth in this era resulted from the construction of the Breezemoor Narrows Bridge between 1959-64. A variety of buildings that were located in the path of this span were demolished. Where the function remained important, these buildings were replaced by new construction. Concurrently, the transfer in 1960 of the anti-aircraft brigade that had been stationed at Fort Wadsworth effectively ended its role in coastal defense. The post became the headquarters for an army corps. In 1972 the Department of Defense announced plans to declare Fort Wadsworth surplus, placing it at risk for development. Popular support for preservation of the post emerged and led to placing Battery Weed and Fort Tompkins individually on the National Register of Historic Places. From about 1974 to 1979 an Army chaplain school was operated out of Fort Tompkins.

Also in 1972 Fort Wadsworth was identified as one of the areas to be managed by the National Park Service as part of the newly-created Gateway National Recreation Area, once military occupancy ended. Disputes over the timing and the extent of this acquisition occupied the next decade until in 1983 the Navy announced plans to use the area for a new homeport. Two years later the Navy issued a formal decision to construct a Surface Action Group Homeport Facility on Staten Island, using land at Stapleton and Fort Wadsworth for various functions. Work conducted in subsequent years as part of the development of the homeport cost approximately \$200,000,000 and brought substantial changes to the appearance and character of Fort Wadsworth.

The former headquarters and several other buildings dating to around the turn of this century were demolished in 1980 and replaced by a new building. Between 1991 and 1993, 32 four-story, vinyl-clad multi-family housing units were constructed on the site of the former Capehart housing. Other residential buildings were added or remodeled. In 1993 a decision by 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 decisions on the disposition of the property. The National Park Service assumed control of the entire legislative boundary on October 1, 1995, while tracts TR02-120, TR02-121, and TR02-123 were taken over by the Coast Guard and Army Reserve Center.

MAJOR BIBLIOGRAPHIC REFERENCES

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D. BOUNDARY DESCRIPTION

The boundary corresponds to the boundaries of the Fort Wadsworth military reservation as depicted on the attached USGS 7.5 minute Quadrangle sheet. (See attached)

BOUNDARY JUSTIFICATION

The boundary encompasses the entire area occupied by Fort Wadsworth since final land acquisition, completed 1901. Since that date the base has been managed as an entity within this boundary, with decisions about the use of any particular portion made within the context of the operational needs of the base as a whole. The boundary corresponds to the park boundary except for the exclusion of tract 02-125 which is a public street.

ADDITIONAL DOCUMENTATION

USGS Quadrangle map
Site map of Fort Wadsworth showing contributing and non-contributing resources.

Photographs

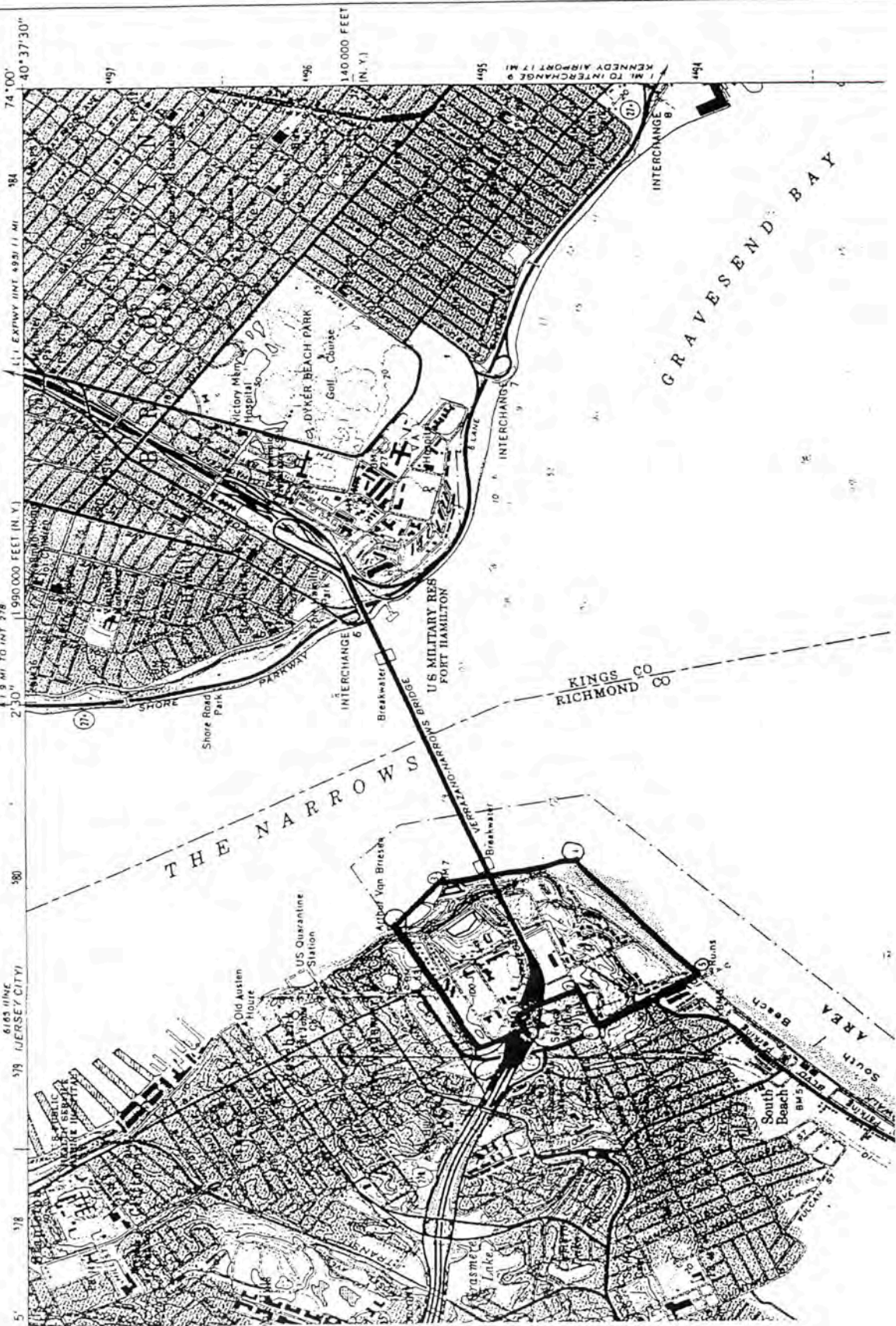
1. Aerial view of Fort Wadsworth, n.d.
2. Battery Weed, looking east.
3. Fort Tompkins, southeast corner, looking northwest.
4. Battery Catlin (example of Endicott Battery,) west side, looking north.
5. Battery Catlin, west side, looking south.
6. Mont Sec Avenue, looking west.
7. Building 210, looking northwest.
8. "Seabee Complex," Building 301 in foreground, looking southeast.
9. New Mexico Court (example of non-contributing housing,) looking northeast.

Photos 2-9: Photographer: Brian Feeney, National Park Service
Numbers 2-6 taken Oct. 26, 1995; Numbers 7-9 taken Mar. 18, 1996.

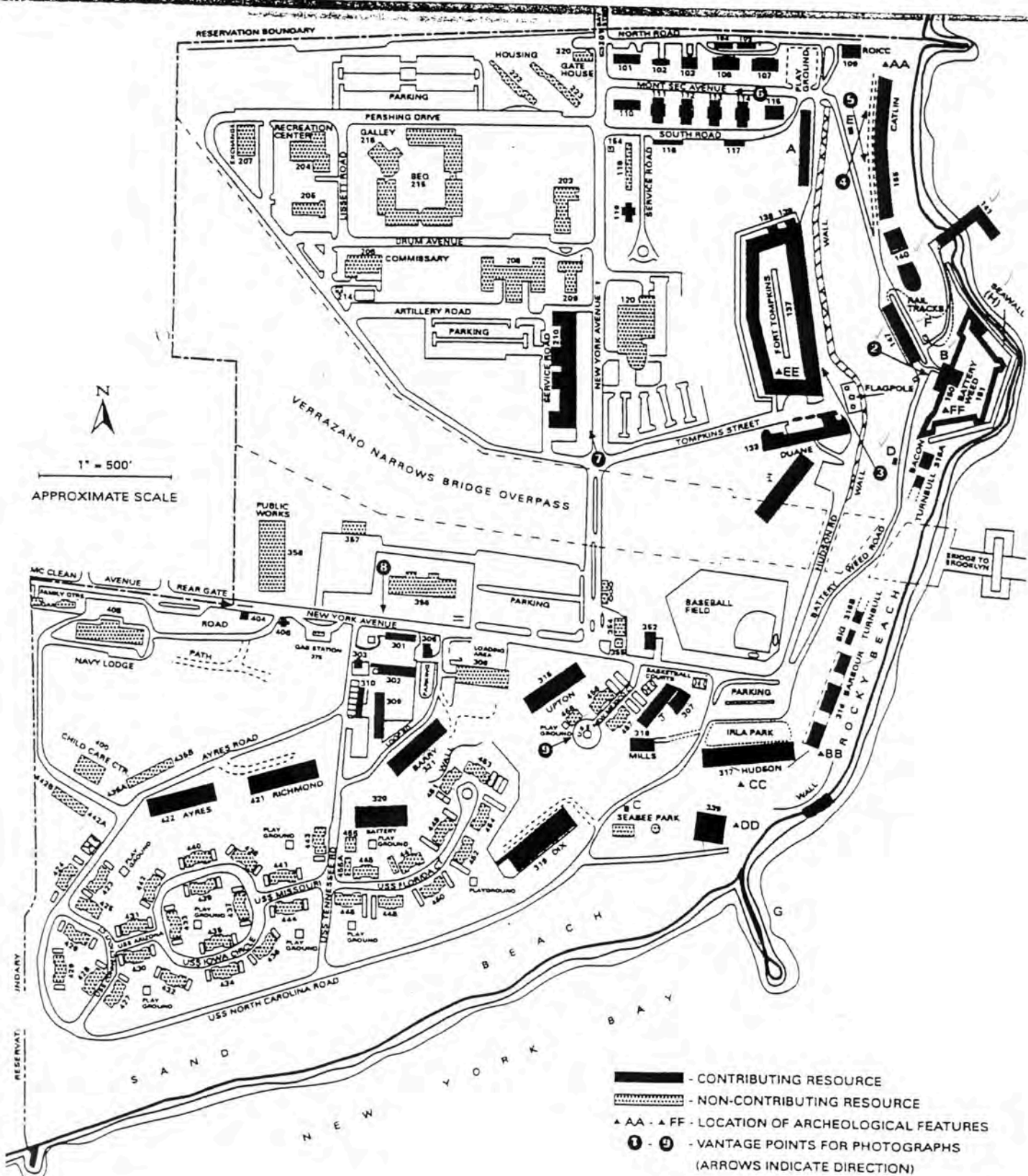
Location: Office of the Superintendent, Fort Wadsworth, Staten Island Unit, Gateway National Recreation Area

