



Charlestown Navy Yard, Boston National Historical Park. Clockwise from top left: 1874 View of Gate 1, First Avenue, and Building 5 from exterior of yard (BOSTS-8940); current view of Gate 1 from exterior of yard (OCLP, 2003); current view of Commandant's House (Quarters G)(OCLP, 2003); and Commandant's House in 1901 (BOSTS 9182).

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ANALYSIS OF SIGNIFICANCE AND INTEGRITY

This chapter provides an analysis of the historical significance of the Charlestown Navy Yard and an evaluation of integrity of the physical character of the landscape. The analysis is based on criteria developed by the National Register of Historic Places, which lists properties significant to our country's history and prehistory. The analysis reviews the current National Register status, identifies inconsistencies and potential new areas of significance, and reviews areas of significance in accordance with National Register criteria and related historical contexts.¹ The evaluation portion of the chapter examines the physical integrity of extant landscape characteristics and features, such as vegetation, views, and circulation, with respect to the site's historical appearance and identifies which contribute or do not contribute to the site's historical significance.

ANALYSIS SUMMARY

The analysis of the areas of significance is based upon the concurrent Historic Resource Study, in draft in 2004 and nearly complete. This document recommends that the park be considered significant under National Register criteria A, B, C and D for the period of 1800-1974 in the areas of naval and military history and associated social movements, technological innovations, distinctive architecture, and remarkable engineered features. Several notable naval officers, architects and engineers are included as well as the physical evidence of their work. In addition, the property contains many archeological resources. The integrity of individual resources in the Navy Yard varies. Yet as a whole, the yard retains integrity of location, association, setting, design, materials, workmanship, and feeling, especially with respect to the National Historic Landmark criteria regarding its association with "events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of United States history from which an understanding and appreciation of those patterns may be gained."² The evaluation section calls out the multitude of characteristics and features that contribute to the historic character of the property. The buildings and structures, already documented through the List of Classified Structures, are described here in the context of the landscape setting. Thus the spatial organization of the yard, the circulation throughout the yard and between individual structures, the vegetation, views, and small scale features are evaluated to provide a holistic description and a comprehensive list of characteristics and features that contribute to the historic property. Those features that do not contribute to the significance are also listed, but for the most part, these do not detract from the historic setting.

¹ The National Register of Historic Places Program determines a historic property's significance in American history through a process of identification and evaluation. Historic significance may be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling or association and which meet at least one of the following National Register criteria:

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

² National Register Bulletin 16, Guidelines for Completing National Register of Historic Places Forms - Part A. How to Complete the National Register Form (Washington: National Register Branch, Interagency Resources Division, National Park Service, US Dept. of the Interior, 1991), Appendix V:I.

SIGNIFICANCE

NATIONAL REGISTER STATUS³

In November 1966, the U.S. Secretary of the Interior designated the Boston Naval Shipyard as a National Historic Landmark. This designation also automatically placed the yard on the National Register of Historic Places, a program established under the authority of the National Historic Preservation Act of 1966 (NHPA). The National Landmark nomination noted that “...the Boston Naval Shipyard...has been found to possess exceptional value in commemorating or illustrating the history of the United States...”⁴ In 1978, the National Park Service prepared a National Register Nomination Form to document the property. The form was submitted to the National Register Office but never formally accepted. This draft document found the Charlestown Navy Yard to be eligible under National Register Criteria A, C and D. The park’s 2004 draft Historic Resource Study recommends that revised National Register forms be prepared and that all four criteria (A,B,C,D) are applicable to the yard. The Charlestown Navy Yard has never been evaluated within the context of a military/industrial complex nor examined in the context of contemporary navy yards.

Since the 1978 nomination form, most of the park’s alterations have not diminished the yard’s integrity, while a few actions have. The park’s General Management Plan states that “...the Navy Yard’s appearance will be managed to reflect the final period of Navy occupancy dating to 1974.”⁵ The yard has been substantially altered since the Historic American Engineering Record (HAER) photographs were taken in 1977. The demolition of certain buildings and additions, the neglect of structures such as the Marine Railway, the reconfiguration of some streets, and the reintroduction of some street trees illustrate a few of the changes. Yet the design intent—guided by the yard’s overall plan and building scale and largely influenced by Loammi Baldwin, Alexander Parris and other early yard architects and engineers—is still strongly expressed.

A Historic Resource Study was completed by Edwin C. Bearss and Frederick R. Black in 1984 and 1988, which is presented in three parts and contained in five volumes. These volumes focus on the history of the site and focus on naval operations and ships built in the yard. They do not address surviving resources, significance, or treatment. A revised Historic Resource Study (HRS) is currently in draft, which seeks to document and assess the cultural resources and determine primary and secondary periods of significance for the yard. The revised HRS also addresses the period of 1974 to 2000, when many changes were made in the yard. This analysis will draw from the both the 1980s and most recent studies as they pertain to significance of the landscape characteristics and features.

PERIOD OF SIGNIFICANCE⁶

The period of significance of the Charlestown Navy Yard extends from the yard’s establishment in 1800 to its deactivation in 1974 when the yard became part of Boston National Historical Park.⁷ The 2004 draft Historic Resource Study defines the significance of the Navy Yard as follows:

³ Much of the content of this section was developed from the tables in the 2003 draft of the Historic Resource Study (HRS) Chapter 3 Overview of Landscape History.

⁴ National Survey of Historic Sites and Buildings, “Boston Naval Shipyard, Massachusetts,” October 10, 1966, enclosed in Howard R. Stagner to Paul H. Nitze, Secretary of the Navy, Nov. 15, 1966, Boston Naval Shipyard NHL Reference File, Division of Cultural Resources, Boston NHP.

⁵ Final Revised General Management Plan, Volume II, Boston National Historical Park, Charlestown Navy Yard, Boston, MA, February 1987.

⁶ Much of the content of this section was developed from the tables in the 2003 draft of the Historic Resource Study (HRS) Chapter 3 Overview of Landscape History.

The Charlestown Navy Yard is significant for its role in the construction, repair, and servicing of vessels of the United States Navy for the entire period of its existence from 1800 to 1974. It is also significant as the site of one of the first two naval dry docks in the United States, the location of the Navy's only ropewalk, and for technical innovations such as die-lock chain. The yard evolved throughout its history to meet changing needs and naval technologies, and the current site contains resources from all periods of its existence. The yard also contains two of the landing sites for British forces involved in the Battle of Bunker Hill. Although much of the current acreage of the yard is filled land, there is a potential that portions of the yard may contain archeological resources related to Native American and colonial use of the area prior to its purchase by the federal government as well as those related to its use by the Navy. The yard is also associated with several historically significant naval officers, as well as with a number of individuals who are significant in the fields of architecture and civil engineering.⁸

Both the 2004 draft Historic Resource Study and 1978 draft nomination cite four primary themes to evaluate all extant buildings and features of the yard:

1. History of the American Navy
2. History of Technology
3. History of Social and Worker Movements
4. History of American Architectural Design and Planning

These four themes are evident in National Register Criteria A, B, C, and D. Both documents ascribe national significance to the Charlestown Navy Yard—one of the six original United States Navy Yards—under Criterion A for its association with 174 years of the U.S. Navy's war and peacetime efforts.⁹ Additionally, the property is significant under Criterion B for its association to significant figures including naval officers and other individuals involved with the yard's architecture, engineering, and technology. The property is also significant under Criterion C for its distinctive historic residences, manufacturing facilities, piers, and dry docks as well as associated open space critical to the yard's operation. Much of the yard's grid, open space, and buildings can be attributed to the planning and design of Loammi Baldwin, Alexander Parris, and Joseph Billings among others while engineers such as Baldwin created structural feats such as Dry Dock 1. Additional significance is ascribed under Criterion D for the potential of the property's buildings and structures to yield important historical information. The archeological resources associated with the yard are significant, but beyond the scope of this study.

AREAS OF SIGNIFICANCE

As part of the cultural landscape analysis, the primary themes and areas of significance listed above for the property are highlighted in the nine subperiods below.¹⁰ With a 174-year long period of significance divided into these nine subperiods, today's Navy Yard represents an amalgam of building styles, technological innovations, and landscape features and spaces, all which reflect evolving ideals and functional needs.

⁷ The Charlestown Navy Yard also includes the site of the British landing during their 17 June 1775 attack on the colonial fortifications built on Breeds Hill, later known as the Battle of Bunker Hill. This event falls outside of the yard's 1800-1974 period of significance and is more associated with the program of the Bunker Hill Monument unit of Boston National Historical Park.

⁸ Statement of significance from Chapter 1, draft Historic Resource Study (Carlson, 2005).

⁹ National Register of Historic Places Nomination Form, The Historic Resources of the Boston Naval Shipyard, Charlestown Navy Yard. Partial Inventory: Historic and Architectural Resources by Edwin C. Bearrs, Historian, Peter J. Snell, Historical Architect, NPS, Denver Service Center, May 1978, page one, Significance Section.

¹⁰ The nine subperiods of the 1800-1974 period of significance above are slight variations of those identified by the draft Historic Resource Study (Carlson, 2004).