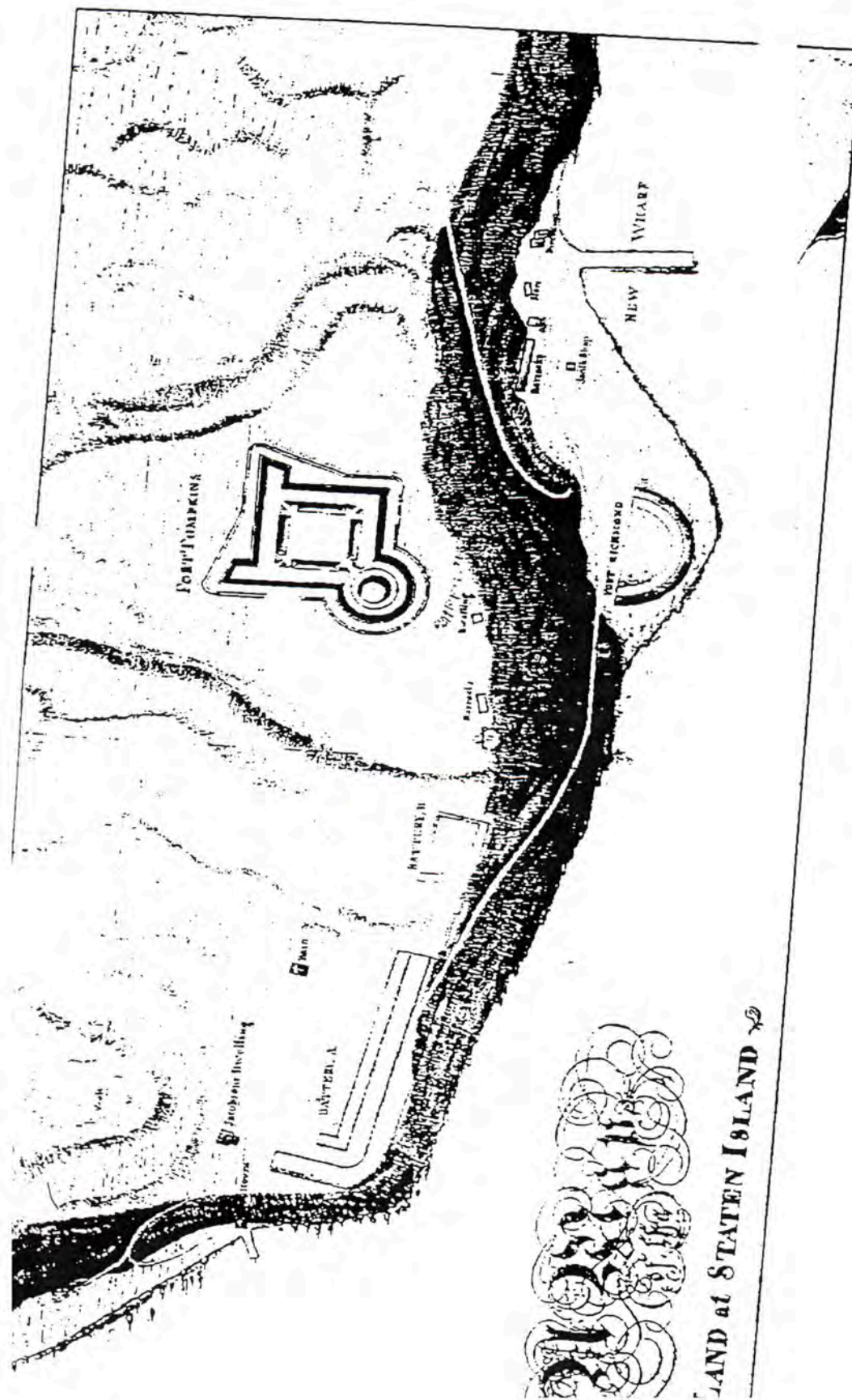
FORT WADSWORTH HISTORIC DISTRICT
(Gateway N.R.A.)
STATEN ISLAND, N.Y.

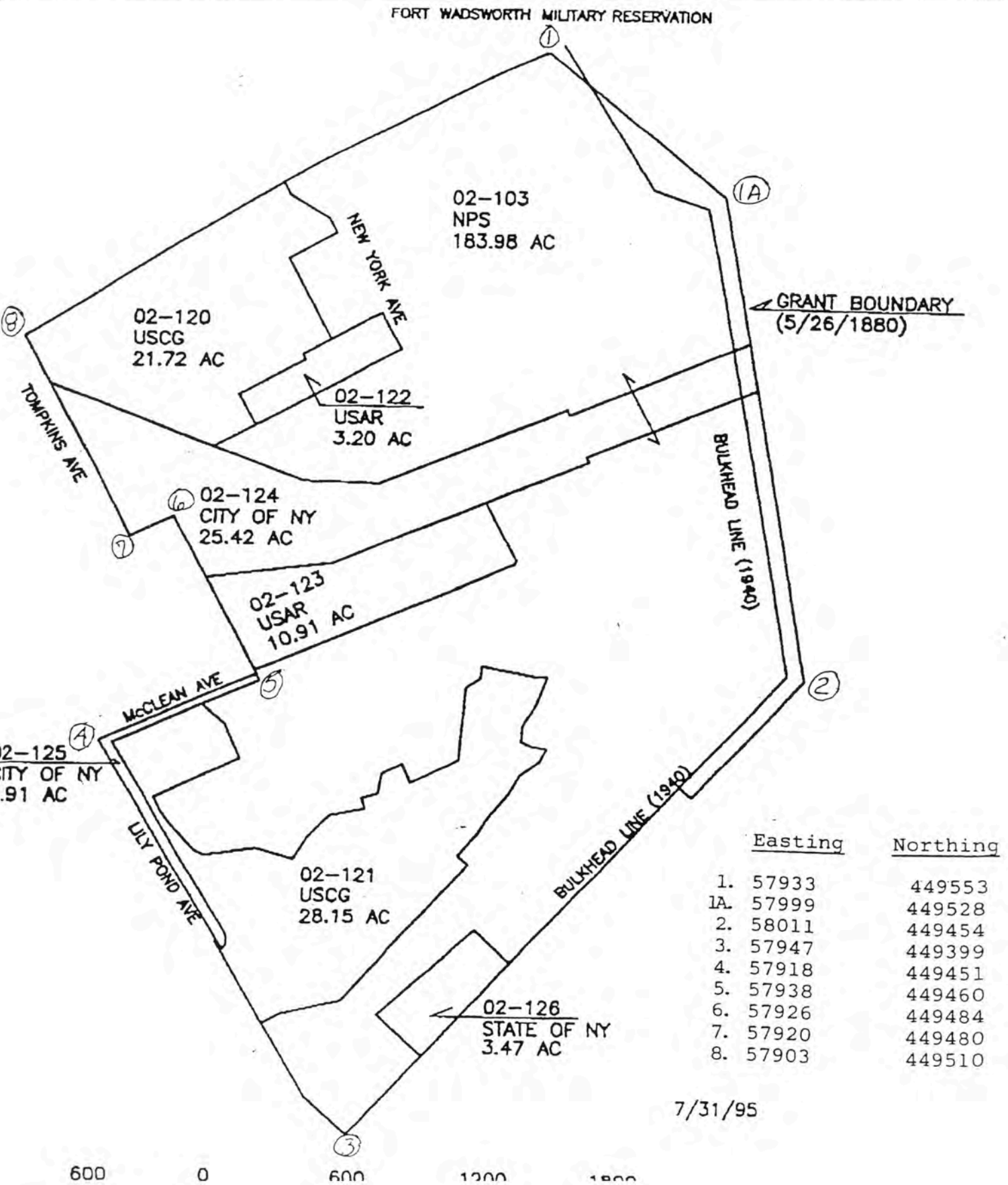
THE NARROWS QUADRANGLE
NEW YORK-NEW JERSEY
7.5 MINUTE SERIES (TOPOGRAPHIC)



FORT WADSWORTH HISTORIC DISTRICT (GATEWAY NRA)









United States Department of the Interior

NATIONAL PARK SERVICE
New England System Support Office
15 State Street
Boston, Massachusetts 02109-3572

FT Wadsworth
SHD 1-18-96

NW. 18, 1996

IN REPLY REFER TO:

August 23, 1996

H32(NESO-SP/CRM)

Ms. Bernadette Castro
Commissioner, Parks Recreation and Historic Preservation
Pebbles Island
P.O. Box 189
Waterford, New York 12188-0189

Attention: Mr. Robert Kuhn, Historic Preservation Coordinator

Dear Ms. Castro:

This letter continues the National Park Service (NPS) efforts to update the List of Classified Structures (LCS). Please refer to our December 6, 1994, letter for a complete description of the LCS and related NPS inventories.

Present submission contents:

The present submission includes information regarding Fort Wadsworth, a component of the Staten Island Unit of Gateway National Recreation Area (NRA).

We direct your attention to the following matters specifically:

1. Endicott-Era Batteries of Fort Wadsworth (determined eligible by the Keeper 7/5/85), Fort Tompkins Quadrangle (entered/documented 7/30/74), and Battery Weed (entered/documented 1/13/72) are National Register (NR) properties located wholly within the boundaries of the Fort Wadsworth NPS site. The attached **List of Contributing Resources: Buildings and Structures** identifies each property and its resources. In addition, the NPS has prepared NR documentation for the Fort Wadsworth Historic District (Gateway NRA). The nomination is currently undergoing review internally prior to submission to your office.

2. A *Cultural Resources Report* for Fort Wadsworth was produced for the NPS in 1995 and submitted to your office as part of the Section 106 compliance documentation for the rehabilitation of the military reservation. The report documents the significance of Fort Wadsworth in its entirety as a historic district and identifies 1794 to 1945 as the period of significance. The LCS inventory is informed by the building inventory found in the report (a copy of the list is enclosed) with the following exceptions:

- Buildings 125 and 338, included in the list, are no longer extant.
- Several small support structures for the batteries, not included on the inventory, have been included on the LCS and are considered contributing resources (see **Reply to List of Contributing Resources** below).

OPTIONAL FORM 98 (7-90)

FAX TRANSMITTAL

of pages 5

To PAUL WEINBAUM

From RICHARD CRISSEN

Dept./Agency NPS-HISTORY PROGRAM

Phone # 978-970-5130

FAX # 617/223-0000 512

Fax #

NSN 7540 01 317 7308

5098-101

GENERAL SERVICES ADMINISTRATION

3. Three markers, the FATHER CAPODANNO MONUMENT, the HORSE MEMORIAL and the SIG THE BELOVED BOXER marker have been included on the LCS at the request of the Superintendent. They are *not* proposed as NR contributing resources because of size, age, and failure to satisfy the NR criteria for commemorative markers or resources less than fifty years old.