1. 1800-1828 Establishment of the Navy Yard

This subperiod reflects the 1800 founding of the Charlestown Navy Yard that followed the establishment of the U.S. Navy in 1798. Following the initial development, the early yard increased production during the War of 1812 and witnessed the start of shipbuilding. By 1828, the Navy removed both the Army and Marine Hospital reservations for yard expansion. The Navy constructed the Commandant's House (Quarters G), portions of the Marine Barracks (Building I), and the Navy Storehouse (Building 5) during this time. These buildings and the spatial relationships created by their placement with respect to each other are still evident.

2. 1828-1853 Early Nineteenth-century Growth

Loammi Baldwin's 1828 master plan guided the yard's growth during the second quarter of the nineteenth century and beyond with its tree-shaded east-west avenues and north-south streets and large rectangular buildings. The Navy built many granite buildings designed by Alexander Parris and Samuel Pook. Major shipbuilding and technological advances included the first covered ways or year-round shiphouses in the country. Parris's Ropewalk (Building 58) and Baldwin's Dry Dock 1 are two examples of state of the art engineering and industrial masterworks. In 1852, the Navy appointed Joseph Billings as the yard's first permanent civil engineer. The circulation system, building massing, several distinctive buildings, and Dry Dock 1 are still evident.

3. 1853-1869 Development in the Age of Steam

During this subperiod the yard adapted as the Navy evolved from wind and wood to steam and iron with new facilities that serviced the modernizing fleet. The yard's civil engineer, Joseph Billings, continued to design within the classical vocabulary of his predecessor, Alexander Parris, as the yard began to handle steam-powered vessels. The Civil War brought ironclad vessels and railroad tracks into the yard. The optimistic 1869 master plan marked the end of this period of growth, which followed with a time of relative inactivity. While core structures and ceremonial spaces were retained, a new layer of infrastructure was introduced to the yard including rail lines and a water distribution system. Larger vessels necessitated the extension of Dry Dock 1. The Muster House, designed by Joseph Billings, ushered in a new design style in the yard.

4. 1869-1898 Post Civil War

The end of the Civil War brought inactivity and efforts to close the yard during the 1880s. The 1890 Navy Appropriations Act led to partial modernization of the yard to build, repair, and outfit steel ships. With the beginning of the Spanish American War in 1898, the Navy authorized the construction of Dry Dock 2. This massive engineering project contrasted with the relatively calm ceremonial core of the yard, which was graced with an abundance of mature elms and other shade trees. Some of these trees are still evident, others have been replaced in kind, but most elms were subsequently lost to Dutch Elm Disease.

5. 1898-1920 Yard Resurrected

The Spanish American War and World War I further encouraged the Navy to continue the major modernization campaign begun with the 1890 Navy Appropriations Act. This subperiod reflects the start of steel shipbuilding and the yard's primary role in supplying and outfitting vessels. The Navy Yard began to expand to South Boston at this time. The completion of Dry Dock 2, the addition of crane and train rails, added asphalt road surfaces and parking areas, the presence of cranes enhanced the industrial appearance of the yard's waterfront as is still evident. The introduction of tennis courts to the ceremonial core altered the use of the central ceremonial area, as is still evident.

6. 1920-1934 The Stagnant 1920s

This subperiod reflects an inactive time in the yard and the beginning of the Great Depression. In 1926, yard workers invented die-lock chain which all Navy ships soon began to use. The Navy only produced the chain here at the Chain Forge (Building 105). This production reinforced the value of the yard as a manufacturing and supply center for the Navy. The stock piles of rope and chain are not currently evident.

7. 1934-1939 The Yard Revitalized

This subperiod began with the first government orders for destroyer construction and the Works Progress Administration (WPA) modernization of the yard and closes with the outbreak of World War II. The WPA renovated many of the yard's buildings during this time and many street trees were removed to allow for road widening and paving. The Garage and Chauffeur's Quarters (Building 1), the sunporch on the Commandant's House, as well as the added kitchen and butler's pantry date to this period.

8. 1939-1945 World War II

With World War II on the horizon and a declaration of national emergency in 1939, the Navy revived shipbuilding with the yard building many of the escort vessels and tank-landing ships used in the war. The Navy constructed numerous new facilities, increased its numbers of workers (especially female and minority), and established large stockpiles for building and supply distribution. The Navy developed the South Boston Annex during the war and redesignated the yard as the Boston Naval Shipyard. The Navy constructed many new buildings and additions during this time. However, one of the largest structures built within the park area, the Temporary Storehouse (Building 198), was subsequently removed as were the enormous stockpiles of supplies and the many temporary structures.

9. 1945-1974 Cold War Era

Following World War II, through the Korean and Vietnam Wars, until its closing in 1974, the yard played a major role during the Cold War in developing missiles, radar, and sonar systems. The yard outfitted many ships during this time, and the 1950s was particularly a time of modernization. Features still evident from this period include additional asphalt paving, the light towers, grit hoppers, explosives bunker, and saluting battery.

EVALUATION OF LANDSCAPE INTEGRITY

Integrity is the ability of a property to convey its historic identity or the extent to which a property evokes its appearance during a particular historic period, usually the period of significance. While evaluation of integrity is often a subjective judgment, it must be grounded in an understanding of a property's physical features and how they relate to its significance. The National Register identifies seven aspects of integrity.¹ Retention of these qualities is essential for a property to convey its significance, though all seven qualities need not be present to convey a sense of past time and place.

¹ Location is the place where the historic property was constructed or the historic event occurred. Design is the combination of elements that create the form, plan, space, structure and style of a property. Setting is the physical environment of a historic property. Materials are the physical elements of a particular period, which include plant materials, paving and other landscape features. Workmanship includes the physical evidence of the crafts of a particular period. Feeling is a property's expression of the aesthetic or historic sense of a particular period. Association is the direct link between an important historic event or person and a historic property.

Boston National Historical Park's Charlestown Navy Yard includes the administrative and ceremonial center of the yard with many nineteenth-century buildings. The landscape presents a long history, 1800-1974, and reflects many different periods of the Navy's and park's presence. Table 10.1 summarizes the yard's landscape integrity. It is impossible to restore the yard's landscape to a specific subperiod without destroying earlier or subsequent layers.

Using the seven aspects of integrity, the site does not retain integrity of the nineteenth-century Navy Yard landscape but does retain integrity of much of the twentieth century landscapes (Table 1.5). For the nineteenth-century subperiods of significance, the integrity of the location, design, and association of the Navy Yard landscape remains, but evidence of the setting, materials, workmanship, and feeling have been lost to subsequent development of the site and surrounding area. The yard's landscape reflects the early to mid-nineteenth century planning (design) of Loammi Baldwin, Alexander Parris, and Joseph Billings with its grid of avenues and streets and massing of buildings. Most of the yard's street trees have been lost however, while much of the yard has been paved with asphalt. Meanwhile the bulkhead has shifted further and further south into the harbor as the yard expanded. With naval modernization, ship and yard materials and workmanship have changed. The upper yard, a subzone within the park, retains integrity of materials and feeling associated with the nineteenth-century landscape at the Officers Quarters, Commandant's House, and Marine Barracks (Building 265, Quarters G, and Building I). Here trees, shrubs, and lawn evoke the historic scene. The Shipyard Mall, however, was historically covered with shot and guns, but is now open for recreation. The integrity of archeological resources should be considered, but is beyond the scope of this report.

For much of the twentieth-century subperiods, the site retains integrity with respect to location, design, setting, materials, workmanship, and association. World Wars I & II necessitated intense additions that compromised the yard's park-like character. By the end of World War II, few street trees remained much like today. Aspects of integrity that are slightly compromised include design, setting, materials, and feeling. After World War II, the Navy removed many of the stockpiles needed for the war effort. The park and BRA later removed some of the World War II era buildings and structures. These actions removed some evidence of this subperiod's design, materials, and feeling. The setting surrounding the park changed during the twentieth century and continued to change once the Navy left and the park formed. The setting reflects these changes made during the last half of the twentieth century.

Table 10.1: Summary of Landscape Integrity for Charlestown Navy Yard.

Sub-Periods of Significance	Overall	Location	Design	Setting	Materials	Workmanship	Feeling	Association
1800-1828 Establishment of the Navy Yard	No	Yes	No	No	No	No	No	Yes
1828-1853 Early Nineteenth- Century Growth	No	Yes	Yes (Baldwin, Parris, and Billings)	No	No	No	No	Yes
1853-1869 Development in the Age of Steam	No	Yes	Yes (Billings)	No	No	No	No	Yes
1869-1898 Post Civil War	No	Yes	Yes	No	No	No	No	Yes
1898-1920 Yard Resurrected	No	Yes	Yes	No	No	No	No	Yes
1920-1934 The Stagnant 1920s	Yes	Yes	Yes	No	Yes	Yes	No	Yes
1934-1939 The Yard Revitalized	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
1939-1945 World War II	Yes	Yes	No (layer removed)	Yes	No (layer removed)	Yes	No	Yes
1945-1974 Cold War Era	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1800-1974 The Navy Yard	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



1930s (BOSTS 9183)



2003 (OCLP)

Figure 10.1: The southeast corner of the Commandant's House grounds during the 1930s (top) and currently (bottom). This landscape, virtually unchanged for the past seventy years, and other landscapes of the upper yard possess integrity with respect to the nineteenth-century appearance of the yard.

EVALUATION OF LANDSCAPE CHARACTERISTICS AND FEATURES¹²

This section explores the landscape characteristics and features of the Navy Yard. Cultural landscape characteristics include tangible and intangible evidence of the activities and habits of the people who occupied, developed, used and shaped the landscape and provide a basic analytical framework of themes within the broader categories of processes and physical forms. Landscape characteristics addressed include natural systems and features/topography, spatial organization/land use, circulation, buildings and structures, small-scale features, vegetation, and views and vistas. While archeological sites are considered important components of the landscape, it is assumed that these resources are addressed in other studies. The evaluation includes a brief description of the characteristics historic and existing condition, as well as a determination regarding the contribution of each existing characteristic or feature to the significance of the landscape as a whole. Characteristics or features defined as “contributing” are those that were present in the historic landscape that survive or are those which are replacements of historic features. The narrative description is followed by a table of landscape characteristics and individual features (Table 10.2) noting whether they contribute or do not contribute to the physical character of the historic Navy Yard. Contributing characteristics and features should be retained in order to preserve the character of the yard. Guidelines for treatment are described in the next chapter.

NATURAL SYSTEMS & FEATURES/TOPOGRAPHY

Historic Condition: Members of the Massachusetts Bay Company established the Charlestown settlement in 1629 on the peninsula bounded by the confluence of the Mystic and Charles Rivers with Boston Harbor. The town was surrounded by extensive tidal flats, and a small inlet from the Charles River fed a five-acre marsh. Ebenezer Breed’s dam created pastureland to the north of the bounded wetland. Charlestown’s location offered a protected marine setting with a deep shipping channel in the Boston Harbor.

Early in the nineteenth century with the establishment of the Charlestown Navy Yard here, the land in front of the Marine Barracks (Building I) was graded to create a parade ground, the Salem Turnpike was graded in front of the Commandant’s House (Quarters G), and a hill was leveled in the lower yard. A natural creek flowed through the marshland of the former Breed’s dam pasture. The fate of the dam is uncertain. Cobb wharf was constructed in the tidal flats below the dam, creating a timber dock. A canal led through the Charles River tidal flats to this dock, and a causeway and dike were constructed along the creek at the northern edge of the dock. The causeway connected the new blacksmith shop and Shiphouse No.2.

The surrounding tidal flats limited boat access at low tide. Throughout the nineteenth century, the Navy filled the wetlands, channelized the creek, built a drainage system, and extended the shoreline with pilings, quays, and fill. These actions tripled the size of the Navy Yard. A culvert was designed to drain water from under the stone boundary wall in “low areas” of the yard. Filled marshland in the lower yard extended the shoreline behind the causeway. The Navy also dredged the harbor to increase the depth of the boat slips to the dry docks. During the late-nineteenth century, pipes were laid for water distribution system first from the Cochituate Waterworks and later from the Mystic Waterworks. By the turn of the twentieth century, the water mains were replaced, and hydrants and fixtures were installed with connection to the metropolitan sewage system. The Navy Yard had become decidedly industrial. The Navy filled in some shipways with waste to create parking lots after World War II and continued to extend the piers further into the harbor until the Navy Yard closed in 1974.

¹² Much of the content of this section was developed from the tables in the 2003 draft of the Historic Resource Study (HRS) Chapter 3 Overview of Landscape History.

Existing Condition: The Charlestown Navy Yard is located on the southeast tip of the Charlestown Peninsula located at the confluence of two rivers, the Charles and the Mystic, at the innermost part of Boston Harbor. The waterfront is bounded by piers and granite seawalls over extensive fill. The topography of the yard is nearly level with a rise in the land near the Commandant's House (Quarters G) and the Marine Barracks (Building I). The Marine Barracks Parade Ground is held level with retaining walls on three sides. Beyond the boundary wall of the yard, the land ascends more steeply to Breed's Hill. The Navy Yard is largely industrial and covered with structures and paving. With the exception of the rivers and harbor, there are no visible natural features.

Evaluation: Once a tidal marsh, the Navy filled in the wetlands, channelized and culverted the drainage, and bound the waterfront with piers and granite seawalls over extensive fill. The Navy graded portions of the upper yard for gardens, recreation, and the parade ground. The yard's physiography remains as it was during much of the Navy's operations and at its closure in 1974. Without its natural features (the Charles and Mystic Rivers and the Boston Harbor), the Navy Yard would have been sited elsewhere. Thus, the location of the yard at the confluence of the rivers, the pilings, quays, and fill, and the multiple terraces within the yard stepping down to the waterfront all continue to contribute to the yard's character.

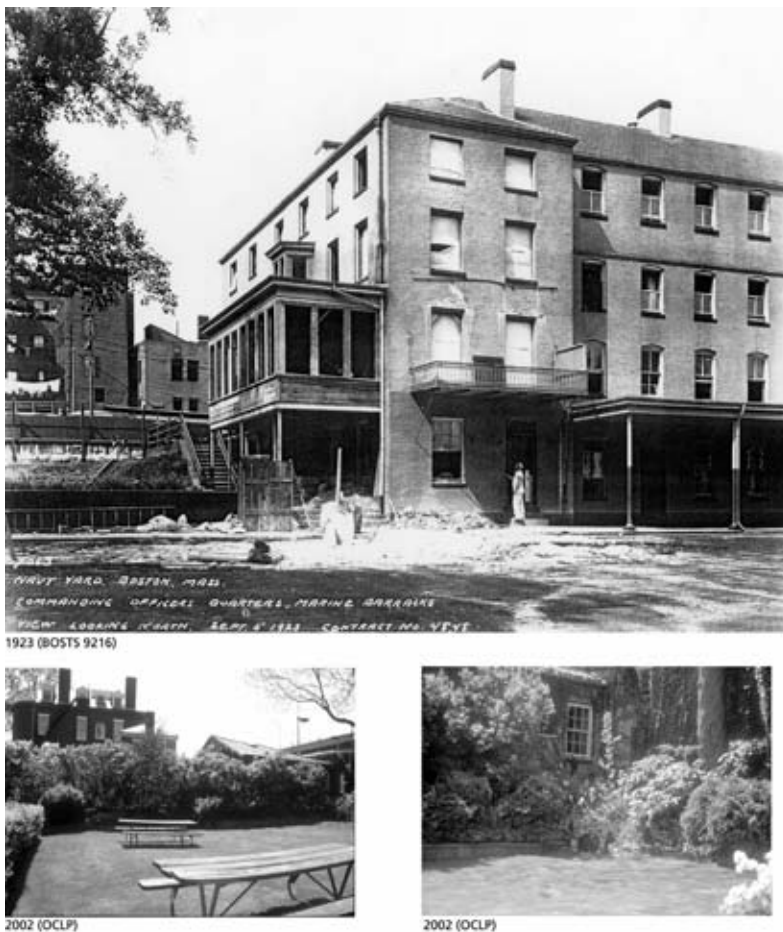


Figure 10.2: The Marine Barracks terraces. West side terrace and Parade Ground in 1923 (top) and west side terrace garden in 2002 (bottom).

SPATIAL ORGANIZATION/LAND USE

Historic Condition: The Navy Yard was sited east of the town of Charlestown on open land. During the seventeenth and eighteenth centuries, the Charlestown settlement consisted of pasturage surrounded by residential and some rope-manufacturing parcels. When the Navy Yard was established in 1800, some of the purchased land remained residential and pastoral, but the developed land became institutional, used for manufacturing, military housing, and defense. The early Navy Yard contained an institutional complex at the eastern end (lower yard) that included a Marine hospital, Army storehouse, powder magazine, barracks and quarters. The western end of the yard contained two clusters, a residential grouping of buildings and structures along the yard's northern boundary (upper yard) and a manufacturing cluster in the region below the fence and stretching to the shoreline (waterfront). A timber dock predominated over the central portion of the yard, which remained as relatively open pasturage for public oxen with the exception of a brick-making complex and the army's earthen half-moon battery at the flood tide mark near the basin canal. By 1822, the Charlestown Navy Yard included eighty-four acres of land and forty-six acres of water and was bounded on the east and south by the confluence of the Mystic and Charles Rivers with the Boston Harbor and on the west and north by a granite wall along Water and Chelsea Streets.

In 1827, a master plan was designed by architect Loammi Baldwin patterned after classical city grids and the royal navy yards of Europe. The plan only called for one road, what is now Second Avenue, and called for internal canals that were never built. From this plan, the yard has evolved into five broad east to west avenues and seven north to south streets. The master plan further bolstered the yard's compartmentalization with the upper yard (northwest) being residential, ceremonial, and park like, the lower yard (northeast) hosting production and manufacturing, and the waterfront (south of First Avenue) servicing ships directly. The lower yard and waterfront areas contained predominantly large rectangular buildings arranged parallel to the grid.

By 1830, a gun and shot park occupied the area between Third and Fifth Streets and First and Second Avenues in the upper yard. Here the Navy stored the equipment and supplies in a beautifully ordered fashion. Later the area became part of the Shipyard Mall, an open space recreation area shaded with trees. This space visually adjoined the Marine Barracks Parade Ground and provided the yard a park core used for recreation, drilling, ceremonies, and storage. The areas various tennis courts have even been frozen over in the winters for ice-skating.