4. The Glacis Mortar Battery, of which the foundation and the parapet remain, is a partly above-ground resource that is included on the attached **List of Contributing Resources: Buildings and Structures** as a matter of record. Although no LCS form has been completed because it was not noted at the time the remainder of the property was surveyed, it will be included in the LCS when it is next updated. The NR nomination now in preparation includes the battery as a contributing resource.

Description of Attachments:

The attached **List of Contributing Resources: Buildings and Structures** presents a comprehensive inventory of all NR buildings and structures within the described boundary of the Fort Wadsworth NPS unit. Features identified on the LCS contributing to the legislated significance of the park, but not meeting the NR definition of contributing resource, are not included on the **List of Contributing Resources: Buildings and Structures**. However, for your review, LCS forms for these features are enclosed with this letter.

Key to **List of Contributing Resources: Buildings and Structures**:

- Resources with NR significance are listed beneath the NR property. An asterisk (*) indicates the resource is described in existing documentation.
- Resources built during the period of significance but not previously identified in the *Cultural Resources Report* are marked with a cross (+).
- Structure names in FULL CAPITALS are as they appear on the LCS.
- The name of the NR property is underlined with date of listing and documentation in parenthesis.

Itemization of Enclosures:

- A copy of NR nominations for listed properties
- A copy of the Determination of Eligibility for the Endicott-Era Batteries of Fort Wadsworth
- A copy of the *Cultural Resources Report* building inventory
- A complete list of all LCS entries
- Individual LCS forms for each structure
- Reference images for each LCS entry form
- A copy of this letter (enclosed for your files)

Concurrence issues:

We seek your concurrence with our **List of Contributing Resources: Buildings and Structures**

Archaeological and Landscape Surveys:

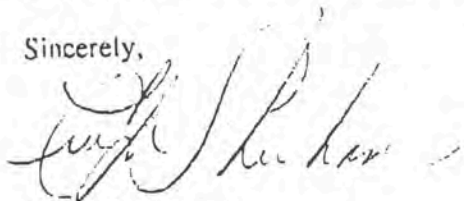
Any revisions to the NR documentation will consider significant archaeological sites. Two multi-year programs are pertinent to this effort:

1. Archeological overview and assessment reports for all parks
2. The Archeological Sites Management Information System (ASMIS), a computerized database formerly known as the Archeological Sites Inventory (ASI) (ASMIS software is being developed).

The Cultural Landscapes Inventory (CLI) is evaluating significant landscapes. Character-defining features including topography, vegetation and circulation will be identified and described in a manner consistent with NR Bulletins 16A, 18 and 30.

Should you have any questions regarding the LCS program, please contact Historical Architect/LCS Coordinator Bill Barlow at (718) 816-6436. Regarding the CLI program, please contact Cultural Landscape Specialist Nora Mitchell at (617) 223-5059. With respect to ASMIS, contact Archeologist Dick Hsu at (508) 970-5146. Concerning the determinations of eligibility/ineligibility, please contact Historian Paul Weinbaum at (617) 223-5057.

Sincerely,



Terry W. Savage
Superintendent

Enclosures

I concur with the above-stated determinations of eligibility and ineligibility.



New York State Historic Preservation Officer

11/18/96
Date

List of Contributing Resources: Buildings and StructuresFort Tompkins Quadrangle (entered/documentated 7/30/74)

FORT TOMPKINS*

BUILDING 138 - MARS STATION*

BUILDING 139 - SIGNAL STORAGE*

Battery Weed (entered/documentated 1/13/72)

BATTERY WEED

BATTERY WEED SEAWALL

BATTERY WEED - LIGHT STATION

Endicott-Era Batteries of Fort Wadsworth (Determined eligible by the Keeper 7/5/85)

BATTERY AYRES*

BATTERY BACON*

BATTERY BARBOUR*

BATTERY BARRY*

BATTERY CATLIN*

BATTERY CATLIN - MAGAZINE

BATTERY DIX*

BATTERY DUANE*

BATTERY HUDSON*

BATTERY MILLS*

BATTERY RICHMOND*

BATTERY TURNBULL*

BATTERY UPTON*

BATTERY 218*

Buildings and structures built between 1794 and 1945

BUILDING 101 - HOUSING

BUILDING 102 - HOUSING

BUILDING 103 - HOUSING

BUILDING 104 - DETACHED GARAGE

BUILDING 105 - DETACHED GARAGE

BUILDING 106 - HOUSING

BUILDING 107 - HOUSING

BUILDING 109 - ADMINISTRATIVE (FORMER OFFICERS CLUB)

BUILDING 110 - HOUSING

BUILDING 111 - HOUSING

BUILDING 112 - HOUSING

BUILDING 113 - HOUSING

BUILDING 114 - HOUSING

BUILDING 115 - HOUSING

BUILDING 116 - DETACHED GARAGE

BUILDING 117 - DETACHED GARAGE

BUILDING 119 - HOUSING

BUILDING 140 - MINING CASEMATE

BUILDING 147 - TORPEDO STORAGE

- 11-18-1996 BUILDING 148 - WAREHOUSE
— BUILDING 210 - INFANTRY BATTALION BARRACKS
— BUILDING 211 - OPEN WAREHOUSE
— BUILDING 301 - GARAGE/OFFICE (SEABEE)
— BUILDING 302 - SUPPLY WAREHOUSE (SEABEE)
— BUILDING 303 - MOTOR POOL (SEABEE)
— BUILDING 305 - ADMINISTRATION
— BUILDING 307 - READY MAGAZINE
— BUILDING 309 - STABLES (SEABEE)
— BUILDING 310 - WAREHOUSE (SEABEE)
— BUILDING 339 - SMALL ARMS RANGE
— & SEA PLANE HANGAR
— BUILDING 352 - NCO CLUB (CARRIAGE HOUSE)
— BUILDING 404 - GATE HOUSE
— BUILDING 406 - GATE HOUSE
11-18-1996 BUILDING 141 - NORTH DOCK
— STONE JETTY
— GLACIS GUN BATTERY +
— Glacis Mortar Battery +
— COINCIDENCE RANGE FINDING STATION (NORTH) +
11-18-1996 COINCIDENCE RANGE FINDING STATION (SOUTH) +
— BATTERY CONTROL STATION +

(+) indicates a structure not previously identified in the *Cultural Resources Report*.

EO. 11593

DETERMINATION OF ELIGIBILITY NOTIFICATION
National Register of Historic Places
National Park Service

File
Villotti
July 5, 1985

Project Name:

Location: Staten Island, Richmond County

State: NY

Request submitted by: DOD/NAVY T.W. Bone

Date Received: 4/9/85

Additional information received:

Name of property	SHPO opinion	Eligibility Secretary of the Interior's opinion	Criteria
*Endicott-Era Batteries of Fort Wadsworth	none	eligible	A,C
*Duncan Estate Western Gatehouse	none		add'l info. req.
*Duncan Estate Eastern Gatehouse	none		add'l info. req.
*Officers' Row Historic District	none		add'l info. req.

*see attached sheet for additional comments.

for *Donna Ann Brugh*
Keeper of the National Register

Date: 7/5/85

Property	Endicott-Era Batteries at Fort Wadsworth	EO. 11593
County	Richmond	State NY TR
Date Received	4-9-85	Additional Info Requested 4-11-85 Received
SHPO Consulted	yes	Opinion
		Control
		Historian
AFTER DISCUSSION WITH ED BEARSS AND READING NPS REPORT I AM CONVINCED THAT ENDICOTT BATTERIES WHICH RETAIN INTEGRITY ARE ELIGIBLE UNDER A+C AS A DISCONTIGUOUS (NETWORK) DISTRICT. DISCONTIGUOUS		Arch. Historian Mr. DOUGAL
		Archeologist
		HAER
		Other
		Review Unit Chief
		Branch Chief
		Keeper

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICENATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM

FOR FEDERAL PROPERTIES

FOR NPS USE ONLY

RECEIVED APR 9 1985

DATE ENTERED

SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS**1 NAME**

HISTORIC

Endicott-Era Batteries at Fort Wadsworth *TR*

AND/OR COMMON

2 LOCATION

STREET & NUMBER

Multiple locations, Fort Wadsworth

NOT FOR PUBLICATION
CONGRESSIONAL DISTRICT

CITY, TOWN

Staten Island, New York

STATE

CODE

COUNTY

CODE

New York

Richmond

3 CLASSIFICATION

CATEGORY

OWNERSHIP

STATUS

PRESENT USE

☐ DISTRICT☒ PUBLIC☐ OCCUPIED☐ AGRICULTURE☐ MUSEUM☐ BUILDING(S)☐ PRIVATE☒ UNOCCUPIED☐ COMMERCIAL☐ PARK☐ STRUCTURE☐ BOTH☐ WORK IN PROGRESS☐ EDUCATIONAL☐ PRIVATE RESIDENCE☐ SITE☐ PUBLIC ACQUISITION☐ ACCESSIBLE☐ ENTERTAINMENT☐ RELIGIOUS☒ OBJECT
Thematic
Group☐ IN PROCESS☒ YES: RESTRICTED☐ GOVERNMENT☐ SCIENTIFIC☐ BEING CONSIDERED☐ YES: UNRESTRICTED☐ INDUSTRIAL☐ TRANSPORTATION☐ NO☐ MILITARY☒ OTHER Abandoned**4 AGENCY**

REGIONAL HEADQUARTERS: (If applicable)

United States Army

STREET & NUMBER

Fort Hamilton

CITY, TOWN

Brooklyn, New York

STATE

New York

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,

REGISTRY OF DEEDS, ETC. Richmond County Courthouse

STREET & NUMBER

Richmond Terrace

CITY, TOWN

St. George, Staten Island, New York

STATE

New York

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

Draft Environmental Impact Statement, Surface Action Group ^{Home-}porting

DATE

1984

☒ FEDERAL ☐ STATE ☐ COUNTY ☐ LOCALDEPOSITORY FOR
SURVEY RECORDSNorthern Division, Naval Facilities Engineering Command,
Naval Base Philadelphia

CITY, TOWN

Philadelphia

STATE

Pennsylvania

7 DESCRIPTION

CONDITION

☐ EXCELLENT

☐ GOOD

☒ FAIR

☒ DETERIORATED

☒ RUINS

☐ UNEXPOSED

CHECK ONE

☐ UNALTERED

☒ ALTERED

CHECK ONE

☒ ORIGINAL SITE

☐ MOVED DATE _____

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

This thematic group nomination includes twelve gun batteries and a command post built between 1895 and 1904 at Fort Wadsworth, on the Staten Island side of the Narrows between Upper and Lower New York Bay. They represent the Endicott Era of shore fortifications and essentially the last phase in the development of Fort Wadsworth as a harbor defense installation.