Throughout the nineteenth century, as the Navy Yard expanded, the residential and pastoral lands were developed with increased manufacturing operations that produced rope, chain, anchors and sails. In addition to manufacturing, the Navy Yard's other emphasis was on ship repairs. Shipbuilding facilities were developed in the lower yard. The Army and Marine hospital reservations were surrendered to the Navy, and the lower yard was developed primarily for manufacturing (shiphouses, mast shop, and timber sheds), although a small residential enclave (officers' quarters) fronted Salem Turnpike near the Chelsea Bridge. The Navy Yard continued to expand with added manufacturing and ship repair buildings and structures until the late-nineteenth century, when these facilities were reduced.

The twentieth century brought an increased number of workshops and ongoing use of manufacturing and ship repair facilities. With World Wars I and II during the first half of the century, the emphasis on ship repairs was expanded to include destroyer construction; overhaul, conversion, and outfitting for military use; and embarkation. Supply manufacturing, particularly chain and rope, remained important as did continued officer residential use. During this period, tourism increased with USS *Constitution* docked at the yard since 1897.

For World War I efforts, the Navy increased the number of temporary structures associated with supplies and increased the size of structures associated with the movement of steel ships and parts. During World War II, the Navy Yard was "built out" to capacity with additional buildings and structures, resulting in lost open spaces and

infringing upon the grid and the domestic area of officers housing. Many of these buildings and structures were removed after the war.

After World War II, the Navy Yard's mission included construction, docking, overhaul, and alteration of ships for defense as well as continued officers' residential use. The Navy Yard also served as a repair center for electronic equipment, a sonar laboratory, and a manufacturing site for large anchor chain. In the decades after the war, the Navy Yard's layout was determined to be inefficient and plans were made to consolidate and relocate operations at a modernized South Boston plant. These plans were never implemented, and the yard closed in 1974. The Navy Yard was designated a National Historic Landmark and placed on the National Register of Historic Places in 1966.

Boston National Historical Park has made few changes to the spatial organization of the park portion of the yard since assuming control on January 1, 1976. The biggest impact resulted from the Chelsea-Water Street connector and Fifth Street extension projects of 1980-1981. The northwestern portion of the boundary wall was shifted south reducing the size of Commandant's House grounds, and the large World War II era Temporary Storehouse (Building 198) was razed returning open space to the Shipyard Mall.

Existing Condition: The entire Charlestown Navy Yard consists of 129.5 acres, while the Boston National Historical Park portion consists of about 30 acres. The park portion includes the upper yard and the western part of the waterfront. The Boston Redevelopment Authority (BRA) controls the lower yard which contains the Historic Monument Area and the eastern part of the waterfront that includes the Shipyard Park and the New Development Area. A grid of streets defines the spatial organization of the yard. First Avenue separates commercial and residential use within the park. Open spaces fronts the Officer's Quarters, Commandant's House and Marine Barracks (Building 265, Quarters G, and Building I), and support both active and passive recreational uses. Below First Avenue are predominantly large rectangular buildings, including Buildings 4, 5, 10, 22, 24, 28, 109 and 125, which are used for industrial and institutional purposes. Expansive paved open areas support marine-related activities and visitor circulation. Pier 1, the largest pier in the park's portion of the yard, provides the largest open space. It is here that most visitors gather to board either USS *Constitution* or USS *Cassin Young*, or to visit the Constitution Museum.

Evaluation: While the Navy Yard has grown substantially since its 1800 inception, the spatial organization remains and contributes to the yard's historic character. Loammi Baldwin's grid has guided the yard's development for almost two centuries. The yard has maintained its characteristic zones (upper yard, lower yard, and waterfront) with the open Shipyard Mall at the core. The circulation and building grid pattern, building scale and massing, compartmentalization and zoning of the yard, and key spatial characteristics such as the Shipyard Mall contribute to the character of the historic property.



c.1823 (BOSTS 9179)



1904 (BOSTS 9221)



1874



1950s (BOSTS 9191)

Figure 10.3: The Shipyard Mall's open space at the core of the Charlestown Navy Yard serving as a military park, ceremonial space, and recreation yard.



1856



1941 (BOSTS 9223)



c. 1865-1870 (BOSTS 9219 Acc 251)



1949 (BOSTS 9224)



1902 (BOSTS 9220)



1974 (BOSTS 9228)

Figure 10.4: The open and flat Marine Barracks Parade Ground used for drilling exercises has changed little over time, while the building has changed greatly.

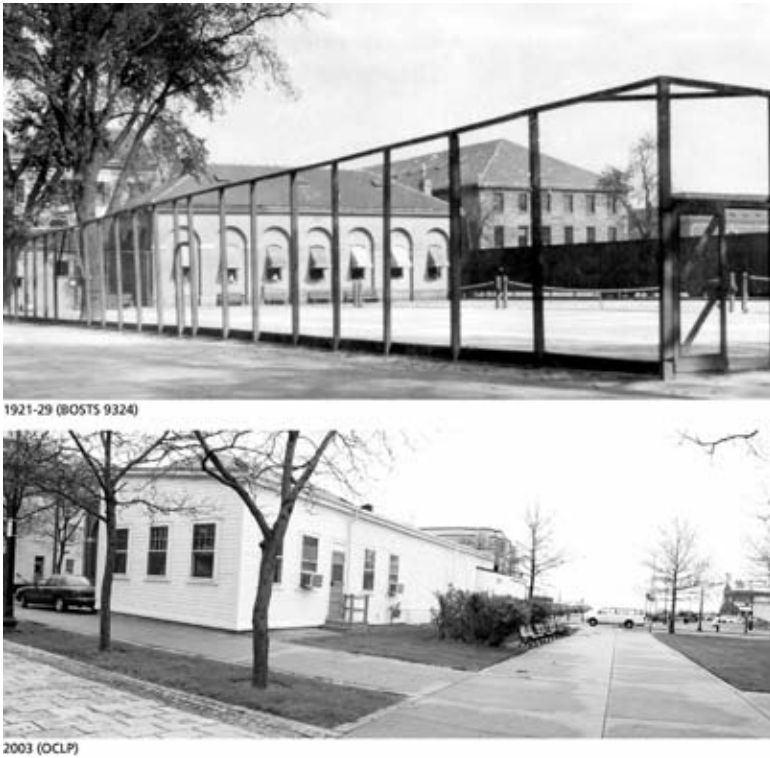


Figure 10.5: The tennis courts west of the Shell House (Building 32) in 1921-29 (top) with the building's addition and plaza in the same space today (bottom). This was the location of the World War II era Temporary Storehouse (Building 198) demolished by the park in 1979.

CIRCULATION

Historic Condition: During the time of Charlestown's seventeenth and eighteenth-century settlement, four of the town's roads traversed the future Navy Yard property. When the Navy Yard was established, a forty-foot-wide alternative road was constructed, rerouting Charlestown's "lane to brickyards," later Chelsea Street, along the northern boundary of the yard. Central Avenue passed along the southern boundary of the Commandant's complex. A road followed the causeway along the northern edge of timber dock. A road led from Chelsea Street to the magazine. During this period, portions of the Navy Yard remained unfenced, open to foot traffic and animal intrusions.

In 1827, architect Loammi Baldwin developed the yard's master plan patterned after classical city grids and the royal navy yards of Europe. The plan included broad east to west and north to south routes. Alexander Parris designed the granite block boundary wall that separated the yard from the surrounding community. As the Navy Yard developed during the first half of the nineteenth century, the main gate (with a guard house and a porter's quarters) stood at Water Street. The Navy built a new eastward road that connected the two building clusters and Central Avenue and Water Street. This road extended to a new wharf in the lower yard, and a small spur cut along a sand and clay embankment to the new blacksmith shop. During the last half of the nineteenth century, regional railroad lines linked to the Navy Yard for deliveries. The Navy paved Main (Second) Avenue with granite blocks to improve transport within Navy Yard, but most roads remained unpaved.

At the turn of the twentieth century, new crane tracks were placed around Dry Docks 1 and 2. Some small marine railroad tracks were removed. The twenty-five roads within the yard were named in 1902 with east-west routes as "avenues" and north-south routes as "streets." World War I efforts brought new railroad system tracks. Increasing

use of automobiles also necessitated parking areas and improved road surfaces on First Avenue and Ninth Street. During the Great Depression, the WPA completed paving projects around the yard, and a portion of the granite wall surrounding the Navy Yard was removed to improve traffic flow. World War II brought circulation patterns altered by tightened security. Most roads were paved with bituminous concrete and asphalt at this time.

During the next few decades, construction of the Mystic River (Tobin) Bridge increased the Navy Yard's separation from Charlestown. The existing crane track system was expanded to service newly rebuilt Piers 4, 6, 7, and 11. The Marine Railway closed in 1971, because of its poor physical condition and inability to handle modern naval vessels. The numbers of automobile-commuting workers increased, so Shipways #1 and #2 were filled with waste and converted to parking lots.