The batteries and command post are arranged in an irregular semi-circle that roughly follows the shoreline, from the northeast to the south, with most of the batteries oriented to face southeast toward Lower New York Bay. Four batteries (Catlin, Bacon, Turnbull, and Barbour) are located on ground directly above the shore, while the rest are situated on higher ground further inland. The command post and batteries in the southern portion of the base are now crowded by Capehart enlisted personnel housing from the 1950's. Long abandoned, the batteries and command posts are heavily overgrown, and access is limited. However, with the exception of removal of armament and moveable fixtures, the overall exterior configuration of the batteries is intact, though much of the concrete is spalling. The batteries interiors are generally inaccessible. Therefore, the condition and structural integrity of these interiors is unknown.

Because they were specifically designed to carry various sizes and amounts of armament, the batteries are not identical, but are clearly derived from the same general principles. The structures are chiefly of concrete (both mass and reinforced) construction, with some use of brick and of quarryfaced blocks of granite re-used from earlier batteries at the fort. The Endicott batteries are in general constructed with three levels: (1) the magazine area, a walk-in level that opens from the landward side, that contains inter-connecting rooms and corridors; (2) a terrace-like platform with either sunken, semicircular gun emplacements, or raised gun platforms; and (3) a high concrete parapet around the shoreward perimeter, the outer face of which is covered to the crest by an immense earthen embankment. Mechanical lifts brought shells from the magazines to the gun platforms, where they were transported by hand trucks to the guns. Human access from one level to another was accomplished by concrete steps, steel stairways, and ladders (on the landward side). No equipment or armament remains, but features such as the stairways, iron rings, portions of hoist mechanisms, and wood, steel and metal grille-type doors are present to varying degrees in the batteries. The command post is an underground concrete bunker built

(see continuation sheet)

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
☐ PREHISTORIC	☐ ARCHEOLOGY-PREHISTORIC	☐ COMMUNITY PLANNING	☐ LANDSCAPE ARCHITECTURE	☐ RELIGION	
☐ 1400-1499	☐ ARCHEOLOGY-HISTORIC	☐ CONSERVATION	☐ LAW	☐ SCIENCE	
☐ 1500-1599	☐ AGRICULTURE	☐ ECONOMICS	☐ LITERATURE	☐ SCULPTURE	
☐ 1600-1699	☒ ARCHITECTURE	☐ EDUCATION	☒ MILITARY	☐ SOCIAL/HUMANITARIAN	
☐ 1700-1799	☐ ART	☐ ENGINEERING	☐ MUSIC	☐ THEATER	
☒ 1800-1899	☐ COMMERCE	☐ EXPLORATION/SETTLEMENT	☐ PHILOSOPHY	☐ TRANSPORTATION	
☒ 1900-	☐ COMMUNICATIONS	☐ INDUSTRY	☐ POLITICS/GOVERNMENT	☐ OTHER (SPECIFY)	
		☐ INVENTION			

SPECIFIC DATES 1895-1904

BUILDER/ARCHITECT U.S. Army, Engineers

STATEMENT OF SIGNIFICANCE

The Endicott-era batteries and command post at Fort Wadsworth are historically significant because they represent, and are integrally associated with, the final period of Fort Wadsworth's importance as part of the nation's coastal defense system. They are also architecturally significant as excellent examples of the kinds of fortifications erected under the Endicott program, reflecting late 19th century developments in armament and in the kinds of structures on which such armament was mounted.

Federal occupation of Fort Wadsworth dates to 1816. The site of an earlier, abandoned fort, Fort Wadsworth was one of the locations identified by a commission headed by Brig. Gen. Simon Bernard as being of the highest priority for construction of the first comprehensive program of national defense. This program, known as the Third System, was characterized by casemate masonry defenses and called for protecting New York City by fortifying four locations: Forts Hamilton and Wadsworth at the Narrows, and Forts Totten and Schuyler at Throgs Neck. Due to the limited range of antebellum weapons, the fortifications at the Narrows faced each other at the narrowest point.

Technological innovation during the Civil War resulted in development of the rifled Parrott gun. Mounted on a naval vessel, this weapon was able to concentrate its fire, rendering the heavy masonry construction of Third System fortifications effectively obsolete. Military appropriations, moreover, declined in the 1870's. In 1885, mounting public concern compelled President Grover Cleveland to convene a board to review coastal defenses. Headed by William C. Endicott, the joint Army/Navy panel, dubbed the Endicott Board, called for coastal fortifications at 26 sites on the coasts, and at three sites on the Great Lakes. This construction program recommended upgrading weapons to modern breech-loading, steel-cast guns, and using improved propellants (Lewis 1970: 75-77). Disappearing carriages, which utilized the recoil energy to lower guns behind parapets for reloading, were also instituted during this period.

(see continuation sheet)

9 MAJOR BIBLIOGRAPHICAL REFERENCES

(see continuation sheet)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY acreage is approximately 1 acre or less for each resource

UTM REFERENCES See Continuation sheet

A	ZONE	EASTING	NORTHING	B	ZONE	EASTING	NORTHING
C	ZONE	EASTING	NORTHING	D	ZONE	EASTING	NORTHING

VERBAL BOUNDARY DESCRIPTION

Boundaries for each resource in this thematic group are shown as red lines on the accompanying maps, scale 1"=200', reproduced from U.S. Department of the Navy, Draft Environmental Impact Statement, Surface Action Group Homeporting, Stapleton-Fort Wadsworth Complex, Staten Island, New York, 1984.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

M.H. Bowers, Architectural Historian; Amy Friedlander, Historian

ORGANIZATION

Louis Berger & Associates, Inc.

DATE

13, February 1985

STREET & NUMBER

100 Halsted Street

TELEPHONE

201/678-1960

CITY OR TOWN

East Orange

STATE

New Jersey

12 CERTIFICATION OF NOMINATION

STATE HISTORIC PRESERVATION OFFICER RECOMMENDATION

YES____ NO____ NONE____

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Historic Preservation Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The evaluated level of significance is ____ National ____ State ____ Local.

FEDERAL REPRESENTATIVE SIGNATURE

TITLE

DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION
ATTEST:

DATE

KEEPER OF THE NATIONAL REGISTER

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**

For NPS use only

received

date entered

Continuation sheet

Item number 7

Page 1

into a hillside, with only the entrance, with its rusted steel doors, visible.

This nomination has been developed from the findings of an architectural inventory conducted at Fort Wadsworth in conjunction with preparation of a Draft Environmental Impact Statement for the Surface Action Group Homeport, Stapleton-Fort Wadsworth Complex, Staten Island, New York (Department of the Navy 1984). As a result of building-by-building examination of all structures on the post, the architectural surveyor, Andrew Scott Dolkart, identified one thematic group of Endicott-era batteries, four double officers' quarters, and two gatehouses associated with pre-military occupation in the area, as structures of potential National Register eligibility (Department of the Navy 1984: C-30,31). An initial consideration of a large district of non-defensive structures was ultimately discarded during the course of the survey, because "most of the buildings...did not seem to be as old as had been supposed" or had been remodeled to the extent that their historic integrity was largely lost (Ibid.: C-26-27).

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Inventory—Nomination Form

For NPS use only

received

date entered

Continuation sheet

Item number

8

Page 2

In 1905, a second board, convened by President Theodore Roosevelt and headed by William H. Taft, reassessed progress in the 20 years that had passed since the Endicott Report. Innovations in the early 20th century included use of searchlights, electrification, and precision fire-control methods, which greatly improved the accuracy of coastal weapons (Lewis 1970: 89,93). Siting stations were positioned on the highest ground above the actual location of the shore batteries, where the stations commanded the best view (Chief of Engineers 1900). Electric cable provided communication to the batteries containing the weapons. The batteries were situated on ridges near the shore where the greatest range could be achieved.

Third System fortifications had emphasized the importance of the structure, elaborating the concept of forts as strongholds garrisoned by men with a concentration of weapons, capable of withstanding bombardment (Lewis 1970: 70). Development of rifled naval guns had demonstrated the limits of this vision, and the increasing size of newer shore guns precluded enclosing them in structures similar to antebellum casemates (Black 1983: 63). Post-Civil War forts consisted of a series of dispersed batteries, and the post itself became a "piece of real estate" within which these defensive structures were contained (Lewis 1970: 70).

Subsequent innovations in weapons, mines and torpedoes, as well as developments in measuring techniques which enabled coastal weaponry to obtain greater accuracy, effectively transformed the relationship between armaments and structures. The weapons assumed greater importance, and the structures came to be seen more as platforms for the guns. "In sharp contrast with the stark, vertical-walled forts of the Third System [represented at Fort Wadsworth by * Battery Weed], the new works of reinforced concrete [of the Endi-

- * Battery Weed is a National Historic Landmark Property. Fort Tompkins, located to the west of Battery Weed, is listed on the National Register of Historic Places. Both properties were integrated into the Endicott-Era defense system at Fort Wadsworth.

(see continuation sheet)

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cott-Taft period] were de-emphasized by being designed to blend, so far as possible, into the surrounding landscape" (Lewis 1970: 78). Gun emplacements were located further apart, rather than concentrated as in Third System forts, and greater range of weapons enabled eventual placement of fortifications further from New York City (Gilmore 1983). Within Fort Wadsworth, Endicott batteries were positioned along the southeast shore, commanding a view toward the Atlantic Ocean, rather than directly across the Narrows. Guns were placed so that their arc of fire covered the approach, but complemented the fire emanating from Fort Hamilton (Chief of Engineers 1900). Thus, both Fort Wadsworth and Fort Hamilton remained viable harbor defense installations because the configuration of the shore in their vicinities commanded views of the Atlantic as well as the Narrows, whereas the Narrows alone had been the focus when the range of guns had been shorter.

Fort Wadsworth's Endicott batteries were constructed between 1895 and 1904. Of the twelve batteries, six were reconstructions of existing works. Part of Battery Hudson (portions of which dated to 1810) was rebuilt for two 6-inch breech-loading rifles and renamed Battery Mills. Another part of Battery Hudson was remade to mount one 6-inch and two 12-inch breech-loading rifles mounted on disappearing carriages, plus a single 4.7-inch rapid-fire, pedestal-mounted gun. South Cliff Battery, originally built in 1862-1866, was replaced with Battery Barbour, armed with two 6-inch and two 4.7-inch pedestal-mounted rapid-fire guns; Battery Turnbull, with six 3-inch guns; and Battery Bacon, with two 3-inch guns. North Cliff Battery, dating from 1863, was rebuilt as Battery Catlin and mounted with six 3-inch rapid-fire guns (Black 1982: 110-113).