The Chelsea-Water Street connector and Fifth Street extension projects of 1980-81 altered the circulation pattern. Construction of the connector between the Mystic River (Tobin) Bridge and the Central Artery (Fitzgerald Expressway) in the 1950s had made Chelsea Street dead end, but by 1981, the street was reconnected with Water Street. Fifth Street was extended to intersect with Chelsea Street at this time, and a new vehicular gate was created at Gate 4. For the first time, Gate 1 and First Avenue ceased to be the primary vehicular entrance to the yard.

Existing Condition: First Avenue serves as the primary artery of the yard, bisecting the 130-acre site as it runs east-west. Second Avenue is north of and parallels First Avenue. Both are open to vehicles within the park, but only First Avenue permits access from outside the park boundary. Most of the numbered streets preserve the grid first proposed in 1828, and are secondary circulation routes that connect the major avenues. Below First Avenue, they meld into the piers. Sidewalks along most streets and avenues permit pedestrian use, though there is no sidewalk on the south side of First Avenue between the Constitution Museum (Building 28) and the proposed Visitor Center (Building 5). A smaller network of paths connects units in Officer's Row (Building 265) with the street and one another. Paths around the Commandant's House function similarly.

The streets and sidewalks consist of a variety of materials, including bituminous paving, brick, concrete, granite and wood. Of these, bituminous material is by far the most widely used for paving streets and piers. Most of the sidewalks throughout the high traffic areas of the park are concrete.

Granite is cut to varying dimensions are used throughout the park. Blocks provide paving material for both vehicular and pedestrian surfaces such as the western edge and southern central portion of Pier 1 and along the western edge of Building 24. As a design element, they serve as a grade-level base for the display of large anchors at the head of Dry Dock 2. Much of the yard's curbing is granite, but concrete curbing borders First Avenue. Brick is widely used throughout the park for utilitarian and decorative purposes, paving Third and a portion of Fourth Streets. A significant amount is used at the head of Dry Dock, around the Constitution Museum (Buildings 22 and 28), and the Commandant's House. The range of styles includes standard pavers, roman (narrower, longer profile) pavers and yellow pavers. Wood is used for the boardwalks along Dry Dock 2, decking near concessions and on some piers, and for the construction of utility covers at some junctions of rail lines.

Evaluation: The circulation pattern at the Navy Yard has changed little since the development of Baldwin's grid during the nineteenth century and contributes greatly to the yard's character. Specifically, First Avenue, Second Avenue, Third Street, Fourth Street, a portion of Fifth Street, Sixth Street, and Baxter Road contribute to the historic character of the property. Chelsea Street also contributes to the historic setting of the property, although it is now substantially wider than it was during the historic period. Sidewalks and walkways continue to traverse the open areas of the upper yard including the Shipyard Mall and Commandant's House grounds and contribute to the character of the property. The historic driveways and associated gates still lead from Second Avenue to the Commandant's House (Quarters G) and to the Marine Barracks (Building I). The grid of avenues and streets are mostly paved with asphalt now as they were when the yard closed in 1974. The paving work done in 1999-2000 and

in 2003-2004 exposed many of the extant underlying granite and brick surfaces. With minor exceptions, historic railroad tracks and crane tracks remain and contribute to the historic character of the property, but the flangeways have been paved for pedestrian safety. Most of the Marine Railway tracks have been removed from the waterfront, but the crane tracks remain.

One of the greatest changes to the yard's circulation has been the expansion of the Gate 4 pedestrian gate into the main vehicular access and the reduction of the former main gate, Gate 1, into just a pedestrian gate. Another change near Gates 1 and 2 is the redesign of Constitution Road area, which does not contribute to the historic character of the site. Despite these changes in use, the location, setting, association, materials, and feeling remain intact for three of the gates. Gates 1, 2, and 4, and the Marine Barracks gates contribute to the character of the property. Another gate, which led to the Commandant's House from Chelsea Street, was closed in the 1920s and sealed with a wall in the 1980s, and thus no longer contributes to the historic character of the property.

BUILDINGS AND STRUCTURES

Historic Condition: Before the Navy Yard was established, several residences and Breed's and Gorham's ropewalk complexes were located north of the future boundary and the road to the brickyards, and several small buildings covered John Harris' $\frac{3}{4}$ -acre triangular plot near the waterfront, between Henley and Water Streets. Early Navy Yard buildings included the brick Commandant's House, Powder Magazine, and Gunhouse. Wooden buildings included the Marine Barracks, offices, storehouses, and artisan's shops, as well as the Shiphouse, Timber Shed, Blacksmith Shop, and Marine Hospital. Structures included the Pile Wharf (below the Blacksmith Shop) and the army's earthen half-moon battery (near Timber Basin). The Guard's Fort Breastworks were constructed for the War of 1812 near the Chelsea Bridge in the lower yard.

By the mid-nineteenth century, the Navy Yard contained approximately sixty buildings including the Officers Quarters, the Drydock Engine House, the Ropewalk, workshops, and timber sheds. New structures included a boundary wall, a dry dock, shiphouses, launching ways, and a wharf (the extended and rebuilt army arsenal wharf). Alexander Parris designed the yard's granite boundary wall built between 1824 and 1826. It originally extended from the Chelsea Street Bridge to the Main Gate on Water Street. Dry Dock 1, built 1827-34, was one of the earliest structures of its kind in the United States and was designated as a National Historic Civil Engineering Landmark by the American Society of Civil Engineers in 1977.¹³ The Ropewalk, designed by Alexander Parris and built 1834-38, is this country's only surviving ropewalk not significantly altered or moved from its original site. The 1,360 feet long building produced the U.S. Navy's rope for 132 years.

During the last half of the nineteenth century, new buildings included the octagonal civilian workers' Muster House, a machine shop complex, a shiphouse, as well as several temporary buildings constructed for the Civil War. New structures included a dry dock extension, a new saluting battery, and an ordnance quay. A tennis court was added in place of the shot park, and the decommissioned USS *Constitution* was permanently berthed at the Navy Yard. Over twenty dilapidated or outdated buildings were removed, including Shiphouse No. 92, seven storage sheds, the Commandant's Office (No. 29), the Steam Chest (No. 86), and nine others mostly including decayed wood sheds. Some existing buildings were upgraded or converted including a new four-boiler pumping facility in Building No. 22.

Forty new buildings including a large construction and repair complex (Buildings Nos. 104-106), workshops, a paint shop, an electric power station, and a coaling plant were built at the turn-of-the-century. Other buildings were relocated or demolished. New structures included the 750-foot Dry Dock #2, piers, and extensions to existing

¹³ American Society of Civil Engineers web page, History & Heritage of Civil Engineering: Landmarks and Historic Works: Domestic Landmarks: Massachusetts [<http://www.asce.org/history/landmarks/massachusetts.html>], accessed Aug. 9, 2001.

piers. The wood caisson for Dry Dock #1 was replaced with one built of steel. USS *Constitution* was restored in 1907.

World War I preparations brought approximately thirty-six new buildings, most for temporary storage space, including the General Storehouse, as well as Buildings Nos. 149, 153, 165, and 187. New structures included an oil storage tank, a battery charging station, an acetylene plant, a locomotive shed, and a crane shed. At this time, the Navy Yard's rail system consisted of four locomotive cranes, two locomotives, thirteen coal cars, six flat cars, seven ash cars, four dump cars, and two gondola cars.

Many temporary buildings from WWI were demolished in the 1920s. During the era of the New Deal and World War II, many new buildings were constructed including a seven-story machinist and electrical shop, a pipe and shipfitters shop, and an addition to the Ropewalk for administrative use. Piers were extended, and new shipways and facilities associated with the construction of destroyers and other types of warships were constructed. The tennis court was replaced with a three-story, wood frame temporary structure. Immediately after the war, surplus structures were removed including cranes, passenger cars, and stockpiled materials.

During the Cold War, new buildings included industrial service buildings and garages. New structures were added to accommodate larger ships and new technologies including longer and stronger steel and concrete piers, light towers, fire pump houses, electrical substations, a sand hopper, an extension of Dry Dock #1, and other small structures. The Ropewalk closed in 1971.

As part of the Fifth Street extension project of 1980-81, the park demolished the World War II era Temporary Storehouse (Building 198) and the Marine Corps Administration Building (Building 136). Within the Boston Development Authority's areas of the yard, most twentieth-century buildings were razed, while most of the nineteenth and early-twentieth century buildings were retained and adapted for reuse with all later additions removed.

Existing Condition: In 1994, as part of the List of Classified Structures (LCS) inventory, the research team made a first effort to itemize contributing resources for the former shipyard. Contributing resources identified included 25 buildings, 2 objects (plaques), and 18 structures. The structures identified included crane and railroad tracks, grit hoppers, flood light towers, gates, the granite wall, piers, an underground oil tank, water storage reservoir, Dry Dock #1, three portal cranes, and USS *Constitution*. In a memorandum dated January 30, 1995, the State Historic Preservation Officer concurred with the list of contributing resources identified by the LCS team, however, they also noted that the streets that are part of the Parris [Baldwin] plan should contribute as a single structural system.

Brick, granite, and wood are the primary construction materials for the buildings and structures in the yard. Building density reflects original use and is greatest in the industrial areas south of First Avenue and east of Pier 1. Density is lighter in the residential areas of the yard north of First Avenue (the upper yard). Most of these buildings are located toward the perimeter of the yard, constructed of brick, and have large amounts of vegetated open space nearby. Here concrete retaining walls provide level areas including the Marine Barracks Parade Ground.

Granite and wood members hold back the sea and raise the piers above reclaimed marshland. There are wooden utility sheds constructed on some piers, as well as temporary shelters constructed of metal and synthetic fabric. A network of rail and crane tracks weave throughout the yard, connecting dry docks, piers and inland manufacturing and storage buildings. Three cranes and two grit hoppers are located on the piers. Five flagpoles erected in 1990 by the USS *Constitution* Museum stand in a row at the head of Dry Dock 1. These were installed to attract visitors to the museum.

Evaluation: The yard's buildings within Boston National Historical Park reflect the historical development of the yard and reflect the Federal, Classical, and Georgian styles of the nineteenth century and contribute to the yard's

historic character. Within the National Park Service property, most of the prominent buildings remain with the exception of the Main Gate (Building 97), the Temporary Storehouse (Building 198), and the Marine Corps Administration (Building 136). The five flag poles added near the Constitution Museum and recent temporary structures added for yard security do not contribute to the historic character of the yard.⁴

SMALL SCALE FEATURES

Historic Condition: Before the Navy Yard was established, post-and-rail fences bounded many of the town's plots. Fenced plots included one at the western end of the future Navy Yard, between Henley Street and the lane to the brickyards, and two at the eastern end, Ebenezer Breed's marsh and "point pasture" near Moulton's Point. Fences also enclosed three pastures south of "proprietor's way" belonging to Catherine Henley, Richard Boyeston, and William Calder. Post-and-rail and board fences surrounded the Commandant's House and gardens and the Marine Barracks complex in the early Navy Yard. The Marine Barracks grounds also contained two wells. Picket fence lined the Salem Turnpike at the Navy Yard's northern boundary, and wood fences enclosed the yards of the Officer's Quarters in the lower yard. Wells were located in the vicinity of the Officer's Quarters. As the Navy Yard developed into the mid-nineteenth century, Alexander Parris's granite wall surrounded the outer boundary. Iron gates marked many of the openings including at the semicircular-walled entrance and the stable of the Commandant's House. The completion of Dry Dock 1 in 1833 was noted with a dedication inscription on the granite blocks inside its head, "Commenced on 10 July 1827, John Q. Adams President of the United States, Samuel L. Southard Secretary of the Navy, Authorized by the nineteenth Congress. Opened 24 June 1833, Andrew Jackson President of the United States, Levi Woodbury Secretary of the Navy, Loammi Baldwin Engineer." Many piles of wooden ship building and repair materials were scattered around the Navy Yard especially along the piers, and masting shears were located at the head of the Pile Wharf. Bollards, capstans, and keel blocks surrounded the piers and dry docks. Stores of shot, guns, and anchors were stockpiled in beautifully ordered rows and piles in parks in the upper yard between the residential areas and the waterfront.

During the last half of the nineteenth century, the installation of natural gas lights at the shiphouses extended work hours. By the close of the century, electric lights powered by a lighting plant in Building 28 replaced the gas lights. Some of these lights were ornate, but most were simple crookneck fixtures manufactured in the yard. At this time, a wooden picket fence surrounded the Commandant's House grounds. An elaborate arbor and octagonal guardhouse marked the gate on Second Avenue. An ornate, two-story birdhouse rose above the south lawn on a pole. A low, iron pipe fence protected areas of lawn and street trees from foot traffic in the area of the Muster House.

In 1929, an iron picket fence replaced the eastern portion of the granite boundary wall to the ropewalk to allow more light into the facility. World War II brought enormous amounts of materials to the Navy Yard, but the surplus was removed after the war. A pedestrian ramp, turnstiles, and time clocks were constructed at Gate 4 to handle the massive increase of employees. When the Central Power Plant (Building 108) from a coal to an oil burning facility, pipes were installed from the storage tank beneath the Commandant's House grounds, along Pier 1, to the plant.

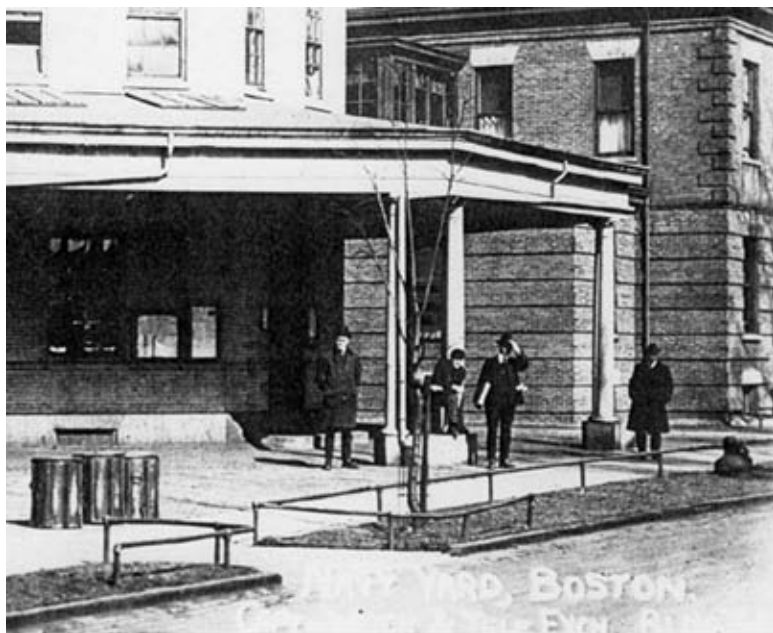
During the last few decades that the Navy Yard operated, new light towers were constructed, and floodlights were installed on roofs and towers to illuminate Dry Dock 2. The square yellow trash receptacles were installed around

⁴ The five flag poles at the head of the Dry Dock were installed in 1990 under a Section 106 action as a one-year temporary experiment to attract visitors to the museum. Section 106 files show that in 1992, although there was no evidence that the flags increased visitation, the park considered allowing the poles to remain "on an indefinite basis pending the preparation and implementation of a Cultural Landscape Treatment Plan for the yard."

the yard with the message “Keep Your Shipyard Clean.” A Shinto Torii Gate was installed in front of the Marine Barracks (Building I) to face the Parade Ground. Various plaques honoring the yard’s history were mounted around the site over the years.

Existing Condition: Small-scale features relate to visitor amenities, circulation, signs, and marine, military, and security functions. The few amenities, benches and picnic tables, are confined to the USS Constitution Museum, the Shipyard Mall (recreation area), Dry Dock 2, the west side of Building 32, and the east side of Building 10. Examples of historic anchors, guns, and chain are also displayed at some of these locations. Bronze plaques located around the yard denote historical events or people associated with the facility. Signs include directional, identification, traffic, and workplace safety information. Marine and industrial related features include capstans, bollards, cleats, hydrants, lifesaving stations, masts, chain, rope, and utilities and are found on the piers. Pier 1 still contains many piles of shipbuilding materials such as live oak timber. The above-ground steam pipes still line the center of the pier. The dedication inscription still marks the inside of Dry Dock 1’s head, although it is deteriorating. Many features relate to public safety needs in the wake of the events that occurred on 11 September 2001. Currently, a series of concrete Jersey barriers and bicycle fencing cordon off USS *Constitution* and Buildings 4 and 5. Jersey barriers and pop-up vehicular barriers are used at the vehicular entrance on Fifth Street to control traffic into the park. Keel blocks, which are found throughout the site, are utilized as barriers at Gate 1 and near the Scale House (Building 19). In 2004, the park replaced jersey barriers and keel blocks in many locations with new movable steel bollards and chains.

Evaluation: The Charlestown Navy Yard Unit of Boston National Historical Park retains many small-scale features that contribute to its historic character as a U.S. Navy facility (1800-1974) including capstans, bollards, keel blocks, steam pipes, and shipbuilding supply pipes. Notable small scale features that contribute to the historic character of the property include the safety sign on the Grit Hopper, the Shinto Torii Gate, and several plaques. The gun, shot, and anchor parks stored numerous supplies during the nineteenth century, but were removed by the turn of the twentieth century. A few samples of these supplies still delight visitors in tourism areas, while many more are in storage at the yard. These cannons, shot piles, anchors, and the historic ship mast contribute to the character of the historic landscape. The yellow trashcans with the slogan, “Keep Your Shipyard Clean” also contribute to the historic character of the property. Some small-scale amenities have been added since the site became a park to facilitate tourism and for security and do not contribute to the historic character, including benches and interpretive signs.



1921 (BOSTS 9318)



2003 (OCLP)

Figure 10.6: Low pipe-fencing protected the turf in front of the Muster House (Building 31) during the 1920s (top), but no fence exists today and the turf is showing wear.

VEGETATION

Historic Condition: When the Navy Yard was established, eelgrass and other marsh grasses covered the tidal flats and wetlands, and grasses covered the pastures. Ornamental trees like the Lombardy poplars grew on Putnam's property that fronted the lane just north of the Navy Yard's boundary.