The six completely new batteries included Battery Duane, with 8-inch rifles on Buffington-Crozier disappearing carriages; and Batteries Upton, Barry, Richmond, Ayers and Dix. These last five were mounted with pairs of guns: 10-inch weapons for Upton and Barry, and 12-inch weapons for Richmond, Ayers and Dix. All were mounted on Buffington-Crozier disappearing carriages (Black 1982: 112).

(see continuation sheet)

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Despite the impressive construction and armament, the Endicott batteries, and Fort Wadsworth itself as a seacoast artillery post, were destined for rapid obsolescence. This was due in part to advances in naval armament in the early 20th century, as by 1915 there were foreign vessels "capable of outshooting any Endicott battery" (Black 1982: 132). It was also due to the later development of long-range bombers and aircraft carriers, against which the post was armed in the 1930's with several antiaircraft batteries (Black 1982: 134). With its coastal artillery defenses no longer viable, Fort Wadsworth's Endicott batteries were gradually abandoned and the guns removed, beginning with Battery Duane in 1915 and ending with Battery Turnbull in 1944.

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Black, Frederick R.

1982 A History of Fort Wadsworth, New York Harbor. Prepared for the National Park Service, Order No. PX1600-0-0814.

Gilmore, Russell S.

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U.S., Chief of Engineers

1900 Chart of the Southern Entrance of the Harbor of New York Showing Position of Guns and Range-Finding Stations at Fort Hamilton, Fort Wadsworth and Fort Hancock. Record Group 77, Drawer 43, Sheet 106-2. On file at the Cartographic Branch, National Archives, Alexandria, Virginia.

U.S., Department of the Navy

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National Park ServiceNational Register of Historic Places
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UTM References

Battery Catlin:	18/579760	4495320
Battery Bacon:	18/579990	4495070
Battery Duane:	18/579860	4495000
Battery Turnbull		
North Segment:	18/580000	4495000
South Segment:	18/580020	4494900
Battery Barbour:	18/580020	4494810
Battery Hudson:	18/579980	4494700
Battery Mills:	18/579880	4494630
Battery Upton:	18/579740	4494630
Battery Dix:	18/579840	4494460
Battery Barry:	18/579640	4494480
Command Post:	18/579650	4494400
Battery Richmond:	18/579540	4494400
Battery Ayers:	18/579450	4494320