The Navy planted 200-300 elm trees and an unspecified number of fruit trees during the first half of the nineteenth century. After the Baldwin plan of 1828, the Navy lined new avenues with elms, maples, and ornamental trees. The Commandant's House grounds were well manicured with shade and fruit trees, ornamental shrubs, and flowers. The Commandant also kept a vegetable garden southwest of the house. The Marine Barracks level, turf Parade Ground provided green and open space for the drilling of soldiers, while a vegetable garden to the southeast provided food. Large trees shaded and hedges lined the front lawn of the Officers Quarters (Building 265), while the back yards provided garden space. During the last half of the nineteenth century, the Navy maintained the yard's street trees, replaced them as needed, and planted an allée of trees along Flirtation Walk, the boardwalk just south of the Ropewalk. The yard was very much a park, and residents and visitors delighted in its beauty.

Unabated building construction during World Wars I and II led to the loss of open, planted spaces. Dutch Elm Disease and hurricanes of the 1950s decimated the few remaining trees along the avenues and Flirtation Walk. The Navy maintained the park character surrounding the Commandant's House, Officers Quarters, and Marine Barracks (Quarters G and Buildings 265 and I). With the removal of the shot and guns from the Shipyard Mall at the turn of the twentieth century, this turf-covered and tree-shaded area provided recreation space to the yard's residents. Ornamental plantings enhanced the development of parking near tourist amenities near Gate 1 by the 1960s. Historically, the piers had no vegetation except for the grass covered Explosives Bunker at the end of Pier 1.

Existing Condition: Ornamental plantings and turf are located outside the wall at Gate 1 which serves as a drop off/pick up site for visitors. A few medium-sized pin oaks are located at the opposite entrance at Fifth Street. There are several ornamental trees in the residential areas north of First Avenue. The grounds around the Commandant's House contain ornamental trees and shrubs, perimeter hedges, and beds of herbaceous plants along the main walk. The yards in front of the Officer's Quarters are turf with mature trees and forsythia as a foundation planting in front of each house. Small individual courtyard gardens are located behind the Officer's Quarters. Other turf areas surround the war memorial plaza to fallen yard workers and cover the parade ground in front of the Marine Barracks (Building I). Trees shade the western end of the Shipyard Mall, while the eastern end is covered with turf. There are few street trees along First and Second Avenues in the park. The Boston Redevelopment Authority (BRA) planted an allée of trees along the Second Avenue Pedestrian Mall. Very little vegetation grows south of First Avenue. At the end of Pier 1 is a grass-covered Explosives Bunker. Ornamental plantings are located near USS *Constitution* and finger pier, and along the perimeter of the parking area between the Hoosac Stores and Building 4. All other vegetation below First Avenue is weedy material.

Evaluation: Much of the upper yard's vegetation contributes to the yard's historic character. The lawns, trees, shrubs, and hedges of the Officers Quarters, Commandant's House, Marine Barracks, and Shipyard Mall in the upper yard evoke a sense of this area's historic park character. First and Second Avenues lack the grand street trees that once arched over them. The historic core of the yard, the upper yard's open, turf-covered space continues to provide recreational space to residents and visitors alike. The waterfront historically did not support much vegetation south of First Avenue.



1882 (BOSTS 15784)



c.1900 (BOSTS 9512)



1945 (BOSTS 8615)

Figure 10.7: The elm trees lining Flirtation Walk (top) are still visible in the 1945 aerial photograph (bottom). Many street trees still shaded First and Second Avenues in 1945 too.



1921 (BOSTS 9318)



c. 1925 (BOSTS 9317)

Figure 10.8: Young street trees growing along Second Avenue during the 1920s.

VIEWS AND VISTAS

Historic Condition: Prior to the Navy Yard, the waterfront views were relatively unobstructed with few built features between the yard's northern boundary and the shoreline. With the establishment of the yard, the views remained relatively unobstructed with only a few intrusions by single-story structures and the three-story Navy Store. As the yard developed during the first half of the nineteenth century, residents and workers enjoyed significant views northwest of the new Bunker Hill Monument and south of the harbor. Shade trees and buildings partially obscured southeast views. During the last half of the century, these views became blocked with the construction of increasingly large buildings such as the machine shop with its large stack. Once *USS Constitution* was berthed at the Navy Yard, it became a significant part of many views. Views remained relatively unaltered until World War II when building density and height increased to up to seven stories high. Construction of the Mystic River (Tobin) Bridge after the war further restricted views.

Existing Condition: From the yard, there are views south and west to the inner harbor, downtown Boston and the Leonard P. Zakim Bunker Hill Bridge. To the north, the Bunker Hill Monument is visible from Piers 1 and 2. To the east are long broad views down the straight First and Second Avenues. Looking into the yard from the waterfront, *USS Constitution* and cranes are the dominant visual elements. The view east from Gate 1 includes a long expanse of asphalt extending across the yard, and a partial view of the façade of the Constitution Museum (Building 22) with the BRA-owned portion of the yard in the distance. The view from Gate 2, down Second Avenue, includes lawn areas bounded by hedges and street trees. The view from Gate 4, down Fifth Street, includes cranes, Dry Dock 2, and the inner harbor beyond. The view from the Scale House entrance into the yard, down First Avenue, includes Building 5 and a distant view of Gate 1.

Evaluation: Historic views and vistas of and from the Navy Yard remain and contribute to its historic character. Waterfront views remain the most significant given the site's role in American history. There are more open views of the water now than during much of the twentieth century due to the removal of the large World War II era building 198, many temporary structures, most of the street trees, and the lack of large numbers of berthed ships. The Mystic River (Tobin) Bridge looms over the northern vistas, but it was constructed during the yard's period of significance. The upper yard, with its park character and historic buildings, still creates and frames many historic vistas including the views from the Commandant's House and from the Marine Barracks to Boston Harbor, to the *USS Constitution*, and industrial waterfront area. Other notable views within the yard include the view of the Commandant's House, Marine Barracks, Officers Quarters, Views down First and Second Avenues, views from Gates 1, 2, and 4. Significant views from the waterfront include views to Downtown Boston, Bunker Hill Monument, the Mystic River Expressway, and views to the upper yard. A detailed list of contributing characteristics and features is provided on the following pages.

Table 10.2: Summary of Landscape Characteristics and Features for the Charlestown Navy Yard.¹⁵

CHARACTERISTIC/FEATURE	STATUS	COMMENTS
Natural Systems & Features/Topography		
Sited at point between the Charles and Mystic Rivers facing Boston Harbor	Contributing	Unchanged since yard's founding in 1800
Pilings, Quays, and Fill (Over marsh and tidal areas)	Contributing	Yard triples from its original size during the nineteenth century
Upper Yard Hill (Commandant's House & Marine Barracks)	Contributing	Most prominent location since the yard's inception
Commandant's House Terrace	Contributing	Emphasizes the house and separates garden rooms
Marine Barracks Parade Ground	Contributing	Graded level in early nineteenth century
Marine Barracks Side Garden Terraces	Contributing	1945-1974
Spatial Organization		
Grid Circulation Pattern	Contributing	1828 Baldwin Plan (broad east to west avenues and north to south streets)
Compartmentalization of the Yard	Contributing	Upper Yard (residential, ceremonial, recreation, park), Lower Yard (manufacturing, commercial, BRA Historic Monument Area), Waterfront (ship/marine servicing, tourism, BRA New Development Area and Shipyard Park)
Building Massing	Contributing	Predominantly large, rectangular buildings parallel with the grid (lower yard and waterfront)
Shipyard Mall	Contributing	Open space between the upper yard and waterfront
Circulation		
Grid Circulation Pattern	Contributing	1828 Baldwin Plan (broad east to west avenues and north to south streets)
First Avenue	Contributing	Major twentieth-century axis of supply and production
Second Avenue	Contributing	Major nineteenth-century east to west axis
Third Street	Contributing	Brick and wood block historically, now brick
Fourth Street	Contributing	Brick and wood block historically, now brick and asphalt
Fifth Street	Contributing	Extended to Chelsea Street 1980-81. The street did not extend to Chelsea Street from 1800-1974; it was a pedestrian route. Converted to a brick courtyard between Buildings 22 and 28
Sixth Street	Contributing	
Baxter Road	Contributing	
Constitution Road	Non-Contributing	Post 1974
Chelsea Street	Contributing	Reconnected to Water Street 1980-81 (former Salem Turnpike)
Pier 1	Contributing	Open, access to USS <i>Constitution</i> and USS <i>Cassin</i> Young
Pier 2	Contributing	Much closed now for safety and/or security
Pier 3	Contributing	Much closed now for safety and/or security
Gate 1	Contributing	early 1800s
Gate 2	Contributing	early 1940-41
Gate 4	Contributing	1853, Pedestrian gate until 1980-81, now also vehicular
Commandant's House Gate	Non-Contributing	Historic boundary wall had curved to an iron gate until the semicircular walls were lowered and the wall built in place of the fence along Chelsea Street in front of the house in 1940-41
Marine Barracks Gates	Contributing	Locked, front Chelsea Street
Pedestrian Gate, Second Avenue	Non-Contributing	Installed during 1980-81 extension of Fifth Street
Marine Barracks Circular Drive	Contributing	Twentieth century-present
Commandant's House Drive	Contributing	Twentieth century-present
Rail Tracks	Contributing	Nineteenth century-present
Crane Tracks	Contributing	Twentieth century-present
Officers Quarters Walkways	Contributing	Nineteenth century-present
Commandant's House Walkways	Contributing	Nineteenth century-present
Freedom Trail	Non-Contributing	1950s-present
Buildings and Structures		
Predominantly rectangular buildings	Contributing	1827-Present