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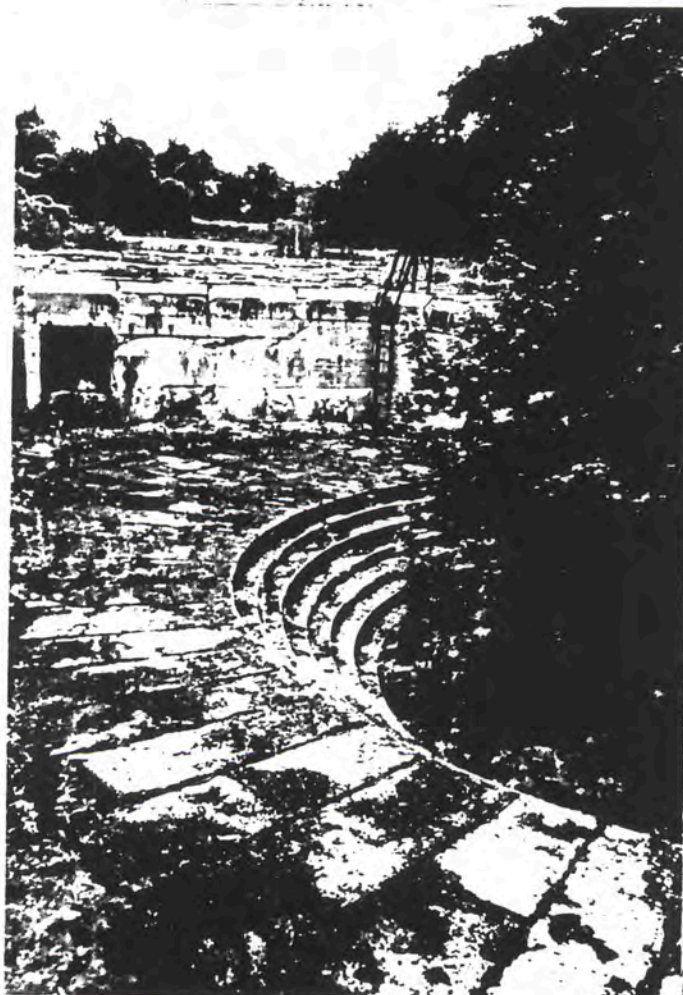
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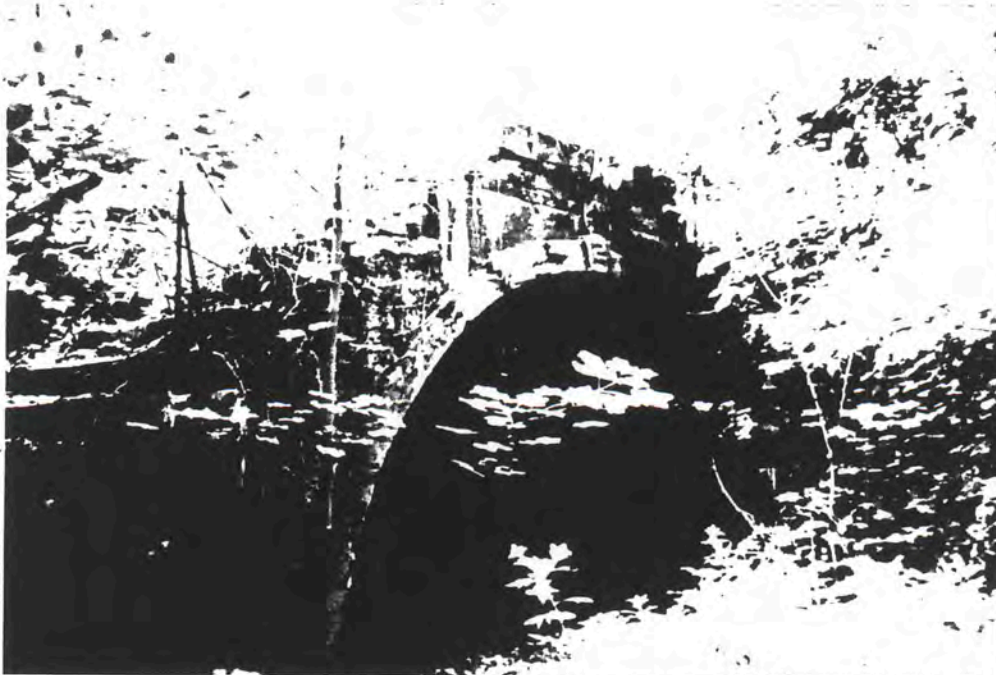
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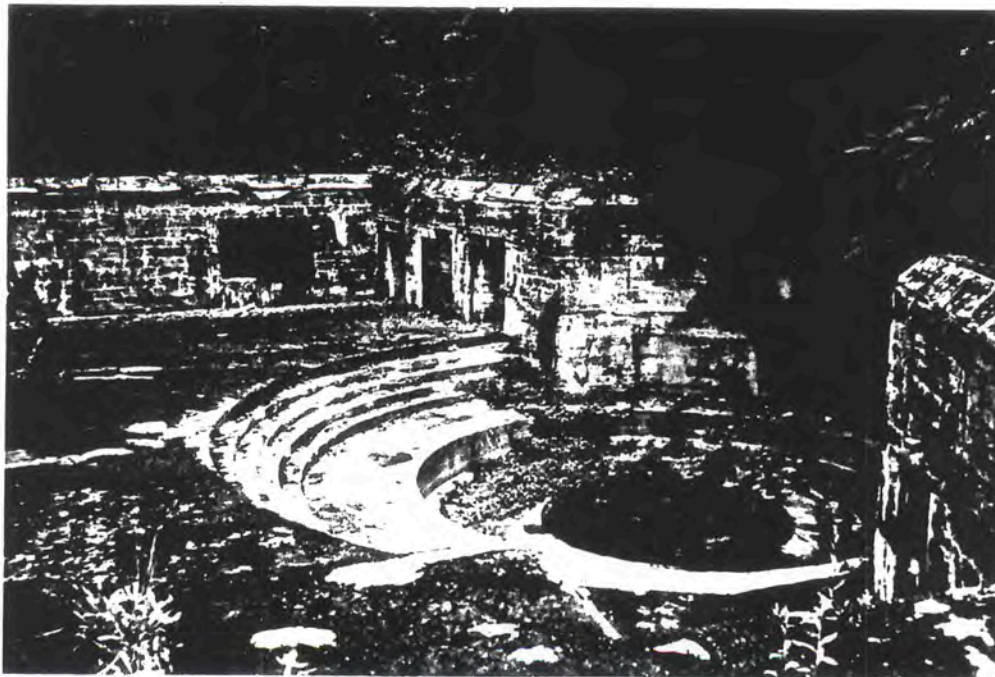
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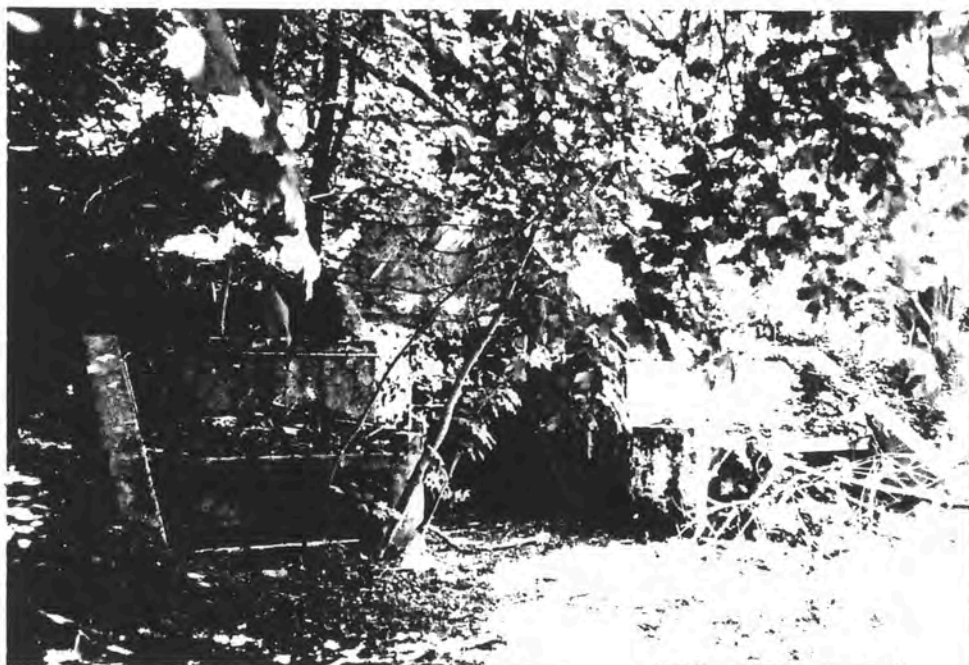
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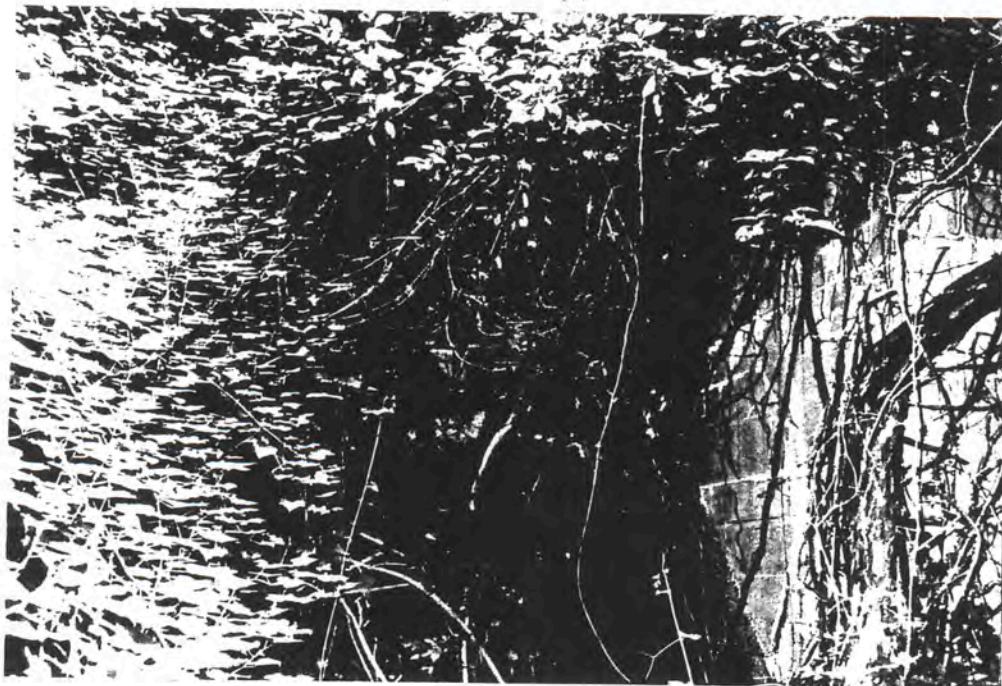
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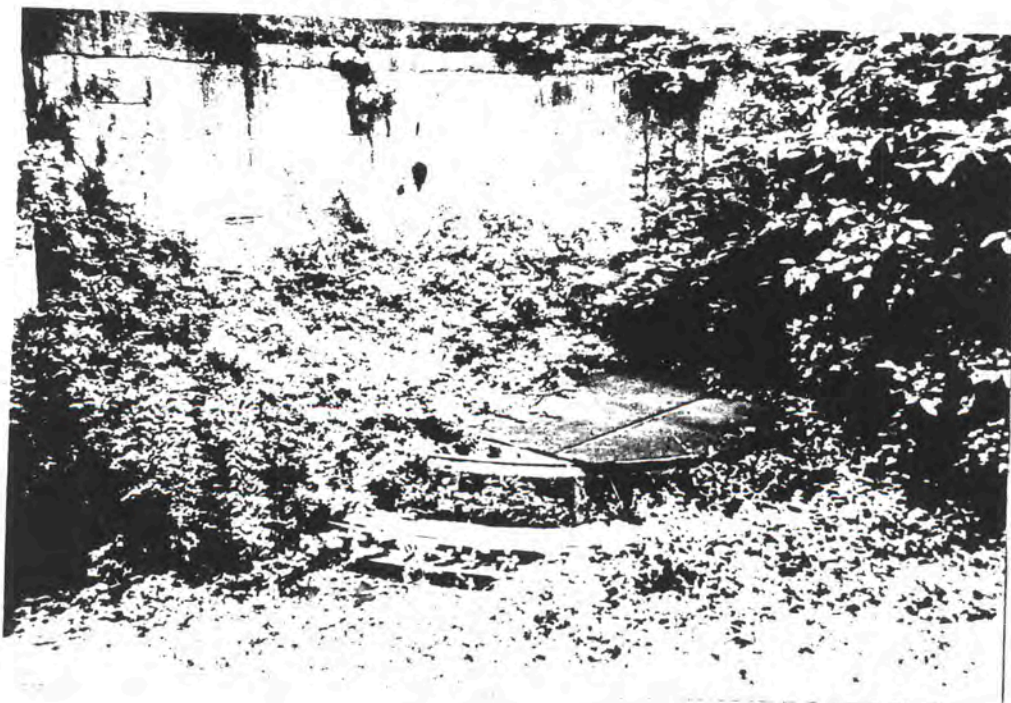
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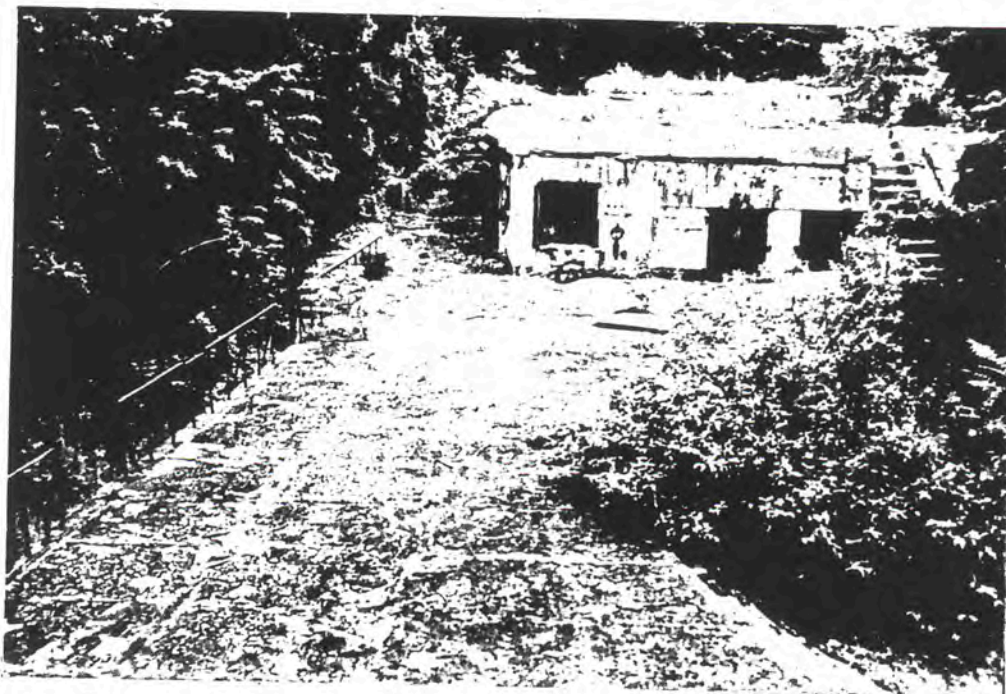
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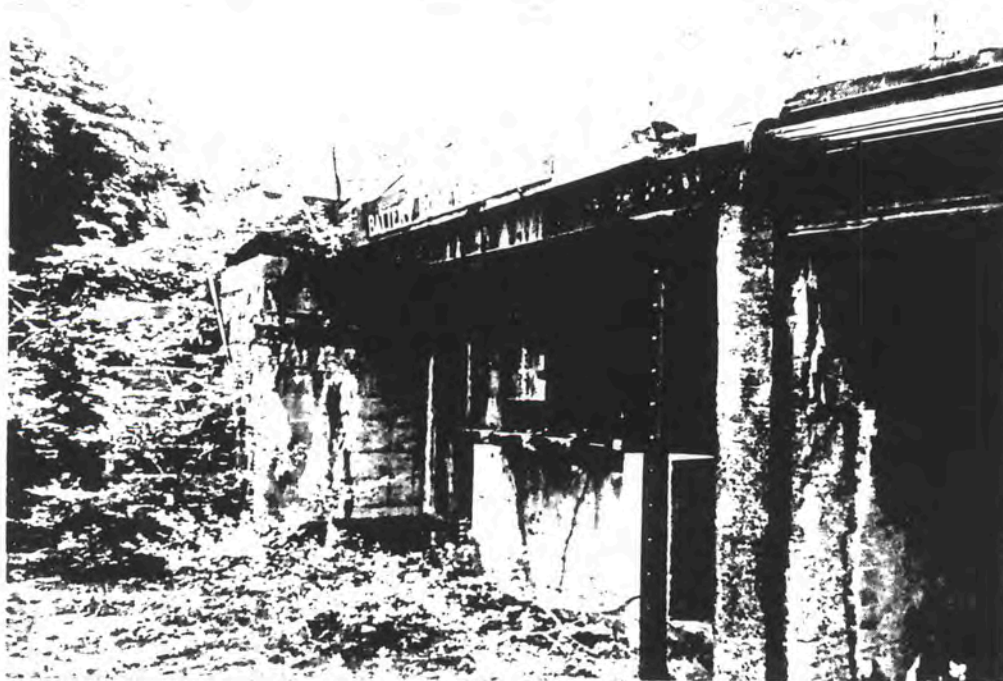
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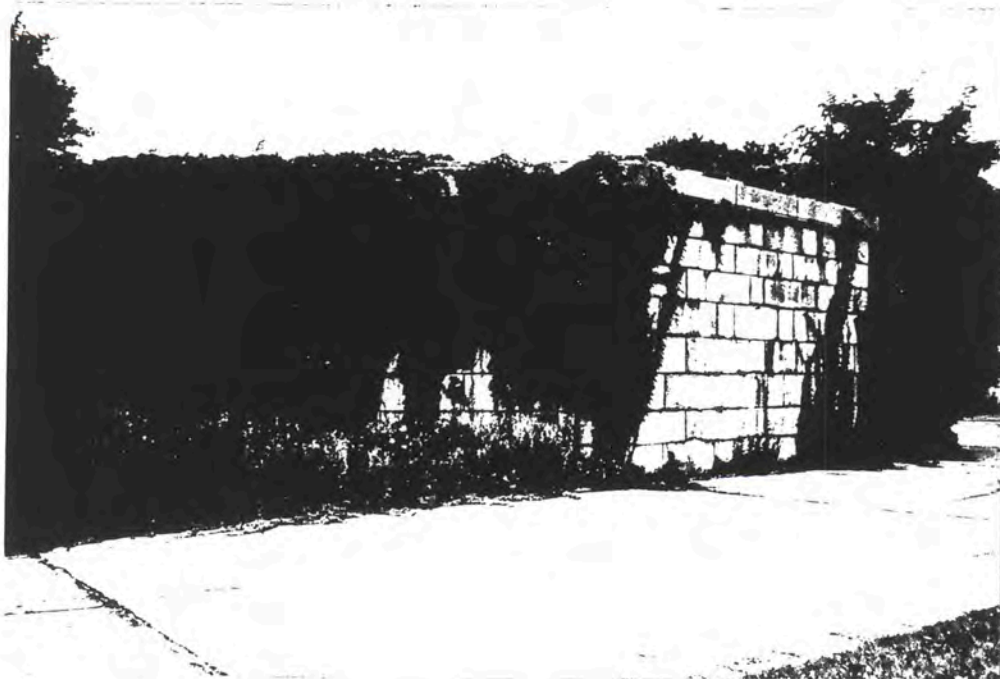
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PLATE CAPTIONS.

ENDICOTT-ERA BATTERIES AT FORT WADSWORTH

- Plate 1: Battery Turnbull, concrete platform. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.
- Plate 2: Battery Bacon, concrete platform. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August 1984.
- Plate 3: Battery Upton, #315, interior of ammunition magazine. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.
- Plate 4: Battery Upton, #315, gun emplacement. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.
- Plate 5: Battery Barbour, #316, concrete platform. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

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Plate 6: Battery Hudson, #317, gun emplacement. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

Plate 7: Battery Mills, #318, arched entrance corridor. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

Plate 8: Battery Dix, #319, Arch 2, Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

Plate 9: Battery Dix, #319, gun emplacement. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

Plate 10: Command Post, #320, Command Post entrance. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

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Plate 11: Battery Catlin, #155, concrete walls. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

Plate 12: Battery Barry, #321, iron support piers and concrete wall. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

Plate 13: Battery Barry, #321, gun emplacement. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

Plate 14: Battery Richmond, #421, gun emplacement and iron hook. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

Plate 15: Battery Richmond, #421, entrance corridor. Fort Wadsworth, New York, New York. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. August, 1984.

July 30, 1973

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM
FOR FEDERAL PROPERTIES

(Type all entries - complete applicable sections)

STATE:	New York
COUNTY:	Richmond
FOR NPS USE ONLY	
ENTRY DATE	

1. NAME

COMMON:

Ft. Tompkins Quadrangle, Ft. Wadsworth

AND/OR HISTORIC:

Ft. Tompkins

2. LOCATION

STREET AND NUMBER:

BLDG #137

CITY OR TOWN:

Ft. Wadsworth, Staten Island

CONGRESSIONAL DISTRICT:

STATE:

New York

CODE

COUNTY:

Richmond

CODE

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
☐ District ☐ Site ☐ Object	☒ Public ☐ Private ☐ Both	☒ Occupied ☐ Unoccupied ☐ Preservation work in progress	Yes: ☒ Restricted ☐ Unrestricted ☐ No
PUBLIC ACQUISITION: ☐ In Process ☐ Being Considered			
PRESENT USE (Check One or More as Appropriate)			
☐ Agricultural ☐ Commercial ☐ Educational ☐ Entertainment	☐ Government ☐ Industrial ☒ Military ☒ Museum	☐ Park ☐ Private Residence ☐ Religious ☐ Scientific	☐ Transportation ☒ Other (Specify) Admin Offices

4. AGENCY

Department of the Army

REGIONAL HEADQUARTERS: (If applicable)

US Army Garrison, Fort Hamilton

STREET AND NUMBER:

CITY OR TOWN:

Brooklyn

STATE:

New York

CODE

NOT 1 7 1973

STATE:

COUNTY:

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ENTRY NUMBER

DATE

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC:

Hall of Records

STREET AND NUMBER:

30 St. Marks Place

CITY OR TOWN:

Staten Island

STATE:

New York

CODE

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:

None

DATE OF SURVEY:

☐ Federal

☐ State

☐ County

☐ Local

DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN:

STATE:

CODE

7. DESCRIPTION

CONDITION	(Check One)					
	☐ Excellent	☒ Good	☐ Fair	☐ Deteriorated	☐ Ruins	☐ Unexposed
	(Check One)			(Check One)		
	☒ Altered	☐ Unaltered	☐ Moved	☒ Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

The present Fort Tompkins Quadrangle was originally designed and built as a fortified barracks in support of Battery Weed and two other Batteries, Morton and Hudson, which were built at the same time. The fort is a prime example of the architectural "era of stone fortifications". In 1847 construction of the fort was begun with completion in August 1861. Constructed on the highest point of the West side of the Narrows, the structure was built in the shape of an irregular quadrangle approximately 500'x250'. Built of granite and brick with earthen roofs it is a prime example of design characterizing the "era of stone fortifications". The front facing the Narrows was approximately 500' long with 2 arched entry ways, 75' long at either end. On the interior of the wall were 18 open arched rooms, with deep humped ceilings, divided by granite and brick rectangular pillers and extending approximately 75' to the exterior wall. This area was covered by an earthen roof forming a parapit for observation.

The back four walls were of a double nature forming a channeled moat. The exterior structure was approximately 15' wide and contained 2 floors of 10' square rooms, with gun ports facing the moat. The interior was formed by two floors of rooms 30' deep, with arched ceilings, and gun ports facing the moat. In each of the four corners passage ways led to cells & powder magazines. Both structures were covered by an earthen roof forming a hipped grassy crown.

The exterior of the structure is much the same today except for the fact that the arched opening in the front wall were enclosed by brick. Modifications were made to most interior rooms, when they were converted to administrative uses. Partitions, plumbing, heating and lighting were installed throughout the entire structure but dates are unknown. Most of the interior stone and brick work has survived, even with the many modifications, still exhibiting the architecture and construction of the "era of stone" fortifications.



8. SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

- | | | | |
|--|---------------------------------------|--|---------------------------------------|
| ☐ Pre-Columbian | ☐ 16th Century | ☐ 18th Century | ☐ 20th Century |
| ☐ 15th Century | ☐ 17th Century | ☒ 19th Century | |

SPECIFIC DATE(S) (If Applicable and Known)

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- | | | | |
|--|---|--|--|
| ☐ Aboriginal | ☐ Education | ☐ Political | ☐ Urban Planning |
| ☐ Prehistoric | ☐ Engineering | ☐ Religion/Philosophy | ☐ Other (Specify) _____ |
| ☒ Historic | ☐ Industry | ☐ Science | _____ |
| ☐ Agriculture | ☐ Invention | ☐ Sculpture | _____ |
| ☒ Architecture | ☐ Landscape Architecture | ☐ Social/Humanitarian | _____ |
| ☐ Art | ☐ Literature | ☐ Theater | _____ |
| ☐ Commerce | ☒ Military | ☐ Transportation | _____ |
| ☐ Communications | ☐ Music | | |
| ☐ Conservation | | | |

STATEMENT OF SIGNIFICANCE

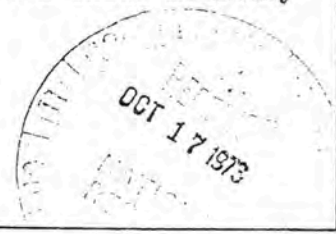
Fort Tompkins, in conjunction with Battery Weed, previously listed on the National Register of Historic Places, both now a part of Fort Wadsworth, which now forms "the oldest active permanently occupied military post in the United States, with service under three flags". The present Fort Tompkins structure is not only significant for this, but also for its site and architectural design.

The site of the present Fort Tompkins began its history as a fortified, garrisoned site in 1663, when the Dutch constructed a block-house. The area was captured by the British in 1664 and further expanded. A signal pole was erected on the site in 1776 to signal the arrival of the British fleet to New York City and General Washington. The area fell to the British in the Fall of 1776 and was rebuilt and manned by them until November 25, 1783, Evacuation Day, when the last shot of the Revolution was directed at the area by a British Gun Boat. During the War of 1812 the forts were again used for signaling the approach of the British Fleet. In 1814 money was appropriated to complete Fort Richmond (Battery Weed) and Fort Tompkins as red stone structures to replace the temporary earth works.

In 1847 the Federal Government purchased the property from the State of New York and the existing structures were destroyed and the present granite and masonry structures were begun that year and finished and garrisoned on August 6, 1861.

Since that time the fort has been manned continually as a coast artillery location, Fort Tompkins eventually becoming a part of Fort Wadsworth and modified for administrative uses. The structure has had few exterior alterations, still maintaining the basic stone and masonry architectural style, as a prime example of the "era of stone fortifications", as a period of military construction. The long history of its site and its construction and architectural style make it a chief military historical landmark.

SEE INSTRUCTIONS



9. MAJOR BIBLIOGRAPHICAL REFERENCES

INFORMATION BROCHURE, HQ Fort Hamilton Complex, NY, 1971, p.3
 Walker, Wm G., History of Ft. Wadsworth, NY, 1936
 Files of Deputy Commander, Ft. Wadsworth, NY
 Files of Information Office, Ft. Hamilton, NY
 DFAE, Real Property Files and Drawings (Historical), Fort Hamilton

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY				OR	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES				
CORNER	LATITUDE		LONGITUDE		LATITUDE		LONGITUDE		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
NW	°	'	"	°	'	"	40°	30'	20"
NE	°	'	"	°	'	"	74°	03'	40"
SE	°	'	"	°	'	"			
SW	°	'	"	°	'	"			

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 3

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE
New York		Richmond	
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

11. FORM PREPARED BY

NAME AND TITLE: A.D. Griswold, Engineer Property Officer		DATE: 30 Jun 73
BUSINESS ADDRESS: Officer of the Director of Facilities and Engineering		
STREET AND NUMBER: BLDG #129, Fort Hamilton		PHONE: 836-4100 EXT-4267
CITY OR TOWN: Brooklyn	STATE: New York	CODE

12. CERTIFICATION OF NOMINATION

State Liaison Officer recommendation:

- ☐ Yes
☐ No
☒ None

State Liaison Officer Signature

In compliance with Executive Order 11593, I hereby
 nominate this property to the National Register, certify-
 ing that the State Liaison Officer has been allowed 90
 days in which to present the nomination to the State Re-
 view Board and to evaluate its significance. The recom-
 mended level of significance is ☐ National ☐ State
☐ Local

Federal Representative Signature

Date

Title

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the
National Register.