¹⁵ National Register of Historic Places Inventory Nomination Form, The Historic Resources of the Charlestown Navy Yard. Partial Inventory; Historic and Architectural Resources.

arranged parallel to grid		
Navy Yard Boundary Wall	Contributing	1824-26, Alexander Parris, sections replaced with iron fence – 1830s, 1929
Gatehouse (Gate 1) (267)	Contributing	1959
Navy Storehouse (5)	Contributing	1815-16
Storehouse (4)	Contributing	1827
Finger Pier	Contributing	
Pier 1	Contributing	1813, former site of Shiphouse G (1813-1848), enlarged to become Sheer Wharf, former site of Shiphouse 72 (1875-94), current bulkhead (1901-05)
USS <i>Constitution</i>	Contributing	1797, contributing as example of ship associated with the yard and NHL for reasons unrelated to the yard
USS <i>Cassin Young</i>	Contributing	1943, contributing as example of ship associated with the yard and NHL for reasons unrelated to the yard
USS Cassin Young Workshop (M-40)	Non-Contributing	1992, built for 1992-1995 drydocking of USS <i>Constitution</i>
Substation (M-1)	Contributing	c.1944, west of Building 109.
Storage Shed (M-41)	Non-Contributing	1992, west of Building 109.
Pitch House and Oakum Loft (10)	Contributing	1853, moved 1900, 1948 north addition
Pilot House (Waterfront Office) (109)	Contributing	1930, expanded until 1944
Saluting Battery (261)	Contributing	1940s
Explosives Bunker (272)	Contributing	1947
Grit Hoppers (259 & 273)	Contributing	1952 and 1962
Scale House (19)	Contributing	1918
Dry Dock 1	Contributing	1827-33, Loammi Baldwin
Portable Steel Shed (M-37)	Contributing	c.1923, currently sitting in the bottom of Dry Dock 1; located south of Building 125 prior to that.
Pier 2	Contributing	1905 replaced Wharf 3; the 'Pile Wharf' in 1827, enlarged 1854
Marine Railway	Contributing	1918, James L. Crandall
Cranes	Contributing	WWII
Crane Tracks	Contributing	1905
Pier 3	Contributing	1903-05
Dry Dock Engine House (USS Constitution Museum) (22)	Contributing	1832, Alexander Parris
Carpenter's Shop (24)	Contributing	1847, Samuel Pook
Steam Shed (M-42)	Contributing	South of Building 24
Tinners Shop (USS Constitution Museum)(28)	Contributing	1849-50
Lead Shop (110)	Contributing	1907
Paint Shop (125)	Contributing	1905
Light Towers (238-240)	Contributing	1951, banks of incandescent and mercury vapor lights later replaced in 1960s
Dry Dock 2 (BRA)	Contributing	1898-1905, O'Brien and Sheehan, former site of Timber Dock 91
Muster House (BRA) (31)	Contributing	1852-54, Joseph Billings
Shell House (Boston Marine Society) (32)	Contributing	1857, Joseph Billings
Ropewalk (BRA)(58)	Contributing	1834-38, Alexander Parris
Tar House (BRA) (60)	Contributing	1836-37, Alexander Parris
Chain Forge (BRA) (105)	Contributing	1904-05
Public Works Maintenance Shop (NPS Maintenance Shop) (107)	Contributing	1903-04
Gate 4 gate (244)	Contributing	1929, shifted to east 1980-81
Marine Barracks (Building I)	Contributing	1810, altered 1862, 1900, 1940s
Marine Barracks Parade Ground Retaining Walls	Contributing	WWII
Commandant's House (Quarters G)	Contributing	1805-09, Style of Bullfinch
Stable (21)	Contributing	1823, Alexander Parris
Garage (Garden Shed) (245)	Contributing	Former location of Barn (Building 20)
Garage and Chauffeur's Quarters (1)	Contributing	1936, 1941, site of Tank Shed
Five Bay Garage (269)	Contributing	1936, 1941
Officers Quarters (265)	Contributing	1833
Storage Tanks (220 & 221)	Contributing	220 first water, later converted to oil beneath Commandant's House grounds; 221 water beneath Marine Barracks Parade Ground
Reviewing Stand (260)	Contributing	1959, expansion of WWII structure
Flagpole (242)	Contributing	WWII, flagpole here since the 1830s
Playing Courts (236)	Contributing	1946
Utility Conduit (280)	Contributing	1905, Beneath First Avenue Sidewalk
Main Gate (97)	N.A.	1909, razed 1958, contributed
Temporary Storehouse (198)	N.A.	WWII, razed 1980-81, contributed

Temporary Storehouse Foundation	Contributing	WWII
Marine Corps Administration (136)	N.A.	1909, expanded 1936, razed 1980-81, contributed
Five Flag poles by Constitution Museum	Non-Contributing	Added in association with Constitution Museum
Security Structures	Non-Contributing	Added for security after September 2001
Small Scale Features		
Capstans	Contributing	1800-1974, Piers and Dry Docks
Bollards	Contributing	1800-1974, Piers and Dry Docks
Keel Blocks	Contributing	1800-1974, Piers and Dry Docks, security
Aboveground Steam Pipes	Contributing	1958
Shipbuilding Supply Piles	Contributing	Pier 1
Safety Sign on Grit Hopper	Contributing	Pier 1, relocated from Building 36 by NPS
USS Boston Memorial	Contributing	Pier 1
Dry Dock 1 Dedication Inscription	Contributing	1833, inside head of Dry Dock 1
Dry Dock 1 Concrete Lamppost	Contributing	
Dry Dock 1 Flagpoles	Non-Contributing	1990, five at head of Dry Dock 1
Shinto Torii Gate (282)	Contributing	1950s, Marine Barracks Parade Ground
War Memorial Plaque (279)	Contributing	1959, moved from traffic island to adjacent Reviewing Stand
Commandant's House Concrete Planters	Contributing	South stairs
Commandant's House Iron Railing	Contributing	North stairs
Yard Commandants Plaque (270)	Contributing	1950s, along Second Avenue south of Commandant's House
British Landing Site Plaque	Contributing	
Ship Mast	Contributing	First Avenue by Dry Dock 1
Cannons	Contributing	
Shot	Contributing	
Anchors	Contributing	
Chain	Contributing	
Benches	Non-Contributing	
Trash Cans	Contributing	Square yellow cans; part of "Keep Your Shipyard Clean" major post-WWII yard campaign
Interpretive / Park Signs	Non-Contributing	
Vegetation		
Curtain Gate Parking Trees and Shrubs	Contributing	
Finger Pier Shrubs	Contributing	
Gate 1 Vegetation	Contributing	
Pier One Explosives Bunker Grass	Contributing	
USS Constitution Museum Vegetation	Non-Contributing	Planting postdates the period of significance
Shell House (32) Street Trees	Contributing	
Shell House (32) Rose Bushes	Non-Contributing	Site of Tennis Courts and Temporary Storehouse (198)
Shell House (32) Flower Beds	Non-Contributing	Site of Tennis Courts and Temporary Storehouse (198)
Fifth Avenue Extended Pin Oaks	Contributing	
Marine Barracks Eastern Garden (yews, lawn)	Contributing	
Marine Barracks Parade Ground Lawn	Contributing	
Marine Barracks Parade Ground Hedge	Contributing	
Marine Barracks Western Garden (Ornamental trees and shrubs and lawn)	Contributing	
Commandant's House Trees	Contributing	
Commandant's House Shrubs	Contributing	
Commandant's House Lawn	Contributing	
Commandant's House Hedge	Contributing	
Commandant's House Flowers (bulbs, annuals, and perennials)	Contributing	
Officers Quarters (265) Trees	Contributing	
Officers Quarters (265) Shrubs	Contributing	
Officers Quarters (265) Lawn	Contributing	
Shipyard Mall Trees	Contributing	
Shipyard Mall Shrubs	Contributing	
Shipyard Mall Lawn	Contributing	
Views and Vistas		
View from Commandant's House to Boston Harbor	Contributing	
View from Commandant's House to USS Constitution	Contributing	

View from Marine Barracks to Boston Harbor	Contributing	
View from Marine Barracks to USS Constitution	Contributing	
View of Commandant's House from yard	Contributing	
View of Marine Barracks from yard	Contributing	
View down First Avenue	Contributing	
View down Second Avenue	Contributing	
View From Gate 1	Contributing	
View From Gate 4	Contributing	
View from Waterfront to Downtown Boston	Contributing	
View from Waterfront to Bunker Hill Monument	Contributing	
View of Mystic River (Tobin) Bridge	Contributing	
View of Yard from Waterfront	Contributing	