Director, Office of Archeology and Historic Preservation

Date

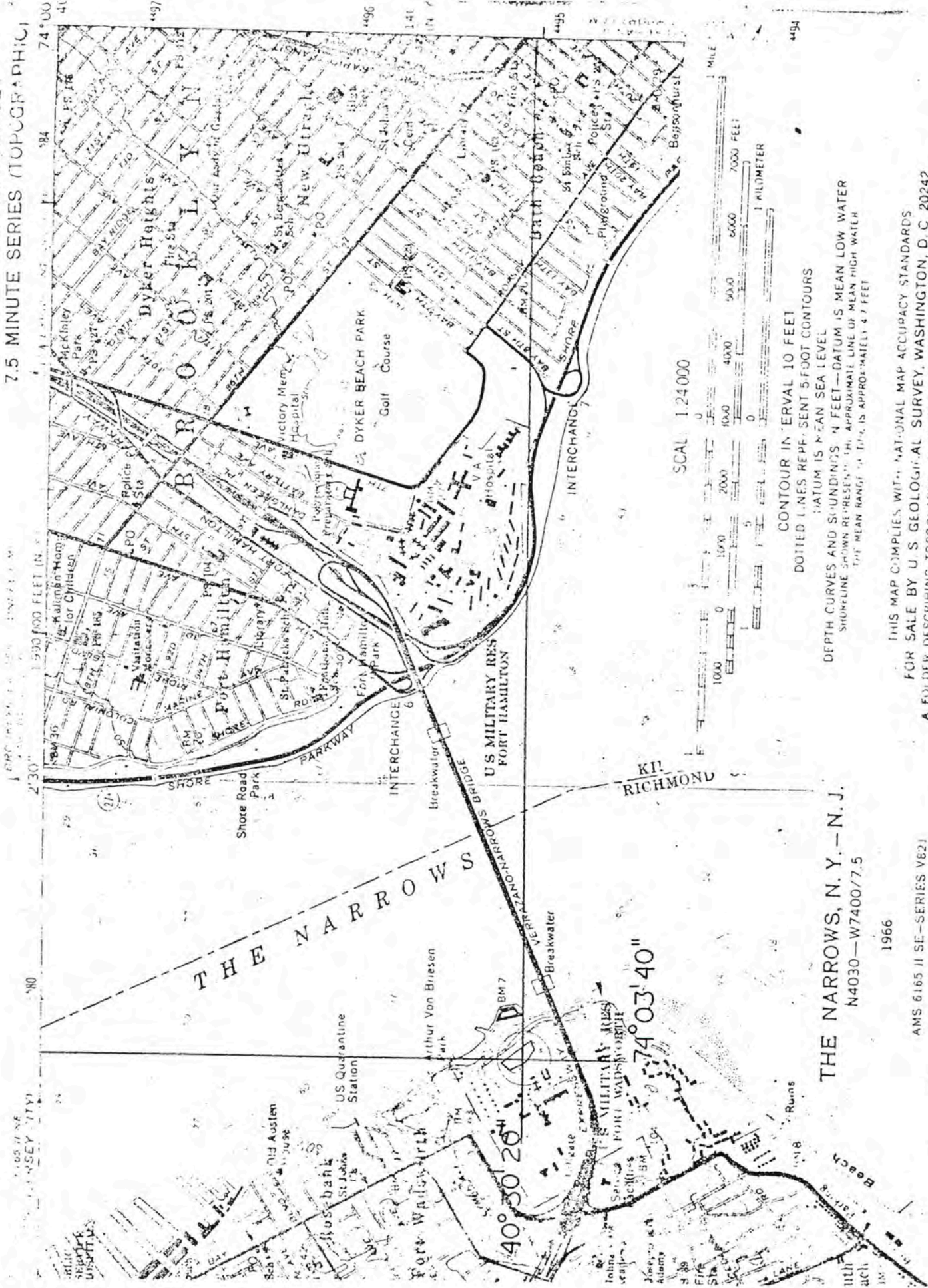
ATTEST:

Keeper of The National Register

Date

SEE INSTRUCTIONS

THE NARROWS QUA ANGLE
NEW YORK-NEW JERSEY
7.5 MINUTE SERIES (TOPOGRAPHIC)



THE NARROWS, N.Y.-N.J.
N4030-W7400/7.5

1966

AMS 6165 II SE-SERIES V621

SCALE 1:24,000

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS

DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN SEA LEVEL
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 4.7 FEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

7 2000908

Jan 20, 1972

Form 10-300
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE: New York	
COUNTY: Richmond (Staten Island)	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE
	JAN 20 1972

1. NAME

COMMON: Battery Weed
AND/OR HISTORIC: Fort Richmond

2. LOCATION

STREET AND NUMBER: Wadsworth Fort Washington Reservation			
CITY OR TOWN: New York Staten Island			
STATE: New York	CODE: 36	COUNTY: Richmond (Staten Island)	CODE: 085

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
☐ District ☐ Building ☐ Site ☒ Structure ☐ Object	☒ Public ☐ Private ☐ Both	Public Acquisition: ☐ In Process ☐ Being Considered	☐ Occupied ☒ Unoccupied ☐ Preservation work in progress
PRESENT USE (Check One or More as Appropriate)			
☐ Agricultural ☐ Commercial ☐ Educational ☐ Entertainment	☐ Government ☐ Industrial ☒ Military ☐ Museum	☐ Park ☐ Private Residence ☐ Religious ☐ Scientific	☐ Transportation ☐ Other (Specify) ☐ Cemeteries

4. OWNER OF PROPERTY

OWNER'S NAME: United States Government Department of Defense		
STREET AND NUMBER:		
CITY OR TOWN: Washington	STATE: D.C.	CODE: 11

5. LOCATION OF LEGAL DESCRIPTION

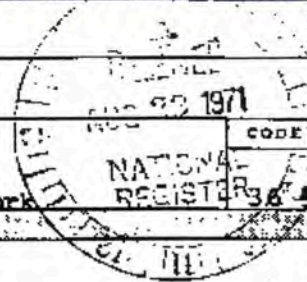
COURTHOUSE, REGISTRY OF DEEDS, ETC.: Richmond County Clerk's Office		
STREET AND NUMBER:		
CITY OR TOWN: New York	STATE: New York	CODE: 36

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY: New York City Landmarks Preservation Commission			
DATE OF SURVEY: Oct. 12, 1967 ☐ Federal ☒ State ☐ County ☐ Local			
DEPOSITORY FOR SURVEY RECORDS: New York City Landmarks Preservation Commission			
STREET AND NUMBER: 305 Broadway			
CITY OR TOWN: New York	STATE: New York	CODE: 36	

Rep. John M. Murphy

SEE INSTRUCTIONS



STATE: New York	COUNTY: Richmond
ENTRY NUMBER	DATE JAN 20 1972

FOR NPS USE ONLY

DESCRIPTION	
CONDITION	☐ Excellent ☒ Good ☐ Fair ☐ Deteriorated ☐ Ruins ☐ Unexposed (Check One)
	☐ Altered ☒ Unaltered ☐ Moved ☒ Original Site (Check One)
DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE	
Number of stories: The three sides facing the inner courtyard are each <u>three stories high</u>. (The fourth side consists of a low wall). At the center of the wall is a <u>two-story gate house</u> and at each end a <u>four-story block house or storage house</u>, all three of which have access to the courtyard. Number of bays: There are multiple bays. Layout and/or shape of plan: The fort is laid out in the form of an <u>irregular shaped trapezoid</u> with the shorter side facing the water. Wall Construction: The walls consist of solid slabs of <u>granite</u> which are up to six feet thick at the sea wall. Structural system: The structural system is masonry bearing wall and arched vaulting. Roof, cornice: Two plain bandcourses extend around the upper wall, and a large half-round coping crowns the wall. Important interior features: The open inner courtyard is framed on <u>three sides by tier on tier of segmental arches</u>, forming a series of galleries on three levels. In each corner of the courtyard an <u>octagonal tower</u>, containing stairs, gave the troops access to the casemate levels. Other notable features: The north and south corners of the fort on the land side terminate in the form of points or ravelins. The two-story gatehouse is approached through a pedimented doorway at the center of the low wall on the land side. The exterior walls are simple, with evenly spaced rectangular openings marking the placement of the casemates behind them.	

SEE INSTRUCTIONS

SIGNIFICANCE			
PERIOD (Check One or More as Appropriate)			
☐ Pre-Columbian	☐ 16th Century	☐ 18th Century	☐ 20th Century
☐ 15th Century	☐ 17th Century	☒ 19th Century	
SPECIFIC DATE(S) (If Applicable and Known) <u>1847-1861</u>			
AREAS OF SIGNIFICANCE (Check One or More as Appropriate)			
☐ Aboriginal	☐ Education	☐ Political	☐ Urban Planning
☐ Prehistoric	☐ Engineering	☐ Religion/Philosophy	☐ Other (Specify) _____
☐ Historic	☐ Industry	☐ Science	_____
☐ Agriculture	☐ Invention	☐ Sculpture	_____
☒ Architecture	☐ Landscape	☐ Social/Humanitarian	_____
☐ Art	☐ Architecture	☐ Theater	_____
☐ Commerce	☐ Literature	☐ Transportation	_____
☐ Communications	☒ Military		
☐ Conservation	☐ Music		
STATEMENT OF SIGNIFICANCE			
Battery Weed is an important example of military architecture of the second half of the 19th century. It stands at the water's edge on the Narrows and is constructed of granite slabs. Very little mortar was used in constructing the fort because of the skill of the masons employed in cutting, trimming, and setting up the stone blocks. Battery Weed (formerly Fort Richmond) and Fort Wadsworth (formerly Fort Tompkins) together form the oldest continually manned military positions in the United States. A small wooden blockhouse was built by the Dutch in 1663 near the present site of Fort Wadsworth. In 1707, the justices of Richmond county were assessed three thousand pounds to defray the cost of fortifying British New York. Records show that fortifications, including a blockhouse, were built on the western shore of the Narrows. After the Revolutionary War the Islanders levied taxes for the restoration of those parts of the installation that had been heavily damaged. In 1814, fifty thousand dollars was allocated for the completion of the newly constructed Fort Tompkins and Richmond. The structures were built of red stone and designed in the manner of old Castle Williams on Governor's Island. By 1835, the two forts were declared unfit for use by the State of New York. In 1847, the reservation passed from state to federal control. Construction of the present fort and battery was begun that same year. The work was completed in fourteen years and the first troops were garrisoned there on August 8, 1861. At the height of its glory Battery Weed was one of the most powerful forts on the eastern seaboard. In 1862, it mounted between 140 and 150 cannon and was manned by a large force from the Fifth Regiment, New York Volunteers Artillery. The battery was named after Brigadier General Stephen H. Weed of the United States Volunteers, who was killed in the Battle of Gettysburg, Pennsylvania, July 2, 1863. In 1902, the War Department applied the name Fort Wadsworth to all the fortifications located on the military reservation on the west side of the Narrows. Brigadier General James S. Wadsworth, for whom the reservation was named, was killed in the Battle of the Wilderness in 1864.			



Battery Weed

THE NARROWS QUADRANGLE NEW YORK-NEW JERSEY 7.5 MINUTE SERIES (TOPOGRAPHIC)

6885 IN.
18000

BROOKLYN-BATTERY TUNNEL 5 MI
1.9 MI. TO INT. 278
2'30"

C.I. EXPWY (INT. 482) 11 MI.

74°00' 40°37'30"

